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Autor: [s.n.]
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The Triassic and the Thetys Sea

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Once you have an indication that the rock in front of you contains something worthwhile, you have to find the extent of the fossil by examining the surroundings, keeping in mind that the pressures in the tectonic plates that pushed up the Alps may have twisted and crushed it into all sorts of shapes. Once everything is loosened, it is cast in plaster and secured in a wooden frame for transport to the preparator's lab.

Mind you, at that stage you still don't have a clear idea what you have found. In innumerable hours of precision work, the bones and structures of the fossils are freed from the surrounding stone with instruments as exotic as gramophone needles (the older amongst us remember those). Only at the end of this whole process, the fossil is ready for photographs, identification and either archiving or putting on display. ***To be fair, after waiting for millions of years, those fossils have probably given up hope of getting out quickly anyway!***

A dinosaur becomes part of the Lanz family

200 million years ago, the five distinct fossiliferous levels of the Monte San Giorgio were most likely a sea basin whose bottom was poor in oxygen which prevented organisms that died there and sunk to the ground from decomposition. Apart from vertebrates, there are also fossils of fishes, insects, ammonites, crustaceans and plants to be found. Since the excavations started in 1924, over 10,000 discoveries have been made and many new species discovered, many of which have names relating to the region such as the Helveticosaurus, the Ticinosuchus or the Ceresiosaurus, after the Italian name of the Lake Lugano. ***In honor of his long standing service to the institute of paleontology of the University of Zurich, one of the Ceresiosaurus species was even named after my father so that since 2004 there is a Ceresiosaurus lanzi!***

Whatever your interests are, fossils, hikes, biking, plants and animals, wellness or even just a quiet boccalino in one of the grottos (which some consider to fall under the wellness category as well), maybe even with a game of boccia, this little unassuming mountain in the very south of Switzerland has it all and a visit cannot be recommended highly enough.

Thetys Sea

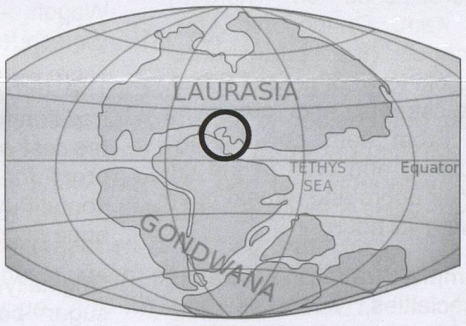
In the beginning, there was a great sea...

Throughout the Triassic geological period (252–201 million years ago), the earth's landmasses were combined into one large super continent, Pangaea. This was surrounded by a vast ocean called Panthalassa. At the equator, an arm of this ocean intruded deeply into the centre of Pangaea, giving rise to an ancient sea, the Tethys. This divided two large continents: Gondwana in the south and Laurasia in the north.

The Tethys sea included two basins of different ages, the Palaeotethys in the north and the Neotethys in the south. This was divided by the Cimmerian continent, a strip of land composed of many small plates. At the western end of the Tethys (see circle below), the story of Monte San Giorgio and the Southern Alps unfolded.

Scientists believe that Monte San Giorgio's oldest rocks once belonged to Africa, or at least a part of it known as the Adriatic Plate. This is why the rocks of Sottoceneri region around Lugano (the region south of Mt Ceneri) are often associated with the African continent.

Source: www.montesangiorgio.org/en/Monte-San-Giorgio/Il-periodo-Triassico/In-principio-era-il-mare.html



Planet earth during the Triassic period. The continents Laurasia and Gondwana are separated by the shallow Thetys sea.
Source: ttp://en.wikipedia.org/wiki/File:Laurasia-Gondwana.svg