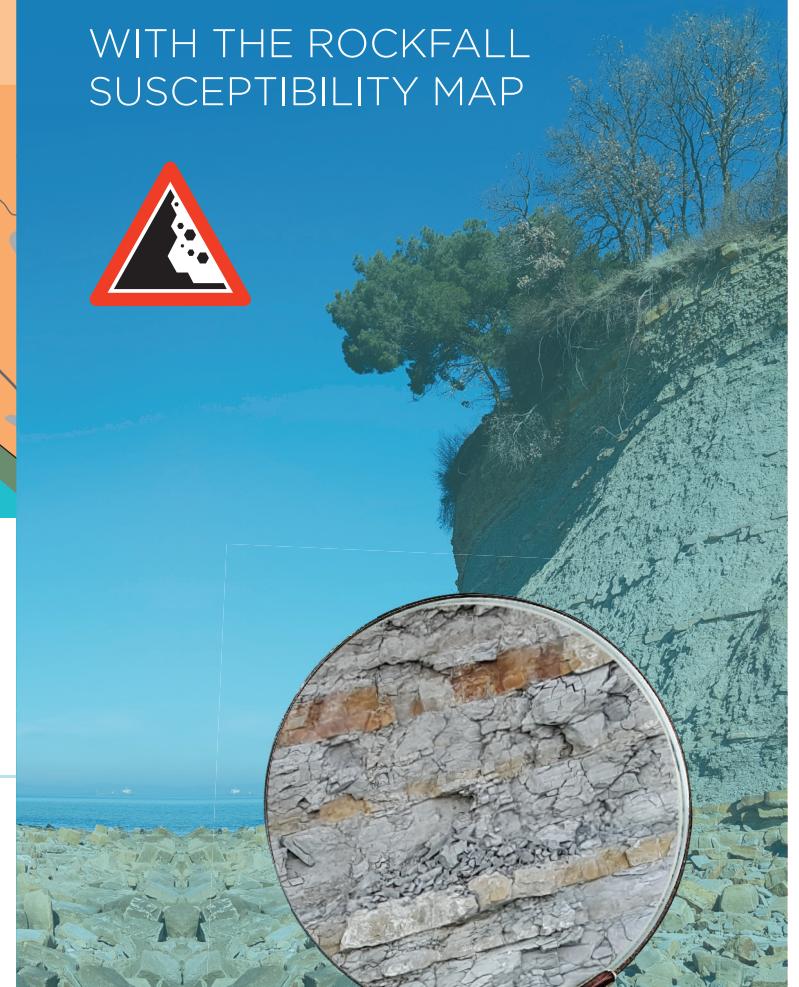


DEBELI RTIČ LANDSCAPE PARK - GEOLOGICAL ATTRACTIOnS

WITH THE ROCKFALL
SUSCEPTIBILITY MAP



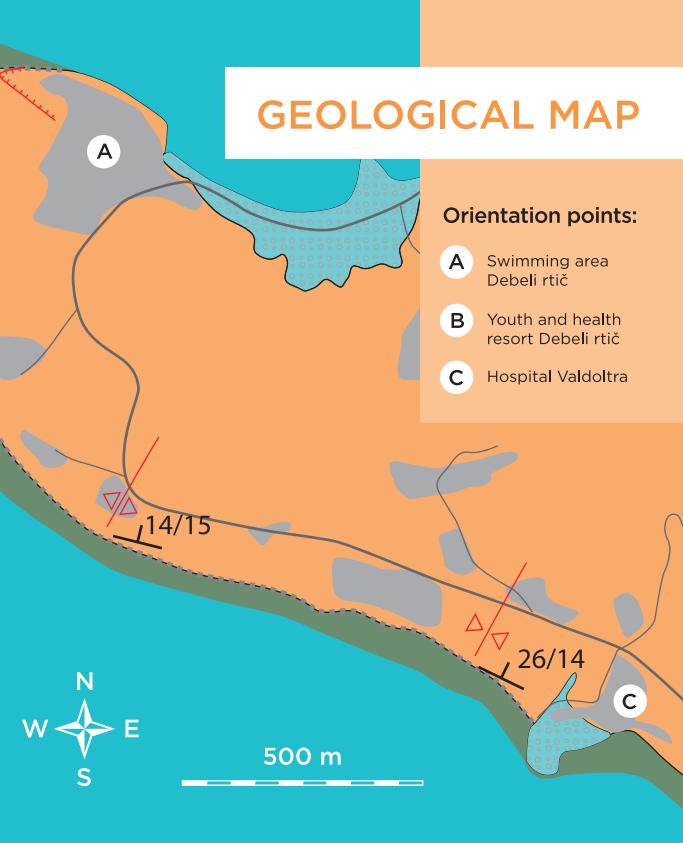
In the area of Debeli rtič, the dominant rocks are known as flysch—alteration of marlstone and sandstone layers, which formed in a deep sea during the Eocene Epoch approximately 40 million years ago. As a result of subsequent tectonic forces, the sedimentary beds have been tilted and now dip gently towards the northeast. Despite its uncomplicated geology, the cliff is attractive, and several interesting features can be observed at eight selected locations. In addition, rockfall susceptibility classes are presented on the map along the coast, as the cliff presents an ever-present and serious threat to visitor safety due to its erosion-prone composition and steep slopes. To protect the environment and maintain the preservation status of the Debeli rtič area in Natura 2000, the Municipality of Ankaran has established the Debeli rtič Landscape Park in cooperation with the Ministry of the Environment and Spatial Planning. Inside the park, there are six protected natural values, which comprise geological, morphological and biotic features. In addition, this intriguing coastline is a vital part of the ecologically-important network comprising the protected area of Natura 2000.

CAUTION! BEWARE OF ROCK FALLS!

Distinctive parts of the cliff disintegrate differently due to variability in geological composition, slope angle and amount of vegetation. Check the rockfall susceptibility map and avoid the more dangerous areas marked in yellow, orange and particularly red, as the slopes there are steeper and little or no vegetated.

During your visit, do not linger below bare and/or steep cliff faces. Choose more vegetated areas with gentle slopes where the possibility of rock fall is lower. Beware of even the smallest stones falling and rolling, as they indicate an unstable region, and signal the possibility of a larger rock fall.

Extra safety measures should be taken in the summer period. Do not choose a place to sunbathe and swim based upon the attractiveness of the place; pay close attention to the condition of the cliffs above you before you settle down.



- cliff
- road
- building area
- Holocene marine sediments
- Holocene terrestrial sediments
- Eocene flysch
- Eocene flysch: submarine outcrops
- minor thrust
- anticline
- syncline
- azimuth and dip of beds

More information about the Debeli rtič Landscape Park:

www.visitankaran.si

Interactive map and description
of geological attractions:

<https://goo.gl/maps/uyeC8EHy7aqvuTLT7>



or:

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Krajinski park
Debeli rtič
Parco naturale
Punta Grossa



COLLAPSE AND ROCKFALL >

The cliff is continuously being weathered, and there is a lot of collapsed material from erosion and rock fall along its base. The sea is constantly eroding the weathered sandstone and soft marlstones; consequently, bigger blocks of harder sandstone remain on the shore.



CLIFF >

Cliff slopes are composed of alternating layers of gray marlstone and harder layers of brown sandstone with many erosional gullies. At the base of the cliff, a horizontal abrasion shelf is visible.



3

< TURBIDITE

Very thin and wavy beds (laminae) in sandstone formed by sedimentation of turbidite flows (diluted submarine landslides) onto the deep seafloor.



4

< CAPE

The cliff is very steep at this location, and some of the sandstone layers are fractured in two perpendicular directions, giving it an artificial look. Trace fossils of sea urchins can easily be seen on bed surfaces.



ROCK SHELTER >

Due to marine abrasion, a deep notch has been created in the form of a rock shelter. The sea erodes the softer marlstones very quickly; annually up to a few centimeters on average.



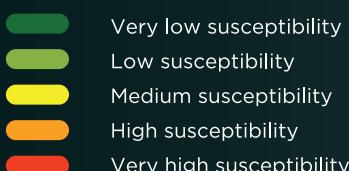
6

< FAULT

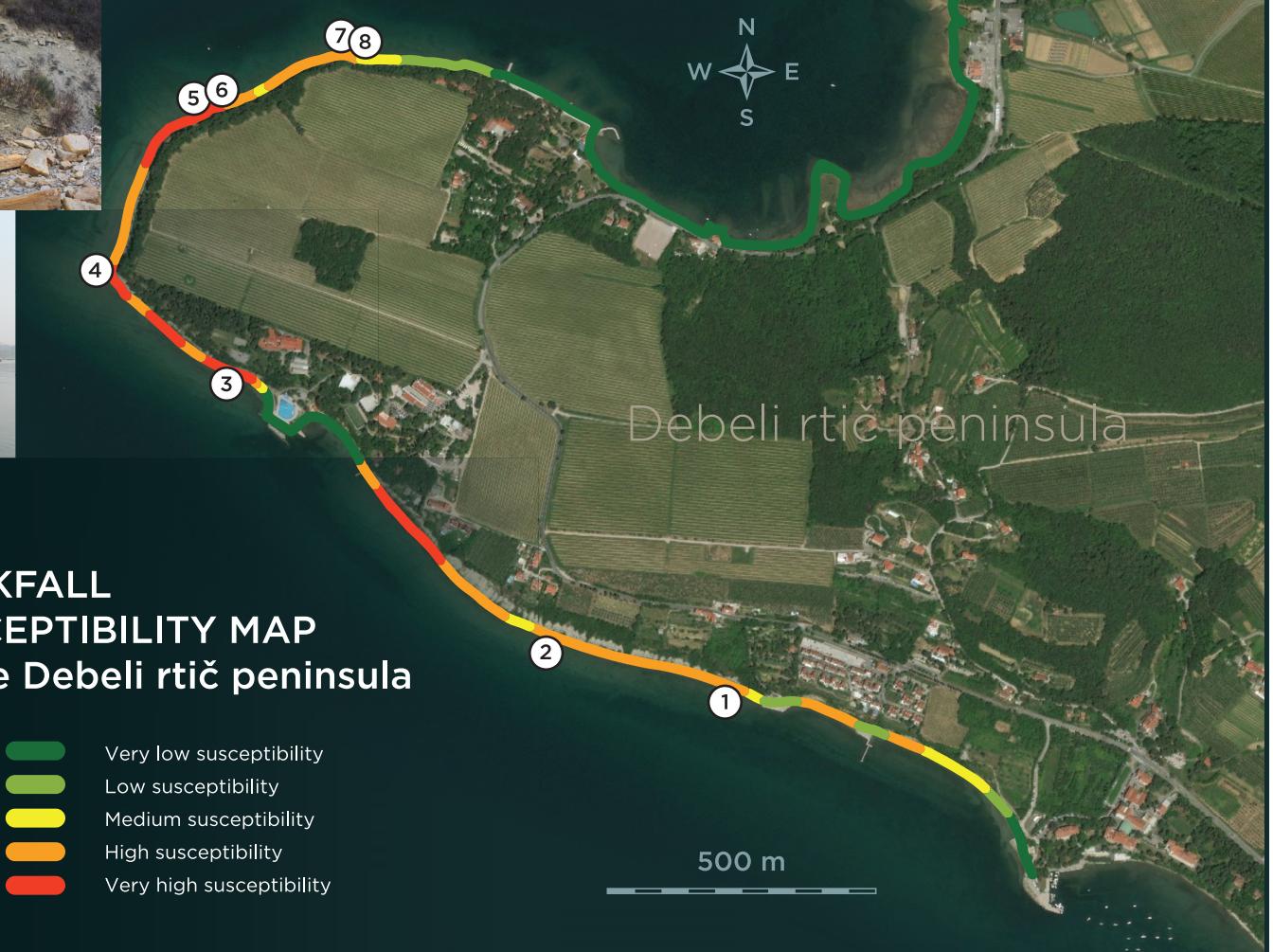
A smaller fault divides the flysch into two blocks and displaces the beds by a few centimeters. Along the fault, white crystals of calcite have precipitated.



ROCKFALL SUSCEPTIBILITY MAP of the Debeli rtič peninsula



500 m



FOLD AND LAYERS >

Around a smaller cape, the beds change their dip and form a fold. Intense alteration of thin-bedded marlstone and sandstone is visible in the cliff face.



8

< LANDSLIDE SCARP

At the top of the cliff, a semicircular representing freshly-exposed sediment due to a very recent landslide at this spot, and the area is slightly collapsed. Open fractures appear; the area is unstable and may result in a quick collapse at any time.

