



## VALLE BOVA (THE BOVA VALLEY)

This point of interest is not located along the itinerary. The vantage point for the view can be found in via Diaz.

### DESCRIPTION

(Silvia Fasana)

When looking northwards from the Pian d'Erba (Erba Plain) towards the first spurs of the PreAlps, one can clearly notice a rather steep valley rift, the Bova valley, wedged among the foothills of mounts Bolettone, Puscio and Panigàa. The environment is one of wild beauty, still well preserved, and of considerable naturalistic and scenic value.

The valley is excavated within Mesozoic sedimentary formations of marine origin, where you can frequently find fossil organisms, particularly Ammonites. It is named after the the river Bova, which runs right through it, fed by a number of perennial springs mostly located on the western slope of Mount Panigàa, and by waters flowing from numerous small valleys which furrow the foothills of the surrounding mountains.

During the last impressive Quaternary glacial expansion, the valley was entirely occupied by ice, except for the highest part, above 850 metres, as witnessed by the presence of moraine material which the glacier transported and then abandoned on the mountain slopes, consisting of sand, pebbles and blocks of granite, ghiandone, serpentine, and gneiss, all of which are rocks of alpine origin.

The main characteristic of this valley is that it is divided in the middle by an imposing rocky wall, consisting mainly of white limestone with lenses of flint (Maiolica limestone). Originally, the river overcame this rocky rampart by means of a waterfall, but the flow of water over thousands of years cut deeply into the rock, digging a deep and narrow gorge.

In this there is the imposing entrance of the cave called Buco del Piombo, one of the best-known in the whole of Lombardy, and a true outdoor natural museum with many interesting features.

From a geological perspective the Buco del Piombo is almost entirely dug into the limestone called Maiolica, a sedimentary formation of marine origin deposited on the bottom of an ancient ocean during the last period of the Mesozoic Era, the Cretaceous period (spanning the time interval from 140 to 65 millions of years ago). It is a white compact and well stratified limestone, which has inclusions of flint. The name of the cave probably derives from the fact that the rock - originally white - is covered with a patina of leaden-grey colour, due to the alteration of the limestone.

The formation of this cavity is linked to karst phenomena, caused by the "corrosive" action of rainwater - made aggressive by the presence of dissolved carbon dioxide - on the easily breakable and erodible limestone rocks which are the geological backbone of the Larian Triangle. This incessant work led, over millions of years, to the formation of a maze of tunnels that run beneath the plateau of the Alpe del Viceré. These tunnels collectively constitute the "Alpe del Viceré - Buco del Piombo" karst complex, which has not been fully explored yet. The entrance to the Buco del Piombo is impressive and spectacular both for its dimension and for the wild environment surrounding it. Comparable in size to the Duomo of Milan, it is 45m high and 38m wide, and is occupied for the most part by a blanket of debris, the residue of an old infilling, and by the ruins of a fortification dating back to the 6<sup>th</sup> century.

The interior of the cave is a very special environment, too: the surface waters from the walls and ceiling contain calcareous mineral salts which deposit themselves giving origin to stalactites, stalagmites and complicated smooth concretions. The cave is colonized by a characteristic microfauna, consisting typically of cave-dwelling forms, i.e. closely adapted to this environment, including Planarians, small Crustaceans, Myriapods, and, among the insects, some Springtails and Ground Beetles.

One of the main reasons for the Buco del Piombo's fame is linked to the discovery of the so called "Banco degli Orsi", a significant heap of bones of the *Ursus spelaeus*, a plantigrade mammal extinct around 18.000-20.000 years ago during the last glacial advance. But man, too, has left its traces in this cave over the centuries. During the Middle and Upper Paleolithic, groups of nomadic hunters visited the valley and certainly ventured into the cave, too, as witnessed by the discovery of some flint tools. Moreover, on several occasions fragments of ceramics and other materials from Roman times (4<sup>th</sup>-6<sup>th</sup> century AD) and the Middle Ages - when the cave was fortified by the construction of a large building that blocked the entrance - have been found in the vestibule. Popular tradition has it that in 1160 the people of Erba withdrew to the cave after winning the battle of Carcano against Barbarossa; and it seems that the noble knight Guelfo Parravicini did the same in 1316 to draw up his will. The cave has been popular with researchers and visitors, including

Queen Margherita of Savoy, ever since the 19<sup>th</sup> century.

In 2007, the Lombardy Regional Council recognized the Buco del Piombo as a “Site of Archaeological and Environmental Interest”; in the same year, it also declared the Bova Valley a “Partial Nature Reserve of Geological, Hydro-geological and Landscape Interest”, entrusting its management to the Municipality of Erba, with the aim of protecting the natural and landscape features of the area, and regulate and control the use of the territory for scientific and educational-recreational purposes.