

Loss of Natural Heritage from the Geomorphological Perspective – do Geomorphic Processes Shape or Destroy the Natural Heritage?

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This study deals with geomorphological natural features (geomorphosites) relative to the natural processes that create, shape, or destroy such features. As a rule, geomorphological processes are geographical constants in the landscape although some, due to their great magnitude or low frequency of occurrence, are unexpected (e.g., natural disasters). In contrast to permanent geomorphological processes, geomorphosites are constantly changing geographical phenomena.

The importance of geomorphosites is relative to their size, rarity (spatial distribution), and duration (existence in time), which depend on both the frequency and intensity of geomorphological processes and on the standards of the observer.

We wish to preserve the geomorphosites and extend their existence for various reasons, among others for their esthetic value and economic significance. This is normally accomplished through protection from human impact (too many visitors) and from natural processes (e.g., erosion). For their protection, we would also like to eliminate the geographical constants, but by their very nature this is impossible.

In this endeavour it is essential to determine goals: do we wish to preserve the current situation and “conserve” nature or do we wish to preserve the processes and thereby consent to change, even if it means the inevitable destruction of geomorphosites. We can certainly preserve the situation with technical and other measures, but the question is whether this is sensible since we are not so much protecting nature as trying to please man.

If we wish to preserve geomorphosites we should not encroach upon them and we must allow natural processes to proceed and protect them from unnecessary human intervention. Geomorphosites are valuable and interesting precisely due to their changeability or due to the processes that are (re)shaping them.

From this viewpoint, we present several cases from western Slovenia. We describe the geomorphological processes shaping the coastal cliffs and conglomerate terraces and the threat to these geomorphosites. We present the influence of geomorphological processes on the formation of chutes and canyons relative to their filling and eradication and the transformation of waterfalls in the event of rock falls. In the case of a glacier, we describe how the loss of a geomorphosite results in the appearance of new geomorphosites (opening of new shafts).

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