



## **Integrating geodiversity in teaching, research and management: examples from coastal marine environments in Denmark**

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During the last five years, we have integrated the geodiversity concept in educational courses at undergraduate and graduate level. In addition, we have applied the geodiversity concept as a framework in several research projects focussing on coastal marine environments. Most recently, we have integrated a geodiversity approach in advisory work for national agencies in relation to evaluating the response of geo- and ecosystems to human-impact disturbances.

The research work was focussed on quantifying geodiversity components, specifically focussing on geomorphological diversity from geomorphometric analyses of high-resolution digital elevation models in combination with additional geospatial data; whereas the advisory work has evolved around the conflict between marine geosystem services (e.g. extraction of sand aggregates) and marine ecosystem services (e.g. fishing and spawning and nursery grounds).

Here, we present examples from case studies in the inner Danish waters where we have developed methods to quantify geomorphological diversity, and where we have applied these methods to assess the geo- and ecosystem response to human-impact.

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