



Howick Bay



What will I see?

A very large clear fracture in the rocks – a geological fault. It can be easily seen in the cliff and can be traced out along the foreshore. The rocks to the south have been “dropped” more than 200 metres in comparison to the rocks to the north of the fault. The fault also has a thin blade of Whin Sill dolerite intruded into it.

How old is it?

The rocks either side of the fault – limestones, shales and sandstones - are around 330 million years old. The rocks to the south of the fault are marginally younger than those to the north. The Whin Sill was injected into the fault around 295 million years ago.

Did you know?

That there are many fossils of shells and crinoids in the limestones both north and south of the fault. The sandstones have fossils of bits of Carboniferous trees too. About 200 metres south of the fault, on the rocky foreshore where the cliff turns eastward, geologists found the some of the oldest footprints in Britain – a four-legged amphibian. The sea has all but eroded them away now.

Why it is here?

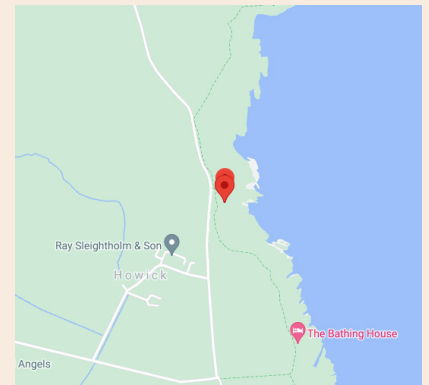
The stresses that caused the fault (just like earthquakes) were part of a long period of mountain building in Britain that started 290 million years ago.

And wildlife?

You might see eider ducks, as well as purple sandpipers feeding near the water's edge, and it's a good place for watching birds out to sea.

Where is it?

400 metres north east of Howick [NU259180]. There is a small roadside parking area just above the bay.



Want to know more?

- NNP Geodiversity Audit
- Onshore GeoIndex
- iGeology
- Geological history of Northumbria
- Carboniferous rocks

