

## **Odsherred, a key location of Danish geological science**

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The landscapes of Odsherred inspired the early Danish geologists, and several key models of glacial geology and coastal dynamics have been formulated based on studies performed in Odsherred. The intriguing geology and landscape still inspires geologists - new knowledge being elucidated, new theories being formulated and old models revised.

The relatively small area of the Odsherred peninsula is a rather unique subject for scientific studies. It is an iconic site for the development of the science of glacial geology in Northern Europe, as it has been a disputed subject for generations of geologists how the landscape was actually created. Vigilant geologists still open discussions on the glacial geology of the region based on studies in Odsherred. The Odsherred formations have been the subject of scientific research since the beginning of the 20th century when Milthers (1900) interpreted the hills as end moraines. This was a new and modern explanation, which was not accepted in general by the scientific community. Milthers made reference to the landforms shaped by Alpine glaciers and argued that they were moraines rather than eskers.

Our knowledge has been deepened by studies of geological profiles in coastal cliffs and open mines and pits. Stratigraphic analyses provide sedimentary and environmental archives that can provide information on the development of the glacial landforms in the ice margins. For instance, today it is accepted that the simple model of Milthers is inadequate, and that Odsherred's end moraines are the result of several different colliding ice streams that reached the fringes of the West Baltic Basin during the late Weichsel.

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