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## Table of acronyms and abbreviations

<b>A.T.S.</b>	Temporary Association of Purpose "Val d'Alpone - faune, flore e rocce del Cenozoico"
<b>A.T.S. New</b>	The new entity managing the site
<b>C.T.S.</b>	Technical Scientific Committee of the Association "Val d'Alpone - faune, flore e rocce del Cenozoico"
<b>C.T.S. New</b>	The new Technical Scientific Committee
<b>CBCP</b>	Cultural Heritage and Landscape Code (Legislative Decree No. 42 of 22 January 2004 updated with subsequent amendments and additions)
<b>ICOMOS</b>	International Council on Monuments and Sites
<b>IUCN</b>	International Union for Conservation of Nature and Natural Resources (International Union for Conservation of Nature)
<b>OG</b>	Operational Guidelines for the implementation of the World Heritage Convention
<b>OGD</b>	Veneto Tourist Destination Management Organization
<b>OUV</b>	Outstanding Universal Value
<b>PATI</b>	Intermunicipal Land Use Plan
<b>PI</b>	Intervention Plan
<b>PRG</b>	General Regulatory Plan
<b>PTCP</b>	Provincial Coordination Territorial Plan
<b>PTRC</b>	Regional Territorial Coordination Plan
<b>SWOT</b>	Strengths, Weaknesses,, Opportunities, and Threats
<b>UNESCO</b>	United Nations Educational, Scientific and Cultural Organization
<b>WHC</b>	World Heritage Centre
<b>WHL</b>	World Heritage List

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# PART 1

## INTRODUCTION

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The geopaleontological heritage of the Val d'Alpone marks and distinguishes the historical identity of the valley and local communities symbolically recognize themselves in some of these elements. At the same time, this paleontological heritage formed by natural fossil records is able to describe and tell the story of the Eocene marine ecosystem of planet Earth (for a more precise description see Nomination for Inscription UNESCO World Heritage List "The Eocene Marine Ecosystem in the Val d'Alpone - Bolca, San Giovanni Ilarione, Roncà, part 2.a Description of the nominated heritage).

A



B



C



D

- A. *Vicetia* sp. found on Monte Postale
- B. *Ostrea roncana* of Valle della Chiesa
- C. *Ampullina vulcani* of the Roncà Horizon (length 4 cm)
- D. *Exellia velifer* found in Pesciara (length 13 cm)



Protecting the property that you intend to propose for inclusion in the World Heritage List (hereinafter WHL) implies an action of protection and conservation of the fossil finds, of the deposits that contain them and of the environment that preserves them.

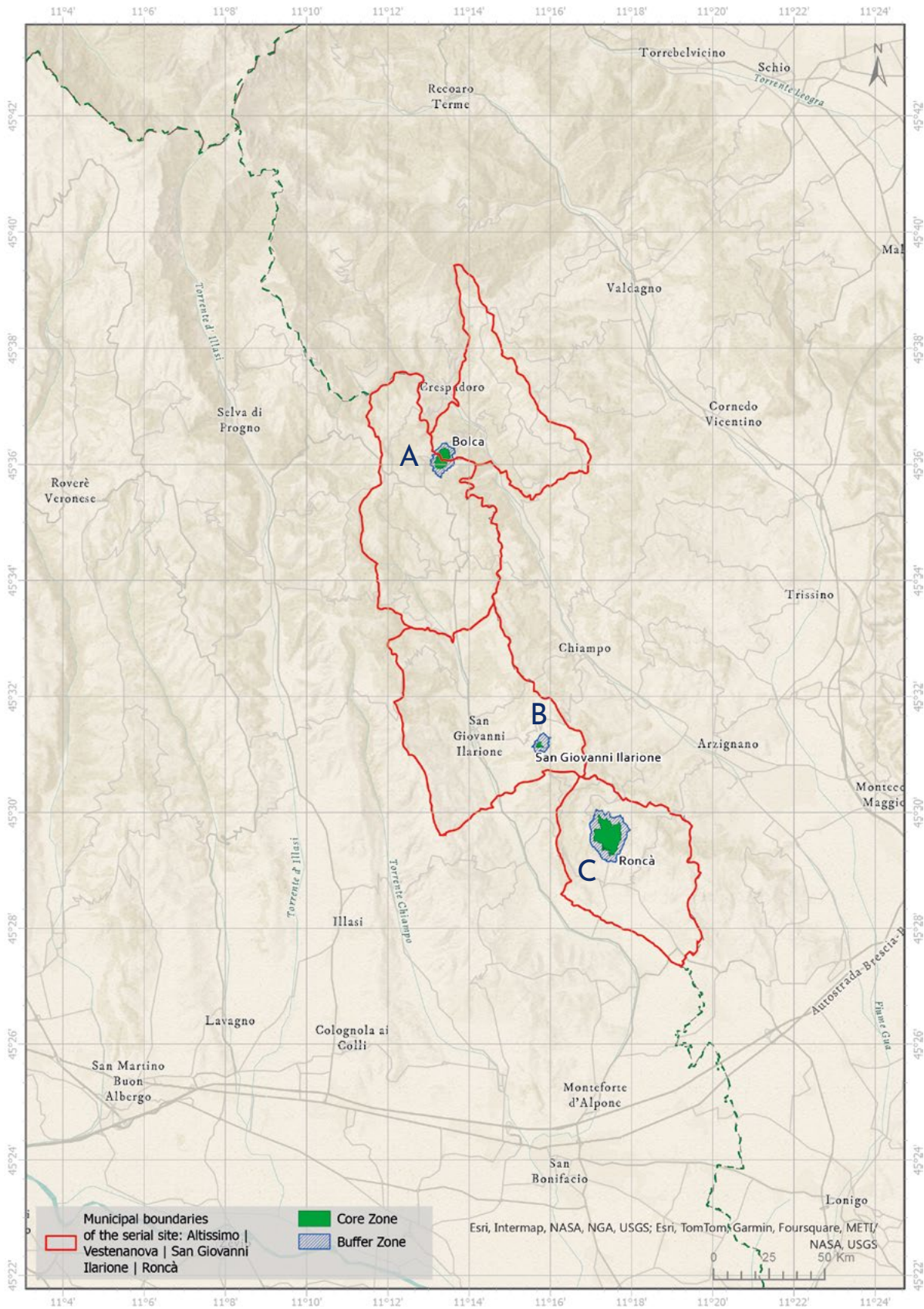
As required by the Operational Guidelines (hereinafter OG), each new proposal for inclusion in the WHL must be accompanied and supported by a Management Plan or System. The proposal for inclusion in the WHL of the site "The Eocene marine ecosystem in the Val d'Alpone - Bolca, San Giovanni Ilarione, Roncà" requests that this exceptional value for humanity be recognized according to criterion (viii), i.e. "Constitute an extraordinary testimony of the main periods of the Earth's evolution, including evidence of life, of geological processes in progress in the development of the physical characteristics of the Earth's surface or of significant geomorphic or physiographic characteristics".

The fossil deposits/outcrops of the marine Eocene vertebrate and invertebrate site are assets of exceptional value as they represent significant natural examples of the great events in the history of planet Earth in a distant geological era: the Eocene..

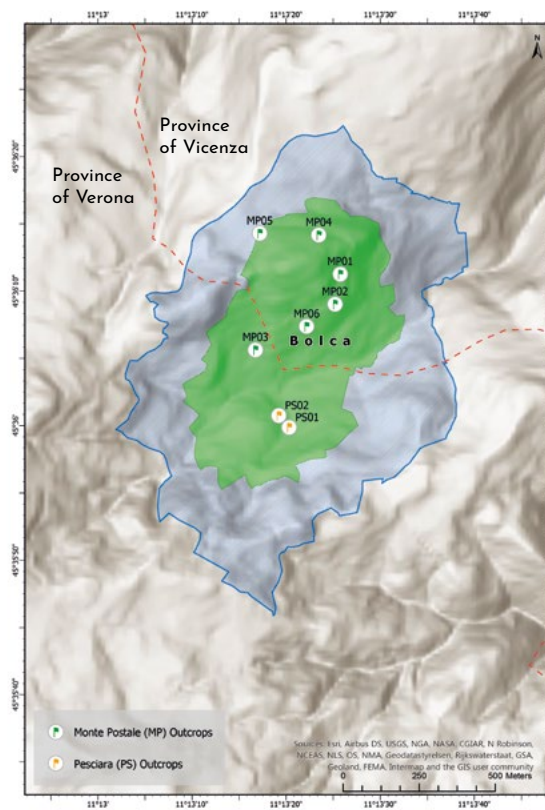
Fossils are non-renewable assets and their protection is necessary not only in their physical integrity, but also for the function and meaning they have for current and future communities. This implies a strong assumption of shared responsibility among all public and private entities of the site who are called to collaborate to protect and maintain over time Outstanding Universal Value (hereinafter OUV) and adopt a management system that meets the objectives of the World Heritage Convention. This involves the conservation and protection of the property, accompanied by sustainable socio-economic development of the territory implemented with participatory processes.

*Trygon muricata* (length 63 cm)

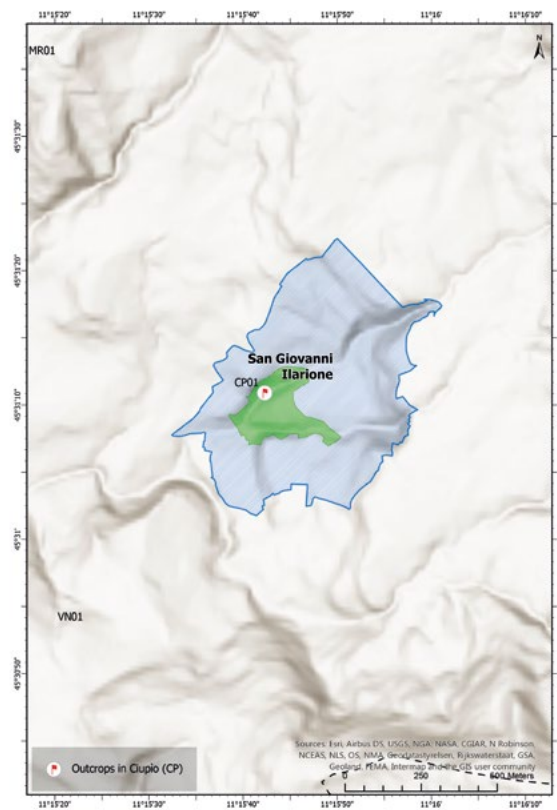




## THE EOCENE MARINE ECOSYSTEM IN THE VAL D'ALPONE - BOLCA, SAN GIOVANNI ILARIONE, RONCÀ

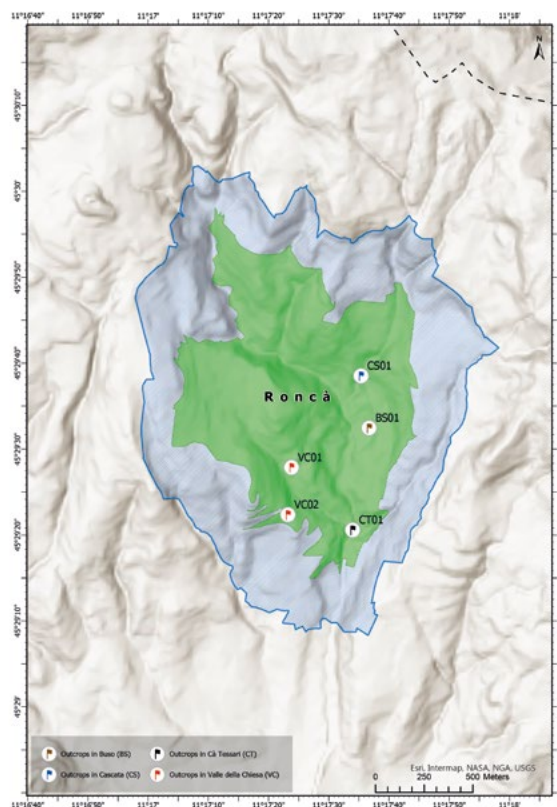


A



B

- A. Bolca component  
 B. San Giovanni Ilarione component  
 C. Roncà component



C

A side - Cartography of the serial site "The Eocene marine ecosystem in the Val d'Alpone - Bolca, San Giovanni Ilarione, Roncà"

The **management system** for the serial site “*The Eocene marine ecosystem in the Val d’Alpone - Bolca, San Giovanni Ilarione, Roncà*” includes three interconnected elements:

1. The legal and regulatory framework on the paleontological assets present on the site;
2. The governance system to respond to the organizational and decision-making needs required for property management;
3. The resources (human, economic, technological, cultural, etc.) used to make the management system operational.

The following are developed around these three interconnected elements:

- a. the processes of planning, implementation and monitoring of actions that ensure conservative management of the goods and associated values and their valorization;
- b. the verification of the objectives and the achievement of the results, this, in response to the gaps or critical issues identified in the management process or to new needs.

The Plan documents in a structured way the systematization of the three components of the serial site ownership present in the Municipalities of Altissimo, Vestenanova, San Giovanni Ilarione and Roncà and two Provinces (Verona and Vicenza). It is the result of a participatory approach and, even if in writing it appears linear and hierarchical, in reality it is the result of a circular process that involved several actors. Built in a collegial way, it was an opportunity to create a system, inaugurating a practice that should become a constant in the management of the serial site both for the multiple location of the deposits/ outcrops and for the very nature of this site. The Plan presents the subjects and the territory involved, gives an account of the objectives of knowledge, protection and enhancement and of the planning and control methods. The function of the Plan is to facilitate the achievement of the objectives, such as general planning acts (for example regarding urban planning) or those of a sectoral nature (for example for environmental protection) taking into due consideration the OUV of the serial site. It is therefore a technical coordination document that has the ambition of becoming

a strategic area plan. Being open to the widest participation, it is a citizenship construction site. The Plan is formally approved by local administrations. The management system in fact finds its legitimacy in participation, sharing and representation. We recall that the ownership of the land that falls within the paleontological deposits of the serial site is 99% private and the rest state-owned, while the fossils contained and extracted from the site are cultural assets that by law belong to the Italian State.



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**PART 2**  
JUSTIFICATION  
FOR REGISTRATION:  
THE DECLARATION  
OF OUTSTANDING  
UNIVERSAL VALUEE

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The Declaration of Outstanding Universal Value is the identity card of the properties registered in the WHL, it is the focus around which the actions of knowledge, protection, conservation, enhancement and control of the property revolve and converge. The OUV of the serial site *"The marine ecosystem of the Eocene in the Val d'Alpone - Bolca, San Giovanni Ilarione, Roncà"* in summary attests how the three components contain the most significant and studied deposits in the world of the marine Eocene. These deposits allow us to recognize all the elements that contribute to defining the Outstanding Universal Value of this nomination proposal. The integrity of the geological and physical characteristics of the fossil deposits transmit the values summarized in criterion (viii) and are represented in summary by three attributes: (a) quantity and history of the fossil heritage, (b) quality of the deposits and (c) biodiversity demonstrated by the fossils found.

Furthermore, the qualities of the serial site that fully convey the exceptional fossiliferous value of the Eocene marine ecosystem are:

1. the complete representation of the different marine environments (subtidal, open sea and intertidal) identified respectively in the Bolca, San Giovanni Ilarione and Roncà components;
2. the specific characteristics of fossils and paleontological contexts. For these, the high representativeness of the data is observed, which is marked by an extraordinary typological variety, an exceptional quantitative dimension and unique taphonomic characteristics;
3. the role of studies on fossils found in the sites of Val d'Alpone that have contributed to the broad debate on the history of life on Planet Earth in past centuries. From the studies of the first fossils in the 16th century to the most recent studies, these deposits have contributed to the understanding of the evolution of marine life and its Eocene ecosystems.

The territory of the serial site is mainly characterized by outcrops of volcanic and marine sedimentary rocks of the Paleogene, has a total

surface area of 82.82 km<sup>2</sup> within which the three components of the site have been identified (Bolca, San Giovanni Ilarione and Roncà) with a total area of the core zone of 88.30 ha protected by a *buffer zone* area of 216.10 ha.

The fourteen fossiliferous deposits/outcrops present in the three components still provide fossil documents with unique information on the great biodiversity of vertebrates, invertebrates and plants, with exceptionally well preserved fossils, including bony and cartilaginous fish, crocodiles, turtles, snakes, birds, gastropods, bivalves, cephalopods, crustaceans, corals, worms, jellyfish, insects, marine and terrestrial plants, the latter sometimes accompanied by flowers and fruits. Much of this fossil heritage is now preserved in local museums and in those of Verona and Padua.

## 2.1 Registration criteria (VIII)

The proposal for registration in the WHL is that of criterion (viii) among the 10 criteria defined by the UNESCO Operational Guidelines.

The serial site *"The Eocene marine ecosystem in the Val d'Alpone - Bolca, San Giovanni Ilarione, Roncà"* includes, in fact, within it a marine Eocene paleontological heritage that is unique worldwide for its high biodiversity and the uniqueness of the fauna to be conserved and transmitted to future generations. These deposits, precisely because they are different from each other, represent a selected and complete marine panorama of the Eocene where the extraordinary state of conservation, concentration, diversity and uniqueness of the fossil finds are unmatched worldwide.

In particular, the fossil deposits of Eocene vertebrates and invertebrates, primarily marine, but also terrestrial, constitute significant examples of the great events in the history of the Earth, including evidence of life and geological processes. The three components are a selected serial asset of paleontological excellences characterized by a high representativeness. The exceptional state of conservation of the fossils of the Val d'Alpone, their great biodiversity, their phylogenetic significance and paleoecological

allow a broad and complete reconstruction of the biological, climatic, environmental and geological variations that characterized the marine Eocene. Furthermore, they have, in absolute terms, the oldest and most detailed history of research documented for over five centuries. Of particular importance are the deposits of the lower Eocene of Bolca (Pesciara and Monte Postale), which have provided the most important paleontological evidence relating to the fish faunas of reef environments, allowing us to define the times and methods of evolution of modern tropical fish faunas. Therefore, the serial asset "*The marine ecosystem of the Eocene in the Val d'Alpone - Bolca, San Giovanni Ilarione, Roncà*" is to be considered as the most important and complete reference at a global level for current and future studies on the marine faunas of the Eocene.

**Specification of the criterion (viii)**

**(taken from Nomination for Inscription UNESCO World Heritage List "The Eocene Marine Ecosystem in the Val d'Alpone - Bolca, San Giovanni Ilarione, Roncà, point 3.3b Justification of the criterion)**

The paleontological documentation of the nominated property is central to describing the history of marine geology and evolutionary biology of the Eocene. These are fossil testimonies that identify an ecological scenario of the entire bathymetric gradient, in a period in which the Earth experienced exceptionally high temperatures, marine biodiversity reached its climax after a long period of post-mass extinction recovery and the groups of organisms that today populate our seas established themselves.

The extraordinary state of conservation of the fossils (vertebrates, invertebrates and plant remains), the richness of species and forms represented by the high taxonomic diversity, the uniqueness of the fish in which anatomical structures and pigmentations that are difficult to fossilize are often recognized, constitute the most complete traces of a broad and detailed picture of marine life in the Eocene. Furthermore, five centuries of history and over a thousand publications document the exceptional significance of the Eocene fossils of the Val d'Alpone, the result of a unique combination of taphonomic, stratigraphic and paleogeographic characteristics.

## 2.2 The integrity of the serial site

In total, the area of the property designated as a *core zone* is 88.3 ha and is protected by a *buffer zone* of 216.1 ha. Most of the *core zone* is cultivated as coppice or grassland, a use that does not conflict with the need for fossil conservation.

**Table I - Properties and legal protection regimes**

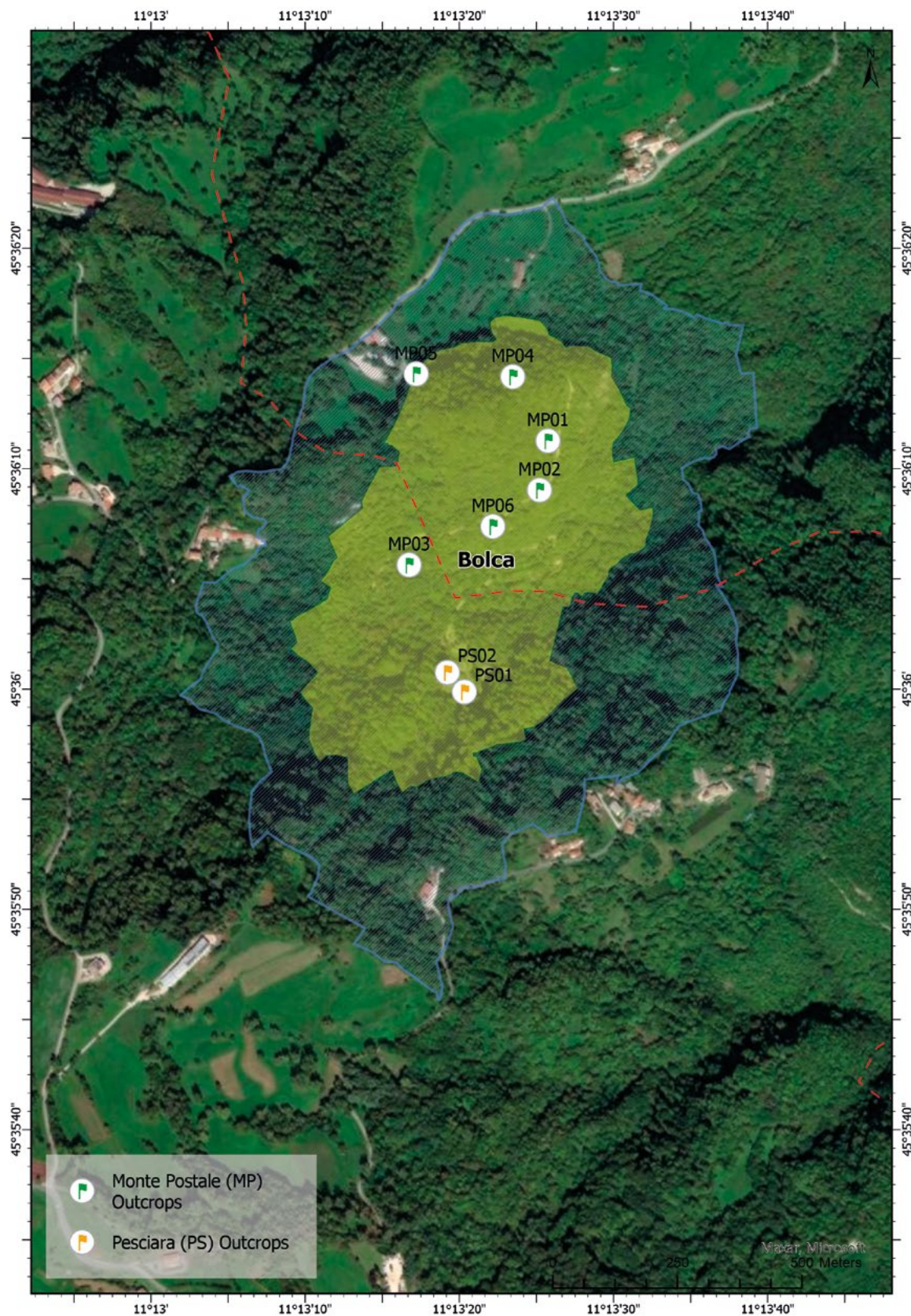
Public property	1%
Private property	99%
<b>Legal protection regime</b>	
Code of Cultural Heritage of the Landscape (Legislative Decree no. 42/2004 approved with subsequent amendments and additions)	100%
Areas of the Lessinia Regional Natural Park (Regional Law of Veneto n. 12 of 30 January 1990)	Core zone 60% Buffer zone 70%
Ministerial Decree	
Ministerial Decree of 08.20.1963 and Ministerial Decree of 09.22.1992	Pesciara deposit 100%
Ministerial Decree of 15.09.1992	Outcrops on Monte Postale 100%
Urban planning regulations: PTRC, PTPC, PATI	100%

The fossil deposits, which in Italy are in themselves subject to the highest level of legal protection (Code of Cultural Heritage and Landscape), have not been affected by urbanization or infrastructure interventions, thus maintaining their scientific values unaltered. The deposits of the Bolca component (Pesciara and Monte Postale) and Roncà (Valle della Chiesa) have been excavated for centuries, in compliance with current regulations so as to preserve the outcrops and the values of the site itself. The abundance of fossil remains extracted in the past and their richness has not impoverished the deposits, allowing research to continue with new and modern excavation campaigns, in agreement with the Ministry of Culture - Superintendence of Archaeology, Fine Arts and Landscape for the provinces of Verona, Rovigo and Vicenza. In each excavation campaign, especially in the Pesciara and Monte Postale deposits, new finds for science have been found that have been studied and published for over fifty years in a dedicated journal: "Studies and research on the Tertiary deposits of Bolca - Paleontological Miscellany" and in international journals of high scientific value.

A part of the invaluable paleontological heritage collected has played a fundamental role in the history of science. Currently, this heritage is preserved in the two local museums of the Val d'Alpone (Fossil Museum of Bolca and Paleontological Museum of Roncà) and in the collections of museums around the world. In particular, the Civic Museum of Natural History of Verona and the Museum of Nature and Mankind of the University of Padua are the two structures that worldwide preserve the majority of the historical collections of the Val d'Alpone and that attest that the condition of integrity of the finds is satisfied. Other museums, located in Italy (Bologna, Milan), in Europe (Paris, London, Vienna) and in the rest of the world (Pittsburg, Chicago, Cambridge-USA), have paleontological finds from Val d'Alpone and of these at the Temporary Association of Purpose "Val d'Alpone - faune, flore e rocce del Cenozoico" (hereinafter A.T.S.) and the Civic Museum of Natural History of Verona are available lists and documents relating to the consistency of the paleontological collections, often accompanied by iconography. The integrity of the values and attributes set out above is also guaranteed by the application of cutting-edge excavation and research methods that produce a significant increase in scientific knowledge, but also guarantee careful and balanced conservation of the heritage. Since the 2000s, five continuous core drillings have been carried out in the Bolca area, as well as a series of geophysical surveys that have allowed the geometries of the Pesciara deposit to be defined with great precision and its volumes to be estimated, thus allowing the area delimitation on the surface and underground.



### Satellite mapping with the delimitation of the three components and the location of the 14 outcrops of the candidate site



Bolca component with deposits and outcrops





San Giovanni Ilarione component with the surfacing



## THE EOCENE MARINE ECOSYSTEM IN THE VAL D'ALPONE - BOLCA, SAN GIOVANNI ILARIONE, RONCÀ



Roncà component with the outcrops

## 2.3 The values and meanings of the candidacy proposal as the basis of the Management Plan

Identifying the values and attributes of the nominated asset in a precise and detailed manner is the basis of the work of drafting the Plan because it allows to evaluate the management interventions on the heritage, but also to effectively analyze and monitor the possible changes and risks on the exceptional value of the proposed asset.

As described (see Nomination for Inscription UNESCO World Heritage List “The Eocene Marine Ecosystem in the Val d’Alpone - Bolca, San Giovanni Ilarione, Roncà, point 3.2 Comparative Analysis) in the comparative examination of the deposits, three components (areas) of greater paleontological relevance were identified that contain the most important and exceptionally valuable fossil outcrops which are:

- A. The Bolca component, which with its eight outcrops of Pesciara and Monte Postale is one of the most famous locations in the world for fish fauna. In particular, the reconstruction of the ancient living environment of the Bolca fish is rather complex, as suggested by the great variety and shapes of the fish: some are characteristic of the coral reef, others of the shallow, sandy seabed with meadows of marine plants and algae. The sedimentation environment of Monte Postale must have been close to the coast, characterized by coral bioconstructions and “mangroves”, while recent studies have reconfirmed the sedimentation of calcareous mud in an intra-platform basin for that of Pesciara;
- B. The San Giovanni Ilarione component, with the Ciupio deposit, whose fauna, predominantly molluscs and crustaceans, is representative of the subtidal depositional environment with depths between a few metres and 20-30 metres;
- C. The Roncà component with the five outcrops in Valle della Chiesa is particularly rich in gastropods and marine bivalves

representative of intertidal or subtidal environments.

Each component of the serial site has a specific Eocene marine fossiliferous content, but only the set of the three components form an asset that describes the entire Eocene marine ecosystem; therefore, the Outstanding Universal Value of the asset is greater than the sum of the individual components.

Precisely to arrive at an integrated management of the site and its values, we identify “substantial values”, descending from the exceptional value and “complementary values” that contribute to enriching the natural resource with the environmental and historical cultural elements of the valley.

“**The substantial values**”, expressed by the deposits of the three components of the serial site, contained in the fossil evidence of the site and the contribution they have given to paleontological and phylogenetic studies, are:

1. the **historical cultural contribution** provided by the fossils of Bolca, San Giovanni Ilarione and Roncà to the evolution of theories on life on planet Earth. The fossils from Bolca began to amaze already in the sixteenth century and since then have contributed to the diffusion of knowledge of paleontological sciences.
2. the **scientific values** that have allowed the development of paleontological and phylogenetic studies;
3. the **high number of deposits/outcrops (14) and the large quantity and quality of the extracted fossils** (Ypresian Lagerstätten) belonging to the marine environment of a specific geological era: the Eocene;
4. the **ecological scenario of the entire bathymetric gradient**, in a period in which the Earth experienced exceptionally high temperatures, marine biodiversity reached its *climax* after a long period of post-



mass extinction recovery and the groups of organisms that dominate modern seas established themselves;

5. the **documentary nature of the paleontological excavation** (in tunnels and outdoors) as a research and study activity dedicated to the discovery of fossils and the recovery of lithological, background, taphonomic, etc. information. In fact, a fossil devoid of stratigraphic information does not have the same scientific importance as a fossil recovered during a modern paleontological excavation.

**"The complementary values"** are:

- a. those of a landscape and environmental nature expressed by the geodiversity of the Val d'Alpone landscape. The territory that

contains the serial site is not only important for its fossils and rocks but also for its landscape with gentle and wavy shapes, some with conical shapes, the result of a morphological evolution that lasted millions of years and was only recently modified by man;

- b. quelli storico artistico culturali. These are values present in the valley territory and are part of the historical cultural identity, each with its own peculiarities: from the most ancient pre- and proto-historic human frequentation of the valley, then moving on to the Bronze Age to the Roman era, up to the medieval period.

These are values with significant potential for the construction of actions to enhance and manage the site.



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# **PART 3**

## LEGISLATIVE PROTECTION OF THE SITE

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The system of rules that concern the assets registered in the WHL has a multilevel character, that is, a regulatory system in which elements of international law and elements of domestic law are combined. In fact, the qualification of a property registered in the UNESCO WHL does not change its legal status, but only obliges the adhering State to recognize that the asset thus identified constitutes an asset for whose protection the entire international community is called to cooperate.

In the serial site "*The marine ecosystem of the Eocene in the Val d'Alpone - Bolca, San Giovanni Ilarione, Roncà*" the actions of protection and conservation of the assets, first of all, are regulated by the national legislative framework Code of Cultural Heritage and Landscape (Legislative Decree No. 42 of 22 January 2004 updated with subsequent amendments and additions) (hereinafter CBCP) which establishes a primary responsibility on the part of the territorial institutions of the State, specifically the Superintendence of Archaeology, Fine Arts and Landscape for the provinces of Verona, Rovigo and Vicenza.

Then, at a different geographical scale, we find other institutional bodies with different competences regarding the protection and planning of the territory. However, cooperation between the various bodies is of fundamental importance to protect the site within a path of sustainable and shared development, as indicated in this Plan. It is important to specify that this Plan is a programmatic document without the legal capacity to directly affect the individual assets located within the serial site as it cannot provide for new types of constraints in addition to the existing ones.

It aims to guide and coordinate the various planning systems in the urban, environmental and tourist fields regarding the site to develop a participatory and shared management among all the subjects with an interest and not to be confused with the tools of urban and territorial planning, with socio-economic development programs or with the legislation for the protection of cultural heritage.

Furthermore, always with regard to the protection of the deposits, in addition to the municipalities of the components and the Regional Natural Park Authority of Lessinia, the owners of the lands falling within the site were also involved and, despite their different competences, they operate with specific methods in this sense. Territorial planning is divided into various levels of intervention and areas of competence as reported below:

- I. Veneto Region: territorial urban planning interventions of competence (PTRC) and those concerning the landscape that affect a part of the areas of the site. These are the constraints of the Lessinia Regional Natural Park (Veneto Region Law no. 1/90), - approximately 60% of the core zone and approximately 70% of the buffer zone;
- II. The Provincial Territorial Coordination Plans (PTCP) define the objectives and fundamental elements of the provincial territorial structure in line with the guidelines for provincial socio-economic development, with regard to the prevalent vocations, geological, geomorphological, hydrogeological, landscape and environmental characteristics;
- III. The municipalities of Altissimo, Vestenanova, San Giovanni Ilarione and Roncà have administrative and regulatory competence for the PATI and the Intervention Plan (hereinafter PI) and are functional for the purposes of protection, conservation, enhancement and management of the site;
- IV. A fourth level refers to the presence of the owners of the land on the site who were involved in the project and understood and shared the OUV.

So the areas of the site are subject to control measures by the territorial bodies to ensure that there are no unauthorized interventions on the deposits with supervision by the Ministry of Culture through the local Superintendency. The latter, with prot. 12950 of 06/25/2020 and with prot. 36873 of 12/05/2023, recognized preventive protection of the site (see Annex 1 Protection regimes, point 1.3).



**Table II - Legal protection of the three components**

Component name	Deposit	Municipality and province	Core zone	Buffer zone	Deposits/outcrops code	Law Legislative Decree no. 42/2004	Ministerial Decree	Veneto Region Law n. 12/90 Lessinia Regional Natural Park
Bolca	Pesciara	Vestenanova (Verona)	D.Lgs n. 42/2004 PARK CONSTRAINTS PTCR, PTPC, PATI	D.Lgs n. 42/2004 PARK CONSTRAINTS PTCR, PTPC, PATI	PS01 PS02	X X	X(1963) X(1992)	X X
	Monte Postale	Altissimo (Vicenza)	D.Lgs n. 42/2004 PARK CONSTRAINTS PTCR, PTPC, PATI	D.Lgs n. 42/2004 PARK CONSTRAINTS PTCR, PTPC, PATI	MP01 MP02 MP03 MP04 MP05 MP06	X X X X X X	X(1992) X(1992)	X X X X X X
San Giovanni Ilarione	Ciupio	San Giovanni Ilarione (Verona)	D.Lgs n. 42/2004 PTCR, PTPC, PATI	D.Lgs n. 42/2004 PTCR, PTPC, PATI	CPO1	X		
Roncà	Valle della Chiesa	Roncà (Verona)	D.Lgs n. 42/2004 PARK CONSTRAINTS PTCR, PTPC, PATI	D.Lgs n. 42/2004 PARK CONSTRAINTS PTCR, PTPC, PATI	BS01 CS01 CT01 VC01 VC02	X X X X X		X X X X X

#### Normative and regulatory references present on the serial site

D.Lgs n. 42/2004	Legislative Decree 01/22/2004 n. 42 known as the Cultural Heritage and Landscape Code with various amendments and additions
Ministerial Decree	The restriction by the Ministry of Public Education (Ministerial Decree 08.20.1963) and the restriction by the Ministry of Cultural and Environmental Heritage (Decree of 09.15.1992) for the Pesciara deposit. The restriction by the Ministry of Cultural and Environmental Heritage for the Monte Postale outcrop (Decree of 09.22.1992).
Superintendence of Archaeology, Fine Arts and Landscape for the provinces of Verona, Rovigo and Vicenza	Communication: confirmation of positive opinion and formal support for the proposed application process (prot. 12950 of 06/25/2020 and prot. 36873 of 12/05/2023)
Lessinia Regional Natural Park	Constraint - (Veneto Region Law n. 1/90) protection of the Bolca and Roncà Component
PTCR	Regional Territorial Coordination Plan (PTCR) (Veneto)
PTPC	Provincial Territorial Coordination Plan (PTPC) (Vicenza, Verona)
PATI	Intermunicipal Territorial Planning Plan (PATI) at municipal and supramunicipal level

### 3.1 Relationship between the current planning tools and the Management Plan

To understand how the Management Plan has incorporated a series of guidelines already outlined by other territorial plans, a comparative analysis of the contents of the planning tools currently operating in the territory of the municipalities of the site and the neighboring ones (*commitment zone*) was developed. This has highlighted how the Plan,

conceived as a support tool for territorial policies, integrates and takes up many of the themes set out in the territorial plans of the municipalities of the site and the surrounding territory of the Val d'Alpone relating both to the purposes of protection and conservation, and to the objectives of valorization of the nominated property.

**Table III - Urban planning in the components and the Management Plan**

<b>Plans acting on the territory of the municipalities of the Val d'Alpone site and the commitment zone</b>	<b>Relationship with the Management Plan</b>
<b>I ) Regional Territorial Coordination Plan (PTRC)</b>	Strategic context objectives and general protection guidelines
<ul style="list-style-type: none"> <li>Regional Territorial Coordination Plan (PTRC) Regional Council resolution no. 62 of 06.30.2020 <a href="https://www.regione.veneto.it/web/ptrc/ptrc-202">https://www.regione.veneto.it/web/ptrc/ptrc-202</a></li> <li>Table of recognition of areas of protection <a href="https://rdv.app.box.com/s/o5kxlc2wutm5dis5jw7uf8klkl1ipn6eT-Biodiversity-table">https://rdv.app.box.com/s/o5kxlc2wutm5dis5jw7uf8klkl1ipn6eT-Biodiversity-table</a> <a href="https://rdv.app.box.com/s/464ol5mx29zujlsq8k88mpu8Ov5j2nk7">https://rdv.app.box.com/s/464ol5mx29zujlsq8k88mpu8Ov5j2nk7</a></li> </ul>	Defines the areas of protection, biodiversity and landscape values
<b>II ) Provincial Coordination Territorial Plans (PTCP)</b>	General protection objectives at supra-municipal level
<ul style="list-style-type: none"> <li>Provincial Territorial Coordination Plan of Verona (DGR n. 236 of 3.3.2015)</li> <li>Provincial Territorial Coordination Plan of Vicenza (DGR n.683 of 17.04.2012)</li> </ul>	They define the economic development objectives in coherence with the prevailing geomorphological, landscape and environmental vocations
<b>III ) Land Use Plan (PAT and PATI)</b>	Specific protection objectives
<ul style="list-style-type: none"> <li>Intermunicipal Territorial Planning Plan (PATI) Montecchia di Crosara, <b>Roncà, San Giovanni Ilarione, Vestenanova</b> (2012)</li> <li>Land Use Plan of Monteforte d'Alpone (D.G.R. n. 85 of 11 February 2014)</li> <li>Intermunicipal Territorial Planning Plan (PATI) of Crespadoro, Gambellara, <b>Altissimo</b> (2014)</li> </ul>	They define the sustainability of the transformations and interventions of individual municipalities
<b>Intervention Plan (PI)</b>	
<ul style="list-style-type: none"> <li>Intervention Plan of Montecchia di Crosara (November 2018), <b>Roncà</b> (February 2018), <b>San Giovanni Ilarione</b> (February 2020), <b>Vestenanova</b> (December 2018)</li> <li>Intervention Plan of Monteforte d'Alpone (July 2014)</li> <li>Soave Intervention Plan (there is only one PRG and one variant of it)</li> <li>Gambellara Intervention Plan (March 2016)</li> <li><b>Altissimo</b> Intervention Plan (April 2017)</li> <li>Crespadoro Intervention Plan (July 2019)</li> </ul>	They define at municipal level in coherence with the urban planning tools at regional and provincial level the program of public works and the landscape and monumental constraints
<b>IV) Veneto Region Law no. 12 of 30 January 1990 establishing the Lessinia Natural Park Authority</b>	
Regional Law no. 12 of 30 January 1990 establishing the Lessinia Park Authority with the aim of protecting the rich naturalistic, environmental, historical and ethnic heritage of the Veronese territory.	Ecosystem and landscape conservation objectives

We also report that the Veneto Region, in order to “protect and regulate the territory to improve the quality of life with a view to sustainable development and in coherence with the processes of integration and development of the European space, implementing the European Landscape Convention, combating climate change and increasing competitiveness”

(Veneto Region Law no. 11/2004), has approved the Regional Territorial Coordination Plan in accordance with the indications of socio-economic planning and to promote the enhancement of the landscape.

The table below highlights the landscape constraints present in the candidate site.

**Table IV - Landscape constraints in the site components**

Component	Landscape constraints in the municipalities of the three components of the serial site
Bolca	<ul style="list-style-type: none"> <li>&gt; <b>Vestenanova</b> <ul style="list-style-type: none"> <li>• landscape constraint for watercourses (CBCP; NTO art. 37; P.I. table 1)</li> <li>• constraint for environmental and landscape protection of wooded areas (CBCP; NTO art. 37; P.I. table 1)</li> <li>• hydrological-forestry constraint (RDL 30.12.1923 n. 3267 NTO art. 37; P.I. table 1)</li> <li>• constraints of the Regional Natural Park for the Pesciara di Bolca (Veneto Regional Law 12/1990)</li> </ul> </li> <li>&gt; <b>Altissimo</b> <ul style="list-style-type: none"> <li>• Constraints relating to the SPA of the Lessinia Regional Natural Park (Veneto Regional Law 12/90)</li> </ul> </li> </ul>
San Giovanni Ilarione	<ul style="list-style-type: none"> <li>&gt; <b>San Giovanni Ilarione</b> <ul style="list-style-type: none"> <li>• hydrogeological/forestry constraint (RDL 3267/1923) on “scattered territory”</li> <li>• landscape constraint for watercourses/wooded areas (CBCP)</li> <li>• Natural Park constraints for columnar basalts (L.R. 12/1990)</li> </ul> </li> </ul>
Roncà	<ul style="list-style-type: none"> <li>&gt; <b>Roncà</b> <ul style="list-style-type: none"> <li>• constraints of the Regional Natural Park for the fossiliferous strata of Roncà (Veneto Regional Law 12/1990)</li> </ul> </li> </ul>



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**PART 4**  
THE GOVERNANCE  
STRUCTURE  
OF THE SITE  
PRE AND POST  
RECOGNITION

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To manage and advance the candidacy and to facilitate the decision-making processes through the sharing of objectives in the management of the property, with the participation of the subjects involved, the Temporary Association of Purpose (A.T.S.) “Val d’Alpone - fauna, flore e rocce del Cenozoico” was founded in 2017. The Association is supported by its members and represents the territory of Val d’Alpone. Its members include local authorities and representatives of economic and cultural associations. The founding members are the municipalities of the site: Altissimo, Vestenanova, San Giovanni Ilarione and Roncà and also the municipalities of Soave, Monteforte d’Alpone, Montecchia di Crosara, Gambellara and Crespadoro which, together, constitute the *commitment zones*. Then in 2019 the Municipality of Verona also joined with the Natural History Museum. Other founding members are: the Mountain Community of Lessinia (now the Lessinia Regional Natural Park Authority), the Department of Culture and Civilization of the University of Verona, the Association of Stories of the Little Homeland, San Zeno-Cultural Association, the Lessini Durello Monti Lessini Wine Route Association, the Soave Wine Route Association, the Recioto and Gambellara D.O.C. Wine Route Association, the Consortium for the Protection of Soave and Recioto di Soave Wines, the Voluntary Consortium for the Protection of Lessini Durello D.O.C. Wines and the Voluntary Consortium for the Protection of Gambellara D.O.C. and Recioto di Gambellara D.O.C.G. Wines. In 2021, the following joined the A.T.S. as supporting members: the Rotary Club Verona-Soave and the Rotary Club of Arzignano; the Lyons Club Val d’Alpone; the Cassa Rurale di Vestenanova; the company Ceratoichthys di Cerato Massimo Cipriano e C. S.n.c., Marana Space Explorer Center (MarSEC); the Abbey of Villanova for the Territory; GAL Baldo-Lessinia (Local Action Group) and the Paleontological Association

Val d’Alpone Gruppo Val Nera di Roncà. The A.T.S. in its action involved the Superintendency of Archaeology, Fine Arts and Landscape for the provinces of Verona, Rovigo and Vicenza which responded positively (prot. 12950 of 06/25/2020 and prot. 36873 of 12/05/2023), the Veneto Region which strongly supports the project (Council Resolution no. 131 of 7 February 2018) and the Regional Natural Park Authority of Lessinia.

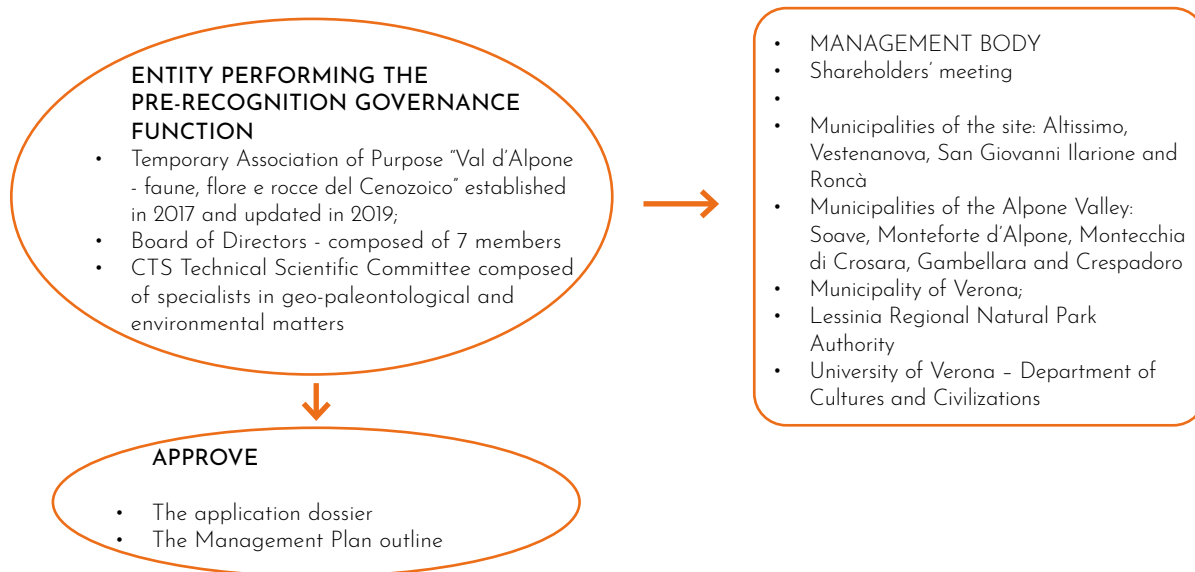
In addition, continuous discussions were held with the public administrators of the Val d’Alpone area, with the heads of the socio-economic and cultural associations of the area, with the representatives of the professional categories, with the world of schools and with citizens. The institutional subjects contributed to and accompanied the candidacy activities and approved the documents that the A.T.S. sent to the Ministry of the Environment and Energy Security (competent for the candidacies of Italian natural sites).

The A.T.S. also involved the owners of the land that falls within the deposits subject to paleontological excavations to illustrate and share the candidacy process, asking them to act consistently and in compliance with the exceptional value of the property.

In practice, a pre-recognition governance system has been created for the protection and conservation of the property, organised in the following way:

- a preventive action based on the national regulatory protection carried out by the Superintendency of Archaeology, Fine Arts and Landscape for the provinces of Verona, Rovigo and Vicenza;
- constant monitoring of the territory of the serial site by local administrations and the Lessinia Regional Natural Park Authority;
- monitoring of deposits with the involvement of landowners;
- a periodic check carried out by the experts of the Technical Scientific Committee (hereinafter C.T.S.) of the A.T.S.



**Table V - The pre-recognition governance scheme**

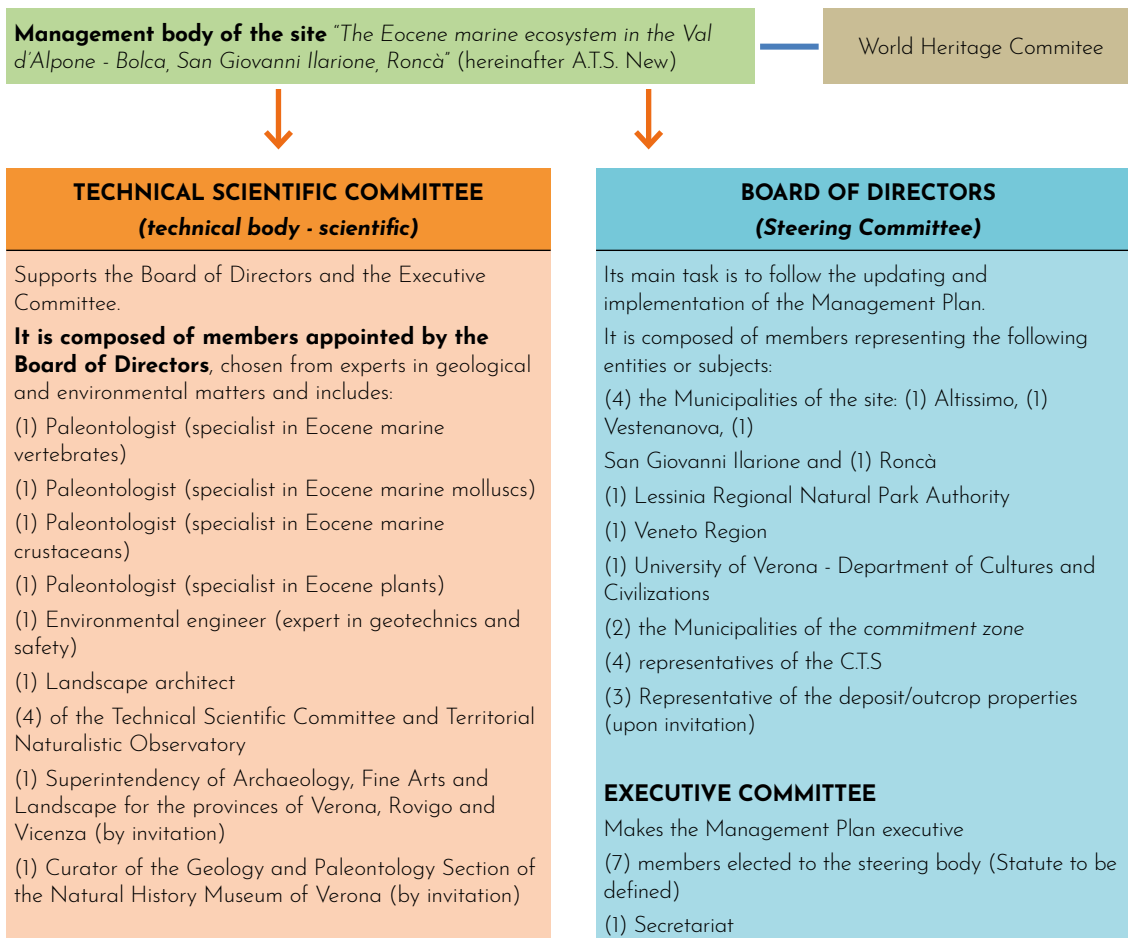
Below are the subjects directly involved in this candidacy proposal, their role and the contributions they have provided to the management of the site in the pre-recognition phase.

ACTORS	Main contributions to site management
Ministry of Culture Superintendence of Archaeology, Fine Arts and Landscape for the provinces of Verona, Rovigo and Vicenza	Knowledge, protection and cultural valorization of paleontological heritage. It is the peripheral body of the Ministry of Culture that carries out the control and protection activity in the territory of competence.
Ministry of Environment and Energy Security	Knowledge, protection and valorization of the natural and paleontological heritage.
Veneto Region	Issues provisions on planning, cultural, environmental, touristic and economic enhancement. Provides support and contribution to the candidacy.
Lessinia Regional Natural Park Authority	It carries out actions of protection, conservation and management of the archaeological areas falling within the territory of competence and among these the Pesciara di Bolca and the Monte Postale and a part of Valle della Chiesa. The Regional Natural Park Authority of Lessinia manages the Fossil Museum of Bolca and is the owner of the building.
University of Verona, Department of Cultures and Civilizations	Scientific and cultural knowledge, conservation and valorization.
Municipalities of the site: - Bolca component: Altissimo (VI) and Vestenanova (VR) - San Giovanni Illarione component: San Giovanni Illarione (VR) - Roncà component: Roncà (VR)	The candidate serial site is located, for the most part, in the province of Verona and, secondarily, in the province of Vicenza. The municipalities involved are: Altissimo (Province of Vicenza), Vestenanova, San Giovanni Illarione and Roncà (Province of Verona). They are the subjects candidate for the management of the site and will carry out the projects of the Management Plan with the referring subject. The Municipality of Roncà manages the local Paleontological Museum and is the owner of the property.
Municipality of Verona - Civic Museum of Natural History	Participates as manager of a large paleontological heritage of the Val d'Alpone and as technical scientific support to the candidacy project.
Temporary Association of Purpose 'Val d'Alpone - faune, flore e rocce del Cenozoico'	Established in 2017, it has submitted the application for registration in the Italian National Tentative List of the paleontological site 'Marine biodiversity in the Eocene sites in Val d'Alpone' and now the candidacy dossier for the proposal for registration in the WHL of the serial site "The marine ecosystem of the Eocene in the Val d'Alpone - Bolca, San Giovanni Illarione, Roncà". The Association has a Technical Scientific Committee (CTS) and a Territorial Naturalistic Observatory (O.N.T.) to support the activities and initiatives that concern the candidate site, for contacts with Italian and foreign specialists and for the control of the activities carried out within the components. In this phase, the Association carries out the functions of the site management body. If the site is registered in the WHL, it will have achieved its mandate and will be replaced by the new management body (A.T.S. New).

<b>The owners of the deposit/outcrop areas of the serial site</b>	Protection, conservation and economic valorization. They are the owners of the 14 outcrops identified on the site. Among these we mention those of the lands affected by the current excavation concessions: the company Ceratoichthys di Cerato Massimo Cipriano e C. S.n.c. owner of some lands of Monte Postale and Pesciara di Bolca and Cerato Giorgio owner of the lands in the Costo area (Municipality of Roncà). They were informed and involved in the candidacy and management of the site so that they can collaborate with the managing entity in some actions of the Management Plan.
<b>Municipalities of Val d'Alpone Province of Verona: Soave, Monteforte d'Alpone, Montecchia di Crosara Province of Vicenza: Gambellara and Crespadoro</b>	The territories of the local administrations of the Val d'Alpone members of the A.T.S. represent together the area of the <i>commitment zone</i> of the serial site. They participate in the management of the heritage protection processes, express a broader sharing for a better balance in the development of tourism, agricultural and economic policies of the candidate territory.
<b>Businesses and trade associations in the Val d'Alpone area</b>	Cultural and economic conservation and enhancement
<b>Bodies, associations and citizens of Val d'Alpone</b>	Cultural and economic valorization

The possible legal form (Association, Foundation, other) is being studied to allow the precise definition of the subject in charge of the site as required by Law 77/06 "Special measures for the protection and enjoyment of Italian sites and elements of cultural, landscape and environmental interest, included in the "World Heritage List", placed under the protection of UNESCO". The following table describes the new post-recognition governance structure.

**Table VI - The post-recognition governance structure of the candidate site**



## THE EOCENE MARINE ECOSYSTEM IN THE VAL D'ALPONE - BOLCA, SAN GIOVANNI ILARIONE, RONCÀ

The Technical Scientific Committee (hereinafter C.T.S. New) will be formally established after the registration of the asset and will provide technical and scientific advice to the Board of Directors and the Executive Committee. The C.T.S. New will examine the research proposals relating to the paleontological heritage of the site and will ensure that the work is scientifically sound and does not cause damage to the outcrops.

Furthermore, it will provide information to the Board of Directors and the Executive Committee regarding the correct conservation and management of the site. The Board of Directors, also on the basis of the indications of the C.T.S. New, will develop the projects of the Plan in order to best protect, preserve and promote the candidate paleontological assets. The Board of Directors will be composed of representatives of the subjects who have a key role in the management according to the objectives and actions of the Management Plan.

The Board of Directors, the Executive Committee and the C.T.S. New are a natural evolution of the A.T.S. "Val d'Alpone - *faune, flore e rocce del Cenozoico*" which prepared the candidacy for world heritage of humanity.

The other bodies, members of the A.T.S. can play an important role in the realization of the objectives and actions outlined in this Plan especially in the territory of Val d'Alpone.

Partnerships are also planned with museums, schools, local associations, etc., to increase knowledge and awareness of the protection of the paleontological asset and for its enhancement.

For the correct management of the site, the following skills are also considered necessary:

- a. Management of works in the field of paleontological excavations with experience in excavation techniques and fossil recovery;
- b. Curator for the management of the museum collections of Bolca and Roncà with experience in scientific education and paleontological teaching;
- c. Administrative manager with at least second level training in the economic and legal fields.

In the context and in compliance with the Italian legislation on tourist guides (2023), the A.T.S. New together with the partner bodies that deal with training, will organize specific courses and training for operators who want to work in the areas of the site.

The nomination process for the site "The Eocene marine ecosystem in the Val d'Alpone - Bolca, San Giovanni Ilarione, Roncà" had a bottom-up process that involved local stakeholders and institutions. The pre- and post-designation steps are summarized below.

STEPS	APPLICATION PATH	A REGIME
Duration	years 7	Forever
Governance	Entity constituted to present the candidacy, Temporary Association of Purpose "Val d'Alpone - <i>faune, flore e rocce del Cenozoico</i> "	Contact person for site management: (A.T.S. New)
Products	Application dossier	Management Plan



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**PART 5**  
KNOWLEDGE  
FRAMEWORK OF  
THE CONDITIONS  
EXISTING ON THE  
SITE, PROBLEMS  
AND OPPORTUNITIES

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The management of the site must start from the knowledge of the existing conditions by identifying current and potential problems in order to ensure that the OUV of the proposed asset is maintained or improved. This section provides basic information on the objectives, purposes and actions for management. Furthermore, it illustrates the natural (environmental) and human factors that influence the management of the site by highlighting some of the available resources. The cognitive analysis is also preparatory to the identification of operational strategies and action programs for the protection and enhancement of the territory present in Val d'Alpone. This need leads, following the

indications of the OGs and the numerous publications available on the WHL UNESCO website, to examine the quantitative and qualitative elements useful for the Plan and to organize an information flow to monitor the values present in the candidacy proposal. The management strategy was preceded by a SWOT (Strengths Weaknesses Opportunities and Threats) analysis summarized in the table below.

Starting, in fact, from those that have emerged as possible points of weakness and critical issues in the management of the components of the candidate asset, both individually and as a whole, the priorities of strategic importance for the actions to be carried out have been defined.

**Table VII - Initial SWOT analysis**

Strengths	Weaknesses
<ul style="list-style-type: none"> <li>• availability of paleontological deposits/outcrops of international importance;</li> <li>• availability of archaeological sites;</li> <li>• presence of museums that act as cultural attractions;</li> <li>• natural resources such as the Lessinia Regional Natural Park;</li> <li>• shares of valuable cultural/natural heritage not yet fully valorized;</li> <li>• positive trend of short-distance tourism;</li> <li>• cultural, folkloristic, food and wine events in the area, capable of attracting numerous visitors;</li> <li>• start of the use of technologies aimed at information and knowledge of the asset.</li> </ul>	<ul style="list-style-type: none"> <li>• size of the candidate area and fragmentation of paleontological deposits/outcrops;</li> <li>• possible danger of landslides, landslides, erosion;</li> <li>• multiplicity of institutional competences on the property and ownership of the land of the deposits/outcrops;</li> <li>• state of relative abandonment of some areas;</li> <li>• infrastructural weaknesses (parking, signage, etc.);</li> <li>• lack of a global strategy in tourism promotion activities and in educational offering activities;</li> <li>• poor provision of accommodation services in the area and insufficient culture of hospitality;</li> <li>• lack of homogeneity in the availability of human and financial resources.</li> </ul>
Opportunities	Threats
<ul style="list-style-type: none"> <li>• recognition of Val d'Alpone as a UNESCO site;</li> <li>• increase in tourist use of the site's components and local paleontological museums;</li> <li>• widespread awareness of UNESCO themes and values.</li> </ul>	<ul style="list-style-type: none"> <li>• illegal excavation and collection of fossils</li> </ul>



## 5.1 The natural environment of the Val d'Alpone which contains the deposits of the serial site

In the Val d'Alpone area, over 40 fossiliferous outcrops have been recorded, indicating a very high paleontological density for such a small territory, all of which are from the Eocene era (Annex 6 Cartography, map 6.9).

From a comparative examination of the deposits present, three areas of greatest paleontological importance have been identified, which contain the most important fossiliferous deposits that constitute the property and which express the Outstanding Universal Value.

The site, in addition to having complete paleontological documentation of Eocene marine fossils, contains other natural values such as geological, environmental and landscape ones. Furthermore, there are historical-artistic testimonies of the past.

These are complementary values, which enrich and enhance the territory and the environment that is the object of the nomination.

The fossiliferous content of the 14 outcrops of the three components is protected and preserved by the thick covering of rocks and loose deposits that cover them and only a small part explored and excavated with a ministerial concession. The natural exogenous processes that affect the site's deposits are those of erosion produced by atmospheric agents: water, sun, ice, etc. which have little impact.

Considering the morphology of the places and the wooded cover of the areas, the few agricultural activities present in the core zone do not appear to have a particular impact.

In the *buffer zone* areas cultivated with mechanical means, however, it is possible that the processing could affect the most superficial and altered portion of a possible outcrop.

For these reasons, some crops, such as new fruit tree plantations that could cause damage, should be authorized and regulated

**Table VIII - Current land use as a % of the surface area of the three components of the asset**

	<b>Bolca</b>	<b>San Giovanni Ilarione</b>	<b>Roncà</b>
Land use as a percentage of the total area surface in the three components of the site	<u>Core zone 21,00 ha</u> Coppice 95 % Lawn 5 %	<u>Core zone 2,30 ha</u> Coppice 100 %	<u>Core zone 65,00 ha</u> Coppice 80 % Vineyard 15 % Orchard 5 %
	<u>Buffer zone 52,50 ha</u> Coppice 80 % Lawn 15 % Sowing 5 %	<u>Buffer zone 21,60 ha</u> Coppice 20% Lawn 3 % Vineyard 65% Orchard 9% Sowing 3 %	<u>Buffer zone 142,00 ha</u> Lawn 10% Vineyard 70% Orchard 20%

From meetings held in 2023 with the Planning and Culture offices of the Veneto Region, the willingness to deepen and define a shared discipline to be introduced into the urban planning tools and/or building regulations of the component municipalities emerged, capable of ensuring better protection and enhancement of the nominated property. This will involve the approval of a technical specification by the Veneto Region and the territorial bodies for the conservation of the characteristics of integrity and authenticity of the site's landscape,

including agricultural arrangements and permanent crops, the management of woods and meadows.

The following table summarizes the factors that interact with the designated property based on the areas of agricultural, urban planning and excavation and/or earthmoving intervention, divided by type of intervention, risk, competent and control subjects and contribution to the management of the site. These are factors that will have to be monitored over time (see Section 7).

**Table IX - Agricultural, urban planning and excavation and/or earthmoving and property protection and management in Core and Buffer areas**

General scope	Scope of intervention	Type of intervention	Risk assessment	Risk	Competent subject to release the authorization or to organize the initiative	Control subject
Agricultural	Woods	Cutting, thinning, possible replacement planting	The intervention does not involve interventions that could compromise any fossil layers since it does not involve new excavations	Null. No excavations are planned	Regional Forestry Service, Regional Natural Park Authority of Lessinia, Municipal Administration	Carabinieri Forestry Unit, Superintendency of Archaeology, Fine Arts and Landscape for the provinces of Verona, Rovigo and Vicenza, Regional Natural Park Authority of Lessinia, A.T.S. New
	Pasture, meadow, wooded meadow, arable land	Change of crop	Possible excavation for planting fruit trees which requires a 50 cm wide and 60 cm deep excavation (double the roots)	Low. The first 30-40 cm are made up of agricultural soil. The underlying rock for at least 30-40 cm is naturally altered and fractured. It is not certain that the excavation will intercept the fossiliferous layers	As above	As above

## THE EOCENE MARINE ECOSYSTEM IN THE VAL D'ALPONE - BOLCA, SAN GIOVANNI ILARIONE, RONCÀ

Agricultural	Orchard (chestnut, olive, cherry, kiwi, etc.), vineyard	Change of crop	The replacement of the orchard typology involves the extraction of the old plants/ stumps	Nothing. The planting of new plants will take place by exploiting the holes left by the extraction of the stumps, therefore without new excavations	As above	As above
	Land improvement	Excavation, backfilling, levelling	The excavation operations could intercept (if present) the fossiliferous layer	Potentially high. However, it is not certain that the excavation will intercept the fossil layer	As above	As above
Urban planning	Agricultural land	Not buildable	No intervention	Null. No excavations are planned	Municipal Administration, Lessinia Regional Natural Park Authority	As above
	Isolated agricultural buildings	Possibility of expansion	The excavation operations could intercept (if present) the fossiliferous layer	Potentially high in proximity to fossiliferous outcrops already recorded	As above	As above
	Isolated inhabited buildings	Possibility of expansion	The excavation operations could intercept (if present) the fossiliferous layer	Potentially high in proximity to fossiliferous outcrops already recorded	As above	As above
	Contrada	Construction of new buildings	The excavation operations could intercept (if present) the fossiliferous layer	Potentially high in proximity to fossiliferous outcrops already recorded	As above	As above
	Existing tourist activities	Possibility of expansion	The excavation operations could intercept (if present) the fossiliferous layer	Potentially high in proximity to fossiliferous outcrops already recorded	As above	As above
Excavations and earthmoving	Forest road	Excavation, backfilling, levelling	The excavation operations could intercept (if present) the fossiliferous layer	Potentially high in proximity to fossiliferous outcrops already recorded	Regional Forestry Service, Regional Natural Park Authority of Lessinia, Municipal Administration	As above
	Local/inter-farm road	Excavation, backfilling, levelling	The excavation operations could intercept (if present) the fossiliferous layer	Potentially high in proximity to fossiliferous outcrops already recorded	Regional Forestry Service, Regional Natural Park Authority of Lessinia, Municipal Administration	As above
	Public roads	Excavation, backfilling, levelling	The excavation operations could intercept (if present) the fossiliferous layer	Potentially high in proximity to fossiliferous outcrops already recorded	Municipal Administration, Lessinia Regional Natural Park Authority	As above

<b>Excavations and earthmoving</b>	Parking	Excavation, backfilling, levelling	The excavation operations could intercept (if present) the fossiliferous layer	Potentially high in proximity to fossiliferous outcrops already recorded	Municipal Administration, Lessinia Regional Natural Park Authority	As above
	Paleontological excavation	Excavation, backfilling and possible levelling	The excavation operations concern the fossiliferous layer	Excavation carried out for scientific reasons. The limited excavation volumes do not impoverish the deposits but allow the recovery of new genera and species.	Ministry of Culture, Superintendence of Archaeology, Fine Arts and Landscape for the provinces of Verona, Rovigo and Vicenza, Regional Natural Park Authority of Lessinia	Superintendence of Archaeology, Fine Arts and Landscape for the provinces of Verona, Rovigo and Vicenza, Regional Natural Park Authority of Lessinia, A.T.S. (C.T.S), University, Museum of Verona, A.T.S. New

<sup>1</sup> Given the geological situation, any expansion of the current infrastructures present in Pesciara would not pose any danger to the fossil deposit since they are all located on landfill materials.

## 5.2 The pressures of development

The core zone of the nominated property is largely made up of areas cultivated with coppice or grassland, a land use that is not in conflict with the need for conservation. The integrity of the geological and physical characteristics of the fossil deposits, which transmit their values, allow us to affirm that the conditions that can influence or threaten the property are very limited.

In fact, scrolling through the list of factors that can influence the nominated property (<https://whc.unesco.org/en/factors/>), we do not detect any particular threats or dangers and the territory is not affected by infrastructures that could damage the existing outcrops. We summarize in the following table the types of pressure and development in the three components.

**Table X - Types of pressure and installation in three components at this site**

Type of pressure and development		Bolca	San Giovanni Ilarione	Roncà
Infrastructure: roads		A dirt road starts from the parking lot and runs along the southern side of Monte Postale up to Pesciara	Neighborhood municipal road	Neighborhood municipal road
Infrastructure: parking		The parking lot is available for cars and buses for the visit to Pesciara.	No	The parking lot is available for cars and buses for visits to the Fossil Park
Mines/quarries		No	No	No
Renewable energy systems (panels, wind turbines)		No	No	No
Landslides		No	No	No
Land Use	Core zone	Coppice, meadow	Coppice	Coppice, vineyard, orchard
	Buffer zone	Coppice, meadow, arable land	Vineyard, orchard, meadow, arable land	Vineyard, orchard, meadow
Types of culture	Core zone	Coppice, chestnut grove, potato	Coppice	Coppice, vineyard, cherry orchard, kiwi
	Buffer zone	Coppice, chestnut grove, potato	Vineyard, cherry orchard, meadow, potato	Vineyard, cherry orchard, meadow
Number of private homes present	Core zone	1	0	6
	Buffer zone	3	3	27
Number of inhabitants living in the core and buffer zones		5	5	65

The areas of the three components have an urban development purpose in which the construction of new buildings or infrastructure is not permitted, so the risk factors related to urban development pressures are practically absent.

### 5.3 Visitor management

Nature and culture are the two resources that intertwine in the components of the nominated property. The fossils extracted from the deposits are admired in many Italian and international museums.

The combinations of factors that have allowed the creation of a complete picture of the Eocene marine environment in Val d'Alpone are exceptional, with fossils that still continue to emerge with each new excavation campaign, revealing unknown information. This valuable natural and cultural capital, if promoted in appropriate ways, represents an important lever for the enhancement of an area that has so far been only marginally touched by tourism.

The flow of visitors directly linked to the fossils of Val d'Alpone is still limited. The most visited destinations are the Fossil Museum of Bolca with a guided tour of the Pesciara deposit and the Paleontological Museum of Roncà with the Naturalistic Itinerary in the Fossil Park. For the San Giovanni Ilarione component, no particular tourist interests are reported since the destination is not equipped and advertised. The correlation between

UNESCO and tourism is very strong, because most of the registered sites attract tourist flows, and at the same time the UNESCO sites that are nominated are often already tourist destinations in themselves. This effect generated by the entry of a property into the WHL stimulates the participation of the local community in the activities of promoting the territory. Its involvement creates a sense of belonging, pride among people and increases the understanding of the value of the territory, giving rise to bottom-up marketing actions. When tourism planning aligns with the needs of residents, it is easier to allow socially and economically sustainable development in the long term that overcomes that fragile balance between tourism and protection of the territory. If the property were to be registered in the WHL, a general increase in visits is expected: from Pesciara to Monte Postale, from Valle della Chiesa to Ciupio. Even the local museums of Bolca and Roncà would feel the positive effects. Currently, visitor flows are still limited due to the limited knowledge and awareness of the paleontological value of the property.

**Table XI - Visitors to the museums and deposits/outcrops of the Val d'Alpone**

Year	Museum of Fossils of Bolca (visitors)	Pesciara (visitors)	Paleontological Museum of Roncà (visitors)	Nature trail and Roncà Fossil Park (visitors)
2018	16.471	8.230	1.100	545
2019	13.743	6.870	813	402
2020	0*	0*	57*	28*
2021	8941*	4.460*	4*	2*
2022	11.440	5.710	379	185
2023	13.716	6.852	507	251

\*Restrictions due to Covid 19 pandemic



The balance that exists between tourism and heritage conservation is often fragile but when the site is registered in the WHL the Management Plan will be updated and integrated to deal with any increase in tourist flows and efforts will be made to minimize potential negative impacts on the property. Careful monitoring (see section 7 of the Plan) of tourist flows is essential for proper management. The touristic enhancement and educational use of the paleontological heritage will be developed and allowed where it does

not conflict with the general objectives of conservation and scientific research. Taking this into account, the management of visits to the proposed property will be adapted based on the results of scientific research, the opinions of the C.T.S. New and the suggestions of local stakeholders.

The following table summarises the factors that interact with the property in the tourism sector, divided by type, risk and control subjects. These are factors that will be monitored over time (see Section 7).

**Table XII - Tourism sector and property protection and management factors**

General scope	Scope of intervention	Type of intervention	Risk assessment	Risk	Entity competent to issue the authorization or organize the initiative	Control subject
Tourism	Visit to the deposits	Transit along marked paths with stops in suitable lay-bys	The collection of fossils and/or rock samples is not permitted	None, when visitors are accompanied by a guide. Potentially high in the absence of a guide. There is adequate information signage near the deposits. Presence of some video cameras/ photo traps	A.T.S. New	Carabinieri Forestry Unit, Superintendence of Archaeology, Fine Arts and Landscape for the provinces of Verona, Rovigo and Vicenza, Regional Natural Park Authority of Lessinia, A.T.S. New, land owners
	Trails	Transit along marked paths	The collection of fossils and/or rock samples is not permitted	None, when visitors are accompanied by a guide. Potentially high in the absence of a guide. There is adequate informative signage at the start and along the route. Potential fire risk in the Valle della Chiesa "picnic" area	A.T.S. New	As above

### 5.3.1 Environmental and social carrying capacity of visitors

The carrying capacity of natural or physical heritage refers to the maximum number of visitors that the asset can support without causing environmental damage or ecological problems. Various parameters have been taken into account to determine the maximum sustainable carrying capacity of visitors with the aim of not threatening its Outstanding Value. Recognizing that all human activities cause environmental and/or social impacts, visitor management on the site must take into account and define the "limits of permissible change". Specifically, since it is a paleontological site, the limit is low. Practical considerations related to the organization of guided visits in the Bolca and Roncà components require limits on the maximum carrying capacity limited to their logistical carrying capacity.

Visits to Pesciara and Monte Postale take place in the period March-October, while there are no limits for guided visits to Valle della Chiesa. At the time of writing, there is not enough information on the impact of visits to Bolca to estimate their environmental carrying capacity. From discussions with the owners of the land that affect the outcrops and with Ceratoichthys and the Associazione Paleontologica Val d'Alpone Gruppo Val Nera, who manage guided visits to the territory in Bolca and Roncà respectively, no negative indications emerged, but the desire for the area of the serial site to have an acceptable social carrying capacity.

### 5.3.2 Site components and visitor facilities

The components of the site have different characteristics for accessibility and visits to the deposits/outcrops, parking, services for visitors, etc. Let's look at the components in detail:

#### Bolca

To reach and visit the deposit area coming from the A4 Soave-San Bonifacio toll booth, take the SP77 Provincial Road towards Bolca and, a few hundred meters before reaching

the location, follow the signs for Pesciara. Once you reach the "Alle Castagnare" location, there is a free car park, equipped with toilets and with a capacity of about 40 cars and 6 buses. You walk along the dirt road that runs slightly downhill along the eastern side of Monte Postale for about 1.3 kilometers. Along the way, you can see some outcrops that are the subject of small excavation campaigns. At the end of the road, there is a small parking lot for two/three vehicles used in the free service for the transport of elderly or disabled people. From here, crossing a small bridge over the stream that runs through Valle del Cherpa, you enter the Pesciara area. Going up the staircase that leads to the reception and refreshment point, you pass by the Pesciara deposit where you can see the gated entrances of the old tunnels that were excavated in the last century. Depending on the time available and your interests, you can stop in the educational area or ask to be accompanied by a guide to visit one of the old tunnels that has been duly equipped and made safe. The section open to the public extends for about 50 meters. The laminated layers rich in fossils are clearly visible, as well as two sections of tunnels that still preserve the ancient techniques, artificial and natural, of securing the vault.

Once the guided tour is over, you can easily reach the reception point to dedicate yourself to the activities of the educational area. School groups and visitors can safely try out (with goggles, gloves and a hammer) the role of a "paleontologist" in search of fossils by opening specially arranged foreign fossiliferous rocks or using sieves in some large sandboxes where fossils of shark teeth from North Africa and colored mineral crystals are hidden. These last activities are carried out under the supervision of expert staff. Before or after the visit to Pesciara and Monte Postale, it is possible to complete the paleontological visit at the Bolca Fossil Museum.

The Museum displays a rich collection of fossils from local deposits/outcrops. These are plants, fish, insects, molluscs and

## THE EOCENE MARINE ECOSYSTEM IN THE VAL D'ALPONE - BOLCA, SAN GIOVANNI ILARIONE, RONCÀ

crustaceans that present themselves to the visitor in all their extraordinary beauty, even with their original color. Extensive captions,

drawings and reconstructions illustrate the environments and the history of Bolca which dates back to about 50 million years ago.

A



A. Entrance to the Bolca Fossil Museum

B. Car and bus parking area

C. Entrance to the Pesciara gallery

D. Path that leads to the Pesciara open to the public

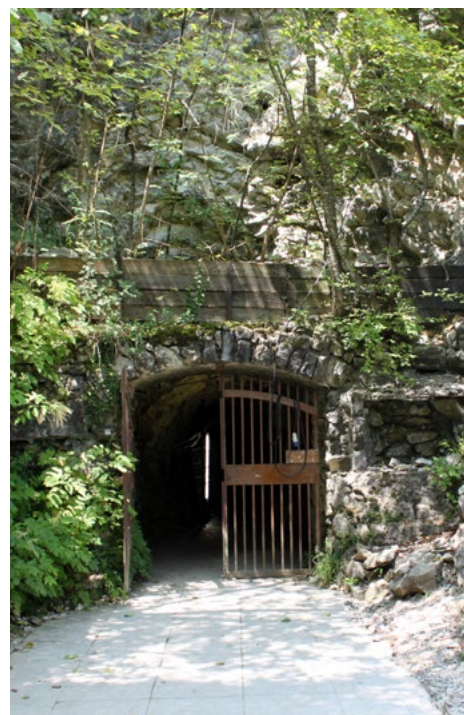
E. Interior of the gallery open to the public

F. Teaching area with sandboxes



B

C



F



E

D





### San Giovanni Ilarione

To reach the outcrop, follow a stretch of Via Ciopii and then continue on the right bank for a few dozen meters along a dirt road.

At the moment only a few rock faces are visible because the tuff unit rich in fossils is covered by detrital materials. Around the site, the agricultural land is cultivated with vineyards, cherry orchards, arable land and permanent meadows. The municipal administration is planning a project to make the area accessible by creating a small parking lot and arranging some information signs.

San Giovanni Ilarione: the environment surrounding the site



### Roncà

Next to the church of Roncà, adjacent to the parking area equipped with a camper area, a ring-shaped nature trail begins. The itinerary develops within the so-called "Fossil Park", skirting outcrops of volcanic and sedimentary rocks. The outcrops are located in a lateral position with respect to the path that crosses the wooded valley floor of Valle della Chiesa. Although they are not marked, their protection is not easy because the fossil horizons are rather superficial. The excursion can end with a visit to the Paleontological Museum of Roncà which since 2004 has a new layout developed on two floors: the ground floor is dedicated to the naturalistic environment of the Val d'Alpone, the upper floor to the collections and the reconstruction of the marine environment of about 40 million years ago.

Roncà: entrance to the Paleontological Museum





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Interior of the Paleontological Museum of Roncà

## 5.4 Scientific research

Since the late 1990s, paleontological excavations (Pesciara, Monte Postale, Valle della Chiesa and Monte Duello) have been conducted under ministerial concession, involving numerous Italian and foreign institutes and research bodies, both in the excavation and study phases. Among these, in addition to the Museo Civico di Storia Naturale in Verona and the Museo Paleontologico in Roncà, we recall the Department of Geosciences of the University of Padua, the Department of Earth Sciences of the University of Turin, the Department

of Chemical and Geological Sciences of the University of Modena and Reggio Emilia, the Institute of Geosciences and Georesources of the CNR in Padua, the Museum of Natural History in Florence, the Borisyak Paleontological Institute of the Russian Academy of Science in Moscow and many others. The results of the research and studies on the paleontological materials extracted are published in scientific journals and disseminated at conferences, seminars, Vinitaly, Fieracavalli, training courses for naturalistic guides, etc.



**Above:** Fieracavalli 2023, stand of the Veneto Region. The Governor of the Region with the President of the Lessinia Regional Natural Park in a moment of valorization of the paleontological heritage of the Val d'Alpone.

**Next:** Program of "ArchaioLogika Erga 2022". The event was organized by the Superintendence of Archaeology, Fine Arts and Landscape for the provinces of Verona, Rovigo and Vicenza where the results of the excavation campaigns on Monte Postale and in Pesciara were exhibited





The richness and uniqueness of the nominated site are highlighted by the interest that these places have aroused, over the centuries, in philosophers of science and naturalists who, starting from the eighteenth century, have contributed to the debate on the origin and evolution of the Earth and the nature of fossils. In particular, the Bolca component represents a unique case in the world both for the abundant Eocene marine fauna and for its perfect conservation. Thanks to the excavations still underway in Pesciara and on Monte Postale, the scientific data regarding the conspicuous fauna and flora biodiversity are constantly updated. These are mostly bony and cartilaginous fish, but also bird feathers, gastropods, bivalves, cephalopods, crustaceans, corals, worms, jellyfish, insects, algae, marine and terrestrial plants, the latter very often accompanied by flowers and fruits. Scientific research, especially in recent decades, has contributed significantly to the understanding of this exceptional paleontological value, capable of describing the Eocene marine ecosystem in the three components of the site, and this would allow us to complete the cognitive framework of this geological era within the World Heritage List. To get an idea of the great biodiversity, we can refer to the most recent list of Actinopterygii fish known for the Bolca fauna, which includes 19 orders, 91 families, 192 genera (of which 32 are of uncertain family) and at least 220 species. The taxonomic diversity at a level above the species (genus) is exceptional: Fish (over 100), Molluscs (80), Crustaceans (25). The taxa of the Val d'Alpone site, although extinct, present the greatest affinities with forms that currently live in the Indo-Pacific area and, to a lesser extent, in the tropical Atlantic. To date, there are more than 1000 scientific publications of various kinds that directly concern the geology and paleontology of the site. Scientific research is not only essential to discover new fossil species and increase knowledge of ancient Eocene marine communities, but also plays an important role in the conservation and protection of the integrity of the value of the proposed property. It is likely that, with the inscription on the World Heritage, scientific

interest will increase even further. In the pre-recognition phase, the aspects and phases of the management of the fossil deposits are followed by the Technical Scientific Committee of the A.T.S. composed of specialist paleontologists in vertebrates, molluscs, crustaceans and marine plants of the Eocene. Subsequently, a new C.T.S. will be formally established to manage all the scientific aspects. (C.T.S. New) which, in addition to expert paleontologists, includes an environmental engineer and a landscape architect who will provide technical advice to the Board of Directors and the Executive Committee. The C.T.S. New will examine the research proposals relating to the paleontological heritage of the site and will ensure that the work is scientifically sound and does not cause damage to the outcrops. Furthermore, it will provide information to the Board of Directors regarding the conservation and management of the fossiliferous outcrops. The Board of Directors, also on the basis of the indications of the C.T.S. New, will develop the projects of the Plan in order to best protect, preserve and promote the candidate paleontological assets.

The members to be officially appointed by the Board of Directors will be chosen from experts, scholars and university professors and includes the following members:

- (1) Paleontologist (specialist in Eocene marine vertebrates)
- (1) Paleontologist (specialist in Eocene marine mollusks)
- (1) Paleontologist (specialist in Eocene marine crustaceans)
- (1) Paleontologist (Eocene plant specialist)
- (1) Environmental Engineer (geotechnical and safety expert)
- (1) Landscape architect
- (4) Technical Scientific Committee and Territorial Naturalistic Observatory
- (1) Superintendence of Archaeology, Fine Arts and Landscape for the provinces of Verona, Rovigo and Vicenza (by invitation)
- (1) Curator of the Geology and Paleontology Section of the Civic Museum of Natural History of Verona (by invitation)

## 5.5 Collecting and preserving fossils

It is important to remember that in Italy fossil deposits are protected by the Cultural Heritage and Landscape Code. Therefore, the fossils found are the property of the State and their trade is prohibited.

Paleontological excavations can only be carried out if previously authorized by the Ministry of Culture - General Directorate of Archaeology, Fine Arts and Landscape, following the submission of a concession application.

The C.T.S. New will be able to carry out support activities for paleontological research proposals in Val d'Alpone and ensure that the excavations are carried out using modern techniques, simultaneously providing information to the Executive Committee regarding the conservation and management of fossils.

A particularity of the candidate serial asset is that paleontological excavations are carried out both in the open and in tunnels. The paleontological excavation and research methods practiced are cutting-edge and produce a significant increase in scientific knowledge while also ensuring careful and balanced conservation of the fossil heritage. Most of the fossils found during excavations require more or less thorough cleaning. The cleaning and restoration phases of the fossils involve the use of various equipment and must be carried out by qualified personnel.

Currently, this heritage is preserved in the two local museums of Bolca and Roncà, and in the collections of the Civic Museum of Natural History of Verona and in those of the Museum of Nature and Man of the University of Padua as well as in other museums around the world.

The long history of the fossils of the site "*The Eocene marine ecosystem in the Val d'Alpone - Bolca, San Giovanni Ilarione, Roncà*" is deposited in the collections of the following museums in the area:

- The Civic Museum of Natural History, managed by the Municipality of Verona, has the most important collection of fossils from the Bolca component. Since the end of the 1990s, the Museum has directed and coordinated research in the Pesciara and Monte Postale deposits in collaboration with various Italian universities and foreign specialists. Paleontological excavations are still active in these two locations;
- The Fossil Museum of Bolca over the years, given the ever-increasing scientific importance of the Pesciara and Monte Postale deposits, has seen an increase in the number of visitors, but also in the quantity and beauty of the finds brought to light during the excavations. The Mountain Community of Lessinia, now the Regional Natural Park Authority of Lessinia, has created the new museum structure in Bolca, managed under an agreement. The museum structure is a two-story building, inaugurated on 28 July 1996, comprising three large exhibition rooms with an adjacent conference room seating over 100;
- The Paleontological Museum of Roncà, owned by the municipality of the same name, and managed under an agreement. The current collection of the Museum was formed starting from the 1970s and has been continuously increased by the fossils found in the excavation campaigns that began in 2010 and are still ongoing. The museum was inaugurated in 1975 thanks to the collaboration of the Paleontological Association of Val d'Alpone-Gruppo "Val Nera" with the municipal administration that made the building available.

Visiting these museums is a "marine" dive into the past between about 40 and 50 million years ago.

## 5.6 Tourism promotion

One aspect to consider is the accidental discovery of fossils inside and outside the components. We reiterate that the CBCP of the Italian State is strict and does not grant exemptions to research and collection activities that are not under public control. It is essential that any person interested in excavating fossils for scientific reasons submits a request to the Superintendency or refers to universities and/or museums that already have a concession in place. No space is granted to the unauthorized sale and possession of these cultural assets that belong, by law, to the Italian State. However, building a good collaborative relationship with enthusiasts in the sector can be advantageous as their presence on the territory could be a valid help for the protection and conservation of existing sites or for reporting new ones, but also for the detection of any clandestine excavations. The presence of the activities planned by A.T.S. New such as regular monitoring of the deposits and the surveillance of the owners of the land that fall within the deposits, allow the prevention of illegal collection of fossils on the site.

### 5.6.1 Tourism and hospitality

The cultural tourist and the ecotourist today are no longer satisfied with a simple visit, they want to live an authentic, engaging experience that allows them to perceive the true essence of the territory. Therefore, it is important to create a complete tourist offer that integrates every aspect of the tangible and intangible cultural heritage of the destination. To do this, it is necessary to create a tourist visit product integrated with every component of the tourist offer including the local community that hosts it. The correlation between UNESCO sites and tourism is also very strong, because most of the sites registered in the WHL attract tourist flows. The balance between tourist flows and heritage conservation is often fragile. According to the idea of sustainable tourism indicated in the Cultural Tourism Charter proposed by ICOMOS (Mexico 1999), it is important to allow all visitors to enjoy the paleontological heritage of the Val d'Alpone but also to protect and conserve it for future generations. At an international level, an important reference is present in the United Nations 2030 Agenda for Sustainable Development, where specific targets have been set in this direction.

From a socioeconomic perspective, tourism is a key element; it is a sector that is today unanimously considered among the most incisive factors of territorial organization for its ability to create close relationships with the various production sectors and to integrate different individual and collective subjects.

One goal is to allow visitors to experience the territory, offering cultural tourism that is an opportunity for virtuous relationships with residents, contributing to the knowledge, enhancement and conservation of the environment. These elements also include the integration between tourism and agriculture, a central aspect today in successful tourism policies. In Val d'Alpone this means promoting a new culture of hospitality, creating or expanding the offer of agritourism and setting up quality refreshment points

The strategy to support the tourist promotion of the site passes through a series of actions that we list briefly:

- training of tourist guides, some multilingual, who can talk about the fossils of the Val d'Alpone even to foreign tourists;
- provide information via a dedicated website;
- create a card for visits to the museums of Bolca and Roncà, in Pesciara and in Valle della Chiesa;
- build a calendar of events dedicated to fossils;
- set up exhibitions to promote the site's fossils;
- develop initiatives aimed at school visits;
- paleontological excursions.

Finally, it is important to activate an Observatory on local tourism that can offer a significant contribution, both as a data archive to monitor existing ones, and as a driving force for new initiatives.

### 5.6.2 The Val d'Alpone and the local tourist system

The reference tourist context of the nominated asset is that defined by the Veneto Region.

The regulatory framework on tourism in the Veneto Region (Regional Law 14 June 2013, n. 11 "Development and sustainability of Veneto tourism) has the entrepreneur as its main actor and the market as its horizon, in a production sector that is the main industry in Veneto. A limited number of thematic tourist systems have been identified. These systems represent homogeneous territorial areas in terms of tourist typologies capable of supporting the development and promotion of an integrated range of networked tourist products. The Tourist Destination Organizations (hereinafter OGD) are in fact the new protagonists in the tourist organization of the Veneto Region.

They are real presidia of the different destinations, which through cooperation between public and private entities govern the development of tourist products such as: the consolidation of the offer, the unitary management of information functions, tourist reception, promotion and marketing of local products. The OGDs aim to organize one or more of the following activities: governance of the territory; organization, management and updating of information on the local tourist offer; qualification of the destination's services and tourist products; creation and development of synergies and forms of cooperation between public and private entities involved in the governance of the destination and tourist products.

The Municipalities of the site belong to the territorial tourism system "Cities of art, historic centers, walled cities and fortified systems" and "Venetian villas" but adhere to two different OGDs.

The Municipalities of Vestenanova, San Giovanni Ilarione and Roncà to that of "VERONA" and the Municipality of Altissimo to that of "TERRE VICENTINE" (list updated to 2023).

#### **Territorial Tourist System (STT): Cities of art, historic centers, walled cities and fortified systems and Venetian villas (<https://www.regione.veneto.it/web/turismo/ogd>)**

A. Destination Management Organizations (DMO) Recognized by the Veneto Region DGR

RECOGNITION NAME: **VERONA** DGR n. 2273 of November 27, 2014

PROMOTING AND/OR CONTACT ENTITY: Destination Verona & Garda Foundation Destination Verona & Garda Foundation established on 03/17/2022 at the Verona Chamber of Commerce

MEMBER ENTITIES: MUNICIPALITIES/ASSOCIATED FORMS: As of March 24, 2022, the Municipalities of **Roncà**, Montecchia di Crosara, **San Giovanni Ilarione**. As of April 4, 2022, the municipalities of Cazzano di Tramigna and Vigasio. As of May 9, 2022, the municipalities of Casaleone, Gazzo Veronese, Illasi, Povegliano Veronese. As of November 28, 2022, the municipalities of Cologna Veneta, Minerbe, Palù, Salizzole, Sanguinetto, **Vestenanova** and Zimella.

DESTINATION MANAGEMENT PLAN: ADOPTED note received on May 20, 2016 prot n. 198633

- B. Destination Management Organizations (OGD) Recognized by the Veneto Region DGR  
 RECOGNITION NAME: TERRE VICENTINE - DGR N 609 of 5 May 2016  
 PROMOTING AND/OR CONTACT ENTITY: Province of Vicenza  
 MEMBER ENTITIES: MUNICIPALITIES/ASSOCIATED FORMS: **Altissimo** and other municipalities  
 DESTINATION MANAGEMENT PLAN: ADOPTED note received on 01.06.2016 prot. n 214706

The 2019 Statistical Report of the Veneto Region highlights some important issues, reported here, which will be taken up again in the projects of the Management Plan.

.... *'The arrival of tourists leads to an increase in the number of people using the territory in a given period, modifying the demand for services and consequently the quality of the services offered. At a territorial level, the impact of tourism can generate problems in the management of services that need to be strengthened when the number of users increases significantly. Not only that, there are limits given by the carrying capacity of the territory that cannot be exceeded and which must be taken into account in the planning and management of tourism development. There are, for example, tourist locations that at certain times of the year record such a high influx that the resident population is even lower than the tourist population. Knowing the pressure of tourism on the territory and on the population in different periods of the year is essential to define strategies aimed at avoiding the saturation of certain services and situations of tourist overcrowding, in order to safeguard both the satisfaction of tourists and the level of quality of life of the inhabitants. In Veneto in 2018, on average, there were 39 tourists per 1000 inhabitants every day, a value that rose to 92 in August, the month of greatest tourist influx. In the last three years, the ratio between tourists and residents has increased (it was 35.2 in 2015) both due to the constant increase in tourist presences and the slight but inexorable decline in the resident population. This is an underestimation of the impact of tourism on the community, as it refers only to tourists who stay for at least one night in our region, while it does not include day tourists, who are particularly numerous in certain areas. At the regional level, there are an estimated 11 million Italian tourists who are excursionists, that is, on a day trip. However, the social impact is also measured through the employment offer in the sector. In Veneto, there were approximately 112,400 employed people in the "heart" of the tourism system in 2017. These are people employed in businesses that live off tourism, such as accommodation facilities, restaurants, travel agencies, tour operators, air and sea passenger transport. Compared to 2011, this number has grown by approximately 32 thousand units (+40%), thanks above all to the good performance of the catering sector. These are younger workers than average, more frequently with a fixed-term contract (37% compared to 15% of the total sectors) and among them the presence of foreigners is more significant (24% compared to the general 11%). These reflections and many others are addressed in the study Analysis of the Veneto Tourist System: demand, supply, social and environmental impact, edited by the Statistics Office of the Veneto Region, which among other topics also addresses the socio-environmental impact of the phenomenon.*







The following table shows the data on tourist movements in 2023 in the four municipalities of the site in the municipalities that form the commitment zone in the accommodation facilities present in the territory.

**Table XIII - Tourist movement in accommodation facilities: hotels and non-hotels  
Year 2023**

Source: Processing by the Veneto Region - U.O. Regional Statistical System on Istat data - Veneto Region

Municipalities of the site		Municipalities of the commitment zone								
		Alfissimo	Vestenanova	San Giovanni Ilarione	Roncà					
Accommodation facilities and tourist movements year 2023	Arrivals	*	*	0	*	12.698	0	*	*	*
	Attendances	*	*	0	*	36.845	0	*	*	*
Complementari	Arrivals	*	*	220	*	14.511	1.913	*	*	*
	Attendances	*	*	654	*	31.657	8.548	*	*	*
Total	Arrivals	981	447	220	*	36.209	1.913	*	*	508
	Attendances	1.853	1.456	654	*	68.502	8.548	*	*	2.235

\* The asterisk indicates that the data are omitted due to statistical confidentiality (art.9 of Legislative Decree 322/89) or due to low survey coverage.



*Eobothus minimus* (length 6,1 cm)

**Previous page:** Participants in the "Regional Day of the Venetian Hills - The Soave Hills" held on March 24, 2024. Along the route, some Eocene outcrops of the Commitment zone were visited

## 5.7 The Resources

Italian heritage legislation provides for the separation between protection and enhancement: the protection tasks are entrusted to the State, the enhancement activities are entrusted to the regions and local authorities. The separation is obviously only formal as the two activities are rarely perfectly separable. Human, financial and scientific resources are the basis of the management capacity of the entity responsible for the site. In the pre-recognition phase, the entity responsible and promoter of the candidacy dossier and the Management Plan is the Association "Val d'Alpone - fauna, flore e rocce del Cenozoico".

It is part of its mission:

- Activate a qualified working group to prepare the application dossier;
- Involve all public bodies with competence on the paleontological heritage of the site;
- Involve local population and stakeholders;
- Seek funding and contributions to support this candidacy beyond membership fees;
- Submit your application to the relevant offices;
- Any other necessary activities functional to the pursuit of the asset's registration in the WHL.

### 5.7.1 Human resources and scientific expertise

The management process carried out by the A.T.S. is carried out by the Board of Directors elected by the members and composed of seven members and makes use of the following collaborations:

- C.T.S. of the Association which makes use of Italian and foreign specialists as well as collaborations with the Universities that study the fossils of the Val d'Alpone and that implement the technical and scientific knowledge of excavation, recovery and restoration of fossils;
- the local authorities (Altissimo, Vestenanova, San Giovanni Ilarione and Roncà) contribute by making available the necessary administrative staff;

- the Superintendency of Archaeology, Fine Arts and Landscape for the provinces of Verona, Rovigo and Vicenza provides collaboration and management support;
- the Lessinia Regional Natural Park Authority which manages the Bolca Fossil Museum;
- the municipality of Roncà manages the Paleontological Museum of Roncà;
- the Civic Museum of Natural History of Verona prepares the requests for excavation authorization in Bolca;
- the municipality of Roncà manages and prepares the requests for excavation authorizations in Valle della Chiesa and on Monte Duello;
- the company Ceratoichthys di Cerato Massimo Cipriano e C. S.n.c. manages the educational activities at Pesciara and collaborates in the excavation campaigns in the Bolca component;
- the Paleontological Association Val d'Alpone Gruppo Val Nera di Roncà manages guided visits to the Fossil Park and collaborates in the excavation campaigns in the Roncà component;
- the owners of the land that falls within the deposits carry out control activities in the relevant areas.

With WHL registration, management activities, including staffing and collaborations, would be better defined within a new statutory framework as shown in Table VI - The post-recognition governance structure of the candidate site.

The following skills have been identified for site management:

- c. management of works in the field of paleontological excavations with experience in excavation techniques and fossil recovery;
- d. curator for the management of the museum collections of Bolca and Roncà with experience in scientific education and paleontological teaching;
- e. administrative management type with at least second level training in the economic and legal fields

Within the scope and in compliance with the Italian legislation on tourist guides (2023), A.T.S. New together with the partner bodies that deal with training, will organize specific courses and training for operators who want to work in the areas of the site.

### 5.7.2 Sources and levels of funding

The activities and projects listed in the Management Plan are currently funded by the A.T.S. through day-to-day management, with projects supported by the Veneto Region or other entities involved in individual initiatives. In the hope of moving from candidacy status to inclusion in the World Heritage List, this would allow us to activate a more incisive fundraising. The financing of measures relating to the protection, conservation and monitoring of paleontological values is the most important item.

This prerequisite for the designation as a UNESCO World Heritage Site and for permanence in the WHL is today implemented by the A.T.S. and the actors involved in management. We can list the flow of resources linked to the protection, enhancement and management activities activated by the A.T.S. during the candidacy process, distinguishing the following items:

- A.T.S. membership fees;
- the financing of the Veneto Region with the Regional Law of 25 November 2019 n. 44, linked to the regional stability law 2020, which provided for "Initiatives aimed at the candidacy of the Alpone Valley for the UNESCO World Heritage List" (art. 24) for the 2020, 2021, 2022, 2023 and 2024 financial years. Part of the resources were used for actions to protect and conserve the paleontological heritage of Bolca;
- donations from supporting members.

Other items that fall within the management activities developed by other actors are:

- management costs of the Bolca Fossil Museum by the Lessinia Regional Natural Park Authority;
- expenses for the excavation campaigns in Bolca (Pesciara and Monte Postale) by the Municipality of Verona - Civic Museum of Natural History;
- expenses for the management of the Pesciara site by the company Cerato ichthys di Cerato Massimo Cipriano e C. S.n.c.;
- expenses for the management of the Paleontological Museum of Roncà by the administration of the same name;
- expenses for the excavation campaigns in Valle della Chiesa and on Monte Duello by the Municipality of Roncà;
- expenses for the management of the Naturalistic Itinerary by the municipality of Roncà in collaboration with the Paleontological Association Val d'Alpone Gruppo Val Nera.

In relation to the amount paid by each entity in its ordinary management activity in favour of the activities in the candidacy phase, a new budget model will be foreseen in the Plan, with the human and financial resources to carry out the planned activities.

In particular, measures relating to the protection, conservation, monitoring and valorisation of paleontological values will have to be financed in the items listed below : organizational structure that guarantees adequate professional and managerial anchoring;

- monitor site values over time;
- facilitate the development of scientific research;
- present the paleontological and geological values of local museums and the site;
- promote the creation of a Visitor Centre that will be a point of reference for guided tours, exhibitions, teaching and research.



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**PART 6**  
PROJECTS  
MANAGEMENT PLAN:  
VISION, OBJECTIVES,  
PURPOSES  
AND ACTIONS

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This section summarises the principles, vision, objectives, purposes and actions of the main management activities of the site.

The management objective remains the protection of the values contained in the OUV of the asset in the long term while the policies and actions define the development process of how they will be implemented in the Plan.

The contents and objectives of the Plan have been developed in collaboration with the subjects directly involved in the candidature.

We indicate the following management principles that guide the development of the Plan and its actions:

1. site management shall comply with international standards of excellence;
2. the entity responsible for the management (A.T.S. New) will manage, protect and enhance the paleontological site with the supervisory authority (Superintendency of Archaeology, Fine Arts and Landscape for the provinces of Verona, Rovigo and Vicenza), the Veneto Region, the municipalities of Altissimo, Vestenanova, San Giovanni Ilarione and Roncà, the Lessinia Regional Natural Park Authority and the owners of the land that falls within the deposits, working cooperatively with the communities and the interested parties of the territory;
3. the main objective of the Plan is to address issues directly related to the management of the conservation of the Outstanding Value of the site;
4. the management of the site is by the Board of Directors and the Executive Committee of the A.T.S. New assisted by the C.T.S. New;
5. actions taken to support the protection and enhancement of the site will be taken by involving local communities and stakeholders;
6. if registered in the WHL, as a member of the World Heritage community, the managing entity (A.T.S. New) will develop and maintain a relationship with the World Heritage Committee for decisions on the future protection, conservation and valorisation of the property.

In developing the Plan, the indications of the Operational Guidelines and the publications supporting the World Heritage Centre were taken into consideration, in particular the IUCN Management Planning for Natural World Heritage Properties, Guidance and Toolkit for Impact Assessments (ICOMOS, ICCROM, IUCN)



## 6.1 Objectives, purposes and actions

The following tables outline and summarize the objectives, defining for each purpose the actions that will be followed by the action

plans. Furthermore, these objectives and actions are linked to indicators that can be monitored and evaluated.

### Objective 1: Protect the proposed Outstanding Universal Value and the integrity of the property.

n.	Scope	Actions
1.1	Safeguarding the physical integrity of deposits	<ol style="list-style-type: none"> <li>Drafting of a periodic report for each deposit and any irregularities found</li> <li>Compile a periodic report on agricultural activities on the site</li> <li>Annual report</li> </ol>
1.2	Support and encourage scientific research on the site's fossils to understand and protect the Outstanding Universal Value	<ol style="list-style-type: none"> <li>Develop paleontological scientific research by the Technical Scientific Committee</li> <li>Encourage scientific research</li> <li>Provide accessible information on ongoing research activities and authorization procedures</li> <li>Maintain a register of permits issued for scientific research on the site's fossils</li> <li>Encourage the promotion of conferences and specially selected scientific meetings</li> <li>Develop guided visits to the deposits/outcrops</li> <li>Promote the nominated site to Italian and foreign research institutes</li> </ol>
1.3	Monitor and manage human activities to preserve the integrity of the site serial	<ol style="list-style-type: none"> <li>Manage access to outcrops in accordance with the indications provided by the Technical Scientific Committee</li> <li>Develop and promote access to deposits/outcrops with guided tours</li> <li>Protect and enforce the natural environment of the site territory</li> </ol>
1.4	Involve residents in the municipalities of the site to play a role in monitoring and protecting the deposits/outcrops	<ol style="list-style-type: none"> <li>Involve local residents and young people by proposing the "Guardian of Fossils" project</li> <li>Inform the local population with public presentations of the discoveries and research done on fossils by inviting the scientists themselves to speak</li> <li>Support local initiatives for cleaning the territory</li> </ol>
1.5	Dedicate resources to protecting the integrity of the site	<ol style="list-style-type: none"> <li>Ensure adequate resources for monitoring and visual control programs of outcrops</li> <li>Support the administrative and scientific activity of the C.T.S. New and the Board of Directors</li> </ol>
1.6	Develop best practices on: fossil recovery, conservation, management and exploitation techniques (CBCP)	<ol style="list-style-type: none"> <li>Comply with the CBCP rules for the research and conservation of fossils</li> <li>Fossils will be preferably preserved in local museums of Val d'Alpone</li> <li>Fossils must be recovered according to the CBCP Protocol</li> <li>Encourage professional activity in the various roles required by paleontology</li> </ol>
1.7	Verification of the results of management decisions and monitoring	<ol style="list-style-type: none"> <li>Monitor the state of conservation and integrity of the proposed site</li> <li>Examine and monitor the deposits/outcrops and document the problems arising from the flow of visitors or hikers</li> <li>Monitor over time the number of visitors to the deposits/outcrops and museums in Val d'Alpone</li> </ol>
1.8	Collaboration with the owners of the deposits' land	<ol style="list-style-type: none"> <li>Share information on the site components with the owners of the lands falling within the deposits</li> <li>Develop a memorandum of understanding with the owners of the lands of the deposits for an active role as first guardians of the asset.</li> </ol>
1.9	Continue to develop partnerships with museums, researchers and universities	<ol style="list-style-type: none"> <li>Continue to collaborate with local fossil museums, the Civic Museum of Natural History of Verona and the Museum of Nature and Mankind of the University of Padua</li> <li>Explore partnerships with organizations that deal with paleontology</li> <li>Collaborate with researchers and professors from Italian and foreign universities</li> </ol>
1.10	Support local efforts to realise the social and economic benefits of World Heritage, whilst maintaining the sense of place and values of the site	<ol style="list-style-type: none"> <li>Support and strengthen the capacity of the community to welcome visitors through shared training opportunities</li> <li>Support the entrepreneurial development of the site with local tourism operators and land owners</li> </ol>

**Objective 2: To ensure that visitors have an engaging, enjoyable and educational experience**

n.	Scope	Actions
2.1	Provide engaging and inclusive visitor experiences that cater to different types of visitors	<ol style="list-style-type: none"> <li>1. Develop and deliver interpretive experiences that include local entertainment programs</li> <li>2. Collaborate on the development of site accessibility facilities to enhance visits to local museums with new and engaging exhibits</li> </ol>
2.2	Improve visitor experiences by building professional capacity of staff managing visitor facilities	<ol style="list-style-type: none"> <li>1. Invest in staff training and professional development</li> <li>2. Support staff engagement with visiting researchers and geological conference tours</li> <li>3. Provide ongoing training for palaeontology guides</li> </ol>
2.3	Providing an authentic cultural experience for visitors	<ol style="list-style-type: none"> <li>1. Provide training to local volunteers on best practices for interacting with site visitors</li> <li>2. Provide visitors with information on local crafts, businesses and other tourism opportunities</li> </ol>
2.4	Adapt programs based on opportunities, site conditions for the public and gather feedback on visitor experiences	<ol style="list-style-type: none"> <li>1. Develop and deliver special event programs (music, film, etc.) related to paleontology</li> <li>2. Survey visitors to gather information on visitor expectations and experiences</li> <li>3. Regularly consult with on-site staff to evaluate the effectiveness of initiatives</li> <li>4. Regularly evaluate programs implemented to ensure that they are effective and meet visitor expectations</li> </ol>
2.5	Develop a comprehensive security program that identifies, prevents and manages risks and outlines security procedures	<ol style="list-style-type: none"> <li>1. Visitor access to the deposits/outcrops will continue to be possible mainly through guided tours</li> <li>2. Continue to provide safety information in brochures, on the website, etc.</li> <li>3. Verify and improve the safety of infrastructure, access paths to the deposits, in educational areas and in the museums themselves</li> <li>4. Update and implement the emergency response and Communication Plan</li> <li>5. Continue to assess on-site safety to reduce risks</li> </ol>

**Objective 3: Promote knowledge, understanding and awareness of the values of the site and the UNESCO World Heritage programme**

n.	Scope	Actions
3.1	Develop programs, initiatives, events and activities to raise awareness of the global importance of the site	<ol style="list-style-type: none"> <li>1. Ensure that the interpretation highlights the significance of the proposed Outstanding Universal Value</li> <li>2. Develop virtual interpretive experiences to raise awareness of the global importance of the site</li> <li>3. Continue the collaborative relationship with local schools to offer study programs, visits and special activities to promote the values of the site and the World Heritage</li> <li>4. Continue to develop the relationship with teachers of local schools to include the site "The Eocene marine ecosystem in the Val d'Alpone - Bolca, San Giovanni Ilarione, Roncà" in school curricula</li> </ol>
3.2	Promote the site "The Eocene marine ecosystem in the Val d'Alpone - Bolca, San Giovanni Ilarione, Roncà" according to the standards of excellence required for World Heritage properties	<ol style="list-style-type: none"> <li>1. Develop a communication and marketing strategy to promote the site</li> <li>2. Display the World Heritage emblem in accordance with UNESCO guidelines</li> <li>3. Provide advice and information to local businesses on UNESCO marketing protocols</li> </ol>

## THE EOCENE MARINE ECOSYSTEM IN THE VAL D'ALPONE - BOLCA, SAN GIOVANNI ILARIONE, RONCÀ

3.3	Promote the site "The Eocene marine ecosystem in the Val d'Alpone - Bolca, San Giovanni Ilarione, Roncà" in a coordinated manner that actively involves local, provincial, regional and international partners	<ol style="list-style-type: none"> <li>1. Promote the site and the World Heritage through the Destination Management Organization and through the A.T.S. New website</li> <li>2. Promote the creation of a Visitor Center that will be a reference point for presentations, guided tours, exhibitions, teaching and research</li> <li>3. Explore opportunities for collaboration in cross-promotion programs (for example, with other World Heritage sites)</li> <li>4. Develop relationships with other protected fossil sites in Italy and around the world</li> <li>5. Involve the members of the C.T.S. New to raise awareness of the site "The Eocene marine ecosystem in the Val d'Alpone - Bolca, San Giovanni Ilarione, Roncà" also through their organizations and networks</li> </ol>
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**Objective 4: Involve the local community and stakeholders in the management of the site**

n.	Scope	Actions
4.1	Traditional uses of the property by residents of the surrounding communities will be able to continue to be carried out in an ecologically and culturally sustainable manner, protecting the Outstanding Value of the proposed site	<ol style="list-style-type: none"> <li>1. Ensure that information on site protection does not conflict with customs, traditions etc. and is communicated to residents</li> <li>2. Involve volunteers and local staff in the implementation of site enhancement programmes</li> </ol>
4.2	Ensure that local people have the opportunity to participate in the management of the site	<ol style="list-style-type: none"> <li>1. Actively seek the participation of residents and provide ongoing information on site management</li> <li>2. Actively seek the participation of municipal government representatives</li> </ol>
4.3	Update and communicate to residents the discoveries and activities of the site "The Eocene marine ecosystem in the Val d'Alpone - Bolca, San Giovanni Ilarione, Roncà"	<ol style="list-style-type: none"> <li>1. Inform and publicize new scientific discoveries to A.T.S. New partners also through the Association's website or with an informative newsletter to local residents</li> <li>2. Provide updates on scientific research by organizing scientific presentations or visits</li> <li>3. Provide copies of scientific research and other publications if requested</li> <li>4. Make available the results of monitoring programs</li> <li>5. Provide updates on site management</li> </ol>
4.4	Involving volunteers and local youth in the knowledge and protection of the site "The Eocene marine ecosystem in the Val d'Alpone - Bolca, San Giovanni Ilarione, Roncà"	<ol style="list-style-type: none"> <li>1. Organize special events and activities to celebrate the contribution of volunteers and residents to the conservation of the site</li> <li>2. Inform and encourage young people about opportunities for involvement</li> <li>3. Develop training programs for volunteers and local young people</li> </ol>
4.5	Continue to work with residents and site owners to cooperatively manage the area and uphold World Heritage values	<ol style="list-style-type: none"> <li>1. Continue to ensure that local residents and all stakeholders of the site are consulted in the conservation and enhancement process</li> </ol>



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**PART 7**  
INDICATORS  
AND  
MONITORING

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In the context of good management of the site, it will be very important to monitor a series of key factors to have an indication of the situation of the asset and its state of conservation. This section describes the monitoring programs that will evaluate both the state of conservation

and the effectiveness of management. The first objective is that of the conservation of the asset. Two categories of indicators are used to monitor the state of conservation of the site: the integrity of the paleontological values and the integrity of the natural environment.

## a) Indicators for the integrity of paleontological values

This category includes the most important group of indicators for monitoring because it is aimed at evaluating the state of conservation of the proposed Outstanding Value and the effectiveness of management practices.

### (7.a) - Indicators used to monitor the state of conservation and increase the paleontological value of the site

INDICATOR	PROCEDURE	FOCUS	PERIODICITY	SUBJECT AND/OR LOCATION OF THE DATA
1. Monitoring of deposits/outcrops	cataloguing of deposits/outcrops	control of deposits/outcrops and updating of the sheet	annual	Superintendence, landowners, A.T.S. New* C.T.S. New
2. Excavation permits in the components	preparation of the excavation application	report of the activities carried out	annual (duration approximately 1 month)	Superintendence, Verona Museum, A.T.S. New C.T.S. New
3. Fossil material excavated	inventory of fossils	Insertion of fossils into collections or on display	annual	Superintendence, Verona Museum, A.T.S. New C.T.S. New
4. Restoration of fossils	control of techniques and photographic documentation of the restoration phases	Report on the interventions carried out	annual	Superintendence, Verona Museum, A.T.S. New C.T.S. New
5. Scientific study and research activities	identification of fossils to study and identification of specialists to involve	study of paleontological material	continues	Verona Museum, A.T.S. New, C.T.S. New
6. Scientific and educational publications on fossils collected and studied	collection of scientific and popular articles related to the site	bibliographic database update	continues	Verona Museum, local museums (Bolca and Roncà), A.T.S. New, C.T.S. New
7. General conditions and state of conservation of fossils preserved in local museums	analysis and evaluation of the state of conservation of the fossil heritage present in local museums	Report on the state of conservation of fossils	half-yearly	Superintendence, local museums (Bolca and Roncà), A.T.S. New, C.T.S. New
8. Improving the state of conservation of fossils	analysis of interventions to improve museum activities (exhibition, teaching, publications, etc.	project development (reports, drawings, estimates, etc.)	annual	Superintendence, local museums, A.T.S. New, C.T.S. New

\*A.T.S. is equipped with a Technical Scientific Committee and a Territorial Naturalistic Observatory, respectively to support the activities and initiatives that concern the three components, including contacts with Italian and foreign scholars and specialists and to control the activities carried out within the components.



## b) Indicators for the integrity of the natural environment

This category considers indicators of human activities on the integrity of fossils on the designated property.

### (7.b) Indicators used to monitor the natural environmental integrity of the site

INDICATOR	PROCEDURE	FOCUS	PERIODICITY	SUBJECT AND/OR LOCATION OF THE DATA
1. Incidents of non-compliance with current legislation and regulations that occurred on the site (illegal excavation, acts of vandalism, etc.)	drafting a report on any irregularities found	analysis of interventions to improve the services offered	continuous	Superintendence, municipalities of the site, Park Authority, land owners, A.T.S. New (C.T.S. New and ONT)
2. Appropriate land use, agricultural activities, deforestation, etc. on the site's land	drafting a report on the land use changes of the property and the <i>buffer zone</i>	measuring the effectiveness of protection mechanisms and assessing the compatibility of agricultural activities on the site	annual	Municipalities of the site, Park Authority, A.T.S. New (ONT), land owners
3. Paths and access roads to the fossil outcrops of the site	drafting a report to document maintenance interventions	assess foot traffic levels on trails and its sustainability	Bolca: April-October; Roncà and San Giovanni Ilarione: annual	Municipalities of the site, Park Authority, land owners, A.T.S. New (ONT)
4. Flow of visitors to the deposits and museums	compile a monthly report on the number of visitors to the deposits and museums	assessment of tourist demand over time in relation to the carrying capacity of the site and international interest in the site	monthly/yearly	managers of museums, of the Pesciara and of educational activities, A.T.S. New (ONT)
5. Structures and quality of tourist services present on the site	cataloguing of tourist facilities and services offered	evaluation of the state of the facilities and services offered	annual	owners of the facilities, A.T.S. New (ONT)
6. Improving the proposals and quality of tourist services	analysis of interventions to improve the services offered	evaluation of the state of the facilities and services offered	annual	Municipalities of the site, Park Authority, A.T.S. New (ONT), owners of the structures

Alongside these indicators there are those linked to the objectives of the Plan's projects and connected to the actions that must be monitored and evaluated.



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# **PART 8**

# IMPLEMENTATION OF THE PLAN

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The Site Management Body will have primary responsibility for the conservation of the Outstanding Universal Value of the proposed site. The Board of Directors and operationally the Executive Committee are supported by the Technical Scientific Committee which plays an advisory role in the implementation of the Plan.

The Management Plan has been developed in collaboration with all public and private entities that have an important role in the achievement of the objectives and actions outlined in the Plan.

#### Implementation framework

The Management Plan defines objectives, actions and indicators that are specific and achievable during the course of this Management Plan. Progress in achieving these objectives will be assessed by the managing entity with the assistance of the Technical Scientific Committee. The results of the actions and the objectives achieved will be presented to the Board of Directors of the managing entity of the site.

Monitoring and evaluation of the results have been included in many of the actions of the Plan.

Implementation of the Management Plan will require adequate funding, which is essential to ensure the achievement of the objectives of the Plan. The basic requirement for registration in the WHL is that the property is maintained or improved compared to what it was at the time of registration: this is therefore a priority.

Monitoring and evaluation of actions are described in more detail in Section 7.

#### Plan review and reports

The Management Plan of the site will be reviewed after inscription and every six years thereafter.

The review will focus on maintaining the Outstanding Universal Value and will be in accordance with the Operational Guidelines for the implementation of the World Convention on Cultural and Natural Heritage, as well as national and Veneto Region legislation. The review of the Management Plan should be in line with the World Heritage reporting cycle.

### **Texts consulted**

ANMS - National Association of Scientific Museums, <http://www.anms.it> > journals > Italian fossils, what can be done? (2018)

ANMS - National Association of Scientific Museums (<http://www.anms.it> > upload). Management practices of the Italian paleontological heritage (2020)

Ministry of Cultural Heritage and Activities - National Commission for UNESCO Sites and Local Tourist Systems, *Model of the Management Plan for Cultural Heritage Registered in the World Heritage List - Guidelines*, Paestum, 25 and 26 May 2004

Preparing World Heritage Nominations (second edition). United Nations Educational, Scientific and Cultural Organization

Italian Paleontological Society (<https://www.paleoitalia.it>) - Round Table "Legislation on Paleontological Heritage in Italy". MUSE, Corso del Lavoro e della Scienza 3, Trento (2018)

Zorzin Roberto, *The Geological Heritage of the Val d'Alpone and the Upper Chiampo Valley*, Cierre editions (2021)

## SITOLOGY

<a href="https://www.culturaveneto.it/it/luoghi/lista-musei/630e6c59b282ae2ca66862f8">https://www.culturaveneto.it/it/luoghi/lista-musei/630e6c59b282ae2ca66862f8</a>	Veneto Culture - The Fossil Museum of Bolca
<a href="https://www.museumofossilbolca.eu/">https://www.museumofossilbolca.eu/</a>	Museum of Fossils of Bolca and the Pesciara Quarry
<a href="https://museodeifossili.it/">https://museodeifossili.it/</a>	The Fossil Museum of Bolca
<a href="https://www.museopaleontologicodironca.it/">https://www.museopaleontologicodironca.it/</a>	Paleontological Museum of Roncà
<a href="https://www.regione.veneto.it/web/turismo">https://www.regione.veneto.it/web/turismo</a>	Veneto Region Tourism Portal
<a href="https://whc.unesco.org/en/managing-natural-world-heritage/">https://whc.unesco.org/en/managing-natural-world-heritage/</a>	Managing Natural World Heritage
<a href="https://whc.unesco.org/en/preparing-world-heritage-nominations/">https://whc.unesco.org/en/preparing-world-heritage-nominations/</a>	Preparing World Heritage Nominations
<a href="https://whc.unesco.org/en/managing-cultural-world-heritage/">https://whc.unesco.org/en/managing-cultural-world-heritage/</a>	Managing Cultural World Heritage
<a href="https://whc.unesco.org/en/guidance-toolkit-impact-assessments/">https://whc.unesco.org/en/guidance-toolkit-impact-assessments/</a>	Guidance and Toolkit for Impact Assessments
<a href="https://whc.unesco.org/en/guidelines/">https://whc.unesco.org/en/guidelines/</a>	2023 Operational Guidelines for the Implementation of the World Heritage Convention
<a href="https://www.valdalponeheritage.it/">https://www.valdalponeheritage.it/</a>	A.T.S. website "Val d'Alpone - faune, flore e rocce del Cenozoico"

Further information on the Management Plan of the site "*The Eocene marine ecosystem in the Val d'Alpone - Bolca, San Giovanni Ilarione, Roncà*" can be requested from:

A.T.S. "*Val d'Alpone - faune, flore e rocce del Cenozoico*"

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