



Tynemouth Castle & Priory



What will I see?

The youngest bits of sedimentary bedrock in the whole of old Northumberland are here, in the cliffs under the castle and priory. Sitting on top of Carboniferous sandstones, is a yellow sandstone and on top of that a pale rock called a dolostone (like a limestone but with magnesium as well as calcium).

How old is it?

The yellow sandstone and the dolostone are 260 million years old, from the Permian period of Earth's history.

Did you know?

If you go round to the north pier at the mouth of the Tyne, stand on the steps where it meets the cliff and look down and east, you will see a 3 metre band of darker grey rock heading out to sea, parallel to the pier. This is the Tynemouth Dyke – an igneous rock called dolerite. Only 60 million years old and one of the youngest bits of rock in Northumberland.

Why it is here?

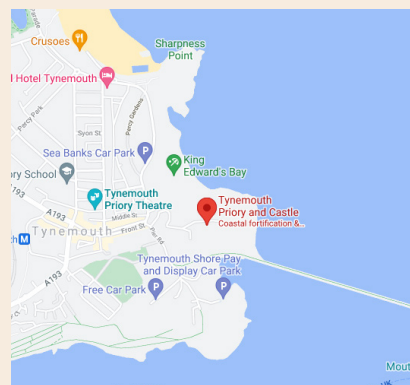
These Permian rocks, tell a tale of a stony desert that was covered by wind-blown sand dunes (the yellow sandstone). Then the sea invaded the land and deposited silt and mud (which has fish fossils, but you can't see the shale very well here) and then the magnesium and calcium rich dolostone.

And wildlife?

The south-facing cliffs and slopes above the haven go yellow in spring from wild cabbages and alexanders. Both are ancient introductions and probably date back to when the monks were in residence. These slopes can be a good place to find migrant birds in autumn. The seaward facing cliffs have nesting fulmars.

Where is it?

You can easily reach this Geo-Site by public transport, or park at several places near the castle and walk round to the pier, and down to the beach at King Edward's Bay.



Want to know more?

- **Walking trail**
- **Virtual tour**
- NNP Geodiversity Audit
- Onshore GeoIndex
- iGeology
- Geological history of Northumbria
- Carboniferous rocks

