Geodiversity and Geoheritage: definitions, values and conservation

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Geodiversity is the abiotic equivalent of biodiversity, i.e. it describes the variety of physical processes operating on planet Earth and the resultant rocks, minerals, fossils, sediments, soils, landforms, landscapes and habitats found on the planet today. Just as biodiversity is valued, in the "ecosystem services" approach, for the benefits it brings to human societies, so geodiversity brings a great number of goods and services that have been brilliantly exploited by humans over countless generations. In fact, our modern, complex society could not exist without geodiversity. Geoheritage are those parts of geodiversity that are specifically identified as having conservation significance, i.e. that have some specific value to human society and therefore ought to be conserved, particularly if they are threatened by human activities and could therefore be lost or damaged. Geoheritage is often seen as being about identifying and designating sites that have geoscientific value, but it can represent other values and be on scales larger than small sites.

This presentation will attempt to define geodiversity and geoheritage and explain the relationship between them, outline that values of geodiversity in terms of the "ecosystem services" approach, and explain how geodiversity and geoheritage can be protected by geoconservation methods.