

PLEASE GEOLOGISTS, WHEN SAMPLING BE SENSIBLE WITH GEOLOGICAL SITES

Geological sites are permanently threatened, many times even if they are included in protected sites. This can be due to the fact that protection rules are often only based on ecological criteria, showing the lack of effective tools to take actions to prevent destruction of geological heritage.

Unfortunately, geologists are sometimes the first to damage geological sites, such in the here presented case of Aiguablava (Costa Brava, NE Spain), where some unique outcrops have recently been damaged by drill sampling.

Within the outstanding landscape of Aiguablava, swarms of Permian to Cretaceous lamprophyre dykes are intruded into Variscan leucogranites. The site is of great scientific value in the fields of igneous petrology and tectonics. Moreover, it has become a classic locality at which to take geology students because of its educational value.

In the last past months, the most magnificent dyke localities appeared plenty of drilling holes, such as the one where a vertical dyke is crosscut by a horizontal one (see photograph with multiple holes) or the one in the middle of a stepped dyke (right-side photograph).

This has happened despite Aiguablava is catalogued in the inventory of sites of geological interest of Catalunya, and protected by the Catalan legislation PEIN for its natural value. It is a sad example of how geological heritage can be destroyed by geologists for "scientific" interest, demonstrating the lack of any sensibility, neither professionalism (there are many hidden places where to take samples of the mafic rocks).

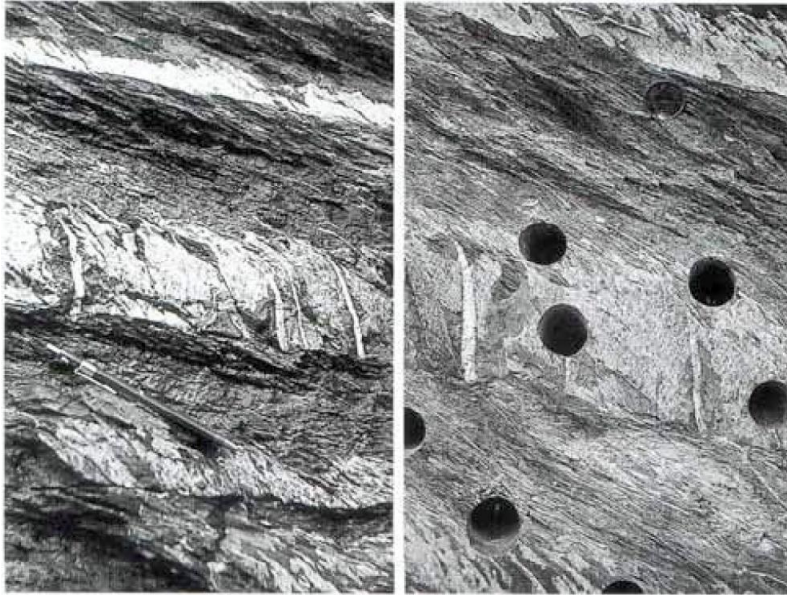
Unfortunately, there are a number of other similar examples of these negative actions over the World, eg. the drilling holes in the excellent outcrops of cleavage refraction at the Mosel region in Germany (see figure from Carreras and Druguet, 2000).

From Tectask we would like to give this warning message of carefulness:

Please geologists, if sampling, be sensible with geological sites. Drill sampling is particularly threatening because of its great visual impact, whilst many times unnecessary. Do not take samples from type localities or from sites of special scientific, didactic or aesthetical interest. Before sampling ask the experts and authorities for permission. Geological heritage is the only record of Earth history and processes and needs to be preserved for future generations.



Two images of the recently damaged lamprophyre dykes from Costa Brava (Catalonia, Spain). Photographs by E. Druguet (11th June 2009).



Outcrop along the Mosel river (Germany) showing cleavage and vein refraction structures. Left: the outcrop in 1971. Right: the outcrop in 1999 after devastating drill sampling. Fig. 11 of Carreras and Druguet (2000).

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