Forato's natural arch

location		
region	Tuscany	
province	Lucca	
municipality	Stazzema	
sector	Matanna	
toponym/locality	Mt. Forato	
interest		
scientific interest	geomorphology	
contextual interest	landscape	
	hiking	
interest evaluation	representative	
level of interest	national	
conservation status		
characteristic/condition		good
risk of natural deterioration		non-existent
risk of anthropogenic deterioration		non-existent



geological and environmental description

It is a rock arch placed beneath Mt. Forato's north and south forked peaks, which reach an altitude of 1208 and 1230 m respectively. The place belongs to the Panie mountain range and is situated in the Apuan Alps south-central sector, along the divide of the same range. This natural architecture has considerable dimensions: a 32 m span and a maximum height of 26 m, whereas the minimum rock thickness of the arch measures between 8 and 12 m both in horizontal and vertical cross sections.

The ridge dividing the two Forato's peaks, with the natural arch at the centre, is made of three different carbonate rock formations of the Autochthonous *Auct.*: "Grezzoni" dolomites, dolomite Marbles and Marbles *s.s.* This "orographic window" is a secondary form of land moulding, deriving from the landform selective deterioration. Several factors contributed to the natural arch morphogenesis: first of all the erosion caused by rainwater and currents, then the chemical dissolution of the carbonate rock slopes and the role played by wind and cryoclastism.

There is also a theory on the arc being what is left of a deep karst river basin, surfaced after the Apuan area upthrust and then degraded by erosion. Accordingly, the rock arch may be the result of two fractures, perpendicular to the pre-existent basin.

Mt. Forato's arch is clearly visible from both Versilia and Garfagnana. In certain days of the year, sunrise may be seen from the Tyrrhenian coast through the natural opening, while sundown is visible from the town of Barga.

In the Middle Ages and in the Modern Era, the mountain was known by the name of "Pania forata" (perforated Pania). The origin of this morphological singularity is the subject of folk tales. In Garfagnana, the legend goes that it was formed when the devil, flying after being slapped by the hermit St. Peregrinus, crashed against the mountain. In Versilia, instead, the arc is a miraculous passage which opened up in the rock to let the Holy Family cross the Apuan Alps and escape from Herod's soldiers after the flight to Egypt.

description of the level of interest

The natural arch is one of the largest in Italy. Its great visibility from afar, thanks to the absence of visual obstacles in the nearby area, contributes to its scenic-aesthetic value. It is a particularly representative geosite, characterised by an unusual morphology and therefore of great scientific interest, at least at national level.