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WORLD HERITAGE LIST  
UNESCO site n.94

# “Rock drawings in Valle Camonica” Management Plan





Provincia di Brescia



Comunità Montana di Valle Camonica

Comunità Montana  
di Valle Camonica



Consorzio Comuni B.I.M. di Valle Camonica



Comune di Capo di Ponte



Comune di Ceto



Comune di Cimbergo



Comune di Darfo Boario Terme



Comune di Paspardo



Comune di Sellero



Comune di Sonico



## Foreword

The request made by UNESCO to the Italian government to make the preparation of Management Plans obligatory for all World Heritage Sites listed before 2002 (in accordance with the *Convention concerning the Protection of the World Cultural and Natural Heritage*, Paris 16<sup>th</sup> November 1972) necessitated the drafting of a Plan for Site N° 94 "Rock Drawings in Valcamonica", the first Italian site to be recognised as World Cultural Heritage, in 1979.

In 2004, the Ministry of Cultural Heritage and Activities (Ministero per i Beni e le Attività Culturali) charged the Lombardy *Soprintendenza* for Archaeological Heritage (Soprintendenza per i Beni Archeologici della Lombardia) with the coordination of work to bring the UNESCO site into line with requirements and to draw up a Management Plan, together with the local authorities.

During the first six months of 2004, the *Soprintendenza* conducted a preliminary investigation and collected up-to-date information. Due to the incompleteness of records regarding the heritage (the 1979 Act of Recognition did not include the boundary of the area or a complete list of individual localities), it was agreed with the Ministry to first define the perimeters of Parks which were already established, or under development, and owned either by the state, local councils or the Regional Authority, namely:

- Parco Nazionale delle Incisioni Rupestri di Capo di Ponte
- Parco Archeologico Nazionale dei Massi di Cemmo
- Parco Comunale di Luine di Darfo-Boario Terme, contained within the Parco Locale di Interesse Sovracomunale del Lago Moro
- Parco Archeologico Comunale di Seradina-Bedolina, in Capo di Ponte
- Parco Comunale di Sellero
- Parco Pluritematico "Coren de le Fate" di Sonico
- Riserva Regionale delle Incisioni Rupestri di Ceto, Cimbergo e Paspardo

The Park boundaries were mapped at various scales (IGM 1:25,000; CTR 1:10,000; 1:2,000/1,000 land register) and Buffer Zones were established. In several cases, the latter had already been defined in Park Plans or in 1960s Landscape Protection Orders (on the basis of Law 1497/1939) around protected archaeological areas (Ministerial Decree 14.4.1967) in the municipalities of Capo di Ponte and Ceto.

In the second phase, begun in June 2004, work started on the preparation of the Management Plan, following ministerial guidelines which were drawn up by the "Advisory Commission for UNESCO Site Management Plans and Local Tourist Systems" and presented at the Second National Conference *Italian UNESCO World Heritage Sites: Management Plans and Periodic Reports*, held at Paestum 25<sup>th</sup>-26<sup>th</sup> May 2004.

The organization of this work and relative procedures were laid down in Memoranda 115 (30<sup>th</sup> July) and 176 (21<sup>st</sup> December) "*Drafting UNESCO Management Plans*", signed by the deputy-minister, Hon. Nicola Bono. It was stipulated that the Plans were to be finished by April 2005 if possible, and otherwise by the end of the year. The Research, Innovation and Organization Department of the Ministry for Cultural Heritage and Activities (Ministero per i Beni e le Attività Culturali - Dipartimento per la Ricerca, l'Innovazione e l'Organizzazione) provided technical and scientific assistance through the Permanent Working Party for the UNESCO World Heritage List (recently renamed Office for the UNESCO World Heritage List, *Ufficio Lista del Patrimonio Mondiale dell'UNESCO*), coordinated by Roberto Manuel Guido, which organized seminars and periodic meetings. It also established a consultancy group, coordinated by Felice Vertullo, which gave invaluable technical advice, first defining guidelines for the Plans, and then procedures for their development and a basic



model in order to guarantee the uniformity of the operation, which involved more than thirty Italian sites. We wish to express our gratitude to the Ministry for this help, which greatly facilitated the work.

The Management Plan requires collaboration between the authority responsible for tutelage and the local authorities concerned. In Valle Camonica, due to the immensity of the area and variety of the heritage (over 180 rock art sites located in 24 valley municipalities), the preparation of the Plan regarded an elevated number of local authorities, all of which (given the limited time available) could not have participated directly. It was therefore decided to select as representatives the local district authorities (above council level), with which the *Soprintendenza* had already negotiated projects and programme agreements concerning this archaeological sector (and others), together with the local councils whose territories contained the Parks listed above.

On 20<sup>th</sup> December 2004, a *Declaration of Intent* (*Dichiarazione di Intenti*: ENCLOSURE 3) was signed by:

- Ministry of Cultural Heritage and Activities– Lombardy *Soprintendenza* for Archaeological Heritage (Ministero per i Beni e le Attività Culturali-Soprintendenza per i Beni Archeologici della Lombardia), together with the Lombardy Regional Directorate of Cultural and Landscape Heritage (Direzione Regionale per i Beni Culturali e Paesaggistici della Lombardia);
- Brescia Provincial Authority (Provincia di Brescia);
- Valle Camonica Mountain Community (Comunità Montana di Valle Camonica);
- Valle Camonica Drainage Basin Council Consortium (Consorzio Comuni del Bacino Imbrifero Montano di Valle Camonica, BIM);
- Darfo Boario Terme, Capo di Ponte, Sellero and Sonico Councils and the Rock Engravings Consortium of Ceto, Cimbergo and Paspardo Councils.

Each of these bodies, in accordance with Art. 4 of the *Declaration of Intent*, nominated a representative who was delegated to participate in the "Management Plan Working Party", which had the following principal aims:

- *protect and conserve Valle Camonica's rock art heritage, listed by UNESCO as a World Heritage Site in 1979, with consideration for the archaeological and local contexts to which it is closely tied;*
- *promote and encourage greater knowledge of the Site, with coordinated programmes of recording, research and study;*
- *develop the Site in suitable ways, using appropriate methods, with constant attention to the integrity and nature of the heritage and its environmental and cultural context;*
- *encourage its inclusion in the cultural tourism circuit and overall organization of tourism in the area;*
- *operate so as to render these priorities compatible with the sustainable development of the valley, for which the rock art site constitutes a factor promoting economic and social growth.*

After the Management Plan guidelines were decided with the bodies listed above, two separate advisory committees were established to assist the Working Party in the preparation of documents regarding scientific research and educational matters. The *Scientific Research Committee*, composed of cultural and scientific organizations specifically concerned with rock art in the valley and whose authoritative role in the study of the engravings is generally recognised (Valcamonica Centre for Prehistoric Studies, Valcamonica and Lombardy Dept. - Centro Camuno di Studi Preistorici, Dipartimento Valcamonica e Lombardia; "Footprints of Man" Archaeological Cooperative - Cooperativa Archeologica "Le Orme dell'Uomo"; Capo di Ponte Teaching Museum of Prehistoric Art and Life - Museo Didattico d'Arte e Vita



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PER I BENI E  
LE ATTIVITÀ  
CULTURALI



Soprintendenza per i Beni Archeologici della Lombardia

Preistorica di Capo di Ponte) and local bodies involved in the management of areas of landscape and environmental interest (Parco dell'Adamello).

The *Education Subcommittee*, composed of organizations (in some cases, the same as those cited in the previous paragraph) which provide education and information services regarding rock art "Footprints of Man" Archaeological Cooperative; Capo di Ponte Teaching Museum of Prehistoric Art and Life, "Archeocamuni", "Do.Net", Capo di Ponte Tourist Office - Pro Loco di Capo di Ponte).

The representatives of the bodies involved, together with the Techno-Scientific Secretariat, commissioned to work on the preparation of the Management Plan by the Lombardy *Soprintendenza* for Archaeological Heritage (in the Prehistoric Valcamonica Project - *progetto Valcamonica preistorica*, 2004 and 2005, funded in the Ministry Triennial Programme 2004-2006), took part in periodic meetings, called by the *Soprintendenza* and held in the Breno offices of the Valle Camonica Mountain Community during the first six months of 2005.

The Working Party discussed, modified, integrated and approved the text submitted by the Coordinator and the Techno-Scientific Secretariat, which also included contributions from the participating bodies and was transmitted to all involved for the evaluation of additions, modifications and variations and periodical evaluation on the part of the political directors of public authorities who were not directly involved in the meetings. The Management Plan includes a *Scientific and Technological Research Plan* and *Training and Publicity Plan* drawn up jointly by the Scientific Research Committee, Education Subcommittee, the *Soprintendenza* and the Techno-Scientific Secretariat. The text is, however, open to further improvements, additions and changes, which will certainly be necessary in the future. In particular, in the project design part of the Management Plan (Parts III and IV), some operational Plans are presented in complete form, whilst others are only outlined and need to be worked out in detail by specific committees which will be set up for the purpose.

Essentially, the aim of the Plan is to furnish technical principals and guidelines of practical use to the numerous parties involved with regard to safeguarding the heritage, and the cultural promotion and development of the Site; to be a flexible instrument that is able to remain relevant to evolving circumstances and manage growth in an informed and reactive fashion.

A preview of the Site N° 94 "Rock Drawings in Valle Camonica" Management Plan was presented at the Third National Conference of Italian Sites in the UNESCO World Heritage List (Terza Conferenza Nazionale dei siti italiani iscritti nella Lista del Patrimonio Mondiale dell'UNESCO), entitled *The Strategy for Managing Italian UNESCO Sites (La strategia per la gestione dei siti italiani UNESCO)* and held in Turin 20<sup>th</sup> - 22<sup>th</sup> May 2005.

On 8<sup>th</sup> July 2005, the Management Plan was adopted by the bodies which had signed the *Declaration of Intent* and participated in its preparation, and thus contributed to this first concerted action for the protection, conservation and development of Valle Camonica's rock art, which is certainly in itself a positive step, because it has led to the development of a common method of working and selecting operational strategies to guarantee the patrimony's future. In subsequent deliberations during summer and autumn 2005, the individual authorities formally approved the Management Plan in its final form (ENCLOSURE 31).



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PER I BENI E  
LE ATTIVITÀ  
CULTURALI



Soprintendenza per i Beni Archeologici della Lombardia

## Additional Information

### UNESCO Site N° 94 "Rock Drawings in Valcamonica" Management Plan Working Party

**Ministry of Cultural Heritage and Activities**– Lombardy *Soprintendenza* for Archaeological Heritage (Ministero per i Beni e le Attività Culturali-Soprintendenza per i Beni Archeologici della Lombardia), together with the Lombardy Regional Directorate of Cultural and Landscape Heritage (Direzione Regionale per i Beni Culturali e Paesaggistici della Lombardia)

*Angelo Maria Ardovino, Elisabetta Roffia* (Superintendents until 31<sup>st</sup> January 2005 and from 1<sup>st</sup> February 2005 onwards, respectively)

*Raffaella Poggiani Keller* (Coordinating Archaeological Director)

#### **Brescia Provincial Authority** (Provincia di Brescia)

*Aristide Peli* (Director, Department of Territorial Innovation, Park and Protected Areas Section-Assessore Area Innovazione Territorio-Settore Assetto Territoriale Parchi e V.I.A.)

*Elena Tironi*, Brescia Provincial Authority delegate (Department for Territorial Innovation, Park and Protected Areas Section)

*Riccardo Minini* (Director, Department of Economic and Social Development, Tourism Section- Assessore Area Sviluppo economico e sociale-Settore Turismo)

*Sabrina Medaglia* (Department of Economic and Social Development, Tourism Section)

*Maddalena Stefani* (Department of Economic and Social Development, Tourism Section)

#### **Valle Camonica Mountain Community** (Comunità Montana di Valle Camonica)

*Giancarlo Maculotti* (Director, Department of Culture)

*Sergio Cotti Piccinelli* (Department of Culture and Territorial Development - Servizio Cultura e Valorizzazione del territorio)

#### **Valle Camonica Drainage Basin Council Consortium** (Consorzio Comuni del Bacino Imbrifero Montano di Valle Camonica, BIM)

*Francesco Manella* (Councillor)

#### **Darfo Boario Terme Council**

*Francesco Abondio* (Mayor)

*Marco Dossena* (President of the Lake Moro Inter-Municipal Park - Parco Locale di Interesse Sovracomunale del Lago Moro)

#### **Capo di Ponte Council**

*Francesco Manella* (Mayor)

*Giuseppe Composto* (Councillor)

#### **Sellero Council**

*Ezio Bartolomeo Laini* (Mayor)

Sonico Council

*Renata Pedrotti* (Director, Department of Culture, Tourism, Accounts and Traditional Handicrafts-Assessore alla Cultura, Turismo, Bilancio e Artigianato)

#### **Consortium of Ceto, Cimbergo and Paspardo Councils**

*Bernardino Rizza* (President)

*Tiziana Cittadini* (Director of the Ceto, Cimbergo and Paspardo Regional Rock Engraving Reserve-Riserva Regionale delle Incisioni Rupestri di Ceto, Cimbergo e



Soprintendenza per i Beni Archeologici della Lombardia

Paspardo)

#### **Techno-Scientific Secretariat**

*Carlo Liborio* (Archaeological Cooperative Society - Società Cooperativa Archeologica, SCA, Milan)

*Maria Giuseppina Ruggiero* (Archaeological Cooperative Society, SCA, Milan)

*Sergio Cotti Piccinelli* (Valle Camonica Mountain Community)

#### **Technical Secretariat**

*Gian Claudio Vaira* (Lombardy Soprintendenza for Archaeological Heritage)

*Tino Pacchieni* (Lombardy Soprintendenza for Archaeological Heritage)

The following participated during the phase of negotiations between public authorities:

*Angelo Maria Ardovino* (at the time, Superintendent for the Archaeological Heritage of Lombardy)

*Edoardo Mensi* (President of the Valle Camonica Drainage Basin Council Consortium)

*Alessandro Bonomelli* (President of the Valle Camonica Mountain Community)

*Cristina Ambrosini* (Lombardy Regional Directorate of Cultural and Landscape Heritage, Ministry of Cultural Heritage and Activities)

And during the final phase of agreement between public authorities:

*Elisabetta Roffia* (Acting Superintendent for the Archaeological Heritage of Lombardy)

The following participated in work and debate:

#### **Scientific Research Committee**

*Emmanuel Anati* (Valcamonica Centre for Prehistoric Studies-Centro Camuno di Studi Preistorici, CCSP)

*Tiziana Cittadini* (Valcamonica Centre for Prehistoric Studies)

*Andrea Arcà* ("Footprints of Man" Archaeological Cooperative-Cooperativa "Le Orme dell'Uomo")

*Angelo Fossati* ("Footprints of Man" Archaeological Cooperative-Cooperativa "Le Orme dell'Uomo")

*Ausilio Priuli* (Teaching Museum of Prehistoric Art and Life-Museo Didattico di Arte e Vita Preistorica)

*Umberto Sansoni* (Valcamonica and Lombardy Dept. of the CCSP)

*Silvana Gavaldo* (Valcamonica and Lombardy Dept. of the CCSP)

*Vittorio Ducoli* (Director of the Parco dell'Adamello)

and *Raffaella Poggiani Keller* (Lombardy Soprintendenza for Archaeological Heritage)

#### **Education Subcommittee**

*Angelo Fossati* ("Footprints of Man" Archaeological Cooperative-Cooperativa "Le Orme dell'Uomo")

*Alberto e Chiara Galbiati* ("Archeocamuni")

*Sergio Musatti* ("Do.Net", Museum of the Riserva Regionale delle Incisioni Rupestri di Ceto, Cimbergo e Paspardo)

*Ausilio Priuli* (Teaching Museum of Prehistoric Art and Life)

*Iliara Zonta* and assistants (Capo di Ponte Tourist Office-Associazione Pro Loco di Capo di Ponte)

*Raffaella Poggiani Keller* (Lombardy Soprintendenza for Archaeological Heritage) with the collaboration of *Serena Solano* (Central Alpine Anthropological Research Centre-Centro Ricerche Antropologiche Alpi Centrali, CRAAC) and additional assistance from *Maria Giuseppina Ruggiero* (Archaeological Cooperative Society, SCA, Milan)



### **General Coordination**

*Raffaella Poggiani Keller* (Lombardy Soprintendenza for Archaeological Heritage), with supervision by the Superintendents *A. M. Ardovino* and *E. Roffia*

### **Coordination with UNESCO**

*Manuel Roberto Guido* (Ministry of Cultural Heritage and Activities, Department of Research, Innovation and Organization Office for the UNESCO World Heritage List - Dipartimento per la Ricerca, l'Innovazione e l'Organizzazione Ufficio Lista del Patrimonio Mondiale dell'UNESCO) with the collaboration of *Angela Ferroni*

### **Overall Coordination and Specialist Advice on Management Plans**

*Management Plan Committee - Commissione per i Piani di Gestione* - of the Ministry of Cultural Heritage and Activities, directed by Deputy-Minister Hon. *Nicola Bono* and coordinated by *Felice Vertull* with the collaboration of *Anna Maria Trimarchi*

### **Preparation and Editing of the Text**

*Raffaella Poggiani Keller* (Lombardy Soprintendenza for Archaeological Heritage)

*Carlo Liborio* (Archaeological Cooperative Society, SCA, Milan)

*Maria Giuseppina Ruggiero* (Archaeological Cooperative Society, SCA, Milan)

The following participated in the preparation of the text:

*Angelo Maria Ardovino*, Ministry of Cultural Heritage and Activities – Department of Research, Innovation and Organization (*Part III, Maintenance and Conservation Plan*)

*Tiziana Cittadini*, Valcamonica Centre for Prehistoric Studies and Riserva Regionale delle Incisioni Rupestri di Ceto, Cimbergo e Paspardo (Parts I and II: information concerning the Riserva Regionale delle Incisioni Rupestri di Ceto, Cimbergo e Paspardo and Valcamonica Centre for Prehistoric Studies and related activities)

*Sergio Cotti Piccinelli*, Valle Camonica Mountain Community (Part IV. Accessibility and Permeability Plan, 1. The Brescia-Iseo-Edolo Railway, a Strategic Means of Access...; Traditional Local Activities Plan)

*Angelo Fossati*, "Footprints of Man" Archaeological Cooperative (information concerning the cooperative and its activity)

*Salvatore Lentini*, Central Alpine Anthropological Research Centre, CRAAC (Part IV. Scientific and Technological Research Plan, 5. Project for Recording Intangible Heritage)

*Claudio Nodari*, architect, Esine (ENCLOSURE 10. Capo di Ponte Planning Regulations - Norme tecniche di attuazione)

*Ausilio Priuli*, Teaching Museum of Prehistoric Art and Life (information concerning the museum and its activities)

*Cesare Ravazzi*, CNR-IDPA (Part IV. Scientific and Technological Research Plan, 1. Palaeoenvironmental Research Project)

*Umberto Sansoni and Silvana Gavaldo*, Valcamonica and Lombardy Department of the CCSP (information concerning the dept. and its activities)

*Maddalena Stefini*, Brescia Provincial Authority – Tourism Section (Part IV. Territorial Marketing Plan)

*Elena Tironi*, Brescia Provincial Authority – Parks and Protected Areas Section (Parte





MINISTERO  
PER I BENI E  
LE ATTIVITÀ  
CULTURALI



Soprintendenza per i Beni Archeologici della Lombardia

II. Natural and Environmental Resources; Part III. Recovery and Protection Plan, 1. Woodland Recovery Plan; Part IV. Training and Publicity Plan. 2. Course for Operators Who Maintain Green Areas...;)

*Gian Claudio Vaira*, Lombardy Soprintendenza for Archaeological Heritage (ENCLOSURE 4. Register of Planning Regulations-Regesto della Strumentazione Urbanistica; ENCLOSURE 27. Manual of Good Practice-Manuale delle Buone Pratiche: Decalogo per la manutenzione delle rocce incise)

### **GIS Mapping**

*Tino Pacchiani* (Lombardy Soprintendenza for Archaeological Heritage) with the collaboration of: *Gian Claudio Vaira* (Lombardy Soprintendenza for Archaeological Heritage); Cartography Office of the Brescia Provincial Authority-Parks and Protected Areas Department; *Tiziana Cittadini* (Riserva Regionale delle Incisioni Rupestri di Ceto, Cimbergo e Paspardo), for maps of the areas under her responsibility, some still under development; *Claudio Nodari* (Architect, Esine), extension of the Capo di Ponte and Sellero General Regulatory Plans - PRG (in progress); *Donato Taboni* (Valle Camonica Drainage Basin Council Consortium, BIM); Technical Offices of Darfo-Boario Terme, Angolo Terme and Sonico Councils; *Ausilio Priuli* (Teaching Museum of Prehistoric Art and Life)

And specialist advice from: *Paola Melis* (architect, Milan)

### **Preparation of Maps, Graphics and Image Processing**

*Carlo Liborio* (Archaeological Cooperative Society, SCA, Milan)  
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### **Illustrations**

Lombardy Soprintendenza for Archaeological Heritage  
Valcamonica Prehistoric Studies Centre, CCSP  
Valcamonica and Lombardy Department of the CCSP  
Teaching Museum of Prehistoric Art and Life  
Sellero Council

### **Sources**

Brescia Provincial Authority, Tourism Section for tourist statistics regarding the valley and the province  
Brescia Provincial Authority, Cartography Office for digital maps in scale 1:50,000, CTR 1:10,000 and the vectorial Provincial Pathway Plan  
Valle Camonica Drainage Basin Council Consortium for digital and vectorial maps in various scales and aerial ortho-photographs  
Valle Camonica Mountain Community for statistics and all available data concerning projects and socio-economic studies  
Capo di Ponte Council for planning regulations

### **English Translation**

*Jim Bishop* (Foreword; Index; Parts I, II, III, IV and V; general revision)  
*Arkadia Translation*, Milan (Parts I and II)  
Coordination: *Maria Giuseppina Ruggiero* (Archaeological Cooperative Society, SCA, Milan)



## CONTENTS

### **PART ONE The Plan's General Context**

1. Definition of the Universal Meaning - **p. 14**
  - 1.1 Reasons for the Listing
  - 1.2 The Engravings and their Archaeological Context
    - 1.2.1 A Brief History of Research
    - 1.2.2 Rock Art: Engraving Techniques and Chronology
  - 1.3 Cultural Value
2. The Site's Geographical Basis - **p. 24**
  - 2.1 Boundaries and Composition
  - 2.2 Buffer Zones and Connecting Areas
3. Description of the Promoting Parties - **p. 30**
  - 3.1 Public Bodies
  - 3.2 Private Parties
  - 3.3 Agreements and Understandings
4. Definition of the Managing Authority - **p. 31**
5. Programmes and Issues - **p. 31**
  - 5.1 Town Planning and Territorial Coordination Regulations
  - 5.2 Sectorial and/or Integrated Plans
  - 5.3 Social and Economic Development Plans
  - 5.4 Specific Plans for the Tutelage of the Site

### **PART TWO Territorial Analysis**

6. Analysis of the Cultural Heritage - **p. 40**
  - 6.1 Cultural Heritage, Museums, Environment, Archaeology, Art, History and Buildings
  - 6.2 Material Culture: Handicrafts, Traditional Local Products and Natural Resources
  - 6.3 Intangible Culture: Events, Cultural Production and Traditions
  - 6.4 The State of Conservation of the Cultural Heritage
    - The State of Conservation of the Rock Art Heritage
    - The Archaeological, Historical and Artistic Heritage
7. Resource Analysis - **p. 65**
  - 7.1 Regular Funding for Conservation Work
    - Parco Nazionale delle Incisioni Rupestri and Parco Archeologico Nazionale dei Massi di Cemmo, Capo di Ponte
    - Riserva Regionale delle Incisioni Rupestri di Ceto, Cimbergo e Paspardo
    - Parco Comunale di Luine, Darfo Boario Terme
    - Parco Archeologico Comunale di Seradina-Bedolina, Capo di Ponte
    - Parco Comunale di Sellero
    - Parco pluritematico del "Còren de le Fate", Sonico
  - 7.2 Natural and Environmental Resources
  - 7.3 Intangible Culture: Events, Cultural Production and Traditions
  - 7.4 Organizational and Intellectual Resources
8. Analysis of Risks and Limitations - **p. 77**
  - 8.1 Public Access to the Heritage
    - Road and Rail Access to the Valley and its Heritage
    - Access to, and Appreciation of, Parks with Rock Engravings
  - 8.2 Indicators and the Risk Factor System
    - General Risk Factors Which Affect the Environmental Context
    - Special Risk Factors Determined by the Cultural Context
  - 8.3 Pressure and Cause/Effect Indicators
  - 8.4 Risk, Tutelage and Protection Map



Risk Analysis and Studies  
Conservation Work

- 8.5 Administration, Regulation and Interference Indicators
- 8.6 Historical Qualities to be Passed On to Future Generations
- 9. Social and Economic Analysis - **p. 88**
- 9.1 Demographic Indicators
- 9.2 Employment Indicators
- 9.3 Types of Productive Activity
- 9.4 Tourism and Related Activities
- 9.5 Cultural Activities
- 9.6 Expectations and Intentions of the Interested Parties

### **PART THREE Tutelage and Conservation**

- 10.1 Plan for the Improvement of Facilities - **p. 98**
  - 1.1-Completion of the Legal Establishment Procedures Regarding the Parks
  - 1.2-Improvement of Display and Information Facilities
  - 1.3-Survey of the Preservation State of the Rock Art Heritage Inside the Rock Art Parks
  - 2- Plan for the Establishment of the National Valle Camonica Prehistory Museum in Capo di Ponte
  - 3- Plan for the Development of Prehistoric and Proto-historic Archaeological Sites
  - 4- Plan for Mapping, Recording and Developing Additional Valle Camonica Rock Art Sites Not Included in the Rock Art Parks
    - 4.1- Plan for the Addition of Sites Outside the Existing Rock Art Parks to the GIS Records
    - 4.2- Plan for the Recording of Sites Outside the Existing Rock Art Parks
    - 4.3- Plan for the Development of Sites Outside the Existing Rock Art Parks
  - 5- Historic Way Network Plan
  - 6- Valley Floor Renewal Plan
- 10.2 Maintenance and Conservation Plan - **p. 118**
- 10.3 Recovery and Protection Plan - **p. 123**
  - 1- Plan for the Recovery of Woodlands and the Rock Art Parks' Natural Environment in General
  - 2- Plan for Protection within the Rock Art Parks (Boundary Fences, Rock Protection Fences, Walkways, Covers...)
- 10.4 Plan for the Modification of Regulations and Planning Rules - **p. 124**

### **PART FOUR Model for Local Cultural Development**

- 11.1 Scientific and Technological Research Plan - **p. 127**
  - Introduction to the Current State of Research
  - 1- Palaeoenvironmental Research Project
  - 2- Plan for Research into Valle Camonica's Rock Art
  - 3- Plan for Research in Valle Camonica's Prehistoric and Proto-historic Archaeological Sites
  - 4- Plan for the Study of the History of Rock Art Research; Analysis and Study of Historical Archives
  - 5- Project for Recording Intangible Heritage
  - 6- Specialist Publications
  - 7- Conference and Cultural Event Plan
  - 8- Environmental Monitoring Plan
- 11.2 Local Community Involvement Plan - **p. 139**
  - 1- Projects for Involving Schools and Universities
  - 2- Projects for Spreading Knowledge about the World Heritage Site "Rock Drawings in Valcamonica"
  - 3- Publicizing the Management Plan



#### 4- Other Proposals

##### 11.3 Accessibility and Permeability Plan- **p. 142**

1- The Brescia-Iseo-Edolo Railway, a Strategic Means of Access to the Rock Art Heritage

2- Signs for Tourists on Valle Camonica's Roads

##### 11.4 Training and Publicity Plan- **p. 145**

###### Professional Training

Training Course for Technical Personnel Specialized in Field Survey and Digital Graphics Related to the Conservation of the Lithic Archaeological Heritage, and in Particular to Rock Engravings

Course for Operators who Maintain Green Areas in Territories Covered by the UNESCO Site N° 94 "Rock Drawings in Valcamonica" Management Plan

Course for Artisans Specialized in Traditional Valley Crafts

Training and Refresher Course for Educators

Course for Tourism Workers

Training Course for Tourism Promoters Who Attract Tourists to Valle Camonica

Spreading Awareness

Clients

Provision of Services

Number of Personnel Involved in Education and Training Activities

The Publishing of Educational and Information Material

###### Education and Information Plans

1. Professional Qualifications for Education Personnel in the UNESCO Site N° 94 "Rock Drawings in Valcamonica"

2. Establishment of Reception and Education Centres in Rock Art Parks

3. Improvement of Educational Facilities in Rock Art Parks

4. Client Opinions Concerning Rock Art Parks

5. Educational Projects for Schoolchildren and Young People Resident in Valle Camonica

6. Educational Projects for Schoolchildren and Young People Not Resident in Valle Camonica

7. Training Courses for Teachers

8. Pre-school Visitors

9. Information for Adults

10. Information for the Disabled

11. Information for Visitors from Abroad

12. Publishing

##### 11.5 Plan for the Reception of Cultural Tourism- **p. 159**

##### 11.6 Traditional Local Activities Plan- **p. 161**

##### 11.7 Cultural Events and Activities Plan- **p. 162**

##### 11.8 Territorial Marketing Plan- **p. 163**

###### Objectives

###### Promotion

##### 11.9 Plan of Actions- **p. 169**

## **PART FIVE Control and Monitoring of the Management Plan**

### 12. Introduction- **p. 170**

12.1 Control of Maintenance and Conservation Work

12.2 Control of Recovery Work

12.3 Control of Preventative Measures

12.4 Control of Measures Regarding Tutelage

12.5 Control of Activities of Transformation

12.6 Control of Protective Measures

12.7 Control of Development Activities

12.8 Monitoring Sources of Pollution



Soprintendenza per i Beni Archeologici della Lombardia

12.9 Control and Monitoring of Tourism and Human Impact  
12.10 Control and Monitoring of Resident Consensus



## PART ONE The Plan's General Context

### 1. Definition of the Universal Meaning

#### 1.1 Reasons for the Listing

Valle Camonica (the "Camonica Valley"), located in northeast Lombardy and one of Italy's most extensive valleys (Figs. 1-2), is characterised by the world's richest heritage of rock engravings.

In 1979, Valle Camonica and its rock engravings became the first Italian site to be included in the UNESCO World Heritage List, for both the rarity of the phenomenon and the important scientific contribution made by the study of this rich heritage of engravings to our knowledge of man's prehistory.

The proposal's precise origin is unknown. It grew through contacts and scientific relations between institutions with no special formalization, as can clearly be seen from the *Proposition d'Inscription* presented on January 24<sup>th</sup>, 1979 by the Lombardy Regional Authority's Culture Department (Assessore alla Cultura della Regione Lombardia) (UNESCO note Prot. N° 94 dated March 21<sup>st</sup> 1979) and the scientific support of the "Centre for Prehistoric Studies, Valcamonica, Italy" (Centro Camuno di Studi Preistorici) in Capo di Ponte. Since the 1950s the institution had identified hundreds of engraved rocks; the historical, cultural and economic circumstances of the people who had produced them were reconstructed by the discovery of their links and contacts with main human groups present in Europe. The listing application was accepted because of the remarkable continuity through time of these artistic expressions and their similarities to other known European examples.

At the time the institution charged with the tutelage of archaeological heritage (Soprintendenza for Archaeological Heritage of Lombardy-Soprintendenza per i Beni Archeologici della Lombardia), was responsible both for the sites themselves (some were state property and were directly managed by the same), and for archaeological research that was conducted both directly and in collaboration (through authorizations and concessions) with the "Centre for Prehistoric Studies, Valcamonica, Italy" (Centro Camuno di Studi Preistorici), which was not involved in the initiative. The documents demonstrate that the bureaucratic procedure was brief (see ENCLOSURE 1):

- January 24<sup>th</sup> 1979: the Lombardy Regional Authority Culture Department (Assessorato alla Cultura della Regione Lombardia) presented the application. The proposal was supported by the "Centre for Prehistoric Studies, Valcamonica, Italy" (Centro Camuno di Studi Preistorici), which was inaccurately defined as the institution in charge of the protection and conservation of the heritage.
- March 21<sup>st</sup> 1979: UNESCO received the application and listed the site, following a consecutive number sequence, as N° 94.
- March 29<sup>th</sup> 1979: ICOMOS (International Council of Monuments and Sites) conveyed a note to UNESCO stating the documentation complete and adequate for *Val Camonica's* application.
- April 10<sup>th</sup> 1979: ICOMOS informed UNESCO of the need to "*add to the file a specially drafted paper for registration as international heritage, defining and specifying the areas concerned*".
- October 22<sup>nd</sup>-26<sup>th</sup> 1979: *Val Camonica's* WHL candidacy was presented at the Third Session of the Convention Concerning Protection of the World Cultural and Natural Heritage held in Cairo and Luxor.



The site was registered in 1979 on the basis of Criteria III and VI, as may be read in the ICOMOS report (Registration Proposal dated April 10<sup>th</sup> 1979). The definitions of the two criteria cited in UNESCO's general specifications and ICOMOS' specific reasons for *Val Camonica's* listing are quoted below:

- ICOMOS, Criterion III (English): "*The rock engravings of Val Camonica stretch back over the 8 thousand years which precede our present era. It is unnecessary to accent the conspicuously invaluable nature of human renderings which are of so great an antiquity.*"
- ICOMOS, Criterio III (francese): "*Les gravures rupestres de Val Camonica s'échelonnent dans le temps sur les 8 millénaires qui ont précédé notre ère. Il n'est pas besoin d'insister sur le caractère éminemment précieux de manifestations humaines remontant à une si haute antiquité.*"
- ICOMOS, Criterion VI (English): "*The rock engravings of Val Camonica constitute an extraordinary figurative documentation of prehistoric customs and mentality. The systematic interpretation, topological classification, and the chronological study of these configurations in stone have brought about a considerable contribution to the fields of prehistory, sociology and ethnology.*"
- ICOMOS, Criterio VI (francese): "*Les gravures rupestres de Val Camonica constituent une extraordinaire documentation figurée sur les moeurs et les mentalités préhistoriques. Le déchiffrement, le classement typologique et l'étude chronologique systématique de ces pétroglyphes aboutit à un apport considérable dans les domaines de la préhistoire, de la sociologie et de l'ethnologie.*"

The WHL's recognition of the site thus confirmed in 1979 the international importance of Valle Camonica's rock engraving heritage.

The preparation of the Site Management Plan provides an opportunity for reflecting upon and analysing the need to involve the various institutions present in the valley in a synergic process to make compatible with the territory's integrated development the unquestioned need for protection, conservation and development of the heritage.

## 1.2 The Engravings and Their Archaeological Context

### 1.2.1 A Brief History of Research

In 1914 Gualtiero Laeng, following up a note published in 1909 (LAENG G. 1909, *Scheda di segnalazione al Comitato Nazionale per la protezione del paesaggio e dei monumenti*, Touring Club Italiano), described for the first time to the general public the engravings present on the two boulders of Cemmo in the *Guida d'Italia del Touring Club Italiano: Piemonte, Lombardia e Canton Ticino*, Milan, Touring Club Italiano, p. 595 (Figs. 3-4). The news caught the interest of other scholars, who came to the valley to see for themselves these manifestations of prehistoric art (see the Bibliography).

In the 1920s and '30s, the search was extended to other localities in Valle Camonica by Giovanni Marro, Paolo Graziosi, Raffaello Battaglia and Giuseppe Bonafini. The latter was one of the first to propose the creation of an archaeological area (BONAFINI G. 1932, *Il Parco Nazionale Preistorico di Valcamonica, Brescia*, 11/Dicembre, Brescia, pp. 24-30) (Figs. 5-6).

During the '30s Valle Camonica (along with other sites) stimulated the interest of the Third Reich in its attempt to legitimize the idea of an Aryan Race, and the rock engravings of the ancient Camuni attracted the attention of Franz Altheim, Professor of Ancient History at the University of Berlin and enthusiastic supporter of racist theories (ALTHEIM; TRAUTMANN, in Bibliography).



After the interruption of the Second World War, research was continued in the '50s by Hercli Bertogg (director of the Coira Museum, Switzerland: BERTOGG 1952, 1956, 1967) and local scholars such as Gualtiero Laeng and Emanuele Süß (see the Bibliography), who worked for the Museo di Scienze Naturali di Brescia (Brescia Natural Science Museum).

Süß was commissioned by the Ancient Monuments Superintendent (Soprintendente alle Antichità), Mario Mirabella Roberti, to produce the first distribution map of engraved rocks in the Naquane area (SÜSS 1956 a, b), a prerequisite for the establishment in 1955 of the Rock Engravings National Park (Parco Nazionale delle Incisioni Rupestri). This was the occasion of an important collaboration between the Municipality of Capo di Ponte and the administration of the Provincial Authority of Brescia (Provincia di Brescia), which purchased the land and donated it to the State (transaction dated 20<sup>th</sup> August 1963, ratified by DPR on 26<sup>th</sup> October 1967, N° 1358 – ENCLOSURE 2) (Fig. 5).

A fresh and decisive impetus to the research was given by the arrival in 1956 of Emmanuel Anati, who came to compare the Valle Camonica rock art with that of Mount Bego in the French Maritime Alps and settled in Capo di Ponte, where in 1964 he founded the "Centre for Prehistoric Studies, Valcamonica, Italy" (Centro Camuno di Studi Preistorici).

His group launched systematic field campaigns to record the engraved rocks, using a method of drawing by direct contact and in some cases employing the casein-carbon black technique to render the engravings more readily visible (*Il trattamento delle rocce istoriate* in ANATI 1982, pp. 65-66 and Fig. 47).

In the '60s Anati, in addition to his rock art studies, conducted archaeological excavations (under concession from the Lombardy Archaeological Superintendency (Soprintendenza alle Antichità della Lombardia) at Luine, in the Municipality of Darfo Boario Terme (ANATI 1982 c) and at Capo di Ponte, in the Massi di Cemmo (ANATI 1967 b) and Dos de l'Arca localities (ANATI 1979 b, *passim*). In the latter site a fortified Bronze and Iron Age settlement was found, together with several engraved rocks (Figs. 7-10).

The "Centre for Prehistoric Studies, Valcamonica, Italy" (Centro Camuno di Studi Preistorici), and its Valle Camonica and Lombardy Department (Dipartimento Valcamonica e Lombardia-CCSP), founded in 1987 as a section of the CCSP, have remained active up to the present, with annual rock art research campaigns drawn up on a yearly basis in collaboration with the Soprintendenza for Archaeological Heritage of Lombardy (Soprintendenza per i Beni Archeologici della Lombardia), with whom the Centre has stipulated in 1994 a five-year agreement.

Research on sites with rock carvings has also been carried since the 1970s by A. Priuli of the Didactic Museum for Prehistoric Art and Life (Museo didattico Arte e Vita preistorica) at Capo di Ponte and from 1988 by the Footsteps of Man Archaeological Society (Cooperativa Archeologica "Le Orme dell'Uomo").

Various study groups conduct territorial searches throughout Valle Camonica and every year report the discovery of new rock art sites.

To date, more than 180 engraved rock localities have been discovered, scattered through the lower, mid and (to a lesser extent) upper valley. Sometimes these are grouped together, or situated near long-inhabited settlement sites, such as at Luine (Darfo-Boario Terme) and Dos de l'Arca (Capo di Ponte).

A summary of work on rock art sites is given in the table enclosed (ENCLOSURE 28), which lists the research and excavations carried out at each locality by the various institutions and study groups active in Valle Camonica.

A comparison of the List of Rock Art Sites (*infra*) with the Table of Research Activities gives a picture of the current state of research.

The rock engravings were executed from the late Palaeolithic until the Iron Age, with sporadic persistence during the Roman and Medieval periods and later. Contemporary settlement throughout these epochs was widespread in Valle





Camonica, but is still poorly understood; it was concentrated in bands halfway up the valley sides, but also present in small lateral valleys and at greater altitude for the exploitation of natural resources (hunting territories, pastures and outcrops of copper and iron ores). Evidence is to be found in traces of villages, burials, sacred localities, sites of mineral extraction and finds of isolated artefacts (mostly metallic) which have, especially in recent years, been the subject of works of synthesis and excavation reports (Fig. 11).

It should be emphasized that the widespread occurrence of important rock art sites has resulted in intense interest in this sector and the corresponding neglect of studies of the territory as a whole and of archaeological sites which, although their presence was known, were not paid equivalent attention until 1980, with the result that our knowledge of the prehistory and protohistory of the Camuni is still today somewhat inadequate.

Since 1980 the Ministry for Cultural Heritage and Activities-Soprintendenza for Archaeological Heritage of Lombardy (Ministero per i Beni e le Attività Culturali-Soprintendenza per i Beni Archeologici della Lombardia) has reinforced archaeological work on sites not necessarily connected with rock art, both with respect to rescue excavations (numerous sites in Darfo Boario Terme-Luine and Corni Freschi, Civate Camuno-Via Palazzo, Malegno, Ossimo-Passagròp and Pat, Capo di Ponte-Cemmo, Temù-Desèrt, Cevo-Dos del Curù and Dosso Andròla, Cedegolo-Dosso Poglià and other smaller sites) and research projects (digs conducted by F. Fedele of Naples University on Breno Castle Hill, a settlement, and on a cult and ceremonial site at Ossimo-Anvòia locality; research by M. Tizzoni of Bergamo University in the mine of Campolongo di Bienno; the excavation by Trento University at Coren Pagà di Rogno).

From this work a rich and complex picture is emerging in which it is now possible to delineate the settlement patterns of the valley, from ancient prehistory onwards (the oldest hut discovered dates from the Palaeolithic), and to discover the nature of the villages, the religious sites and places of work; all but the burial practices, which are still rather obscure.

The principal excavations conducted in prehistoric and protohistoric sites in Valle Camonica are summarized briefly below. The Soprintendenza carried out further investigation of the Massi di Cemmo area, in 1983 and 1984 (directed by R.C. De Marinis: DE MARINIS 1988 b), after the casual discovery, in 1981, of a fragment of a stele (the "Cemmo 3").

From 1988 onwards the Ministry granted concessions to several universities for excavations in settlement and ceremonial sites. At Breno, on Castle Hill (Fig. 12), excavations directed since 1988 by F. Fedele (Federico II University of Naples) have brought to light a Neolithic settlement which continued during the Bronze and Iron Ages (FEDELE 1988 a). Other campaigns were begun at Ossimo in Anvòia locality (Fig. 13), where, from 1988 to 2003, a Copper Age megalithic sanctuary was investigated (FEDELE 1995).

Excavations directed by B. Bagolini of Trento University have concentrated on an upland Neolithic site in Rogno (Fig. 14) (FERRARI-PESSINA 1997 a, b); M. Tizzoni of Bergamo University started in 1997 an international project concerning Iron Age mineral extraction in a mine at Campolongo di Bienno (ANCEL *et alii* 2000).

During the same period the work conducted directly by the Soprintendenza for Archaeological Heritage of Lombardy (Soprintendenza per i Beni Archeologici della Lombardia) has intensified and spread over various localities in the valley, frequently in areas with dense concentrations of engraved rocks (cf. bibliography and reports in "NSAL", 1988-2002); these have included rescue digs, excavations in advance of large-scale public works and programmed research.

In 1988 in Civate Camuno (Figs. 15-16), the remains of a hut with layers datable to the Upper Palaeolithic (about 13,850 years ago) were found, and a Lower



Mesolithic (late 9<sup>th</sup> millennium BC) occupation deposit. These constitute the oldest evidence of human presence in Valle Camonica (POGGIANI KELLER 1999 c); in the same site during the Middle and Late Neolithic was founded a village with hut on a wooden platform.

Other important discoveries (starting from the lower valley) were the Neolithic and Eneolithic settlements in the Parco di Luine, Darfo Boario Terme (1999-2000); in 1993 at Ossimo, in Passagròp locality, a site with Copper Age steles and menhir-boulders was brought to light; since 1995 at Ossimo, in Pat locality (Figs. 17-18), the Soprintendenza has been excavating a Copper Age ceremonial area with megalithic burials, near to which a *Camunni* settlement existed in the Iron Age (POGGIANI KELLER 1999 d, 2004 a, b, d).

At Cemmo, after an excavation in 1995 in which a small stele fragment (Cemmo 5) was found, new important remains were found in 2000 during preparatory work for the establishment of the Parco Archeologico Nazionale dei Massi di Cemmo (Figs. 19-21). The Soprintendenza programmed a series of excavation campaigns, still under way, which brought to light the remains of a megalithic sanctuary founded in the Copper Age and used until the late Roman/Early Medieval period (POGGIANI KELLER 2000 a).

Traces of prehistoric occupation were found in 1999 inside the Parco Nazionale delle Incisioni Rupestri, in the I Verdi locality (near Rock 33) and in Baitello del Pedù (NSAL 1999-2000).

In Upper Valle Camonica, where only sporadic finds were known, the remains of a dwelling datable to the late 6<sup>th</sup>/5<sup>th</sup> century BC constitute a particularly important discovery; they were excavated by the Soprintendenza in Desèrt locality, Temù during 2000 (POGGIANI KELLER 2001 a).

In 2004 the traces of a middle Iron Age mining settlement, associated with a long inscription in the North-Etruscan alphabet and rocks engraved with cup-shaped depressions, were investigated at Cevo at an altitude of 2000 m (Figs. 22-24). In addition, a dig in Malegno town centre uncovered a village founded in the Late Neolithic and occupied until the middle Iron Age, when a metallurgical workshop for bronze was present.

### 1.2.2 Rock Art: Engraving Techniques and Chronology

#### Introduction

The Valle Camonica rock art constitutes the most important assemblage of this kind of manifestation of human thought in the world. The valley's rock art heritage, composed of over 140,000 engraved figures, distributed on about 2,400 rocks, is an extraordinary expression of human creativity over the millennia, for a total of over 8,000 years, from the epi-Palaeolithic until the Roman and Medieval periods.

The number, chronological distribution and variety of the carvings determine the exceptional value of this site.

#### *Engraving techniques*

The carvings were performed on rocks which may be classified as Upper Permian sandstones and conglomerates. They are hard and composed largely of quartz; the erosive effect of the passage of Quaternary glaciers has been to smooth the surface of the outcrops. On these rocks the ancient inhabitants of the valley executed engravings which depict aspects of their everyday lives (especially hunting and agricultural scenes) and spiritual lives (divinity figures, cult scenes, ritual practices e.g. dances and initiation rites).

The majority of the engravings were executed using a "hammer" technique in which



the rock surface was subjected to repeated blows with a stone or metal tool, thus creating small circular concavities. Figures may be portrayed by hammered outlines only, or the internal areas may be completely infilled by hammering (Figs. 25-26). Another technique used is that known as "filiform" or "graffito" in which the rock surface was cut with a pointed instrument, leaving a groove (Figs. 27-28). It is not uncommon to find, amongst the vast assemblage of Valle Camonica rock art, figures which have been created using both methods; in these cases the filiform technique was used to add detail to the works (Fig. 29).

### *Chronology*

The first comprehensive typological and chronological study of the valley's rock art, based on an analysis of the style, content and superpositions of thousands of carvings, was made by Emmanuel Anati, who in 1964 founded the "Centre for Prehistoric Studies, Valcamonica, Italy" (Centro Camuno di Studi Preistorici).

In *Evoluzione e stile nell'arte rupestre camuna*, published in 1975, Anati classified the rock art into four main stylistic groups which correspond to the prehistoric period (from the epi-Palaeolithic to the Bronze Age: Styles I-III), distinguished by schematic portrayals of figures in isolation or in symbolic groups (weapons and other artefacts), and the protohistoric (Iron Age: Style IV), which is characterized by a naturalistic and narrative art with figures in movement and illustrations of events (Fig. 30).

The engravings of the latter period may be attributed to the *Camunni* people (the Latin name of the Camuni), which are referred to by historical sources as the Retic (Strabo) or Euganeic peoples (Pliny).

This chronological system is still held to be valid, but over the last fifteen years has been subjected to partial revision on the basis of recent research and the important new discoveries which have been made in the valley.

### *Rock art chronology*

After the end of the last glaciation, the climate, vegetation and fauna of the Alpine regions underwent a process of gradual change, affecting and profoundly altering the lives of the human populations.

The economy of the hunting groups continued to be essentially predatory; due to the spread of the use of the bow and arrow, middle and large-sized animals were hunted, such as roe and other deer (still present in Valle Camonica) and elk. Other means of obtaining food were fishing and gathering wild fruits.

The oldest evidence of the presence of humans in the valley dates from the Upper Palaeolithic, followed by the Mesolithic; an Upper Palaeolithic hut (radiocarbon date GX-17274/1991: 13,805±440 B.P.) and a Lower Mesolithic bivouac (radiocarbon date GX-18843 AMS/1993: 8,820±112 B.P.), were excavated in Cividate Camuno (POGGIANI KELLER 1990; 1996; 1999). Other finds of these periods were made at Breno Castle (Upper Paleolithic: FEDELE 1988 a) and at "Rockshelter 2" in Foppe di Nadro (Mesolithic: ZANETTIN 1983). A system of seasonal upland bivouacs has been identified on the mountains which divide Valle Camonica and Valtrompia (BIAGI 1989; 1994; 1997).

Rock engravings attributed by scholars (especially ANATI 1982 b, pp. 139-153) to this period are to be found in the Darfo-Boario Terme area, on rocks in Luine (ANATI 1982 c): these are depictions, often large in size, of big animals such as elk, pierced by hunting weapons (Fig. 31).

The figures were outlined with irregular hammer blows produced by heavy stone tools, some of which were recovered at the base of the carved rocks.

In the **Neolithic** (5<sup>th</sup> – 4<sup>th</sup> millennium BC) the economy changed from one of subsistence to one of production, due to the introduction of agriculture and animal rearing. Other important innovations were ground stone tools, pottery, spinning, weaving and, in the Late Neolithic, the introduction of the plough.



Although in Valle Camonica there are numerous Late Neolithic archaeological sites – in fact at this time villages were founded which remained in use until the Iron Age (Lovere, Luine in Darfo B.T., Cividate Camuno, Malegno, Breno and Dos de l'Arca in Capo di Ponte: POGGIANI KELLER 2003; 2004 b) – it is difficult to indicate features which distinguish the rock engravings of the period (despite past attempts: ANATI 1982 b, pp. 154-185).

The characteristic figures of the epoch are the schematic "orants", with symmetrical legs and arms bent at right angles; these carvings have been variously interpreted as people at prayer, in lamentation or dancing (Fig. 32).

Several geometrical designs, considered to represent landscape features (cultivated fields), are dated to the end of the Neolithic or the beginning of the Copper Age (Figs. 33, 35). The conclusions of the rock art scholars (ANATI 1982 b; ARCA 1999 a, b, c) are confirmed by recent finds in the ongoing excavations of the Ossimo-Pat megalithic sanctuary: Fig. 34 (POGGIANI KELLER 1996 b; 1999 d; 2002 a, f; 2004 a, b, d).

During the **Copper Age** (mid 4<sup>th</sup> – 3<sup>rd</sup> millennium BC) the search for and working of metal and other important technological and cultural innovations, represented by the introduction of the cart and the spread of the plough, led to expansion into new territories, increased settlement density determined by the exploitation of resources and the control of access routes, the development of agriculture and the strengthening of long-distance contacts. Alongside the tools made from flaked and ground stone, axes, daggers and halberds came into use with the spread of copper production.

The rock art of this period is typified by steles and menhir-boulders engraved with symbolic and naturalistic figures, erected in cult and ceremonial localities, which were sometimes associated with primary or secondary burials. This phenomenon is known from all of Europe, from the Atlantic coast and the Iberian peninsula to the Ukraine, and dates from the Neolithic to the Bronze Age. It is found in the Alps during the Copper Age in an area which extends from Valle d'Aosta to Trentino/Alto Adige, with localized concentrations (in Valle d'Aosta, Vallese, Valcamonica, Valtellina, Trentino and Alto Adige). In Italy such monumental compositions also occur in Lunigiana, in the Appennines (Fig. 36).

In Valle Camonica from the Late Neolithic (1<sup>st</sup> half 4<sup>th</sup> millennium BC) onwards, long-lasting settlements were founded, which controlled key points along the River Oglio valley floor, where mountain paths branched off. Over the course of the next few centuries, during the Copper Age (2<sup>nd</sup> half 4<sup>th</sup> and 3<sup>rd</sup> millennia BC), striking and singular monumental religious-ceremonial complexes were constructed (Fig. 37). These megalithic cult and ceremonial sites contain engraved rocks, mostly menhir-boulders made from glacial erratics, with a lesser number of steles. They are positioned both along the Oglio (at Corni Freschi, Darfo-Boario; at Cemmo and Cedegolo-Campolongo) and in more internal areas crossed by the route which connected Valcamonica and Val di Scalve, on the Ossimo-Borno upland (Map, nos. 10-16).

In Valle Camonica (and in neighbouring Valtellina) this phenomenon is particularly evident, unusual and clearly allied to the exceptionally abundant manifestations of rock art present in the same area. After ten years of excavation, it is evident that this distribution of numerous cult and ceremonial sites, sanctuaries distinguished by engraved monoliths, constitutes a novel and distinctive aspect of the rock art of Valle Camonica, which is thus also one of the parts of Europe with the greatest density of Chalcolithic monumental sites. There are over seventy engraved monoliths (steles and menhir-boulders) distributed between sixteen separate localities (Corni Freschi in Darfo-Boario Terme; Piancogno-Dassine; Ossimo-Pat (Figs. 38-40), Passagròp, L'Anvòia, Asinino, Via S. Carlo; Ossimo Inferiore-case Zendra and Feriti, Via S.



Rocco; Borno-Valzel de Undine, Lazzaretto, Centro; Malegno-Ceresolo; Capo di Ponte-Cemmo (Figs. 41-42); Cedegolo-Campolongo; Ceto-Foppe di Nadro).

A careful evaluation of the circumstances of these finds suggests that eleven of the locations correspond to the original monument sites (POGGIANI KELLER 2004 a, b, d, c.s.).

In four of them excavations have been carried out, of which three (still under way) by the Soprintendenza for Archaeological Heritage of Lombardy (Soprintendenza per i Beni Archeologici della Lombardia): at Ossimo, in Passagròp (FEDELE 1990 f; POGGIANI KELLER 1996 b; 1999 d) and Pat localities (POGGIANI KELLER 1996 a; 1999 d; 2002 a, f; 2004 a, b, d; c.s.), and at Cemmo in Capo di Ponte (POGGIANI KELLER 2000 a; 2002 c). The fourth was recently concluded at Ossimo-l'Anvòia locality (directed by prof. F. Fedele of the Federico II University of Naples under concession from the Ministero per i Beni e le Attività Culturali: FEDELE 1990 f; 1995). These sites, together with others that may be hypothesized on the basis of chance discoveries of one or more engraved monuments, have a special significance in the landscape of the valley (as in that of nearby Valtellina) and constitute an expression and consequence of the density of occupation, extending from the valley floor to high altitudes, which developed from the Late Neolithic onwards, an enduring and demonstrated possession of the territory.

These open-air sanctuaries were monumental and visible from various directions, by means of *ad hoc* visual corridors created by the clearance of extensive portions of woodland (Fig. 43), and contained engraved monoliths of various sizes (those known at present range from 1.95m to 0.5m in height). They formed long-lasting territorial markers, as Colin Renfrew has observed for other parts of Europe (RENFREW C. 1984, *L'archeologie sociale des monuments mégalithiques*, "Pour la science", 75, pp. 28-37), to the extent that their presence has influenced and perpetuated the use of these sites through changing millennia and religions. This may be seen from recent excavations in Cemmo, where the prehistoric sanctuary became an Iron Age and then Roman cult area and, finally, the location of a parish church.

The presence of metal slag in several of the sites (Ossimo - Passagròp and Pat localities) and the conversion of large areas of woodland into meadow by burning clearance at the time when the complexes were founded (both of which are recorded in excavations) indicate possible underlying motives for the occupation of certain internal zones – the exploitation of minerals and animal rearing – and the consequent religious importance of particular sites on the access routes.

Two of these sites will be equipped for visitors and opened to the public in 2005:

- in Anvòia, Ossimo, where excavation ceased in 2003, there is the Parco Archeologico di Anvòia, an archaeological area with casts of several monuments, (opened on May 28<sup>th</sup> 2005: Fig. 44);
- at Cemmo in Capo di Ponte the remains of the sanctuary with Rocks 1 and 2 will form part of the Parco Archeologico Nazionale dei Massi di Cemmo (inauguration in October 2005).

The abundant variety of figures found on Copper Age monuments includes weapons, ornaments, animals and humans (Figs. 45-48). The wild animals include deer, fawns, ibex, chamois, foxes, wolves and wild boar; the domesticated varieties are dogs, pigs and cattle, the latter at times yoked in pairs to ploughs or carts. The predominant symbolic figure is that of the sun disc, inscribed towards the top of the more anthropomorphic monuments in place of the face.

A study of the weaponry, the superposition of some figures with respect to others, and the most common associations has led to the recognition of two chronological phases (DE MARINIS 1994 c), which find stratigraphic confirmation in excavations currently under way (Figs. 49-50).

The earlier is also known as the "Remedello Phase" on the basis of the depictions of daggers with triangular blades and straight bases, similar to those found in the bur-



ial ground in Remedello Sotto (Province of Brescia), which are dated to the Copper Age (2800-2400 BC).

The second phase (late Copper Age, 2400-2200 BC) is called the "Bell-Beaker Phase", after the daggers with long narrow triangular blades, slightly curved sides and ogival handles, which resemble the Ciempozuelos type widespread in the Bell-Beaker culture (characterized by campaniform vases which are found throughout most of Europe).

The Valle Camonica steles and carved rocks have been interpreted as divinities or heroic entities, represented at first by real and symbolic objects and later by human figures. The places where these sacred images were situated seem to have been, in the light of recent discoveries, open-air sanctuaries in which regular ceremonies would have been held. In the case of the Ossimo-Pat sanctuary, the presence of tumuli indicates that this ceremonial site also had a funerary role, which might suggest the interpretation of some carved monuments as ancestor figures (POGGIANI KELLER 2004 a, b, d, c.s.).

During the **Bronze Age** (2<sup>nd</sup> millennium BC) metallurgical techniques underwent further development with the invention of bronze, made by adding tin to copper. The production of work implements, sickles, axes, daggers, halberds, swords, helmets, spearheads and objects for personal use, such as razors, pendants and brooches for fastening clothing, intensified.

In this period Valle Camonica was on the periphery of cultures which developed on the Po Plain (the Polada culture and that of the inhabitants of pile dwellings and *terramara* mounds) and also subject to Alpine influences. Important excavations were conducted in Dos dell'Arca, Capo di Ponte (excavations in the '60s by the Antiquities Superintendency (Soprintendenza alle Antichità), directed by E. Anati) and at Luine, Darfo (research and excavations by the "Centre for Prehistoric Studies, Valcamonica, Italy" (Centro Camuno di Studi Preistorici), directed by E. Anati, 1968-1970; excavations by the Soprintendenza for Archaeological Heritage of Lombardy (Soprintendenza per i Beni Archeologici della Lombardia), 1999-2000: Fig. 51), of sites occupied for millennia, with dwellings in the same localities as engraved rocks. The Luine locality, Darfo-Boario Terme, which contains the remains of a prehistoric and protohistoric village and 237 engraved rock surfaces, has been a municipal park area since 1976 (ANATI 1982 c; CITTADINI 1989), recently included in the Parco Locale di Interesse Sovracomunale del Lago Moro.

Most of the carvings from this period show weapons, especially daggers, axes and halberds (Figs. 52-55). Composite engravings are usually, but not always, made up of groups of arms of the same type; they have been compared to the practice of hoarding metal artefacts, sometimes to be interpreted as votive deposits. A hoard consists of a group of metal objects (ingots, slag from metalworking, broken or complete artefacts) which were hidden at moments of particular difficulty or danger (in this case these usually belonged to founders). Arms deposited on riverbeds or in streams have a different meaning: they are interpreted as offerings to divinities. A connection has recently been proposed between the weapons engraved on the rocks in Foppe di Nadro and the presence of nearby watercourses.

Other bronze tools portrayed in the Valle Camonica carvings look like small shovels (Figs. 56-57), and have been subject to a wide variety of interpretations: oars, razors, mirrors, spades or sleds, to cite but a few. The most plausible theory is that the engravings show the small bronze shovels which are found as grave goods and were used to move the ash of the cremated deceased or from domestic hearths. Amongst the other Bronze Age engravings, particularly noteworthy are the ploughing scenes (Foppe di Nadro, R. 29), looms (Naquane, Rocca 1: Fig. 58) and orants which are still schematic, but distinguished by the presence of anatomic details (Fig. 59).



**Iron Age** carvings are attributed to the *Camunni*, the ancient population of the Valle Camonica referred to by historical sources (Pliny, Nat. Hist. III, 133-134).

Archaeological evidence of Iron Age settlements in the valley has been found in excavations conducted in the '60s in Luine (Darfo-Boario Terme) and Dos dell'Arca (Capo di Ponte); there is also an isolated find from Valcamera di Borno (DE MARI-NIS 1989 b) Fig. 60.

Especially interesting are the well-stratified remains, datable to the Middle Iron Age, of the mining village of Cevo-Dos Curù (Fig. 61), founded at high altitudes, and also the remains of a house excavated in 2000 in Temù, Desèrt locality; various scientific analyses were performed (a Soprintendenza dig: POGGIANI KELLER 2001 a). The single-roomed sunken building contained 6<sup>th</sup> – 5<sup>th</sup> century BC pottery. This type of construction remained in use after the Romans annexed the valley, as may be seen from the remains of a house discovered in Pescarzo (Capo di Ponte), dated to the 1<sup>st</sup> century BC (ROSSI 1999 b), and the village at Berzo-Demo found in 2001 (excavated by the Soprintendenza: "NSAL" 2001-2002, p. 52): Figs. 62-65.

The majority of the Valle Camonica Iron Age rock engravings exhibit a naturalistic, realistic style, distinguished by the progressively more detailed portrayal of anatomical detail and attempts to illustrate the movement in the events shown (Figs. 66-76).

The figure of the warrior is dominant, involved in various activities appropriate to the aristocratic class: duels (Figs. 77-79), horse riding and hunting (Figs. 80-82), which have been interpreted as initiation trials or rites undergone by local young aristocrats in order to enter adulthood.

The variety of arms (swords, shields and helmets: Figs. 83-85) with which the warriors are depicted and the precision of the engraved detail has allowed comparisons with finds from archaeological excavations.

In the hunting scenes the prey shown are almost exclusively deer; the hunter, sometimes on horseback, is in several instances helped by a dog (Figs. 86-88).

Examples of other subjects illustrated in this period are buildings (Figs. 89-92), ploughing (Fig. 93), footprints (Figs. 94-95) and aquatic birds (Figs. 96-97). It is interesting to note that in the ploughing scenes the work is now done by horses (Fig. 93) rather than the cattle shown in the carvings of previous epochs.

Of great importance is the appearance during the Iron Age of inscriptions in the alphabet known as "North-Etruscan", at times clearly associated with frequently illustrated subjects, such as "sun-boats" and footprints (PROSDOCIMI 1965; 1971 a; MANCINI 1980; TIBILETTI BRUNO 1978; MORANDI 2004): Figs. 98-99.

The end of the 1<sup>st</sup> century BC, after the definitive **Roman conquest** of Valle Camonica, saw the foundation of the town of *Civitas Camunnorum*, now called Cividate Camuno. In the 1<sup>st</sup> century AD it progressively acquired a monumental appearance, with the construction of important public buildings, a theatre and an amphitheatre (excavated, and open to the public since the inauguration, in 2003, of the Parco Archeologico del Teatro e Anfiteatro: MARIOTTI 2004).

The Roman occupation of the valley and the arrival of new cultural models effectively brought the sequence of Valle Camonica rock art to a close. In reality, though, the practice of engraving the rocks did not completely disappear, as may be seen by the presence of several Latin inscriptions (Figs. 100-101). Figurations in the Iron Age tradition also probably continued for some time.

After the arrival of Christianity, from the 4<sup>th</sup> century onwards there spread an energetic campaign against the idolatry of carved rocks (*saxorum veneratio*). Official documents from up until the 11<sup>th</sup> century show the firm intention of the Catholic Church to extinguish these forms of pagan cult from mountain areas. The campaign took the practical form of inscribing Christian symbols (especially crosses: Figs. 102-107) on rocks next to the ancient engravings and of building churches and shrines



close to prehistoric and protohistoric sites.

The recent excavations conducted by the Soprintendenza at the Massi di Cemmo (Capo di Ponte) shed some light on these events (POGGIANI KELLER 2000): the megalithic sanctuary, founded in the Copper Age (3<sup>rd</sup> millennium BC) and used until the Roman period, fell into disuse in the late Roman/Early Medieval period. Near the old pagan religious site a church was built, dedicated to St. Siro, the saint who, according to tradition, brought Christianity to the valley.

Depictions of towers and castles (Figs. 108-109), symbolic figures such as those known as "Solomon's Knots", keys and gallows bear witness to the continuation of engraving tradition into the Medieval period and beyond. The refined recording techniques of recent years have revealed that in this later epoch burins were often used for engraving grooves ("filiforme" style); such carving was often practiced on monuments and religious buildings as well as rocks. The Campanine site, Cimbergo, is particularly rich in Medieval inscriptions (SANSONI 1993, 1997).

The practice of engraving rocks continued, however, in the following centuries, up to the **modern and contemporary periods**. Numerous modern carvings mark private property and municipal boundaries, or record individual names or dates, in addition to illustrations in which the artistic qualities prevail over the simplicity of the engraving.

Monticolo locality, Darfo Boario Terme, which is included in the Parco Locale di Interesse Sovracomunale del Lago Moro, contains a large number of historically recent figurations and inscriptions; many of these are of a religious and devotional nature, such as crosses and elaborate monstrances (Figs. 104-106), and demonstrate that the practice was still common in the 17<sup>th</sup> and 18<sup>th</sup> centuries. In fact, it continued into the modern epoch, as may be seen from the engraving which commemorates the construction of the Valle Camonica railway between 1904 and 1908 (Fig. 110), an ancient way of recording an important 20<sup>th</sup>-century event!

### 1.3 Cultural Value

For the sheer quantity of engravings, their incredible iconographic variety and the vast span of time they cover (the earliest examples date from c. 8000 years before the modern era, and the practice continued up the Medieval period and after), nowhere else in the world is a phenomenon such as Valle Camonica's rock art to be found. It is a unique manifestation of Alpine and European culture, a huge open-air museum that occupies the entire valley. It is therefore an outstandingly precious patrimony which must be protected and developed for present and future generations.

The thousands of rock engravings provide an exceptional illustrated record of both the everyday existence and the spirituality of the people of the past. The study of these continues to make important contributions to the disciplines of prehistory, proto-history, ancient history, the history of religion and those of linguistics, glottochronology, and anthropology in general.

## 2. The Site's Geographical Basis

### 2.1 Boundaries and Composition

**Nation:** Italy

**Region:** Lombardy

**Province:** Brescia

**Name of Site:** Rock Drawings in *Val Camonica*

**Geographical Coordinates:** The site has been defined by two polygonal bound-



aries, the first of which encloses the total area of rock art sites, and second the area of Parks with rock engravings. The Gauss-Boaga, Roma40 and WGS84 coordinates of each of the polygons' vertices are specified below. These are numbered from 1 to 9, starting from the SE corner and proceeding clockwise.



List of the points of the two boundaries, which enclose the area of rock art sites and the area of Parks with rock engravings.

Lat. =  $\phi$   
Long. =  $\lambda$

### 1) PISOGNE

Località: Monte Pontasio

Foglio I.G.M.: 34, Breno

Coord. Gauss Boaga (E/N): 1587817.22/5070814.70

Coord. Geografiche Roma40:  $\phi$  45° 47' 04.0121"

$\lambda$  -2° 19' 21.5295"



## 2) PISOGLNE

**Località:** La Biosca

**Foglio I.G.M.:** 34, Breno

**Coord. Gauss Boaga (E/N):** 158659.57/5072958.99

**Coord. Geografiche Roma40:**  $\phi$  45° 48' 14.0034"

$\lambda$  -2° 20' 13.7452"

**Bibliografia:** ROSSI 1991, p.163, n.1278

## 3) ANGOLO TERME

**Località:** southwest of the Anfurro hamlet along the main road to Monti (Municipality of Rogno)

**Foglio I.G.M.:** 34, Breno

**Coord. Gauss Boaga (E/N):** 1588021.13/5080503.44

**Coord. Geografiche Roma40:**  $\phi$  45° 52' 17.7835"

$\lambda$  -2° 19' 05.7185"

## 4) BORNO

**Località:** Casa vecchia dei Paiù

**Foglio I.G.M.:** 34, Breno

**Coord. Gauss Boaga (E/N):** 1593585.74/5089101.30

**Coord. Geografiche Roma40:**  $\phi$  45° 56' 53.6560"

$\lambda$  -2° 14' 41.6359"

**Bibliografia:** ROSSI 1991, p.32, n.137

## 5) CORTENO GOLGI

**Località:** Cappelletta dell'Addolorata

**Foglio I.G.M.:** 19, Tirano

**Coord. Gauss Boaga (E/N):** 1598854.36/5113660.90

**Coord. Geografiche Roma40:**  $\phi$  46° 10' 06.5269"

$\lambda$  -2° 10' 18.6300"

**Bibliografia:** ROSSI 1991, p.68, n.520

## 6) VEZZA D'OGLIO

**Località:** Sass de le Strie, croce del Piazza

**Foglio I.G.M.:** 19, Tirano

**Coord. Gauss Boaga (E/N):** 1607859.03/5120284.50

**Coord. Geografiche Roma40:**  $\phi$  46° 13' 36.1441"

$\lambda$  -2° 03' 13.4054"

**Bibliografia:** ROSSI 1991, p.204, n.1734

## 7) SAVIORE DELL'ADAMELLO

**Località:** near Malga Casentia

**Foglio I.G.M.:** 19, Tirano

**Coord. Gauss Boaga (E/N):** 1609713.90/5106136.17

**Coord. Geografiche Roma40:**  $\phi$  46° 05' 56.8218"

$\lambda$  -2° 01' 58.6450"

## 8) BIENNO

**Località:** Novel, above Campolaro

**Foglio I.G.M.:** 34, Breno

**Coord. Gauss Boaga (E/N):** 1602781.16/5085048.53

**Coord. Geografiche Roma40:**  $\phi$  45° 54' 37.6453"

$\lambda$  -2° 07' 37.7757"

**Bibliografia:** ROSSI 1991, p.28, n.100



## 9) SONICO

**Località:** Pradasella

**Foglio I.G.M.:** 19, Tirano

**Coord. Gauss Boaga (E/N):** 1605425.34/5113272.82

**Coord. Geografiche Roma40:**  $\phi$  46° 09' 50.4110"

$\lambda$  -2° 05' 12,6091"

**Bibliografia:** ROSSI 1991, p.195, n.1641

**Site limits.** The WHL Site N° 94 "Rock Drawings in *Val Camonica*" is defined as a complex site, which covers a large area in the Province of Brescia. The rock engravings, which constitute the site, are found throughout Valle Camonica, with a maximum length of 80 km and a surface area exceeding 1,300 km<sup>2</sup>. The altitude ranges from 200 m above sea level, in the valley floor, to 3,539 m at the summit of the Adamello.

About 180 rock engraving localities have been identified in 24 of the valley's 41 municipalities, with a total of at least 2,000 engraved rocks (at a conservative estimate)<sup>1</sup>, found at altitudes which generally range from 200 m to 1,300 m. Some are also present at altitudes of over 2,000 m (Cevo-Dos del Curù, Pian della Regina, etc.).

From 1955 to 2005, seven Parks have been created in this extremely rich cultural heritage, whose distribution in lower, middle and upper Valle Camonica varies greatly. These parks contain the main rock art sites.

An eighth park, opened on May 28<sup>th</sup> 2005 in Ossimo, Anvòia district, features a ceremonial site dating to the Copper Age. It has been thoroughly studied and opened to the public with plaster casts of carved monoliths on display and information panels both on site and at the Reception and Education Centre which is located nearby. There follows a brief description of the seven Rock Art Parks, with an indication of land ownership.

**1) Parco Nazionale delle Incisioni Rupestri (National Rock Engraving Park), Capo di Ponte** (state property and private property under compulsory purchase in progress). It is located on the left-hand side of the middle valley, with an average altitude ranging from 350 m to 600 m, and includes the *Naquane*, *Còren del Valento*, *Bait del Pedù*, *I Verdi* and *Ronchi di Zir* localities. The Park also comprises an *Antiquarium* and service facilities (offices and storage units for archaeological material).

The site's surface area (inclusive of property under compulsory purchase order) is 143,935 m<sup>2</sup>.

**2) Parco Archeologico Nazionale dei Massi di Cemmo (Massi di Cemmo National Archaeological Park), Capo di Ponte** – opened on October 6<sup>th</sup> 2005 (State property). The park is located on the right-hand side of the middle valley at an average altitude of approximately 400 m. Surface area: 8,125 m<sup>2</sup>.

**3) Parco Comunale di Luine (Luine Municipal Park), Darfo Boario Terme** (council property). The Park, located in the lower valley, is on a hill overlooking the point where the Dezzo stream flows into the river Oglio on the right-hand valley side, with an average altitude between 200 m and 350 m. It includes the *Luine*, *Crape* and *Simoni* localities and is contained within the *Parco di Interesse Sovracomunale del Lago Moro*, which was formed in 2000-2001. Surface area: 99,789 m<sup>2</sup>.

**4) Parco Archeologico Comunale di Seradina-Bedolina (Seradina-Bedolina**



**Municipal Archaeological Park), Capo di Ponte** – opened on October 8<sup>th</sup> 2005 (council property). It is located on the right-hand side of the middle valley at an average altitude ranging from 370 m to 540 m. It includes the *Seradina (I, II and III, Corno di Seradina<sup>2</sup>)* and *Bedolina* localities. Surface area: 86,528 m<sup>2</sup>.

**5) Parco Comunale di Sellero (Sellero Municipal Park)** (mixed council and private property). It is located in the upper valley on the right-hand side, with altitudes from 500 m to 800 m. It contains the localities of *Carpene-Fradel-Berco* and *Preda Mola-Castello*. Other concentrations of rock engravings have been found in Isù-Barnil (north of the Park) and in Pià d'Ort-Còren (to the south, at the border with Capo di Ponte). Surface area; 830,261 m<sup>2</sup>.

**6) Parco pluritematico del "Còren de le Fate" ("Còren de le Fate" Multi-theme Park), Sonico** (mixed council and private property). It is located on the left-hand side of the upper valley at an average altitude of 650 m to 750 m. Surface area: 832,153 m<sup>2</sup>.

**7) Riserva Regionale delle Incisioni Rupestri di Ceto, Cimbergo e Paspardo (Ceto, Cimbergo and Paspardo Regional Rock Engraving Reserve)** (mixed consortium, council and private property). It is located on the left-hand side of the middle valley, partly adjacent (on the northwestern side) to the *Parco Nazionale delle Incisioni Rupestri*, at an altitude of 360 m to 1,000 m. It includes the localities of *Foppe di Nadro, Verdi, Zurla, Dos Cui, Castelliere* (Municipality of Ceto); *Campanine-Figna* (Municipality of Cimbergo); *Vall-Castello-Canneto, Capitello dei Due Pini, Dos Custapeta, Dos Sottolaio, Deria* (Municipality of Paspardo). The Teaching Museum of the Riserva Regionale Incisioni Rupestri di Ceto, Cimbergo e Paspardo, which is located in the historic centre of Nadro di Ceto, is linked to the Reserve. Surface area: 2,685,803 m<sup>2</sup>.

A complete list of Valle Camonica localities with rock engravings is given in the table "*List of Rock Art Sites in Valle Camonica*" (Table 1).

(The number of sites may vary as some discrepancies have been found in the use of place names by those who made the signposts for these sites: with the creation of a GIS record of rock art sites – which is currently (in 2005) being prepared by the Soprintendenza for Archaeological Heritage of Lombardia (Soprintendenza per i Beni Archeologici della Lombardia) – locations are being verified and corrections made where necessary).

## 2.2 Buffer Zones and Connecting Areas

Buffer zones were defined around the seven main Rock Art Parks. They include a harmonious geographical and historical area, which groups various degrees of interest (geomorphological, environmental, landscape, archaeological and historical) recognised, where possible, in the framework of Piani Paesaggistici (Landscape Plans) processed in former Law No. 431/1985 and given due consideration by the Brescia Provincial Authority's recent Territorial Coordination Plan.

The buffer zones of the seven main Parks contained in the UNESCO Site are varied in nature, and include the following features:

- areas where landscape is protected, in accordance with former Law N° 1497/1939 (or, around the Parco Nazionale delle Incisioni Rupestri in Capo di Ponte, by Ministerial Decree dated 14.4.1967);
- geographically and morphologically uniform areas (Parco Archeologico Comunale di



Seradina-Bedolina, whose buffer zone also comprises archaeologically important rock engraving sites, not currently inserted in the park; Parco Comunale di Sellero; Parco pluritematico del "Coren de le Fate");

- link areas between different sites connected by the ancient road network, and in the case of neighbouring municipalities which already form a consortium (Riserva Regionale delle Incisioni Rupestri di Ceto, Cimbergo, Paspardo), where the archaeologically important areas and buffer zones may not be separately defined ;

- geographical link areas between various types of parks – natural, historical and archaeological – which form a single administrative group (Parco Comunale di Luine, now included in the Parco Comunale di Interesse Sovracomunale del Lago Moro).

**Parco Comunale di Luine (Darfo Boario Terme)** - The perimeter of the Parco Comunale di Luine's buffer zone coincides with the boundary of the Parco Comunale di Interesse Sovracomunale del Lago Moro, which contains the Parco di Luine. Its overall surface area is circa 430 hectares of which 131 ha are in Angolo Terme municipal territory and 299 ha in Darfo Boario Terme municipal territory.

The Lake Moro Park comprises the entire lake and the adjacent hilly area including, besides the Parco Comunale di Luine, the hills of Sorline, Castellino and Monticolo, which also contain archaeological remains and engraved rocks.

Surface area: 4,058,765 m<sup>2</sup>.

**Parco Nazionale delle Incisioni Rupestri (Capo di Ponte)** - As mentioned above, the buffer zone coincides with the protected landscape area, (former Law N° 1497/1939; Ministerial Decree dated 14<sup>th</sup> April 1967).

Surface area: 273,609 m<sup>2</sup>. The boundary of the National Park's buffer zone coincides perfectly with that of the Riserva Regionale delle Incisioni Rupestri di Ceto, Cimbergo e Paspardo.

**Parco Archeologico Nazionale dei Massi di Cemmo and Parco Archeologico Comunale di Seradina-Bedolina (Capo di Ponte)** - Capo di Ponte Council is currently defining the buffer zone perimeter, which surrounds these two adjacent parks and also includes, in addition to a geographically and morphologically uniform area, some other rock art sites to the northwest. The latter do not yet belong to the municipal park, but will be included in the near future. The Parks' buffer zone extends as far as the neighbouring Sellero municipal Park, thus creating a single large protected area.

Surface area: 1,497,992 m<sup>2</sup>.

**Parco Comunale di Sellero** - An extension of the Park's area and the creation of a buffer zone are currently being approved and will be inserted in the council's planning regulations, which are currently being revised. This process envisages a southward extension, to link up with the buffer zone of the two parks in the neighbouring Capo di Ponte municipality, mentioned above.

Surface area: 746,064 m<sup>2</sup>.

**Parco Pluritematico del "Coren delle Fate" (Sonico)** - The Park's perimeter and buffer zone borders are currently being defined in collaboration with the council; both already fall within the Adamello Regional Park.

Proposed surface area: 955,978 m<sup>2</sup>.

**Riserva Regionale di Ceto, Cimbergo e Paspardo** - New boundaries have been defined for the Reserve and its buffer zone. They were presented for the approval of the Managing Institution and the Ceto, Cimbergo and Paspardo Regional Rock Engraving Reserve Consortium at the "Services' Conference" on March 23<sup>rd</sup> 2005.

Surface area, western area (C1) + eastern area (C3): 1,290,118 m<sup>2</sup>.



### 3. Description of Promoting Parties

This Management Plan will consider Valle Camonica both as a traditional place for the "conservation of historical culture" and as a living community which can coordinate the factors necessary for the development of its local economic system.

#### 3.1 Public Bodies

The Management Plan envisages a collaborative process between institutions, with the involvement of local organizations. On the basis of a *Declaration of Intentions* (ENCLOSURE 3), approved and undersigned on December 20<sup>th</sup> 2004, the main parties involved are the following:

- Ministry of Cultural Heritage and Activities-Lombardy *Soprintendenza* for Archaeological Heritage (Ministero per i Beni e le Attività Culturali-Soprintendenza per i Beni Archeologici della Lombardia) (with the Lombardy Regional Directorate for Cultural and Landscape Heritage-Direzione Regionale per i Beni Culturali e Paesaggistici della Lombardia);
- Brescia Provincial Authority (Provincia di Brescia), to which the Lombardy Regional Authority (Regione Lombardia) has recently assigned new functions concerning local museum organization, in Deliberation N° 7/9393 dated June 14<sup>th</sup> 2002 of the Regional Council and Regional Law N° 1/2000, art. 4, paragraph 134, letter a) – *Development of "Local Museum Systems": approval of criteria for the allocation and supply of contributions to provincial administrations and approval of objectives and guidelines for provincial administrations' processing of feasibility studies including the definition of pilot projects for the associated management of services;*
- Valle Camonica Mountain Community (Comunità Montana di Valle Camonica);
- Valle Camonica Drainage Basin Council Consortium (Consorzio dei Comuni del Bacino Imbrifero Montano della Valle Camonica-BIM).

Each of the above institutions, in accordance with art. 4 of the *Declaration of Intentions*, has appointed a representative to participate in the "Management Plan Working Party".

As soon as the Management Plan's outline was defined with these parties, a second "Scientific and Technical Committee" was formed to provide specialist advice to those cultural and scientific institutions involved with the specific theme of rock engravings in the valley – and generally recognised as authoritative in this field – and also for local authorities which coordinate and manage areas under landscape and environmental protection which involve numerous municipal areas (Parco dell'Adamello). This "Scientific and Technical Committee" includes those who organize educational activities concerning rock art as a Sub-committee.

The work group is thus composed of these two sectors (scientific research and educational), which are at times conducted by the same organizations:

- "Valcamonica Centre for Prehistoric Studies" (Centro Camuno di Studi Preistorici), in particular the Valle Camonica and Lombardy Department
- "Footsteps of Man" Archaeological Cooperative (Cooperativa Archeologica "Le Orme dell'Uomo")
- Prehistoric Art and Life Teaching Museum (Museo didattico Arte e Vita preistorica) in Cemmo (Capo di Ponte)
- Parco dell'Adamello
- *Archeocamuni*
- Do.Net
- Capo di Ponte Tourist Office (Pro Loco)

plus contributions for other specialists involved in research and surveys, and an education expert.



### 3.2 Private Parties

To be defined in a second phase after the preparation of the Management Plan.

### 3.3 Agreements and Understandings

The Management Plan Working Party was formalized on 20<sup>th</sup> December 2004, when the public bodies involved in various capacities in the protection, administration and management of the UNESCO Site N° 94 "Rock Drawings in Valcamonica" (ENCLOSURE 3) approved and signed a *Declaration of Intentions*.

### 4. Definition of the Managing Authority

A correct site management policy must be based on the establishment of common goals, which requires the full participation of all parties actively involved. The following primary goals were defined:

- 1) the creation of a legally-recognised body in charge of Valle Camonica's rock art site; its priority functions will be the coordination and definition of guidelines for all activities which concern the site; it must also fully accept the Management Plan's fundamental strategy, and respect national, regional and provincial legislation regarding cultural heritage;
- 2) the definition of a "Territorial Museum System", which also comprises Parks and rock art sites (in collaboration with the Culture Dept. of the Provincial Administration -Assessorato alla Cultura della Provincia);
- 3) coordination with the "Tourist System".

Following a detailed discussion with the public bodies involved in preparing the Management Plan, it was decided to postpone the definition of a managing authority until a later phase, after a trial period of practical application of the Management Plan, which was considered advisable.

When the drafting of the Management Plan reached its conclusion, the bodies involved in its preparation met to sign a formal document in which they agreed to its goals, programmes, strategies and implementation schedule; in addition, they undertook to implement the operational Plans regarding all aspects of territorial management and work programming within their competence.

### 5. Programmes and Issues

During the drafting of the Management Plan all relevant existing legal planning instruments were studied. These are listed below according to category, with comments regarding their pertinent specifications.

#### 5.1 Town Planning and Territorial Coordination Regulations

Overall Municipal Development Plans (PRG): all the PRGs of municipalities, which contain Parks and their related buffer zones, including that under revision by Sellero Council, have been closely studied. For further details, see the Register of Council Planning Documents (ENCLOSURE 4), which has specific instructions for each Park, heritage locations and buffer zones.

It should be emphasized that the Overall Development Plans of municipalities which form part of the Parco dell'Adamello's territory must adopt the Park's regulations



within two years of the publication of the Plan for the Parco dell'Adamello in the Lombardy Regional Authority's Official Bulletin dated 29<sup>th</sup> November 2001 (2<sup>nd</sup> special supplement to issue N° 48, Regional Council Deliberation N° 7/6632 dated 29<sup>th</sup> October 2001: "Approval of the Territorial Coordination Plan for the Parco Regionale dell'Adamello", Regional Law N° 86 dated 30<sup>th</sup> November 1983, art. 19, paragraph 2 and following amendments and integrations).

## 5.2 Sectorial and/or Integrated Plans

**Regional Authority Territorial Landscape Plan (PTPR):** the bill concerning territorial government indicates the PTPT as the appropriate tool for building a regional territorial strategy. Awaiting the new law's approval, the Lombardy Regional Authority (Regione Lombardia) has started (but not completed) the plan's preparation by means of a comparative study conducted both internally and externally (involving local institutions, professional associations and private citizens).

The plan's drafting was begun in 2002 and has so far involved:

- preliminary work to establish general strategies, which involved preparing a **Programming Document** with other authorities;
- an important opportunity for discussion with the outside world, on the occasion of the **XXIV INU** (*Istituto Nazionale di Urbanistica*–National Town-Planning Institute) **Congress**, entitled "Europe's Metropolitan Cities and Regions" (Milan, June 25<sup>th</sup>-28<sup>th</sup>, 2003);
- the drafting by the Lombardy Regional Authority (Regione Lombardia) of a **Strategic Document: A Proposal for a Comparative Study**, containing the plan's basic elements and themes and the establishment of a research and programming strategy.

This plan, built through a process of inter-departmental consultation and collaboration within the Regional Authority, and cooperation with other branches of local government (Provincial Authority and councils), will be thus the result of extensive discussion with the parties involved and have a solid local basis.

## **Brescia Provincial Authority's Plan for Provincial Territorial Coordination (PTCP):**

The Brescia Provincial Authority's *PTCP* was approved on December 22<sup>nd</sup> 2004 and is currently in force; it is competent with regard to territorial issues and is an instrument designed to facilitate the Provincial Administration's territorial activity by combining criteria to be followed and goals.

The *PTCP* is an essential reference tool for appropriate territorial organization and management. It is based upon the principles laid down by the Lombardy Regional Authority (Regione Lombardia) in Regional Law N° 1 dated January 5<sup>th</sup> 2000, "Reorganisation of the autonomy system in Lombardy. Implementation of Legislative Decree N° 112 dated March 31<sup>st</sup>, 1998 (the State's assignment of administrative functions and duties to Regional Administrations and local institutions in accordance with Law N° 59 dated March 15<sup>th</sup> 1997, heading 1)", setting legislative and operational limits to be observed by councils in the definition of general regulatory plans. The *PTCP* stipulates planning guidelines at levels above the municipality and it provides specifications on landscape, environmental and cultural topics. Its general goals are environmentally sustainable growth and the development of local landscape features and territorial, environmental, cultural, social and economic resources.

The Brescia Provincial Authority's *PTCP* is organised in three *Quaderni* (books): the *Preliminary Document* (Book 1), the *Preliminary Project Plan* (Book 2) and the *Final*





*Project* (Book 3).

The *Final Project* includes the report, applied technical rules, regulations concerning the protection and development of the province's landscape zones, lists of individual historical and cultural heritage sites, the Provincial Authority's road network scheme, regulations regarding the functioning of the Conference of Municipalities and Mountain Communities and maps illustrating the Provincial Authority's Territorial Coordination Plan.

Book 1 was distributed to mayors and the Regional Administration in summer 2001 and Book 2 in spring 2003. The Provincial Council approved the *PTCP* Final Project in 2004 with Deliberation N° 21 dated April 22<sup>nd</sup> 2004. The Deliberation approving the Provincial Authority's Territorial Coordination Plan (N° 21 dated April 22<sup>nd</sup> 2004), which makes it fully operational in accordance with Regional Law N° 1/2000, art. 3, paragraph 31, was published in the BUR on December 22<sup>nd</sup> 2004.

The Brescia Provincial Authority's *PTCP*, starting from a technical analysis of the environmental types present, has marked out 72 "eco-mosaics", which are ecologically homogeneous territorial units. Decisions related to the project for a provincial ecological network are based on these eco-mosaics.

Each eco-mosaic involves one or more municipal areas and constitutes a point of reference for improvement and certification initiatives focusing on environmental quality organised by councils and groups of councils (e.g. local parks involving more than one municipality "PLIS", local "Agenda 21s", Eco-Management and Audit Scheme - EMAS etc.).

**Strategic Projects.** The following are strategic projects of provincial importance outlined in the *PTCP*, which concern plans for future projects in Valle Camonica:

- Strategic Project for the Development of "Paths of the National Liberation War" ("Sentieri della Guerra di Liberazione Nazionale").

The Strategic Project for the promotion of sustainable local development based on creating "Cultural and Natural Heritage Systems" is of vital interest.

Among the Strategic Projects based on Local Initiatives, the *PTCP* includes the "Integrated Plan for Local Development of the Districts of Monte Campione, Lower Valle Camonica and Lake Iseo".

### **5.3 Social and Economic Development Plans**

**The Mountain Communities' Social and Economic Development Plan (Piano di Sviluppo Socio Economico (PSSE) delle Comunità Montane):** the example of the Valle Camonica Mountain Community (Comunità Montana di Valle Camonica), 2001.

In 2001, Valle Camonica Mountain Community drafted a Social and Economic Development Plan (PSSE). To plan activities and define development trends, each mountain community must prepare a PSSE (on the basis of the Unified Text for Local Authorities, Legislative Decree N° 267/2000 and, especially, on the basis of Regional Law N° 6/2002 "Regulations for Mountain Communities" (Disciplina delle Comunità Montane), which collects together social and economic analyses conducted in the area and suggests a series of essential actions interventions to be programmed in yearly plans.

If the PSSE is compatible with the Regional Authority's planning guidelines, it is approved by the Provincial Authority, which then considers it an integral part of its own programmes (Regional Law No. 13/1993, art. 18, paragraphs 6 and 7). The PSSE in turn contributes to the formation of the *PTCP* (see above; Legislative Decree N° 267/2000, art. 28, paragraph 4).



Valle Camonica Mountain Community (Comunità Montana di Valle Camonica) approved its own Social and Economic Plan with Deliberation N° 30 dated October 12<sup>th</sup> 2001. This *PSSE* was then approved by the Brescia Provincial Authority, in Deliberation N° 9 dated February 4<sup>th</sup> 2002.

The *PSSE* defines *General Objectives*, which aim at a general improvement in the population's standard of living and in the quality of services, and *Strategic Objectives*, specifying plans for projects. Each action has a *Project Sheet*, which refers to the relevant action types, motivations, project management, degree of priority and implementation times, expected results, resources required and references to legislation.

The Mountain Community's Plan, on the basis of territorial, social and economic analyses, defined three areas and described possible intervention strategies:

- a *fringe area*, comprising municipalities involved by trends such as a fall in population, diminished local services, the failure to develop of the tourist market and the subsequent depopulation towards the valley floor and population ageing. Two possible investment strategies are the promotion of tourism, and relaunching agriculture and animal rearing, with attention to safeguarding the environment.

The valley municipalities which fall within the *fringe area* are: Prestine, Ossimo, Losine, Lozio, Ono S. Pietro, Sellero, Cedegolo, Cevo, Saviore, Paisco Loveno, Berzo Demo, Malonno, Corteno Golgi, Monno, Incudine, Vezza d'Oglio, Vione and Temù.

- an *area of consolidated development*, characterised by a clear-cut tourism sector (Ponte di Legno) and industrial sector (Pian Camuno, Artogne, Gianico, Angolo Terme, Borno, Braone and Cerveno). In this case, the strategic goals are the development of tourist services, environmental upgrading and improved provision of services to companies.

- an *area of attraction*, whose strength lies in its environmental and cultural offerings, composed of good service availability (especially the link system) and tourist sector potential (winter, sports, cultural, nature and congress-orientated). Seeking to enhance these strengths would seem to be this area's best development strategy. The *attraction area* comprises the municipalities of Darfo Boario Terme, Esine, Piancogno, Berzo Inferiore, Bienno, Cividate Camuno, Breno, Malegno, Niardo, Ceto, Cimbergo, Paspardo, Capo di Ponte, Sonico and Edolo.

#### 5.4 Specific Plans for the Tutelage of the Site

At present, there is no general overall plan for the protection of Valle Camonica's rock art site, which comprises a multitude of specific situations which differ with respect to extension, land ownership and legal status.

Since all rock engraving sites are part of the archaeological heritage, they are covered by state legislation for the protection of cultural heritage (Legislative Decree N° 42 dated January 22<sup>nd</sup> 2004), which all must comply with.

The main rock art localities have been enclosed in Parks (7 in number, described above) that are managed by various institutions (the state, councils or council consortia). Only some of these have Plans, which vary in type and differ in structure and according to the various bureaucratic Plan approval procedures, as described below.

#### Park Plans (PdP)

At present, the National Parks and the Riserva Regionale delle Incisioni Rupestri di Ceto, Cimbergo, Paspardo have both multi-year and yearly Plans. In National Parks and rock art sites in Valle Camonica generally, which are under the protection of the Ministry of Cultural Heritage and Activities, "Plans" include the programming of



activities (projects, actions and management) that are periodically defined and approved as part of the national budget, according to goals established by the laws regarding tutelage (Legislative Decree N° 42 dated 24<sup>th</sup> January 2004).

The Plan of the Riserva Regionale was definitively approved by the act which accorded the Riserva legal status in 1988. It lists goals, methods and general regulations that must be respected by annual programmes and is presently under revision (2005).

### **Triennial and Annual Plans for National Parks (Parco Nazionale delle Incisioni Rupestri e Parco Archeologico Nazionale dei Massi di Cemmo) and the "Rock Drawings in Valcamonica" Site**

National Park boundaries are defined by formal acts following the compulsory purchase of property by the state and are carefully mapped (Carta Tecnica Regionale [Regional Technical Map] 1:10.000; cadastral map 1:2000 with a topographic survey of rocks, a route map, a map of obligations under former Laws N° 1089/1939 and 1497/1939, and area ownership and current dispossession process' map). However, the Parks possess neither an Act of Constitution nor a Special Protection Plan, because they are directly managed by the Ministry of Cultural Heritage and Activities (Ministero per i Beni e le Attività Culturali), which is responsible for the protection of cultural heritage (Legislative Decree N° 42 dated January 22<sup>nd</sup> 2004, art. 4, paragraph 1), both inside National Parks and throughout the country, by means of its regional administrative bodies (in this case the Lombardy Soprintendenza for Archaeological Heritage - Soprintendenza per i Beni Archeologici della Lombardia), and on the basis of current regulations, Legislative Decree N° 42 dated 22<sup>nd</sup> January 2004: "Cultural Heritage and Landscape Code" (Codice dei Beni Culturali e del Paesaggio).

Yearly plans are drawn up (subject to the Ministry's approval), which are composed of various projects (both for specific parks and for the entire valley, that is for the site "Rock Drawings in Val Camonica" as a whole) related to specific initiatives regarding the archaeological heritage and its development and publicisation. They have always been implemented for Valle Camonica within three-year plans (which are also subject to ministerial approval). The yearly plan is organised as follows:

1- Maintenance. All the routine maintenance of the archaeological heritage and of public educational and reception facilities, besides that of other buildings present on state property (boundary and terrace walls, farms, houses, Park facilities and the Antiquarium).

2- Conservation. All conservation work on rock art and archaeological heritage, performed both inside National Parks and outside them, on public and private property throughout Valle Camonica.

3- Recording and cataloguing. All activities related to surveying, photographic recording (photogrammetry, chemical-based and digital photographs, laser imaging), drawn records, filing and cataloguing of rock engravings, related archaeological heritage and other archaeological contexts in Valle Camonica.

4- Excavation, archaeological investigation and related activities (including the following analyses - palaeoenvironmental, radiometric, on finds etc.). All the research, excavations and surveys conducted on archaeological sites and rock engravings in Valle Camonica.

5- Development. All the routine work and special activities aimed at publicising the archaeological heritage and publishing works concerning it, setting up/reorganiz-



ing/equipping National Parks and museums, updating National Parks' educational facilities and organising exhibitions and congresses.

This Plan, drawn up according to national legislation concerning tutelage, has been continually in force since 1955, when the first rock art sites were placed under state protection with the foundation of the Parco Nazionale delle Incisioni Rupestri di Capo di Ponte (pertinent records may be found in the archive of the Lombardy *Soprintendenza* for Archaeological Heritage (Soprintendenza per i Beni Archeologici della Lombardia); an itemised summary is enclosed concerning the period 1979-2004, following UNESCO's World Heritage listing of the site "Rock Drawings in Val Camonica": ENCLOSURE 5).

### **Plan for the Riserva Regionale delle Incisioni Rupestri di Ceto, Cimbergo, Paspardo**

The Plan currently in force was approved with the Regional Council's Deliberation N° 5/29143 dated November 3<sup>rd</sup> 1992. The plan is now under revision and its approval by the end of 2005 is expected. The changes proposed by the managing body, with the agreement of local institutions and the competent Soprintendenza, (border modifications, updated regulations concerning protection) are included here.

The Riserva Regionale Plan is the result of the particularly intimate relationship between nature (flora and fauna), landscape and human interventions (which include prehistoric rock engravings). In particular, in order to understand prehistoric artistic expression (which has left so much evidence in the Reserve), it is essential to appreciate the surrounding environment. It is hence necessary to place under special protection all aspects - environment, vegetation and cultural features - of the Reserve, as these factors have contributed to create the context in which rock art developed.

The plan comprises a study of historical and archaeological remains with plans of each area containing rock engravings, an analysis of the Reserve's geology, flora and fauna with maps of areas of special interest regarding fauna and vegetation; a forestry study of the Reserve involving an analysis of the extent of woods, current human activity and a series of proposals for woodland management.

The goals of the Plan for the Riserva Regionale delle Incisioni Rupestri di Ceto, Cimbergo, Paspardo are: the protection and conservation of the environmental, archaeological and ethnographical heritage, enhancement of the heritage with respect for its preservation, regulation and stimulation of scientific research, and the territory's integration in its local context, e.g. through environmental education and the recovery of economic activities.

The Riserva Regionale has been divided into two areas: area A, with archaeological and environmental features, as well aspects of botanical and ethnographical importance; area B, to which public access is forbidden due to its special archaeological and environmental significance.

An essential point in the plan is the regulation of human activities, which are only permitted in area A (wood-cutting, pasturing, farming activities, collecting mushrooms, bush-fruits and chestnuts; scientific research, educational activities and building work only for maintenance purposes). Rules that are more precise will be stipulated, explaining prohibitions, limitations and regulations regarding these activities.

The plan is accompanied by the following detailed subject-specific maps (in scale 1:5000):

- 1- General area map showing summary of interdisciplinary studies;
- 2- Map of zoning, access points and roads;
- 3- Map of conservation work, amenities and public facilities;
- 4- Map of boundary changes;



#### 5- Map of areas to be purchased.

The Plan also outlined several initiatives programmed within the protected area: the creation of the Reserve museum, which currently covers a surface area of 600 m<sup>2</sup>, with space for welcoming groups, and the creation of hospitality facilities (at present the Reserve boasts two visitors' lodgings and three reception facilities).

#### **The Parco Regionale dell'Adamello Territorial Coordination Plan**

The Parco dell'Adamello is in the heart of the Alpine chain, in the Rhaetian Alps. It includes the entire Lombardy portion of the Adamello Group, situated in the northeastern part of the Province of Brescia, on the left-hand side of Valle Camonica. It covers about 51,000 hectares, from the Tonale Pass to the Crocedomini Pass, and to the east continues into Trentino - Alto Adige. Proceeding southwards from the Tonale Pass, the municipal areas included in the Park are: Ponte di Legno, Temù, Vione, Vezza d'Oglio, Incudine, Edolo, Sonico, Malonno, Berzo Demo, Cedegolo, Cevo, Saviore dell'Adamello, Paspardo, Cimbergo, Ceto, Braone, Niardo, Breno and Prestine.

The Parco dell'Adamello's significance is enhanced by its position, because it forms bridge between two bordering Parks: to the east it borders on the Trento Province's Adamello-Brenta Park, and to the north, the Stelvio Park, which in turn shares a boundary with the Engadina Swiss National Park.

Together, these constitute a protected area of 250,000 hectares, the largest in the Alps, in the very heart of Europe.

Two rock engraving Parks (Riserva Regionale delle Incisioni Rupestri di Ceto, Cimbergo, Paspardo, and Parco pluritematico del "Còren de le Fate", Sonico) are inside the Parco dell'Adamello, which prompted the creation of the so-called "Parco pluritematico di Sonico", reference is made here only to the Territorial Coordination Plan of the Parco Regionale dell'Adamello.

The Parco Regionale dell'Adamello was established by Regional Law N° 79 dated September 16<sup>th</sup>, 1983 (Foundation of the Adamello Natural Park) and following amendments and integrations (Regional Law N° 23 dated December 1<sup>st</sup> 2003, Foundation of the Parco Naturale dell'Adamello).

The Park is regulated by landscape regulations in accordance with Legislative Decree N° 490/1999, art. 146, paragraph 1, letter f, later replaced by the current Legislative Decree N° 42 dated 22<sup>nd</sup> January 2004.

The Territorial Coordination Plan for the Parco Regionale dell'Adamello, which is classified as a mountain and forest park, was approved by the Regional Council's Deliberation N° 7/6632 dated October 29<sup>th</sup> 2001. The Park's aims and intentions, as stated in the Plan, are as follows:

- protection of biodiversity and preservation and enhancement of the area's potential related to fauna, flora, vegetation, geology, water resources, ecosystem and landscape;
- guaranteed use of the territory and heritage in a fashion compatible with its natural quality;
- preservation and improvement of the environment;
- integration between man and the natural environment, through the safeguarding of the anthropological, archaeological, historical and architectural heredity and the value of farming, forestry, cattle-breeding and traditional activities;
- promotion and regulation of the area's use for scientific, cultural, educational and



recreational purposes.

The Plan has the status of a Landscape Plan, coordinated according to Legislative Decree N° 112 dated March 31<sup>st</sup> 1998, art. 57 (*Conferment of the State's administrative functions and duties to Regional Authorities and local institutions, in compliance with Law N° 59, dated March 15<sup>th</sup> 1997, heading I*) with the landscape contents of the Provincial Authority's Territorial Coordination Plan. It is approved in compliance with, and with the contents of, Regional Laws N° 79 dated September 16<sup>th</sup> 1983 and N° 86 dated November 30<sup>th</sup> 1983 (*Regional plan for protected regional areas; legislation for the establishment and management of reserves, parks and natural monuments, as well as areas of special natural and environmental importance*) and following amendments and integrations. Regional Law N° 23 dated December 1<sup>st</sup> 2003 defined the Natural Park's area, which is subject to provisions in Law N° 394/91, within the Regional Park.

The Plan specifies the Park's territory by defining its perimeter, with amendments compared to the perimeter approved by Regional Law N° 79/1983, which were required to improve the Park's framework; it also defines those areas assigned to the Nature Reserve and those assigned to the Natural Park. Regulations related to these areas have the value and effects of a Regional Territorial Plan as per Regional Law No. 86/1983, art. 16 and following amendments and integrations.

It must also be stressed that all provisions are immediately binding, as per Regional Law N° 86/1983, art. 18, paragraph 4; hence councils must adjust their respective general town-planning regulations to meet the specifications of the Park's Territorial Coordination Plan within two years of the Plan's enforcement. The Plan was approved by the Regional Council's Deliberation N° 7/6632 dated October 29<sup>th</sup> 2001.

Listed below are the Park's implementation tools:

- *Implementation Plans for operational branches* (bodies of water and rivers, humid areas and peat bogs, conservation and wild fauna management, fishing, woodland management, farming, pasturing and use of woodlands, valley floor farming, civic usage, agritourism, tourism, skiing resorts, protection of historical features and monuments, archaeological remains and World War 1 sites, construction outside of built-up areas, fencing, camping sites, roads, parking areas, tracks and paths, fire prevention, areas subject to hydrogeological restrictions and at geological risk, quarries and dumps, technical plants and infrastructural upgrading);
- *Management Plan* (valid for three years, organised in yearly implementation plans);
- *implementation rules*;
- *work conducted by the Managing Institution and local councils*;
- *work conducted under agreements*;
- *mandatory advice*;
- *authorizations, concessions and claims*.

The Territorial Coordination Plan of the Parco Regionale dell'Adamello also establishes regulations for behaviour in the Park, under the following headings: *General rules, Transit in motor vehicles and flying over the area, Transit on horseback and on bicycle, Gathering wild plants and bush-growing fruits, Protection of small animals, Collecting minerals and fossils*.

A general plan of the Park is composed of twenty-six sheets drawn to scale 1:10,000.



Soprintendenza per i Beni Archeologici della Lombardia

The Park is managed by the Valle Camonica Mountain Community (Comunità Montana di Valle Camonica).

### **Plan for the Parco Locale di Interesse Sovracomunale del Lago Moro (Angolo Terme and Darfo Boario Terme)**

*The Lake Moro Park was officially recognised by the Regional Council Deliberation N° 6/49730 dated April 27<sup>th</sup> 2000. Subsequently, the Brescia Provincial Authority Deliberation N° 305 dated July 22<sup>nd</sup> 2003 defined the boundary of the Park, which lies in the territories of the Angolo Terme and Darfo Boario Terme municipalities.*

The two councils concerned adhered to the Park project through special deliberations.

This Valle Camonica Park was created in order to develop and protect the environment, with full respect for existent territorial framework policies, and constitutes a useful tool for triggering local growth based on the development of the sustainable use of the area's cultural and tourist resources.

The Park's primary goal is to become a local reference point, whose development trends will be the fruit of balanced political and territorial coordination between the councils involved, in close collaboration with other local authorities. In this regard, both councils approved an agreement concerning the organization of the Park and the joint management of administrative, technical, maintenance and surveillance activities regarding the protected area (Darfo Boario Terme: Deliberation N° 77 dated December 16<sup>th</sup> 2002, Angolo Terme: N° 8 dated March 3<sup>rd</sup> 2003).

Under the terms of the agreement, a Park management institution will be defined by a Mayors' Coordination Committee, with the collaboration of a Consulting Technical and Scientific Committee.

The decision-making body of the Park's managing institution is the Coordination Committee formed by mayors or their delegates; it has the power to decide all matters related to the attainment of the agreement's goals.

From a political and managerial perspective, the Park's creation permits practical cooperation with the Consortium of Lakes Iseo-Endine and Moro, thus combining regional experience related to lakes.

The Park's special environmental features enable the organisation of a tourist-oriented system, whose potential attractions comprises its natural and archaeological resources (e.g. the rock engravings in the Parco Comunale di Luine).

Local development may also be encouraged by the insertion of the entire park in a planned tourist circuit, where its landscape and special features of natural beauty are its main elements of interest.



## PART TWO Territorial Analysis

### 6. Analysis of the Cultural Heritage

#### 6.1 Cultural Heritage, Museums, Environment, Archaeology, Art, History and Buildings

It is important, in the context of the "Project on Site Knowledge" - to emphasize that Valle Camonica has a rich and complex historical and cultural heritage of huge value. It is the largest valley in Brescia, formed by the River Oglio and contains significant historical, archaeological and artistic features, such as the Cividate Camuno and Breno archaeological sites, important remains of the Roman civilization (ROSSI 1990; MARIOTTI 2004), and Capo di Ponte, a centre for rock engravings, besides many other sites which dot the lower (e.g. Luine di Darfo B.T.), middle and upper valley: various medieval castles, religious buildings, historic settlements (VIAZZI L. 1979, *Storia illustrata della Valcamonica*, Torino; AA.VV. 1990, *Conoscere la Valle Camonica*, a cura della Comunità Montana di Valle Camonica, edit. De Agostini, Novara) and traces left by World War I (BELOTTI W. 2004, *La guerra bianca: il suo territorio, le sue genti*, vol.I, *Dallo Stelvio al Garda*, Breno/Brescia).

There is important evidence of mining activities that exploited siderite and chalcopyrite outcrops, which have been known and exploited from prehistoric and proto-historic times (e.g. the Bienno-Campolongo mine: ANCEL *et al.* 2000) until recently (MACULOTTI G. 1988, *I signori del ferro: attività protoindustriali nella Valle Camonica dell'Ottocento*, Breno; BONTEMPI F. 1989, *Economia del ferro: miniere, forni e fucine in Valle Camonica dal XV al XIX secolo*, Breno; FRANZONI O.-SGABUSI G.C. 1999, *Le miniere della Valle Camonica. Fonti e territorio*, Breno; IIDEM 2000, *La sorgente dei metalli. Le miniere di Valle Camonica tra Otto e Novecento*, Breno). The iron and steelworks in the lower valley also depended upon raw materials from mines in the neighbouring Scalve Valley.

An old blast furnace, which dates back to about the 16<sup>th</sup> century, is preserved in Malonno, in the upper Valle Camonica; it is one of the most important industrial archaeology sites in the area and provides tangible evidence of the «iron-based economy» which was of primary importance for the people of the valley between the 16<sup>th</sup> and 19<sup>th</sup> centuries.

Sellero Council has recently (2005) started developing some old mines and the creation of a Mining Park is planned in the Carona area, which borders on the Parco Comunale di Arte Rupestre.

The tradition of flour-producing windmills with millstones made of local stone, which has been documented since the Middle Ages throughout the valley, from Pisogne to Ponte di Legno, is still alive.

There is also more recent industrial archaeology, such as the abandoned power stations in Cedegolo (already open to the public), the Isola hamlet and in the Cevo Municipality. Sonico Council is also taking steps to open the Edison Power Station in Sonico.

#### Archaeology

Besides rock engravings - Valle Camonica's special heritage, which has been registered in the UNESCO World Heritage List (concentrated in the Parks listed in this Management Plan, Part I - The Plan's General Reference Framework, The Site's Geographical Basis, Boundaries and Composition) - the Valley also prides itself on well-preserved and important archaeological remains which bear witness to settlement in the Roman period (Fig. 111). The area around Cividate Camuno is particu-





larly notable for the exceptional quality of its Roman remains, and the town is home of the Museo Nazionale della Valcamonica, dedicated to the Roman period (Fig. 112). Two archaeological areas have recently been created:

- the Civitate Camuno *Parco Archeologico del Teatro e dell'Anfiteatro Romano* (Roman Theatre and Amphitheatre Archaeological Park) was inaugurated in 2003 following a programme agreement between the Lombardy Regional Authority (Regione Lombardia), the Ministry of Cultural Heritage and Activities (Ministero per i Beni e le Attività Culturali) and Civitate Camuno Council, which was approved on February 9<sup>th</sup> 2005 (Fig. 113);
- the *Parco Archeologico del Santuario di Minerva di Breno* (Sanctuary of Minerva Archaeological Park, Breno) is currently being equipped and is scheduled for opening in 2005-2006.

In addition, the Parco Archeologico di Anvòia in Ossimo was inaugurated in May 2005 (Fig. 44), opening to the public a ceremonial site dating to the Copper Age. It was studied between 1988 and 2003, with excavations conducted by the "Federico II" University of Naples with the authorisation of the Ministry of Cultural Heritage and Activities (Ministero per i Beni e le Attività Culturali). Plaster casts of several engraved monoliths found there have been placed in their original positions on the site.

### **Museums**

With regard to Valle Camonica's museums, a distinction can be made between museums which collect archaeological material from the entire valley and local museums, especially ethnographic ones closely related to local traditions (Table 2).

Among Valle Camonica's civic and private museums (i.e. excluding National Museums), only the *Museo Etnografico del Ferro, delle Arti e delle Tradizioni Popolari* (Ethnographical Museum of Iron, Arts and Folk Traditions) in Bienno has been given provisional "museum" status in the Regional Council's Deliberation N° 7/19262 dated November 5<sup>th</sup> 2004; the same Deliberation also recognised the *Museo della Guerra Bianca* (White War Museum) in Adamello, Temù.

The collection of the "Valcamonica Centre for Prehistoric Studies" (Centro Camuno di Studi Preistorici) in Capo di Ponte was not accepted, because it did not have the "special features of a museum". The collections which are temporarily being studied in the Centre will, in the future, be exhibited in the appropriate museums, after studies have been completed.

The project for the *Museo dell'Energia Idroelettrica di Valle Camonica* (Valle Camonica Hydroelectricity Museum) in Cedegolo proposes the re-use of the power station and the site to create a museum centre, following the "Science Center" model.

This initiative, which will be completed in 2008, is based on the wish to preserve a historical part of Lombardy's hydroelectricity industry, and to turn it into a science education centre for the dissemination of information about energy production and related issues, and also to conserve the memory of this important mountain occupation.

The following institutions are also present in the WH Site (Figs. 114-115, Table 3):

- Museo Didattico della Riserva Naturale Incisioni Rupestri Ceto, Cimbergo e Paspardo;
- Antiquarium del Parco Nazionale delle Incisioni Rupestri (Capo di Ponte)

Valle Camonica's museums according to **ownership**:

- State Museums: 3
- Municipal Museums: 5
- Private Museums: 7



TOTAL MUSEUM: 15

The list below reveals the significant presence of private initiative, evidence of the valley community's strong interest in safeguarding and protecting local traditions.

Valle Camonica's museums according to **collection type**:

- Archaeological: 4
- Artistic: 1
- House-Museum: 1
- Composite: 1
- Ethnographical: 4
- Specialised: 3
- Historical: 1

Lastly, there are privately managed institutions, which cannot be considered true museums due to their chiefly educational character and the absence of collections of archaeological material, though their popular activities (targeted especially at school groups) make them in a certain sense complementary to a tour of sites and museums. The two private facilities dedicated to experimental archaeology have recently been joined by a third which specializes in environmental topics, as listed in Table 4.

#### **Buildings of historical, artistic and architectural interest**

The following religious buildings, particularly distinguished because of their architectural value and/or the works of art they hold, are only a small part of a rich heritage of over two hundred important examples (ENCLOSURE 6, *List of the widespread historical and artistic heritage*):

- the oratory of Disciplini, Montecchio di Darfo Boario Terme (14<sup>th</sup> – 15<sup>th</sup> century)
- the church of S.Maria Assunta, Esine (15<sup>th</sup> century)
- the church of S.Maria Annunciata, Bienno (15<sup>th</sup> – 16<sup>th</sup> century)
- the church of S.Maria della Neve, Pisogne (16<sup>th</sup> century)
- the church of S.Antonio, Breno (14<sup>th</sup> – 16<sup>th</sup> century)
- the monastery of S.Salvatore, Capo di Ponte (11<sup>th</sup> century) (Fig. 116)
- the church of S.Siro, Capo di Ponte (11<sup>th</sup> century) (Fig. 117)

The remains of some medieval castles are also of great historical interest:

- Gorzone Castle (Darfo Boario Terme)
- Breno Castle
- Lozio Castle
- Cimbergo Castle

Many towns and villages in the valley have historic centres which conserve perfectly their medieval street and house plans.

#### **Environment**

Areas protected for their natural beauty, another important environmental and tourist resource in Valle Camonica, are listed below:

- Riserva Naturale Regionale del Giovetto, Borno (675 ha)
- Parco di Interesse Sovracomunale del Lago Moro, Angolo Terme and Darfo Boario Terme (430 ha)
- Parco di Interesse Sovracomunale del Barberino, Cividate Camuno (106 ha)
- Parco Regionale dell'Adamello (51,000 ha) (Figs. 118-119)



- Riserva Naturale Regionale delle Valli di S. Antonio, Corteno Golgi (256 ha)
- Parco Nazionale dello Stelvio (134,620 ha)

The Riserva Naturale Regionale del Giovetto, as mentioned above, continues into the Province of Bergamo; the Lombardy section of the Parco Nazionale dello Stelvio, including the provinces of Sondrio and Brescia, has a surface area of 60,126 hectares (the remainder is in the Trentino-Alto Adige region).

Other environment-related resources include the Observatories, such as the Alpine Eco-Fauna Observatory in Aprica and the Fauna Observatory at Rifugio Baitone on the Adamello Massif (Sonico Municipality).

The Paisco Botanical Gardens, at present the only one in the Valley, will be joined in a few years' time by the Angolo Terme Botanical Gardens, inside the Parco Locale di Interesse Sovracomunale del Lago Moro.

It is clear from the foregoing description the valley currently has neither a networked management of its heritage and facilities, nor the means of integrating resources, activities and experiences.

The Plan for Social and Economic Development of Valle Camonica Mountain Community (Volume I, page 76) refers to the valley's "Museum System", considering the Museo Camuno in Breno as a landmark. But at present the Breno museum is being reorganised for transfer to a more appropriate site; hence it has suspended its activities in recent years.

Procedures for the museum's official recognition (Regional Council's Deliberation N° 11643 dated December 20<sup>th</sup> 2002 "Criteria and guidelines for the recognition of museums and museum collections in Lombardy, guidelines on the professional profiles of museum and museum collection operators in Lombardy, as per Regional Law N° 1, paragraph 130-131 dated January 5<sup>th</sup> 2000") have been postponed until the completion of the work and the renewal of services in accordance with new national and regional stipulations, as specified in the Regional Council's Deliberation N° 7/19262 dated November 5<sup>th</sup> 2004.

Valle Camonica's "Museum System", although required by current regional regulations, has yet to be defined (2005).

## **6.2 Material Culture: Handicrafts, Traditional Local Products and Natural Resources**

Valle Camonica has long made use of its natural resources, clearly recorded in rock engravings, and developed strong traditions regarding production, techniques, and the ways in which work and life in general were organized; these have left a modern inheritance of industrial localities, traditions and local specialities.

Iron processing (Figs. 120-121), which is still practiced in the middle valley (i.e. the forge-museum of Bienno), has conditioned Valle Camonica's economy and very landscape for many centuries. This ancient activity was begun in the Iron Age and was later further developed by the Romans.

The mines, furnaces, forges and iron-working industries were distributed throughout the valley and constituted its main productive activity (with an international export market), before the serious crises of the 1980s and '90s notably reduced the sector's economic and social importance. Today the smithing tradition is well documented in the attractive village of Bienno, where several forges which were used until recently have been converted into museums (Fig. 122). An important initiative is under way in Sellero, where a series of sites and itineraries illustrating the tradition of mineral extraction and processing is being established.



Stone working (together with wood working, represented by 15<sup>th</sup> to 18<sup>th</sup>-century works of artistic importance) is a fundamental component of the valley's history, from prehistory to the present, as may be seen not only by the wounds left by quarrying, but also from the quality of the buildings, monuments and beautifully crafted objects thus made possible (Fig. 123). The Vezza d'Oglio marble quarries were already in use in the Roman period, and were accompanied by lime kilns, particularly common in the Concarena area, and a network of various stone quarries which constituted a significant, though not principal, economic activity. Today the stone and wood working traditions are continued largely by craftsmen, represented by specific associations.

The hydroelectric industry is another important sector in the local economy; it once sustained iron smelting and is now an independent activity. The generating facilities at Edolo and Sellero are of national importance, and are fed by an extensive complex of canals, dams and artificial bodies of water which have profoundly altered the natural landscape, especially at high altitude. Edolo power station may be visited by the public; guided tours are available of one of Europe's largest and most important underground hydroelectric stations. The traditions associated with this activity will be presented to the public in the new Hydroelectricity Museum which is being created in the disused "Centrale Bresciana" power station just outside Cedegolo, part of the Province of Brescia's Museum of Industry and Labour, which will be named after E. Battisti.

We may be certain that for millennia the principal activities of the people of Valle Camonica, by which they maintained themselves, were the tilling the soil, animal husbandry and hunting (Figs. 124-127).

In a sense today, after the crisis of the iron industry, there is a gradual return to agriculture, distinguished by a more scientific approach, which leaves less to chance and is more closely tailored to the nature of the terrain, aiming to exploit the valley's special resources and traditional strengths. Numerous bodies and local associations are involved in the development of specific products and the recovery of local traditions and specialities.

In order to further develop this theme, a few of the large number of alimentary products which today are being in some measure rediscovered will be described below. These constitute an important resource, an immediate, tangible and day-to-day expression of a community's culture, a historical record of activities, methods and traditions intimately connected with the local geography. In Valle Camonica, these are an authentic and often well preserved memory of actions and rituals connected with agriculture and such activities as animal rearing and forestry.

Dairy products are the most significant in terms of quantity; cheeses are made from cows' and goats' milk, either singly or mixed in varying proportions.

Certification of "protected place of origin" (Denominazione di Origine Protetta, DOP) is in the pipeline for **Silter**, a semi-hard, mid-fat cheese made only with cows' milk, surface-skimmed, which can be eaten soft after 100 days of maturation or used for grating after a year. **Formagella** is a soft high-fat cheese made with full-cream cows' milk and ready for eating after 15-20 days, which comes in cylindrical forms generally weighing 1-2 kg. A variety of this, produced in particular by the CISSVA Consortium (Caseificio Sociale di Valle Camonica e del Sebino) of Capo di Ponte, has the shape of a "Camunian Rose", and this name, "Rosa Camuna", recalls traditional valley culture and for this reason has had the greatest commercial success.

**Casolet dell'Adamello**, a soft, mid-fat cheese made from surface-skimmed cows' milk and ready to eat after maturing for 15-20 days, had a characteristic triangular shape.

The most noted of the numerous goats' cheeses is called **Fatuli**, and is obtained



from a local breed of goat known as the "Adamello Blonde" ("Bionda dell'Adamello"); the producers have founded their own association. Fatulì is smoked on grilles placed in chimney cowls, with fires burning green juniper branches as well as firewood.

The various varieties of "**Casoncelli**" are a traditional Valle Camonica pasta course; recipes are passed down from generation to generation, and names and ingredients differ from place to place. Typical examples are: **Caicc** from Breno, **Casunsei** from Ono San Pietro and Lozio, **Cadonhei** from the lower valley and **Calsù** from the upper valley, which are filled with cotichino sausage and potatoes. A unusual type are **Calsunsei** from Monno, shaped like boats and filled with "Spec", which is not the Trentino cured ham with a similar name, but a sort of protein-rich flour, toasted in butter.

Meat-based products of note are **Salsiccia di castrato**, a sausage made in Breno from the meat of a castrated ram with spices and a broth made by boiling up the bones. Other sausages are made with goats' meat, as is **Berna**, obtained by drying the meat in the sun.

Another typical and unique Valle Camonica product is **Cuz**, typical of Corteno Golgi, in the upper valley, which is made from the meat of fully-grown sheep, cooked slowly for a long time in a copper pot. This is eaten with solid maize porridge (polenta) and mascherpa, a smoked "ricotta" cheese made from goats' milk. This curiosity of gastronomic history is probably Hungarian in origin.

**Wine** has been produced in Valle Camonica for many centuries, although recently the activity has declined sharply. The Valle Camonica Mountain Community, together with other local bodies, has sought to incentivate the making of high quality wine, especially amongst young producers, and obtained in 2003 the certification of "typical geographical indication" (Indicazione Geografica Tipica, IGT) for wines from the valley. A specific consortium of wine makers assists with publicity and a collective cellar (cantina sociale) is being organized. Spirits are also produced: grappa (classic or flavoured with berries and woodland fruits), amaro and alcoholic herbal infusions, made with high altitude herbs.

**Sweet chestnuts**, known as "poor man's flour" in the Valley, have always had a role in the local economy, diet and cookery. There exists a consortium dedicated to the development of chestnut-based products, spirits, cakes and biscuits, for which there is a ready market.

Lastly, there is a niche market in Valle Camonica for local honey, tree and bush fruits, herbs and herbal teas, the result of careful studies and field trials, which are beginning to show signs of success.

Amongst the activities which contribute to Valle Camonica's economy, those associated with the spas that are present in several localities should be remembered. These once included Ponte di Legno, Prestine and Angolo Terme, although today they are largely restricted to the principal centre, Darfo Boario Terme, whose spa waters – much appreciated by the writer Alessandro Manzoni – are famed for their curative and purifying properties. Valle Camonica contains other powerful tourist attractions based on local resources, most significantly the winter snow sports in the upper valley. Cultural tourism is a more recent phenomenon, but assumes particular importance because of its potential to stimulate the development of the valley's immense historical, artistic and natural heritage.

For the community projects regarding the promotion and development of craft industries, traditional local products and natural resources, see: "*Table with the community projects regards the promotion and development of craft industries, traditional local products and natural resources (years 2002-2003); it is based on the Plan for Social and Economic Development, Volume I, Valle Camonica Mountain Community (Comunità Montana di Valle Camonica), 2001, pp. 90-95 (with additional material)*" (Table 5).



### 6.3 Intangible Culture: Events, Cultural Production and Traditions

Valle Camonica is endowed with a rich and exceptional "intangibile" heritage, which has been handed down orally through generations by means of popular beliefs, religious and traditional practices and esoteric knowledge, which tell of a world characterised by the inextricability of the physical and the metaphysical, the real and the magical. This evidence provides us with the essential interpretative key to understand the geography of the collective imagination and perceive the "actively involved" territory, as well as the economic activities, ethics and culture common to the valley's communities in recent centuries.

If, on the one hand, the final disappearance of the farming community and the transformation of the valley's economic and social substrate in the post-war period have deprived this channel of oral transmission of its function and reason to exist, they created, on the other, a widespread need to rediscover the "folk memory". This recovery occurred in a fragmentary manner and was entrusted to enthusiasts and scholars, who were motivated by the desire to collect "peculiar" folkloristic traditions and superstitions (Figs. 128-129), rather than to conduct a systematic and detailed study and thus create an overall picture of scientific validity.

Today, the profound connections between oral tradition, material culture and historical and archive material is evident, as is the essential role of the first of these in reconstructing the traditional perception and use of the territory and the cultural heritage contained therein. The careful study of intangible culture must therefore be considered a unique and essential tool for the integration, verification and understanding of knowledge gained from historical and archaeological research.

The possibility this reconstruction is today entrusted to a few "informers", who are the repositories of knowledge inherited from parents, but no longer handed down to successive generations. These informers form a small part of the valley's population and their numbers are rapidly diminishing, thus making it extremely urgent to start systematic collection of this enormous amount of information and knowledge, which will otherwise disappear forever.

A digital archive of interviews (over 200 hours of recordings), which collects folkloristic material and material from oral culture (*bote* (myths), popular beliefs and traditions, symbolic and ritual practices) is preserved in the Centro Ricerche Antropologiche Alpi Centrali (Central Alps' Anthropological Research Centre - CRAAC), which was founded by a group of researchers with various study experiences and specializations (archaeology, history, anthropology and archive-keeping) in 2003.

#### Events, cultural production, traditions

The promotion of Valle Camonica's local culture is also encouraged by many initiatives focusing on various cultural aspects, specialist occupational and ethnographical traditions. They are designed to attract tourists and local people throughout the year (the Resource Analysis provides a list of the main events).

Organization on the part of councils and local cultural associations of many exhibitions concerning a wide range of topics (archaeology, art, history and local traditions) during the year is of particular importance in this sector.

The numerous events also include music (classical, modern, light and folk music, bands and and choirs), theatre (from classical works to comedies in dialect) and literary events (public drama and poetry readings).

Sports events, which involve the inhabitants of the valley and many tourists in international competitions during all seasons of the year, are also important.

Finally, folk events, often associated with initiatives designed to promote food and wine traditions and with market-shows, increasingly attract large numbers of visitors and tourists in many valley towns, especially in summer.



#### 6.4 The State of Conservation of the Cultural Heritage

The protection and conservation of the valley's cultural inheritance is a primary objective of the Italian State, through the competent superintendencies, and of the local authorities. In pursuit of this aim, the various types of cultural patrimony present in the territory have been the object of various initiatives.

The rock art heritage, since it is part of the national archaeological patrimony, is safeguarded by a law (Legislative Decree in date 22<sup>nd</sup> January 2004, N° 42) which confers the responsibility for tutelage upon the Ministry of Cultural Heritage and Activities-Ministero per i Beni e le Attività Culturali, (art. 4, c. 1).

This same law (art. 88 c. 1) also makes the Ministry responsible for archaeological research (and other activities which aim at the discovery of archaeological artefacts), to which end it can make use of the collaboration of other bodies (art. 89, c. 1), by granting them a research concession.

The State, which operates on UNESCO Site N° 94 "Rock Drawings of Valle Camonica" in the form of the Lombardy *Soprintendenza* of Archaeological Heritage (Soprintendenza per i Beni Archeologici della Lombardia, 11 Via E. De Amicis, Milano), is responsible for specialist activities and is in possession of the relevant personnel (archaeologists, conservation workers, architects, topographers, photographers and computer specialists), active in the fields of archaeological research, maintenance, conservation, recording and development of sites and museums. It provides, in the premises of the Lombardy Superintendency, technical drawing offices, an archive centre, a photographic laboratory, a specialized library and a conservation laboratory (which, for the preservative treatment of the engraved rocks, has studied methods and monitoring procedures with the ICR - Istituto Centrale del Restauro of the Ministry, in collaboration with national research institutions, as indicated below).

These facilities are located in the main Lombardy offices and the technical and specialist staff employed there functions as a consultancy, internal and external, for projects concerning the UNESCO site, advising other managing authorities and directing specialist work in the fields of conservation, protection and research in accordance with current legislation (Legislative Decree 22 January 2004, N°42).

The work is carried out, under contract, by specialized firms operating under the supervision of the *Soprintendenza*.

For the management and maintenance of UNESCO Site N° 94 "Rock Drawings in Valle Camonica", which includes the seven Parks described above and additional sites which lack this status, spread throughout the entire valley, both employees of public authorities and external personnel are used, in varying numbers and proportions, as may be seen from the Park Authorities' balance sheets (see Part II, 7. Resource Analysis, 7.1 Ordinary Resource Analysis for Conservation).

Consequently, while the State possesses personnel (internal and external) in sufficient number for the sites it manages and for the work with which it is charged (protection, conservation, restoration, research, cataloguing and development), the local authorities which administer Parks have scarce personnel, lacking the human resources for the conservation of the site, but put a lot of effort into promotion.

All of the seven parks currently included within the UNESCO Site N° 94, already operative or under development, are regulated by specific administrative rules (*Regolamento*, for the *Parchi Nazionali*; *Delibere Comunali* and *Delibere Regionali di approvazione dei Piani*, for the *Parchi Comunali*) which have been integrated into local territorial planning instruments (*Piani Regolatori Generali* and *Piano Territoriale di Coordinamento della Provincia*).

It should not be forgotten that, in accordance with the pertinent laws concerning tutelage (in force since the early 20<sup>th</sup> century, long before UNESCO's recognition) the Soprintendenza examines all planning applications for building permits within the valley (public works, local authority and private projects) in order to safeguard archaeological and rock art sites and areas held to be at risk, which were catalogued



and mapped in the *Carta archeologica della Lombardia. I. La Provincia di Brescia*, ed. F. Rossi, Modena 1990, and continually brought up to date.

The *Soprintendenza* Milan headquarters houses the archaeological archive for all of Lombardy, collected continuously since 1909. With respect to Valle Camonica, it contains all the survey records of all sites in the valley, together with other records regarding discovery and research (over 2700 black-and-white and slide photographs, over 5000 digital photographs and 3700 drawn records, including contact drawings on polyethylene sheet, rubbings, smaller scale drawings and copies). The *Soprintendenza* Archive also contains the historical archives of the old *Soprintendenza* of Antiquities of the Veneto, Lombardy and Tridentine Venezia, and the archive of rock art drawings and photographs created by V. Fusco, previously professor of Palaeo-ethnology and Human Palaeontology at the Università degli Studi di Milano.

Most of the detailed drawings of the Valle Camonica rock art are kept at the Valcamonica Centre for Prehistoric Studies (Centro Camuno di Studi Preistorici, CCSP), a scientific organization founded in 1964, whose members have participated since the mid 1950s in annual research campaigns concerning Valle Camonica's rock art, authorized by the *Soprintendenza* under *concession* or, since 1994, in accordance with a *convention*.

This institution deserves merit for having publicized Valle Camonica's rock art internationally, and its Valle Camonica branch has more recently been joined by other organizations (in 1975, the Museo Didattico d'Arte e Vita Preistorica, Capodiponte, and in 1992, the Cooperative "Le Orme dell'uomo").

These research groups have, in response to requests from local authorities, offered specialist consultancy to Parks administered by local authorities (the CCSP for the Riserva Regionale delle Incisioni Rupestri di Ceto Cimbergo e Paspardo, the Parco di Sellero and the Parco di Luine; the Museo Didattico for the Parco pluritematico di Sonico).

### **The State of Conservation of the Rock Art Heritage**

The engraved rocks are mainly sited in wooded areas, widely spread on both sides of the valley up to high altitudes (Figs. 130-131). They are at risk from factors related to climate and environment, both natural and in the form of human activity (increased pollution, soil destabilization which increases erosion) which can lead to serious deterioration of the engraved rock surfaces. This could result in the partial loss of this UNESCO World Heritage Site if suitable conservation treatment is not rapidly given.

Besides damage caused by the growth of vegetation and moss and lichen, which has always grown in cracks and on rock surface, in recent years (around 1990) an increase in biological damage caused by increasing pollution was noticed (Figs. 132-133).

Biological deterioration is caused by the growth of various indigenous plants, leafy and powdery lichens, moss, algae and (especially) cyanophytic algae (Figs. 134-136). The filamentous network produced by the latter causes disaggregation of the rock surface over time, causing irreversible damage to the parts with engravings.

A rock's environmental situation is closely related to the phenomenon of biological damage: its location in a Park, or in untended woodland, can deeply influence the intensity and type of biological attack, as well as the formation of earthy and organic deposits.

Rock conformation also has an important effect on the development of this type of deterioration; a pronounced inclination, which encourages runoff, and surface concavity with preferential stagnation areas, are all factors that enhance biological attack.





Furthermore, the intensity of biological attack is closely related to the specific rock type. For example, the lower Valley (Luine) is distinguished by the presence of the rock known as *Pietra Simona*, which is more friable and coarser grained than the *Verrucano Lombardo* typical of the rest of the Valley.

Another rock conservation problem, which must not be neglected, is the crumbling and erosion of stone, which appears as scaling, exfoliation and detachment, involving the possible loss of engraved details (Figs. 137-138). Very often, detached parts are so historically accepted that it is impossible to establish - except in cases where indisputable traces of engravings are visible - whether they really had illustrated areas, or whether these portions of rock were discarded from the very beginning as being inappropriate for engravings.

Erosional intensity depends on various factors: the rock's geological nature and conformation (gradient and orientation), temperature changes, biological attack, environmental context (closeness to trees, vegetation and earth), the passage of human feet (human impact) and any conservation or protective treatment.

It was also ascertained that the contrast method applied to highlight engravings by spreading casein and lampblack before the graphic recording of images (a survey method designed by the "Valcamonica Centre for Prehistoric Studies" (Centro Camuno di Studi Preistorici) encourages the formation of micro-organisms. Hence the system, which the Soprintendenza had already forbidden in the mid 1980s, was definitively outlawed after analyses conducted on the materials and treated rocks.

*Biological and physical-mechanical* deterioration of the rocks cannot be completely separated from that due to *human actions* (passage on foot, vandalism or the use of inappropriate cleaning methods). The impact of numerous visitors, if not opportunely organized (as is the case in numerous rock art areas not in Parks that are scattered throughout the valley), can cause damage due to passage on foot and vandalism.

The magnitude of this patrimony, the fact of its dispersal over an extensive area and the variability in locations and states of preservation (and the consequent great responsibility of safeguarding this world patrimony), have determined the emphasis on systematic conservation studies and specific research programmes on the part of the authority charged with guardianship, the Soprintendenza, which has had to face the problem of widespread deterioration of rocks with engravings, partly due to the use of unsuitable methods on the part of those who first recorded the rock art (the use of chemical agents for cleaning surfaces, the making of casts and removal of covering earth).

Since 1992, the Soprintendenza for Archaeological Heritage of Lombardy (Soprintendenza per i Beni Archeologici della Lombardia), in order to deal adequately with the problem and prepare a Conservation Plan using appropriate methods (on the basis of the examinations and surveys described above), has carried out specific measurements, analyses and studies on the preservation state of rocks with engravings, on the causes of deterioration and the level of pollution.

The aim of these analyses and studies was to obtain a detailed knowledge of the various Valle Camonica rock art localities and hence to devise appropriate conservation procedures and begin a systematic programme (treatment of the rocks in order to preserve them, using methods sanctioned by the Istituto Centrale del Restauro, has been under way since 1980 in the Parco Nazionale delle Incisioni Rupestri, Capo di Ponte).

The major Italian research institutes in the field of the deterioration and preservation of stone (ICR, CNR) collaborated in the research, as specified below.

The analyses and field examinations conducted indicate that the best preserved rocks are undoubtedly those in the protected areas (the Parks), where routine maintenance is regularly performed and damage from human passage on foot is eliminat-



ed by the installation of walkways.

This shows the fundamental importance of correct and constant maintenance, which is the only way to ensure that the effects of conservation treatment are long-lasting; without it, even the most effective treatment may lose its potency.

### **Conservation Work**

The state of deterioration described above can be contained only by expensive and ever-increasing territorial management (with the involvement of numerous authorities) and campaigns of rock maintenance and treatment. Since the phenomenon is on the increase, in the future it may be necessary to periodically reinter certain rocks in order to protect them from further deterioration.

With the exception of a campaign by Darfo-Boario Terme council in the Parco Comunale di Luine on Rock no. 34 in 1999 and that by the Consorzio della Riserva on Rock 6 of the Riserva Regionale di Ceto, Cimbergo e Paspardo (2005), the State is the only body which has contributed funds for the site's protection and preservation with annual programmes of conservation work.

Since 1980 the Soprintendenza for Archaeological Heritage of Lombardy (Soprintendenza per i Beni Archeologici della Lombardia) has carried out annual conservation campaigns on the rocks (Figs. 139-141).

Records of conservation treatment are kept in the archives of the *Soprintendenza*, which in 1997 created the **Rock Art Conservation Monitoring Archive**, based on a computerized cataloguing system called **IR**, which was later revised for use via Internet and Intranet, and renamed **IR Web**, a tool for mapping and recording the patrimony and its conservation history with the use of modern techniques such as **photogrammetry** and **digital photography**, as is more fully explained *infra*.

The monitoring archive includes a part regarding the site's conservation history (managed by conservator D. Costantini) which lists the treatment applied to each rock and the products used (when known) and records changes in the state of preservation. Yearly reports on conservation campaigns and methods regarding the rock art heritage may be found in the "Notiziario della Soprintendenza per i Beni Archeologici della Lombardia" 1981-2002.

The *Soprintendenza* intends to continually increase protective and conservation measures with the following initiatives:

- 1- Systematic conservation of rocks with engravings.
  - 2- Extension of the computerized rock art catalogue with further campaigns of digital photography and photogrammetry, for recording purposes and conservation programming.
  - 3- Extension of the Rock Art Conservation Monitoring Archive created in 1997.
- It also intend to:
- 4- Develop collaboration with local authorities, who are also invited to launch conservation campaigns regarding the rocks on their property, under the scientific supervision of the authority charged with tutelage (the *Soprintendenza*).
  - 5- Propose specific rock engraving cataloguing projects, within the framework of specific pluriennial national and Regional Authority programmes, using the *IR* and *IRWeb* cataloguing systems that were created by the *Soprintendenza* and approved as the official rock art cataloguing system by the MiBAC-ICCD.

These steps serve to compile exhaustive and complete conservation records of the engraved rocks.



***The Initiatives of the Soprintendenza for Archaeological Heritage of Lombardy/Ministry of Cultural Heritage and Activities (Soprintendenza per i Beni Archeologici della Lombardia/Ministero per i Beni e le Attività Culturali)***

The Soprintendenza's initiatives with respect to the rock art have been mainly concerned, as explained above, with safeguarding this patrimony, regardless of whether under state, local authority or private ownership, within the limits of the financial resources made available in the triennial and annual programmes approved by the Ministry. This tutelage takes the form of long-term programmes aimed at recording and conserving the engravings, following a protocol of methods and procedures established after careful studies and on the basis of accumulated experience, in collaboration with specialist national research institutes.

Safeguarding the rock art involves the question of its conservation, which is effected by qualified personnel (conservators specialized in the treatment of stone) on the basis of studies of the initial state of preservation and with the continued monitoring of the situation. These heritage management requirements have led to the establishment of a programme which can be summarized under three main headings:

- 1) recording the rock engravings;**
- 2) monitoring;**
- 3) conservation.**

**1-2) Recording and Monitoring.** The Soprintendenza for Archaeological Heritage of Lombardy (Soprintendenza per i Beni Archeologici della Lombardia) began in 1997 a computerized cataloguing project ("IR", *Incisioni Rupestri*) which, as well as covering technical, scientific and administrative aspects, places particular emphasis on monitoring the state of preservation.

This initiative concludes a lengthy period of study and experiment regarding the computerization of rock engraving records (the *IR Sheet*<sup>3</sup> was developed in 1984; the *Petra* cataloguing project was started in 1989 as part of a programme to develop the Parco Nazionale delle Incisioni Rupestri di Capo di Ponte and financed by Law 449/1987<sup>4</sup>). It constitutes a new development in rock art studies inasmuch as it was created as a modifiable and continually updatable inventory which would be accessible to all and (as soon as possible) available for online consultation (*IRWeb*).

Within the archive, careful and specific attention is dedicated to the systematic review of rock preservation states, which is considered fundamental and of vital importance for a medium and long-term heritage management strategy.

With respect to this last point, it should be noted that the ICCD-Istituto Centrale per il Catalogo e la Documentazione (Central Institute for Catalogue and Documentation) of the Ministry of Cultural Heritage and Activities (Ministero per i Beni e le Attività Culturali) certified in July 2003 that the *IRWeb* system is compatible with its own cataloguing system, also with respect to the connection between descriptive data and the monitoring of the objects' state of preservation and with regard to the close interplay between the descriptive data and the structuring of the information which the system guarantees.

**The IR (Incisioni Rupestri) Project** (Figs. 142-143)

The inventory system used for the engraved rocks was designed and created in 1997 by the Soprintendenza for Archaeological Heritage of Lombardy (Soprintendenza per i Beni Archeologici della Lombardia) and has been applied not just to the rock art of Valle Camonica, but to all the rock art sites present in other Lombardy provinces (Sondrio, Bergamo, Brescia, Como, Lecco and Varese). It uses modern recording methods, such as photogrammetry and digital photography<sup>5</sup>.

In comparison with the rock art cataloguing methods used by other organizations which operate in Valle Camonica (*infra*), the Soprintendenza's IR Project is distin-



guished by the fact that **the entire surface of each rock is taken into consideration, not just the area with carvings (or even each single carving)**. This criterion is of paramount importance, because a detailed analysis of the whole rock permits a complete evaluation of its condition and thus allows the onset or aggravation of deterioration states that could cause serious damage - and thus prejudice its conservation for future generations - to be avoided.

The IR Project absorbed the results of previous programmes begun in 1984 (scheda IR, according to the Istituto Centrale per il Catalogo e la Documentazione-ICCD) and 1989 (Project Petra) by the Soprintendenza, in collaboration with the ICCD and the ICR (Istituto Centrale per il Restauro).

This electronic archive, designed to allow monitoring of the preservation state and the programming of conservation campaigns according to the indications of the Ministry's **Risk Map** (*Carta del Rischio: Ministero per i Beni e le Attività Culturali* and ICR), contains an interactive database which is able to hold technical and scientific as well as administrative information together with photographs and drawings and may be repeatedly updated.

The database for monitoring the rocks' condition is created by means of the following steps:

- 1) field recording
- 2) research and collation of archive and bibliographical references
- 3) insertion of digital photographs
- 4) elaboration of computer graphics illustrating conservation data
- 5) database compilation

#### 1) Field recording

The photogrammetry of rock surfaces is fundamental for recording in the field; it yields high-precision drawings, with levels or in 3D (useful for the construction of scale models).

The photogrammetry data are subjected to computer elaboration so as to obtain a vectorized perimeter plan, on which a grid of 50cm squares (referred to as "Zones") is superimposed: this enables individual engravings to be positioned with respect to the entire rock surface.

At this juncture a series of photographs from different positions are taken in the field, so as to record the Zones and the Figurations and Scenes (i.e. groups of Figurations which together portray of events such as dances or duels, or complex entities e.g. cultivated fields and paths or villages) they contain.

At the same time, descriptive sheets recording information such as the morphology, dimensions, orientation and surface preservation state of the rocks, and the quantity, type and legibility of engravings present, are compiled.

#### 2) Research and collation of archive and bibliographical references

Contemporarily with the field recording, a bibliography search is conducted together with an examination of the Soprintendenza archives. The Superintendency headquarters house the Topographic archive, composed of written records pertinent to archaeological sites in Lombardy, and Conservation, Drawing and Photographic archives; there is also the *Carta Archeologica della provincia di Brescia* (ROSSI 1991) with the catalogue of all the archaeological finds. As far as Valle Camonica rock art is concerned, about 3700 drawings, 2700 black-and-white and slide photographs and more than 5000 digital photos are currently conserved.

#### 3) Insertion of digital photographs



Every photograph taken in the field is memorized as a JPEG file (this is one of the formats approved for computerized inventories of archaeological finds by the ICCD). All the files are inserted in a central electronic archive, at present based in Milan, in the head office of the Soprintendenza for Archaeological Heritage of Lombardy (Soprintendenza per i Beni Archeologici della Lombardia).

This archive is structured in a systematic fashion: province, municipality, locality, photograph type (panoramic, or of a particular Zone, Scene or Figuration), rock code, brief photograph description. Each image file has a unique name which refers to the archive structure (for example: C:\ARCHIVIO IR\BS\Ceto\Foppe di Nadro\Raffigurazioni\FDN037-Z26 antropomorfo.jpg).

#### 4) Elaboration of computer graphics illustrating conservation data

Information concerning preservation and conservation, in addition to being presented in detail in the Zone Conservation Profile and summarized in the Rock Conservation Profile, is available visually in files which contain the conservation state of each Rock Zone in vectorial form. The IR Project developed a method for the graphic recording and visualization of the affected areas and damage types, using the Autodesk programme AutoCAD: this methodology, tested since 1997, was illustrated during the Third Regional Congress (Terzo Congresso Regionale) at Como during October 1999<sup>6</sup>. The boundaries of areas affected by different kinds of damage are marked on digital photos, using symbols (Figs. 144-145), and each damage type is memorized on a separate layer<sup>7</sup> which is distinguished by a particular colour. The use of digital photos allows, during the monitoring activities, to see and to verify the possible increase of the damages and so to decide the conservation treatment.

These files together constitute a specific archive for monitoring conservation state of the rock art, located in the head office of the Soprintendenza.

#### 5) Database compilation

Two versions of the IR inventory programme were developed in 1999, using Microsoft Access: one for compilation and the other exclusively for consultation.

The first is designed for the insertion and possible modification of data, with unrestricted descriptive fields, presence/absence fields and fields with drop-down menus from which just predefined options may be chosen. The other version enables consultation of the archive only.

The terminology adopted for conservation matters derives from the Cultural Heritage's Risk Map (*Carta del Rischio del Patrimonio Culturale: Consorzio Metis* and Istituto Centrale per il Restauro, of the Ministry of Cultural Heritage and Activities-Ministero per i Beni e le Attività Culturali); the terms used have been adapted to the particularities of the patrimony in question<sup>8</sup>.

Purpose-built software was created for internal archive searches, which allows these to be conducted on the basis of single properties (Scene type, for example) or multiple parameters (such as Scene type + chronology + locality).

This version is divided into seven descriptive modules, five of which are connected to digital images, and a sub-screen:

- Rock Sheet
- Other Data sub-screen
- Zone Sheet
- Scene Sheet
- Figuration Sheet
- Zone Conservation Profile
- Rock Conservation Profile
- Rock History Profile



### *Rock Sheet*

The Rock Sheet is the nodal point of the archive, to which all the other modules refer. The morphological characteristics of the rock are described; it is identified by a code which makes reference to the locality and a progressive number series. The right hand side of the screen shows a general photo and the vectorial drawing with grid squares indicated may be visualized by means of a hypertextual connection.

The *Other Data* sub-screen, which contains relevant topographic and administrative information, may be accessed from the Rock Sheet.

### *Zone Sheet*

This sheet contains a brief description of the engravings present, with notes on the photographic conditions and indications concerning engraving overlays, when these occur. A digital photo of the relevant Zone is shown and a drawing of the rock grid may be activated.

### *Scene Sheet*

Also connected to the Rock Sheet, this sheet contains fields for identification codes, Scene type, engraving date and description. The left of the screen shows a list of the Figurations which make up the Scene and the Zones involved. On the right a digital image of the Scene may be seen.

### *Figuration Sheet*

This sheet may be activated from the Scene Sheet and contains, in addition to the relevant identification codes, fields for chronology, technique, type and description. Here too, the sheet is completed by a photograph, of the Figuration.

### *Rock History Profile*

Fields are supplied for a description of the rock, its discovery date, morphology and a summary of the engravings present and their chronology, as well as a series of archive data (bibliography, and photographic and drawn records to be found in the Soprintendenza for Archaeological Heritage of Lombardy archives).

### *Zone Conservation Profile*

This may be accessed from the Zone Sheet, and consists of two pages: the first, entitled **Data**, contains a series of fields which refer to the conservation state, the various different kinds of damage and the conservation procedures already carried out or under way on this particular portion of the rock.

With reference to the National Heritage **Risk Map**, the terminology for damage to engraved rock surfaces ("intrinsic risk") has been used with some adaptation.

## **List of damage types applicable to stone surfaces with rock art**

### **A** Structural damage

- |   |                             |
|---|-----------------------------|
| 1 | Deformation                 |
| 2 | Cracks                      |
| 3 | Body cracks                 |
| 4 | Deformation and cracks      |
| 5 | Deformation and body cracks |

### **B** Physical disaggregation

- |   |   |
|---|---|
| 1 | Oxidation/corrosion                     |
| 2 | Cement disaggregation/powdering         |
| 3 | Main component disaggregation/powdering |
| 4 | Erosion                                 |



- |          |                              |                                       |
|----------|------------------------------|---------------------------------------|
|          | 5                            | Black crust                           |
| <b>C</b> | Humidity                     |                                       |
|          | 1                            | Infiltration                          |
|          | 2                            | Capillary action                      |
|          | 3                            | Percolating water                     |
|          | 4                            | Condensation                          |
|          | 5                            | Stagnant water                        |
|          | 6                            | Salt efflorescence                    |
| <b>D</b> | Biological attack            |                                       |
|          | 1                            | Macroflora/vegetation                 |
|          | 2                            | Animals/insects                       |
|          | 3                            | Microflora and macroflora             |
|          | 4                            | Macroflora and insects                |
|          | 5                            | Microflora, macroflora and insects    |
| <b>E</b> | Alteration of surface layers |                                       |
|          | 1                            | Layer separation                      |
|          | 2                            | Fissuring/flaking                     |
|          | 3                            | Encrustations/concretions             |
|          | 4                            | Superficial deposits/smoke blackening |
|          | 5                            | Vandalism                             |
| <b>F</b> | Missing parts                |                                       |
|          | 1                            | Old breaks/missing parts              |
|          | 2                            | Removal of posts, chains and barriers |
|          | 3                            | Breakage and removal of barriers      |

The damage found in each Zone is summarized in the compilation of fields relating to the level of each damage type – and hence the degree of urgency of conservation treatment - in the *Rock Conservation Profile*. The collation of this information is thus of great importance for the short, mid and long-term scheduling of rock conservation programmes.

The second page of the Zone Conservation Profile, entitled **Images**, allows two photographs to be inserted, showing the condition of the rock before and after conservation treatment; these facilitate periodic monitoring of the conservation state.

#### *The Rock Conservation Profile*

The *Rock Conservation Profile* contains, in two pages, information regarding the utilization of the rock, the morphology of its geographical setting and notes regarding action taken with respect to conservation.

Particular attention is dedicated to the rocks' environmental context, because the extent to which environmental factors may influence negatively their state of preservation has become clear.

**Page 1** contains information on the details of maintenance procedures, protection and safety structures, on how the rock is equipped for public visits (walkways, explanatory panels etc.) and on the morphology of the surrounding terrain. The module is completed, on **Page 2**, by data concerning the various conservation treatments, with reference to the gravity and extensiveness of the damage, and an evaluation of the degree of urgency of the procedures to be effected. The source of information regarding conservation treatment (visual, bibliographical or archival) is also recorded.

The Rock Conservation Profile unites many data relating to factors of *extrinsic risk*.



The following extrinsic risk factors (a-n) may influence the conservation state of a rock:

- a) **context of locality/utilization:**
  - 1. archaeological park
  - 2. residence
  - 3. production/agriculture/grazing
  - 4. production/industry
  - 5. production/craft work
  - 6. production/services
  - 7. mobile find stored under cover
  - 8. mobile find in museum
  - 9. mobile find kept in the open
  - 10. excavation site in progress
  - 11. in disuse
- b) **public access**
- c) **annual visitor load**
- d) **maintenance frequency and type**
- e) **means of protection from the weather:**
  - 1. seasonal covering
  - 2. enclosure
  - 3. shoring
  - 4. roofing
  - 5. absent
- f) **safety/security systems:**
  - 1. protective construction
  - 2. burglar alarm
  - 3. sprinkler system
  - 4. lightening conductor
  - 5. enclosure
  - 6. absent
- g) **equipment for visitors:**
  - 1. fixed explanatory panels
  - 2. platforms
  - 3. platforms and fixed explanatory panels
  - 4. walkways
  - 5. walkways and fixed explanatory panels
  - 6. absent
- h) **custody of the archaeological area:**
  - 1. continuous
  - 2. continuous diurnal
  - 3. only at entrances
  - 4. continuous nocturnal
  - 5. discontinuous
  - 6. discontinuous only diurnal
  - 7. discontinuous only nocturnal
  - 8. absent





- i) **exposure to the weather:**
  - 1. total
  - 2. partial
  
- l) **contiguity of damaging environmental factors:**
  - 1. grazing area
  - 2. watercourse
  - 3. water table
  - 4. soil
  - 5. path
  - 6. spring
  - 7. pond
  - 8. road
  - 9. modern constructions
  - 10. earth bank
  - 11. agricultural land
  - 12. vegetation
  
- m) **proximity of damaging environmental factors, within a 50m radius:**
  - 1. grazing area
  - 2. watercourse
  - 3. water table
  - 4. soil
  - 5. path
  - 6. spring
  - 7. pond
  - 8. road
  - 9. modern constructions
  - 10. earth bank
  - 11. agricultural land
  - 12. vegetation
  
- n) **percolation of water**

All data regarding aspects of conservation, visible in files which containing vectorized forms of information concerning the conservation state, are gathered together in an electronic Rock Art Monitoring Archive compiled by the Soprintendenza for Archaeological Heritage of Lombardy (Soprintendenza per i Beni Archeologici della Lombardia).

The collection of data with respect to "intrinsic and extrinsic risk" for the entire Valle Camonica rock art patrimony will enable an effective heritage management strategy to be put into action, and therefore protect the site for future generations. Furthermore, the recurrence of particular phenomena of degradation or damage should permit the identification of standards which will guide the management and public utilization of this patrimony without allowing its condition to worsen. In correspondence to the diverse circumstances, it would be possible, for example, to control the *physical load capacity*, regulating the maximum number of visitors or establishing an itinerary system which did not threaten to compromise the survival and exceptional value of this cultural inheritance.

The sheets regarding Zone and Rock conservation, because of their highly specific nature, can only be compiled by qualified restorers.



### The IRWeb Project (Rock Art on the Internet) (Figs. 146-147)

In January 2003 the Soprintendenza for Archaeological Heritage of Lombardy (Soprintendenza per i Beni Archeologici della Lombardia) launched a project to further extend the reach of the **IR** database, so that it can be used in Intranet networks and on the Internet, with the possibility of de-localised data insertion<sup>9</sup>. From a structural point of view, IRWeb is a natural development of IR, because it retains the same seven-sheet organization, with the same fields and the same lexicons for compilation; the data acquisition procedure in the field is also identical. Naturally, thanks to the system's flexibility, it will be possible to implement the voices to be compiled according to requirements that emerge as work proceeds.

The new IRWeb programme was created using the most widely-used current standards, in order to permit the re-use of data in future versions:

- Database: SOAP interface with database, engine SQL compliant
- Interfaces: XHTML, XHTML strict for WAI (Web Accessibility Initiative) conforming versions
- Application language: PHP 5.0

It is based on a distributed *client/server* structure which is able to function efficiently in a high-velocity internal network (Intranet) or in a remote web server (Internet) and is remarkably simple to use, thanks to an intuitive graphic interface. The programme contains an online manual which facilitates data input and archive consultation.

Another advantage is that access to the archive is immediate; it is not necessary to install any software into the client computer, because all that is required is a normal *web browser* (such as Internet Explorer) which are by now pre-installed in most PCs.

With a view to data insertion via Internet, careful attention was given to the system's security, with the introduction of personalized access based on the distinction of various categories of user type, each with different privileges:

<b>User category</b>	<b>Access level</b>	<b>Activity</b>
Admin	System administrator	User coordination; database modification; checking sheets compiled by other users
Superuser	Privileged internal system user	Database visualization; data input; checking sheets compiled by other user
Cuser	Common or normal system user	Database visualization; data input
Guest	External user	Database visualization

The data visualization profile is chosen when a user or user group registers (login). The administrator chooses between these interfaces:

- Compiler
- Standard



- Student
- Other interfaces

At the moment of a user's login, he or she will access the system, in a completely transparent fashion, through the interface which has been assigned.

Obviously, interfaces which present a reduced set of all the data gathered about a rock can be created, in order to design sheets which conform to less detailed standards.

A fundamentally important feature of this new database is that all newly compiled sheets, including those inserted via Internet, are temporarily archived in a purpose-constructed **Validation List**. In this way the correctness of the data and insertion procedure can be verified and only after all data have been checked by the system "Superusers" are they integrated definitively into the **IRWeb** archive. This validation system has also the function of protecting the sheets of unpublished rocks or those under study, guaranteeing that the information is treated confidentially until the work is completed.

Particular attention was given to the safety of data, with the production of daily back-up copies and rapid procedures for data recovery.

After the phase of software design, the proper functioning of the programme was put to the test, by checking the inventory transferred from the previous version and by verifying the data insertion and consultation procedures.

In July 2003 the ICCD certified that the IRWeb system is compatible with its own cataloguing system, with regard to the close interplay between the descriptive data and the structuring of the information which the system guarantees.

In 2005, the IRWeb system was adapted to the graphic parameters for accessibility and usability indicated by MINERVA ("MInisterial NETwoRk for Valorising Activities in digitisation") for public cultural websites. With respect to the accessibility of content, the system follows the indications of the Stanca Law (Law N° 4, 9<sup>th</sup> January 2004), which stipulates parameters that facilitate the access of those with disabilities to computer services.

Lastly, it should be emphasized that IRWeb interfaces with the database by means of a WEB SERVICE, which consents the extraction from the database (after due authentication and authorization) of data in "unrefined" form, for use in other applications.

**3) Conservation.** During the more than twenty years (1979-2004) that have passed since the inclusion of the site in the Unesco Heritage List, the Soprintendenza has carried out numerous campaigns which are itemized in the enclosure (ENCLOSURE 5), with relevant annual reports registered in the archive of the Soprintendenza for Archaeological Heritage of Lombardy (Soprintendenza per i Beni Archeologici della Lombardia) head office and articles published in the "Notiziario della Soprintendenza Archeologica della Lombardia" (1981-2002) and specialist periodicals.

Since 1980 annual rock conservation programmes have been conducted, involving cleaning, consolidation and restoration, financed by the Ministry and involving conservators specialized in work on stone.

The sum spent by the *Soprintendenza* for conservation and routine maintenance of rocks inside the National Parks over the period 1980-2004 is estimated at circa € 750,000.00.



Soprintendenza per i Beni Archeologici della Lombardia

The programmes are carried out systematically in the National Parks; the Soprintendenza has also footed the bill for some work on private property (Corni Freschi, Darfo Boario Terme; Bedolina, Capo di Ponte -"La roccia della Mappa" [The Rock of the Map]-; and Seradina, Capo di Ponte, Rocks A, B and C) and promoted conservation campaigns on council-owned territory (Parco di Luine, Riserva Regionale) in the hope of instilling a culture of maintenance and conservation in order to ensure the survival of an inheritance which is at ever-increasing risk of degradation, especially from atmospheric pollution.

All of the conservation campaigns are organized and conducted so as to reconcile conservation requirements with the public interest, giving priority to rocks sited on visitors' itineraries within the Parks.

On the subject of conservation, see also below under: Map of risk, tutelage and protection (Part II, 8. Analysis of Risks and Protection Orders).

***The Initiatives of the Soprintendenza for Archaeological Heritage of Lombardy/Ministry for Cultural Heritage and Activities (Soprintendenza per i Beni Archeologici della Lombardia/Ministero per i Beni e le Attività Culturali) in Collaboration with Local Authorities***

In the period from the late 1990s to 2001, numerous cataloguing projects regarding various aspects of Valle Camonica's cultural heritage were conducted, financed in part by the European Union and in part by local authorities.

These included the production of data banks of rock engravings (in collaboration with the Soprintendenza for Archaeological Heritage of Lombardy), as well as of historic buildings, restoration work in churches and buildings in town and village historic centres, the recovery and management of agricultural and forestry resources, and a census of typical Alpine buildings.

Two projects carried out between 1999 and 2001, financed by the European Regional Development Fund, were of importance for an analysis of the condition of preservation of Valle Camonica's cultural patrimony.

The first, "Project Leader II, Action 5, Ethnographical Support Initiatives" (*Progetto Leader II, Azione 5, Sostegno alle Iniziative Etnografiche*) was designed in collaboration with the system for computerized monitoring of the rock engravings' preservation state, launched by the Soprintendenza for Archaeological Heritage of Lombardy.

The IR Project was tested as part of the European project Leader II-Action 5, on the basis of a programme agreed in date 18th May 1999 between the Soprintendenza for Archaeological Heritage of Lombardy and the BIM (Bacino Imbrifero Montano dei Comuni della Valle Camonica) and the Valle Camonica Gruppo di Azione Locale.

Fifty engraved rocks in the middle and upper Valle Camonica were catalogued by the SCA-Società Cooperativa Archeologica di Milano (commissioned by the Soprintendenza for Archaeological Heritage of Lombardy), and a workstation was set up in Valle Camonica, in the BIM Councils Consortium office in Breno, where the record sheets of the catalogued rocks were computerized and checked. This workstation functions as a local branch office for the inventory and for consultation of the rock art patrimony, in connection with the central archive which is housed in the Soprintendenza Milan offices.

The website [www.voli.bs.it/ir-incisionirupestri](http://www.voli.bs.it/ir-incisionirupestri) was also created; it may also be reached from the site [www.pal.voli.bs.it](http://www.pal.voli.bs.it)

As explained below (Cataloguing of the cultural heritage by local authorities), the second project, "Leader II, Action 7", concerned the creation of an archive to the record buildings of special historic and architectural interest which are widespread in Valle Camonica (*Inventario e valorizzazione di edifici storici*).



### **Other Rock Art Cataloguing Activity**

Various research organizations have operated in Valle Camonica for many years, in particular the Centro Camuno di Studi Preistorici (CCSP), Capo di Ponte, the Archaeology Cooperative "Le Orme dell'Uomo", Cervino, and the Museo Didattico d'Arte e Vita Preistorica, Capo di Ponte.

The **Valcamonica Centre for Prehistoric Studies (Centro Camuno di Studi Preistorici)** is a Research Institute (a private association which submits a yearly balance sheet to the Ministry of Cultural Heritage and Activities), founded in 1964 for the study of rock art in Valle Camonica (and elsewhere in the world), which gathers data and records. Under concession from the Ministry, it has conducted research into rock art in accordance with agreed annual research programmes, in the course of which it has identified and uncovered hundreds of engraved surfaces, many of which are now part of the archaeological heritage of Rock Art Parks and Reserves. The CCSP's archives contain records pertaining to rock art research over the last 50 years, which include over 250,000 images and documents concerning the discovery and study of Valle Camonica's (and the world's) prehistoric rock engravings.

From the 1970s onwards, this material has been organized into 4 databases, now united in a single computerized archive which contains survey data concerning Valle Camonica's rock art (engraved rocks are positioned according latitude and longitude using GPS), as well as photographs, drawings of individual rocks and descriptive modules.

This new archive unites the following databases:

- The "*Surveying Valle Camonica's Rock Art*" Project, which positioned, using GPS, every known engraved rock. The municipal areas currently covered by the project are: Pisogne (in progress), Darfo Boario Terme (in progress), Pian Camuno (in progress), Ceto (completed), Cimbergo (completed), Paspardo (in progress), Capo di Ponte (completed, with the exception of the rocks in the Parco Nazionale delle Incisioni Rupestri), Sellero (in progress) and Grevo (completed). Following a procedure recently agreed with the *Soprintendenza* and implemented in the new Seradina e Bedolina Park, engraved surfaces will be identified by means of numbered plaques fixed to the ground, which are positioned on a vectorial map, and thus guarantee that the rock surfaces and engraved zones may be localized (even if they are re-covered with earth in the future). This constitutes a fundamental tool for managing the territory, as well as for programming research. By 1<sup>st</sup> January 2005, circa 1900 engraved surfaces had been positioned and added to the inventory. The project received financial support from the Lombardy Regional Authority as part of the SIRBeC initiative (Sistema Informativo Regionale Beni Culturali) and represents an important step towards the protection of this patrimony.

- The *Italian Prehistoric Art Inventory (Inventario Arte Preistorica Italiana, IAPI)*, funded by the Ministry of Cultural Heritage and Activities, is a database of over 4,000 modules concerning Italian prehistoric art (including Valle Camonica), and is still being updated and enlarged. The computerization is based on a new prototype database design which uses a Microsoft Windows™ platform. The application has a hierarchical structure which imitates the **SA** and **RA** sheets drawn up by the Central Institute for Cataloguing and Recording (Istituto Centrale del Catalogo e della Documentazione, ICCD). The database also provides the possibility of extracting data and inserting it in ICCD standard formats. The basic features of the application are: the structure contains Archaeological Site Sheets (Schede di **Sito Archeologico**) and Archeological Find – or "artistic object" – Sheets (Schede di **Reperto Archeologico**) contained within a site (1 or more); the possibility of making *queries* in each defined field (geographical, chronological, typological etc.), which may be multiple (e.g. searches for objects in a geographical region which also conform to certain criteria); the possibility of *queries* using *key-words* (from a list largely



Soprintendenza per i Beni Archeologici della Lombardia

derived from the original WARA archive list); an image archive attached to each individual find (1 or more images); a GPS coordinate archive available for each find (consisting of points or a perimeter, implemented only for Valle Camonica rock art); general or selective reports;

- *Word Archive of Rock Art (WARA)*, a world rock art database containing 1500 modules describing sites with rock art, that provides a complete picture of the phenomenon, covering its birth, ancestral features and regional characteristics. The creation of a single archive is planned, which will unite the data currently kept in the WARA and IAPI with the plentiful iconographic records.

The **“Footprints of Man” Archaeological Cooperative (Cooperativa Archeologica “Le Orme dell’Uomo”)**. Since its foundation in 1988 the cooperative has pursued the aim of sharing the results of its research, in part through campaigns of computerized cataloguing of the engravings, which are drawn and studied. The group of researchers which founded the cooperative also created (in 1987) the first computerized catalogue of an area of Valle Camonica rock art, Dos Sottolaiolo (7 engraved rocks), whilst still working at the Centro Camuno di Studi Preistorici. This zone was published by the cooperative in 1988. The first EUGA Sheet, particularly suitable for cataloguing the rock art of Valle Camonica, Valtellina and Lake Garda, was developed in 1990, and based on the experience of three different inventory systems: that used at the time by the CCSP, the recording sheet produced by the Lombardy Archaeological *Soprintendenza* in 1989 (*Petra*) and the sheets used by various bodies in the Western Alps. The EUGA Sheet (comprising Rock Sheet and Figure Sheet) was used to catalogue numerous engraved rocks in the Vite-Deria area, a zone in which the cooperative has concentrated its research activities from 1990 until the present day. The same module was used in 1995 for recording the Rupe Magna in Grosio, Valtellina, as part of the Regional Authority’s SIRBec initiative (Sistema Informativo Regionale Beni Culturali); the cooperative was commissioned by the Consorzio Incisioni Rupestri di Grosio, with funding from the Lombardy Regional Authority and supervision by the Lombardy Archaeological *Soprintendenza*. In the late 1990s, the cooperative participated in the EuroPreArt project, together with a group composed of university groups, museums and archaeological associations from all over Europe (Istituto Politecnico di Tomar, Portugal; Centro Universitario Europeo per il Patrimonio Culturale di Ravello, Italy; Consejo Superior de Investigaciones científicas di Madrid, Spain; Asociación Cultural Colectivo Barbaòn, Extremadura, Spain; University of Liege, Belgium; University of Gotland, Sweden; University College, Dublin, Ireland; Centro Studi e Museo di Arte Preistorica di Pinerolo, Italy; l’Associazione Archo Jovem, Portugal). The EuroPreArt project was financed by the European Union, Education and Culture Programme 2000. The first results of this scientific cataloguing project were presented to the XIV Congress of the Unione Internazionale delle Scienze Preistoriche e Protostoriche (UISPP) of Liege in September 2001. 806 recording modules (Engraved/Painted Rock or Cave Sheets) with more than 2700 images were presented by seven European countries: they are available online at [www.euopreart.net](http://www.euopreart.net). As well as recording several rocks in the Western Alps, the cooperative covered Valle Camonica and Valtellina, for a total of 80 records. During 2003, Area (e.g. Valcamonica) and Site (e.g. Foppe di Nadro) Sheets were prepared; cataloguing is in progress on the part of various of the above-mentioned bodies. The next step will be the creation of a Figure Sheet.

The **Prehistoric Art and Lifestyle Teaching Museum, Capo di Ponte (Museo Didattico d’Arte e Vita Preistorica)**, is an experimental archaeology laboratory, founded in 1975 by A.Priuli, which houses an abundant collection of drawings (circa 1,000), photographs (circa 35,000 slides, which also cover other rock art localities in Italy and abroad, and circa 2,000 digital), casts and rubbings which illustrate Valle Camonica’s rock art from the Palaeolithic until the arrival of Christianity.



In the context of the museum's research activity, particular attention has been devoted to the development of new methods of recording and cataloguing rock engravings, not just in Valle Camonica, but throughout the Alps and in the rest of Italy.

In order to avoid damaging the engraved rocks, and in the interests of producing copies of the engravings which were as precise as possible, and therefore of maximum scientific value, rock rubbings were taken, together with photographs under oblique artificial lighting (and adapted to individual circumstances).

The results of research and rock art records from Valle Camonica, elsewhere in Italy and numerous other countries have been combined into a multi-media image bank, which was started at the museum in 1989.

The work described above has been generally directed at the study of the iconographic and chronological aspects of the rock art, whilst the problem of conservation – of fundamental importance for the long-term preservation of this patrimony, unique for its richness and size, - is touched on only marginally. Furthermore, the analysis of the engravings in the studies described above is often limited to single portions of a rock, and not extended to the entire context in which the engravings occur.

It was to tackle this problem that the IRWeb software was designed with reference to the Cultural Heritage Risk Map (Carta del Rischio del Patrimonio Culturale), from which terminology regarding the intrinsic and extrinsic risks to which stone surfaces are exposed was borrowed, with adaptation to the particular circumstances of engraved rocks. The method which underlies the IRWeb system is one of "survey", with the subdivision of each rock into "zones", and therefore allows each individual engraving to be precisely positioned with respect to the entire rock surface. Other innovations regard the vectorial computer graphics used to record, and visualize, the exact extent and nature of damage, and thus programme conservation work with precision.

### ***The Conservation Monitoring of the Engraved Rocks: Aims and Anticipated Results***

In pursuit of the goal of increasing the integration and optimal use of resources and cultural initiatives, our aim is to create a single shared **Catalogue**, which contains all the information currently available about Valle Camonica's rock art.

During the drafting of the present Management Plan, the Scientific and Technical Study Committee, which is composed of the Centro Camuno di Studi Preistorici, Dipartimento Valcamonica e Lombardia, the Cooperativa Archeologica "Le Orme dell'Uomo" and the Museo Didattico d'Arte e Vita Preistorica, has agreed on the need to use the *IRWeb* system for the unified rock art catalogue.

The primary purpose of the unified catalogue is the continual monitoring of the conservation state of the engraved rocks, and it is an ideal tool for combining the tutelage of the heritage with the integrated development of the valley's resources.

### **The Archaeological, Historical and Artistic Heritage**

#### ***The Cataloguing of the Historical and Artistic Heritage by the Local Authorities.***

The project "Leader II, Azione 7, *Inventory and Development of Historic Buildings*" lead to the creation, in the period 1999-2001, of a data bank concerning the numerous buildings of historical and architectural interest spread throughout Valle Camonica. The compilation of a **Risk Map (Carta del Rischio)** has also been started for this important patrimony, in order to record the state of preservation and thus



be able to programme conservation work.

During the three-year-period 2002-2004, the Consorzio Comuni Bacino Imbrifero Montano has continued the cataloguing of buildings of historical and artistic interest in the valley, compiling (in addition to new Risk Map sheets) the Lombardy Regional authority "A - Beni Architettonici" (A-Historic Buildings) S.I.R.Be.C. (Sistema Informativo Regionale Beni Culturali) module. This data will form part of a Single National Catalogue, with the participation of the regional Soprintendenze and the inclusion of other Regional Authorities' recording systems. In the S.I.R.Be.C. recording modules, which are kept by the Lombardy Regional Authority and by the Consorzio Comuni Bacino Imbrifero Montano, traditional photographic records (black-and-white and slide photos) are accompanied by digital photography.

***Development and Conservation of Archaeological, Historical and Artistic Heritage by Local authorities, in Collaboration with the Soprintendenze.***

As well as rock art, Valle Camonica possesses a rich and immensely valuable historical and cultural inheritance which the state and local authorities make provision to protect, conserve and develop by means of various campaigns and projects.

In particular, between 2002 and 2003 several European Union projects concerning the restoration of religious buildings in the municipalities of Breno, Bienno, Niardo, Capo di Ponte and Edolo (Table 6).

For the development of the archaeological heritage and Roman archaeological sites of Mid Valle Camonica, a Programme Agreement (Accordo di Programma) between the Ministry of Cultural Heritage and Activities and Local Authorities (Lombardy Regional Authority, Brescian Provincial Authority, Comunità Montana di Valle Camonica, and Civate, Camuno, Breno, Berzo Inferiore and Bienno Councils) was accepted in preliminary form on 20<sup>th</sup> May 2003 and ratified on 9<sup>th</sup> February 2005. Under this agreement, numerous initiatives have been programmed, ranging from conservation to the construction of itineraries for visitors, listed in the Table 7.

Funding was also made available under the agreement for the establishment of cultural itineraries in the municipal areas of Bienno and Berzo Inferiore which were not subject to joint state-local authority management, as specified in Table 8.

Table based on data supplied by the Comunità Montana di Valle Camonica. The Valle Camonica Mountain Community (Comunità Montana) has spent most of its funds derived from the Regional mountain Law (Legge Regionale sulla Montagna, R.L. 10/98) between 2001 and 2004 on financing work proposed by Valle Camonica councils, with the precise intent of assisting important local projects.

The Comunità Montana thus supports Valle Camonica's most realistic development strategy: the development of its historic and cultural traditions, the strengthening of services to citizens and of the valley's attractions.

Between 2001 and 2004, the following restoration work regarding the valley's historical and artistic heritage was financed.

Data supplied by the Comunità Montana di Valle Camonica.

**2001**

**Project Description:** Conservation of artefacts in the local museum "Le Fudine", Malegno

**Project Cost:** € 12,911.42

**Contribution of the Comunità Montana:** € 3,747.15





**Total project cost: € 12,911.42**

**Total contribution of the Comunità Montana: € 3,747.15**

## **2002**

**Project Description:** Renovation and restoration of the "Ex Comensoli-Africani" Forge-Museum in Via Artigiani, Bienno

**Project Cost:** € 205,197.00

**Contribution of the Comunità Montana:** € 102,598.50

**Total project cost: € 205,197.00**

**Total contribution of the Comunità Montana: € 102,598.50**

## **2003**

**Project Description:** Special maintenance, restoration and structural renovation of the Medieval Tower of Cividate Camuno

**Project Cost:** € 209,165.04

**Contribution of the Comunità Montana:** € 104,582.00

**Total project cost: € 209,165.04**

**Total contribution of the Comunità Montana: € 104,582.00**

**2004 (work for the period 2005-2006), Table 9**

## **7. Resource analysis**

### **7.1 Regular Funding for Conservation Work**

Listed below by park are the yearly investments for the three-year period 2002-2004 concerning management, maintenance, conservation, research and optimization. The Lombardy *Soprintendenza* for Archaeological Heritage (Soprintendenza per i Beni Archeologici della Lombardia) yearly allocates part of its funds to conservation, protection, development and research, both inside the National Parks and also in rock engraving sites and prehistoric and proto-historic archaeological sites throughout the valley. In this context, we shall not present the Soprintendenza's budgets concerning the Roman and Early Medieval archaeological heritage present in the valley.

#### **Parco Nazionale delle Incisioni Rupestri and Parco Archeologico Nazionale dei Massi di Cemmo, Capo di Ponte**

The Lombardy *Soprintendenza* for Archaeological Heritage (Soprintendenza per i Beni Archeologici della Lombardia) provides for the routine maintenance, conservation and recording of engraved rocks, for archaeological surveys and the management of Valle Camonica's National Parks with funds allocated by the Ministry on the basis of yearly projects inserted in three-year plans.

The yearly budget for the year **2002** comprised the following expense items, totalling € 519,333.88:



<b>Title</b>	<b>Amount in euros</b>
Maintenance and management of parks	€ 15,490.00
Supplies (water/light/heating/telephone/ easy consumption materials etc.)	€ 10,000.00
Maintenance of green areas	€ 11,213.88
Archaeological surveying, recording, conservation and development (throughout Valle Camonica)	€ 67,140.00
Conservation of Masso dei Corni Freschi – Darfo Boario Terme	€ 15,490.00
Expenses for personnel (approx.)	€ 400,000.00
<b>TOTAL</b>	<b>€ 519,333.88</b>

The yearly budget for the year **2003** comprised the following expense items, totalling € 588,042.00:

<b>Title</b>	<b>Amount in euros</b>
Maintenance and management of parks	€ 25,820.00
Supplies (water/light/heating/telephone/ easy consumption materials etc.)	€ 10,000.00
Maintenance of green areas	€ 12,472.00
Archaeological surveying, recording, conservation and development (throughout Valle Camonica)	€ 67,140.00
Archaeological excavations and development of the Parco Archeologico Nazionale dei Massi di Cemmo	€ 56,810.00
Exhibition " <i>Rock Engravings and Sites in Valle Camonica. New Research Perspectives</i> ", Milan, 14 October 2003 - 9 January 2004	€ 15,800.00
Expenses for personnel (approx.)	€ 400,000.00
<b>TOTAL</b>	<b>€ 588,042.00</b>

The yearly budget for the year **2004** comprised the following expense items, totalling € 535,737.00:

<b>Title</b>	<b>Amount in euros</b>
Maintenance and management of parks	€ 20,660.00
Supplies (water/light/heating/telephone/ easy consumption materials etc.)	€ 10,000.00
Maintenance of green areas	€ 12,787.00
Archaeological surveying, recording, conservation and development (throughout Valle Camonica)	€ 72,300.00
Archaeological excavations and development of the Parco Archeologico Nazionale dei Massi di Cemmo	€ 30,990.00
Pamphlet published for the exhibition: " <i>Fashion, Custom and Beauty in Ancient Italy</i> ", promoted by the Ministry of Cultural Heritage and Activities's General Management for Archaeological Heritage (Direzione Generale per i Beni Archeologici del Ministero per i Beni e le Attività Culturali)	€ 5,000.00
Expenses for personnel (approx.)	€ 384,000.00



**TOTAL € 535,737.00**

Expenses for state-employed personnel in charge of the Parks in 2004 refer to 19 full-time employees (1 technical-scientific assistant, 17 security guards, 1 person in charge of repairs) and 1 part-time (director). In addition there were administrative and technical personnel and a security guard, whose cost cannot be separately stated, since they are based in the Soprintendenza's head office and are also involved with the National Parks.

**Total Expenses for the three-year period 2002-2004: € 1,643,112.88**

### **Riserva Regionale delle Incisioni Rupestri di Ceto, Cimbergo, Paspardo**

The Managing Institution of the Riserva Regionale is the Ceto, Cimbergo and Paspardo Rock Engravings Consortium, which has entered into agreements with local institutions for the joint use of human resources and services.

In particular, the "Valcamonica Centre for Prehistoric Studies" (Centro Camuno di Studi Preistorici, Capo di Ponte) has been entrusted with the Reserve's scientific management, research management, data bank and higher level information services. The appointed director of the Reserve is employed by the Centre, which thus guarantees his constant services. The firm DO.NET has a special 6-year agreement to manage the museum's routine administration, providing the following services: caretaking, cleaning, heritage maintenance, security services, ticket office, information services and tourist promotion in exchange for the use of museum income (ticket office, educational services and refreshment sales) as payment for these services, as long as they are conducted in accordance with the Reserve Museum's statutory aims. Ceto Council appoints (by deliberation) one of its employees to act as the consortium's secretary and administrator.

The yearly budget for the year **2002** comprised the following expense items, totalling € 101,869.80 (see Table 10).

The yearly budget for the year **2003** comprised the following expense items, totalling € 376,269.00 (see Table 11):

The yearly budget for the year **2004** comprised the following expense items, totalling € 239,500.00 (see Table 12):

The yearly budget of the Riserva Regionale does not include the cost of personnel (1 in charge of education and 1 for caretaking activities, full time) provided by the firm Do.Net, which manages the Reserve's services. These expenses, amounting to about € 40,000.00 a year, are financed by the proceeds of activities and services supplied to the public.

Other activities and initiatives which are not included in the budgets, are promoted and supported from time to time by sponsors and/or local institutions, i.e. the councils which form the Consortium.

In 2005 the Reserve has programmed work to create a hospitality area in Figna (which will require the renovation of several farmhouses), lay out paths in the Capitello dei Due Pini area, provide toilets in the Foppe di Nadro area, create an area



equipped for those suffering from motor and sight disablement and survey historical paths.

**Total expenses for the three-year period 2002-2004: € 717,638.80**

#### **Parco Comunale di Luine, Darfo Boario Terme**

Yearly expenses on behalf of the local council for the park's routine administration amount to about € 26,000.00 (year 2003) and they comprise the cost of personnel assigned to security service and maintenance (one employee), and also caretaking, guarding and maintenance.

**Total expenses for the three-year period 2002-2004: € 72,000.00**

#### **Parco Archeologico Comunale di Seradina-Bedolina, Capo di Ponte**

The Park, inaugurated on 8<sup>th</sup> October 2005, has still not been allocated funds from the yearly budget for personnel, maintenance and development.

Capo di Ponte council possesses special funds (amounting to € 520,000.00 in 2005, allocated by SECAS S.p.A. – Intervention Firm for the Development of Valle Camonica, Sebino and Valle Cavallina – Darfo Boario Terme, Brescia) for equipping the Park: creating visitors' itineraries, mounting panels and other educational fittings, building hospitality facilities.

#### **Parco Comunale di Sellero**

No expenses (no budget is presently available for the Park).

#### **Parco pluritematico del "Còren de le Fate", Sonico**

No expenses (no budget is presently available for the Park).

In 2005 the Sonico municipality will invest approximately € 5,000.00 for a project involving school groups, to increase the younger generation's knowledge and respect for the rock art heritage. The initiative consists of a theory course and a practical part comprising visits and learning activities in Parco pluritematico del "Còren de le Fate". It should be noted that preparatory work in the Park, which is included within the boundary of the Parco dell'Adamello, was promoted and financed by the same.

Funds for this municipal park have been partly allocated by the Lombardy Regional Authority (Regione Lombardia), individual councils, the Mountain Community and the Valle Camonica Drainage Basin Council Consortium (Consorzio dei Comuni del Bacino Imbrifero Montano della Valle Camonica-BIM).

We are unable to quantify donations from banks and private parties, which, to our knowledge, are generally targeted at publishing papers and organizing conferences.

## **7.2 Natural and Environmental Resources**

The Province of Brescia's extensive territory may be divided into three geographical



areas: plain, pre-Alpine zone and Alpine area. The mountainous territory is organised administratively into five "Mountain Communities": *Valle Camonica, Valle Trompia, Valle Sabbia, Alto Garda Bresciano* and *Sebino Bresciano*.

Valle Camonica's territory is rich in natural features. This abundance is sanctioned by the presence in the valley of 17 sites of European Community Interest (Habitat Directive 42/93/EEC) and an area under special protection (Birds Directive 79/409/EEC).

The presence of a National Park (Parco Nazionale dello Stelvio), a Regional Park (Parco Regionale dell'Adamello) and a "Local Inter-municipal" Park (Parco Locale di Interesse Sovracomunale del Barberino) on the left-hand side of Valle Camonica means that the majority of this part of the valley is under tutelage of some description, although of varying degrees. The opposite situation is found on Valle Camonica's right-hand side, where there are two Regional Reserves at the north and south ends (Riserva Naturale delle Valli di S. Antonio to the north, and to the south, the Riserva Naturale dei Boschi del Giovetto) and the Parco Locale di Interesse Sovracomunale del Lago Moro at the southernmost extremity, but no protection in the central portion (although this is adjacent to the Parco Regionale delle Orobie Bergamasche and the Parco Regionale delle Orobie Valtellinesi).

The pre-Alpine strip and the *River Oglio's* upper course in the valley floor have been classified as areas of environmental importance in the terms of Regional law N° 86/83.

Valle Camonica's **woodland** consists mainly of coniferous and broad-leaved trees that are periodically cut; tall forests of broad-leaved trees are scarce.

Seven forestry consortiums currently operate in Valle Camonica, covering the entire territory and ensuring well-organized management of council-owned woodlands (see Table 13).

The following municipalities belong to Valle Camonica's forestry consortiums:

- 1) Consorzio Forestale Alta Valle Camonica: Berzo Demo, Cedegolo, Cevo, Corteno Golgi, Edolo, Saviore, Sonico.
- 2) Consorzio Forestale Valle dell'Allione: Capo di Ponte, Cerveno, Malonno, Ono S. Pietro, Paisco Lovenò, Sellero.
- 3) Consorzio Forestale del Pizzo Camino: Angolo Terme, Borno, Lozio, Malegno, Ossimo, Piancogno.
- 4) Consorzio Forestale Bassa Valle Camonica: Artogne, Berzo Inferiore, Bienno, Cividate Camuno, Darfo Boario Terme, Esine, Gianico, Pian Camuno, Prestine.
- 5) Consorzio Forestale del Pizzo Badile Camuno: Braone, Breno, Ceto, Cimbergo, Losine, Niardo, Paspardo.
- 6) Consorzio Forestale Due Parchi: Incudine, Monno, Ponte di Legno, Temù, Vezza d'Oglio, Vione.

The consortia have many goals, which are all extremely important for the woodland heritage's maintenance and for the management of hydro-geological issues. They are also a source of employment in the valley.

The Valle Camonica Mountain Community in Breno also functions as a branch of the E.R.S.A.F. (Regional Authority for Agricultural and Forestry Services). This institution



is a tool of the Lombardy Regional Authority (Regione Lombardia), established with Regional Law N° 3/2002; it carries out technical and promotional activities for the development of agricultural, forestry and rural sectors.

**Water resources** form an important part in the valley's economy - many lakes, both natural and artificial, are exploited for the production of hydroelectricity.

The main artificial basins at high altitudes are all fed by streams *Avio* (*Avio*, *Benedetto*, *Venerocolo* and *Pantano d'Avio*), *Remulo* (*Baitone*, *Lungo*, *Rotondo* and *Bianco*) and *Poia* (*Dosazzo*, *Salarno* and *Arno*). In addition, there are large water collection tanks located in the Edolo and S. Fiorano power stations near the course of the river *Oglio*.

It should be noted that this water storage and collection system has a negative impact on the valley's hydrological balance, because it significantly reduces stream outflow capacity and cyclically shifts masses of water from one basin to another to meet the needs of hydroelectricity production.

The methods used to collect water in basins at high altitudes are regulated according to capacity parameters set by the Po Basin Authority.

### **7.3 Intangible Culture: Events, Cultural Production and Traditions**

Thanks to the cultural institutions present in the valley (research institutes, universities, museums and institutions of tutelage) and the energy devoted to cultural promotion by councils and other local bodies (Comunità Montana di Valle Camonica and BIM), many interesting events are organized (in the valley for the valley, or in external provincial, regional, national or international venues), some of these are periodical and by now have their place in the local calendar.

In addition, every council in the valley promotes exhibitions of work by local artists during the course of the year, and, in celebration of the town's patron saint, various events which accompany the sampling of traditional local products.

#### **Events connected with the rock art heritage, 2002-2004**

Below, the events connected with the rock art – and, more generally, archaeological-patrimony, are listed; distinction is made between those which are periodical and those which were special occasions, linked to discoveries, research results, public information or promotion. These events were held in the three-year period 2002-2004.

#### **Conferences and Study Meetings**

From 1968 onwards, international conferences on rock art have been held in Valle Camonica (and occasionally abroad); each of these was organized by the Centro Camuno di Studi Preistorici and bears the name *Valcamonica Symposium* (for a list of the 21 *Symposia* see ENCLOSURE 7).

#### **2002**

- XX *Valcamonica Symposium* "Recent Perspectives on the Documentation and Presentation of Rock Art", held at Tanum (Sweden).

#### **2004**

- XXI *Valcamonica Symposium* "Prehistoric and Tribal Art: New Discoveries, New Interpretations, New Research Methods", held at Darfo Boario Terme 8<sup>th</sup> – 14<sup>th</sup> September 2004.

- *Stones of the Gods, Copper-Age Statue-Steles in Europe: the Current State of Knowledge*, International Congress, Brescia 16<sup>th</sup> – 18<sup>th</sup> September 2004, with study



excursion to Valle Camonica, organized by: Università Cattolica del Sacro Cuore di Brescia, Università degli Studi di Milano, Civico Museo Archeologico di Bergamo, Cooperativa Archeologica "Le Orme dell'Uomo".

- *The Unknown Foppe di Nadro: GPS Mapping and the Latest Analyses*. First study meeting on the rock engravings in the Riserva Regionale di Ceto, Cimbergo e Paspardo, organized by the Reserve Museum in Ceto, 26<sup>th</sup> June 2004.

### **Archaeological Exhibitions**

#### **2002**

- "Culture is an Open Space", 4<sup>th</sup> Culture Week, promoted by the Ministry of Cultural Heritage and Activities, with longer opening hours and free entry for National Museums and Parks, 15<sup>th</sup>-21<sup>st</sup> April.

#### **2003**

- *40,000 Years of Contemporary Art*, documentary exhibition organized by the Centro Camuno di Studi Preistorici in Brussels, at the European Parliament, 18<sup>th</sup>-27<sup>th</sup> March 2003. Repeated in Brescia, Palazzo del Broletto, 1<sup>st</sup> December 2005-26<sup>th</sup> February 2006.

- "Culture is an Open Space", 5<sup>th</sup> Culture Week, promoted by the Ministry of Cultural Heritage and Activities, with longer opening hours and free entry for National Museums and Parks, 5<sup>th</sup>- 11<sup>th</sup> May.

- *Engravings and Rock Art Sites in Valcamonica: the Latest Research*, exhibition organized by the Lombardy Soprintendenza of Archaeological Heritage and sponsored by the CARIPO Bank (14<sup>th</sup> October 2003 - 9<sup>th</sup> January 2004), in the Soprintendenza Milan premises. The exhibition was organized by R.Poggiani Keller (Soprintendenza), C.Liborio and M.G.Ruggiero (SCA-Società Cooperativa Archeologica, Milan).

#### **2004**

- The Lombardy Soprintendenza of Archaeological Heritage participated in 2003-2004 in the national exhibition cycle entitled *Fashion, Costume and Beauty in Ancient Italy*, promoted by the Central Office of the Ministry of Cultural Heritage and Activities, with itinerary on the theme *Aspects of Costume Engraved in Stone: 5000 Years of History*, organized in the Parco Nazionale delle Incisioni Rupestri in Capo di Ponte, and illustrated by the catalogue: LIBORIO C.-RUGGIERO M. G., *Aspects of Costume Engraved in Stone: 5000 Years of History*, Bergamo 2003.

- *100 Years of Research in Valcamonica*: an exhibition organized by the Centro Camuno di Studi Preistorici about the history of the discovery, study and development of Valcamonica's prehistoric art (venues: Boario Terme (BS), 1<sup>st</sup>-30<sup>th</sup> September 2004 and Milan, 7<sup>th</sup>-27<sup>th</sup> February 2005).

- *The Voyage in the Labyrinth*, an exhibition organized by the Centro Camuno di Studi Preistorici (Boario Terme (BS) - December 2004 - January 2005).

- "Art, Monuments and Landscape", 6<sup>th</sup> Culture Week, promoted by the Ministry of Cultural Heritage and Activities, with longer opening hours and free entry for National Museums and Parks, 24<sup>th</sup>-30<sup>th</sup> May.

- The Lombardy Soprintendenza of Archaeological Heritage participated, in 2004, with finds from one of Valle Camonica's rock art complexes (the Ossimo-Pat megalithic sanctuary), in the international exhibition *Warriors, Princes and Heroes Between the Danube and the Po, from Prehistoric Times Until the Early Medieval Period*, organized by the Trento Provincial authority in Trento, Castello del Buonconsiglio, 19<sup>th</sup> June-7<sup>th</sup> November 2004 (catalogue *Warriors, Princes and Heroes Between the Danube and the Po, from Prehistoric Times Until the Early Medieval Period*, Eds. F. MARZATICO and P. GLEIRSCHER, Trento 2004).

- The Lombardy Soprintendenza of Archaeological Heritage took part, in 2004-2005,



in the national exhibition cycle organized by the Central Office of the Ministry of Cultural Heritage and Activities, with the exhibition *Food for the Gods*, which dealt with the theme of food offerings in religious rites amongst the Valle Camonica population between the late Iron Age and the time of Imperial Rome. The venue was the Museo Archeologico Nazionale in Cividate Camuno (BS).

### **Other Cultural and Promotional Events in the Valley**

The main events are listed below, with emphasis on those which recur periodically and which reflect particular aspects of Valle Camonica 's identity.

#### **Art Exhibitions**

- *The City of Darfo Boario Terme National Art Competition*: this event is held every year in the first week of September in the historic centre of Darfo Boario Terme.
- *Extemporaneous Painting Competition*, at Darfo Boario Terme: every year, between July and September, a village just outside the town is taken as the subject for *impromptu* paintings by artists who work "on location".
- "Waiting for Santa Lucia" – children's painting and drawing competition organized by Darfo Boario Terme council during November and December.

#### **Religious Events**

- "Crucifixus-Festival of Spring, Theatre, Music and Religious Traditions": involving numerous Valle Camonica towns and villages, and a few elsewhere in the Province of Brescia and the Province of Bergamo. An attempt to rediscover a collective memory of medieval and Renaissance theatrical traditions.
- Every ten years, a live *Via Crucis* (Way of the Cross) is celebrated in Cerveno, with the involvement of the entire population; preparations for this religious drama take about a year. The event is particularly significant, because Cerveno has a Via Crucis Sanctuary, where life-size wooden and plaster statues may be admired, made in the 18<sup>th</sup> century by sculptors Beniamino Simoni, and Donato and Grazioso Fantoni.

#### **Music and Theatre**

- *The Song of the Stones*: a festival of medieval music organized in October 2004, in the Pieve di San Siro, by Capo di Ponte Council and the Lombardy Regional Authority Department of Culture.
- Every year between July and August, near the Park "Coren de le Fate" in the municipality of Sonico, an evening theatrical event which resembles a medieval rite is organized. The itinerary is illuminated for the occasion by flaming torches placed along the sides of the road.
- Theatre Festival, organized in the period from December and April at the San Filippo Congress Centre and Theatre in Darfo Boario Terme.
- Itinerant theatre, during the summer period, in the town of Darfo Boario Terme and surrounding villages.
- "Family Theatre" – a children's theatre festival in Darfo Boario Terme, held in the San Filippo Theatre from November to February.
- "From Shaman to *Showman*" – Festival of comical singer-songwriters, held in the Darfo Boario Terme Congress Centre during the month of September.
- Festival "Music in the City", in Darfo Boario Terme: this festival lasts from March to January, with numerous concerts of music and song, some of them religious.
- "Great Little Artists: Discovering New Talent": a provincial festival of music, dance, song and expression with the body, organized in September in the Congress Centre in Darfo Boario Terme.
- Jazz concerts organized in July 2004 in the Roman Theatre and Amphitheatre Archaeological Park in Cividate Camuno by the local tourist office and CRAAC (Centro Ricerche Antropologiche Alpi Centrali).
- "A Nocturnal Voyage Through the Aeneid", dramatic event held in the Roman





Amphitheatre in Cividate Camuno by the Lombardy *Soprintendenza* of Archaeological Heritage, in collaboration with the local tourist office and the Breno "C. Golgi" Grammar School (spring 2004).

### **Cinema**

- "*Mountains in Cinema*": a mountain film festival and meetings with internationally renowned mountaineers, organized in June in Darfo Boario Terme.
- *Festival of art films*, held in the Garden Cinema in Darfo Boario Terme during the spring.

### **Market-exhibitions**

- *Pescarzo Market-exhibition*: this fair, and that held in Pisogne, are cultural and touristic events of great importance for the valley in the 21<sup>st</sup> century. They bear the slogan "Immaginarti" (imagine/image/art) and are held annually in the first ten days of August, with hundreds of stalls and many associated activities. Thousands of visitors come (in 2002: 8000 visitors; in 2003: 10000; in 2004: 11000), emphasizing the importance of this attractive annual occasion.
- *Bienno Market-exhibition*: the fair promotes the area's traditional arts and crafts, using workshops, courtyards, cellars and entrance halls in the old town centre as exhibition spaces. The evenings are enlivened by dramatic productions and music. Guided tours of the rich prehistoric, religious and artistic heritage of Capo di Ponte are organized by the tourist office. It is usually held at the end of July and beginning of August.
- *Pisogne Market-exhibition*: this event belongs to the Pescarzo and Bienno fair circuit and offers, in August, important examples of valley craftsmanship and occasional international attractions (in 2003, for example, it played host to Moroccan glass-blowers and carpet weavers from Pakistan).
- *Sellero Market-exhibition "From the Medieval Period to the Third Millennium"*: held in the months of June and July, this fair includes cultural events (concerts of medieval music) and the chance to sample local traditional food and wine.
- *Market-exhibition "Autumn Flavours"*: a display of art and artisanship, organized in Sellero (Novelle locality) in October.

### **Shows of Livestock**

- *Cattle Show, Sonico*: in this event, which is held every two years in October, Sonico's farmers bring their livestock to be judged by an expert. Funding from the council and local sponsors assists participants with expenses and provides prizes. School parties come to watch traditional crafts being practiced and sample local products.
- *Livestock Show, Darfo Boario Terme, Isola locality*, in April, with an exhibition of sheep, goats, horses and cattle. Traditional valley fare may be sampled.
- *Upper Iseo Livestock Show* in Rogno, during April, with prizes awarded for Friesian and Brown Alpine Cattle, and an exhibition of sheep and goats.
- *Spring "Blonde Adamello Goat" Show*, organized in Val Savioire with funding from the Parco dell'Adamello, Comunità Montana di Valle Camonica and local Val Savioire councils. The principal aim of the event is the protection and promotion of this race of goat, which is indigenous to the Adamello area.
- *Brown Alpine Cattle Show, Edolo*: organized in November in the Livestock Centre (Centro Zootecnico), with an exhibition of cattle and related agricultural and commercial sectors.
- *Summer Pastures, Vezza d'Oglio*: traditional local products fair held in August.

### **Traditional Folk Events and Festivals**

- *Porsèl and Lard Festival*: a time of entertainment and consumption of local products made from pigs ("porsèl" in local dialect), organized in Ossimo Superiore in



December.

- "*Mangialonga*", event held in April in the municipality of Ossimo. The festival is centred on an interesting itinerary pauses to sample local dishes and delicacies, which alternate with a series of re-evocations of past epochs (prehistory, the medieval period, the 16<sup>th</sup> and 19<sup>th</sup> centuries) and the present day.
- *Carneval Parade*, Darfo Boario Terme, with allegorical floats and groups in fancy dress.

### **Sporting Events**

- "*Adamello Rally*" *Alpine Skiing Tournament*: this is a classical Alpine skiing competition, which was started in 1960 and has thus reached its 45<sup>th</sup> anniversary (April 2005). The Adamello Massif, with its famous glaciers (average altitude about 3000 m), provides the slopes on which the event is held. The starting and finishing lines may be situated in Pontedilegno or on the Tonale Pass.
- "*Al chiar di luna*" *Moonlight Alpine Skiing Tournament*: this traditional rally attracts numerous enthusiasts to the Tonale Pass every February.
- *Mortirolo Alpine Skiing Tournament*: a non-competitive event held in Monno in March. This year marks the 18<sup>th</sup> anniversary.
- *Moonlight "Caspolada" (or "Ciaspolada")*: an atmospheric sporting event for enthusiasts of *caspe* (snow shoes), organized in Vezza d'Oglio in January. In 2005 there were 3000 participants.
- *4<sup>th</sup> July Path Skyrace*, in Corteno Golgi: a *skyracing* competition (held on high altitude mute tracks and paths), over a distance of 42.195 km (including 2750 m in ascent and 2880 m in descent), held in July in the mountains of upper Valle Camonica.
- *Vallecamonica Cyclo-cross*, an international cross-country race organized in December by Atletica Valle Camonica of Darfo Boario Terme. 2004 marked the 12<sup>th</sup> year.
- *National Athletics Meeting for the Disabled*, Darfo Boario Terme: 2004 marked the 13<sup>th</sup> anniversary of this event, which encourages the integration of the disabled in the world of sport.
- *Brixia Tour*, international cycle race for professionals in July, based in Darfo Boario Terme.
- *Timed Ascents (Cronoscalata)* Boario Terme-Angolo, valid for the regional cycle championship; in 2004 it was held in October.
- *Hunter & Field*, national archery contest. In April 2004 the Gruppo Arcieri Alabarde Camune organized the 6<sup>th</sup> competition.

### **7.4 Organizational and Intellectual Resources**

The various events, cultural and traditions activities described in detail in the previous section have been made possible by the financial support of local institutions, which actively promote their territory and its cultural and production resources. In several cases, these events are organized thanks to economic contributions from the Lombardy Regional and Brescia Provincial Authorities, and local banks. The contribution of local sponsors is also highly significant, although probably underestimated.

Intellectual resources are many, comprising - besides the Lombardy *Soprintendenza* for Archaeological Heritage - research institutions, firms and associations, which have long operated in the territory to publicize and promote the study of the cultural heritage through publications, exhibitions and meetings.

The **Lombardy Soprintendenza of Archaeological Heritage** (legally charged with archaeological tutelage and research since the early twentieth century) has



been a continual presence in Valle Camonica since 1955, when it founded the Parco Nazionale delle Incisioni Rupestri di Capo di Ponte, the first Italian archaeological park, which laid the foundations for the rock art patrimony discovered in 1908. 1965 saw the addition of the council-owned area of the Massi di Cemmo, which is currently being converted into a National Archaeological Park (2005). In 1981 the National Museum of Cividate Camuno (for Roman material) was added, and in 2003 the Archaeological Park of the Theatre and Amphitheatre of Cividate Camuno. In 2006 the public opening of the new National Archaeological Area of the Sanctuary of Minerva in Breno is planned, and in 2007 the inauguration of the new National Prehistory Museum of Valle Camonica in Capo di Ponte. Through this network of National Museums and Archaeological Areas and Parks, the *Soprintendenza* has created a system (integrated with local Archaeological Parks and various local museums) of centres for the development of the valley's archaeological heritage with two main focal points: rock art, which is concentrated mid-valley (but present throughout the valley) and the monumental Roman remains around *Civitas Camunnorum* (Cividate Camuno and Breno).

In order to perform its functions of tutelage, development and archaeological research, as required by current law (Legislative Decree in date 22<sup>nd</sup> January 2004, N° 42, art. 4 c. 1; art. 88 c. 1), the *Soprintendenza* possesses its own staff of specialists (archaeologists, conservators, architects, surveyors, photographers and IT experts) as well as technical offices and services and in local branches.

According to the multi-year plans approved and financed by the Ministry of which it forms part, the *Soprintendenza* conducts programmed campaigns and emergency operations every year in the following categories:

- archaeological research, with excavations and investigations in various context types, including rock art (such as megalithic sanctuaries with engraved Chalcolithic steles and boulders), with particular attention to the surroundings;
- conservation of rocks with engravings;
- recording and cataloguing of the rock art patrimony (*IR* and *IRWeb* records), especially with regard to conservation requirements;
- development, with the organization of exhibitions, museums and information areas, Archaeological Areas and Parks, and various modes of publication of scientific studies.

The results of the research work, integrated with the specialist studies and analyses (palaeobotanical, dendrochronological, radiometric dating, geological, archaeo-metallurgical etc.) which are at times needed for a complete, interdisciplinary understanding and entrusted to specialist scientific institutes (universities, CNR and other laboratories), are published annually in the "Notiziario della Soprintendenza Archeologica della Lombardia" ("NSAL"), 1981-2002, and in scientific periodicals (Fig. 148), conference proceedings and monographs, in Italy and abroad.

The following institutes, associations and cooperatives are concerned with rock art:

- **Valcamonica Centre for Prehistoric Studies (Centro Camuno di Studi Preistorici, CCSP), Capo di Ponte:** founded in 1964 by E. Anati and with its own permanent staff. CCSP conducts yearly rock art study campaigns in various valley sites, programmed according to five-year and annual plans which are periodically approved by the *Soprintendenza*, with which the Centre accorded a five-yearly agreement in 1994. International teams also participate in these campaigns. It also carries out educational activities and public information, organizing (for example) exhibitions, meetings, seminars and conferences (including international *Symposia*). CCSP spreads interest in and knowledge about ancient civilizations by means of research work which is published, since 1967, in its periodical "Bulletin of the Valcamonica Centre for Prehistoric Studies" ("Bollettino del Centro Camuno di Studi Preistorici") and in other series of publications ("Archivi", since 1968; "Studi



Soprintendenza per i Beni Archeologici della Lombardia

Camuni", since 1972; "Edizioni del Centro", since 1965; "Valcamonica Symposia", since 1970) (Fig. 149). The Centro Camuno di Studi Preistorici may be found on the internet at: [www.ccsp.it](http://www.ccsp.it)

- In 1987 the **Valcamonica and Lombardy Department (Dipartimento Valcamonica e Lombardia)**, was founded, a section of the Centre concerned with research into Alpine rock art; it has its own website: [www.simbolisullarocchia.it](http://www.simbolisullarocchia.it)

- **Prehistoric Art and Lifestyle Teaching Museum (Museo Didattico d'Arte e Vita Preistorica), Capo di Ponte**: created in 1975 by A. Priuli, the museum carries out research and educational activities connected with Valle Camonica's rock art, with a special interest in experimental archaeology. It has also published numerous scientific and popular works and may be visited on the internet at the following address: [www.intercam.it/valcam/assoc/arceo/arceo.htm](http://www.intercam.it/valcam/assoc/arceo/arceo.htm)

- **"Footprints of Man" Archaeological Cooperative (Cooperativa Archeologica "Le Orme dell'Uomo"), Cerverno**: was formed in 1988 by a group of archaeologists and researchers involved in study, teaching, promotion and publishing in connection with the rock art of Valle Camonica and other areas of the world (Fig. 150). The cooperative organizes exhibitions, meetings, conferences and seminars and maintains one of the most-visited internet sites dealing with rock art. It also conducts annual rock art research campaigns, with the support of Paspardo Council, following programmes agreed with the *Soprintendenza*. Internet: [www.rupestre.net](http://www.rupestre.net).

- **Archaeological Cooperative Society (Società Cooperativa Archeologica-SCA), Milano**: was formed in 1994 by a group of archaeologists of varied special interests (palaeo-ethnology, etruscology, Greek and Roman, Phoenician and Punic, and Egyptian archaeology). Since 1996, for the Lombardy *Soprintendenza* of Archaeological Heritage, SCA has tested and developed the *IR* (Incisioni Rupestri) database for cataloguing Valle Camonica's (and the rest of Lombardy's) rock art heritage. Since 2003, it has been occupied with the design, development and implementation of the *IRWeb* application, the adaptation of the *IR* database for intranet networks and internet. SCA's website is: [www.scaweb.it](http://www.scaweb.it)

- **Central Alpine Anthropological Research Centre (Centro Ricerche Antropologiche Alpi Centrali, CRAAC), Gorzone**: is composed of local scholars, who conduct interdisciplinary historical studies of the central Alps (involving archaeology, history, anthropology, folklore, history of art, religion and the economy). It promotes research and local development projects, public information and teaching. CRAAC may be found on the internet at: [www.voli.bs.it/craac](http://www.voli.bs.it/craac)

The following organizations are principally involved in teaching and public information activities in Valle Camonica:

- **Capo di Ponte Tourist Office (Associazione Pro Loco)** : founded in 1967, it promotes the valley's archaeological, historical, cultural and natural attractions, offering guided visits to schools and tourists. Its internet site is: [www.proloco.capodi-ponte.bs.it](http://www.proloco.capodi-ponte.bs.it)

- **Archeocamuni, Capo di Ponte**: has been active since 1989 in the educational and teaching sector, especially with regard to primary and secondary schools, offering guided visits and workshops regarding aspects of archaeology and nature. Works for school use have been published. Archeocamuni may be found on the internet at: [www.digilander.libero.it/archeocamuni](http://www.digilander.libero.it/archeocamuni)



- **Archeodromo, Capo di Ponte:** in connection with the Prehistoric Art and Lifestyle Educational Museum, in 1993 Archeodromo created a reconstruction of a Late Neolithic village where school groups come into contact with experimental archaeology and re-live the day-to-day life of the valley's ancient inhabitants. Internet: [www.intercam.it/valcam/assoc/archeo/archeo.htm](http://www.intercam.it/valcam/assoc/archeo/archeo.htm)

- **ArcheoPark, Darfo Boario Terme:** covers an area of over 10,000 m<sup>2</sup> and offers the possibility to re-live the past in the form of reconstructions of prehistoric settlements (a Palaeolithic cave, rock-shelters, a Neolithic farm, a village of pile-dwellings, hill-top forts, huts made of tree trunks and a labyrinth), and an experimental archaeology workshop. Archeopark's internet site is: [www.archeopark.net](http://www.archeopark.net)

- **Do.Net, Ceto:** a company which provides services for tourism, and manages (through an agreement) the museum of the Riserva Regionale delle Incisioni Rupestri di Ceto, Cimbergo e Paspardo. Educational initiatives may be viewed on the internet at: [www.arterupestre.it/arterupestre /proposte.html](http://www.arterupestre.it/arterupestre/proposte.html)

- **Alpine Garden Museum – Graffitipark (Parco tematico Museo Giardino Alpino-Graffitipark), Capo di Ponte:** an open area equipped with workshops for experimental archaeology and rock art, and which illustrates important aspects of the valley's geology and Alpine flora. See the Park's website at: [www.graffitipark.it](http://www.graffitipark.it)

## 8. Analysis of Risks and Limitations

### 8.1 Public Access to the Heritage

#### **Road and Rail Access to the Valley and its Heritage**

Visitors can reach Valle Camonica by train, by means of the Brescia - Edolo line (Northern Milan Railway Network, *FNME*), and by car from three directions: main road (*Strada Statale, SS*) N° 39 from Aprica, road N° 42 from Tonale and Mendola and road ex-N° 510, the "Sebina Orientale" (East Lake Iseo Road).

The N° 42 is connected to the A4 Milan - Venice and A22 Modena - Brenner motorways: it links the valley to Bergamo, to the southwest, and to Trentino-Alto Adige, to the northeast, over the Tonale Pass. The N° 42 presents some problems with regard to traffic flow due to the many towns through which it passes and the considerable volume of traffic.

There exists an upgrading project, targeted at reducing the impact of traffic on towns and at improving access to the valley. This project, whose initial phases date back to the 1970s, was implemented through the years by individual lots and is currently incomplete.

The part of road N° 42 which passes through Capo di Ponte and Sellero (the "Capo di Ponte-Sellero variant") was revised and modified following a request by the Lombardy *Soprintendenza* for Archaeological Heritage (Soprintendenza per i Beni Archeologici della Lombardia) for a route that better protected the engraved rocks. A new route was designed, which passes through a tunnel at such a depth as to neither alter nor damage the rock engraving heritage. Building work will start soon.

A further link with the A4 motorway is the road ex-N° 510, which runs parallel to the eastern bank of Lake Iseo to reach Brescia. A second, particularly scenic, route (N° 469, the "Sebina Occidentale") runs along the western side of the lake, from Sarnico (south) to Castro, near Lovere (north).

The following roads which join Valcamonica and the Lake Idro area should be noted for the outstanding beauty of the landscape through which they pass (especially



popular with visitors from north of the Alps, Germans in particular): Passo di Croce Domini, Passo del Gaver and Passo del Maniva. Valcamonica is connected to Valtellina by the Aprica Pass (1181 m), over which the road "Strada Statale 39" runs, and by passes which are open in the summer: Mortirolo (1896 m) and Gavia (2621 m). Valle di Scalve (Bergamo) may be reached from Darfo Boario Terme to the south by means of "Strada Provinciale 294", which flanks the scenic old Via Mala, made in the second half of the 17<sup>th</sup> century, and from the north via the Vivione Pass (1828 m), which is open during the summer.

Visitors who wish to arrive by bus may make use of the following bus routes:

- Bus service *FNMA* (North Milan bus services), route Brescia-Edolo ([www.ferrovienord.it](http://www.ferrovienord.it));
- Bus service *SAB*, route Milan-Bergamo-Lovere-Ponte di Legno ([www.sab-auto-servizi.it](http://www.sab-auto-servizi.it)).

With regard to rail connections, a project called "*Una linea verso l'Europa. Il futuro della Linea Ferroviaria Brescia-Iseo-Edolo nella rete alpina dei trasporti*" (A Route to Europe. The Future of the Brescia-Iseo-Edolo Railway Line in the Alpine Transport Network) is being developed, to renew and strengthen Valle Camonica's railway service in a European context (*Una linea verso l'Europa. Il futuro della Linea Ferroviaria Brescia-Iseo-Edolo nella rete alpina dei trasporti*, Conference Abstracts, May 31<sup>st</sup> - June 1<sup>st</sup> 2002, Darfo Boario Terme Congress Centre).

### **Access to, and Appreciation of, Parks with Rock Engravings**

All parks can be reached from main road N° 42, from which a network of minor roads branches off towards the various valley towns. Signs on access roads indicating Parks are not always present and not uniform in appearance.

Since the means of access to the Valle Camonica rock engraving Parks differ greatly from district to district, it would appear useful to consider the factors involved and the ease of access, together with the extent to which appreciation of the heritage has been facilitated:

- 1) Parking;
- 2) Visitors' itineraries (including facilities for persons with motor disablement);
- 3) Walkways;
- 4) Educational tools (panels, explanatory leaflets, publications, audiovisual and computer aids, websites);
- 5) Educational activities (guided tours, workshops, classroom teaching etc.)

With regard to Point 1, at present only the Parco Comunale di Luine (Darfo Boario Terme) and the Riserva Regionale delle Incisioni Rupestri di Ceto, Cimbergo, Paspardo have extensive areas for bus and car parking.

The provision of a parking area in the Cemmo locality, which will serve both the Parco Archeologico Nazionale dei Massi di Cemmo and the Parco Archeologico Comunale di Seradina-Bedolina, is programmed in the Plan of the latter Park.

All Parks so far set up in Valle Camonica, have **visitors' itineraries** - with different features and characteristics - designed to enhance appreciation of the engraved rocks.

Special walkways have been constructed along the trails in correspondence to large or steeply sloping rocks, so as to provide better vantage points for viewing the engravings and effective protection of rocks from wear. Explanatory panels (in some cases also in English: Parchi Nazionali di Capo di Ponte, Riserva Regionale delle Incisioni Rupestri di Ceto, Cimbergo, Paspardo and Parco Comunale di Luine) are to be found near the most important rocks.



Unfortunately, due to their typically rugged terrain, the Parks cannot be visited - or can only be reached with great difficulty - by people with sight or motor handicaps. In some cases, it is possible to visit specific websites or websites which refer to rock engravings in particular localities, as listed below.

### **1- Parco Nazionale delle Incisioni Rupestri, Capo di Ponte** (Figs. 151-155)

A small parking area can be found near the *Chiesa delle Sante* where buses can transit without parking.

In 1989 five itineraries were created, which run for about 3 km inside the park. Some of the rocks located along the routes are equipped with information panels (in Italian and English) - both general in character and concerning the most significant engravings; on request, visitors may also consult a guidebook with the panels' texts in Braille.

Wooden walkways have been built over some rocks (Nos. 1, 35, 50 and 57) to offer a better view of the engravings.

The Park also houses an Antiquarium - its lower halls temporarily exhibit<sup>10</sup> the steles Cemmo 3 and Cemmo 4, which were found during the 1983-84 excavations in Cemmo, and two rocks inscribed with North-Italic letters from Cevo and Grevo. Educational activities inside the Park are conducted by local associations.

Entrance to the Park, on the basis of Ministerial Decree N° 507 dated 11th December 1997 and Ministerial Decree N° 375 dated 28th September 1999, is free of charge for:

- Italian and EU citizens under 18 or over 65 years;
- Student groups from Italian public and private schools, or from other EU states, with their teachers;
- Tourist guides;
- Tourist interpreters;
- Ministry of Cultural Activities and Heritage personnel;
- Members of the International Council of Museums (I.C.O.M.);
- University teachers and students from the architecture, cultural heritage preservation and education faculties, and those teaching or studying Italian literature/archaeology or art history in literature or philosophy faculties;
- teachers and students from fine arts' academies.

Ticket reductions apply to :

- Italian and EU citizens between 18 and 25 years;
- Permanent teachers at state schools

For non-EU citizens, conditions regarding free entry and reductions are applied on the basis of reciprocity.

Introductory leaflets about engraved rocks, published by the Lombardy *Soprintendenza* for Archaeological Heritage (Soprintendenza per i Beni Archeologici della Lombardia), may be obtained free of charge in the Park ticket office. There is a small privately-run bookshop with specialist publications and souvenirs outside the Park, near the entrance.

The official website of the Parco Nazionale delle Incisioni Rupestri is at the following temporary address: [www.soprintendenza-archeologica.lombardia.it/parchivalcamonica/parco1](http://www.soprintendenza-archeologica.lombardia.it/parchivalcamonica/parco1) (until the Ministry of Cultural Heritage and Activities' MINERVA (**M**inisterial **N**et**W**ork for **V**alorising **A**ctivities in digitation) survey has been completed).

The website, created in 2003 by the Lombardy Soprintendenza for Archaeological Heritage (Soprintendenza per i Beni Archeologici della Lombardia) to make known to the public at large Valle Camonica's rich rock engraving heritage, introduces the Parco Nazionale delle Incisioni Rupestri (Naquane district) and the Parco Archeologico Nazionale dei Massi di Cemmo in Capo



di Ponte.

The website presents five visitors' itineraries in the Parco Nazionale delle Incisioni Rupestri, which run for about 3 km on easy paths which offer panoramic views of one or more rocks and a selection of engraved figures and the possibility to read brief descriptions of these.

Besides the trails, the website provides information about the work carried out in recent years by the Lombardy *Soprintendenza* for Archaeological Heritage (Soprintendenza per i Beni Archeologici della Lombardia) on the computerised cataloguing of rock engravings and the protection and preservation of rock engravings.

The website also offers teachers all the information necessary for an accurate presentation of the heritage: chronological notes, a selection of some of the most interesting rocks on tourist trails, analyses of some of the most important depictions in the *Camuno* iconographic repertoire, comparisons between engravings and archaeological finds etc...

The section designed for those with impaired vision (blind or with poor sight) is well-equipped; it was created in collaboration with the Milan Institute for the Blind (Istituto dei Ciechi) and is an ultra-modern instruction and information services facility targeted at this category of disabled users. The Parks website was created in 2003 and the version dedicated to those with sight disablement complies with the Stanca Law N° 4 dated January 9<sup>th</sup> 2004 "Provisions to facilitate access of the disabled to IT tools".

The graphics were created with Flash software, which enabled the insertion of small animations in some pages. This software cannot currently be read by the normal screen readers used by the blind, as was demonstrated by attempts made in July 2003 by those in charge of the Milan Institute for the Blind IT Service, involving both sighted and sightless. In agreement with consultants from the institute, it was decided to create an HTML format version of the website. In parallel with text analysis, they worked on the development of an image-reading system designed to enable the blind to perceive the figurations engraved on the rocks, based on one of the tactile perception systems normally employed by instructional centres for the blind. A survey conducted in spring 2003 revealed that some websites offered the possibility of printing images for the blind using a Braille printer. Direct testing of the Braille printer method suggests that at present this procedure cannot be applied to engravings: the images' profile is very complex and the Braille line obtained is not easy to understand. Besides, the Institute for the Blind's statistics indicate that the number of visually disabled people who have a Braille printer is still very small (due to the high cost of the apparatus).

It was thus decided to utilize a relief method using the fusor technique (known as the "Minolta method"). Digital photographs of selected engravings were vectorialised with AutoCAD software – the images thus obtained follow the engraved figure's profile. Each image was studied and specially processed with the consultancy of the Institute for the Blind's Educational Material Centre in Milan. Lastly, the images were combined with written captions for those with poor sight and in Braille for the blind. All images were saved in PDF format and linked to brief descriptions in HTML format. Hence any blind person visiting the website can use the special link to print images and ask the nearest branch of the Italian Union for the Blind to convert it into a relief photograph.

A Braille copy of the texts of information panels displayed in the Parco Nazionale delle Incisioni Rupestri may also be obtained in the Park. This text, which may be consulted by visitors, is described under the "Information" section.

**2) Parco Archeologico Nazionale dei Massi di Cemmo, Capo di Ponte** (State property): *opened on 6<sup>th</sup> October 2005* (Fig. 156).

An archaeological excavation is underway on the site to distinguish the remains which will be put on show inside the Park, which will have a single visitors' itinerary with a display area for information panels at the entrance and further panels *en route*.

The official website of the Parco Archeologico Nazionale dei Massi di Cemmo is: [www.soprintendenza-archeologica.lombardia.it/parchivalcamonica/parco1](http://www.soprintendenza-archeologica.lombardia.it/parchivalcamonica/parco1)

The website was created in 2003 by the Lombardy *Soprintendenza* for Archaeological Heritage (Soprintendenza per i Beni Archeologici della Lombardia), in part to compensate for the current impossibility of visiting the Park, which is still under construc-





tion. The state-owned site of the Cemmo boulders, which bear the first rock engravings which reached public notice (in 1914), was established in 1965 to safeguard these two engraved rocks that date to the Copper Age (3<sup>rd</sup> millennium BC). Following compulsory purchase, the area was enlarged to create an archaeological park, which is currently being organized after important archaeological finds in 2000 during building work. Recent excavations have brought to light the remains of a megalithic sanctuary with walls and steles (some of the latter intact, others fragmentary). These recent digs have unfortunately delayed the establishment of the Parco Archeologico Nazionale dei Massi di Cemmo. The website has therefore been organised so as to illustrate the discoveries of recent excavations against the background of the archaeological research conducted in Cemmo from 1930 to 2000, and a historical reconstruction of the area of the Massi di Cemmo from prehistoric times to the Medieval period.

**3) Parco Comunale di Luine, Darfo Boario Terme** (council property) (Fig. 157). The Park is furnished with an extensive parking area. Some rocks have accompanying information panels. Three visitors' itineraries have been organised, with a total a length of about 3 km divided in areas (A, B, C). A Service Centre at the entrance displays rock art images and sells specialist publications.

Educational activities inside the Park are conducted by local associations. Entrance to the Park is free of charge.

Website: [www.darfobaorioterme.net](http://www.darfobaorioterme.net) (this is the council website and is not wholly dedicated to the Parco Comunale di Luine; information concerning the latter can be found in the section "*Vivere la città*" (Experience the town)).

**4) Parco Archeologico Comunale di Seradina-Bedolina, Capo di Ponte** (council property): opened on 8<sup>th</sup> October 2005 (Fig. 158). The Park has two entrances, one for the Seradina area, and one for the Bedolina area. The project also includes the preparation of information panels. Reference on the internet may be found within the website [www.capodiponte.bs.it](http://www.capodiponte.bs.it) (under "*Storia e Arte, Incisioni rupestri*").

**5) Parco Comunale di Sellero** (mixed council and private ownership). The development project is currently being completed; it will soon be fully equipped and the itineraries established, complete with information panels. Particular care will be given to the connection with the mining area under development to the north (Carona locality), by means of a multi-theme historic way. Entrance to the Park is free of charge. Website: [www.comune.sellero.bs.it](http://www.comune.sellero.bs.it) (this website is not dedicated to the Park; information can be found in the section "*Turismo, arte rupestre*" [Tourism – rock art]).

**6) Parco pluritematico del "Còren de le Fate", Sonico** (mixed council and private ownership) (Fig. 159). Some rocks are furnished with information panels and walkways to facilitate the understanding of engravings. In view of the locality's unusual landscape, of great natural interest, a project is being studied so as to make it easier to reach the engraved rocks and improve internal communication. Entrance to the Park is free of charge.

Website: [www.comune.sonico.bs.it](http://www.comune.sonico.bs.it) (this website is not dedicated to the Park; information can be found in the section "*Turismo, arte rupestre*" [Tourism – rock art]) and [www.parcoadamello.it](http://www.parcoadamello.it)

**7) Riserva Regionale delle Incisioni Rupestri di Ceto, Cimbergo, Paspardo** (mixed consortium, council and private property) (Fig. 160). Entrance (on payment) to the Riserva Regionale is from Nadro, where the museum



is located, Cimbergo (for Campanine-Figna) or Paspardo (for Capitello, In Vall and Sottolaiolo). The Nadro, Campanine-Cimbergo and Sottolaiolo-Paspardo access points have parking areas which are suitable for buses.

Some itineraries, which enable visitors to view the many aspects of the Riserva Regionale - archaeological, ethnographical and environmental - in a few hours (or more), have been laid out.

Trails are indicated by signposts, and the most important engraved surfaces are furnished with panels reproducing the engraved sectors. Rocks 24 and 27 in *Foppe di Nadro* are equipped with walkways to give a better view of the engravings.

Life-size reconstructions of huts portrayed in rock art images can be found inside the Reserve.

Outside the Riserva Regionale, in a 16<sup>th</sup>-century rural settlement in the old village of Nadro (Municipality of Ceto), is the Teaching Museum of the Riserva Regionale delle Incisioni Rupestri di Ceto, Cimbergo e Paspardo, which displays material on rock art and provides educational services (accorded temporary museum status by Regional Council Deliberation N° 7/19262 dated November 5<sup>th</sup> 2004). Its scientific management is entrusted under convention to the "Valcamonica Centre for Prehistoric Studies" (Centro Camuno di Studi Preistorici) in Capo di Ponte. A self-raising chair, which enables access to the exhibition area, has been purchased for the disabled. The museum, where visitors can purchase specialist publications, also provides audiovisual projections to complete the visit, multimedia information facilities (multimedia hall), a café and a lounge for groups. Besides the museum building, the Riserva Regionale also has at its disposal for statutory activities (as of December 31<sup>st</sup> 2004):

- 2 guest rooms, in Nadro and Paspardo, for the accommodation of volunteers, scholars or students;

- 3 hospitality facilities (on payment) in Figna di Campanine, inside the Reserve.

Educational services inside the Riserva Regionale are entrusted, by special renewable 6-year agreements, to the company Do.Net, which also handles the museum's routine administration (when it is open or closed) with provision of the following services: keeper, cleaning, heritage maintenance, surveillance, ticket sales, information and tourist advertising.

The Riserva Regionale delle Incisioni Rupestri di Ceto, Cimbergo, Paspardo's official website is: [www.arterupestre.it](http://www.arterupestre.it)

Each Park organizes its ticket sales and hospitality services with its own personnel and in its own way.

Educational and tourist activities inside the parks are conducted by personnel from local companies and associations.

During the year, the institutions responsible for park management promote various cultural events (exhibitions, meetings, seminars etc.) without, however, coordinating their activities.

## 8.2 Indicators and the Risk Factor System

A detailed study of the close relations between the rock art patrimony and the surrounding environment, where human activity always plays an important role, is essential in the risk factor analysis of Valle Camonica's heritage.

Described below is a case study, which could be implemented, of the risk factors which may threaten the conservation and development of the valley's cultural heritage, which have been defined through a critical analysis of the territory.

A distinction must be made between "environmental risk factors" and "cultural risk factors".



### **General Risk Factors Which Affect the Environmental Context**

This category designates risk factors resulting from human presence and activities, which have repercussions on environmental quality and therefore on the state of conservation of the rock art heritage, independently of development.

#### **Risks Related to Human Activity**

This list comprises risk factors which are directly related to the presence of man and his activities, and can cause quite considerable damage to the rock art heritage if they are conducted without specific regulations.

- Agricultural activities, especially ploughing, which can damage engraved rock surfaces that are still buried. It should be noted, however, that the abandonment of agricultural, forestry and pastoral activities would not necessarily have positive effects, because it could easily encourage the uncontrolled growth of woodland vegetation in areas where there are rock engravings.
- Deforestation and woodland management activities, including that related to the problem of fires.
- Mining, quarrying and excavation work.
- Urbanization, considered as the expansion of built-up areas and the construction of infrastructures (roads, gas pipelines, electricity lines, aqueducts and hydroelectric power stations). With regard to the presence of electricity lines in the neighbourhood of areas with rock engravings, it should be noted that the valley has many high-tension lines. However, these mainly date from a period prior to the site's World Heritage listing (1979), except for the new S. Fiorano-Robbia 380 kV power line which runs between Italy and Switzerland, for which the positioning of pylons was agreed to with (and accurately checked by) the *Soprintendenza*, which also conducted prior geophysical prospecting and excavations. On this occasion the relocation of some pylons was requested, and obtained, to protect rock art and archaeological sites. With respect to electricity lines built long ago, the Ministry of Cultural Heritage and Activities (Ministero per i Beni e le Attività Culturali) requested and obtained the transfer of some sectors near areas with engraved rocks in the Parco Archeologico Comunale di Seradina-Bedolina and the Parco Archeologico Nazionale dei Massi di Cemmo (both in Capo di Ponte municipal territory). Valle Camonica is a technological corridor of primary importance, crossed from the early 20<sup>th</sup> century by a series of high-tension lines, whose course has been altered to protect the rock engravings, but which cannot however be removed. On the other hand, these power lines cannot be buried, as this could physically interfere with engraved rocks.
- Industrial activities and related emissions of pollutants.
- Dumps of domestic waste and gravel, rubble etc.
- Hydrogeological instability triggered by various types of human activity.
- Surface and underground water circulation.
- Fires.

#### **Risks Related to Environmental Quality**

These factors are closely related to conservation problems and are mainly caused by the presence of man.

The main problems include:

- Air pollution, caused by road traffic, central heating and industrial emissions.
- Acid rain, which is (in any case) constantly monitored in the valley for environmental purposes, i.e. to check on the state of health of the woodland heritage (Environmental Observatory in the Riserva Naturale Regionale del Giovetto, Borno);
- Electromagnetic pollution, caused by radiation produced especially by power lines.
- Leakage of water near rock engraving areas, both with regard to the quality of the water and the channelling capacity related to hydrogeological instability problems.
- Hydrogeological instability, both natural (landslides, slope erosion and the conse-



quent deposition of colluvium, which obliterate engraved rocks) and caused by man (landslips resulting from uncontrolled deforestation or earth removal).

- Outbreaks of fire caused by poor maintenance of the land, and a consequent higher frequency in the formation of points of auto-combustibility, and due human activity, indirect (unintentional) or direct (acts of vandalism).

### **Special Risk Factors Determined by the Cultural Context**

This category includes potential risk factors for the conservation caused by the ways in which the development of the rock art heritage is managed.

Certain critical factors have been identified, which, in the absence of careful management, can cause damage of various types and degrees. They permit an estimate of the degree of human use and exploitation which does not exceed the "carrying capacity" of the heritage:

Critical physical factors:

- An excessive concentration of visitors around rocks which are especially famous for the images engraved on them.

Critical cultural factors:

- Lack of specifications concerning visits (in other words, a set of rules for visitor behaviour).
- Use of inappropriate recording procedures on rock engravings, highlighting them by means of contrast (casein and lampblack).
- Taking casts of engravings.
- Damage due to intentional removal of portions of engraved rocks;
- Deterioration of the rock surfaces due to the fact that more are exposed than may be maintained with existing resources.

Critical social factors:

- Poor awareness of the importance of the rock engravings.
- Acts of vandalism due to a poor awareness of the engravings' importance.
- Imbalance of visitor type; a study conducted on the Parco Nazionale delle Incisioni Rupestri di Capo di Ponte showed the predominance of school groups, especially from primary schools (ex-elementary schools); school reform specifications (Law N° 53 dated 28<sup>th</sup> March 2003 and Legislative Decree N° 59 dated 19<sup>th</sup> February 2004) stipulate the study of prehistory and ancient civilizations in grades 3 and 4;
- Restricted opening to international tourism, which might be due to various factors (e.g. poor promotion of the valley's rock engravings in international tourist circuits, or the valley's poor accommodation facilities and road networks).

### **8.3 Pressure and Cause/Effect Indicators**

With regard to indicators of pressure, certain parameters connected with human activity are clearly the causes of specific effects on the rock art heritage's state of conservation.

Urban and industrial centres:

- Distance of urbanized and industrialized areas from rock engraving sites, also with reference to the deterioration of the valley's image and landscape;
- The sites' use for local activities: agriculture, cattle breeding, wood cutting etc.

Infrastructures:

- The presence of roads, long-distance power lines, etc. near rock art sites.

Development:



- Tourist pressure (flow, quantity, environmental education and respect for the site etc.).

#### **8.4 Risk, Tutelage and Protection Map**

In 1980 the Lombardy *Soprintendenza* for Archaeological Heritage (Soprintendenza per i Beni Archeologici della Lombardia), the peripheral organ of the Ministry of Cultural Heritage and Activities (Ministero per i Beni e le Attività Culturali) responsible for the UNESCO Site's tutelage as specified in current legislation (Legislative Decree N° 42 dated January 22<sup>nd</sup> 2004), as described in Part II, began yearly campaigns of conservation work on engraved rocks inside National Parks, after agreeing on the most appropriate methods to be used with the Istituto Centrale per il Restauro (ICR). In addition, it has promoted and coordinated conservation and maintenance work in park areas with engraved rocks managed by local institutions - which to date has been very little (in the Parco Comunale di Luine and the Riserva Regionale delle Incisioni Rupestri di Ceto, Cimbergo, Paspardo) and it has financed conservation work on privately owned rocks (in the Bedolina and Seradina sites in Capo di Ponte and in the Sacca-Corni Freschi site in Darfo Boario Terme). Furthermore (as mentioned above) the Soprintendenza has performed analyses for risk evaluation, in collaboration with specialist national institutes, and has developed a system for mapping the preservation state of the rock art heritage (*IR* and *IRWEB*), described in Part II, 6.4 State of Preservation of the Heritage.

#### **Risk Analysis and Studies**

In 1990, on the basis of the results of the first ten years' work, the variety of circumstances studied and the increase of deterioration measured (mainly due to the growth of atmospheric pollution), the urgent need to face the problem of deterioration through a systematic interdisciplinary study became clear.

Specific surveys, analyses and studies have therefore been conducted on the engraved rocks' state of conservation, the causes of deterioration and on the levels and nature of pollution, so as to obtain a wide-ranging knowledge of Valle Camonica's many rock art sites (and those of neighbouring Valtellina, which also contains rock art). Subsequently, appropriate conservation procedures were defined and a systematic conservation programme was extended to various sites in the valley that had never previously been the subject of conservation treatment (which had been applied, from 1980 onwards, only in the Parco Nazionale delle Incisioni Rupestri).

The most experienced national research institutions collaborated in conducting the surveys, as specified below.

There were two interlinked study projects - the first promoted by the Lombardy *Soprintendenza* for Archaeological Heritage (Soprintendenza per i Beni Archeologici della Lombardia) in 1992, and the second promoted in 1997 by the ICR and the ICCD of the Ministry of Cultural Heritage and Activities, as part of a national project to create a Risk Map of Italian Cultural Heritage, as described below.

#### **1-Study Commission on the Deterioration of Engraved Rocks, 1992.**

Promoted by the Lombardy *Soprintendenza* for Archaeological Heritage (Soprintendenza per i Beni Archeologici della Lombardia), the Commission performed surveys, sampling and analyses (lithological, biological, chemical, vegetational, climatic etc.) to define the geological, lithological and conservation situation of Valle Camonica's main rock engraving sites, investigating the causes and types of pollution, isolating the causes of deterioration (physical, mechanical and biological), marking out the plant species most widespread on the rocks, selecting the most appropriate products to remove them (already tested by the ICR for stone conservation), testing these on lithologically diverse rocks and monuments (Parco



Nazionale delle Incisioni Rupestri in Capo di Ponte; Massi di Cemmo Area; Bedolina area; Seradina area; Parco Comunale di Luine; steles and Calcolithic menhirs from various valley sites) and monitoring the results.

We are in fact aware that the conservation problem of rock engravings in Valle Camonica is extremely pressing, as rocks are constantly exposed to atmospheric agents.

The deterioration is mainly biological, physical and mechanical in nature: the two phenomena – bio-deterioration and erosion, which often coexist - have a synergic action in most cases.

The Commission was composed of:

- Lombardy *Soprintendenza* for Archaeological Heritage (Soprintendenza per i Beni Archeologici della Lombardia);
- Autonomous Region of Valle d'Aosta *Soprintendenza* for Cultural and Environmental Heritage (a chemist expert in weathering phenomena);
- Venice *Soprintendenza* for Historical and Artistic Heritage (a biologist expert in micro-organisms);
- Istituto Centrale per il Restauro;
- "Gino Bozza" Centre for the study of the causes of decay of works of art and the development of conservation methods (CNR-Consiglio Nazionale delle Ricerche/National Research Council, Milan);
- Municipal Service Firm (*ASM*) of Brescia (a chemist and a geologist).

Within this commission, the "Gino Bozza" Study Centre performed mineralogical examinations to determine lithological features and the extent of deterioration.

The Municipal Service Firm (*ASM*) of Brescia conducted a systematic survey of climatic conditions and analysed the air and polluting agents by means of a mobile survey station which was placed inside the Parco Nazionale delle Incisioni Rupestri in Capo di Ponte for six months.

**2-** In 1997 the Istituto Centrale per il Restauro (ICR) and the Central Institute for Catalogue and Documentation (ICCD) of the Ministry of Cultural Heritage and Affairs (Ministero per i Beni e le Attività Culturali) performed, as work for the production of the **Risk Map of Italian Cultural Heritage**, the **experimental recording** of certain rocks in lower and middle Valle Camonica (Luine, Naquane, Cemmo, Seradina and Bedolina) and neighbouring Valtellina (Grosio).

This work aimed at an analysis of preservation states, and highlighted how the biological, physical and mechanical deterioration of the rocks was closely related to the human factors (wear by trampling, vandalism and rock cleaning performed by non-specialist personnel). The analysis revealed that rocks in protected areas, where ordinary maintenance is constantly performed, are clearly in better states of conservation.

Hence the crucial importance of careful and regular maintenance, without which even the most rigorous restoration work runs the risk of losing its effectiveness.

### **Conservation Work**

The Lombardy *Soprintendenza* for Archaeological Heritage (Soprintendenza per i Beni Archeologici della Lombardia) allocates part of its annual resources to the routine and special maintenance of rocks, as specified in the attached report ENCLOSURE 5 (2-Restauro).

For this work it only makes use of conservators specialised in the treatment of stone surfaces and who have a diploma to practice the profession, as required by current legislation.

The technical and scientific recording of all conservation treatment given is filed in the *Soprintendenza* archives; it created the **Rock Art Conservation Monitoring Archive** (*IR* and *IRWEB*) in 1997.

All conservation campaigns are conducted and organised so as to combine conser-



vation requirements with the interests of visitors, and therefore give priority to rocks located along itineraries inside Parks.

Besides yearly performing routine and special maintenance inside the sites and parks it manages directly, the Lombardy *Soprintendenza* for Archaeological Heritage (Soprintendenza per i Beni Archeologici della Lombardia) also promotes and coordinates conservation and maintenance campaigns in park areas with rock engravings that are managed by local institutions.

### **8.5 Administration, Regulation and Interference Indicators**

The Parks and heritage which constitute UNESCO Site N° 94 "Rock Drawings in Valcamonica" lie in zones covered by a series of legally-binding and detailed planning regulations, which apply to the entire area (PTPR, PTCP), local portions (PSSE), municipal territories (PRG) or specific Parks (PdP); they are also covered by national legislation regarding tutelage (Legislative Decree 42/2004).

No study of potential conflicts between the consequences of the various actions of local bodies and private parties and the requirements of national laws concerning tutelage is currently available.

It is to be hoped that, with full respect for tutelage legislation, all the local authorities, uniformly and with active participation, will include precise indicators and rules in their own planning regulations regarding the numerous different possible relationships between the rock art heritage and the surrounding territory:

- vicinity of the heritage to a built-up area. Priority should be given to the careful field survey and regulation of those parts of the valley where the rock art heritage is most threatened by urban expansion and to the margins of all settlements;
  - interference between the heritage and public amenities (roads, railway lines, electricity lines, methane pipelines and hydroelectric plants), with direct consequences (new public works) and indirect consequences (the necessity of periodic maintenance);
  - the relationship between the heritage and old roads, which may be subject to repairs of modification (widening, safety measures etc.);
  - the relationship between the heritage and ski slopes and mountain accommodation or access structures, such as refuges and mechanical plant for ascent (this applies particularly to the examples of schematic rock art found at high altitude);
  - the presence of the heritage in areas of woodland areas, which are subject to periodic routine or special maintenance (clearance to thin the woods, with the opening of tracks for vehicle access and the establishment of aerial cableways for transporting cut wood);
- the presence of the heritage in agricultural areas subject to ploughing, levelling, terracing or irrigation;
- vicinity of the heritage to quarries which are in use or recognised as resources.

When the heritage is in conflict with urban expansion or large-scale public works, a standard procedure should be created and respected: a request for the opinion of the competent local authorities and bodies responsible for tutelage, an evaluation of the situation, the conduction of further enquires if necessary, the production of a considered opinion with stipulations, on-site control of work, verification of results.

### **8.6 Historical Qualities to be Passed On to Future Generations**

The Management Plan highlights the strategies to be implemented to solve problems related to the protection, conservation and development of Valle Camonica's rock engraving heritage: on one hand this involves preserving this inheritance to allow future generations to appreciate it and, on the other, aiming to enable current generations to make use of it, to reconcile cultural and economic development. The Management Plan thus becomes a dynamic territorial planning and programming



instrument, designed to adjust to the development of cultural, social and economic realities.

In the specific case of Valle Camonica's rock engravings, the recovery of local cultural identity is an essential factor in the development and integration project designed for the sites. Awareness of cultural roots is the result of a process of knowledge-building and conscious learning about the territory's cultural and historical value. So, from this perspective it is essential to involve the young, starting from primary school, and to reach those who are about to start work, to ensure the knowledge of rock engravings and local traditions is handed down to new generations.

However, it is evident that today the valley still preserves an important heritage of local traditions (intangible culture), which are rooted in the rock art phenomenon.

## 9. Social and Economic Analysis

Valle Camonica is a mountainous area in the north of the province of Brescia – it stretches from the banks of Lake Iseo to the Tonale and Aprica passes. From a social and economic perspective, it has the typical features of Alpine mountain areas - a tendency towards depopulation and the abandonment of ancient settlements, especially towns in fringe districts, besides a gradual impoverishment of economic conditions and increasing difficulty to trigger positive development processes.

Such conditions are worsened by highly inadequate transport networks characterised by inefficient connections with important local towns and poor communication between the various towns due to the shape of the valley and a rail service that has not been adequately strengthened.

Hence, faced with the crisis of certain traditional industrial and manufacturing sectors – the iron industry in the recent past and the textile sector today – Valle Camonica is finding it hard to implement the necessary reorganisation and upgrading processes. In the near future such processes will invariably influence the archaeological, historical, artistic and environmental potential of great interest, recognised with the establishment of archaeological parks, natural parks and reserves including the Parco Nazionale dello Stelvio and the Parco Regionale dell'Adamello, and places of conservation and appreciation such as various national and regional museums.

The very nature and features of this heritage make Valle Camonica a landmark both for the Brescia province and for the entire Lombardy Regional Authority (Regione Lombardia), which has made the *Rosa Camuna* its institutional emblem and organised, together with local institutions and the participation of various ministries, important projects to promote and develop the territory's tourist resources with the prospect of significant economic and employment results.

Collaborations and synergies implemented between the various institutions and the entire community's renewed interest in a cultural heritage handed down over ten thousand years of history are the necessary premises for economic and social development focused on new ambitious challenges.

### 9.1 Demographic Indicators

*"Variations in the population resident in the Province of Brescia over the past thirty years (1971-2000) are similar to the values found in other Lombardy provinces whose chief towns are located along the main structural east-west line: Milan – Bergamo – Brescia and Verona in the Veneto Region.*

*The central strip of Lombardy shows a concentration of resident population, whilst the northern Alpine and pre-Alpine zones and the southern area, with its mainly agricultural calling, have exhibited a reduction in the number of inhabitants. ... (omission) ...*

*A detailed analysis of the Province of Brescia highlights the continuing depopulation of mountain regions and of the main municipalities, while there is an increase in the resident population in municipalities in the hilly strip and the plain, where fluctua-*





*tions are close to the provincial averages ... (omissis)...  
... the mountain communities show an increase in the number of family units with values near the provincial average, while family unit fragmentation is increasing in the areas of the lower Val Trompia and lower Val Camonica. The increase in the number of family units in these areas can be explained by the increase in the resident population... omissis..." (excerpt from: Piano Territoriale di Coordinamento della Provincia di Brescia, Book 1, Preliminary Document, edited by Marcello Vittorini, 2001).*

This demographic analysis of Valle Camonica is based on population census data and on a comparison between the lower, middle and upper valley and the Province of Brescia during the period 1961 - 1999. The analysis of the basic trend in the Valle Camonica Mountain Community population enables us to forecast some long-term population trends (see Table 14).

Forecasts which consider the various demographic dynamics of sub-areas (lower, middle and upper Valle Camonica) into which the valley can be divided were carried out over a 50-year period divided into 10-year periods. After a downward trend in the period 1961 - 1971, the tendency is towards a moderate increase, despite fluctuations in 1971 - 1999. These trends enable us to assume a basically growing trend, with a gradual and limited increase in the overall population in the near future (estimated at approximately 600 in ten years).

This basic trend is naturally influenced by contrasting tendencies, both internal and typical of the various sub-areas. In general terms, an increase has occurred in the valley floor population, with an exodus from mountain municipalities in the upper valley.

## **9.2 Employment Indicators**

Considering the valley's special geographical configuration, an accurate analysis of employment indicators must refer to the various sub-areas in which Valle Camonica can be divided (lower, middle and upper valley) and to the relevant production sectors (agriculture, manufacturing, construction, business, services and tourist activities) which are peculiar to each area.

The lower and middle valley, where most industrial areas are located (municipalities of Darfo Boario Terme, Pian Camuno, Esine and Breno), have greater potential for more extensive growth compared to the upper valley, due to geographical features which ensure better access.

Diversely, municipalities of lateral valleys and those situated half-way up the valley sides are currently most influenced by the employment crisis, because they are mostly damaged by the road network system. Districts at high altitudes with tourist activities - mainly located in the upper valley - and those in the valley floor, with a vibrant fabric of productive firms, present fewer problems on the whole.

Lastly, we must report an increase in de-industrialisation in recent years. This has led to a significant progressive reduction in the size of production units.

## **9.3 Types of Productive Activity**

Valle Camonica's main production sectors are industry and handicrafts - the manufacturing sector is centred on manufacturing and processing metal products and on the textile and garment industry, while craft production is much more complex. The building sector is the most important of Valle Camonica's industries, together with manufacturing.

Activities based on mineral extraction are only present in the municipalities of



Malonno, Capo di Ponte, Esine, Lozio, and to a lesser degree in Ponte di Legno, Borno, Niardo, Darfo Boario Terme and Pian Camuno, while the production and distribution of electricity, gas and water plays a minor role.

Service industries have acquired an increasingly significant role in the valley's production and employment, in particular the trade sector (especially supermarkets, and to a lesser degree shopping centres, which are currently expanding). These developments obviously threaten the survival of small shops, which are mostly found in municipalities half-way up the valley sides and in lateral valleys.

Berzo Inferiore, Bienno, Breno, Civate Camuno, Esine, Piancogno and Prestine municipalities belong to "Industrial District No. 9, Camuno Sebino" (Law N° 317 dated October 5<sup>th</sup> 1991, art. 36, and Regional Law N° 7 dated February 22<sup>nd</sup> 1993, art. 3), which is distinguished by the iron industry and textile production.

With regard to production activities related to environmental resources, agriculture is the most important sector in terms of employment in Valle Camonica. According to 1990 agricultural census data, the "total agricultural area" makes up 70% of the valley's entire surface area. This is mainly woods, meadows and pastures (about 80%), followed by land fit for sowing crops (almost entirely used for cattle fodder) and permanent arboreal crops (grapevines and apple trees), which are widespread only in the middle and lower valley.

The most numerous livestock are cattle, followed by sheep and goats. Mountain pastures are still widely used in Valle Camonica, which has over 150 high-altitude summer farms.

#### 9.4 Tourism and Related Activities

The Lombardy Regional Authority (Regione Lombardia), with Regional Law N° 8 dated April 14<sup>th</sup> 2004 "*Legislation for Tourism in Lombardy*", has partly implemented the provisions of Law N° 135/2001, art. 5, which identifies "Local Tourist Systems" (STL) as models for resource development in uniform territories and for increasing provision for tourists by creating associations between public and private entities. The Lombardy Regional Authority (Regione Lombardia) did not, in fact, expressly mention the provisions of art. 5 concerning "Local Tourist Systems", but has established "Tourist Systems" which are based on these.

As per art. 3, paragraph 1 of the above-mentioned law, "*a Tourist System is the series of programmes, projects and services focused on developing the territory's provisions for tourism and tourist attractions consisting of cultural and environmental heritage, including typical local foods and wines*". The promotion and activation of tourist systems is assigned to local authorities, to firms operating in the tourist sector (individually or in associations), to specialised business associations, as well as other entities involved in local social and economic development (art. 3, paragraph 2): the *Guidelines for Tourist Systems were defined and approved by a Regional Authority deliberation* in date 16<sup>th</sup> December 2004 N° 7/19893.

Provincial Administrations, which contribute to the establishment of regional policies, promote and coordinate Tourist Systems and perform functions once assigned to provincial tourist offices (dissolved by Regional Law N° 8/2004, art. 11) by granting (on the basis of regional criteria) the authorization to create Tourist Information and Hospitality (IAT) facilities.

Local Tourist Offices (Pro Loco) still exist, as per Regional Law N° 16/2001 (*New regulations on the regional register and activities of Local Tourist Offices*), and can create, individually or with other associations, tourist information and hospitality amenities aimed at facilitating tourist appreciation of the area.

The valley has at present 26 Local Tourist Offices (in a total of 41 municipalities). 15 of these belong to the *Consorzio delle Pro Loco Camuno - Sebino* [Consortium of Valle Camonica - Lake Iseo Tourist Offices] in the project *InVallecamonica*, ([www.invallecamonica.it](http://www.invallecamonica.it)), the Valle Camonica tourist portal set up to ensure web



access to tourist information (with European funding: Leader II, Action 10, tele-information systems).

With respect to guided tours, the Lombardy Regional Authority (Regione Lombardia) has issued guidelines on the differences between *tourist guides* and *instructional and educational operators in museums*, stating that educational museum activities differ from those covered by Regional Law N° 65/86 (Official Bulletin, 1<sup>st</sup> Special Supplement to N° 48 dated November 23<sup>rd</sup> 2004, Enclosure B: *Issues highlighted by regional recognition and guidelines*, letter D - *More regional guidelines*, point 1). In this regard, only the Parco Nazionale delle Incisioni Rupestri in Capo di Ponte is included in the *First list of sites which can only be illustrated by specialist guides, as per Presidential Decree dated December 13<sup>th</sup> 1995* (Lombardy Regional Council Deliberation N° 18263 dated September 20<sup>th</sup> 1996).

Valle Camonica possesses a rich historical, artistic and environmental heritage, which make it an attractive provincial, regional and national tourist destination. Tourism is thus important for productive activities, territorial organisation and resource exploitation.

Valle Camonica 's tourist activity can be divided into the following types (Figs. 161-162):

- winter tourism;
- summer tourism/sports and nature-orientated;
- cultural tourism;
- spa tourism;
- congress tourism.

Winter tourism and summer nature/sporting tourism are especially important in the upper valley sub-area, whilst cultural tourism connected with rock art (four Parks out of seven) and the archaeological and art-history heritage (the Roman theatre and amphitheatre in Cividate Camuno, the Romanesque church of S.Siro and monastery of S.Salvatore in Capo di Ponte, the castles of Cimbergo, Breno, etc.) is concentrated in the middle valley. The lower valley sub-area is distinguished by the renowned spas in Darfo Boario Terme and Angolo Terme, which are associated with a plentiful availability of hotels (some of which are of high standard). Darfo Boario Terme also boasts an important multi-function Conference Centre, equipped with sophisticated technology and designed to host congresses, sporting events, shows, exhibitions and various sorts of entertainment.

Tourism is a sector of growing economic importance, whose full potential is yet to be developed.

This fact clearly emerges from an analysis of the numbers of tourists visiting Valle Camonica (presences in hotels and others), in a comparison between 2001 and 2004 for those registered in the Province of Brescia and Valle Camonica; source: Provincia di Brescia – Assessorato al Turismo – Ufficio promozione e statistica) (see Table 15).

Valle Camonica's tourist accommodation is characterised by a widespread availability of amenities and beds, currently distributed in irregular fashion and which could certainly be enhanced. Hospitality facilities, except in Darfo Boario Terme and Ponte di Legno, mainly consist of medium and medium-low category hotels. Residences, campsites and farm tourism amenities are limited in number and certainly insufficient to meet the demand. It is hard to assess the numbers and trend of holiday homes rented to tourists.

School groups play an important role in cultural tourism and account for over two thirds of annual visitors.

A considerable drop, though, has been recorded in the past year, probably due to the recent school reform (Law N° 53 dated March 28<sup>th</sup> 2003 and Legislative Decree N° 59 dated February 19<sup>th</sup> 2004). Consider, for example, the reduction in visitor num-



bers over the period 2002 (32,012), 2003 (27,395) and 2004 (20,132) in the Parco Nazionale delle Incisioni Rupestri, which shows a decrease in young visitors between 2002 and 2004 of about 37%. In the Riserva Regionale delle Incisioni Rupestri di Ceto, Cimbergo e Paspardo, where visitor numbers are registered by ticket issue, it may be noted that an increase from 2002 to 2003 (3,906 in 2002 and 4,226 in 2003, an increase of about 8%) was followed by a drop of 5.3% in 2004 (3,999 visitors) (see Table 16).

Information and educational services in Valle Camonica's museums and rock engraving Parks are currently conducted by personnel from independently organised firms, cooperatives and associations. There is currently only one example of museum hospitality services contracted out to firms or associations: the Riserva Regionale delle Incisioni Rupestri di Ceto, Cimbergo, Paspardo, which has an agreement with the "Valcamonica Centre for Prehistoric Studies" (Centro Camuno di Studi Preistorici), Capo di Ponte, for the area's scientific management, has also tendered out the ordinary management to the firm Do.Net. Reciprocal rights and duties are specified by contract, together with practical details for the provision of routine maintenance, information, ticket office, museum and Park surveillance, and educational services.

The compliance of local institutions with the museum guidelines set out by the Lombardy Regional Authority (Regione Lombardia) is also to be recommended; this requires official recognition the professional status of the museum director and that the information and education personnel be of high professional standard (Regional Council Decree N° 7/11643 dated December 20<sup>th</sup> 2002, Criteria and guidelines for the recognition of museums and museum collections in Lombardy and concerning professional figures of museum and museum collection operators in Lombardy, as per Regional Law N° 1 dated January 5<sup>th</sup> 2000, paragraphs 130-131, Enclosure B – "Guidelines on the professional figures of museum and museum collection operators").

The Riserva Regionale delle Incisioni Rupestri di Ceto, Cimbergo e Paspardo, through the company Do.Net, makes use for its educational services of personnel trained by means of an ESF (European Social Fund) Course for Cultural Tourism Operators, who receive specific instruction for dealing with school groups and preparing educational projects.

## **9.5 Cultural Activities**

### **"Library System"**

Valle Camonica's District Library System, established in 2001 with funding from the Mountain Community, BIM Consortium and Brescia Provincial Authority, is an important cultural resource. The system is based on data sharing between 14 libraries and actively encourages users to profit from culture and literature.

The Comunità Montana di Valle Camonica offices in Breno also keep a collection of undergraduate theses (the Fondo Tesi) on Valle Camonica, which start from the academic year 1962-63, in all about 300 manuscripts from various Italian universities.

### **"Museum System"**

Although the "Library System" has been in operation for some time, Valle Camonica (together with the Region and Provincial Authorities) has not yet a "Museum System" able to bring its historical and cultural heritage to wider public notice.

The establishment of "Local Museum Systems" refers to Regional Law N° 1/2000, art. 4, paragraph 134, letter a: *Development of Local Museum Systems: approval of*



*criteria for the allocation and donation of funds to Provincial Authorities and approval of goals and guidelines for provinces to plan feasibility studies, including the preparation of pilot projects for the integrated management of services.*

Implementing this law is the responsibility of the Brescia Provincial Authority's Culture Department, which at present has still not established the "Valle Camonica Territorial Museum System" which should consist of an interdisciplinary framework composed of single-theme components (the "Archaeological System", "Art-history System" etc.) for the entire Province. In other Lombardy provinces which have already thus organized their museums, the services (teaching, publishing informative material, specialist consultancies etc.) of each single institution have generally been united with those of others, although the museums retain their autonomy. The Lombardy Regional Authority considers it a priority to "*incentivate the unification of services, the most suitable instrument for guaranteeing the availability of public services which satisfy the criteria of total quality, economic and organizational efficiency, and effectiveness. The aim is the sharing of equipment, services and specialist work between all museums, and especially with regard to those in municipalities with fewer inhabitants*" (Deliberation of the Regional Authority in date 20<sup>th</sup> Dicembre 2002, N° 7/11643, 2.3).

The Culture Department of the Valle Camonica Mountain Community is currently studying the problem.

### **"Territorial Information System"**

In the latter half of 2000, Valle Camonica's Territorial Information System (*SITAR*) (Community Initiative LEADER II, cofinanced by the European Community – European Regional Development Fund) was established in the framework of activities envisaged in the project "Creation of the Territorial Information System". The *SITAR* enables the management and consultation of the geographical and descriptive data archive concerning Valle Camonica's municipal territories which are included in the Local Action Plan (36 municipalities in middle and upper Valle Camonica).

The goal is to provide a mechanism for the collection, processing and sharing of social, economic, geographical and environmental data regarding Valle Camonica.

The system is based on a client/server model. The server, located in the head office of the Valle Camonica Drainage Basin Council Consortium (Consorzio dei Comuni del Bacino Imbrifero Montano della Valle Camonica-BIM), provides a logical and physical data management service. Clients may use access and research tools organised by the system's administrator to consult archive data over a local (intranet) or remote (internet) network.

The *SITAR* archive comprises:

- territorial and environmental data in vector or raster format regarding the municipalities in question;
- hypertextual records consisting of documents in PDF (Portable Document Format) and HTML pages;
- metadata (information sheets on data characteristics).

The data is organised on three levels: information frameworks, projects and information elements.

There is currently no Website Information System (*SIS*) which includes the social, economic and cultural data for the entire valley.

These initiatives have, however, contributed towards an integrated management of the territory's cultural policy.

### **Universities**

Milan University's School of Agriculture in Edolo has begun a Course on the Development and Protection of the Mountain Environment and Territory, which is at present the only one of its kind in Italy and which could constitute a point of special-



ist reference for south, central and north Alpine area. Amongst its aims is the training of professionals skilled in the various aspects of organizing mountain production activities, with emphasis on the protection of territorial equilibria, defence of the environment and rural development.

### **Historical and Council Archives**

In 2003 and 2004 the Mountain Community (Comunità Montana) promoted research regarding the historical and council archives in Valle Camonica, recording (for each council) the name of the person responsible for the archive, its location, the parties who produce archive documents, the groups of documents present and how these are structured. This is the only such systematic study conducted in the last fifteen years and constitutes a fundamental basis for future work to develop these archives. The Civate Camuno Elementary school houses the **Ghislandi Historical Archive (Archivio Storico Ghislandi)**, managed by a Cultural Group bearing the same name. The archive, open for public consultation since 1990, includes a series of documents from the time of the II World War and various groups of records, such as those of the Breno Working Men's Association (Società Operaia di Breno), those concerning the birth and growth of the valley's hydroelectric industry (Fondo Energia Elettrica), those on the Gleno dam disaster, and others regarding mines and iron-smelting furnaces.

Another interesting archive is the **Archivio Panzerini**, kept in the Cedegolo Civic Library, which contains documents about the old family after whom it is named and concerning economic history of iron ore mines and furnaces for metal extraction.

The Breno Civic Library houses the **Archivio don Romolo Putelli**, which contains numerous documents collected by this local historian regarding the history of Valle Camonica.

There are also **specialist archives** to be found in the valley, such as that kept in the Centro Camuno di Studi Preistorici in Capo di Ponte since 1964 (with documents from the 1950s), which is currently being reorganized and computerized. Lastly, the Maffessoli brothers of Capo di Ponte have long kept an archive of photographs and documents concerning rock art, which is currently being studied in preparation for two exhibitions in preparation on the history of research into Valle Camonica's rock art.

## **9.6 Expectations and Intentions of Interested Parties**

The main points regarding the expectations and intentions of interested parties are summarized below. They will be expanded upon in Parts III and IV in the form of Plans, which are operational projects for action.

### **Part III**

#### **Knowledge of the Site**

The implementation of a strategy to increase our **knowledge of the site** would appear to be of fundamental importance, based on the stimulation of research and the organization of a detailed recording system including:

- 1) The cataloguing of data in a **Computerized Rock Art Monitoring System: CIMAR (Catalogo Informatizzato per il Monitoraggio dell'Arte Rupestre)**, which will unite all currently existing information regarding rocks inside Parks, and place emphasis upon conservation aspects.
- 2) The collection and verification of all available data concerning rock art localities outside Parks, in preparation for their enclosure, and the insertion of this information in the **CIMAR** Archive.
- 3) The systematic and complete recording of all of the heritage not yet recorded and catalogued, in accordance with a pluriennial work programme.
- 4) A continuous programme of monitoring of the state of preservation of rocks, both



inside and outside the Parks, for the purpose of organizing conservation campaigns. 5) A **Survey-based Data Bank** designed to contain all the information from the **CIMAR** Archive. This system will allow the combination and comparison of different types of data, and hence the efficacious planning of protection, conservation and development work concerning the heritage.

### **Conservation and Integrity of the Site**

It is also of fundamental importance to prepare a **conservation strategy** for the rock art patrimony of Valle Camonica, considering its environmental, landscape, historical and urbanistic context, by:

- 1) Preparing a Conservation Plan based on data concerning the monitoring of the preservation state archived in the General rock Art Catalogue (and the drafting of a "Manual of good Practice" regarding maintenance work, the planning of conservation work, distinguishing between routine and special maintenance, the definition of methods and the qualifications required of conservation workers, etc.).
- 2) Extending the conservation strategy to all areas with rock art outside the seven Parks which exist at present.
- 3) Ensuring that the need for conservation and protection, as outlined and described in this Management Plan, is understood and included in all the planning instruments which operate at various levels in order to safeguard the heritage.
- 4) Increasing levels of control and surveillance of sites in Parks, with adequate personnel in relation to the size of the latter.
- 5) Ensuring, where possible, the installation of wooden walkways (made according to WHL standards), to avoid erosion of the rocks due to the passage of visitors.
- 6) Educating visitors and local inhabitants to take more care with regard to maintaining the heritage in good condition.

It is also of great importance to implement a strategy for **safeguarding and conserving** Valle Camonica itself, by:

- 1) Ensuring that the requirements for the conservation and tutelage of the countryside which surrounds the rock art heritage are contained in all the instruments of territorial management (such as landscape plans, regulatory plans... Piani Paesistici, Piani Regolatori etc.) and felt to be of primary importance, so as to improve the local landscape and increase its protection. For this, work to renovate and "restore" the landscape is urgently needed, so as to appreciably redefine the Valle Camonica cultural area, at present noticeably deteriorated in the valley floor, the first part to make an impact on a rock art visitor.
- 2) Improving the design of infrastructures (e.g. roads and electricity lines), so as to meet the standards needed to safeguard the heritage and the landscape which surrounds it.

## **Part IV**

### **Tourism**

#### **Tourism in Valle Camonica**

A correct strategy for managing tourism must be implemented for the Site's development, and this objective may be reached by:

- 1) Following and applying the ICOMOS principles for sustainable tourism, which allow a balance between site conservation and growth in tourism to be obtained.
- 2) Creating Reception Centres – or Service Centres – for tourists, which offer information about rock art, the valley's various tourist attractions, and road and other transport facilities. These centres, equipped for the disabled, should contain public toilets, first-aid amenities, public telephones and internet connections, as well as play areas for children.
- 3) Increasing local and regional transport services.



- 4) Improving road and rail connections.
- 5) Creating a "Graffiti Train".
- 6) Coordinating the site management system with the Museum and Tourist Systems.

### **Tourism in the Parks**

Particular care should be given to the management of tourists within the Parks, so as to avoid conflict between development and promotion on one hand and the necessity to protect and conserve the heritage on the other. All Parks should, of course, conform to the minimum standards specified by relevant current legislation.

This aim could be achieved by:

- 1) Improving access to Parks by creating new car parks, taking into account the needs of the disabled (reserved spaces).
- 2) Creating a **Combined Ticket** for visits to the valley's Parks and state and locally-run museums, perhaps with reductions in the cost of transport connections.
- 3) Optimizing Park opening hours and closing days.
- 4) Creating a bookshop network.
- 5) Enriching tourist possibilities by combining rock art visits with:
  - mountain excursions;
  - lake trips;
  - spa visits;
  - conference attendance;
  - local artistic tourism (creating theme trails);
  - visits to other sites of archaeological, artistic or historical interest: Roman, medieval etc.;
  - contact with local traditional products (market-exhibitions, festivals with food and drink etc.);
  - intangible culture (connections with events regarding local traditions and practices).

### **Educational Services**

The tutelage and conservation of the heritage also require an increased awareness amongst the younger generations; suitable training must be given to teaching staff, especially in the light of the changes in school education introduced by the recent School Reform Bill (Law 28, March 2003, N° 53 and Legislative Decree in date 19<sup>th</sup> February 2004, N° 59).

The important steps to be taken include:

- 1) Monitoring the quality of the present educational service in function in the valley, following the guidelines which the Lombardy Regional Authority has laid down in recent years for the Museum and Territorial Educational Services.
- 2) Training teaching personnel according to uniform standards which are recognised at regional or national levels.
- 3) Organizing periodic refresher courses for teachers, to improve contacts with local schools.
- 5) Producing high quality publications, specifically designed for various user-groups (including pre-school), with a uniform and recognisable graphic style.

### **Professional Training**

The site management strategy recognises the great importance of involving the local population, members of which, with suitable training, will occupy professional roles and take part in the process of understanding, conserving and developing the site. For example:

- 1) Technicians for surveying and monitoring the state of conservation of the rock art.
- 2) Personnel for monitoring the cultural and environmental heritage (see the Architectural Heritage Cataloguing Project promoted by the BIM: SIRBec and Risk





Map, 2002-2005).

- 3) Tourism promoters who attract and direct visitors to Valle Camonica.
- 4) Educational staff.
- 5) Tourist operators and guides able to direct visitors towards and accompany them on itineraries (which may be large scale and involve other parts of the province).
- 6) Operators for the maintenance of green areas covered by the UNESCO Site N° 94 "Rock Drawings in Valle Camonica" Management Plan.
- 7) Artisans specialized in traditional valley craft activities.

The collaboration between the Agriculture Faculty of the Università Statale degli Studi di Milano and the Università di Brescia, based in premises in Edolo, is a promising new development; courses and seminars are organized for the training of specialized personnel.

### **Collaboration with Local Businesses**

The creation of synergy with local businesses is an important element in the site management strategy, and should lead to:

- the creation of a shared policy, regarding interests and aims, with the industrial, craft and service sectors, leading to sponsorship agreements, especially for the promotion of cultural tourism.

### **Promotion**

The active promotion of the rock art sites has a significant contribution to make to the growth of Valle Camonica, both from the point of view of its national and international renown and from that of its renewed economic development. The following important promotional measures should be taken:

- The creation of a specific internet site administered by the site coordination body (to be defined).
- The design of an image-enhancing logo for the UNESCO Site N° 94 "Rock Drawings in Valle Camonica".
- Connection with other similar UNESCO Sites, for example by twinning.
- The development of a coordinated information and promotion campaign, leading to the production of a uniform and recognisable series of publications, websites with similar graphic design, and road signs with content and symbols based on an agreed formula.

The agreed programming should also include the planning of cultural events, such as exhibitions, meetings, seminars and series of conferences. It would be of assistance to scientific research, heritage development and promotion, public education and local economic development if these events could be spread throughout the year, in order to avoid programming similar events separated by only a few weeks (which has happened in the past).

The advantages of such coordinated planning, which would involve all of the research organizations in the valley, would be to:

- Give events their rightful importance.
- Present externally an image intelligent planning.
- Contribute to the stimulation of tourism, by distributing it more evenly throughout the year.
- Optimize sponsorship resources.
- Encourage the spreading of knowledge about rock art, so that it becomes a topic of stimulating debate between scholars and involves a wider public.



## PART III Tutelage and Conservation

### 10.1 Plan for the Improvement of Facilities

The term "facilities" is used here to mean the Parks in the UNESCO Site N° 94 "Rock Drawings in Valcamonica", which correspond to the major concentrations of rock art, together with associated resources: the information and publicity service, which is composed of the educational and information centres at Park entrances (Parco Comunale di Luine and Parco Archeologico Comunale di Seradina-Bedolina), and exhibition areas (museums, *antiquaria*) sited either inside the Parks (the *Antiquarium* in the Parco Nazionale delle Incisioni Rupestri di Capo di Ponte) or externally (the Reserve Museum in the village of Nadro, which is connected with the Riserva Naturale Regionale delle Incisioni Rupestri di Ceto, Cimbergo e Paspardo).

The new National Valle Camonica Prehistory Museum (Museo Nazionale delle Preistoria della Valle Camonica), which is being set up in Capo di Ponte inside the 18<sup>th</sup>-century Villa Agostani and due to open in 2008 (**2- Plan for the Establishment of the National Valle Camonica Prehistory Museum**, see below), also belongs to this category of amenities associated with the valley's rock art and, more generally, its prehistoric and proto-historic archaeology. The latter is also represented by a series of important and well-preserved archaeological sites suitable for future development, which could be opened to the public and included in the "Historic Way Network" (**5- Historic Way Network Plan**).

There are numerous archaeological sites which could be developed in the mid term, so as to offer a picture of Valle Camonica both as the "Valley of the Engravings" and as the home of people who, over the millennia, have produced settlements, burial grounds, religious sites and centres of economic activity. Work has already started on some of these sites, under projects launched by local councils in collaboration with the Lombardy Regional Authority and *Soprintendenze* of Archaeological Heritage and Architectural and Landscape Heritage, coordinated by the Regional Directorate for Cultural and Landscape Heritage (**3- Plan for the Development of Prehistoric and Proto-historic Archaeological Sites**).

These projects, already programmed and partly under way, will, in the next five years, lead to the creation of an articulated system which will constitute an addition to the complex of Rock Art Parks and other localities with engravings (which will be progressively opened to the public and included in the itineraries), together with the valley's other archaeological sites and museums. The result will surely be an increase in visitors' knowledge and understanding of Valle Camonica, well known for the great complexity of the "rock art" phenomenon and its duration until relatively recent times, as well as for other wider cultural manifestations.

The centenary of the rock art's discovery in 2009 will offer an important opportunity to take stock of the progress of this detailed and wide-ranging programme. This archaeological complex of Valle Camonica rock art, prehistory and proto-history will be further enriched by the numerous additional rock art sites listed above (Part I, List of Rock Art Sites), which are scattered throughout the entire length of the valley, and from the valley floor to high altitudes, some of which are already open to visitors (**4- Plan for Recording and Developing Additional Valle Camonica Rock Art Sites**).

The historical and cultural importance of UNESCO Site N° 94 "Rock Drawings in Valcamonica" is perfectly complemented by the Cividate Camuno National Museum



of Roman Culture (Museo Nazionale della Civiltà Romana di Civitate Camuno), which illustrates traces of the "Romanisation" process (the Pescarzo *Camunni* dwelling) and various Roman remains, some of which are monumental public buildings (the theatre and amphitheatre in Civitate Camuno and the Sanctuary of Minerva near Breno).

It may thus be appreciated that the Site is more articulated and complex than the simple reference to "rock art" might suggest: this must, in fact, be considered and studied in association with contemporary and later archaeological sites, and understood as a phenomenon which persisted through time in the entire valley, and is also able to throw light on the present situation. It is therefore a sort of "eco-museum", an inseparable mixture of history, nature, culture and traditions, a highly important territorial palimpsest with its own special identity.

Particular attention should thus be paid not just to manifestations of rock art, but to the archaeology of the whole territory in its various aspects: the network of historic ways; signs of devotion, historical memory or negation associated with the rock art (religious shrines - "*santelle*"-, chapels, churches; beliefs and legends; place names).

The UNESCO Site n° 94 "Rock Drawings in Valcamonica" Management Plan must also consider amongst its primary aims that of the "restoration" of the valley's natural beauty, in that there is an intimate connection between landscape and rock art because the latter cannot be understood separately from its natural and geographical context.

It follows that the Plan concerning Facilities (here defined as the currently existing Rock Art Parks), ought also to concern itself with operations aimed at the restoration of the landscape outside the Parks and rock art sites. The valley floor needs particular attention; it has suffered degradation in several stretches from poorly regulated building activity (industrial premises, workshops and housing), from infrastructures with high physical and visual impact (the road "Strada Statale 42") and from a closely spaced series of electricity lines (which are, however, of strategic national importance). Valle Camonica is a "technological corridor" of primary importance, used since the early 20<sup>th</sup> century by a series of power lines, the routes of which have been modified in order to safeguard the rock art and which could be further improved.

The aims of the Plan are outlined below:

1) *Harmonious coordination of initiatives* in all the Valle Camonica Rock Art Parks (belonging to various authorities and the state) concerning the recognition of the juridical status of *archaeological parks, improvements in the standard of facilities and the provision of necessary services.*

2) *Creation* of the National Valle Camonica Prehistory Museum in Capo di Ponte (Museo Nazionale della Preistoria della Valle Camonica a Capo di Ponte), which will have the additional function of central reference point for the Valley's rock art and archaeological heritage, their recording and public presentation.

3) *Close collaboration concerning planning with the Valle Camonica museum complex;* the details of which are in course of elaboration by the Brescian Provincial Authority in accordance with relevant Regional legislation and with reference to the reality of the valley's archaeological patrimony. The integration of the Rock Art Parks into the museum, territorial and local traditions network would make possible the "joint management" of cultural and hospitality facilities for the public (teaching and information services, promotion of tourism and reception amenities), so as to render uniform the services offered and better promote cultural tourism.

4) *To extend development to all rock art sites,* since they all form part of the World Heritage Site under tutelage.

5) *Coordination* of work in rock art parks and sites with the *Plan for the Development*



of Archaeological Sites and Historic Ways.  
6) Landscape Recovery.

The following Operational Plans are therefore proposed:

- 1- Rock Art Park Improvement and Development Plan;
- 2- Plan for the Establishment of the National Valle Camonica Prehistory Museum;
- 3- Plan for the Development of Prehistoric and Proto-historic Archaeological Sites;
- 4- Plan for Mapping, Recording and Developing Additional Valle Camonica Rock Art Sites Not Included in the Rock Art Parks;
- 5- Historic Way Plan;
- 6- Valley Floor Renewal Plan.

### **1- Rock Art Park Improvement and Development Plan**

The current situation in the Rock Art Parks contained in UNESCO Site N° 94 (which are described in Parts I and II of this Management Plan) is dishomogeneous with respect to administrative norms, design, level of equipment, availability of educational material, explanatory captions and information and exhibition amenities.

A detailed plan is therefore needed which programmes the series of actions required to bring the existing Parks, within the next five years (2005-2009), to the end of their establishment procedures (where necessary) and up to standard with regard to teaching, explanatory and reception facilities, in a fashion that respects their identity (as recognised in the 1979 UNESCO declaration) and is compatible with conservation needs and correct criteria of public access.

This plan must orchestrate harmony and close coordination between all the Valle Camonica Rock Art Parks (administrated both by the state and by other bodies), with periodic verification of the state of progress of work under way and the identification of problems and proposal of corresponding corrective measures, on behalf of all the Park Authorities and those bodies charged with tutelage, development and planning.

The following measures are required during this period, listed in order of priority:

#### 1.1-Completion of the legal establishment procedures regarding the Parks.

In first place, it is necessary to complete the procedures, which will lead to the granting of the full official status of "Park" for all these areas. In some instances, the process has remained stationary at the stage of a proposed definition, without the execution of those actions needed to bring it to completion: this is the situation of the Sonico and Sellero Parks, together with the Seradina-Bedolina Park, which were constituted by decisions of the local councils and for which recognition on the part of the Lombardy Regional Authority has never been requested (or granted). The latter *"has responsibility for the public accessibility of objects of cultural importance present in institutions and cultural sites which are not State property or which are administered under concession from the State in accordance with current legislation"* (Legislative Decree in date 22<sup>nd</sup> January 2004, N° 42, art.102, c.2). The time has clearly arrived for the completion of the procedures regarding Regional regulations, which will lead to the formal recognition as *Archaeological Parks* of three Rock Art Parks, the Municipal Archaeological Park in Seradina-Bedolina, Capo di Ponte, the municipal Park in Sellero and the multi-theme "Coren de le Fate" Park in Sonico, and also of other Parks already officially recognised by the Lombardy Regional Authority (but in categories other than that of "Archaeological Park") and with their own Management Plans, such as the Riserva Regionale delle Incisioni Rupestri di Ceto, Cimbergo e Paspardo and the Parco Regionale dell'Adamello.

The Lombardy Regional Authority has not yet adopted the category of *Archaeological Park* which was defined in national legislation concerning cultural heritage in 1999 (Legislative Decree 490/1999) and more recently developed



(Legislative Decree in date 22<sup>nd</sup> January 2004 N° 42, art. 101 *Cultural Institutions and Sites*, comma e): "Archaeological Park", an area of territory distinguished by important archaeological remains and of historical, landscape or environmental value, equipped as an open air museum. For this reason, those Valle Camonica Rock Art Parks which are not directly managed by national authorities are still today defined as Protected Areas, on the basis of Regional Law N° 86/1983. This situation has various consequences, such as a difficulty in obtaining funding for conservation, research and recording work regarding the archaeological patrimony. A different case is that of the Riserva Regionale delle Incisioni Rupestri di Ceto, Cimbergo e Paspardo; the Lombardy Regional Authority has recognised only part of the Reserve, the Nature Reserve Teaching Museum, with the status of "Museum" (Regional Council Decree in date 5<sup>th</sup> November 2004, N° 7/19262).

This unsatisfactory situation urgently needs to be resolved, with the recognition of the status of "Archaeological Park" on the part of the Lombardy Regional Authority (in a similar fashion to the commendable recent adoption of regulations concerning Archaeological Parks by the Lazio Regional Authority, Regional Law N° 18 in date 9<sup>th</sup> December 2004), and its application also to those Parks which as yet lack formal status (the Parco Archeologico Comunale di Seradina-Bedolina di Capo di Ponte and the Parco Comunale di Sellero) and to the Riserva Regionale delle Incisioni Rupestri di Ceto, Cimbergo e Paspardo, already recognised by the Lombardy Regional Authority (Regional Council Decree in date 2<sup>nd</sup> March 1988, N° IV/938) and in possession of an approved Management Plan (Regional Council Decree in date 3<sup>rd</sup> November 1992, N° 5/29143)<sup>11</sup>.

### 1.2-Improvement of Display and Information Facilities

As well as the need to complete procedures concerning legal status, it is also necessary to equip the Parco Comunale di Sellero, which is lacking in amenities, and improve the itineraries and information facilities in the other parks. The requirements of each park are listed below:

#### **1) Parco Nazionale delle Incisioni Rupestri, Capo di Ponte**

The Park was founded in 1955 and fully equipped in 1989, with subsequent occasional updates. It is now in need of widespread improvements to itineraries and display facilities, as follows:

- Renewal of the sign at the entrance with an up-to-date one which is similar to other Park entrance signs and makes reference to the UNESCO Site to which it belongs.
- Renovation of slopes, which have suffered from erosion in certain zones that are particularly exposed to "visitor impact" (paths with exposed roots and steep stretches of path that ought to be substituted by more level ones).
- Extension of itinerary improvement so as to facilitate access of the disabled, and the completion an itinerary for the blind and those with poor sight, which is being equipped with special panels which complement the information in Braille currently available.
- As soon as the compulsory purchase of privately owned land lying inside the Park perimeter is completed (2006), it will become possible to equip the Park with additional information panels (that cannot be placed on private property).
- Creation of an indoor reception area for the accommodation and protection of visitors in case of rain, or for those who wish to rest during their visit to the Park; this could also function as an information centre where groups of visitors could be introduced to the Park.



- Creation of a public catering facility inside the Park, so that members of the public who wish to make a longer visit can take a break; the Park contains 104 rocks and is one of the major concentrations of rock art in the valley.
- When the compulsory purchase is concluded, it will be possible to complete the boundary fence on the south side, where the Park touches the Riserva Regionale delle Incisioni Rupestri di Ceto, Cimbergo e Paspardo. It would be opportune to devise a system allowing the direct passage of visitors from one Park to the other, both those who come from Naquane (a Park with entrance fee) and those who climb up from Foppe di Nadro, along the historic track which already joins the two localities. The new territory added to the Park following the compulsory purchase will need to be equipped with information panels and itineraries created, etc.

## 2) Parco Archeologico Nazionale dei Massi di Cemmo, Capo di Ponte

The Park was inaugurated on 6<sup>th</sup> October 2005, with the necessary amenities already in place. A reduced information service for the blind and those with poor sight has been designed, with the collaboration of the Milan Institute for the Blind and the Società Cooperativa Archeologica (SCA), with the possibility of extension at short notice.

## 3) Parco Comunale di Luine, Darfo Boario Terme

The Park was recently absorbed into the Parco Locale di Interesse Sovracomunale del Lago Moro. In recent years it has been improved, with the creation of itineraries equipped with information panels, and boasts an information centre and teaching display.

In 2005, the *Pluriennial Plan for the Parco Locale di Interesse Sovracomunale del Lago Moro* (total funding € 8,610,280.00 in 5 years) was approved by the two councils which administer the Park, Darfo Boario Terme and Angolo Terme. This programme the improvement of the Park Centre and the development of the rock art heritage in the Parco di Luine (for an estimated cost of € 350,000.00).

In the absence of a detailed project with respect to the above, which needs in any case to give priority to the problem of the conservation of the engraved rocks, several measures concerning the improvement of display facilities and other preliminaries to the elaboration of a suitable conservation plan are listed below:

- Formal recognition of the Parco Comunale di Luine on behalf of the Regional Authority (as explained above, with the status of "Archaeological Park").
- A suitable sign indicating that the Park belongs to the UNESCO World Heritage Site should be installed.
- The number of panels illustrating the engraved rocks needs to be increased. The engravings are poorly visible due to the nature of the rock (conglomerate, locally known as "Pietra Simona") and the preservation state (they urgently need to be cleaned and subjected to conservation treatment, as specified below).
- It is suggested that the rocks be equipped for visits during the hours of darkness, in order to attract the tourists who visit the nearby spa in the summer period. A suitable system for illuminating the rocks with oblique light would have the advantage of making the engravings more clearly visible.
- It would be opportune to make suitable thematic comparisons with the rest of the territory of the Parco Locale di Interesse Sovracomunale del Lago Moro, which contains other important areas with rock art (Monticolo locality, Darfo Boario Terme, and Sorline locality, Angolo Terme).
- It is most urgent that survey and recording of the rocks' state of preservation be carried out, in order that an adequate Rock Maintenance and Conservation Plan



may be drawn up. The rocks are poorly legible due to the extensive presence of micro-organisms (see the Maintenance and Conservation Plan).

- The construction of an access road, proposed by the local council, that would connect the Parco di Luine directly to the spa in the centre of Boario, would greatly encourage visitors to come to the site. This route would make pedestrian access to the Park easier for those already in Darfo or arriving by train.

-The Park boundary should be extended to include the rocks near the car park and those near the "simona"-stone quarry.

#### **4) Parco Archeologico Comunale di Seradina-Bedolina, Capo di Ponte**

The Park was opened on 8<sup>th</sup> October 2005, equipped and ready for visitors. The town council has undertaken to establish the most suitable institutional form of management, taking into consideration the Park's municipal and geographical location.

The following matters still need to be decided and concluded:

- Formal recognition of the Park by the Regional Authority (as explained above, with the status of "Archaeological Park").

- Extension of the limits so that they correspond to those of the Park's cultural and geographical identity, and not just to the boundaries of the property (recently acquired by the council). In this respect, it is suggested that the Park perimeter should be extended to include the areas with engraved rocks to the northwest (Dos del Mirichì and Redondo localities) and northeast (the S. Rocco rock).

- It is necessary to carry out survey and field examination of the rocks' state of preservation, so as to draw up an adequate Rock Maintenance and Conservation Plan (Maintenance and Conservation Plan).

- The installation of educational equipment (the project has been presented to the Lombardy Regional Authority, but has not yet received funding).

- The preparation of a project for the renovation of the ancient route between the Parco Archeologico Comunale di Seradina-Bedolina and the Parco Comunale di Sellero, making use of an existing historic path which crosses the buffer zones surrounding the two Parks.

- By the end of 2006, a pedestrian connection between the Parco Archeologico Nazionale dei Massi di Cemmo and the Parco Archeologico Comunale di Seradina-Bedolina, equipped with similar signs indicating the two Parks and with two parking areas, will be opened.

#### **5) Parco Comunale di Sellero**

This Park, which possesses a number of unique features in the rock art panorama, is under construction, both with regard to both its legal status and the creation of itineraries and information resources. We would recommend the extension of its boundaries to include contiguous areas, of limited extension, with engraved rocks. In fact, the local council has already given a favourable reception to this suggestion during the production of the new planning document (Piano Regolatore Generale), and also to the proposed buffer zone which surrounds the Park. The town council has undertaken to establish the most suitable institutional form of management, taking into consideration the Park's municipal and geographical location.

The following measures need to be programmed:

- Formal recognition of the Park on the part of the Lombardy Regional Authority (as explained above, with the status of "Archaeological Park").



- Extension of the Park boundaries to include the contiguous localities with engraved rocks of Isù-Barnil (immediately to the north) and Pià d'Ort-Coren (to the south, at the boundary with Capo di Ponte).
- Creation of visitors' itineraries and the necessary educational facilities and reception and information services;
- In order to implement the above, it will also be necessary to survey and record the rocks' state of preservation, in order to prepare an adequate Rock Maintenance and Conservation Plan before the public opening of the Park (Maintenance and Conservation Plan).

#### **6) Parco pluritematico del "Còren de le Fate", Sonico**

This Park, created in recent years, is an archaeological area inside the Parco dell'Adamello. For this reason, it lacks its own boundary and has not been recognised by the Regional Authority as a park with rock engravings. It is sited in area of exceptional natural beauty, but suffers from difficulty of access due to the form of the land.

The following measures are required:

- Formal recognition of the Park by the Regional Authority (as explained above, with the status of "Archaeological Park").
- Exact definition of the Park boundary, which has been sketched in preliminary fashion during the development of the Management Plan. The buffer zones have been established with precision.
- Erection at the Park entrances of signs referring to the Park and the fact that it belongs to the UNESCO World Heritage Site.
- Repair or replacement of existing information panels, some of which have suffered deterioration.
- Repair of the wooden walkway present on Rock 1, which has deteriorated in several points.
- Design of a new (less steep) entrance route, if possible, or the provision of warnings to visitors that access is difficult.
- In order to put into practice the above, a recent inspection has confirmed that it will also be necessary to survey and record the rocks' state of preservation, so as to prepare an adequate Rock Maintenance and Conservation Plan before the public opening of the Park (Maintenance and Conservation Plan).

#### **7) Riserva Regionale delle Incisioni Rupestri di Ceto, Cimbergo e Paspardo**

The Reserve is the only park managed by local authorities which possesses a detailed Management Plan, with precise descriptions of the recording work and studies which are needed, together with woodland conservation measures, and the provision of equipment for conservation and development of the heritage. In 2005 it was also decided "to create an educational itinerary for visitors to the rocks with prehistoric engravings, with facilities for the disabled and poor-sighted" in the area of Dos Sottolaiolo, near the "provincial road" and easily accessible.

The Reserve is adequately equipped for public information (including the Reserve Museum, sited externally, in the village of Nadro), but certain maintenance tasks have suffered neglect due to the large area to be managed and a scarcity of personnel:

- Greater attention ought to be given to the cutting and clearance of woods, at least in the area of the historic pathway which connects the various rock art sites





present in the Reserve.

- A project needs to be designed to programme (probably in a series of phases) the repair or, rather, the renovation of the historic way which crosses the park and gives it a special significance. The Reserve's large area (290 ha) tends to favour – as the Reserve management has noted and encouraged – trips which combine visits to the rock engravings with trekking (by bicycle and on horseback along tracks, as well as on foot). This special quality of the Park suggests that it may require a different approach to the tutelage of the engraved rocks and natural heritage with respect to the others.

- A project should be prepared for the creation of adequate access to, and the development of, the rocks in the Vite-Deria area (which have recently been systematically mapped and catalogued) so as to meet the standards of the Reserve's other developed zones.

- Rock cleaning and conservation treatment began in the Reserve in 2005, but the state of preservation gives cause for concern and cleaning and conservation work needs to be programmed for several years. This, in turn, makes necessary field examination and mapping of the rocks' preservation state, so that an adequate Operational Plan may be drawn up (Maintenance and Conservation Plan).

- As was outlined in the paragraph concerning the Parco Nazionale delle Incisioni Rupestri, a suitable connecting path which permits visitors to pass from the National Park to the Reserve, making use of the historic track which currently joins the two areas.

- Lastly, signs, similar to those present (or to be installed) in the other Parks, need to be erected at the entrances to the Reserve. These will contain maps of the paths in the Reserve and explain that it belongs to the UNESCO World Heritage Site.

In response to the indications which emerged during the preparation of the UNESCO Management Plan, the Governing Committee of the Consortium of Councils of the Reserve, in date 10<sup>th</sup> June 2005, approved (Deliberation N° 7/2005, with integration in date 18<sup>th</sup> July 2005) the *Ten-year Plan for Investments in the Riserva Regionale delle Incisioni Rupestri di Ceto, Cimbergo e Paspardo*, which stipulates the following expenditure, by category, for a total of € 3,084,402.00:

- Roads/paths and display facilities (€ 1,085,000.00)
- Reception amenities (€ 1,277,652.00)
- Information and museum equipment (€ 241,000.00)
- Recording, monitoring and conservation of the archaeological and environmental heritage (€ 480,750.00)

## Conclusions

In order to make it clear that the various Parks make up a network belonging to UNESCO Site N° 94 "Rock Drawings in Valcamonica", similar panels should be mounted at the Park entrances, and internally a panel referring to the other Parks should be set up.

It is further recommended as Good Practice, that during the work to improve public facilities in existing Rock Art Parks and equip new Parks and archaeological sites, particular care should be taken to make every possible **provision for invalids and those with poor sight**. With regard to the visually handicapped, see, for example, the facilities installed in the Riserva Regionale and the Parco Nazionale dei Massi di Cemmo in 2005.

The official website of the National Parks may be consulted at [Management Plan of UNESCO Site n.94 "Rock Drawings in Valle Camonica"  
2005](http://www.soprintendenza-</a></p></div><div data-bbox=)



archeologica.lombardia.it/parchivalcamonica, which includes a section designed for the blind. Furthermore, a copy in Braille of the texts of Parco Nazionale delle Incisioni Rupestri di Capo di Ponte information panels is available in the Park.

### 1.3-Survey of the Preservation State of the Rock Art Heritage inside the Rock Art Parks

As outlined for each single Park above (1.2-*Improvement of Facilities*), the *Plan for the Improvement of Facilities* presupposes the systematic evaluation of the state of conservation of the engraved rocks, which are, after all, the essential component of the Rock Art Parks: problems concerned with aspects of conservation will be discussed in the *Maintenance and Conservation Plan*. The importance of examining in the field and mapping the engraved rocks' preservation state in the seven Parks should be emphasized; it is a preliminary task and strictly linked to the Plan for the Improvement of Facilities. To date, conservation-related field recording using the *IRWeb* system, and followed by conservation treatment, has only been conducted in the National Parks (Parco Nazionale delle Incisioni Rupestri and Parco Archeologico Nazionale dei Massi di Cemmo a Capo di Ponte, with 104 engraved rocks and 13 engraved monuments respectively), but is currently under way in the new Parco Archeologico Comunale di Seradina-Bedolina (over 200 rocks). It is recommended that this fieldwork and computerized archiving, which permit preservation monitoring, should be systematically extended to the other Parks, which contain over 600 rocks (circa 450 in the Riserva Regionale, circa 140 in the Parco Comunale di Sellero and 40 in the Parco pluritematico "Coren de le Fate" in Sonico), within the three-year period 2006-2008. In this regard, it should be remembered that the Management Plan Scientific Research Committee has decided to adopt the *IRWeb* system to create a Computerized Catalogue for Rock Art Monitoring (*C.I.M.A.R.*: Catalogo Informatizzato per il Monitoraggio dell'Arte Rupestre), which will unite all the available data for Valle Camonica's rock engravings. The *IRWeb* archive will be constant updated, and progressively extended to all the rocks in the valley, so that conservation programmes may be well organized and fund use optimized, and resource development integrated.

The actions which follow this monitoring work also regard the Operational Maintenance and Conservation Plan (Piano attuativo, punto 1).

## **2- Plan for the Establishment of the National Valle Camonica Prehistory Museum in Capo di Ponte (Figs. 163-164)**

The need to create a museum to illustrate Valle Camonica's prehistoric and proto-historic archaeological heritage, which is all property of the state under current legislation, has existed since the 1980s when it became clear that the "rock art" phenomenon needed to be seen in the context of contemporary archaeological finds and sites, which were not then presented to the public in any museum. In addition, that period saw an increase in the number and diversity of research and construction-related excavations, conducted both by the *Soprintendenza* of Archaeological Heritage and by Universities with excavation concessions agreed by the *Soprintendenza* and the Cultural Heritage and Activities Ministry.

These excavations and other research lead to the discovery of important archaeological complexes and numerous engraved Chalcolithic monuments which, after twenty years during which careful attention has been paid to these sites, display great cultural richness and variety, and date from the Upper Palaeolithic to the period of the valley's Romanization.

From 1989 and 1996 the *Soprintendenza* searched for a building suited to house the museum collections<sup>12</sup> and whose location and dimensions would permit it to accom-



moderate the tourists who would pass whilst visiting the Rock Art Parks. Finally, in 1996, thanks to the collaboration of Capo di Ponte Council (in particular R. Ghetti, then mayor), ideal premises were found, belonging to the parish and located in the town centre next to the parish church. The building was known as Villa Agostani and had once been an episcopal seminary, fallen into disuse for many years.

The use of ex-Villa Agostani (also known as Villa del Sacro Cuore), in Via di S. Martino, was obtained by means of a convention between the state and the parish and since 1997 it has been under reconstruction on the part of the Lombardy *Soprintendenza* of Cultural Heritage, with funding from the Ministry for Cultural Heritage and Activities. The villa will reopen as a spacious museum, and a recording and information centre: the **Museo Nazionale della Preistoria della Valle Camonica**.

The museum is housed in a three-storied building with a large courtyard and an enormous garden. It positioned centrally with respect to the nearby Rock Art Parks, which together constitute the most conspicuous concentration of rock art in the valley. In fact, a notable quantity of visitors comes to the local archaeological parks (the Parco Archeologico Nazionale delle Incisioni Rupestri, the Parco Archeologico Nazionale dei Massi di Cemmo and the Parco Archeologico Comunale di Seradina-Bedolina) throughout the year, with obvious benefits for the local economy. It was thus important to create a focal point, both cultural and organizational, which would prepare visitors and inform them about the valley's various archaeological sites, currently under development (see 3- *Plan for the Development of Prehistoric and Proto-historic Archaeological Sites*).

In addition, the duty to sort out and put on public display the huge collection of material concerning Valle Camonica's prehistory and proto-history which had accumulated in the *Soprintendenza's* storerooms could no longer be put off.

Villa Agostani offered an excellent seat for the new institution, a prestigious building which was part of a complex of considerable antiquity, adjacent to the monumental parish church of S. Martino. It consists of a long wing parallel to the road, along which runs a high boundary wall enclosing the courtyard; onto the latter the main facade opens, porticoed with low arches supported by stone pillars. The profiles of the pillar and window mouldings date the original construction to around the 16<sup>th</sup> century. An 18<sup>th</sup>-century rebuild appears to have conferred uniformity upon a previously heterogeneous collection of structures (which probably belonged, though, to a single residential and agricultural complex).

The building is in the old town centre of Capo di Ponte, and may easily be reached by tourists, and the courtyard, which is walled off from the road and faced by an arcade covered by first-floor rooms, is an ideal place for gathering together and welcoming both small and large groups of visitors.

The presence of a museum and cultural centre will surely make the experience of visitors more culturally complete and, through the stimulation of a better-informed and less-hurried tourism, could serve to increase those local economic activities that benefit from tourism (typically, visits to the Parks are swift at present).

The transformation of the building from bishop's seminary to the seat of the National Valle Camonica Prehistory Museum, begun in 1997 and due to be finished in 2008, has necessitated structural renovation and maintenance work, in addition to modifications connected to the conversion of function.

The following sums were spent on this work during the years 1997-1999 and 2002:

- 1997: £ 200,000,000 (equal to € 103,291.20)
- 1998: £ 200,000,000 (equal to € 103,291.20)
- 1999: £ 450,000,000 (equal to € 232,405.20)
- 2002: € 154,940.00



The total estimated cost of completing the conversion during the period 2005-2008 is € 1,400,000.00, according to the projects presented in July 2004 and July 2005 to the director of the Ministry of Cultural Heritage and Activities, and subdivided as follows:

- 2005: € 200,000.00;
- 2006: € 400,000.00;
- 2007: € 400,000.00;
- 2008: € 400,000.00.

The museum exhibition spaces will cover over 2000 m<sup>2</sup>, distributed over the ground floor, adjoining open areas and the second floor, whilst the first floor and part of the second will be used for services and other museum activities (offices, temporary exhibition and conference rooms, multimedia theatre and storerooms).

The museum itinerary, which is partly conditioned by display necessities<sup>13</sup>, is (provisionally) planned as follows:

*Religion over the millennia. Sanctuaries and prehistoric ceremonial sites* (engraved Copper-Age steles and boulders; the cult and ceremonial sites of Cemmo, Campolongo in Cedegolo, Borno Valzel de Undine, Malegno Ceresolo, Ossimo Anvòia, Pat and Passagròp, Ossimo Inferiore etc.).

*Earliest occupation of the valley*

- The Cividate Camuno hut and the use of the Foppe di Nadro rock shelters (Palaeolithic)
- The Cividate Camuno site and upland bivouacs (Mesolithic)
- Traces of Neolithic occupation

*Settlements: distribution and material culture from the Late Neolithic to the period of Romanization*

- Rogno, Coren Pagà
- Luine, Darfo Boario Terme
- Cividate Camuno and Malegno, a settlement controlling movement on the river
- Breno, Castello
- Capo di Ponte, Dos dell'Arca
- Borno, Valcamera
- Temù, Desèrt
- The Pescarzo *Camunni* house

*Places of work*

- Prehistoric and proto-historic bivouacs and transhumance sites (various upland sites; Cevo-Dos del Curù)
- The copper mine in Campolongo, Bienno
- A 6<sup>th</sup>-5<sup>th</sup>-century BC mining settlement in Cevo
- The Malegno metallurgical workshop

*Burials*

- The Copper-Age secondary burials in the Foppe di Nadro rock shelters
- The Pat tumuli
- The Breno tombs

*Religion: sites and aspects*

- The network of megalithic sanctuaries
- The upland sanctuaries (Dosso Poggia, Cedegolo; S. Stefano, Cividate Camuno etc.)
- Votive offerings in water (Lake Arno etc.)



- Traces of Religion: relation between rock art and votive deposits (important chance finds; the weapons depicted at Luine...)
- Traces of religion in domestic sites
- A probable *Brandopferplätze* in Le Sante, Capo di Ponte

The museum itinerary will be connected, through multimedia aids, to rock art and archaeological sites which are illustrated in the museum, and which may themselves be visited. Thematic itineraries will also be proposed.

### 3- Plan for the Development of Prehistoric and Proto-historic Archaeological Sites

Of all the archaeological sites which could be developed in the mid term so as to offer visitors a more complete and detailed picture of Valle Camonica's prehistory and proto-history in terms of rock art and associated archaeological remains, the following (settlements; cult, ceremonial and burial sites; places where minerals were mined and metals worked) are proposed:

- settlement, Breno Castle;
- megalithic sanctuaries in course of excavation in Ossimo;
- Dosso Poggia upland cult site, Cedegolo;
- Dos dell'Arca settlement, Capo di Ponte;
- Iron Age settlement, Temù;
- dwelling, Pescarzo;
- Iron Age copper mine in Campolongo, Bienno;
- mining complex, Cevo

Work has already been started on some of these:

- In association with **general conservation projects** concerning historical areas and buildings:

Breno Castle, inhabited from the Neolithic until the Iron Age (FEDELE 1988; 2004), funded by the local council, 2004-2005.

- In association with **archaeological excavations and studies:**

The Dosso Poggia upland site, Cedegolo, in use during the Copper Age (excavations by the Lombardy *Soprintendenza* of Archaeological Heritage, 2004-2005), under development with funding by the firm Terna (Trasmissione Elettricità Rete Nazionale S.p.A.), in collaboration with the Lombardy *Soprintendenza* of Archaeological Heritage and the Parco dell'Adamello, 2005.

The 6<sup>th</sup>-5<sup>th</sup>-century BC settlement in Temù (POGGIANI KELLER 2001); excavation funded by Temù council, in collaboration with the Lombardy *Soprintendenza* of Archaeological Heritage, 2005-2006;

It should also be remembered that the *Soprintendenza's* triennial programme, financed by the Ministry for Cultural Heritage and Activities, includes a project for the excavation and development of prehistoric and proto-historic sites in Valle Camonica, for a total expenditure of € 227,000.00.

- In association with **research and excavation projects conducted under concession** by Universities and partly funded by local authorities:

The early Iron Age mine in Campolongo, Bienno, is being excavated by the University of Bergamo, as part of a project of international collaboration (ANCEL et AL. 2000) and with funding from Bienno Council.



The Chalcolithic ceremonial site in Anvoia di Ossimo was excavated between 1995 and 2003 (FEDELE 1991; 1995), and on 28<sup>th</sup> May 2005 was inaugurated as a Park (*Parco Archeologico di Anvoia*), with the promotion of Ossimo Council and funding from the Regional Authority.

Amongst other known sites which have been excavated in the past, one in particular seems ripe for purchase and development: the Dos dell'Arca site, Capo di Ponte, on what is at present private property, in the vicinity of the Parco Nazionale delle Incisioni Rupestri. Given the notable size of the surviving walls (recorded during an excavation conducted, under concession from the *Soprintendenza*, by E. Anati: ANATI 1979) and the long period of settlement (Neolithic – Iron Age), it could be made an Archaeological Area as an example of prehistoric and proto-historic building techniques in the valley. Its closeness to an existing Rock Art Park which attracts many tourists would surely mean that it would interest many visitors and thus be a sensible investment.

Lastly, with regard to the remaining prehistoric and proto-historic archaeological sites, details of which may be found in the *Carta archeologica della Lombardia. I. La Provincia di Brescia* (ROSSI 1990) and in the "Archivio Topografico" of the Lombardy *Soprintendenza* of Archaeological Heritage, work to plan and position them using GIS is under way (Lombardy *Soprintendenza* of Archaeological Heritage project, 2006-2007), similar to the work programmed for 2005-2006 which concerned rock art sites, which thus completes the relevant proposals in this Management Plan (creation of GIS record of Rock Art Parks).

This GIS record will be integrated with the positioning with geographic coordinates of single engraved rocks (where the latter exists), which was conducted by the Centro Camuno di Studi Preistorici in the sites listed in Part II of the present Management Plan.

#### **4- Plan for Mapping, Recording and Developing Additional Valle Camonica Rock Art Sites Not Included in the Rock Art Parks**

The rock art sites present in Valle Camonica, as may be seen from the list of rock art sites in Part I, are more than 180 in number; 8 of these have been, or are in the course of being, organized as Parks. 17 localities feature engraved Chalcolithic steles or boulders, of which at least 11 are cult or ceremonial sites of Chalcolithic age; these might either be subjected to total archaeological excavation, with subsequent "normalization" of the area, or suitably developed, as in the case of the Anvoia di Ossimo site, which was transformed into a Park. The other rock art sites contain variable numbers of specimens, from a few to tens of inscribed rocks.

Many of these rocks with engravings are located near to modern settlements, whereas others are scattered in zones that are difficult to reach, in wooded areas where the vegetation renders problematic both access and visibility.

Topographic survey of these rocks using GPS needs to be carried out with great urgency (2005-2007), so as to create GIS records (see below, 4.1), together with the compilation of preliminary documentation concerning the state of conservation (see below, 4.2). These operations are essential for the subsequent development of sites, which is already being planned in some cases (see below, 4.3). It should be remembered that those rocks listed in ENCLOSURE 28 have recently been positioned with geographical coordinates by the Centro Camuno di Studi Preistorici (CCSP), as part of a Regional Authority cataloguing project (SIRBec: Sistema Informativo Regionale Beni Culturali): this information will be integrated with the Lombardy *Soprintendenza* of Archaeological Heritage's GIS project.



#### 4.1- Plan for the addition of sites outside the existing Rock Art Parks to the GIS records

During the preparation of the Management Plan, priority has been given to the definition of Rock Art Park boundaries and relative buffer zones, using GIS, and the creation of a database (Fig. 165).

It is our intention to map all the remaining rock art sites, using the same method, and at the same time to establish an archive of geographically-positioned aerial photographs (Lombardy *Soprintendenza* of Archaeological Heritage project, 2005-2006). The work will conclude with the precise geographical positioning of each individual rock, on the part of the CCSP (see above).

#### 4.2- Plan for the recording of sites outside the existing Rock Art Parks

In addition to the aerial photo archive mentioned above, the rock art site survey will also be accompanied by the preliminary recording of the rocks' conservation state and the compilation of computerized modules using the *IRWeb* system (Lombardy *Soprintendenza* of Archaeological Heritage project, 2005-2006).

In this regard, it should be emphasized that respect for "Good Practice" means that each research programme conducted on unpublished sites, or those whose records need to be brought up to date, should follow exactly the procedure outlined below:

- Survey of the site (following the specifications given in the Manual of Good Practices–*Survey Procedures*);
- Preliminary cataloguing (Rock and Other Data Sheets, Rock Conservation and Rock History Profiles), computerized using the *IRWeb* system, of all rocks contained within the site (Fig. 146). After this, the new data in their entirety should be added to the *CIMAR* archive, which constitutes a catalogue of the plans, and historical and conservation records of the patrimony (see below, Maintenance and Conservation Plan) and permits the following steps to be programmed:
  - Prepare, in concomitance with the preliminary recording of the rocks, a conservation plan for these, which specifies useful and suitable cleaning procedures, in order to facilitate their recording and study.
  - Produce plans and complete records of the rocks using *IRWeb* (Zone Sheet, Zone Conservation profile, Scene Sheet, Figuration Sheet), with particular attention to the recording and planning of each part of the rock. The conservation analysis must be conducted by conservation specialists with specific competence regarding the treatment of stone.
  - Evaluate the possibility of developing the site for public visits and prepare a project in collaboration with the *Soprintendenza*, the Research Group, the local authority, site management authorities (in the case of a Park or other situation);
  - Prepare contemporarily a definitive Conservation Plan for the rocks and the entire site.
  - Study and publish all the information.
  - Promote the site and communicate research results using means and channels which will reach a diversified public.

This protocol has, in recent years, been communicated by the Lombardy *Soprintendenza* of Archaeological Heritage to researchers when granting authorizations and concessions or signing agreements.

#### 4.3- Plan for the development of sites outside the existing Rock Art Parks

Studies by conducted Research Institutes (the Centro Camuno di Studi Preistorici, the Cooperativa "Le Orme dell'Uomo", the Museo Didattico di Arte e Vita Preistorica and the Università Federico II di Napoli), other authorized researchers and by the Lombardy *Soprintendenza* of Archaeological Heritage precede subsequent steps to develop some sites, in particular those on public property which are easier to open to visitors (even if they lack the status of "Park").



Some of these sites are near existing Parks, whilst others have been for years the object of excavation campaigns and each rock has been planned and studied with partial or complete publication of the results.

Sites which could be developed in the short term (2006-2008) are listed below:

**1) Darfo Boario Terme**, Monticolo and Corni Freschi localities; **Angolo Terme**, Sorline locality.

In the Parco Locale di Interesse Sovracomunale del Lago Moro, which contains the Parco Comunale di Luine, two important rock art sites dating to the Medieval and post-Medieval periods are to be found. One is in Monticolo locality, in the municipal area of Darfo Boario Terme, and the other in Sorline locality, Angolo Terme. In the *Five-year Plan* (2005-2009), approved by the two local authorities which administer the Parco Locale di Interesse Sovracomunale, work has been programmed which will facilitate public access to and reception in the Park: the construction of car parks and picnic areas with facilities, the creation of itineraries and the maintenance of existing paths, the purchase of premises and their conversion to a Park Centre and a Multi-purpose Centre, and publicity. Measures are also planned to make the two rock art sites more hospitable to visitors: Angolo Terme Council has included the development of Sorline in a wider-ranging project concerning access to and development of the area; Darfo Boario Terme Council has specifically funded the creation of a panoramic itinerary and improvement of access to the archaeological sites (€ 360,000.00) and the renewal of the itinerary and environmental and archaeological renovation of Monticolo hill (€ 1,600,000.00). The Monticolo project includes the purchase and development of the area around the Corni Freschi Rock, an exceptional Copper-Age monument that resembles the Massi di Cemmo (and which was given conservation treatment by the *Soprintendenza* in 2002-2003). This should resolve the serious problem of protecting this rock, which is widely used for free-climbing, although this activity is expressly forbidden.

When Sorline and Monticolo are equipped and opened to visitors, they will constitute an important display of the most recent rock art, different from and complementary to the Parco di Luine, which contains prehistoric and proto-historic engravings.

**2) Capo di Ponte**, S.Rocco locality.

This great rock on the right-hand bank of the River Oglio marks the northern boundary of the municipal area of Capo di Ponte (on the road "Strada Statale 42", just beyond the bridge over the Oglio. This rock is most suitable for development (recording, conservation and equipment with information panels), both by virtue of its position on an important route, at the entrance to Capo di Ponte (which is the major centre of Valle Camonica's rock art), and because of its closeness to the Parco Archeologico Comunale di Seradina-Bedolina, which in future will probably be extended to include it. The work will be funded by Capo di Ponte Council, with supervision by the Lombardy *Soprintendenza* of Archaeological Heritage.

**3) Berzo-Demo**, Lòa locality.

The site, which is inside the Parco Naturale dell'Adamello, was discovered some years ago (PRIULI 1984 a). In 2004, it was mapped and recorded by the Lombardy *Soprintendenza* of Archaeological Heritage; this computerized recording will continue in 2005. The *Soprintendenza*, together with the Parco Naturale dell'Adamello, is preparing a project for the site's development as a Multi-theme Itinerary (the relevant documents may be found in the *Soprintendenza* archive). The area contains – as well as engraved rocks, which are of special importance due to the presence of a series of inscriptions in the North Italic alphabet and associated with figures of armed men with panoply – numerous structures and remains from the First World War and zones of environmental importance, recog-





nised by the European Community as Sites of European Community Interest under the Habitats Directive (such as upland peat bogs). The Multi-theme Itinerary Project will be commenced before the end of 2006, under the supervision of the Parco Regionale dell'Adamello, in collaboration with Berzo Demo Council and the Guerra Bianca Museum of Temù.

**4) Edolo, Föbia, Mù Rocca and Via Valeriana localities.**

Edolo's position, at the crossroads between routes to and from Valtellina and the province of Trento, makes it of special archaeological and historical interest, and this is confirmed by the striking Rocca di Mù. Numerous rock art sites of limited extension are known in the vicinity; these are mostly located on the eastern valley side, in continuation of those in Sonico (a large proportion of which are in the Parco pluritematico di "Coren de le Fate").

The following localities could be most easily developed, in that they may be reached by carriageable roads and are near the town:

- *Föbia*, where there are rocks with cup marks and a rock with geographical compositions which are maybe Late-Neolithic in date.
  - The *Rocca* (and the surrounding plateaux), a medieval fortress and tourist attraction, has also rocks with cup marks, one of which resembles an altar of sorts and is in a dominating position with respect to the Edolo basin and the valley which rises towards the Aprica Pass;
  - *Mù*: at the eastern margin of the village, at the side of the ancient "Valerian Road", there is an erratic boulder which is decorated with a plan composition and signs of religious devotion;
  - *Dos de la Desma*, where numerous rocks with cup marks are to be found, one of which (in *Trangolone* locality) is easily reached and readily understood.
- A project has yet to be prepared.

**5) Pisogne**

The systematic recording and research conducted in recent years throughout the entire municipal territory (SANSONI-MARRETTA-LENTINI 2001) constitutes the possible base for a project regarding the development of several of the localities studied.

A project has yet to be prepared.

**6) Piancogno, Annunciata locality.**

Systematic fieldwork has revealed the widespread presence, in a particularly rocky area, of many rocks with engravings and inscriptions in North Italic alphabet (PRIULI 1993), which the local council, in a consortium with other nearby councils (Borno, Ossimo etc.), is planning to develop.

**7) Cedegolo, frazione Grevo.**

A detailed survey of rock art sites, which are largely historical in age (SOLANO-MARRETTA 2004), has revealed the existence of several sites, each with a few well preserved engraved rocks, spread along historic ways between areas of landscape and environmental interest. The local council, together with the Parco dell'Adamello and the Lombardy *Soprintendenza* of Archaeological Heritage is preparing a development project which also includes the Dosso Poggia archaeological site, which is at present being excavated by the *Soprintendenza* (see above).

**5- Historic Way Network Plan (Figs. 166-167)**

Valle Camonica is crossed by a dense network of ancient roadways, which connect numerous rock art and archaeological sites, and in certain stretches follow and per-



petuate trackways and paths which have been in use since the Early Mesolithic (this is confirmed by the seasonal bivouacs which archaeologists have found on crests and passes: BIAGI 1989; 1994; 1997).

This network branches into lateral valleys, bearing witness to millennial relationships between neighbouring territories; it patterned over time the development of the valley's settlements, activities and commerce.

This network, a good part of which survives and may still be seen, has been studied with regard to historical geographical zones and chronological divisions in several recent works (AA.VV. 1997, *Viaggiare in Valle Camonica*, Breno (Brescia); COMEN-SOLI D. 2000, *Sui sentieri della Vallecamonica. Le più belle passeggiate ed escursioni in alta e media valle*, Clusone).

We still lack, though, a complete survey and catalogue, which would permit the insertion of each road or trackway into a reliable and detailed chronological framework and facilitate the recognition of archaeologically significant communication networks.

A cultural patrimony of such importance for the comprehension of rock art and archaeological remains deserves to be surveyed, described and studied with careful attention, so as to recognise the age of the ways and perceive and understand their relationship to the distribution of rock art and archaeological sites.

This work has already been started; a campaign of path recording was initiated by the Brescia Provincial Authority in 2000 and led to the drafting of the Provincial Path Plan (approved by the Provincial Authority in Resolution N° 28/2002).

The preparation of the Provincial Path Plan involved, during a phase of discussion and verification, all those groups who are interested, in one way or another, in local pathways: Comunità Montane, Park authorities, the Club Alpino Italiano (CAI), individual councils, the Associazione Nazionale Alpini (A.N.A.) and the Alpine Forces Command. The analysis of the data gathered led to the identification of the principal components of the province's path network, according to criteria of accessibility, environmental interest, landscape quality, historical and cultural value, homogeneous distribution throughout the territory, in relation to the excursions characteristics of different geographical zones.

The Plan distinguished main brief and mid-length roadways, which are of provincial importance in that they constitute a sort of service network for local pathways which can be used for connecting with points of availability of public transport.

The ways of provincial and regional interest defined in the Plan have been made available in computerized form.

The Brescia Provincial Authority ("Settore Assetto territoriale, Parchi e V.I.A.-Valutazione Impatto Ambientale") is launching a project to rationalize and control all work conducted on the provincial path network by means of the management of information concerning the need for routine and emergency path repairs using SENTIERI.GIS software produced by the Club Alpino Italiano (CAI).

With regard to Valle Camonica, the Provincial Path Plan has identified the following theme itineraries based on existing historic ways (several of these are also described in BELOTTI W. 2004, *La guerra bianca: il suo territorio, le sue genti. Una proposta di turismo culturale*, Vol. 1 *Dallo Stelvio al Garda. Alla scoperta dei manufatti della prima guerra mondiale*, Breno/Brescia):

- The "Bocchette di Val Massa" Historic Path, in the Ponte di Legno municipal area, is associated with one of the best preserved and most typical remains from the First World War, the Bocchetta di Val Massa stone barrier.
- The Vezza d'Oglio Archaeo-venatorial Path, which follows an itinerary leading to old traps for catching migratory birds. The "green" architecture of these singular structures, the product of a detailed knowledge of plant types and notable manual abilities, make these constructions marvellous examples of the traditional relationship



between man and nature.

- The Dosso di Turicla Wildlife Path, in the municipal territory of Edolo, is dedicated to the observation of examples of the natural fauna.
- The Val d'Avio Glacier Path, in the municipal area of Temù, offers fascinating opportunities to observe active glacial phenomena and morphological landscape features caused by previous glacial activity.
- The Corteno Forest Path, in the Corteno Golgi municipal area illustrates the most significant aspects of Brescian forest scenery, including natural and environmental features as well as forestry.
- The Electrical Energy Archaeo-industrial Path, in the Valle di Saviore, aims at illustrating how the water from the Adamello massif is used in the "Poglia" hydroelectric complex.
- The Rock Engraving Archaeological Path, which involves the municipal territories included in the UNESCO Site N° 94 "Rock Drawings in Valcamonica", is dedicated to rock art and connects the original Parco Nazionale delle Incisioni Rupestri di Capo di Ponte with other currently less known sites.
- The Valle dei Magli Archaeo-industrial Path, in the municipal area of Breno, links the natural and man-made components in thousands of years of iron working.

For its part, the Parco dell'Adamello intends to conduct a survey and study of the historic ways within its territory (personal communication from the Park Director, December 2004).

In view of the numerous projects which have been launched, it remains only to underline the importance of concluding that started by the Brescia Provincial Authority (Settore Assetto territoriale, Parchi e V.I.A.-Valutazione Impatto Ambientale).

In view of the complexity of this research, it would be advantageous to set up a multidisciplinary commission containing archaeologists amongst its personnel, in order to correlate, in a complete historical framework, Valle Camonica's rock art and archaeological heritage with the historic ways network.

Similar studies have been conducted for some time in other Alpine areas<sup>14</sup>, prevalently for the Roman and Medieval periods, as may be seen from the exhibition catalogue *Attraverso le Alpi. Uomini. Vie. Scambi nell'antichità*, edited by the Archäologisches LandesMuseum Baden- Württemberg, Stuttgart 2002.

Another study, concerning the Roman road network, must be cited with regard to Valle Camonica (GRILLI A. 1997, *Tracciato romano in Valle Camonica*, in AA.VV., *Viaggiare in Valle Camonica*, Breno /Brescia, pp. 53-62). Still more recently, a detailed and exemplary study concentrated on the representation of historic routes in the rock art around Grevo (SOLANO S.- MARRETTA A. -eds.-, 2004, *Grevo. Alla scoperta di un territorio fra archeologia e arte rupestre*, "Archivi", vol. 15, Edizioni del centro).

It is clear that the time has arrived, with the *Sentieri.GIS* survey under way, to conduct a specialist study of Valle Camonica's historic ways which follows their development through time and identifies (where possible) prehistoric, proto-historic and Roman systems.

Besides evidence from rock art (which is particularly useful because of its lengthy duration, from prehistoric until modern times), other important considerations to be born in mind with regard to the recognition and dating of historic ways are:

- 1- The connection between places and areas of archaeological importance by trackways determined by favourable morphology.
- 2- The distribution of archaeological finds which are foreign to the local material cultures (objects imported from north and south of the Alps; artefacts made from materials not found in the Alpine area; products of distant workshops etc.).
- 3- The patterns of settlements connected by long-distance trackways (in Valle Camonica a long-lasting settlement distribution has been found, which began in the



Late Neolithic, together with a second group of single-phase villages dating to the middle Iron Age.

4- Remains from passes, to which a particular cultural importance may often be attributed (the "Passfunde"): votive deposits of objects, caches of metal, and special buildings.

5- The presence of strategic crossroads' which give rise to characteristic archaeological situations (sanctuaries and cult sites).

6- The local density of sites associated with economic activity, such as hunting, mountain grazing, transhumance, mineral extraction and metal working, which are in turn connected to religious sites.

Using similar studies which have been carried out in Alpine areas as models, the study of Valle Camonica's ancient ways, from prehistoric trackways to Roman (and later) roads, could be programmed as follows:

- 1- Bibliographical and archive research.
- 2- Study of literary sources and archaeological data, including rock art images and maps of historical age.
- 3- Survey and recording of individual ways.
- 4- Production of modular written records.
- 5- Comparison with place names.
- 6- Archaeological fieldwork along the ways.
- 7- Final Report.
- 8- Publication of Results.
- 9- The contemporary preparation of a development project for historic ways, paying particular attention to maintenance and renovation methods.

It is estimated that the **Plan for the Archaeological Study of Historic Ways**, which needs to be prepared in greater detail, with a specific project produced by a purposely-appointed study commission, could be put into effect over a ten year period (2006-2015), with the involvement of experts from numerous fields (archaeologists specialized in various periods, a historian, a geographer, ancient map, place-name, archive and architectural history specialists, a topographer and probably other figures).

## 6- Valley Floor Renewal Plan

The Management Plan of UNESCO Site N° 94 "Rock Drawings in Valcamonica" is obliged to give serious consideration to the first impression which Valle Camonica makes on a visitor to the World Heritage Site, arriving (from north or south) on the "S.S. 42" road or via the Brescia-Edolo railway.

The valley floor appears spoilt and untidy due to the widespread construction of workshops, industrial premises and housing, as well as high-impact infrastructures which have truncated the visual and ecological continuity between the bottom and sides of the valley, where most of the rock art sites are located. The road S.S. 42, with its viaducts, and the pylons of the various electricity lines (Fig. 168), which make Valle Camonica a technological corridor of national importance, create the most disturbance.

The "S.S. 42 Variant", designed in the 1970s, has been constructed piecemeal over the years and is still not been complete. The stretch which passes Capo di Ponte and Sellero (Capo di Ponte-Sellero Variant), designed without taking into account the presence of the Parco Nazionale delle Incisioni Rupestri, was blocked in 1999 by the Lombardy *Soprintendenza* of Archaeological Heritage, which requested the revision of the proposed route in order to protect the engraved rocks. A new course has been planned, which runs through a deep tunnel and poses no threat to the rock art pat-



rimony (Fig. 169).

With regard to the power lines which pass near the site, it should be explained that numerous high-tension lines cross the valley, but that these pre-date the site's World Heritage Listing. When new lines were constructed, however, the Ministry for Cultural Heritage and Activities requested and obtained modifications to already existing lines, with notable improvements in correspondence to the Parco Archeologico Comunale di Seradina-Bedolina and the Parco Archeologico Nazionale dei Massi di Cemmo area (Fig. 170).

Other situations which may be taken as typical of the degradation of the valley floor scenery and environment are: the industrial premises and workshops at the north end of the Breno tunnel; the extensive area of light industry at the southern margin of the town of Capo di Ponte (Fig. 171) and the scruffy collection of rusty fences, overgrown areas, yards etc. on the northern side; the concentration of industrial buildings surrounding Sellero, especially to the south (Fig. 172).

It is common knowledge that current Italian procedures for the preparation of large public construction projects involve the prior verification of preliminary versions, which are examined and commented upon by the various authorities and *Soprintendenze* involved during the *Conference of Public Utilities*. Past works, however, especially building work approved by individual local authorities, cannot be modified, but only "corrected" by renewal/restoration of the landscape, with respect to "its characteristics derived from nature, human history or the reciprocal interrelations of these" (*Safeguarding Landscape Values*, art. 131, c. 1 of the Legislative Decree in date 22<sup>nd</sup> January 2004, N° 42). Unfortunately, in certain parts of Valle Camonica the delicate relationship between man and nature has been spoilt.

Current legislation (Legislative Decree in date 22<sup>nd</sup> January 2004, N° 42, art. 143, *Landscape Plan*, c. 2 b) specifically mentions, as a component of landscape quality to be defined by the Landscape Plan, "the programming of town and housing development in a way that is compatible with the various levels of value recognised and does not diminish the value of the local landscape, with particular attention to safeguarding listed UNESCO World Heritage Sites ....".

In the light of this law, the renewal of the more degraded parts of UNESCO Site N° 94 "Rock Drawings in Valcamonica" ought to be one of the primary aims of the Management Plan, and a specific *Environmental and Landscape Renewal Plan* should be drawn up by a multidisciplinary specialist team; a project that would make it possible to proceed with the "recovery and renovation .....of spoilt or degraded areas under tutelage, with the aim of restoring previously existing values or creating new landscape values coherent and integrated with these" (art. 143, c. 2 c, Legislative Decree in date 22<sup>nd</sup> January 2004, N° 42).

The Plan should:

- correct and transform the growth which was previously uncontrolled into sustainable development, as defined in the 1992 Rio de Janeiro conference (UNED-United Nations Conference on Environment and Development);
- programme a better integration between valley-floor production facilities and communications networks, on one hand, and the lower valley sides on the other, through environmental mitigation measures<sup>15</sup>;
- define planning instruments above the level of single councils, which are able to implement renewal procedures and territorial management measures for environmental and landscape conservation.

In practice, the actions that need to be given priority are:

1- The development of a preliminary project by specialists in the field, which should include: a-survey and planning of the present situation; b-the establishment of guidelines for the sustainable development of the valley; c-the production of complete environmental mitigation projects based on a detailed sample of typical situations. This step could be completed by the end of 2007.



2- Modification of "state roads" (strade statali) to improve tourism. In addition to the problems outlined above, a second aspect which makes a negative impact consists of the numerous advertising hoardings of every shape, size and design, which line the S.S. 42, obstructing travellers' view of the valley scenery. Again, in this case, it is urgent that solutions be found for the protection of the UNESCO Site, in compliance with current legislation regarding the tutelage of the cultural heritage and the landscape (Legislative Decree in date 22<sup>nd</sup> January 2004, N° 42, art. 153, *Advertising Hoardings*). During the preparation of this Plan, the Tourism Department of the Comunità Montana di Valle Camonica reached an agreement with the Azienda Nazionale Autonoma delle Strade Statali (ANAS) concerning the *Modification of Valle Camonica's state roads to improve tourism*. In the near future, a technical committee will be appointed to draw up a project, coordinated by the Comunità Montana and composed of representatives of ANAS, Brescia Provincial Authority, Comunità Montana di Valle Camonica, Consorzio dei Comuni del Bacino Imbrifero di Valle Camonica (B.I.M.) and the Lombardy *Soprintendenza* of Archaeological Heritage. The committee should have concluded its work by April 2006.

### 10.2 Maintenance and Conservation Plan

Valcamonica's patrimony of engraved rocks is naturally exposed to various conservation threats, both with respect to individual rocks and groups and the areas in which they are situated.

The engravings are found on various types of sandstone, usually schistose; in rocks of this sort the layers tend to separate from one another, and the surfaces are obviously more at risk from flaking, whatever its cause may be. Since the engravings which have been incised over the centuries and millennia use a technique in which only the surface of the stone is removed and a line or figure created by the contrast between the upper layer and the next one down, it is evident that the loss of just one rock layer would cause irreparable damage, because it would mean the inevitable loss of the engraving.

The conservation of these rocks is thus a race against time, in which numerous technical problems must be confronted at three different levels: **protection**, **maintenance** and **conservation**, and the work distributed between the various programmes of the numerous national and local authorities involved.

We have defined **protection** as the indirect action taken to safeguard the heritage, which does not involve direct physical contact, but affects its context. In the case of the Valle Camonica rock engravings, we identify three types of protection:

- 1) environmental protection, which involves the entire district;
- 2) localised protection of a rock or spatially defined rock group, such as a park;
- 3) protection of moveable artefacts.

Environmental protection implies the elimination of the causes of deterioration on a regional/ environmental scale: acid rain, pollution from iron-working residues, public infrastructures which interfere with the rocks or may constitute sources of pollution (electricity lines and roads in particular). These problems lie in large part beyond the jurisdiction of the bodies involved in the management of the Valle Camonica rock engravings, with the exception of the authorization of new constructions that would interfere physically with or be situated close to sites subject to preservation orders or located in protected areas. They involve more directly and closely those authorities with responsibility for safeguarding the territory and for the development of industries and services.

The body responsible for the UNESCO site may, in general, issue preventative recommendations or report active processes of deterioration.



The localised protection of a rock or group of rocks, or larger grouping (as long as this is confined), may involve the control of exposure to sunlight, the embankment of surrounding earth and removal of standing water, the correct routing of access paths and tracks, or the adoption of walkways, fences or railings, both to ensure the safety of visitors and to limit access to those rock surfaces which could be most easily walked upon.

Exposure to sunlight must not be excessive, so as not to cause overheating in the schists and provoke cracking due to differential expansion, but neither must it be completely eliminated, in order to avoid excessive humidity and the development of colonizing undergrowth vegetation. This balance may be obtained by an adequate control of the surrounding tree types. In particular, trees whose root growth could, in time, lead to breakage of the rocks must be eliminated; the choice of compatible species (those which do not pose this problem) will vary according to the altitude of the rocks and their geographical location. The woodland generally found on the valley slopes of Valle Camonica, which is characterized by beech at higher levels and normal copse species lower down, causes no problems. Fruit trees and other non-native species, which have sometimes been introduced experimentally, are not to be recommended.

Another problem is avoiding the collection of standing water on the rocks; when the temperature drops this may freeze and widen fissures already present in the schists. The solution lies in the suitable remodelling of the earth above and below the rocks, so as to avoid the formation of pools of water on them and guarantee rapid drainage. With regard to the positioning of paths, tracks, walkways and fencing, the question will be considered here neither as a potential source of damage, through interference with the rocks due to design errors, nor with regard to visitor safety (both of these most important aspects are discussed elsewhere), but with respect to the avoidance of damage caused by human activity and deliberate vandalism.

Due to the dispersal of the patrimony over a large part of the valley, prevention must be effected largely using means of persuasion, in particular an intensive information campaign, not only aimed at local schoolchildren and those who might visit or are educationally involved, but also through all tourist information points: information offices, council tourist centres, various local organizations, hotels etc.

Prevention by means of physical barriers is also of fundamental importance, that is by the creation of barriers that impede access to the most important or exposed rocks, or, in situations of lesser risk, through warning signs which remind of access restrictions.

Moveable finds, such as the so-called "steles", are few in number and are all housed in *Soprintendenza* storerooms or other secure places. They are destined to be put on display in the new National Valle Camonica Museum of Prehistory (*Museo Archeologico Nazionale della Preistoria della Valle Camonica*) in Capo di Ponte, or in similar locations. These do not, therefore, pose particular problems of protection.

**Maintenance** is the sum total of operations (excluding scientific and preservative conservation) necessary to maintain the value of the heritage (routine maintenance) or to restore this (special maintenance). The engraved rocks and the various structures associated with them are subject to maintenance of the constructions which afford protection (discussed above) and of boundary fencing etc. which regards road access (the parks are protected areas). Maintenance of museums, *antiquaria*, all installations and systems necessitated by public visits to the rock engravings, and of storerooms of archaeological material, is also necessary. The pruning of trees and bushes, grass-cutting near the rocks and the removal of covering vegetation (except for moss and micro-organisms, included in conservation) from the rocks themselves are also considered to be maintenance. In addition, keeping the parks clean and the correct maintenance of computer-linked devices which measure environmental conditions and the state of preservation of the engraved rocks are included.



Several types of work, which here are excluded from the category, would certainly be considered as maintenance in the case of treatment of other types of monument (i.e. not engraved rocks). Firstly, the removal of small roots which infest the schist layers bearing the engravings; this operation is particularly delicate and better performed together with conservation work. The same argument applies to several other cleaning procedures, not least for the reversal of damage caused by human activity, such as the presence of paint or oil from agricultural machinery and the like due to vandalism or simple carelessness.

**Conservation** is conducted following a policy of preservative treatment, consisting of a first phase of field observation and recording, and a second phase of direct intervention on the rock. Given the nature of the engravings and the usual "intaglio" technique, restoration procedures aimed at improving their appearance involving repairs, the integration of missing portions and suchlike are excluded. In the rare cases in which the problem occurs (generally due to natural causes or vandalism), the re-attachment of detached fragments is fully admissible.

It should be evident, but needs to be underlined (due to the circulation of contrary opinions several years ago), that the conservation of engraved rocks, with the exception of steles and other moveable monuments, means their preservation *in situ*. The engravings form part of a larger body, the engraved rock. This, in turn, is part of a group of rocks and interacts with the surrounding landscape, with its steep slopes and its woods. Landscape and rocks form a single cultural context and each adds value to the other. To remove engravings from this context is to damage the latter, and detracts from the value of the engravings themselves, since their original three-dimensional location is lost when they are displayed on a two-dimensional wall. Removal of any single engraving is certainly technically possible, by cutting deep enough into the rock layers to create a solid slab, whereas the removal of only those layers penetrated by the engraving is obviously to be avoided in this schistose material. Such a procedure should only be employed as a last resort when a rock is destroyed, in which case the monument may be considered lost and all that can be done is to recover the pieces. With regard to the possible removal of a whole rock and its transferral to a new location, because, for example, it is on the site of a public construction project, this strategy is to be excluded because of the complexity of the valley landscape (in contrast with that of the Nubian desert, where such operations were carried out several decades ago).

Rock conservation rarely necessitates pre-consolidation prior to cleaning, because it is most rare to find schist which has degraded into the powdery form that would require such treatment.

The removal of various kinds of earthy concretion does not present particular problems on this stone type, and neither does that of atmospheric particles formed by industrial pollution (such as iron compounds from foundries). With trained personnel (see below) these operations, abundantly experimented, may be performed without difficulty.

The removal of biological agents and consolidation requires much greater effort. Living organisms are found superficially and internally; under normal circumstances they live inside the rock and emerge on the outside only under special conditions. Since most of the vegetation is removed by maintenance work, conservation treatment has to deal mainly with surface mosses, algae, fungi and lichens (which may be stratified, one on top of the other). Afterwards, it is necessary to remove the root systems which have penetrated the outer schist layer (which bears the engravings) or, worse, which endangers the adhesion of this to the underlying stone.

The biological cleaning procedure continues with the removal of deeply-seated colonizing organisms, the presence of which is characteristic of the Valle Camonica rocks, using special chemical treatments. The stone often contains deep-seated colonies of cyanophytic algae, which exploit the photosynthesis of other organisms and occasionally multiply and migrate to the surface, covering the surface of afflicted rocks





with red patches.

Consolidation also presents difficulties; the consolidation of sandstone in the open is one of the most challenging categories for conservation specialists. Inorganic or synthetic binding substances are applied, following the directives of the *Istituto Centrale per il Restauro*.

The qualifications of the operators and project designers involved in the various aspects of the Plan depend on the nature of the work. Protection and maintenance procedures are normally similar to types of building work or, in some cases, service activities; there are therefore no restrictive rules limiting the choice of contracting firms or project designers. It is, however, important to recommend the presence of archaeologists amongst the latter, in order to have the best possible understanding of the heritage and hence decide priorities.

It is equally important that the authorities involved in administering the parks and other areas containing engraved rocks (the state, consortiums etc.) equip themselves with workmen, so as to be able to proceed with the most urgent tasks using internal forces, as well as guaranteeing a certain continuity of practical expertise (which could also be placed at risk by the participation of an excessive number of different firms in maintenance work).

In order to programme protection, maintenance and conservation work, it is necessary to have technical staff for field observation and the computerization of data regarding the conservation of the rock engravings, suitably instructed by means of training courses and employed by the bodies involved in management. These figures, in constructing (or expanding) the digital inventory regarding the engraved rocks, would be able to indicate cases of rock deterioration, of any type or degree, and other problems, and thus constitute an indispensable technical tool aid for conservation specialists and archaeologists.

The conservation work described above corresponds to that carried out in the field on the engraved rocks by qualified operators. These are professionals (as defined by Decree N° 294 of the Ministry for Cultural Heritage and Activities in date 3<sup>rd</sup> August 2000, which regards the specification of qualifications for restoration, conservation and maintenance of moveable artefacts and the decorated surfaces of architectural monuments, as modified by Decree N° 420 of the Ministry for Cultural Heritage and Activities in date 24<sup>th</sup> October 2001) in possession of the relevant diplomas (granted by schools of the Ministry for Cultural Heritage and Activities: the *Istituto Centrale per il Restauro*, *Opificio delle Pietre Dure* etc., or diplomas granted by regional authorities with additional specific training courses). Only specialists with these qualifications may carry out and direct conservation work, with, of course, the possibility of assistance from less qualified workers and other specialists.

Conservation work, which may be conducted in the presence of archaeologists (who have responsibility for defining the importance of the site and the priorities of the campaign), is necessary both in the planning phase and during implementation.

The legislation concerning Cultural Heritage (and in particular Legislative Decree N° 30 in date 22<sup>nd</sup> January 2004) stipulates that detailed project design may be contracted to the same conservation specialist who conducts the work; in this it constitutes an exception to the general rule in Italian law governing public works, which clearly separates the functions of project designer and site director. The law also states that "work of particular complexity or specificity", a description that certainly applies to the conservation of engraved sandstone rocks, must be preceded by the collection of technical data on the basis of which the tendering should be organized; this information is to be furnished by conservation specialists (clearly, not the same ones who compete for the contract). In this case, too, the participation of an archaeologist in the project design process is necessary in order to identify correctly the heritage and priorities.



The organs entrusted with the approval of the protection and maintenance work are the individual bodies responsible for managing the individual parks or complexes. It is evident that for each park, group of rocks or single rock recognised as of archaeological interest according to relevant national legislation (most recently, Legislative Decree 42/2004), authorization is the responsibility of the Lombardy *Soprintendenza* for Archaeological Heritage, on behalf of the Ministry for Cultural Heritage and Activities.

Each campaign of conservation work on the engraved rocks, which directly affects monuments of manifest cultural importance (independently of whether or not each rock is the subject of a specific order under the Italian law protecting cultural heritage), requires the authorization of the Lombardy *Soprintendenza* for Archaeological Heritage, on behalf of the Ministry for Cultural Heritage and Activities.

Apart from the necessity of this authorization process, it is in any case clearly advantageous that all campaigns of protection, maintenance and conservation, regardless of the agency responsible (which could be any of the national or local authorities involved in the management of the engraved rocks, as long as they are entitled to conduct tenders and award contracts) should be coordinated, in order to optimize programming and fund applications and distribution.

### **Operational Plan**

As described in Part III. *Operational Facilities Plan*, Point 1.3, in several Rock Art Parks contained in the UNESCO site (those belonging to local authorities), the general situation concerning the state of preservation of the patrimony is not known and, except in isolated cases (listed in Part II), conservation work has not been effected. It was therefore an urgent priority to draw up a *Rock Preservation State Recording Plan*.

This stipulates, for each park (and, as a mid-term aim, for all the Valle Camonica rock art sites), the following operations:

1) The field observation and mapping of the state of preservation of all the rocks in each park, including the creation of a preliminary computerized catalogue (Rock Sheet, Other Data Sheet, Rock Conservation Profile and Rock History Profile) using the *IRWeb* system. Such recording has already been carried out for the National Parks, is under way (2005) in the Parco Archeologico Comunale di Seradina-Bedolina, and will be conducted as a matter of priority within the triennial 2006-2008 in the remaining parks, which contain over 600 rocks (circa 450 in the Riserva Regionale, circa 140 in the Parco Comunale di Sellero and 40 in the Parco pluritematico "Coren de le Fate", Sonico). Contemporarily and subsequently (2006-2010), the recording will be extended to all rock art sites in the Part I Table and others that may be discovered in the meantime.

The *IRWeb* inventory will be added to the *C.I.M.A.R.* Rock Art Monitoring Archive (*Catalogo Informatizzato per il monitoraggio conservativo dell'Arte Rupestre*), which will constitute the basis for the second phase of the Plan.

2) The development of a suitable *Rock Maintenance and Conservation Plan*, organized on the basis of individual parks and sites.

As part of the cataloguing activity carried out by specialist archaeologists, an analysis of conservation aspects will be conducted by conservation specialists with experience of working on stone, assisted in mapping and recording by specialist personnel (trained by courses for technical staff prepared in recording stone archaeological monuments (with particular reference to rock engravings) for conservation purposes, and computer data insertion, see Part IV, ENCLOSURE 19). The authority responsible (The *Soprintendenza* for Archaeological Heritage), on the basis of experience acquired during the preliminary computerized cataloguing work (Rock Sheet, Other Data Sheet, Rock Conservation Profile and Rock History Profile) with the *IRWeb* system, will supply an analysis of costs, with prices per rock.

The *Rock Preservation State Recording Plan* will be implemented over the three-year period 2006-2008 for parks already constituted and should be terminated by 2010



for the remaining sites.

Contemporarily, in those areas where recording has already been conducted and the second phase (*Rock Maintenance and Conservation Plan*) implemented, the rock conservation programme will be launched.

3) For sites and parks where Phase 1 has already been carried out (the two National Parks), Phase 3, which involves monitoring the state of rock preservation (with updating of the CIMAR Archive and the setting up of an air composition recording centre for the study of rock deterioration) will be initiated.

4) Routine maintenance of the engraved rocks, according to the indications of the Manual of Good Practice.

### 10.3 Recovery and Protection Plan

Landscape recovery, though also relevant to the recovery of the intrinsic value of the scenery which surrounds and interacts with Valle Camonica's rock art heritage, was treated as a general theme in point 6 of the chapter "Plan for Improvement of Facilities", Valley Floor Renewal Plan. The renovation of historic ways, closely linked with the Parks, but also relevant to the theme of "recovery", has also been covered under point 5 of the same chapter, Historic Way Network Plan.

This chapter deals with specific and detailed actions to be implemented inside the Rock Art Parks, the subject of this Management Plan:

- 1) Plan for the Recovery of Woodlands and the Rock Art Parks' Natural Environment in General.
- 2) Plan for Protection within the Rock Art Parks (boundary fences, rock protection fences, walkways, covers...).

#### 1) Plan for the Recovery of Woodlands and the Rock Art Parks' Natural Environment in General

During the preparation of this Management Plan it became clear that a "Woodland Plan" was needed, which established procedures regarding the wooded areas present inside the Rock Art Parks, and (in view of the close relationship between nature and culture which distinguishes Valle Camonica's rock art sites) also permitted the protection and perhaps improvement of the natural woodland.

The plan ought to stipulate rules, with regard to tree-cutting and the selection of indigenous tree species, which take particular care to protect the rocks. It is opportune to avoid the establishment of species that produce fruits, which may stain the rock surface when they make contact with the, or small seeds able to enter fissures in the rock and subsequently germinate, causing or worsening the detachment of superficial portions.

Another important matter is the reduction of tree root size, bearing in mind that the roots must not damage the rocks but must be strong enough to support the tree.

It is proposed to use as a model for the Woodland plan, and as a general approach to woodland tutelage, a document produced at the beginning of 2005 by the Parco dell'Adamello specifically for the Riserva Regionale delle Incisioni di Ceto, Cimbergo, Paspardo (DUCOLI A. 2005, *Le tipologie forestali della riserva delle Riserva Regionale delle Incisioni di Ceto, Cimbergo, Paspardo. Analisi quali-quantitativa e indicazioni gestionali propedeutiche alla redazione del Piano di Gestione Forestale*). The general indications contained in this work, which need to be integrated with rules for the maintenance of areas near rocks with engravings, should be extended to the other Rock Art Parks covered by the Management Plan, for which the production of analogous, individually-tailored plans is to be strongly recommended.



Similar measures could thus in future be adopted for the other rock art sites spread throughout the valley, articulated in a General Plan and specific detailed plans with the involvement of the bodies responsible for the tutelage of the environment (Brescia Provincial Authority-Assessorato per il Territorio, Parks and V.I.A., *Soprintendenza* of Architectural Heritage and Landscape, Parco dell'Adamello, forest consortia, ente Regionale per i Servizi all'Agricoltura e alle Foreste-ERSAF), the body responsible for the tutelage of the rock art and archaeological heritage (Lombardy *Soprintendenza* of Archaeological Heritage), and specialist advice from the Agriculture Faculty of the Università degli Studi di Milano (Edolo branch). The latter could usefully develop and study, in collaboration with the organizations cited above, and especially the Lombardy *Soprintendenza* of Archaeological Heritage, suitable procedures for environmental and landscape maintenance in the "Rock Drawings in Valcamonica" site and train personnel able to put them into practice (see above, Training and Education Plan).

In order to implement the above, the Comunità Montana di Valle Camonica, which is responsible for the work in the Parco dell'Adamello, will take the necessary steps to prepare a programme for the protection of the woodland in the Rock Art Parks and sites which at present lack a Woodland Plan.

## **2) Plan for Protection within the Rock Art Parks (boundary fences, rock protection fences, walkways, covers...)**

Great care must be taken over any task (however minor) performed near the engraved rocks, whether fencing or work aimed at improving access or visibility (Fig. 173). The management bodies must therefore request, and receive, prior approval from the Archaeological *Soprintendenza* for projects concerning the erection of Park boundary fences, protective barriers around rocks, walkways (which must be made of wood<sup>16</sup>) or any sort of covers or roofing.

The use of walkways is expressly recommended whenever it is necessary to protect a rock (which must not be walked over, as this will erode it) or facilitate and make safe the crossing of steep or slippery areas.

For every supporting component needed in the construction of fencing which protects engraved rocks, walkways or covers, the most suitable anchorage system in the circumstances should be chosen to avoid damaging the rock surface.

Since it is to be recommended that these works, for protection or to improve public appreciation, should be homogeneous in style and suitable in structure and appearance, the Technical Group (made up of Lombardy *Soprintendenza* of Archaeological Heritage personnel, who have many years' experience in Lombardy's Rock Art Parks) should be consulted for project preparation and design assistance. These technicians are highly competent and have long experience in building walkways, in particular with regard to construction methods, the consideration of local morphological and environmental factors and safety regulations.

So as to identify rapidly the work to be programmed in each Park, it is urgent and necessary for the Management Plan working party to make systematic tours of inspection in all the Rock Art Parks to verify requirements and cases of urgency and to prepare a definitive *Protective Structures Plan* before the end of 2005.

This plan will programme work for the next five years (2006-2010).

### **10.4 Plan for the Modification of Regulations and Planning Rules**

During the drafting of this Management Plan the regulations regarding territorial government were reviewed, in particular the "General Regulatory Plans" (Piani Regolatori Generali: PRG) and, where they existed, the Park Plans, currently available only for the National Parks, the Riserva Regionale delle Incisioni Rupestri di Ceto, Cimbergo e Paspardo and the Parco dell'Adamello (which contains several rock art sites on the left-hand side of the valley).



The PRGs of Valle Camonica local councils generally recognise the presence of areas with rock art, at the very least those areas which are universally known because they have established boundaries, are under development and are protected by specific regulations, which often coincide with those providing widespread protection for the woodland and agricultural heritage which surrounds the rock art sites.

In cases where municipal areas include part of the Parco dell'Adamello, there exist compulsory rules for tutelage of the landscape and environment, the conditions of which the councils must meet within a fixed time (two years).

Only a part of the sites have been legally protected for their archaeological value by the ministry responsible for administering national law concerning tutelage. The Lombardy *Soprintendenza* of Archaeological Heritage has launched a plan for bringing protection orders up to date, in concomitance with tracing boundaries using GIS (to be implemented in the three-year period 2005-2007).

The preparation of the Management plan has given an opportunity for the validation of regulations protecting areas with rock art and the relative buffer zones; the latter were defined expressly for the Management Plan and have been included in local planning instruments and subjected to specific regulations.

In order to facilitate the constructive participation of local authorities in the application of measures protecting rock art (which is part of the archaeological heritage) and its natural surroundings, a small number of concise rules were formulated for Parks and rock art sites. These refer to national laws regarding tutelage (most recently: Legislative Decree 42/2004) and have been added to the regulations of existing Park Plans; they are listed below:

- in areas of demonstrated archaeological importance, any proposed intervention must receive prior approval from the *Soprintendenza* responsible for tutelage;
- the same applies to areas "at archaeological risk" (i.e. which have not yet been investigated, but which are close to areas of known archaeological importance, or for which this risk may be hypothesized on the basis of topographic or other similarities to areas of known archaeological importance); any proposed intervention must receive the prior approval of the *Soprintendenza* responsible for tutelage;
- the projects concerning proposed work in localities near areas of demonstrated archaeological importance in Rock Art Parks, and in buffer zones, must be communicated to the *Soprintendenza* responsible for tutelage, which may conduct inspections and controls.

For the tutelage of the environmental and landscape patrimony of Rock Art Parks and their buffer zones, in addition to the current national legislation cited above, we recommend as an example the detailed regulations regarding environmental and landscape protection contained in the Plan of the Parco Regionale dell'Adamello (ENCLOSURE 9), which includes some of the Rock Art Parks on the left-hand side of Valle Camonica, or parts of these (e.g. the Riserva Regionale delle Incisioni Rupestri di Ceto, Cimbergo e Paspardo, which contains the same regulations in its Plan, currently being updated).

In order to make these regulations immediately effective, work is under way to include them in the planning instruments listed below:

- The following "General Regulatory Plans" (PRG), in preparation or under modification:
  - Sellero PRG (in preparation), which covers the Parco Comunale di Sellero;
  - Darfo Boario Terme PRG, which partly covers the Parco Locale di Interesse Sovracomunale del Lago Moro (which constitutes the Parco di Luine buffer zone);
  - Angolo Terme Terme PRG, which partly covers the Parco Locale di Interesse Sovracomunale del Lago Moro (which constitutes the Parco di Luine buffer zone);



- The Plans of existing Rock Art Parks, in preparation or under modification:
  - Riserva Regionale delle Incisioni Rupestri di Ceto, Cimbergo e Paspardo Plan (which is being modified and redefined);
  - Plan of the Parco Locale di Interesse Sovracomunale del Lago Moro, which has been defined as the buffer zone of the Parco Comunale di Luine, but which also contains the rock art sites of Sorline (Angolo Terme) and Monticolo (Darfo Boario Terme), the archaeological heritage of both of which is under development.

The Parco Pluritematico del "Coren de le Fate" di Sonico, which constitutes an archaeological zone within the Parco dell'Adamello, already shares the regulations concerning landscape and environmental protection contained in the Parco dell'Adamello Plan.

Capo di Ponte Council's planning regulations are currently being modified, with regard to the recognition of the new Parco Archeologico Comunale di Seradina-Bedolina and associated buffer zones. The Council's PRG (ENCLOSURE 10) already recognises and regulates in exemplary fashion the areas with rock engravings, with reference to the indications of the Regional Law N° 12 in date 11<sup>th</sup> March 2005 "*Territorial Government Law*". The Seradina-Bedolina buffer zone has been joined with the neighbouring Parco Archeologico Nazionale dei Massi di Cemmo and Parco Comunale di Sellero, so as to create a single landscape and environmental conservation area. This step had been proposed by the Lombardy *Soprintendenza* of Archaeological Heritage and met with agreement from the councils of Capo di Ponte and Sellero and the project designers.

This mode of working "from the bottom upwards", so to speak, acting directly on planning rules and Park Plans whilst these are in preparation or under modification, would seem to facilitate collaboration between the body responsible for tutelage and local authorities.



## PART IV Model for Local Cultural Development

### 11.1 Scientific and Technological Research Plan

For many years, a research strategy for the UNESCO Site "Rock Drawings in Valcamonica" has been pursued by the institutions responsible for its protection and scientific study. This *Research Plan* is also the result of collaboration between institutions, and has been agreed between the organizations which operate on the Site, at various levels - tutelage, research and study, publicizing and developing the patrimony - together with the Lombardy *Soprintendenza* for Archaeological Heritage, which is responsible for protecting and conducting research into the archaeological heritage.

In order to define a research strategy during the preparation of the Management Plan, the *Soprintendenza*, as coordinator of the Plan, established a "Scientific and Technical Working Party", which included the following research institutes and organizations who study the valley's rock art and whose authoritative role in the study of rock engravings is generally recognized: the

Valcamonica Centre for Prehistoric Studies/Centro Camuno di Studi Preistorici (Emmanuel Anati and Tiziana Cittadini) the Valcamonica and Lombardy Dept. of the Centro Camuno di Studi Preistorici (Umberto Sansoni and Silvana Gavaldo), the "Footprints of Man" Archaeological Cooperative/Cooperativa Archeologica "Le Orme dell'Uomo" (Angelo Fossati and Andrea Arcà), the Teaching Museum of Prehistoric Art and Lifestyles/Museo Didattico d'Arte e Vita Preistorica (Ausilio Priuli).

Advice was also given by the Adamello Park/Parco dell'Adamello, an organization that coordinates and manages local inter-municipal areas subject to landscape and environmental protection (V. Ducoli).

### Introduction to the Current State of Research

Research into Valle Camonica's rock art has a long and glorious tradition which began in 1909, when the geographer G. Laeng first drew public attention to the existence of the engravings and thus stimulated the interest of scholars which has continued uninterruptedly throughout the 20<sup>th</sup> century and made a fundamental contribution to the international renown of this extraordinary heritage.

The first systematic research started in 1930, coordinated by the Antiquities Superintendency, which also began to build protective structures for the engravings (in the Massi di Cemmo area in Capo di Ponte) and proceeded to issue protection orders for reasons of archaeological interest that covered huge areas in the Capo di Ponte municipality, where in 1955 the Rock Engravings National Park/Parco Nazionale delle Incisioni Rupestri was founded, with the collaboration of local authorities.

The *Soprintendenza* was joined in 1964 by the Centro Camuno di Studi Preistorici (CCSP), based in Capo di Ponte and founded and directed by E. Anati, which conducts systematic research campaigns into the rock art under ministerial concession, and spreads knowledge of it throughout the world by means of the periodical "Bollettino del Centro Camuno di Studi Preistorici" (published since 1967) and the series "Archivi" (since 1968), "Studi Camuni" (since 1972), Edizioni del Centro (since 1965) and "Valle Camonica Symposia" (since 1970). Il CCSP has also contributed over the years to the development of the Parco di Luine, Parco di Sellero and the Riserva Regionale delle Incisioni Rupestri di Ceto, Cimbergo e Paspardo, and to UNESCO's recognition of the heritage.

In recent years, new rock engravings have also been discovered in the valley as a



result of fieldwork by other groups, such as the Valle Camonica and Lombardy Department of the CCSP, the Cooperativa Archeologica "Le Orme dell'Uomo" and the Museo Didattico d'Arte e Vita Preistorica.

During this time, archaeological excavations have also been conducted on rock art sites, either directly by the *Soprintendenza* or, under concession, by universities.

Since 1992, the Lombardy Archaeological *Soprintendenza* has been conducting surveys, analyses and systematic studies specifically directed at measuring the preservation state of engraved rocks, the causes of their deterioration and the levels and nature of pollution, so as to evaluate the risks to the survival of the heritage and launch programmes of conservation treatment and allied recording work. These studies were carried out with the collaboration of those Italian research institutes which are most highly specialized in the field of the deterioration and conservation treatment of stone (Istituto Centrale del Restauro or ICR of the Ministry of Cultural Heritage and Activities/Ministero per i Beni e le Attività Culturali, the Consiglio Nazionale delle Ricerche or CNR, the Milan "Centro G. Bozza", with the collaboration of experts from the Venice and Aosta *Soprintendenze*). Outlines of the conservation work and various studies may be found in the "Notiziario della Soprintendenza Archeologica della Lombardia", from 1981 onwards, and in articles in national scientific periodicals and conference papers (see Bibliography).

Fieldwork and studies on engraving recording methods led to the formulation, by the Lombardy *Soprintendenza* for Archaeological Heritage, of a computerized cataloguing system known as *IR (Incisioni Rupestri)*, which was later adapted for use via internet and intranet (*IRWeb*), designed for the mapping and compilation of historical documentation of the engraved rock patrimony for conservation purposes.

In addition the *Soprintendenza* has (especially since 1980) pursued a strategy of conducting stratigraphic excavations and context and archaeological finds' studies, so as to develop an understanding of the relationship between rock art and archaeological sites and a more detailed knowledge of Valle Camonica's prehistoric and proto-historic patterns.

The research conducted by the *Soprintendenza*, or by university teams (from the Universities of Pisa, Trento, Venice and Naples), has extended the time of known settlement in the valley, which dates from the Upper Palaeolithic period, and enriched the panorama of rock engravings with the discovery of important 4<sup>th</sup>-3<sup>rd</sup> millennium BC megalithic sanctuaries containing inscribed monoliths that belong to the tradition of Mediterranean and Atlantic coast megalithic sites and establish Valle Camonica as one of the richest areas in Europe in this respect. Annual summaries of excavation results (published more fully in specialist periodicals and conference proceedings, see Bibliography) are given in the "Notiziario della Soprintendenza Archeologica della Lombardia", from 1981 to 2002.

The general distribution of archaeological sites in Valle Camonica, essential for a full understanding of the rock art phenomenon, is presented in the published archaeological map of Lombardy (*Carta archeologica della Lombardia. I. La Provincia di Brescia*, ed. F. Rossi, Modena 1991) which contains all the archaeological and rock art finds known in Valle Camonica at the time of publishing; subsequent updates are available in the archive of the Lombardy *Soprintendenza* for Archaeological Heritage (ATS).

An examination of the current state of knowledge, summarized for each rock art site<sup>17</sup> (ENCLOSURE 28) with the assistance of all research organizations operating in the valley<sup>18</sup> (this table may usefully be compared to that of rock art sites given in Part I), a comparison between what has (in some way) been reported and what studied and published, and an awareness of the many unresolved problems regarding diverse aspects of settlement, chronology and cultural connections, lead us to strongly recommend that the Scientific and Technological Research Plan should pursue the following aims:





1. *Establish standard research procedures for past, present and future studies, with particular attention to the following priorities:*

a) completion of recording which has been begun but not finished in the case of numerous rocks in various rock art sites;  
b) mapping and complete recording of those rocks which have not yet been subjected to *IRWeb* cataloguing, for addition to the rock art monitoring "CIMAR" archive (Catalogo Informatizzato per il Monitoraggio dell'Arte Rupestre);  
c) study and complete publishing of each site;  
d) mapping and recording for conservation purposes of the entire rock art heritage, according to the procedures described in Part III (1- Plan for Improving and Developing the Rock Art Parks; 4- Plan for Mapping, Recording and Developing Additional Valle Camonica Rock Art Sites Not Included in the Rock Art Parks);  
e) furthermore, so as to render uniform rock art records and catalogue entries and thus share a computerized data-bank, the CIMAR archive and preliminary *IRWeb* recording sheets should be compiled for all previously recorded material (following a programme agreed with the Lombardy Archaeological *Soprintendenza* and Lombardy Regional Authority –SIRBeC), in collaboration with the organizations and scholars responsible for the original research and site records and with authorization from the *Soprintendenza*.

2. *Increase understanding of the wider context of archaeological and rock art sites by means of palaeoenvironmental evidence, on the basis of the results of palaeobotanical studies conducted on recent excavations, with the addition of specific research in the "natural archives" constituted by lake and peat-bog deposits, according to a specific CNR project, described below.*

3. *Increase the study of archaeological sites, both those associated with engraved rocks and those separate from (but connected with) rock art sites, following rigorous scientific methods and microstratigraphic analysis (which has yielded interesting results in poorly-preserved archaeological contexts of problematic interpretation, such as the megalithic sanctuaries which are under excavation in Ossimo and Capo di Ponte, in Cemmo locality).*

4. *Complete the GIS survey of rock art and archaeological sites, in order to have a complete picture of their distribution and geographical and functional relationships, and thus draw conclusions which will have useful predictive consequences and thus improve the tutelage of the valley territory.*

5. *Reflect upon the history of the research conducted over the past century and decide lines for its future development, which should tend towards increased complexity as studies become more interdisciplinary, with collaboration between specialists from various fields (history, history of religion, anthropology, aesthetics, art, traditions and folklore, various archaeological sectors, epigraphists etc). As a first step, in 2005 the *Soprintendenza* prepared a complete bibliography of writings on Valle Camonica's rock art, with over 1200 works: *Bibliografia sull'arte rupestre e sui contesti e ritrovamenti preistorici e protostorici della Valle Camonica*, edited by A. Marretta and R. Poggiani Keller, "Quaderni del Parco Nazionale delle Incisioni Rupestri", Capo di Ponte, 1, 2005 (Fig. 174).*

6. *Begin to survey, record and study the historical archives present in the valley and in Italian universities and research institutes.*

7. *Prepare a Research Plan for the recording and study of the valley's intangible culture, which (as well as archaeological work) may help in the understanding of the meaning of rock engravings.*



Naturally, the study and recording of rock art includes all the work in progress, on the part of various groups of scholars, with regard to single themes (*schematic art, houses, ploughing, "orants", footprints, inscriptions* etc.), which will not be described here because they are specific research topics.

### 1- Palaeoenvironmental Research Project

An all-encompassing study of the geographical context in which the rock art phenomenon developed (from Palaeolithic roots, according to the chronology developed by E. Anati) must necessarily include a palaeoenvironmental reconstruction.

Research of this type began in Valle Camonica with the pioneering work of A. Horowitz in the 1960s (HOROWITZ A. 1975, *Holocene pollen diagrams and palaeoenvironments of Valle Camonica, Northern Italy*, "BCCSP", 12, Capo di Ponte, Edizioni del Centro, pp. 29-34), but has not been adequately followed up, and no "natural archive" in close proximity to areas settled by the ancient inhabitants has been examined. Recent excavations have offered a notable quantity of palaeobotanical remains which, together with information from lacustrine and peat-bog deposits, would enable a reconstruction of vegetation, and its changes over time due to climatic variations and human activity, to be made.

The Lombardy *Soprintendenza* for Archaeological Heritage, which has accumulated numerous palaeobotanical data from studies performed on prehistoric and proto-historic deposits excavated since 1980, requested the Milan section of the Institute of Environmental Process Dynamics of the CNR (Consiglio Nazionale delle Ricerche - Istituto per la Dinamica dei Processi Ambientali, IDPA)<sup>19</sup> to prepare a project to study the evolution of the environment in middle Valle Camonica. The project (ENCLOSURE 30), is entitled "***The Environmental History of Middle Valle Camonica and the Impact of Human Inhabitants After the Last Glaciation***" (***La storia dell'ambiente della Media Valle Camonica e l'impatto delle popolazioni umane dopo l'ultima deglaciazione***) and was developed by Prof. Cesare Ravazzi<sup>20</sup>. It will be implemented over five years (2006-2010).

The study will focus on a selection of natural archives (peat bogs, sinkholes and marshy areas) chosen within the study area, mid Valle Camonica.

### 2- Plan for Research into Valle Camonica's Rock Art

An examination of the work hitherto accomplished<sup>21</sup> with respect to rock art studies in Valle Camonica, presented in the table in ENCLOSURE 28, makes sufficiently clear the current state of research and the nature of the projects pursued: research in individual sites rarely comprises all the rocks present, research has been repeated at a distance of several years in the same sites by different study groups (cases of pointless repetition), a complete lack of records from sites which have been known for years or decades, entire rock groups catalogued years ago but never published. These are the principal problems which need to be remedied, with the collaboration of all the research teams involved, so as to reach the first objective set in the introduction to the *Scientific and Technological Research Plan*: to organize research systematically, so as to record all rock art sites, following a detailed and articulated programme to be pursued at least until completion of phases 1.1 and 1.2, when all of the rocks in each site will have been catalogued, and can be published (phase 1.3).

As may be seen from the List of Rock Art Sites that forms part of the Management Plan, 182 rock art sites are currently known and may be subdivided as follows:

- 15 localities with Chalcolithic steles and engraved boulders (at present over 80 monuments, whole or fragmentary); of these, at least 11 may be considered cult or ceremonial sites<sup>22</sup>, whilst 4 are find sites of monuments (or parts thereof) which have been re-used and are not in their original positions<sup>23</sup>;
- 167 engraved rock sites (varying in number from 1 to over 100 rocks).



Leaving aside the Chalcolithic religious and ceremonial sites with steles and boulders (15), which have all been studied and published in recent years or are currently being excavated (and will soon be published), of the remaining 167 sites, 58 have been the object of preliminary recording, 51 completely studied and 58 never studied. It should be remembered, though, that this has been conducted using various recording modules and methods, and with varying degrees of data accessibility (see Part II, 6.4 The State of Conservation of the Cultural Heritage).

It thus be seen that about 35 % of sites with engraved rocks have been recorded, of which only about 30 % thoroughly.

Of these, only a small minority have been published completely. The following studies on the sites of Luine (ANATI 1982), Sellero (SANSONI 1987), Piancogno (PRIULI 1993), Pià d'Ort (SANSONI-GAVALDO 1995), Sonico (PRIULI 1999), Pisogne and Piancamuno (SANSONI-MARRETTA-LENTINI 2001), Grevo (SOLANO-MARRETTA 2004) and Foppe di Nadro (MARRETTA 2005) may be cited as exemplary for the systematic fashion in which they have been conducted and published.

In consideration of the above, the following steps must be taken; these will be further developed in a joint study and publishing plan which the Scientific Research Committee will prepare as a matter of urgency.

1) Finish fieldwork already under way and complete the documentation and cataloguing of sites where complete or partial recording is in course; a programme will be drawn up by June 2006 in agreement with all the study teams involved.

Rock recording will be conducted using the computerized cataloguing system *IRWeb* (for both preliminary and complete procedures), so as to permit the construction of the CIMAR Rock Art Monitoring Archive (*Catalogo Informatizzato per il Monitoraggio dell'Arte Rupestre*). With regard to methods of recording (rock positioning and mapping, digital photography, drawings) and cataloguing (preliminary and complete *IRWeb* modules), and the sequence and procedures of the various operations, reference should be made to the relevant descriptions in the *Plan for the Improvement of Facilities*, sections 1.3 and 4.1-2, the *Maintenance and Conservation Plan* and the "Manual of Good Practice". The availability over the Web of records and catalogue data will encourage a level of communication between scholars which will certainly be beneficial and promote the bringing up-to-date of studies.

2) Ensure the publication of studied sites. In order to programme a Publications Plan and establish timetables, subject matter and participants, the Scientific Research Committee will draft a "Publishing Plan for Valle Camonica's Rock Art Sites", covering the next decade.

3) Survey and record completely those sites which have not yet been investigated. In this case, too, the Scientific Research Committee will prepare a rough Plan by the end of 2006, indicating sites, research organizations and estimated timetables, giving priority to sites located near to expanding built-up areas, threatened by other development or in a poor state of preservation. For these hitherto un-studied sites, the *IRWeb* recording system will be used, to enable the construction of the CIMAR conservation-state monitoring archive as indicated in the Plan for the Improvement of Facilities (Part III).

Emphasis must be placed on the importance of conducting rock art studies, recording and development in a systematic and uniform fashion, following the operational sequence outlined above in the "Plan for the Improvement of Facilities" (Part III), that is:

- survey
- recording
- study



- publication
- and, at the same time, suitable conservation and development measures.

With regard to survey, this should be based on the GIS map prepared by the *Soprintendenza* for Valle Camonica rock art and archaeological sites; individual rocks should be positioned according to procedures developed by the Centro Camuno di Studi Preistorici, in every case using methods that have been agreed with the *Soprintendenza* and described in the Manual of Good Practice.

As has been stressed above, the occurrence of rock art needs to be understood in a wider context and in relation to the valley's history; it is therefore necessary to pursue lines of research indicated below in the *Plan for Research in Valle Camonica's Prehistoric and Proto-historic Archaeological Sites*.

In the future, it is important that attention also be paid to the less renowned aspects of historical period rock art; the phenomenon does not decline or stop with Valle Camonica's Romanization, nor with the spread of Christianity, but continues to be significant right up to recent centuries, marking and accompanying historical, political, religious, devotional (and personal) events in the valley (SANSONI 1997). Rock engravings need thus to be studied through time, giving more attention to certain groups hitherto considered of marginal importance and little interest because of their recent origin (for example, sites such as Sorline di Angolo, Campanine di Cimbergo, Monticolo di Darfo Boario Terme and others, of particular significance for research concerning "intangible culture").

### **3- Plan for Research in Valle Camonica's Prehistoric and Proto-historic Archaeological Sites**

Prehistoric and proto-historic Valle Camonica is known, and has been studied, largely with regard to the extensive and abundant presence of rock art, which in some cases is found together with (or near) settlements inhabited for long periods (for example, in Luine di Darfo Boario Terme, Seradina and Dos dell'Arca in Capo di Ponte). An all-encompassing study of the valley's history would therefore have to pay particular attention to archaeological sites which were contemporary with examples of rock art, not just those of prehistoric and proto-historic age, but also of subsequent epochs, when the phenomenon is more difficult to recognise and date, but does not disappear.

The tutelage of UNESCO Site N° 94 is based on an ever-deepening knowledge of the territory which is emerging from the investigation of archaeological sites: a more widespread and detailed attention to all archaeological aspects has contributed decisively to the programming of future research, protective measures and the choice of development strategies, as well, of course, of furnishing a more detailed picture of the total archaeological heritage (rock art areas, megalithic sanctuaries, upland cult sites, settlements, burial grounds, transhumance sites, places of work and various activities, mining areas etc.).

The development of rock art from the late Palaeolithic to the Iron Age, not to mention the Roman and Medieval periods and later, was accompanied by widespread settlement of the valley, about which our knowledge is sadly limited, but which involved mainly the mid slopes of the valley sides, extending also into lateral valleys and higher altitudes in order to make use of particular resources (game, pastures, copper and iron ores). The evidence consists of the remains of settlements, burials, religious localities, old mine-workings and sporadic finds, mostly metallic, which have been published as excavation reports and special studies, especially in recent years (ANCEL *et alii* 2000; DE MARINIS 1982 a-d, 1989 a; BIAGI 1989, 1997; FEDELE 1988 a-b, 1990 f, 2003; FERRARI, PESSINA 1997 a; POGGIANI KELLER 1999 a-e, 2000 a, 2001 a-b, 2003, 2004 a-c).



Since 1980, the Ministry of Cultural Heritage and Activities/Lombardy *Soprintendenza* for Archaeological Heritage (Ministero per i Beni e le Attività Culturali-Soprintendenza per i Beni Archeologici della Lombardia) has increased archaeological investigation in sites not necessarily associated with rock art, in preliminary and rescue excavations (numerous *Soprintendenza* digs in Darfo Boario Terme-Luine and Corni Freschi, Cividate Camuno-Via Palazzo, Malegno, Ossimo-Passagròp and Pat, Capo di Ponte-Cemmo, Temù-Desèrt, Cevo-Dos del Curù and Dosso Andròla, Cedegolo-Dosso Poggia and other minor sites) and research projects (excavations by F. Fedele of the Università Federico II, Naples, on Breno Hill, a settlement site, and in the cult and ceremonial site of Ossimo-Anvòia locality; research by M. Tizzoni of the Università degli Studi di Bergamo in the mine at Campolongo di Bienno; the excavation begun by B. Bagolini of the Università di Trento and G. Cremonesi of the Università di Pisa at Coren Pagà di Rogno, and continued by A. Pessina and A. Ferrari).

The picture emerging from this work is rich and complex, and permits a reconstruction to be made of valley settlement from the most ancient periods (the oldest dwelling found dates to the Upper Palaeolithic), settlements, religious and activity sites; less is known at present concerning burial practices.

Work for the creation of the new National Valle Camonica Prehistory Museum (Museo Nazionale della Preistoria della Valle Camonica), due to be opened in 2008, includes the completion of studies concerning all sites known at present, including those dug over thirty years ago and published only in part, such as Dos dell'Arca (ANATI 1982, *passim*) and Luine di Darfo Boario Terme (ANATI 1982; DE MARINIS 1989).

With regard to **settlements**, sites of long duration are found in positions which offer strategic control of principal roads and resources. These were founded in previously unoccupied localities during a period bridging the Late Neolithic and the early Copper Age, in the mid 4<sup>th</sup> millennium BC, which is characterized by the presence of material referable to the "Vasi a Bocca Quadrata" and "Lagozza" Cultures (the latter indicated by the appearance of Breno stamped pottery), and survived on the same sites until the late Iron Age, a notable example of long-term stability.

These long-lived settlements were flanked by less permanent villages, all dating to the mid and Second Iron Age; to date, most of these have been found in the upper valley.

Geographical settlement distribution shows a certain variability, although there is a prevalence of upland settlements. Regarding their organization and structure, little is known. The design of Bronze Age houses is unknown, whilst the Iron Age examples discovered are isolated, sunken and single-roomed with stone perimeter walls. The sunken, single-roomed model, the so-called "Alpine House", is found well into the period of Romanization (1<sup>st</sup> century BC), as in the case of the *Camunni* dwelling in Pescarzo (Fig. 11, n. 11), soon to be equipped for public display.

Traces of metalworking have frequently been found in settlement areas: the frequency of iron smelting associated with settlements suggests that it was a common activity in the valley, based on the natural resources present, and may well explain the presence of several settlements in inhospitable locations.

On the basis of present knowledge, a study of mineral resource distribution and ancient road networks would seem a promising line of research into proto-historic settlement patterns. Traces of the exploitation of a vein of copper ore in about the 9<sup>th</sup> – 8<sup>th</sup> century BC have been found at Bienno-Campolongo (Fig. 11, n. 26) and a mining village discovered at an altitude of over 2000 m in Cevo, in association with rock engravings (boulders with cup marks) and *Camunni* inscriptions.

Little is known with regard to settlement, and even less concerning **burial practices** (Eneolithic rock-shelter burials in Foppe di Nadro; an inhumation cemetery in Breno-Val Morina, dated to the 5<sup>th</sup>-4<sup>th</sup> centuries BC), which remain one of the most



obscure aspects of Valle Camonica's archaeology.

It is most important that the study of the few skeletal remains from the Eneolithic Foppe di Nadro burial ground, which belong to a period of great changes characterized by migrations, sometimes long-distance, should be completed.

**Places of cult and ceremony.** The foundation, in the 4<sup>th</sup> millennium BC, of long-lasting settlements controlling key points in the valley along the course of the Oglio, led, during the next few centuries, to the establishment of striking religious/ceremonial complexes of great significance, some of which were at some distance from the valley itself. These megalithic sanctuaries were distinguished by alignments of engraved steles and boulders, erected during the Copper Age and sometimes used until the historical era, as has been demonstrated by *Soprintendenza* excavations in Ossimo-Passagròp and Pat localities, and in Cemmo, Capo di Ponte (Fig. 11, respectively n. 31, n. 15 and n. 16), where important evidence of rituals and ceremonies has emerged.

The Plan for Research in Valle Camonica's Prehistoric and Proto-historic Archaeological Sites comprises the following points, which have already been put into action by the *Soprintendenza* for Archaeological Heritage, on occasions in collaboration with local authorities, during the period 2005-2007.

- 1- Updating of the Archaeological Map of Valle Camonica, including:
  - GIS mapping of archaeological sites, as described in the Plan for the Improvement of Facilities (Part III) (2005-2006);
  - New surveys to record a backlog of discoveries and to search for new sites (2006-2007), also with reference to historic ways, which are already the subject of a specific research project (Part III, Plan for the Improvement of Facilities).
  
- 2- Recording and study of archaeological sites for the preparation of the National Valle Camonica Prehistory Museum (Museo Nazionale della Preistoria della Valle Camonica) in Capo di Ponte.

The study of the following sites is programmed for the three-year period 2005-2007:

  - Temù/Desèrt (study financed by Temù Council for publication of the 2001 excavation results);
  - Capo di Ponte, Le Sante;
  - Capo di Ponte, Dos dell'Arca;
  - Capo di Ponte, Seradina (recovery and study of finds from CCSP test pits);
  - Darfo Boario Terme, Luine;
  - Malegno, Via Cavour.
  
- 3- Specialist analyses of finds from recent excavations which are especially relevant to the study of anthropological aspects of Valle Camonica's inhabitants and several principal economic activities:
  - Study of human skeletal remains from the Foppe di Nadro rock-shelter and Malegno (2005);
  - Metallurgical analyses of the furnace complexes and slag from the settlements of Lovere (Copper Age – Late Bronze Age) and Malegno (Copper Age, Early Bronze Age, mid Iron Age), the smelting pit in the 6<sup>th</sup> – 5<sup>th</sup> century BC settlement in Temù-Desèrt, the megalithic sanctuaries at Ossimo-Passagròp and Pat, and Capo di Ponte-Cemmo (Copper Age) (2004-2006);
  - Research to locate and sample the metal ore veins mined in the past (2006-2008);
  - Analyses of mollusc and palaeobotanical samples from cult sites in Ossimo and Cemmo, evidence of interesting cult practices (votive fires) associated with the prehistoric sanctuaries (2004-2006).



4- Archaeological investigation of prehistoric and proto-historic sites, as indicated the Lombardy *Soprintendenza* for Archaeological Heritage (Soprintendenza per i Beni Archeologici della Lombardia) Triennial Plan (2005-2007) for Research and Development in Valle Camonica, financed by the Ministry of Cultural Heritage and Activities for a total of € 227,000.00.

The importance should not be forgotten of conducting research and verification into rock art sites, by means of specialist microstratigraphic excavations, so as to shed light on the functions and dating of several sites (Ponte di Legno-Lago di Viso; Breno-Mezzarzo; Capo di Ponte-Piè rock-shelters; Ceto-Foppe di Nadro; Cedegolo-Campolongo etc.).

#### **4- Plan for the Study of the History of Rock Art Research; Analysis and Study of Historical Archives**

A meditation on the history of the research conducted on rock art, over almost a century (1909-2009), should lead to a necessary renewal of study methods, which are tending to become more detailed and multidisciplinary, opening to various specialists. To this end, the *Soprintendenza*, in collaboration with Capo di Ponte Council, organized in October 2005 a conference on the history of rock art research (ENCLOSURE 11), to celebrate the fiftieth anniversary of the foundation of the Parco Nazionale delle Incisioni Rupestri.

The 2005 event constituted the first in a series of historical studies covering the *survey, recording and study of historical archives* present in the valley or kept in Italian universities or scientific institutes, to be conducted in collaboration with the *Soprintendenza* competent for archives.

Attention is drawn to the following archives, with indications concerning the current state of research:

- G. Marro Archive, Turin (survey conducted by T.Doro and G.Brunod: DORO-BRUNOD 1991);
- P. Graziosi Archive, Istituto Italian Institute of Prehistory and Proto-history, Florence (study nearing conclusion under the supervision of Prof. A. Vigliardi of the University of Florence);
- G. Bonafini Archive;
- A. Süss Archive, Brescia;
- Brothers Maffessoli Archives, Capo di Ponte (survey and study started in 2005, with funding from Capo di Ponte Council as part of the activities concerning the history of rock art research in celebration of the fiftieth anniversary of the foundation of the Parco Nazionale Incisioni Rupestri, 1955-2005);
- Ateneo di Brescia Archive;
- Brescia Natural Sciences Museum Archive;
- Borgna Archive, Pinerolo.

In addition, the following should be considered historical archives:

- Archive of the Lombardy *Soprintendenza* for Archaeological Heritage, Milan. This includes documents (ATS-Archivio Topografico), drawn records (ADS-Archivio Disegni) and photographs (AFS-Archivio Fotografico) from more than a century (from the late 19<sup>th</sup> century until the present day), that is, from when the state assumed the tutelage of the archaeological heritage. In 2004, a survey of the *Soprintendenza* Archive regarding Valle Camonica was conducted and the digitalisation of drawn and photographic records completed.
- The Archive of the Centro Camuno di Studi Preistorici, Capo di Ponte, which dates from 1964, with additional records (mainly photographs) from the 1950s. The CCSP began in 2005 the reorganisation and digitalisation of its archive (a project presented in 2005 to the CARIPLO Foundation). A request for it to be considered a Historical



Archive is being examined by the *Soprintendenza* for Archive Heritage.

### 5- Project for Recording Intangible Heritage

The symbolic dimension of beliefs and the deeply seated layer of myth and ritual in which they are rooted is a theme which has been studied by historians and social anthropologists; C. Ginsburg's description in *Nocturnal History: Deciphering the Sabbath*, Turin 1989, is an illuminating example.

In Valle Camonica, studies regarding the recording of this inheritance of (still living) traditions have been conducted over the years by the Valcamonica and Lombardy Department of the CCSP.

More recently, the importance and abundance of the information which can be obtained from a micro-geographical study of an area, which takes account of both material and intangible culture, has clearly emerged from projects carried out by the Central Alpine Anthropological Research Centre (Centro Ricerche Antropologiche Alpi Centrali, CRAAC), Gorzone. It has proved possible to analyze specific historical-epoch sites and rock engravings in the light of popular beliefs and understanding of the local geography, integrating historical and archive records. The research also uncovered evidence concerning the existence of devotions, beliefs and processions not registered in local literature, and made clear the particular importance of these phenomena in the definition of an "enacted" landscape, and the identity of individual communities and the historical and cultural heritage that it contains.

A project for recording the intangible heritage is thus of fundamental importance, because of its connection with the awareness and understanding of rock art. The project is composed of the following points (ENCLOSURE 12):

- The reconstruction and systematic mapping of processional and rogation routes in the valley's towns and villages (a basic tool for reconstructing the significance of the territory in recent centuries).
- The reconstruction and systematic mapping of places of spiritual importance, in particular of *santelle* (roadside shrines, especially those with offerings), votive chapels, ancient graveyards and sites of miraculous or extraordinary happenings.
- The systematic reconstruction of traditional place names, their historical development, and the economic use of the territory (woodland, cultivated fields, pastures, terraces, mines, charcoal burning sites, lime kilns, mills, roads etc.).
- The systematic collection of interviews of ethno-anthropological significance (archived in digital form), which document specific beliefs, stories (*bote*) and legends, prayers, nursery rhymes and folk medicine practices.
- The systematic recording of engravings and graffiti of historical age on rocks or frescos and their comparison with archive and oral records.
- The study of folklore, collected from a historical interdisciplinary perspective.
- The creation of a digital and multimedia archive, available to the public and to all research workers and enthusiasts, which would encourage the circulation and exchange of information.

It is to be hoped that the bodies involved in the preparation of the Management Plan will establish a public site where the records can be stored.

### 6- Specialist Publications

There already exists an established tradition of scientific publications centred on the organizations which operate in the valley; in particular, the CCSP/Valcamonica and Lombardy Department publish numerous series (periodicals, conference procee-





dings, special monographs and site editions). The Lombardy *Soprintendenza* for Archaeological Heritage, apart from the "Notiziario della Soprintendenza Archeologica della Lombardia", started publishing the "Quaderni del Parco Nazionale delle Incisioni Rupestri" in 2005.

The importance of continuing to publish must be stressed, and in particular, as emphasized above, the large quantity of unpublished material.

A Specialist Publication Plan should pursue twin aims, that of presentation and that of content:

1) Design a uniform graphic package which makes readily identifiable all scientific publications regarding UNESCO Site N° 94 "Rock Drawings in Valcamonica", of course maintaining internal distinctions specific to each institution, museum and Park, which will each have a distinctive logo. The graphic project for specialist publications (and that for popular publications referred to in the *Training and Publicity Plan*, see below) could be given to a single studio, selected to create the logo for UNESCO Site N° 94 "Rock Drawings in Valcamonica", or be chosen from competition entries.

2) Proceed systematically, following an agreed Publishing Plan, to publish all that is unpublished, the dimensions of which will be apparent as soon as the Scientific Research Committee compiles a table containing the relevant information. These data will form the basis of the rock art heritage Publishing Plan, which it is our duty to push forwards at regular intervals over the next five years (2005-2009). These systematic rock art records, the publication of which constitutes a Management Plan priority because of its evident importance for tutelage, will be accompanied by *thematic studies*, for which a series of titles furnished by the groups involved in the research are already available: Ploughing and Hierograms, Buildings, Footprints, Mythological Figurations, Schematic Non-Figurative Art.

In order to organize the publication of rock groups, the drafting of a Publishing Plan (2006-2009) by June 2006 is recommended; this will be subdivided into Annual Plans, with priority given to the complete publication of sites.

## 7- Conference and Cultural Event Plan

The vivacity of initiatives connected with rock art on the part of local authorities and institutions (exhibitions, conferences, meetings and lecture series) is considerable. In order for these to have a more incisive and constructive effect in increasing knowledge and raising awareness of the heritage, and involving local people, it is recommended that:

- the events are programmed in an agreed Plan;
- they are distributed evenly throughout the year, with several fixed events which have already become established.

The Managing Authority will be responsible for the **preparation of an approximate calendar for the following years**, based on several popular and established annual events (in the absence of this body, an authority such as the Comunità Montana di Valle Camonica could fulfil the role).

Given the extraordinary longevity of the rock art phenomenon, which lasted until modern times and has always been a traditional form of expression in the valley, an interesting theme for one of the next conferences could be that of *chronology*, to be followed in later conferences by discussion of Medieval and post-Medieval rock art and its associations with other cultural, ethnographic and devotional manifestations. It is also important to encourage initiatives expressly aimed at the local inhabitants (conferences, meetings and refresher courses for those who work in the sector), to



keep them informed and involve them in new developments, research findings and novel initiatives, so as to maintain a lively interest in the UNESCO World Heritage Site and preserve an awareness of the historic value of the valley's cultural inheritance.

It is to be hoped that activity in the Site will be opened to new dimensions which, whilst being rooted in the valley's great rock art patrimony and based on the inseparability of its history and natural features, develop themes related to contemporary art: perspectives such as Art and Nature, Land Art and Landscape Painting, could well find fertile ground and stimulating connections and thus contribute to a revaluation of the universal meaning of Valle Camonica's rock art and perhaps lead to the continuation of this tradition which has continued, uninterrupted, for centuries.

In more concrete terms, this kind of activity could play a part in the correction or mitigation of the valley floor degradation described in Part III: landscape architecture projects could help to recreate the conceptual and physical continuity between the floor and slopes of the valley where rock art sites are located, which has been lost in some places. Another idea would be to involve landscape experts in the design of visitors' rock art itineraries. An important and interesting example of this kind of design, which manages to "organize the landscape" with a minimum of interference, emphasizing natural geometry and using it as a unifying element, is to be seen in the work of the Norwegian architects J. O. Jensen & Børre Skodvin, who designed rest areas on Norwegian tourist trails (1995-1998; [www.jsa.no](http://www.jsa.no)).

It is recommended that a pluriennial programme should be drawn up for this Plan, as for the Publishing Plan, so as to encourage a balanced choice of events and regular spacing throughout the year. In the case of major initiatives, these will be four or five-year plans, organized together with national and international authorities and institutes, and two-year plans for other events.

Cultural events are also discussed in the Cultural Events and Activities Plan (see below).

## **8- Environmental Monitoring Plan**

As was underscored in Part II of this Management Plan, amongst the factors which threaten the survival of the rock art heritage, those connected with human presence and activities are of particular importance, especially atmospheric pollution due to the emission of various gases (not necessarily in the immediate vicinity of the sites), which is also responsible for "acid rain". This causes deterioration of the rock surface and consequently a progressive destruction of the engravings.

For years in Valle Camonica, in the Riserva Naturale Regionale "Boschi del Giovetto di Paline" in the municipality of Borno, which is managed by the Regional Authority for Agricultural and Forestry Development (Ente Regionale per lo Sviluppo dell'Agricoltura e delle Foreste, ERSAF), there has been an area subject to permanent observation of the forest ecosystems' state of health. This forms part of the Forest Ecosystems Control Programme (Controllo Ecosistemi Forestali, CONECOFOR), which was launched in 1995 by the state forestry corps (Corpo Forestale dello Stato) and is part of an international study to control and monitor forest ecosystems (Forest Integrated Cooperative Programme I.C.P. and I.C.P.-Integrated Monitoring). The Giovetto permanent observation area is part of a "Level II Network" ("Rete di Livello II") that comprises a series of intensely monitored sites throughout Italy. In this area, as in two others in Lombardy (LOM1, in Bagni di Masino-SO, and LOM3, in Moggio-LC), various measurements are conducted (climatic, analyses of rain and wind-borne pollutants, flora and fauna, tree condition etc.). These serve to keep a check on the health of woodlands and to deepen our understanding of the factors on



which their existence depends.

It would seem important to enter into collaboration with this programme, and establish a centre for data collection, equipped with sampling devices and measuring instruments to control the quality of air and atmospheric precipitation. This information would contribute to the monitoring of the preservation state of engraved rocks and the determination of protective measures.

As the result of an agreement between the Lombardy *Soprintendenza* for Archaeological Heritage (Soprintendenza per i Beni Archeologici della Lombardia) and ERSAF, one of these data collection centres will be positioned in the Parco Nazionale delle Incisioni Rupestri di Capo di Ponte, where similar research was carried out in 1992 (near Rock 33), in collaboration with the Brescia "Azienda Servizi Municipalizzati", with the aim of measuring the effect of atmospheric pollution (acid rain) on the engraved rocks.

### **11.2 Local Community Involvement Plan**

The conservation of the cultural identity of the local population constitutes a fundamental phase of the project of development and integration with local realities. Knowledge of cultural roots comes from a familiarity with and awareness of Valle Camonica's cultural and historical values. It is indispensable to activate projects specifically aimed at the younger generation, starting from primary school and continuing until youngsters enter the employment market, and to involve old people in the conservation of traditions.

An effective strategy for involving the young would be to propose projects which are integrated in a practical sense with local knowledge and development, as may be seen from the success obtained by the Scuola Elementare Statale "Romolo Galassi", Angolo Terme, with regard to tourist promotion of the Parco Locale di Interesse Sovracomunale del Lago Moro during the school years 2003-4 and 2004-5 (ENCLOSURE 13). The project involved the whole school and numerous specialists in different subjects who assisted the children to carry out the various tasks aimed at promoting the Park, for example: the design of a logo, the production of an information leaflet, a cartoon book, wooden panels and pottery bas-reliefs for the creation of a "fantasy trail". Notice boards and a series of signs and notices indicating local places of interest were designed. The project was composed of six activities which form part of the work of the Valle Camonica Schools Services Coordination Centre (Centro Coordinamento Servizi Scolastici, CCSS), which links together the state and other schools in the valley and formulates projects aimed at students or courses for teachers and other personnel.

Several projects for the promotion and publicizing of rock art and the aims of the UNESCO Site N° 94 Management Plan emerged from the Local Community Involvement Plan, aimed at various sectors of the public. They are outlined below (for further details, see the respective enclosures).

#### **1- Projects for Involving Schools and Universities**

For primary and secondary school students, in accordance with the recent School Reforms (Law dated 28<sup>th</sup> March 2003, N° 53 and Legislative Decree in date 19<sup>th</sup> February 2004, N° 59), a series of educational activities directed at Valle Camonica schools will be developed over the next five years (2005-2009), in order to improve knowledge of the valley's past inhabitants, every-day life and traditions.

a) In this regard, a special project entitled "**Adopt a Rock**" has been launched (ENCLOSURE 14), which aims to increase the awareness of the younger generation concerning the rich rock art heritage that their valley contains. The project was modelled on "Adopt a Monument", which was implemented in Lombardy from 1997 until



2001 in collaboration with the Pégase Foundation, based in the European Parliament in Brussels.

b) **Training Courses for Teachers** will also be organized, both in Valle Camonica and in the Province of Brescia, in collaboration with the Regional Schools Service (Ufficio Scolastico Regionale) and the CCSS, on the subjects of archaeology, rock art and Valle Camonica's art history. These courses will feature the latest research results concerning archaeological sites in Valle Camonica and the respective historical and anthropological conclusions.

c) In order to unite Valle Camonica with other parts of Europe, using modern technology, an attempt will be made to involve the valley schools in the **"eTwinning"** project promoted by the European Community, which aims to *"encourage twinning between European schools through the use of Internet"*. It was inaugurated in Brussels in January 2005 by the commissioner for education, training, culture and multilingualism, and would permit one or more schools in Valle Camonica to twin with schools in other countries which have a rock art heritage (France, Spain, United Kingdom, Sweden and Austria). The principal goals of the project, which is open to every type and level of school, are the exchange of experience, the promotion of intercultural dialogue and the consolidation of a European educational dimension. This initiative could also have the effect of stimulating international scholastic tourism in the valley, as the summer archaeology meetings for foreign teachers seem to have done (in 2005 the schools' director of Capo di Ponte organized a meeting for Austrian teachers, with a financial contribution from the Brescia Provincial Authority).

d) In 2005, the Valle Camonica Mountain Community (Comunità Montana di Valle Camonica) published an announcement concerning Valle Camonica students (**Bando per studenti Camuni**) with the object of assisting those participating in campaigns of field research in and exploration of new archaeological sites (ENCLOSURE 15). The proposal aims to offer financial assistance to public or private projects involving students between 15 and 25 years of age, resident in Valle Camonica, in field research and exploration campaigns concerning new archaeological sites, which have received authorization from the authorities responsible for tutelage in accordance with current legislation (Legislative Decree N° 42/2004). After an evaluation of results, the initiative will be repeated in future years.

## **2- Projects for Spreading Knowledge about the World Heritage Site "Rock Drawings in Valcamonica"**

In order to increase the level of awareness concerning the valley's enormous rock art patrimony and to spread an appreciation of its worldwide importance amongst local people, it is necessary to establish a series of events which, repeated over time, will be looked forward to and have the function of reinforcing a shared identity, be opportunities for social encounters and relations with the external world, and bring tangible benefits to the local economy. Develop, in other words, local pride in being in possession of a heritage that is appreciated internationally, and which therefore needs to be protected and developed with care. Here are some examples of promotional events:

a) In 2005, the Culture Department of the Valle Camonica Mountain Community (Assessorato alla Cultura della Comunità Montana di Valle Camonica) launched a project entitled **"Archeoweek"** (ENCLOSURE 16), with the intention of organizing, every year, a series of events to spread knowledge of archaeology, considered not just from the point of view of research and field work, but also from anthropological, philosophical and psychological stances. The idea is to involve, in addition to



archaeologists and art historians, personalities known to a wider public (journalists and well-known literary, political and theatrical figures) who would be asked for wide-ranging opinions centred on the evolution of thought and human behaviour from prehistoric times to the present day.

b) Other established national and European cultural occasions (already known in Valle Camonica) could provide opportunities for wide-ranging cultural projects, in which the valley's unique rock art heritage would have an important role of high visibility. It is therefore necessary to take part in the cultural events promoted during the year by the Ministry of Cultural Heritage and Activities:

- Culture Week
- Science and Technology Culture Week
- Great Exhibitions organized by the Ministry's head office

c) Support and planning for participation in the following occasions is also recommended:

- European Heritage Days, promoted by the European Parliament and organized on a national basis in the month of September throughout Europe. For 2005 an event entitled "**Del Bene e del Bello**" was organized (ENCLOSURE 17), promoted by the Comunità Montana di Valle Camonica and Consorzio dei Comuni del Bacino Imbrifero Montano di Valle Camonica (BIM), in collaboration with the competent *Soprintendenze*, councils, local tourist offices and the Italian Foundation for the Environment (Fondo per l'Ambiente Italiano, FAI);
- Italian Foundation for the Environment (FAI) Days;
- European Park Days (in 2005, 20<sup>th</sup>-21<sup>st</sup> May)

### **3- Publicizing the Management Plan**

The UNESCO Site N° 94 "Rock Drawings in Valcamonica" Management Plan was first presented during the 7<sup>th</sup> Culture Week (16<sup>th</sup>-22<sup>nd</sup> May 2005) promoted by the Ministry of Cultural Heritage and Activities and at the 3<sup>rd</sup> National Conference of Italian Sites in the UNESCO World Heritage List, "*The Management Strategy for Italian UNESCO Sites*" ("*La strategia per la gestione dei siti italiani UNESCO*") (Turin, 20<sup>th</sup>-22<sup>nd</sup> May 2005).

After this national presentation, which concluded the collaborative enterprise of preparing Management Plans of all Italian UNESCO Sites, under the coordination of the Office for the UNESCO World Heritage List (Ministry of Cultural Heritage and Activities – Research, Innovation and Organization Department) and the National UNESCO and Local "Tourist System" Consultancy (Ufficio Lista del Patrimonio Mondiale dell'UNESCO, Ministero per i Beni e le Attività Culturali – Dipartimento per la Ricerca, l'Innovazione e l'Organizzazione; Consulta Nazionale UNESCO e sistemi turistici locali), the Management Plan was publicly presented in Valle Camonica on 8<sup>th</sup> October 2005.

In addition, a series of meetings are planned, covering the whole area, in which the work done and its aims will be explained to local communities, as well as the proposed measures and the resultant prospects for local growth.

The Management Plan's aims were also illustrated to rock art scholars during conferences held during 2005 in Valle Camonica, which are listed below.

- "*Rupestre.DOC. Valle Camonica's rock art 1955-2005. Techniques, study and recording methods: history and prospects*" (Breno, 25<sup>th</sup>-26<sup>th</sup> June 2005);

- "*Valle Camonica's Rock Art. History of Research; Protagonists, Tendencies and Prospects over a Century*" (Capo di Ponte, 6<sup>th</sup>-8<sup>th</sup> October 2005), organized by the Lombardy *Soprintendenza* for Archaeological Heritage (Soprintendenza per i Beni Archeologici della Lombardia), in collaboration with Capo di Ponte Council, to cele-



brate the 50<sup>th</sup> anniversary of the foundation of the Parco Nazionale delle Incisioni Rupestri di Capo di Ponte: the third day was dedicated to the presentation of the Plan, with the participation of the Office for the UNESCO World Heritage List (Figs. 175-176). On this occasion (8<sup>th</sup> October 2005) the complete Plan was presented, together with a briefer summarized version.

The conference was also accompanied by:

- 1) Inauguration of the *Parco Archeologico Nazionale dei Massi di Cemmo*, 6<sup>th</sup> October 2005;
- 2) Visit to the future National Valle Camonica Prehistory Museum, where work is in progress, 7<sup>th</sup> October 2005;
- 3) Visit to the *Parco Nazionale delle Incisioni Rupestri*, Capo di Ponte, where an exhibition had been mounted on the archaeological finds from nearby "Ritrovamenti archeologici intorno al Parco", 7<sup>th</sup> October 2005;
- 4) Inauguration of the *Parco Archeologico Comunale di Seradina-Bedolina*, 8<sup>th</sup> October 2005;
- 5) A series of lectures to be held in various localities in the valley, in the period from autumn 2005 and winter 2006, as part of the celebration of the 50<sup>th</sup> anniversary of the foundation of the Parco Nazionale delle Incisioni Rupestri di Capo di Ponte (Fig. 177). The lectures will be about archaeological research in prehistoric and proto-historic sites in the valley.

- Press conferences for the presentation of the Site Management Plan, to be held in Brescia and Milan during the winter 2005-2006, the dates and locations of which are still to be decided.

- International conference on Management Plans, organized in Assisi by the Ministry of Cultural Heritage and Activities (Ministero per i Beni e le Attività Culturali).

- "4<sup>th</sup> Conference on Schematic, Non-figurative Art in the Alps", 28<sup>th</sup>-30<sup>th</sup> October 2005 in Saviore, organized by Saviore dell'Adamello Council and Centro Camuno di Studi Preistorici, Dipartimento Valle Camonica e Lombardia: in addition to the Management Plan, the results of excavations conducted by the *Soprintendenza* in Ossimo-Pat locality, di Cevo-Dos del Curù locality and other Lombardy sites with schematic art.

#### **4- Other Proposals**

Another point of contact with and involvement of the local people concerns tourist signs, and was developed by the Tourism Dept. of the Brescia Provincial Authority, which approved in 2004 (N° 2940), a public announcement with regard to "Contributions to councils in the Province of Brescia for the production and installation of bilingual signs". Bilingual, in this context, means in Italian and local dialect. The offer, which expired on 31<sup>st</sup> January 2005, was taken up in Valle Camonica by the councils of Angolo Terme, Borno, Capo di Ponte, Ceto and Lozio. Capo di Ponte Council, in particular, presented a project which included the production of bilingual signs dedicated exclusively to rock art.

A new proposal for 2005 refers explicitly to signs regarding cultural tourism.

#### **11.3 Accessibility and Permeability Plan**

Since the Efficacy and Implementation of this Management Plan depends on an adequate strategy for improving access to Valle Camonica and its internal connections between localities of cultural interest, an Accessibility and Permeability Plan is proposed which privileges rail transport, in particular because of the limited environ-



mental impact (especially with respect to pollution) which this means of transport guarantees. A second project concerns the improvement of road signs, from the point of view of the development of tourism at sites of cultural interest, in particular those with rock engravings, which are not adequately served at present.

### **1- The Brescia-Iseo-Edolo Railway, a Strategic Means of Access to the Rock Art Heritage**

The Brescia-Iseo-Edolo railway line (Ferrovie Nord Milano Esercizio-FNME) is of fundamental importance for guaranteeing and facilitating access to the Valle Camonica World Heritage Site.

Not only does the line run the entire length of the valley, connecting almost all of the municipalities which have Rock Art Parks and sites, but the railway also permits the "sustainable" transport of organized groups of visitors and school parties, overcoming the limits of a mountain road system, which are aggravated by the problems of specific critical points in the valley.

Use of the train's full potential, in order to facilitate an optimum tourist appreciation of the archaeological heritage, would, however, necessitate changes in organization with respect to timetables, routes and stops, not to mention consideration of the connections between stations and Rock Art Sites.

The Provincial Authority (which has been delegated by the Lombardy Regional Authority) is reviewing the whole question of public transport in Valle Camonica, and is considering a proposal for integrating road and rail, with a bus transport network for the lateral valleys around the central rail link. The Brescia-Iseo-Edolo railway will thus maintain its priority over other modes of transport in the valley; all services will be tendered out to a single operator.

The decision to back the primary importance of railway transport must be fully considered in the management proposals for the UNESCO Site. A **specific project regarding the relationship between the railway and the rock art sites** should be prepared, discussing details of timetables, stops, ticket prices, train specifications (guaranteeing, e.g., access for the disabled, a necessity for use by school parties) and the means of integration with connecting transport between stations and Rock Art Park entrances.

It is a fact that most Parks and archaeological museums are distant from railway stations, and that no certain method of public transport between one and the other exists. This lack needs to be overcome by a specific transport project which establishes, in the mid term, pedestrian tracks – including walkways, alternative routes and footpaths – in addition to a bus and taxi service. The need to organize public transport efficiently and increase its use falls within mobility management policy, which ought to be shared by councils and district authorities (under the coordination of the Brescia Provincial Authority, which has overall responsibility).

After the Brescia-Iseo-Edolo rail service has been strengthened and improved, it will be possible to use the train as a tool for the development of Valle Camonica's rock art sites and associated tourism. In the project "**The Graffiti Train**" ("**Il treno dei graffiti**", ENCLOSURE 18), special educational workshops organized on the train become an unusual learning resource for schoolchildren who come to discover rock art.

Capo di Ponte Council's Culture and Public Works Departments, in association with the local tourist association and the "Don Ottavio Tempini" civic library, launched (in January-March 2005) a project entitled "Design/Create the Entrance to Capo di Ponte", as a means of soliciting sketches and proposed designs for a roundabout and pedestrian overpass on the edge of the town, which would consent the road S.S.42 to be crossed in total safety in order to reach the Parco Nazionale delle Incisioni



Rupestri. Entries were solicited from children from the middle and upper schools, technical studios (surveyors, architects, engineers and graphic designers), artists and all interested citizens, without limits of age or area of residence.

## 2- Signs for Tourists on Valle Camonica's Roads

In Part II of this Management Plan (in the paragraph: Access to, and Appreciation of, Parks with Rock Engravings), it was made clear that the presence in Valle Camonica of Rock Art Parks is signposted on valley access roads in an inconsistent and (above all) insufficient fashion. Clear indications that Valle Camonica's rock art belongs to the UNESCO World Heritage List are also lacking.

In order to encourage the widest possible tourist appreciation of these resources, it is essential to publicize the sites, especially along principal roads, by placing suitable informative road signs which would allow the immediate recognition and localization of areas of archaeological, artistic and natural interest.

It was thus decided to prepare a **Plan for Main-Road Tourist Signs** (especially for Strada Statale 42 "Del Tonale e della Mendola" -S.S. 42) that would offer a uniform image of Valle Camonica.

### *Rock Art Park Sign Standards*

It would seem sensible to standardize the signs associated with Valle Camonica's Rock Art Parks, both those which give indications for reaching park areas from major roads (for example S.S. 42) and those concerned with internal trails. They should always make reference to the World Heritage Listing and the UNESCO Site N° 94 Managing Authority.

Since at present the Lombardy Regional Authority has not yet formally accepted the definition of *Archaeological Park* adopted in national legislation (Legislative Decree 42/2004), no norms exist for the regulation of signs in archaeological areas, whilst with regard to Regional areas of natural interest, protected in accordance with Regional Law 86/83 (*General Plan for Regional Protected Areas. Norms for the establishment and management of nature reserves, natural parks and monuments and areas of special natural and environmental importance*), a deliberation of the Regional Council (N° 7/17173 dated 16<sup>th</sup> April 2004) approved "Norms for Signs in Regional Protected Areas".

Signs are classified as follows:

- Symbols (Type A);
- Perimeter and information signs and those giving directions (Type B);
- Signs giving compartmental indications (Type C);
- Information panels (Type D);
- Path signs (Type E).

The areas in Valle Camonica which are currently regulated by these norms are the Riserva Regionale delle Incisioni Rupestri di Ceto, Cimbergo e Paspardo, the Parco Pluritematico di Còren delle Fate a Sonico (inside the Parco Regionale dell'Adamello) and the Parco Comunale di Luine (inside the Parco Locale di Interesse Sovracomunale del Lago Moro).

On the occasion of the fiftieth anniversary celebrations for the Parco Nazionale delle Incisioni Rupestri and the inauguration of two new Parks (Parco Archeologico Nazionale dei Massi di Cemmo and Parco Archeologico Comunale di Seradina-Bedolina) in Capo di Ponte in autumn 2005, signs were increased in number and made uniform in style, with reference to the World Heritage Listing.





## 11.4 Training and Publicity Plan

### **Professional Training**

In order to reconcile the needs of tutelage and conservation of the heritage with the job crisis, which affects the young above all, it is important to implement professional training schemes, so that the Management Plan can produce concrete economic and employment results in the district. Several courses are briefly described below; when activated, they will help to provide employment for the local inhabitants. To date, only the course for technical personnel has been approved and financed by the CARIPLO (Bank) Foundation (Cassa di Risparmio delle Provincie Lombarde).

### **1- Training Course for Technical Personnel Specialized in Field Survey and Digital Graphics Related to the Conservation of the Lithic Archaeological Heritage, and in Particular to Rock Engravings**

These new professional figures, who will not substitute archaeologists and conservators, but rather work with them so as to constantly update information concerning the engraved rocks' preservation state and thus maintain the *IRWeb* monitoring archive, designed and maintained by the Lombardy *Soprintendenza* for Archaeological Heritage (Soprintendenza per i Beni Archeologici della Lombardia), which constitutes the base for the actions described in Part V of the Management Plan. These technical figures will conduct regular fieldwork on engraved rocks and the surrounding areas, collaborating in new discoveries and performing careful recording (using digital technology), and thus contribute to the acquisition of data needed for adoption of conservation tutelage and monitoring plans or measures.

The trained personnel produced by the course could be employed on the project to create a single unified catalogue, which will enrich our knowledge of the entire valley's rock art and its state of conservation. Furthermore, thanks to the technical expertise acquired with regard to surveying stone materials for conservation purposes, those completing the course could also find work in non-archaeological fields (for example concerned with historic buildings).

The UNESCO Site N° 94 Management plan has accepted a "Project for a technical course of survey and digital recording, for conservation purposes, of Lombardy's archaeological lithic heritage" ("Progetto per un Corso di Tecnico di Ricognizione e Restituzione Digitale ai fini conservativi del patrimonio archeologico litico della Lombardia"), proposed in 2005 by the Lombardy *Soprintendenza* for Archaeological Heritage (Soprintendenza per i Beni Archeologici della Lombardia) and financed by the CARIPLO Foundation (Cassa di Risparmio della Provincie Lombarde) (ENCLOSURE 19).

### **2- Course for Operators who Maintain Green Areas in Territories Covered by the UNESCO Site N° 94 "Rock Drawings in Valcamonica" Management Plan**

It is, in practice, inevitable that the engraved rocks in their natural surroundings suffer the results (direct or indirect) produced by any environmental modification, which will affect conservation and visitor appreciation. For this reason, it is particularly important that the management of the entire district and, more specifically, the area surrounding each rock, should take into account the presence of engraved rocks. In particular, attention should be given to the treatment of woodland and other vegetation, from the perspective of the creation and maintenance of scenic surroundings and also to avoid that the presence or absence of certain species increases erosion, damage or leads to poor visitor appreciation of engraved rocks (undermining due to uncovered roots, the proliferation of rock vegetation, excessive shade or exposure to direct sunlight etc.).

Careful consideration must also be given to other maintenance tasks (regarding woodlands, drainage, roads etc.) which, even if conducted at what is thought to be



a safe distance, may have fairly rapid effects on the engravings' state of preservation.

Since, to date, practical indications for operators who maintain green areas near rock art sites have never been codified, it would seem appropriate to train new professional figures, specially prepared in the problem of reconciling management considerations with the tutelage of the archaeological heritage.

The most appropriate institutions with regard to these problems are the Istituto Superiore in Edolo (previously known as the School of Forestry) and the Agriculture Faculty of Milan University, which runs a degree course in Mountain Territory Management from its branch in Edolo. The involvement of both these levels of training will serve to create professionals with differing degrees of responsibility able to work together for an effective and informed management of the territory surrounding the engraved rocks.

The Agriculture Faculty of Milan University (Edolo branch) intends to develop, within currently existing courses, specific themes regarding the environment and landscape in relation to rock art.

### **3- Course for Artisans Specialized in Traditional Valley Crafts**

As described in Part II of the Management Plan, the Valle Camonica Mountain Community (Comunità Montana di Valle Camonica) promoted in 2002 and 2003 numerous community projects designed to encourage and develop craft activities, traditional local products and the valley's natural resources. Many subjects are involved in these fields, such as centres for professional qualifications and companies that provide training programmes, which are important for the conservation of local traditions and products, and increase the level of qualifications in the population, especially among the young.

### **4- Training and Refresher Course for Educators**

With regard to public education in its widest sense, the spreading of the cultural message, it became clear during the resource analyses undertaken for Part II of the Management Plan that in Valle Camonica numerous organizations concerned with teaching and communication aimed at school parties and tourists exist. So as to increase standardization in these services and treat in greater depth certain teaching and education themes, a training and refresher course was prepared for those operating in this sector in the valley.

The course is composed of modules ranging from introductions to Valle Camonica's rock art, archaeology and cultural heritage, to multimedia communication and business management, to give participants the opportunity of continue in their jobs with greater professionalism, or to create their own businesses (ENCLOSURE 20).

Particular attention will be dedicated to questions regarding management and use of the environment in relation to the protection and conservation of the rock art heritage.

### **5- Course for Tourism Workers**

Valle Camonica's tourist resources, in their considerable variety, have not yet found a road which leads to the development and organization of a tourism bringing economic growth in harmony with the surrounding territory. As has already been mentioned, the valley's environmental, historical, artistic and cultural heritage has always been firmly rooted in its geography, but only in isolated cases has been perceived as a tourist resource. Part of this lack of development in tourism in Valle Camonica is, in fact, due to a lack of awareness of its tourist value. In this moment of reflection upon strategies for the future development of the valley, it is necessary to consider the training of those who work in tourism. It is difficult to define these



figures with any precision, because various sectors are included, and the various phases that make up the organization, presentation and implementation of a tourist activity. Hotel and restaurant operators are clearly involved in tourism, as are guides and those who accompany groups, sport instructors etc. Museum staff, bar and shop managers, those who run Bed & Breakfasts and Agritourism outfits may all be considered to work in the tourism sector in its wider sense. (Not to mention those who come into contact with visitors at some time during their stay, and contribute to the series of experiences which add up to an enjoyable holiday - or one to be forgotten as soon as possible).

In order to tackle this problem, the courses have been divided into three categories:

- Specialist and refresher courses are dedicated to tourism workers as more strictly defined, with field trips to deepen understanding or to put theory into practice. The principal subjects offered will be foreign languages, archaeology, art history, the psychology of hospitality, an introduction to marketing and the development of local resources for tourism.
- Those who work in tourism in a wider sense will have more to gain from training courses which concentrate on aspects such as local knowledge and hospitality. The quality of a service is to be seen in the details; the awareness of operating in a field of great interest to visitors will, when it becomes more widespread, create an atmosphere peculiar to places of sojourn which is still lacking.
- Young people in search of employment will be offered courses aimed at training new professional figures, such as specialists able to create tourist packages which make use of various resources in the valley and, aided by an understanding of the nature of potential clients, are attuned to the market. These operators will be able to find the right point of contact between demand and supply and will work singly, assisting local and district authorities with respect to tourist activities and events, or collaborating with travel agencies and tour operators.

## **6- Training Course for Tourism Promoters Who Attract Tourists to Valle Camonica**

The aim is to design and activate, in collaboration with local Upper Schools and training agencies, a training course for professionals specialized in the promotion of the valley. The resulting professional figure should be capable of communicating and publicizing Valle Camonica's rich tourist patrimony in an interesting fashion and in a foreign language, combining the multiple resources present and with particular attention to rock art. The Tourism Promoter should thus be able to choose a precise marketing strategy and implement the measures necessary for reaching the goal of attracting tourists into the valley.

The training course would be an essential instrument for reaching a high level of professionalism, based on a wide and detailed knowledge, not only theoretical, of the valley's resources, historical, artistic, cultural (material and intangible), environmental, sporting etc. Knowledge of the territory should be accompanied by linguistic, communicative and educative capabilities, to be developed by expert teachers.

The sociology of tourism and analysis of statistical data and tendencies of possible markets will also be required to complete the professional training of a promoter. The work of a tourism promoter could be developed on various scales, from the Province of Brescia to national and international levels.

The tourism promoter will publicize the attractions of Valle Camonica itself, and the services offered in the various individual tourist operators' proposals, either singly or in packages. He or she may conduct selected publicity campaigns or participate in collective events, such as tourism fairs and exchanges.

### **Spreading Awareness**

The 'spreading of awareness' means the communication of information concerning



the cultural heritage. It was decided to prepare a specific **Education and Information Plan**, taking into account the organisations which have been active in the valley for years and the need to bring local procedures into line with regional and national standards.

### Introduction

The Legislative Decree dated 22<sup>nd</sup> January 2004, N° 42, in art. 101, following the preceding Legislative Decree in date 29<sup>th</sup> October 1999, N° 490, art. 99, defines cultural institutes and localities and in c. 2 e) defines an "Archaeological Park" as an open-air museum ("*...area characterized by the presence of important archaeological remains and of historical, landscape or environmental interest, equipped as an open-air museum*"). The Archaeological Park therefore shares with the museum "*purposes of education and study*" (ibid., art. 101 c. 2 a), purposes in relation to which the state and Regional Authorities have, during the last ten years, proposed guidelines and created working parties.

On the subject of instruction concerning the cultural heritage and museum education, in 1996 the Ministry of Cultural Heritage and Activities (Ministero per i Beni e le Attività Culturali) set up a *Study Commission for Museum and Territorial Education* (Ministerial Decree in date 16<sup>th</sup> March 1996), which has studied the problem of defining the most important institutional duties of those responsible for Education Services.

In 1998 the Ministry founded the *Centre for Museum and Territorial Education Services* (Ministerial Decree in date 28<sup>th</sup> March 1998), which has the task of nationally coordinating and documenting the activities of the Education Services of the *Soprintendenze*; it also gives guidelines regarding method, organizational models and policy with respect to the recruitment and training of personnel, resource acquisition and management, and the scientific evaluation of strategies employed.

The "*Act concerning technical and scientific criteria and functional standards and the development of museums*" ("*Atto di indirizzo sui criteri tecnico-scientifici e sugli standard di funzionamento e sviluppo dei Musei*") issued by the Ministry of Cultural Heritage and Activities (Ministero per i Beni e le Attività Culturali) on 10<sup>th</sup> May 2001, subsequently defined the quality goals for museum management and development; the professional figure responsible for museums' educational function is the Director of Education Services (Table 1 in Appendix – Definition of principal museum roles with reference to professional figures described in current collective contracts), for whom standards are also listed (in Appendix – Definition of professional figures – reference standards; Director of Education Services: *Degree in subject relevant to museum type – post-graduate teaching qualification – referenced teaching experience – specific training courses*).

This Act was followed by specific Acts passed by individual Regional Authorities; for Lombardy, the essential text was passed by the Regional Council on 20<sup>th</sup> December 2002, N° 7/11643 "*Criteria and guidelines for the official recognition of museums and museum collections in Lombardy, and guidelines regarding the professional qualifications of those who work in museums and with museum collections in Lombardy, in accordance with Regional Law dated 5<sup>th</sup> January 2000, N° 1, commas 130-131*", in which minimum requirements 6 and 11 stipulate the presence of the Director of Education Services and the availability of suitable areas for educational and cultural activities<sup>24</sup>.

With respect to Educational Services, the Lombardy Regional Authority has since 1998 taken a series of steps, the most important of which was the establishment of *Working Party for the promotion, coordination and verification of educational activities concerning the cultural heritage*, which is still in function.

The Working Party, set up following a decree by the Lombardy Regional Authority's Director General for Culture on 17<sup>th</sup> August 1998, is composed of scientific personnel from various museum types, schools representatives, experts in education con-



cerning cultural heritage, a representative of ICOM Italia (International Council of Museums), a functionary from the Milan Soprintendenza per i Beni Storici, Artistici e Demoetnoantropologici and a representative of the Lombardy Schools Office.

The Working Party's objectives are to:

- monitor and coordinate educational activity concerning cultural heritage in Lombardy<sup>25</sup>;
- record, verify and evaluate these experiences;
- prepare relevant projects;
- identify information and publicity channels for both projects and products;
- make contacts with partners;
- coordinate its activities with those of other Regional Authority working parties relevant to museum heritage and services;
- furnish indications concerning standards for exhibitions and their respective catalogues;
- furnish indications concerning the training of education workers.

Amongst the most important achievements of the Working Party is the definition of competences for library and museum staff, which category includes the *Director of Museum and Territorial Education Services* (see Regional Council decision dated 20<sup>th</sup> December 2002, N° 7/11643, in particular Enclosure B – "Guidelines for professional qualifications of those who work in museums and museum collections"). These guidelines were based on research conducted by the Lombardy Regional Authority in 2001 into professional figures working in Lombardy's museums<sup>26</sup>.

Requirements for the "Director of Education Services" mainly involve preparation in teaching and school regulations, together with a general knowledge of museum studies and specific expertise with regard to collections (regulations, specialist methods and procedures concerning the analysis of territorial resources, research, presentation techniques). Familiarity with the use of networked computers and the management of the formalities of inter-institutional cooperation are also requested. These abilities are needed for the implementation of tasks which are important factors in museum development.

Regional Council decision in date 20<sup>th</sup> December 2002, N° 7/11643, indicates as necessary for the Director of Education Services the same qualifications cited in the Ministerial Decree dated 10<sup>th</sup> May 2001, : *Degree in subject relevant to museum type – post-graduate teaching qualification – referenced teaching experience – specific training courses*.

The theme of the quality of museum education services (as well occupying the *Working Party for the promotion, coordination and verification of educational activities concerning the cultural heritage*), has been the subject of debate in seminars and discussion groups since 1996, in the course of which the importance of a structured education service within a museum operated by well-qualified personnel has been repeatedly emphasized. In many cases, the presence of such services has led to a significant increase in active public (not only scholastic) participation in the activities of the museum.

Since educational functions form part of a museum's institutional duties, it follows that the museum itself should decide the lines to be pursued, and control the quality and results achieved.

In recent years in Italy there has been a tendency on the part of several National Museums and *Soprintendenze* (e.g. the "L. Pigorini" National Prehistoric and Ethnographic Museum in Rome, the Pompeii Archaeological *Soprintendenza* and the Capitoline Museums) to manage the educational service, which is considered an additional activity (Legislative Decree 42/2004, art. 117- Additional services, comma e), indirectly, contracting it out to third parties via tender or other procedures (Legislative Decree 42/2004, art. 115 – Forms of management). The organizations which manage development activities must guarantee the standards of quality stip-



ulated in uniform fashion by the Ministry, Regional Authorities, district authorities and universities (Legislative Decree 42/2004, art. 114 – Levels of quality). An examination of the documents regulating several recent public tenders for educational services reveals that particular attention is paid to the professional qualifications of personnel, and that these constitute one of the fundamental issues on which assignment of the contract is decided. In the December 2004 *Rules regulating public tendering of the tour guide and educational assistance service*, the Pompeii Archaeological *Soprintendenza*, has made an “indispensable condition for participation” the possession by personnel of a “classical arts degree in archaeology, a degree in cultural heritage conservation, or a post-graduate archaeology qualification for those who took short degree courses; in all cases, classical archaeology is a necessity”. As well as formal qualifications, experience matured in (referenced) didactic activities was also evaluated on a points system.

The results of studies conducted in 2001 by the Education Services Working Party of the Lombardy Regional Authority indicate that there is also variety in the management of educational services in Lombardy museums: direct management on the part of the museum is the prevailing model, but in a significant proportion, the service is contracted out or operated under concession.

In cases of external management it has emerged that cost must not be the paramount criterion, but that academic competence, and communicative and teaching abilities on the part of personnel are of fundamental importance (see for example the regulations of Milan Council, which has contracted out the management of educational services since 1995, for both the Civic Archaeological and Numismatic Collections and the Applied art Collection and the Castle<sup>27</sup>). Furthermore, the duration of the concession or contract must be such as to offer a certain continuity: for the Civic Collections the period is 3 years, whilst the Natural History Museum stipulates a 5-year agreement; the Pompeii Archaeological *Soprintendenza* contract lasts 4 years.

In response to the high level of professionalism requested, it is therefore essential to train and provide specialist refresher courses for education services personnel with regard to museum collections and heritage.

With respect to Valle Camonica, during preparations for present Management Plan, the Education Sub-commission of the Technical and Scientific Working Party conducted a study on personnel working in the valley and specialized in rock art and collected data (for the period 2002-2004) on services offered, subjects covered, type of approach (guided visits, experimental or workshop activities), existing educational organizations and services, number and qualifications of personnel and client number and type.

In particular, it emerged that educational activities are almost always conducted by personnel external to the Rock Art Parks, since these do not have internal “educational services for clients” defined and structured according the indications of Ministerial Decree in date 10<sup>th</sup> May 2001 (*VII, Relations between museum and public and relative services, Public access, Preliminary conditions for accessibility and public appreciation, 3-Special services for clients*). The exception is the Reserve Teaching Museum, which is an educational service connected to the Riserva Regionale delle Incisioni Rupestri di Ceto, Cimbergo e Paspardo, managed under a 6-year convention by a private firm (Do.Net), which also furnishes other services (surveillance, maintenance, promotion of tourism and hospitality). In other Parks, instruction – directed at schools, parties of adults or single visitors – is conducted by local associations and groups, without any control or direction on behalf of the Park management bodies.

The education organizations operating in Valle Camonica (Archeocamuni, Cooperativa Archeologica “Le Orme dell’uomo”, Do.Net.<sup>28</sup>, Pro Loco di Capo di Ponte, Museo Didattico d’Arte e Vita Preistorica- Archeodromo e GraffitiPark, Archeopark



and, since 2004, Centro Ricerche Antropologiche Alpi Centrali-CRAAC<sup>29</sup>) have furnished a series of dishomogeneous data (ENCLOSURE 21), from which certain interesting points emerge; these are outlined below.

### Clients

An analysis of the types of visitor making use of educational and information services in order to organize their visit to Valle Camonica cannot be made without comparing the figures with data from the Rock Art Parks and tourist numbers in the valley. Although the figures were collected in non-uniform fashion, such a comparison reveals general tendencies which can be checked and further studied.

The picture which emerges from these data shows that between 2002 and 2004 there is an overall fall in the number of visitors using educational services in Valle Camonica of 17%, compatible with that registered in the Rock Art Parks, where the reduction over the same period was 24.8% (Table 17: *Numbers of visitors who use educational and information services in Valle Camonica*; Table 18: *Numbers of visitors to the Parco Nazionale delle Incisioni Rupestri, the Parco Comunale di Luine and the Riserva Regionale delle Incisioni Rupestri di Ceto, Cimbergo e Paspardo*).

The principal client category which makes use of educational services is naturally that of schoolchildren, over 73% of the total visitor numbers (78% in 2002; 80% in 2003; 73% in 2004). The adult public is made up of Italian tourists (12-14%) and foreign visitors (only 2-3%). Nations represented are Holland, Belgium, Germany, Switzerland, France and the United Kingdom.

A comparison, for the year 2004, with data supplied by the Brescia Provincial Authority Tourism Department, Promotion and Statistics Office shows that, of foreign tourists who visit the valley (133,146, an increase of 10.91% with respect to 2003), only a small percentage (2,312, or 1.7% of the total) make use of local guides when visiting cultural sites.

The Archeopark offers services for pre-school groups, summer children's groups and the handicapped (including visually handicapped), a wide range of client types. The "various groups" category includes those from the "Università Popolare" for older citizens, which are presumably also represented in the statistics furnished by other organizations, although not specified in data gathering procedures.

With regard to **school parties** (Fig. 178), it should be underlined that during 2004 a marked reduction in numbers was registered in the valley, due to the coming into force of new school regulations (School Reforms: Law dated 28<sup>th</sup> March 2003, N° 53 and Legislative Decree in date 19<sup>th</sup> February 2004, N° 59) which limit the study of prehistory and ancient civilizations to classes III-V of the Primary (previously Elementary) School. The phenomenon involves both Rock Art parks and education and information organizations. It should be noted, however, that there is a difference in the reductions registered (-21.6% for structures with educational services and -32.8% for Rock Art Parks), evidence that a certain proportion of school parties, as well as adult visitors, come to the valley and use education services but do not visit the Parks (Table 19: *Numbers of visitors using education and information services in Valle Camonica, divided according to type*; Table 20: *Visitor categories registered at the Parco Nazionale delle Incisioni Rupestri di Capo di Ponte and Riserva Regionale delle Incisioni di Ceto Cimbergo e Paspardo over the period 2002-2004*).



For the Parco Nazionale delle Incisioni Rupestri, past visitor statistics are also available, here summarized in a chart for the years 1971-2003. These figures are compiled annually according to various parameters (type, age, provenance, individual visitors or groups) (Table 21).

Although the figures should be treated with caution due to the differing data gathering methods employed, the underlying trend is striking: in 2004 only the total number of visitors to Rock Art Parks in Valle Camonica fell by over 20%, whereas tourism in the valley increased by about 6% (over the period 2002-2004). Thus Valle Camonica, too, suffers from a phenomenon which has been noted in other Italian UNESCO Sites, where the overall number of visitors in the surrounding area increases, but falls in UNESCO World Heritage List sites (reported at the 3<sup>rd</sup> conference on Italian UNESCO Sites, 20<sup>th</sup>-22<sup>nd</sup> May 2005, Turin).

### Provision of Services

All the organizations which provide education services in the valley offer varied programmes of thematic rock art itineraries, but operate in single Parks (the Parco Nazionale delle Incisioni Rupestri di Capo di Ponte in particular) and not in all those present.

Publicity in schools is not restricted to those in the valley or the Province of Brescia but, by means of leaflets and specific websites (see also the chapter "Organizational and Intellectual Resources in Part II of the Management Plan and ENCLOSURE 22, which has a list of useful links), reaches educational institutions in other areas and regions, and offers programmes of varying duration (half days, full days or three days).

In recent years the growth of interest in experimental archaeology, which permits children (and others) to gain knowledge of the ancient world by means of practical experiences, has led most organizations to establish one or more workshops in or near their operational bases.

The most popular subjects are simulated archaeological excavations and metallurgical processes, but the recording of engravings, pottery production, archery, spinning and weaving, music and dance (etc.) are also included. These activities normally accompany visits to Rock Art Parks, and thus encourage school parties to pass an entire day in the valley. Only a small proportion (about 3%) remains for more than one day (Table 22: *Education and information organizations: comparison between numbers and visits lasting more than one day*).

As well as visits dedicated to rock art (about 90% of the total), all of the education organizations, in order to cater for all interests, have also developed nature trails and tours of the valley's historical and artistic attractions.

A growing interest in remains of historical age – especially from the Roman period – should also be noted. Visitor numbers increased by 7% between 2002 and 2004, which is certainly due to the development of the National Valle Camonica Archaeological Museum and the recent opening of the Roman Theatre and Amphitheatre Archaeological Park, both in Cividate Camuno (Table 23: *Education and information organizations: visitor numbers according to itinerary type*).

Within this general picture, a special place is occupied by the Archeopark which alone, in the three-year period under consideration, counted for 49% of all visits by educational institutions to the valley (45% in 2002, 48% in 2003 and 55% in 2004). It is also the only organization to have recently suffered a but modest reduction in visitor numbers: an increase of 3.6% between 2002 and 2003 was followed by a 2.4% decrease between 2003 and 2004.

These figures are probably due, on one hand, to the fascination of visiting recon-





structed prehistoric dwellings and the possibility of trying out various activities and, on the other, of efficacious promotion, which is particularly wide-reaching and effective in this case. As well as traditional publicity and an internet site (an option which offers high visibility and is used by other valley organizations), inserts in children's magazines with discounts and special offers are used, and proposals are offered together with other educational organizations outside Valle Camonica (e.g. the Museum Educational Association which operates in the Milan Natural History Museum). Furthermore, the Archeopark is the only organization which currently has advertising placards on the road Strada Statale 42, from Trescore Balneario (BG) onwards.

It should be noted, however, that in Archeopark's educational programme for Primary Schools, a visit to a Rock Art Park (either the Parco Nazionale delle Incisioni Rupestri di Capo di Ponte, the Parco Comunale di Luine or the Seradina-Bedolina area) is proposed as part of a day's visit and an "alternative" to the afternoon workshops offered by the organization. A visit to the Parco Nazionale delle Incisioni Rupestri di Capo di Ponte or the Seradina-Bedolina area is included in the one and two-day programmes, but it is also possible to pass two whole days inside the Archeopark and thus only visit its educational facilities, without setting foot in a site with rock engravings.

### **Number of Personnel Involved in Education and Training Activities**

Education organizations vary in the number of personnel employed, from a minimum of 6 to a maximum of 30, with an average of 14-15. The overall total is 86, to which figure should be added another 8-12 who work for Do.Net, whose statistics are given in the analysis of Parks, under the Riserva Regionale, since the organization conducts educational activities on behalf of the Reserve.

The work of the Cooperativa Archeologica "Le Orme dell'Uomo", and from 2004, of the Centro Ricerche Antropologiche Alpi Centrali-CRAAC, with schools and other groups, constitutes only part of their activities, which include scientific research, including field surveys, and the organization of exhibitions and conferences, and is not, therefore (as in other cases) their principal or exclusive occupation.

This work is not continuous throughout the year, but concentrated in the months of autumn and spring, when the schools conduct educational visits and the climate is temperate. The problem of the necessity to provide shelter for children when it rains has been partly solved by the inauguration of workshops, which permit the transferal indoors of at least a part of the teaching activities and avoid the cancellation of school trips.

With regard to the low number of foreign tourists registered, this could partly be due to reduced activity of education personnel during the summer months and also to a limited desire on the part of adult visitors to make use of expert guides during visits to cultural localities (not to mention the low visibility of information services).

Most education workers do not possess degrees in archaeology or tourist guide qualifications (as defined by Regional Law N° 65, dated 10<sup>th</sup> December 1986; this function was delegated to Provincial Authorities by Regional Law N°1 in date 5<sup>th</sup> January 2000, art. 44), but they have attended courses on rock art and communication in education produced by the organizations that employ them, as well as European Social Fund Courses for Cultural Tourism Operators, with specific instruction regarding the management of school parties and the preparation of educational projects.

### **The Publishing of Educational and Information Material**

All of the education and information organizations operating in Valle Camonica produce their own teaching material, such as booklets which treat in greater depth the



topics covered in lessons and check sheets for compilation by schoolchildren.

At the end of this analysis, several **Education and Information Plans** are proposed (below). These inevitably overlap in part with other development plans for UNESCO Site N° 94 "Rock Drawings in Valcamonica", especially Improvement of Facilities, Local Community Involvement, Training, Cultural Tourism Reception and Territorial Marketing Plans.

It should be made clear from the outset that, although the teaching value of the reconstructions derived from experimental archaeology (by now widespread in Valle Camonica) is evident, it is of fundamental importance for the Management Plan to reinforce direct contact between the visitor and the cultural heritage, and therefore the Rock Art Parks, an unavoidable starting point for any historical reconstruction of the valley.

A comparison between the number of visitors to the Archeopark and the nearby Parco Comunale di Luine gives pause for thought, although it should be noted that the latter does not accurately register visitor numbers. The situation is even more striking if the Darfo Boario Terme IAT (Informazione Accoglienza Turistica) figures are included for comparison, which mainly concern the spa present in the town (Table 24: *Numbers of visitors to the Archeopark and the Parco Comunale di Luine: 2002-2004*. Table 25: *Numbers of visitors to Darfo Boario Terme, the Archeopark and the Parco Comunale di Luine: 2003-2004*).

It is to be hoped that the disparity could be reduced by closer ties between the Archeopark and the Parco Comunale di Luine and by the implementation of the proposed measures regarding the Park in the Piano di intervento per l'adeguamento e la valorizzazione dei Parchi d'Arte Rupestre (Part III of the Management Plan).

Measures which could improve tourism to the Parco Comunale di Luine include the conservation treatment of engraved rocks (which would make the inscriptions more visible), an increased number of information panels, provision of adequate illumination for nocturnal visits (especially in summer to attract visitors to the spa) and thematic connections with the Parco Locale di Interesse Sovracomunale del Lago Moro, which contains important rock art areas (Monticolo locality in Darfo Boario Terme and Sorline locality in Angolo Terme, for which mid-term development is planned).

### **1. Professional Qualifications for Education Personnel in the UNESCO Site N° 94 "Rock Drawings in Valcamonica"**

According to Italy's recent school reforms, Primary and Secondary Schools should forge closer ties with their local territory and its cultural resources, and museums play a more active role in educational processes, for example by means of contributing teaching experiences (Law 28 March 2003, N° 53 and Legislative Decree in date 19<sup>th</sup> February 2004, N° 59).

These developments in schooling and the growth in museum teaching, as well as resulting in a probable increase in cultural tourism for UNESCO Site N° 94 "Rock Drawings in Valcamonica" after the implementation of the measures contained in this Management Plan, will also make it imperative for education personnel in the valley to update their qualifications, so as to respond to the changing market and offer an optimum service to clients. It is recommended that, in the future, annual training courses should be held for those who work in education, so that visitor requirements may be adequately met (according to indications which result from the monitoring of visitor type: quantity, provenance, age, expectations etc.).

The **training of personnel**, below divided into two categories for the purpose of analysis, is therefore an urgent priority.

a) Personnel already employed in the field of education in Valle Camonica for at least



two years, continually concerned with the subject of rock art, documented by *curriculum vitae*;

b) Personnel entering the profession and in possession of the basic requirements (arts or cultural heritage conservation degree in archaeology, a post-graduate archaeology qualification for those who took short degree courses, a degree in art history or architecture).

Personnel belonging to category a) must acquire the minimum qualifications stipulated (if they do not already possess these) within three years after the presentation of the Management Plan (i.e. by 2008), by taking a specifically designed course (described above).

Furthermore, discussions with the Regional and Provincial Authorities will be initiated with regard to the official recognition of the figure of Specialized Tourist Guide, connected with thematic "Tourist Systems". For Valle Camonica's "Tourist System" (yet to be defined) this figure could be tied to rock art, an especially abundant patrimony in the valley, which for its exceptional nature has been included in the UNESCO World Heritage List.

Lastly, annual refresher courses or seminars will be organized for workers in the field, for the communication of the results of recent archaeological, historical and environmental research carried out in the valley, so that visitors will be offered a continually updated historical and cultural background.

## **2. Establishment of Reception and Education Centres in Rock Art Parks**

As proposed in the Cultural Tourism Reception Plan, reception centres will be established in the valley to furnish information to different types of client: schools and Italian and foreign tourists (for whom material will be prepared in English and German). Where they do not already exist, educational activity areas will be created inside the Rock Art Parks, consisting of teaching/visitor reception rooms with qualified personnel and/or workshops, the use of which will be regulated by the managing bodies.

## **3. Improvement of Educational Facilities in Rock Art Parks**

In the Plan for the Improvement of Facilities, ample space was given to work for the improvement and development of Rock Art Parks (Part III, Improvement of Display Facilities), which are currently dishomogeneous with regard to education, information and public reception facilities. In the above-mentioned Plan, measures that need to be taken to improve public access to, and appreciation of, each Park were outlined. A further future reference point for visitors who wish to discover the numerous archaeological sites in the valley will be the **National Valle Camonica Museum of Prehistory** in Capo di Ponte, due to open in 2008. In addition to exhibition areas covering over 2000 m<sup>2</sup> and offices, spaces are planned for special events and educational and information activities (a temporary-exhibition and conference hall and multimedia centre).

## **4. Client Opinions Concerning Rock Art Parks**

In order to monitor and evaluate rock art development and promotion activities in UNESCO Site N° 94 using standardized parameters, questionnaires will be prepared and distributed, at specific times with prior agreement, in the valley's Rock Art Parks, national, civic and private museums, sites of culture, reception and education centres. The questionnaire will be directed at Italian tourists and those from other countries, and should therefore also be available (at least) in English. The aim is to gain



an awareness of the salient features of the visiting public and its degree of satisfaction, in order to improve the effectiveness of promotional activities.

## 5. Educational Projects for Schoolchildren and Young People Resident in Valle Camonica

A basic theme of the Management Plan is the conservation of the local cultural identity, which especially concerns the younger generation, which must be made aware of the importance of the cultural and historical value of Valle Camonica's rock art inheritance.

In the Local Community Involvement Plan (Part III), several projects were presented which involved young local residents, from Primary School to university students, in an effort to increase knowledge of the valley's ancient inhabitants through direct contact with the cultural heritage, i.e. the engraved rocks themselves.

The projects, listed below, are described in detail in Part IV, Local Community Involvement and Territorial Marketing Plans:

- **Adopt a Rock** (ENCLOSURE 14), modelled on the "Adopt a Monument" project, aims to increase youngsters' awareness of the valley's rock art patrimony;
- **"eTwinning"**, promoted by the European Community to "encourage twinning between European schools by means of the Internet" (Fig. 179);
- participation in the **National Network of Italian Schools Associated with UNESCO**, to involve valley schools in national and international projects (concerning cultural, environmental and social themes);
- **campaign to support the participation of students resident in Valle Camonica**, between 15 and 25 years of age, in seasons of excavation on archaeological sites, previously authorized by the bodies responsible for tutelage under current legislation (Legislative Decree N° 42/2004) (ENCLOSURE 15). It was promoted by the Comunità Montana di Valle Camonica in 2005 and, if judged a success, will be repeated.

Special attention must be dedicated to the **Grade I Secondary** (ex Superior) **Schools**, certainly the most difficult age group to interest in the Parks and museums. Programmes like those promoted by the Valle Camonica School Services Coordination Centre (Centro Coordinamento Servizi Scolastici della Valle Camonica, CCSS) are to be encouraged, such as the Liceo di Breno project to make a CD-ROM about the Parco dell'Anfiteatro e del Teatro Romano in Cividate Camuno. For youngsters in their final year, about to enter the job market, it could be interesting to have "behind the scenes" information concerning the specialized occupations involved in running the Parks, with descriptions of the specific tasks and respective qualifications of workers in maintenance, conservation, cataloguing, promotion, education and management.

## 6. Educational Projects for Schoolchildren and Young People Not Resident in Valle Camonica

Several projects directed at schools (including those abroad), which offer contact with environmental and cultural themes, are described below:

- Following the model of "Nature School" Valle Camonica could organize a variant **Archaeology-Nature-School**, aimed in particular at Infant Schools, Primary and Grade I Secondary Schools. During a week-long field trip, archaeology, history and nature trails would lead to the discovery of the valley's rich heritage.
- For Grade II Secondary Schools, cultural exchanges could be arranged through plurennial conventions with scholastic institutions in other parts of Italy and other European nations, in particular those with rock art (France, Spain, Portugal etc.).



These week-long exchange visits should include guided tours to Rock Art Parks, activity sessions, exchange of information and comparisons between territories to discover similarities and differences. The European school projects Arion and Comenius could be useful starting points.

## 7. Training Courses for Teachers

As well as projects aimed at children, it is fundamental to implement **training courses for teachers** on the subjects of archaeology, rock art and art history in Valle Camonica. These courses would be intended for teachers working in Valle Camonica and the rest of the Province of Brescia, and produced in collaboration with the Regional Authority Schools Office and the Valle Camonica Schools Service Coordination Centre (CCSS).

## 8. Pre-school Visitors

An age group which could most profitably be introduced to rock art is that of pre-school children, for which only recently have several itineraries been organized in the valley. These clients are difficult to manage because cognitive processes regarding the "construction of time" have not yet developed. Compared to adolescents, though, young children have high levels of perception of the events they experience. Following procedures used in various museums in Italy and abroad (archaeological, artistic and historical), the first contact between the child and rock art images and engraving techniques takes place as a form of play, without temporal reference. Games such as "Treasure Hunts" in the Parks, aimed at finding the most common or strangest figures ("Hunt the Image"), could be enjoyable and allow children to discover which human and animal figures are most frequently engraved on certain rocks and why. In such cases, a subsequent workshop on engraving and painting techniques (which are available in the valley) would be an important consolidation of observations made during the visit, and an opportunity to develop manual skills.

## 9. Information for Adults

The clients of education services, and of the organizations which conduct education and information activities, are not only schools of every sort, but also adults from Italy and elsewhere, lone individuals, families and various groups (e.g. cultural or other associations or senior citizens' universities). Suitable strategies must be studied to reach all of these potential visitors and encourage to come to the valley and see its Rock Art Parks, for example on the occasion of Culture Week, European Heritage Days, European Park Days, Italian Fund for the Environment (FAI) Days, as illustrated in more detail in the Local Community Involvement Plan.

For youngsters and families, Prehistory Days could be instituted as annual events associated with visits to Rock Art Parks, archaeological sites and experimental archaeology experiences.

## 10. Information for the Disabled

Recent years have seen a growth in Italy in the attention paid to the disabled in all situations, including the cultural and environmental heritage sector. The Management Plan has also devoted ample space to considering how best to facilitate the appreciation of Rock Art Parks by the handicapped, always recommending **provisions for the access of those with sight or motor handicaps** when improvement work is carried out in established Parks or new Parks or archaeological sites are equipped.

With regard to the visually handicapped, an official website exists for National Parks ([www.soprintendenza-archeologica.lombardia.it/parchivalcamonica](http://www.soprintendenza-archeologica.lombardia.it/parchivalcamonica)) with a section



specially designed for those with poor sight. In the Parco Nazionale delle Incisioni Rupestri di Capo di Ponte, a Braille copy is available of the texts of information panels displayed in the Park.

By 2006, a tactile itinerary will be ready in the Parco Nazionale dei Massi di Cemmo and an itinerary for those with motor or visual disabilities in the Dos Sottolaiolo area, inside the Riserva Regionale delle Incisioni Rupestri di Ceto, Cimbergo e Paspardo. With respect to visits designed for the visually handicapped, meetings will be organized for valley education personnel with experts in the education of the blind and those with poor sight, in which the reception of disabled visitors and explanation of tactile itineraries will be explained.

### **11. Information for Visitors from Abroad**

In order to encourage foreign tourists to visit Valle Camonica, it is necessary that all who work in various sectors of tourism, and especially guides and education and information personnel, are able to communicate effectively and to promote the product "Valle Camonica".

It is therefore most important that language courses designed for those in the culture and tourism sectors are instituted in the valley. Furthermore, suitable information leaflets need to be available in Reception Centres, hotels, restaurants and public centres (see also the Territorial Marketing Plan).

### **12. Publishing**

The printed word is undoubtedly an important tool for the national and international diffusion of knowledge of Valle Camonica's rock art heritage. We will distinguish here between different types of published material which are aimed at different recipients:

- scientific publishing, for which see the Specialist Publishing Plan in this Management Plan (Part IV *Scientific and Technological Research Plan*)
- printed material for schools
- informative material for the public

With regard to school textbooks, it is most important that the Managing Authority launches a promotion campaign aimed at publishers in this sector, to make sure that Valle Camonica's rock art receives full consideration in the pages dedicated to Italian prehistory and proto-history, with texts and illustrations that are adequate and up-to-date. It is probable that such action would stimulate renewed attention from schools and increase the flow of young visitors to the valley.

Educational publications must be carefully divided (on the basis of existing products and data collected on client types) into categories, listed below, aimed at the various sorts of intended recipients:

- 1) material for children of pre-school age, currently non-existent (this category includes games);
- 2) material for children;
- 3) informative material for adults;
- 4) multimedia products.

Strategic decisions regarding the creation of informative publications may be entrusted to a Working Party which also includes the education organizations operating in the valley and specialists in the field. It is recommended that this Working Party should be constituted in autumn 2005, so as to present a finished plan in 2006. Educational and scientific published material should be characterized by an overall similarity in appearance which facilitates recognition and connection with the UNESCO Site, naturally respecting the specific production of each research organization and institution. It will be necessary to create a network of bookshops, situat-



ed in strategic locations in the valley, for the distribution of these publications, as indicated in the Plan for the Reception of Cultural Tourism (see below).

### 11.5 Plan for the Reception of Cultural Tourism

With regard to a cultural tourism management strategy for Valle Camonica, this Management Plan intends to refer to the principles adopted in October 1999 by ICOMOS (International Council of Monuments and Sites), during the 12<sup>th</sup> General Assembly in Mexico. On that occasion a reference document was prepared, the *International Cultural Tourism Charter*, in which guiding principles for sustainable tourism, able to maintain a suitable balance between site conservation and local touristic development, were established.

The Valle Camonica rock art Management Plan also makes reference to Regional Law N° 8 dated 14<sup>th</sup> April 2004 "*Norms for tourism in Lombardy*", with which the Lombardy Regional Authority recognised in part the indications contained in art.5 of Law N° 135/2001, which defined "Local Tourist Systems" (STL) as models for the development of the resources of uniform territorial zones and for the organization of an integrated combination of cultural and environmental heritage and tourist attractions through the creation of collaboration between public and private entities. Specifically, the Lombardy Regional Authority does not make explicit reference to the principal of art.5 concerning "Local Tourist Systems", but has set up "Tourist Systems" which follow these indications.

The picture outlined for tourism in Valle Camonica appears extremely positive, although resources and potential are non-uniformly distributed between the three sub-areas (the lower, middle and upper valley).

Amongst these, the mid valley is characterized by a high density of Rock Art Parks (it contains four of the seven Parks: Parco Nazionale delle Incisioni Rupestri and Parco Archeologico Nazionale dei Massi di Cemmo in Capo di Ponte; Parco Archeologico Comunale di Seradina-Bedolina; Riserva Regionale delle Incisioni Rupestri di Ceto, Cimbergo e Paspardo) and the presence of the National Valle Camonica Prehistoric Museum (under construction in Capo di Ponte), factors which create ample poles of tourist attraction on opposing valley slopes. This sub-area also contains a large number of organizations which offer services for school visits (five out of six: Associazione Pro Loco, Archeocamuni, Archeodromo, Parco tematico Museo Giardino Alpino-Graffitipark in Capo di Ponte and Do.Net in Ceto) and the headquarters of four of the five Research Institutes which study rock art in Valle Camonica and elsewhere in the Alps (the Centro Camuno di Studi Preistorici and the Museo Didattico d'Arte e Vita Preistorica in Capo di Ponte, the Cooperativa Archeologica "Le Orme dell'Uomo" in Cerveno and the Dipartimento Valcamonica e Lombardia in Niardo).

It would seem evident, however, that in order to welcome tourism and distribute it evenly throughout the valley, the Plan for the Reception of Cultural Tourism should take account of all three sub-areas (others of which have also centres of excellence such as the Parco Comunale di Luine (inside the Parco Locale di Interesse Sovracomunale del Lago Moro).

It is also a fact, supported by visitor statistics, that Valle Camonica's rock art is commonly associated with a single municipal area and that there is little awareness of all that is available, even in that same municipality.

It is consequently necessary to:

- Welcome tourists and facilitate their first acquaintance with the subject by indicating the distribution of the great rock art patrimony throughout the valley. The identification of areas, sites and Parks with icons will serve to increase knowledge concerning the different types of engravings and diverse historical periods,



together with the numerous environmental resources and tourist attractions that various localities have to offer. The idea is, in brief, to emphasize the availability of a selection of itineraries and approaches to the discovery of rock art – and with it, Valle Camonica – by means of visiting several Parks.

To further this aim, specific reception areas will be established, known as “**Welcoming Areas**” situated at the junction of access roads and equipped with ample car parks, toilets and play areas. They will also serve to mark the entrance into the valley, and make a great impact, but with respect for the surrounding environment, and be equipped with suitable information placards with icons and colour photographs indicating the position of Parks, museums, tourist offices and useful services. Another possibility would be the installation of digital information services, with images and basic information: Park opening hours and access routes, entrance costs etc.

To welcome and similarly inform visitors to the principal valley tourist centres, such as Boario Terme, Angolo Terme, Edolo, Borno, Ponte di Legno and Montecampione, and those who arrive by train, signs like those described above could be placed in these localities and selected railway stations.

- To establish, in each of the three sub-areas, a **Tourist Reception – or Services – Centre**, with a strategically positioned section dedicated to rock art, networked with the other two centres. The success of this initiative will largely depend on the level of interaction and collaboration between centres.

The centres should offer tourists, Italian or otherwise, all necessary information concerning visits to rock art sites, the various cultural and nature-based tourism proposals available in the valley, road connections and local and regional public transport.

Tourist reception and information services in Valle Camonica are provided by the IAT (Informazione Accoglienza Turistica) offices present, with various names and formal statuses, since the 1930s in the municipalities of Darfo Boario Terme, Edolo and Pontedilegno. Their role is defined in particular by Regional Law N° 28/86, confirmed by Law N° 8, 2004 “*Norms for tourism in Lombardy*”. It is therefore appropriate that they continue to fulfil this function, strengthened by the updating of personnel and the provision of informative material specifically regarding rock art, computer network connections to rock art parks, museums, accommodation structures etc.

The tourist figures in Valle Camonica for the last three years collected from hotels and other structures, show that the total number of visitors, Italians and foreigners, is about 10% of the number registered in the entire Province of Brescia (Table 26: *Tourist figures for the Province of Brescia and Valle Camonica*).

Since Valle Camonica’s tourist potential is considerable, it is essential to implement the following measures in order to improve the number of visitors attracted to the valley’s rock art heritage:

- Improve access to the valley, with regard to both public transport (by rail and road) and private (see the **Accessibility Plan**, including improvement of road signs).
- Modify the Parks’ opening times and closing days to guarantee that tourists have always the possibility of visiting one or two Parks every day of the week.
- Introduce a **Combined Ticket** that is valid for visits to state-owned Parks and culture sites, including those outside the valley, in collaboration with the city of Brescia (ENCLOSURE 23).
- Encourage tourism by combining visits to Rock Art Parks with different activities, such as nature-based tourism and sporting activities, local material culture





(e.g. market shows, fairs, folk events etc.), intangible culture (events associated with local traditions and customs).

- Create a **bookshop network**, which offers a series of publications with shared design features enabling easy recognition (each publication will always be clearly marked with the logo of the body responsible for its production). This common publishing line will include both educational and specialist material, and respect the particular appearance that each research centre or institution chooses for its works.

In order to evaluate the efficiency of reception structures and the transmission of the cultural message, and verify the level of tourist response, a **questionnaire** will be produced for distribution in the valley's Rock Art Parks, culture sites, Welcoming Areas and other reception centres. These questionnaires will furnish information about visitor type (age, academic qualifications, occupation, provenance, length and means of stay in the valley, motives for choices, sources of information etc.) and on the degree of satisfaction with respect to cultural attractions and relative services. This information is essential for the design of more relevant and effective strategies.

### 11.6 Traditional Local Activities Plan

Valle Camonica is a land rich in traditions, diverse and persistent, which the inhabitants keep alive and promote in various ways.

Of particular interest is iron working, because it has ancient roots in local history and is still practiced, largely in the middle valley (remember the Bienno forge-museum). This industry was born in the Iron Age and expanded in the Roman period. Still today in Bienno, an important Late Medieval town renowned for iron working, several modern firms of artisans use hammers and other apparatus which derives from that period.

Also present are wood and stone working, the antique craft of embroidery and numerous activities associated with traditional local alimentary products, which range from diverse cheeses (including goats' and sheep's) to wine, grappa, chestnuts and honey.

Wood sculpture is particularly important in the upper valley, where numerous works are to be found and a significant tradition persisted from the 15<sup>th</sup> to the 18<sup>th</sup> century.

The Valle Camonica Mountain Community (Comunità Montana di Valle Camonica) has recently drawn up a series of community projects (2002-2003) to promote and develop craft activities, traditional local products and natural resources in the valley (see table in Part II, Material Culture: Handicrafts, Traditional Local Products and Natural Resources).

Local food, wine and craft products are popular amongst the locals, and are available in restaurants, agritourism centres and shops, and there is an awareness that they represent an important part of the local cultural heritage, to be conserved and communicated.

They therefore form an integral part of the marketing of the local territory, and are important promotional tools in this respect. Their value as resources is double, in that they constitute a significant attraction for tourists who will surely turn their attention to historical, artistic or other cultural resources present, and are an additional interest for rock art visitors. This added value will be integrated into the various communication, reception and marketing Plans, well represented in local publicity material and also be the subject of specific promotion campaigns.



Rock art stands should clearly be present at the main tourist fairs and conventions held annually in Italy and abroad, and reference to local food, wine and craft products should not be lacking. Together with the distribution of material and sale of tourist packages, tourist operators should arrange for the sampling of local produce and display of craft objects, which will make a powerful contribution to the stimulation of curiosity about and interest in Valle Camonica.

Every year, the Brescia Provincial Authority puts on show the best of local products through participation in fairs involved in the sector (ENCLOSURE 24) and signing contracts with tourist operators.

A special commission nominated by the Management Plan Working Party will prepare a Plan for the programming of participation in national and international tourist fairs and exchanges, so as to develop an efficacious image promotion campaign of the "Valley of the Engravings". Reference will also be made to the projects indicated in the table in Part II, Material Culture: Handicrafts, Traditional Local Products and Natural Resources, which is cited above.

### 11.7 Cultural Events and Activities Plan

Specialist and educational events can be connected, since we are dealing with a huge cultural site of great scientific importance and it is neither possible nor desirable to separate completely these two aspects. Organizers must therefore arrange multi-level, or complementary, events designed for participants varying in age, degree of cultural preparation and interests. An introductory display on the sidelines of a specialist convention, an informative lecture explaining a complex research field, or a guided visit or tour, can increase the understanding of research methods and results on the part of the general public, local residents and schoolchildren, or involve them in projects, and make them concerned about the protection and conservation of the site.

The following events are in programme in the valley, some recurrent and others not; they have already been partly referred to in the *Scientific and Technological Research Plan*.

#### Conferences:

On the occasion of the fiftieth anniversary of the foundation of the Parco Nazionale delle Incisioni Rupestri di Capo di Ponte (1955-2005), the Lombardy *Soprintendenza* for Archaeological Heritage and Capo di Ponte Council have organized a series of events:

- "Rock Art in Valle Camonica: History of Research; Protagonists, Tendencies and Prospects Throughout the Century", Conference 6<sup>th</sup> – 8<sup>th</sup> October 2005;
- Inauguration of the new Parco Archeologico Nazionale dei Massi di Cemmo and Parco Archeologico Comunale di Seradina-Bedolina;
- Photographic exhibition of the Maffessoli Archivio (rock art, characters and events);
- Presentation of Borno Rock 1, with an information panel dealing with interpretation and conservation;
- Exhibition in the Parco Nazionale delle Incisioni Rupestri *Antiquarium* about archaeological finds in the Park and nearby areas (Foppe di Nadro-Riparo 2, Dos dell'Arca, Le Sante etc.);
- Presentation of the *IRWeb* computerized rock art cataloguing system;
- Nocturnal opening of the National Park with concert;
- Series of meetings, held partly in Capo di Ponte and partly in municipalities where discoveries have been made (autumn-winter 2005-2006);
- Official presentation (8<sup>th</sup> October 2005) of the "Rock Drawings in Valcamonica"



## Site Management Plan.

*Cup marks and the Like*, 4<sup>th</sup> conference on schematic non-figurative art in the Alps, 28<sup>th</sup>–30<sup>th</sup> October 2005, organized by the CCSP Valle Camonica and Lombardy Department at Saviore dell'Adamello. A presentation of new areas with "schematic art", research and analysis, debate and future prospects, as well as a consideration of the relations between engravings and archaeological remains throughout the Alps.

2006: a conference with other UNESCO rock art sites to share and compare methods, technical procedures and strategies regarding protection, conservation and development.

Autumn 2006: the biennial *Valcamonica Symposium*, organized by the Centro Camuno di Studi Preistorici.

2007: a conference on the problem of dating rock art; the programme is yet to be defined.

2009: celebration of the hundredth anniversary of the rock art's discovery; the programme is yet to be defined.

### **Exhibitions:**

- Outdoor exhibition: "Valcamonica: the Prehistoric Valley", introducing rock art and Rock Art Parks. The show was organized by the Centro Camuno di Studi Preistorici and exhibited in town centres, squares and streets during August and September 2005.

- Exhibition: "40,000 Years of Contemporary Art: Rock Art Throughout the World", Brescia, 17<sup>th</sup> December 2005–20<sup>th</sup> February 2006, organized by the Centro Camuno di Studi Preistorici (repeat).

## **11.8 Territorial Marketing Plan**

### **Objectives**

Promotion involves the activation of processes which stimulate public interest in a certain product or service. It means making contact with and involving the targeted public, that thought to be particularly receptive to the proposals. It means making known, publicizing, stimulating interest, creating a demand for which we are ready to supply the desired response. In the specific case of Valle Camonica's rock art, it means stimulating a desire to know, to become directly acquainted with, making use of the resources on offer.

Before speaking of a Promotion Plan, it is absolutely necessary to have a "product" and "services", which can be utilized in clearly defined and identifiable ways. Nothing could be worse than a promotional campaign calling attention to something inexistent or not organized. Parting, therefore, from the presupposition that the various components of Valle Camonica's rock art heritage are evolving in this direction, the objective is to communicate and publicize, in Italy and abroad, the image of this important and prestigious resource in order to gain attention, attract visitors and create social and economic development. A message must be formulated which, starting from the resource's cultural and scientific value, expands to become a stimulus to tourism, whilst retaining the necessary attention on safeguarding it and making intelligent use of the surrounding area. With respect to the past, it is necessary to imbue the rock art heritage with the **value of a tourist reference product**, putting into practice a series of measures, interactions and involvements typical of mar-



keting strategies, in order to overcome the obstacles which have, until now, prevented the general public from becoming familiar with it. This unique phenomenon must be recognised as one of the fundamental factors for attracting tourists to Valle Camonica.

It is important to distinguish between communication and promotion, although, of course, promotion uses communication as a vehicle. A distinction should be made between promotional communications as means of publicity and informative communication as a means of conveying factual information which facilitates access and appreciation, and which therefore presupposes that interest exists, that the message had already been received.

Some actions will be directed at specific areas and sectors, whilst others might be of general application. As a first step, Lake Iseo and the Provinces of Brescia and Bergamo could be used as trial areas in which to look for new clients.

Since knowledge of the heritage and awareness of its value are fundamental for its promotion, it is essential to create sensibility throughout the valley, with particular attention to workers in the field and others who might have contact with visitors.

### **Promotion**

#### **Image Creation: Brand-Logo-Slogan**

It is necessary to begin by creating an image which always, everywhere stands for Valle Camonica's rock art in the mind of all visitors. A competition open to famous Italian and overseas advertising agencies would yield an image of reliable quality, and could itself be a promotional strategy because of the media attention it would attract and the involvement of advertising studios obliged to come to grips, perhaps for the first time, with a singular product.

Such a competition has been prepared, aimed at professional graphic designers, for the creation of a logo for UNESCO Site N° 94 "Rock Drawings in Valcamonica", which forms part of the measures for the development and promotion of rock art in the valley (ENCLOSURE 25).

Once the logo is chosen, its use and concession will be regulated according to rules drawn up by the managing authority of UNESCO Site N° 94 "Rock Drawings in Valcamonica".

#### **Distribution of Information**

Ease of obtaining information and other material and is an essential factor in promotion. Brochures and usefully illustrated and informative publications should be distributed as widely as possible with respect to the Rock Art Parks. Tourist Offices, hotels, restaurants and public centres should be constantly supplied with information that is easily consulted and distributed.

#### **Specific Distribution Campaigns in Italy and/or Abroad**

It is also essential to distribute advertising material, in paper or digital form, including specifically targeting certain subjects, such as schools of every sort, known enthusiasts, cultural groups, associations, clubs, council libraries and (especially) various levels of Italian and European tourist organizations:

- ENIT delegations (previously Ente Nazionale del Turismo, renamed Agenzia Nazionale del Turismo), which represent Italian tourist resources abroad;
- Tour operators active in Italy;
- Travel agencies;
- The media.

#### **Educational Tours for Journalists and Tour Operators**

These are typical strategies for allowing small groups of journalists and/or tour oper-



ators to acquire direct knowledge of the places and services that are being promoted. In our case, media representatives from the culture and tourism sectors could be invited to spend a day or two getting to know Valle Camonica's rock art. With the accompaniment of expert guides, they would gain personal experience of the engravings' scientific importance, the ease of visitor appreciation and the attractiveness of the localities. During brief periods of distraction, they would also make the acquaintance of local food, wine and landscape, as well as other aspects of the artistic and historical patrimony. It is essential to place the rock art in its local surroundings, together with other features usually sought after by tourists.

#### **Accommodation and Assistance for Journalists and Tour Operators**

This differs from the previous proposal only in that in this case there is no special invitation, but requests stimulated by the promotional campaign. The ENIT offices present throughout the world receive and transmit them, via the Lombardy Regional Authority, and agreements are made with public bodies and private individuals to sustain the expenses of such visits.

#### **Plan for the Stimulation of Interest, Directed in Particular at National, Regional and Local Television and Radio**

After choosing successful television programmes which cover interesting corners of Italy for the general public, it is necessary to make contacts and negotiate for on-site filming (examples of suitable TV shows: Sereno Variabile, Linea Verde, Geo & Geo, La Domenica del Villaggio, Mela Verde etc.).

Radio stations are also highly effective vehicles of promotion. The cultural importance of our product could be relevant to various programmes. Its value as a tourist resource could be featured in programmes which propose places for weekend visits and the like. Even its mere nomination, as an answer to questions, or location of holiday prizes, could have a powerful promotional effect.

#### **Road Shows**

A series of events for presenting Valle Camonica's rock art could be prepared, featuring film projections, talks by experts, distribution of publicity material, and so on. Local authorities, associations, groups etc. could be invited, together with travel agents from the host town and the local press. Favourable publicity is sure to result. Such occasions could be repeated at varying distances (according to the financial resources available), starting with the immediate hinterland of nearby Provinces and Regions.

A variant might be **promotional motor caravans** which move from place to place, distributing material and organizing small-scale events.

#### **Twinning with other European Sites for Joint Actions (France, Spain, United Kingdom, Sweden, Norway, Portugal, Ireland, Malta)**

The presence of UNESCO Sites with rock art, cave paintings and megalithic structures in many European countries (ENCLOSURE 26) raises the possibility of twinning and joint actions, which would certainly be valuable and advantageous. Promotional campaigns and material, websites and joint events, in accordance with European Community guidelines, could substantially reduce costs, reach a much wider public and build an international reputation.

#### **Creation of a European Rock Art Tour**

The idea is to create a unique tour circuit which joins together all or some of the UNESCO sites featuring rock art (Valle del Côa in Portugal, Tanum in Sweden, the cave paintings of Altamira in Spain and the Valle del Vézère caves in France), using similar promotional strategies to those described above and the various means of



Soprintendenza per i Beni Archeologici della Lombardia

communication available: printed material, website and advertisements, as well as conferences, educational tours etc.

The circuit should be similarly recognizable in all the countries involved (uniform signs and placards) and have special tickets valid for a year. This idea was inspired by the success of the Touring Club Italiano (TCI) proposal for visiting the "Treasures of Italy", with a prize at the end. In the case of Valle Camonica, it could also be successful as a tourist package for the American market, as a type of European tour. The interaction with the special features of each area could enrich the itinerary with other items, after the fashion of the wine and gastronomic tours ("strade dei vini e dei sapori").

### **Sale of Tourist Packages**

These are at the same time a functional tool and an advertisement; publicity clearly has its limits if not backed up by adequate facilities that permit the heritage to be enjoyed. The image easily reaches individuals, who can visit locations on their own, but needs to be organized into packages for groups, or for those who want more than a brief visit and want to acquire some experience and knowledge of the territory. A tourist package becomes a promotional device when used as a vehicle for attracting attention to a tour operator's activities (participation at fairs, direct advertising etc.). The tourist package "Valle Camonica's Rock Art" could be marketed on its own or in combination with different activities in nearby districts (Lakes Garda and Iseo, Franciacorta and Brescia) or similar tourism in other areas (cf. the European Rock Art Tour).

### **Dynamic Publicity**

Once the logo which will represent the valley has been chosen, it can be reproduced on vehicles to increase visibility and emphasize the message. This could be done both in the valley and elsewhere in the province (between Brescia and Valle Camonica), as well as in the rest of Lombardy or still further afield, in the main towns of north Italy.

### **Promotional Signs**

In line with the Plan for Main Road Tourist Signs described in detail above, it is proposed that placards should be prepared, depicting the chosen logo and significant images of the valley and its rock art heritage (similar to those on the motorway in Valle d'Aosta, which indicate the presence of famous castles). These signs could be positioned along the entire A4 Motorway (Milan-Venice), which with regard to accessibility and traffic quantity constitutes a potent means of publicity, and on the A21 Motorway (Turin-Brescia), which is equally close to Valle Camonica and connects with provinces which have historic links with Brescia, Lake Iseo and Darfo Boario Terme. The spread of this image, and therefore of the call towards Valle Camonica's rock art could also catch the attention of airport users at Orio al Serio (BG), Montichiari (BS), Verona and Milano Linate. Air travellers have usually already chosen their destination, but our proposal could suggest novel excursions and visits to them.

### **Cultural School Exchanges**

Since schools constitute one of the basic targets of the Rock Art product, the stipulation of agreements with scholastic institutions for cultural exchanges would supply a known quantity of clients. Such conventions should last a number of years, in order to guarantee a certain continuity of interest. The target area would essentially be Italy, but could include other nations involved in the hypothesized "Rock Art Circuit". Accommodation could consist of hospitality with families, or could make use of the availability of a great deal of space in hotels etc. during the low season. This would also have the advantage of making school visits less seasonal.

Cultural exchanges, which would perhaps last one week, should obviously include guided visits, educational activities, exchange of material and comparison between



home territories, and aim at a wider exploration of the area.

### **Projects Involving the Administrative Services Centre (ex "Provveditorato agli Studi"), to Promote Guided Visits with Particular Attention to Educational Aspects**

Projects should be selected which serve to spread knowledge of rock art and are not limited to guided visits, but also include preparatory instruction with audiovisual and other teaching aids and check sheets. The project could also become an interdisciplinary course at various levels.

### **Advertising Insertions: Newspapers, Specialist and Non-specialist Periodicals, TV and Radio**

One of the most direct and effective means of gaining attention is still the advertisement. The repeated presentation of an image has the effect of increasing its powers of attraction. The large number of tourist magazines to be found is proof that many choices of holiday destinations are influenced by their presence in these publications. Newspapers and magazines continually receive numerous requests for coverage and are more inclined to collaborate, publishing editorial pieces and press releases, when a commercial relationship already exists.

### **Selection of a Real or Imaginary Testimonial**

A well-known strategy for strengthening a product image is to link it with a testimonial which gives reinforcement through its popularity. It is necessary to select a person of guaranteed popularity, not necessarily of local origin. An imaginary testimonial involves the creation of a mascot which always takes part in the advertising campaign.

### **Newspapers/Periodicals**

The foundation of a bilingual newspaper or periodical could have a clear promotional payoff. It is important that this should not be seen as a newsheet for specialists, but rather that it should be a vehicle of cultural tourism proposals, and therefore have an attractive graphic design, interesting contents, and contain pictures in abundance. Collaboration with other UNESCO sites, each of which would contribute images and information regarding its special characteristics, could increase the potential readership of such a publication and thus attract advertisers. Since it would be aimed at the general public, it should attempt to attract as wide a readership as possible.

### **Newsletters**

It is evident that publicity should also be created by means of the internet, and the "electronic newsletter" formula gives the possibility of rapid updates and communications, as well as that of measuring the interest stimulated.

### **Participation in Italian and European Fairs, Independently, Jointly or on Other Stands**

The meeting between demand and supply is mediated, in the field of tourism, by fairs, exchanges and workshops. In the course of the year, there are tens of such occasions in Italy and abroad, a few of which are dedicated to specific sectors or niches. Cultural tourism, the category to which rock art belongs, is of widespread interest. Amongst numerous tourism exchanges, there is that of archaeological tourism in Paestum (SA) (Fig. 180).

Being present at these fairs means spreading the message to a public ready to receive it, well prepared and attentive. It also means coming face to face with other national and overseas organizations, establishing relations and entering into collaboration. Participation can be with one's own stand, equipment, material and events managed individually, or inside the stands of institutions such as ENIT, the Regional



or Provincial Authority, or other organizations, with reduced costs.

### **Tools**

In order to reach the desired objectives, it is essential to be equipped with the necessary instruments. The lynchpin of an effective advertising campaign is the person who coordinates everything, responsible for marketing and press relations, a professional figure that, by means of close contact with all those involved, spreads the image and publicizes each step taken. This requirement should not be undervalued, because past experience shows that, despite important achievements, the general public has not been closely involved, putting at risk the enormous efforts of the dedicated few.

Other essential tools for achieving positive results are:

- The availability of a photographic archive, perhaps digital, and the authorization to distribute and reproduce the images. It is worth remembering that, until recently, both press and television experienced considerable difficulty in this regard, which certainly did not assist the spread of rock art's image. The resolution of this problem, with a selection of images immediately available, would be of great practical assistance to the promotion campaign.
- The creation and installation on-line of a suitable website, in the creation of which it will be necessary to pay attention to its positions in research engines.
- Publication of publicity material, also in several foreign languages.
- Preparation of publicity material in digital form, also in several foreign languages.
- Preparation of professional display material for participation in fairs and other events.
- Equipment.
- Production of give-aways.
- Acquisition of mailing lists for media and professional tour operators (Italian and overseas).
- Acquisition of market and trend research, conducted by research organizations and ENIT delegations by means of questionnaires and specific response analyses.
- Acquisition of statistical data regarding tourism for promotional purposes, subdivided into uniform areas.
- Creation of contacts and conventions.

### **Timing**

The steps to be taken could be roughly separated into two phases. Absolute priority must be given to the creation of an image/logo and the selection of a promoter, followed by the diffusion of the former. Contemporarily, it is necessary to acquire the instruments needed for promotion, and negotiate agreements and conventions.

Illustrated articles and editorial pieces can be spread well in advance, whilst specific promotional campaigns can only be mounted once the localities and facilities for individual tourists and group packages are ready for use.

Particular attention must be paid to the sequence of events and the publicizing of these, remembering that, in general, magazines and other periodicals require copy to be consigned two months in advance.

Promotion must also take heed of the fact that, since the "product" rock art is basically situated outdoors because of its very nature, it cannot be visited with the same facility in all months of the year.

### **Partners**

The authority which manages the implementation of the Plan could negotiate collaboration with organizations operating in the valley who are interested, perhaps only for single promotional events, which may be of an economic, cultural or social nature. The creation of widespread involvement, including by means of training programmes, is fundamental.





The interaction with accommodation facilities, which are present in greatest quantity around Darfo Boario Terme and in the upper valley, is also important. Another strategic sector is that of travel agencies, which can function as tour operators for incoming visitors, thus going beyond the limits which constrain public institutions.

**Internal:**

- Public authorities
- Economic entities (craft, commercial and industrial)
- Cultural bodies (associations, museums and foundations)
- Social organizations (clubs, cooperatives and others)

**External:**

- ENIT
- Lombardy Regional Authority

**Means of Funding**

Leaving aside direct funding from the Managing Authority, this Marketing Plan has also the status of "Tourist System" project/object, as defined in the guidelines of Law 135/2001, received by Regional Law N° 8/2004 and further refined by Regional Council Decisions N° 7/19893, dated 16<sup>th</sup> December 2004, and N° 7/19895.

"Tourist Systems" are distinguished by the provision for concerted action by public bodies and private partners, in ways that are suitable, supporting and efficacious. In this case, it could be advantageous to create a "Transverse Tourist System".

Certain individual actions could be studied to make use of European Community contributions, for example through twinning with other UNESCO sites.

Some actions will involve widespread publicity that could attract sponsorship, as regulated by art. 120 of Legislative Decree 42/2004, which concerns any form of contribution, in goods or services, by private parties in the field of cultural heritage tutelage and development, with the aim of promoting the name, brand, image or products of these.

**11.9 Plan of Actions**

The *Plan of Actions Described in Parts III and IV of the Management Plan* (ENCLOSURE 29) has been structured on the basis of a series of parameters which take into account the main features useful for programming the actions contained in Plans in Parts III and IV:

- 1) Type of Action:** definition of projects or actions proposed in the Plan;
- 2) Position:** it is useful to distinguish between projects or actions which regard all Valle Camonica from those limited to Rock Art Parks;
- 3) Description:** a brief description of the project or action;
- 4) Timetable:** the year or other time period in which the project or action is implemented;
- 5) Reference Authority:** the body or bodies principally responsible for implementing the project or action;
- 6) Financing Body or Bodies:** the body or bodies who supply funding;
- 7) Type of Funding:** the source of funding (local, Regional, state or EC) and the relevant legislation (Law, Decree, Deliberation etc.);
- 8) Other Parties Involved:** other subjects involved, for various reasons, in the project or action;
- 9) Estimated Cost:** the sum available or proposed;
- 10) "IMO" Priority:** every project or action is assigned a priority rating according to the three categories Essential ("Indispensabile"), Improving ("Migliorativo") and Optimizing ("Ottimale")<sup>30</sup>.



## PART V Control and Monitoring of the Management Plan

### 12. Introduction

The presentation of the definitive formulation of the Management Plan does not constitute its termination, but rather the starting point for a continuing process in which new information and the first results of the actions undertaken could lead to modification of the priorities and strategies adopted for this UNESCO Heritage Site. New data and increased understanding will surely result from the regular monitoring and control of the implementation of various projects, and from that of the environmental context (in order to identify potentially damaging factors).

After the formulation of the plans for the recording, protection, conservation and development of UNESCO Site N° 94 "Rock Drawings in Valcamonica"<sup>31</sup>, it is necessary to establish the parameters ("Key Indicators") for the implementation of the individual projects described in the plans and to continually monitor and control the results of these.

According to the definition of the OECD (Organisation for Economic Co-operation and Development<sup>32</sup>), a Key Indicator is a parameter or value derived from parameters which gives information concerning the state of a phenomenon, a sphere or an area. The Key Indicator should be a concise but effective instrument, with the capacity to give as accurate a description as is possible of a phenomenon, and in particular to:

- define an environmental situation using a limited number of parameters and measures with respect to that generally used for a precise description of the phenomenon;
- simplify the explanation of the phenomenon, so that the information derived from the application of a Key Indicator can be easily used by those who are not experts in the fields of the environmental sciences.

The EEA (European Environment Agency), following the OECD's instructions, has defined the **DPSIR** (**D**Driving forces **P**ressures **S**tates **I**mpacts **R**esponses) model (translated into Italian as **FPSIR**: **F**orze trainanti **P**ressioni **S**tato **I**mpatti **R**isposte), which defines relations between various categories of Key Indicators. These categories may be divided into:

- **Driving Forces**, which represent primary human activities (agriculture, industry, transport, energy, tourism etc.), which produce
- **Pressures**, such as, for example, the pollution of the atmosphere and bodies of water, the production of refuse, the exhaustion of natural resources etc., which result in the changes in the
- **State** of the environment and, especially, its quality. The study of environmental change leads to the identification of
- **Impacts** on ecosystems, the economy, society and health. When there is a social reaction to these changes, it may be measured by the Key Indicators of
- **Responses**, which consist of legislation and plans for intervention, designed to recreate conditions of sustainability with regard to environmental pressures, or measures which aim to protect environmental resources so that these do not suffer irreversible damage.

The choice of Key Indicators was made, therefore, with the principal aim of evaluating the condition of the rock art and with the possibility of subsequent corrections in order to guarantee the most effective application of the Management Plan.



Control and monitoring are therefore the most suitable critical instruments for verifying and quantifying project implementation for each of the single Operational Plans; in this way the Management Plan will pass on, after the phase of analysis and preparation, to that of application.

In the Operational Financial Plan, the priorities for action were defined, taking into consideration technical feasibility, resource availability, execution timescales and work already programmed. For several Plans, the formation of commissions is envisaged, with technical assistance from experts from the Management Plan Working Party for UNESCO Site N° 94, and from external specialists.

In practical terms, it was found useful to organize the task on two levels, namely:

1) verification, control and monitoring of the state of implementation and quality of results of the constituent projects of the various Operational Plans, through regular work progress checks (**K.P.I. – Key Performance Indicators and Reporting**);

**2) Monitoring and evaluation of the mid/long-term territorial impact of the Management Plan**, in order to control the strong and weak points that the Plan identified for the UNESCO heritage throughout the entire valley.

With regard to Point 1), it should be noted that, in the current version of the Management Plan, the legal status of the responsible body has not yet been defined, for the reason that the public authorities involved in drawing up the Plan have decided to postpone the procedure to a second phase, preferring an initial trial period of practical experimentation and evaluation.

Notwithstanding the question of the form that the governing authority will take, it is necessary to outline an administrative structure for managing, controlling and monitoring the projects and actions contained in the individual plans.

It should be underlined that the verification of implementation, control and monitoring refer only to the Operational Plans illustrated in Parts III and IV of the Management Plan.

These functions will be carried out by a structure formed from the Management Plan Working Party and Technical Secretariat, composed of an expert or functionary proposed by each of the authorities which underwrote the Declaration of Intent on 20<sup>th</sup> December 2004, and constituting a permanent rock art board of control (or by a structure defined by the future governing authority).

The Working Party/Technical Secretariat will receive, at suitable intervals, periodic Project Reports compiled by those responsible for individual projects, that is say, the responsible authorities indicated in the Operational Financial Plan (Part III of the Management Plan); if two or more bodies are involved, a single point of reference must be defined.

The Project Reports will be compiled according to the indications contained in "Progetto di definizione di un modello per la realizzazione dei Piani di Gestione dei siti UNESCO", produced in 2005 by Ernst & Young Financial Business Advisor S.p.A. on behalf of the Ministry for Cultural Heritage and Activities (Ministero per i Beni e le Attività Culturali).

The individual Project Modules, in addition to details about the specific project or action, will supply information concerning the stage of implementation reached, using the following Key Indicators:

- financial (sum invested)
- economic (progress report)



- technical
- temporal
- impactual.

Since the last Indicator, which measures the effects of the project on the environment and on society, will vary according to pre-established aims and is not necessarily immediately quantifiable, it will be measured using "Performance Indicators" (e.g., in order to measure the increase in visitors to a museum, the number of tickets sold compared to the previous year's figures could be employed) (Table 27: *Example of Project Module from Progetto di definizione di un modello per la realizzazione dei Piani di Gestione dei siti UNESCO*, produced in 2005 by Ernst & Young Financial Business Advisor S.p.A. on behalf of the Ministry for Cultural Heritage and Activities).

With regard to Point 2) above, studies by Ernst & Young have shown the need to record mid and long-term changes (over three to five years) which may affect the patrimony and the territory in various ways following the application of the Management Plan.

The implementation of all or some of the Operational Plans will necessarily have results and consequences, positive and/or negative, on the environment and on the social fabric of the valley.

For example, the valley floor rural renewal (Part III, Facilities Plan) and woodland management programmes should have positive environmental results (assisted by long-term strategies to lower hydrogeological and forest fire risks due to lack of maintenance: Part III, Maintenance and Conservation Plan, and Recovery and Protection Plan). The local population should also derive a series of advantages from the implementation of the Management Plan, such as increased employment in the tourist sector (increased demand for hotels and other accommodation facilities, craft production, food and wine, other commercial activities etc.), and in heritage protection and conservation, cultural fields, local transport etc. (Part IV, Scientific and Technological Research Plan; Local Community Involvement Plan; Training and Education Plan; Cultural Tourism Reception Plan; Traditional Local Activities Plan; Territorial Marketing Plan).

On the other hand, the expected and hoped-for increase in cultural tourism in the valley will inevitably produce negative changes of various sorts, which should be taken into consideration from the outset in order that adequate provisions may be organized.

For example, one of the most predictable negative consequences is an increase in environmental pollution (a decrease in air quality due to increased traffic, domestic heating, refuse production etc.), together with an increase in the consumption of resources (water and electricity).

To these factors, which influence the environment, cultural pressure on residents should be added (the continual proximity of different lifestyles), with the risk of diminished quality of life and therefore increased opposition on the behalf of the local population.

The data obtained from control procedures will be put together with those from monitoring the implementation of Operational Plans, thus allowing the measurement of variations over time in the territorial impact of the Management Plan, and therefore permitting the Plan itself to be updated or modified (radically, if need be).

The control and monitoring system will thus be structured according to defined parameters and timetables, so that, on the basis of the actions carried out (the indi-



vidual projects in each Operational Plan), the authority responsible for the Management Plan (at present, temporarily, the Working Party) will be able to acquire the precise information and indications necessary for programming future work in the mid and long term.

With regard to Project Reports, these will be compiled periodically (every three or six months), as suggested in the study by Ernst & Young Financial Business Advisor S.p.A. which was referred to above.

In this way, the authority responsible for the Management Plan (initially, the Working Party and Technical Secretariat) will have continual access to a complete and up-to-date summary of the state of progress of all the actions and projects in each Operational Plan.

Taking into account all of these considerations, and the fact that one of the Management Plan's principal aims is the **sustainable development of the area**, it would appear of primary importance to also consider all other initiatives that have the aim of protecting the environment and encouraging compatible economic development, which are currently under way in Valle Camonica.

The "**Valle Camonica Local Agenda 21**" project, the preparation of which is at present being completed, involves all of the valley's 41 councils, and is therefore an important opportunity to coordinate all of the programmes which affect the territory<sup>33</sup>.

### 12.1 Control of Maintenance and Conservation Work

[Part III: Operational Maintenance and Conservation Plan; Recovery and Protection Plan]

During the development of the Management Plan, it became clear that it is of fundamental importance that the Valle Camonica rock art UNESCO Heritage Site be subject to *constant maintenance*. The related activities of maintenance, protection and conservation contribute in equal measure to safeguarding the heritage, to ensuring its preservation and transmission to future generations.

Since, therefore, the control of maintenance work is strictly connected to that of protection and tutelage, the reader is referred to the sections dealing with the control of these, where the C.I.M.A.R. Rock Art Monitoring Archive (Catalogo Informatizzato di Monitoraggio dell'Arte Rupestre) is cited as primary instrument of evaluation and analysis.

Maintenance was defined, during the development of the Management Plan (Operational Maintenance and Conservation Plan, Part III), as "the sum of those operations necessary to maintain the value of a heritage site (ordinary maintenance), or restore it (special maintenance), excluding scientific and preservative conservation treatment".

In the case of UNESCO Site N° 94 "Rock Drawings in Valcamonica", maintenance regards essentially:

- rock surfaces;
- the natural environment in which the rocks are situated;
- the Rock Art Parks and associated structures.

The Maintenance category includes all tasks of "Localised Protection"<sup>34</sup>, which includes as priorities the pruning of trees and bushes, cutting of grass and removal of vegetation (but not lichens and micro-organisms, considered under Conservation) from rock surfaces and the immediate vicinity. The *Handbook for the Maintenance of Engraved Rocks* (ENCLOSURE 27, Manual of Good Practice), lists norms to be followed for the ordinary maintenance of rocks and the ground in the immediate vicin-



ity, season by season.

For all protection work regarding the natural environment which the surrounds the rocks (their environmental context), the reader is referred to the *Plan for the Recovery of Woodland and, More Generally, of the Natural Environment Surrounding the Rock Art Parks*, which forms part of the Recovery and Protection Plan (Part III), which indicates methods applicable to the woodland areas in which the Rock Art Parks are situated. This is modelled on a publication produced in 2005 by the Parco Regionale dell'Adamello for the Riserva Regionale delle Incisioni di Ceto, Cimbergo, Paspardo (DUCOLI A. 2005, *Le tipologie forestali della Riserva Regionale delle Incisioni di Ceto, Cimbergo, Paspardo. Analisi quali-quantitativa e indicazioni gestionali propedeutiche alla redazione del Piano di Gestione Forestale*).

It is also necessary to pay particular attention to the maintenance of park facilities, such as access roads, paths, historic itineraries and every variety of equipment designed to improve visitors' appreciation of the rock engravings (for example: walkways, information panels, signs etc.). Maintenance also regards museums, *antiquaria* and storerooms of archaeological material in or associated with the Rock Art Parks.

For the control and monitoring of all maintenance work on or near engraved rocks, it is essential at all times to use the procedures and follow the rules contained in the "Manual of Good Practice" (section: Handbook for the Maintenance of Engraved Rocks), the use of which will be subject to periodic verification by specialized personnel on behalf of the responsible authorities.

With regard to the *conservation* of engraved rock surfaces, the Soprintendenza has the authority to release concessions for conservation work and to supervise all work within the Parks and in publicly or privately owned rock art sites. Authorization depends on the favourable outcome of an evaluation procedure and is followed by supervision and control of the work and, finally, by the certification of its correct execution. Naturally, the project must formulate all the necessary details concerning methods, materials and the qualifications of the personnel involved.

Regardless of who presents a request for authorization of a conservation project, the specialists who conduct the work must possess the qualifications indicated in the Operational Maintenance and Conservation Plan (Part III of this Management Plan).

## 12.2 Control of Recovery Work

[Part III: Operational Facilities Plan]

"Recovery work" includes all activity dedicated to the recovery and improvement (through their transformation) of facilities, in the wide sense, which are currently in disuse, in poor condition or which detract from the appearance of the landscape.

Part III of the Management Plan describes the deteriorated condition of several portions of the valley floor (in the Operational Facilities Plan; see Point 6, Plan for the Renewal of the Valley Floor), which contribute negatively to the impression that Valle Camonica makes on visitors.

In particular, several glaringly obvious cases are cited, involving the impact on the landscape made by the road "Strada Statale 42" and the advertising hoardings which flank it, several electricity lines which cross the valley, industrial areas and premises, overgrown zones, extensive yards and numerous rusted iron fences.

Since landscape improvement in the valley requires the collaboration of local and non-local bodies, considerable investment and an extended timescale (at least ten



years), it is proposed to entrust the project design for landscape recovery of several parts of the valley bottom to a multidisciplinary team of specialists.

The team will select the most suitable methods for transforming uncontrolled growth into sustainable and integrated development and identify trial areas where the first work may be started. These aims are attainable through a better integration between the valley floor industries and the lower valley slopes, by means of environmental improvement.

A provisional list of the bodies involved includes the Valle Camonica Mountain Community (Comunità Montana di Valle Camonica), the Municipalities of the Valle Camonica Drainage Basin Consortium (Consorzio dei Comuni del Bacino Imbrifero di Valle Camonica), the Lombardy Regional Authority (Regione Lombardia), the Soprintendenza for Archaeological Heritage of Lombardy (Soprintendenza per i Beni Archeologici della Lombardia), the Brescia Soprintendenza for Architectural Heritage (Soprintendenza per i Beni Architettonici di Brescia) and the Brescian Provincial Administration (Provincia di Brescia).

With regard to the Rock Art Parks and relative buffer zones, emphasis must be placed on the need to control and monitor all recovery and reconstruction work involving rural buildings and infrastructures (such as historical itineraries) within them and nearby, so as to respect the historical identity of this part of the valley's cultural heritage (see also the indications in the Territorial Coordination Plan for the Parco Regionale dell'Adamello, Art. 24 and Art. 34).

### **12.3 Control of Preventative Measures**

*[Part III: Operational Facilities Plan; Operational Maintenance and Conservation Plan. Part IV: Scientific and Technological Research Plan]*

This category refers to all activities and initiatives having the effect of physically preventing processes which damage or could damage the UNESCO patrimony or the environment which surrounds it.

As indicated in Part III, prevention must act both:

- locally, that is directly on the rock art heritage and
- in a delocalised fashion, on the environmental context in which the heritage occurs (be it an established park or an as yet unstructured area).

It should be made clear that Valle Camonica's rock art heritage is situated in largely wooded areas which are subject to climatic and environmental risks, which may be of natural origin or due to human activity.

A list of factors which put the preservation of the heritage at risk is given in Part II of the Management Plan. In the implementation phase it will be necessary to continually check on those activities and factors which could give rise to risk situations (for example: agriculture, woodland clearance and management, quarrying and excavation, urbanization, industrial and other production, and the consequent treatment and disposal of refuse, hydrogeological effects and fires).

With respect to individual rocks, the importance of monitoring the preservation state of the rock surfaces using the IRWeb inventory, which includes the evaluation of intrinsic and extrinsic risks for each rock, and compiling the C.I.M.A.R. Archive has been frequently emphasized (Parts II, III and IV). This catalogue will compile all available data concerning Valle Camonica's rock art. The IRWeb cataloguing system will be progressively extended from the seven Rock Art Parks which already exist to all rock art sites in the valley, enabling adequate conservation programmes to be organized.



The C.I.M.A.R. Archive will thus become an instrument of control for all the conservation monitoring conducted in Valle Camonica, coordinated by the Soprintendenza for Archaeological Heritage of Lombardy (Soprintendenza per i Beni Archeologici della Lombardia), which is charged with tutelage by the Ministry of Cultural Heritage and Activities (most recent Legislative Decree 42/2004).

The Soprintendenza will check the data inserted in the C.I.M.A.R. Archive, produce reports on the catalogued sites and rocks, and be able to furnish information regarding the progress of the work and the overall state of preservation of the UNESCO Heritage Site.

Since environmental controls are closely linked to sustainable territorial development, the reader is referred to the chapter dealing with the monitoring of sources of pollution.

#### **12.4 Control of Measures Regarding Tutelage**

*[Part IV: Scientific and Technological Research Plan]*

Effective tutelage of the heritage necessitates a thorough understanding of it. For this reason, the contribution of the Scientific and Technological Research Plan is of fundamental importance, since it is an indispensable tool for increasing our knowledge of the rock art patrimony in order to safeguard it better.

From a practical point of view, it seems desirable that the Scientific and Technological Research Committee (which, with the coordination of the Soprintendenza, collaborated in the formulation of the Management Plan) should, together with the Soprintendenza and others involved in research, participate in the constant updating of the project progress reports, until these are completed (ENCLOSURE 28), the completion of rock art site recording and cataloguing (C.I.M.A.R. Archive), field recording, archive studies and publications.

It should be remembered in this context that UNESCO Site N° 94 "Rock Drawings in Valcamonica", recognised as archaeological heritage, is the subject of national legislation regarding tutelage which is applied by the locally competent authority, the Soprintendenza for Archaeological Heritage of Lombardy (most recent Legislative Decree 42/2004), which also constitutes the authority responsible for conservation treatment of the engraved rocks.

#### **12.5 Control of Activities of Transformation**

*[Part III: Operational Facilities Plan; Plan for the Modification of Regulations and Planning Rules]*

In the Management Plan of UNESCO Site N° 94 "Rock Drawings in Valcamonica", all activities which directly affect (at various levels of impact) the morphology of the territory are defined as "Activities of Transformation". These could also potentially affect the rock art heritage and therefore require approval at the project stage by the Soprintendenza for Archaeological Heritage of Lombardy (Soprintendenza per i Beni Archeologici della Lombardia), which exercises functions of tutelage on behalf of the Ministry for Cultural Heritage and Activities (Ministero per i Beni e le Attività Culturali).

These activities include the construction of infrastructures such as roads, electricity lines, gas pipelines and, in general, all activities involving excavation (quarries,





building etc.).

It is also necessary to monitor all activities which could upset the hydrogeological equilibrium and perhaps cause landslips, structural damage or the flooding of rivers. In this case, control should be exercised both by local authorities (such as councils, by means of planning instruments e.g. the "Piani Regolatori Generali") and by environmental agencies<sup>35</sup> and national bodies, such as the Corpo Forestale dello Stato.

Lastly, the Working Party/Technical Secretariat will control the effective functioning of the Study and Coordination Committee for the Definition of Guidelines for the Modification of the Instruments of Territorial Government (see also the Operational Financial Plan and the Plan for Modifying Regulations and Planning Rules).

## 12.6 Control of Protective Measures

*[Part III: Operational Facilities Plan; Recovery and Protection Plan]*

In the plan for protection inside the rock art parks (Part III – Recovery and Protection Plan), the urgent need was stressed for each park to be assessed with regard to the degree of its equipment with protective structures, such as boundary fencing, fences around rocks, walkways, roofing etc.

On the basis of this information, it will be possible to draw up a *Protective Structures Plan* for each park and to programme work for the five-year period

2006-2010.

It must not be forgotten that any proposed work in the vicinity of engraved rocks, including fencing or improvement of public facilities, must be approved by the Soprintendenza for Archaeological Heritage of Lombardy (Soprintendenza per i Beni Archeologici della Lombardia). The projects must describe in detail the materials and procedures to be employed and the qualifications of the personnel involved, and always follow the indications and norms contained in the "Manual of Good Practice" (ENCLOSURE 27).

## 12.7 Control of Development Activities

*[Part III: Operational Facilities Plan. Part IV: Accessibility and Permeability Plan; Cultural Tourism Reception Plan; Territorial Marketing Plan]*

Amongst the numerous development activities indicated in the Management Plan, the priority should be given to the installation of educational and informative material inside the rock art parks.

Each body responsible for park management must therefore submit periodic reports on the improvements and modifications made to visitors' itineraries and relative equipment which are detailed in the Operational Facilities Plan (Part III of the Management Plan). In particular, the perfect correspondence between the projects presented to and approved by the administration authorities, and the methods and materials subsequently employed, will be checked.

Similarly, the park management authorities must also furnish information concerning visitor numbers<sup>36</sup> (with assessment of popularity) and the organization of exhibitions and other cultural events, including publications.

This complex and complete transmission of information is clearly a prerequisite for the preparation of an effective Territorial Marketing Plan.

Monitoring should also be conducted of projects regarding the presentation of archaeological sites which, as is abundantly illustrated in Part III (Operational Plan



for the Development of Prehistoric and Protohistoric Archaeological Sites), can offer visitors both a wider and a more detailed picture of Valle Camonica's pre- and protohistory.

To this end, it is essential that work should be finished on the Museo Nazionale della Preistoria della Valle Camonica in Capo di Ponte, due to open in 2007. The role of this National Museum will be to present, with illustration and explanation, the entire rock art and archaeological patrimony of the valley.

At the same time, work to improve access to the valley must be carried out, in particular with regard to the Brescia-Iseo-Edolo railway and the road S.S.42; the competent authorities will conduct the necessary project control, during both the design phase and as the work progresses. The Welcome Areas and three Reception Centres will also be constructed; this work will be completed in the mid term, since several authorities are involved.

Particular attention will be dedicated to the progressive implementation and control of the actions specified in the Cultural Tourism Reception and Territorial Marketing Plans, in order to coordinate the numerous initiatives, amongst which the creation of a logo/image for the UNESCO Site will have absolute priority. This should not detract from the need to continue wide-ranging promotional activities to stimulate further interest in Valle Camonica's rock art heritage.

## 12.8 Monitoring Sources of Pollution

*[Part III: Operational Maintenance and Conservation Plan. Part IV: Scientific and Technological Research Plan]*

Safeguarding the environment and natural resources is a subject which has received international attention for more than thirty years: the UN organized the Conference on the Human Environment in Stockholm in 1972<sup>37</sup> and, in 2002, the Johannesburg summit: these meetings have reiterated the message that the environment and its resources are not infinite or necessarily renewable, and the conclusion that models of development must be balanced and, above all, compatible with the requirements of conservation.

We repeat here the importance of monitoring the environment that surrounds the rock art heritage, already stated in the paragraph on the Control of Preventative Measures (see above). Environmental pollution can have a negative influence on the state of preservation of the rock surfaces, leading on occasions to the loss of the engraving.

Monitoring activity should also take account of the impact that implementation of the actions contained in the Management Plan will have on the valley, in terms of pollution *sensu lato* and excessive resource exploitation.

Since the sustainable development of the valley constitutes one of the principal aims of the Management Plan, the birth of Local Agenda 21 in Valle Camonica<sup>38</sup> is significant: it is to be hoped that the UNESCO Site N° 94 Management Plan Working Party will be able to reach mutually advantageous agreement with the movement concerning environmental conservation (in the wide sense of "environment as cultural heritage").

The environmental monitoring that will be conducted by the Valle Camonica Local Agenda 21 could most usefully be combined with that foreseen by the Environmental Monitoring Plan (Part IV, Scientific and Technological Research Plan), to be executed in collaboration with E.R.S.A.F. (Regional Authority for Agricultural and Forestry



Services).

The responsible authority (or, in the meantime, the Working Party/Technical Secretariat) will encourage local and valley authorities to voluntarily commence procedures leading to the acquisition of an environmental management system conforming to the international norm ISO 14001 and EU regulation EMAS<sup>39</sup>.

With regard to the Rock Art Parks, see also the "Parks of Quality" (Parchi in Qualità) project, produced in 1999 by ENEA (the Ente per le Nuove Tecnologie, l'Energia e l'Ambiente) for the Ministry for the Environment and Territory, which involved the Parco Fluviale del Po (tratto vercellese/alessandrino) e del Torrente Orba<sup>40</sup> and the Parco Nazionale del Circeo.

### 12.9 Control and Monitoring of Tourism and Human Impact

[Part III: Operational Facilities Plan; Maintenance and Conservation Plan. Part IV: Scientific and Technological Research Plan; Accessibility and Permeability Plan; Cultural Tourism Reception Plan; Territorial Marketing Plan]

Over the last few decades, tourism has emerged as an important sector in the valley's economic growth, with the creation of many jobs and the potential to create many more, some for highly qualified personnel. It is therefore vital that the tourist industry itself ensures the protection of the natural and cultural heritage on which its activity is based, and that it develops in conformity with the principles of sustainability, responding to the needs of present generations without compromising those of future generations<sup>41</sup>.

The "Charter for Sustainable Tourism" was produced at the 1995 World Conference for Sustainable Tourism at Lanzarote; the first point states: *"Tourism development shall be based on criteria of sustainability, which means that it must be ecologically bearable in the long term, as well as economically viable, and ethically and socially equitable for local communities. Sustainable development is a guided process which envisages global management of resources so as to ensure their viability, thus enabling our natural and cultural capital, including protected areas, to be preserved. As a powerful instrument of development, tourism can and should participate actively in the sustainable development strategy. A requirement of sound management of tourism is that the sustainability of the resources on which it depends must be guaranteed"*.

Tourism thus defined, though, requires a generalized reflection upon the interaction between tourist activity and other sectors of the economy. To this end, it is necessary to organize coordinated actions in which all of the parties involved (local authorities, tour operators, hoteliers etc.) participate, and which have long-term aims, whose purpose is the defence of the environment, the cultural heritage and the tourist industry itself, in a design which responds realistically to visitors' expectations.

In order to create sustainable tourism, it is therefore necessary to control and monitor the flow of tourists in the valley, so as to assess their effect on the cultural and natural patrimony and on the local population. Tourism has long been considered a clean resource ("smokeless industry") and the risks to the environment caused by its uncontrolled growth have often been underestimated.

In general, the effects of an excessive tourist load on the territory can be considered under various aspects:

- urban growth into rural areas, causing damage (deforestation, landscape deterioration etc.);



- increased atmospheric pollution due to increased road traffic;
- increased refuse production;
- increased energy consumption;
- increased pollution of water runoff;
- excessive consumption of natural resources;
- strain on facilities originally designed for less intense use.

All these parameters, which may be measured through the monitoring of sources of pollution, must be monitored and controlled with the collaboration of all parties involved in the Management Plan and, especially, those referred to in the Environmental Monitoring Plan (Part IV, Scientific and Technological Research Plan).

With regard to the Rock Art Parks, the checks will operate on two levels:

- for the engraved rocks, through periodic monitoring of the state of preservation, on the basis of the data gathered in the C.I.M.A.R. Archive;
- for the flow of tourists, by means of measurements of monthly and annual numbers, using suitable questionnaires available in all the Parks.

By correlating the data on the rocks' state of health and the numbers of visitors to the Parks it will be possible to estimate the sites' physical carrying capacity, and either regulate the maximum number of visitors or adopt other solutions, which do not endanger the integrity or universal values of the rock art heritage. For example, when an excessive concentration of visitors is often present around a rock which is particularly famous for its engravings, visitors' itineraries could be modified and interest encouraged in other less well known and less congested areas. If, on the other hand, there is an increase in acts of vandalism, a determined effort must be made to communicate with the local population and the general public, and to draw attention to the inestimable cultural and historical importance of the rock art heritage and the need to safeguard it.

Levels of surveillance of the engraved rocks will also be increased, without neglecting other forms of protection and dissuasion, such as the installation of fences and warning signs.

### **12.10 Control and Monitoring of Resident Consensus**

*[Part IV: Local Community Involvement Plan; Training and Education Plan; Traditional Local Activities Plan]*

For tourism to be sustainable, in addition to protecting the environment and the cultural heritage, it is necessary that the lifestyle of residents should be safeguarded.

It has been observed that the attitude of local people towards tourism passes through an initial phase of "euphoria", in which the visitors are well received and accepted, to one of "apathy", in which relations are more formal, which evolves into a phase of "irritation", when the concentration of tourists saturates the locality and the first negative effects on infrastructures and services also used by residents begin to become evident.

In some cases this last phase may develop into a form of "antagonism", in which tourists are seen as the main cause of the territory's problems and a refusal towards tourism itself is found in all who do not work in the sector and benefit directly and immediately from it.

As mentioned in the section on the control of tourist flow and the impact of human activity, "tourist pollution" exists and is a problem for authorities which have to manage a phenomenon that is unstable and varies according to season.

In order to manage tourism without suffering damage from it, apart from reinforcing



ing in residents the idea that it constitutes an economic resource, it is necessary to avoid considering the local population as an "object of consumption" for the use of tourists and, at the same time, to be careful that tourism does not get blame it does not deserve.

Often, in fact, difficulties are not due to the volume of tourism, but rather to mismanagement, which has undervalued the consequences of the phenomenon and then attributes responsibility to it. For example, traffic problems are often caused by day-trippers and commuters rather than real tourists who stay for some time in the locality.

Besides, although it is true that tourism may pose a threat to the environment, it may also constitute an important and effective tool which stimulates authorities to safeguard and recover local traditions.

Resident consensus should thus be controlled and monitored by means of suitable systems, which may be divided into:

- interviews with questionnaires, to measure the level of satisfaction;
- workshops and meetings, like those used in the Agenda 21 process.

With regard to Point a, the use of methods described in the publication "*Towards a local sustainability profile – European Common Indicators*" (ECI), *Methodology Sheets for testing phase 2001-2002 (May 2001)*<sup>42</sup> is planned.

At the third European Conference on Sustainable Cities, held at Hannover (Germany) in 2000, a set of Indicators for local sustainability, developed within the ECI project, was presented.

These Indicators are listed below.

- 1) *Satisfaction of citizens with the quality of the local community*
- 2) *Local contribution to global climate change*
- 3) *Local mobility and passenger transport*
- 4) *Accessibility of green areas and local services*
- 5) *Local air quality*
- 6) *Children's home-school transport*
- 7) *Sustainable management of local authorities and firms*
- 8) *Acoustic pollution*
- 9) *Sustainable land use*
- 10) *Sustainable products*

In 2001, *Ecological Footprint*<sup>43</sup> was added to these ten Indicators.

During 2001 and 2002 an experimental phase was put into action, with the involvement of numerous partners; support and coordination was provided by Ambiente Italia, in partnership with Eurocities (coordination of the 100 major European cities, based in Brussels) and Legambiente (national headquarters, Rome), with the scientific collaboration of West England University (Bristol, UK).

With regard to Point b (workshops and meetings), the fact that Local Agenda 21 has been activated in Valle Camonica at the same time as the implementation of the UNESCO Site N° 94 Management Plan constitutes a good starting point, providing a picture of the situation in 2005. It would be important to reactivate a similar process of resident participation in the mid term, to ascertain whether the objectives associated with a generalized improvement in the quality of life have been reached and whether the sustainability indicators concerning the local population have changed.

#### **KEY INDICATORS FOR THE CONTROL AND MONITORING OF THE MANAGEMENT PLAN** (Table 28)



## NOTES

**1-** Already in the '70 scholars wrote about the presence of 2400 engraved rocks (M. Parent in ANATI 1979 b, p. 7).

**2-** Additional names introduced by the "Valcamonica Centre for Prehistoric Studies" (Centro Camuno di Studi Preistorici) during their engraved rock surveys are given in brackets. These names designate specific rock groups, which were numbered consecutively.

**3-** In 1984, on behalf of the ICCD-Istituto Centrale per il Catalogo e la Documentazione, the Lombardy Soprintendenza of Archaeology produced two IR Sheets; one, for rock art (IR Sheet designed by R. De Marinis), the other, for steles (designed by R. Poggiani Keller).

**4-** In 1989, as part of a detailed project for developing the Parco Nazionale delle Incisioni Rupestri and the Massi di Cemmo, financed by special Ministry funds under Law 449/1987, the decision to create a rock engraving data bank – which then did not exist – was taken, and the IR Sheets designed in 1984 were tried out on a sizeable sample.

Taking the IR Sheets as a starting point, an archiving programme known as "Petra" was drawn up. This system organized the data in seven complementary archives: a rock archive, scene archive, figure archive, graphic archive, photographic archive, bibliographic archive and conservation archive. A study group was formed, coordinated by R. Poggiani Keller of the Soprintendenza and composed of specialists (Prof. Bertucci of the Università di Genova, Prof. R. De Marinis of the Università degli Studi di Milano, A. Fossati of the Cooperative "Le Orme dell'uomo", M. Simões de Abreu, L. Jaffe, M.G. Ruggiero, and C. Modi and C. Baruffi of Ikonos). A Terminological Dictionary was prepared, which served as the basis for subsequent lexicons. This archiving programme was interrupted in 1990, together with the practice of making contact drawings of the engravings (the principal recording method employed prior to the 1990s), in order to find methods that were more objective and rapid, so as to cope with the large number of engravings.

**5-** The inspiration for the project came from A.M. Ardovino, at the time Lombardy's Archaeological Superintendent. F.Iozzi was responsible for software production and programming. The experimentation, development and construction of the database is due to C. Liborio and M.G. Ruggiero (SCA-Società Cooperativa Archeologica di Milano). Conservation matters were coordinated by the conservator L. Ghedin; photogrammetry was by the firm FOART, Parma; assistance was provided by M. Pacchiani and C. Vaira of the Superintendency.

**6-** POGGIANI KELLER, GRASSI, LIBORIO, RUGGIERO 2001; POGGIANI KELLER, LIBORIO, PACCHIENI, RUGGIERO 2001.

**7-** AutoCAD layers are like overlayable manual drawings on transparent polyester sheets and furnish an efficient method of organizing drawing components, keeping them separate in distinct groups. In addition, the use of layers gives great flexibility with regard to which elements are contemporaneously made visible; it is possible, for example, to turn off one or more layers so as to temporarily remove their content from the "complete" drawing, and to plot the desired combinations.

**8-** A.M. Ardovino was responsible for conservation aspects and the adaptation of terminology.

**9-** The system was activated on the Web by D.Vitali e F.Tumiatti. Scientific consultancy, trials and data input were by C.Liborio and M.G.Ruggiero, of the firm SCA (Società Cooperativa Archeologica di Milano). Aspects concerning rock conservation and engraving restoration were coordinated by the conservator A.Sechi. Photogrammetry was by the firm FOART of Parma and assistance to the project was provided by M. Pacchiani and C. Vaira of the Superintendency.

**10-** These finds are destined to be put on display in the new Museo Nazionale della Preistoria della Valle Camonica di Capo di Ponte.



**11-** The Parco Comunale di Luine in Darfo Boario Terme forms part of the Parco Locale di Interesse Sovracomunale del Lago Moro. The Parco pluritematico "Coren de le Fate" di Sonico is part of the Parco Regionale dell'Adamello.

**12-** The search was conducted by the Soprintendenza in collaboration with the Ministry, in particular Central Inspector C. Laviosa who examined the numerous proposals.

**13-** The collection of over seventy Chalcolithic engraved steles and rocks, from sanctuaries and ceremonial sites under excavation on the Ossimo-Borno plateau and in Cemmo, and chance finds, must necessarily be exhibited in the ground-floor rooms and open areas.

**14-** For example in Switzerland A. Planta's pioneering survey of the roads of the Grisons, begun over thirty years ago, led to a reconstruction of the Roman road network (PLANTA A. 1976, *Die römische Iulieroute*, "Helv. Arch.", 7, pp. 16-25): for bibliography and updated information, see RAGHET J. 2002, *Resti di strade e vie romane nell'area alpina dei Grigioni*, in *Attraverso le Alpi. Uomini. Vie. Scambi nell'antichità*, edited by the Archäologisches LandesMuseum Baden-Württemberg, Stuttgart, pp. 59-66. In Austria, studies were initiated during the first half of the twentieth century by H. Bulle: bibliography in POLL J. 2002, *Tracce di antiche vie nel Tirolo settentrionale- "I solchi carrai"*, *ibidem*, pp. 73-81.

**15-** See: BATTISTI C. 2004, *Frammentazione ambientale connettività reti ecologiche*, Provincia di Roma-Assessorato alle politiche agricole, ambientali e Protezione civile, Roma; Jongman R.- PRUGNETTI G. 2004, *Ecological Networks and Greenways. Concept, Design, Implementation*, Cambridge University Press, Cambridge; MALCEVSCI S. - BISOGNI L.G.- GARIBOLDI E. 1996, *Reti ecologiche ed interventi di miglioramento ambientale*, Milano; NEGRI J. (edit.) 2001, *Reti ecologiche. Azioni locali di gestione territoriale per la conservazione dell'ambiente*, "Quaderni di Gargnano", Centro studi "Valerio Giacobini", Milano. Several exemplary multidisciplinary environmental mitigation projects (some still in course) have been conducted by the University of Bergamo's Centro per lo studio del Territorio (FERLINGHETTI R.- MARCHESI E. 2002, *Reti ecologiche in aree urbane a forte criticità. Due casi nel bergamasco*, Atti 97° Congresso della Società Botanica Italiana, Università degli Studi di Lecce, 24th-27th September 2002, Lecce).

**16-** Wood gives the best results with respect to appearance and, especially, protection of the heritage; for these reasons, the Lombardy Soprintendenza for Archaeological Heritage requires the exclusive use of this material.

**17-** Each site is given the same number in the Table as in the list of rock art sites in Part I of the Management Plan; thus the state of research regarding each site may easily be checked.

**18-** The Table, entitled Sum Total of Research, also includes the studies and cataloguing (using the IRWeb system) conducted on behalf of the Lombardy Soprintendenza for Archaeological Heritage in Valle Camonica by the SCA-Società Cooperativa Archeologica since 1997.

**19-** The CNR is the Italian National Research Council and is active in all sectors, from medicine to physics and geology ([www.cnr.it](http://www.cnr.it)). The IDPA (Istituto per la Dinamica dei Processi Ambientali) is composed of 28 research workers specialized in geology (evolution of the Alps, geological resources, geothermal phenomena, underground and surface water, earthquakes, ornamental stones, hydrogeological imbalance, landslides and flooding), environmental sciences (botany, plant ecology, the study of past environments applied to archaeology and the history of man), the climate and its variations, environmental chemistry and IT applied to the sciences. The IDPA researchers operate both locally and internationally, with the assistance of 3 technicians and 4 administrative personnel.

**20-** Researcher for the CNR-IDPA, Milan section, Dalmine branch; Lecturer in Palynology at Milan University and Lecturer in Quaternary Geology at Milan University, Bicocca.

**21-** This examination only concerns studies conducted in the last forty years, that is since organized sur-



vey and research campaigns have been carried out in rock art sites.

**22-** Sites: Borno-Dos Averta/Valzel de Undine; Capo di Ponte-Cemmo; Malegno-Ceresolo/Bagnolo; Ossimo-Asinino/Anvòia; Ossimo Inferiore; Ossimo-Passagròp; Ossimo-Pat; Piancogno-Dassine; Cedegolo-Campolongo; Darfo Boario Terme-Corni Freschi; Ceto-Foppe di Nadro.

**23-** Sites: Borno-town centre Via S. Fermo; Borno-Lazzaretto; Ossimo Superiore-Via S.Carlo; Lozio.

**24-** Regional Authority Decision in date 20th December 2002, N° 7/11643, Minimum requirement 6: "The correct functioning of museums or museum collections requires the presence of professional figures, a director and/or a conservator, a technical employee responsible for safety and museum keepers. The Director of Education Services is essential for museums, and is also recommended for museum collections". Minimum requirement 11: "Museums must guarantee the organization of educational and cultural activities in accordance with museum programmes, and be equipped with the necessary spaces, which can be shared with other museums. It is recommended that these activities should also be developed in the case of museum collections, but are not here considered minimum requirements".

**25-** The Lombardy Regional Authority carried out a study in 2001 on the education services available in museums in Lombardy by means of questionnaires. The results and the questionnaire used are published in AA.VV. s.d., Atti della Quarta Giornata di Studio "Musei e servizi educativi in Lombardia. Sistema Standard Qualità", Milan, Museo della Scienza e della Tecnologia, 2002.

**26-** Satef S.r.l., eds., Le professionalità operanti nel settore dei servizi culturali: i Musei lombardi, Regione Lombardia, I.R.e.F., Milan, October 2001.

**27-** AA.VV. s.d., Atti della Quarta Giornata di Studio "Musei e servizi educativi in Lombardia. Sistema Standard Qualità", Milano, Museo della Scienza e della Tecnologia, 5th December 2002, pp.118-130 and in particular, art. 3 and 4.

**28-** Do.Net operates, by means of a convention, inside the Riserva Regionale delle Incisioni Rupestri di Ceto, Cimbergo e Paspardo: figures concerning visitor numbers are included in Rock Art Park charts.

**29-** CRAAC operates mainly in the Parco Archeologico Nazionale dell'Anfiteatro e Teatro romani di Cividate Camuno.

**30-** The IMO rating was used in Plans of Actions in the Lombardy Regional Authority decision dated 16th December 2004, N° 7/19893 "Guidelines for "Tourist Systems" as per art. 3 of Regional Law in date 14th April 2004 N° 8 "Norms for tourism in Lombardy".

**31-** Part III: Operational Facilities Plan; Maintenance and Conservation Plan; Recovery and Protection Plan; Plan for the Modification of Regulations and Planning Rules; Operational Financial Plan. Part IV: Scientific and Technological Research Plan; Local Community Involvement Plan; Accessibility and Permeability Plan; Training and Education Plan; Cultural Tourism Reception Plan; Traditional Local Activities Plan; Cultural Events and Activities Plan; Territorial Marketing plan.

**32-** The OECD, founded on 14th December 1960, operates in the field of international macroeconomics ([www.oecd.org](http://www.oecd.org)).

**33-** Agenda 21 is an international, national and local plan of action organized by the United Nations, individual governments and multinationals in every field in which man's activity has an impact on the environment. Agenda 21, the Declaration of Rio on the Environment and Development and the Statute of Principles for Sustainable Forest Management were adopted by more than 178 countries at the United Nations Conference on the Environment and Development (UNCED) held at Rio de Janeiro, Brazil, between the 3rd and 14th June 1992.

The full implementation of Agenda 21 and support for the Rio Principles were strongly reaffirmed at the World Summit for Sustainable Development (WSSD), held at Johannesburg (South Africa), between the 26th August and 3rd September 2002.





**34-** The reader is referred to the definition of "Localised Protection" in the Operational Maintenance and Conservation Plan (Part III): "The Localised Protection of a rock or group of rocks, or larger grouping (as long as this is confined), may involve the control of exposure to sunlight, the embankment of surrounding earth and removal of standing water, the correct routing of access paths and tracks, or the adoption of walkways, fences or railings, both to ensure the safety of visitors and to limit access to those rock surfaces which could be most easily walked upon".

**35-** The technical organizations for environmental monitoring and control are mostly managed by the Environmental Agencies: APAT (Agenzia per la Protezione dell'Ambiente e per i Servizi Tecnici), ARPA (Agenzia Regionale Prevenzione e Ambiente) and APPA (Agenzia Provinciale per la Protezione dell'Ambiente). These organizations exercise control by means of numerous public laboratories, central governmental institutes and specialist corps (Autorità di Bacino, Magistrato alle Acque, Comando Carabinieri per la Tutela dell'Ambiente, Corpo Forestale dello Stato etc.) and various technical/scientific institutes (Consiglio Nazionale delle Ricerche, Istituto Superiore di Sanità, Ente per le Nuove Tecnologie, l'Energia e l'Ambiente, and universities) which operate in the field of environmental monitoring and control.

**36-** See also the indications given in the Ministry for Cultural Heritage and Activities Circular N° 51 in date 31st March 2005, which gives Key Indicators for the measurement and evaluation of actions with respect to improvements in management and in the quality of the cultural product.

**37-** 113 heads of state and government participated; the resulting plan of action contained 109 recommendations and a declaration with 26 principles concerning man's rights and responsibilities with respect to the environment. Amongst the results of the Stockholm Conference was the creation of UNEP (United Nations Environmental Programme), which promotes campaigns that favour and safeguard the environment, supervises environmental problems and coordinates the environmental policies of the United Nations and various governments; UNEP is also involved in important research programmes.

**38-** The creation of Local Agenda 21s was foreseen in the 2003 planning document, the Piano Territoriale di Coordinamento Provinciale della Provincia di Brescia. Progetto Preliminare di Piano, Quaderno 2, Brescia, 2003, pp. 300-301. See, in particular, paragraph 5.1.2: "... L'Agenda 21 locale è uno strumento di tutela dell'Ambiente che si basa su un ampio coinvolgimento di soggetti pubblici e privati. Essa può dare un contributo significativo alla formazione ed alla attuazione del PTC e dei PRG, sulla base di una adesione allargata, volontaria e responsabile, di soggetti istituzionali, di categorie economiche, di cittadini. L'Agenda 21 Locale assume come obiettivo il razionale uso delle risorse, secondo criteri di sussidiarietà, di partecipazione, di cooperazione interistituzionale, di pianificazione condivisa, di coprogettazione...".

**39-** ISO (International Organization for Standardisation) is an international body which is responsible for the stipulation of norms. Those regarding the environment (ISO 14000) are defined and discussed by a technical committee (TC207), with the participation of representatives from those countries which belong to the ISO; EMAS (Environmental Management and Audit Scheme) is a regulation adopted by the parliament of the European Union (CE 761/2001). It is administered through government organisations of member states, in Italy by the Ministry for the Environment's Ecolabel-Ecoaudit or EMAS Italia Committee, which is based in the APAT.

Both the ISO 14001 standard and the EMAS regulation have the aim of continually improving the performance of an organization with regard to the quality of the environment. They provide for the attainment of continually improving objectives and therefore of continually reduced environmental impact.

**40-** The Parco Fluviale del Po (tratto vercellese/alessandrino) e del Torrente Orba (or: Po River (Vercellese-Alessandrino Portion) and Orba Stream Park) is the first Protected Area in Piedmont to obtain the environmental standard certificate (29th November 2004). The Istituto Certiquality (an accredited official organization) recognised that the park has developed and correctly and completely applies an environmental management system that conforms to the international ISO 14001 standard, identifying environmental performance improvement and environmental quality goals related to its activity ([www.parcodelpo-vcal.it](http://www.parcodelpo-vcal.it)).



Soprintendenza per i Beni Archeologici della Lombardia

**41-** Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs (World Commission on Environment and Development, "Our Common Future", 1987).

**42-** The use of ECI has the aim of monitoring and evaluating urban existence through categories of sustainability as a base and support for a debate on European policies. The indicators system, developed after prolonged consultation and thus considered a "system of agreed indicators", is broadly based (it was signed by 144 officials from 14 European countries) and covers fields which are correlated with already existing local, national and sectorial indicator systems.

In the context of the Strategy on the Urban Environment, the analysis of the data available confirms the importance of sustainable management of urban mobility and design, land use and building as European strategy priorities, and throws light on new subjects for future action. The importance of the indicators as instruments useful for the design of sustainability policies and the development of suitable methods of action has thus been confirmed.

**43-** The Ecological Footprint means the area of land necessary to sustain a given economy and maintain the same standard of life and consumption; its calculation permits resource consumption and the need to assimilate refuse by a given human population or economy to be estimated and be expressed in terms of a corresponding area of productive land. The Ecological Footprint thus clearly illustrates the "debt" which societies have with respect to the environment.