
10 Tynemouth Castle and Priory

Theme: Ancient rivers, seas and life

Location

Easily reachable by public transport. Walk to the north pier from Tynemouth Castle, or you can view the cliffs from King Edward's Bay [NZ 374 693].

Description

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).

The yellow sandstone and the dolostone are 260 million years old, from the Permian period of Earth's history. They 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. The sea, called the Zechstein Sea, was very salty, a bit like the Dead Sea today.

Beside the steps of the north pier, where it meets the cliff, look down and east; a 3 metre band of darker grey rock heads out to sea, parallel to the pier. This is the Tynemouth Dyke — an igneous rock called dolerite. It is only 60 million years old and one of the youngest rocks in Northumberland; a red-hot visitor from Volcanoes near the Isle of Mull.

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. Wild forms of wallflower are also conspicuous. These slopes can be a good place to find migrant birds, particularly in autumn. The seaward facing cliffs have nesting fulmars, which are usually in residence from January onwards.

Photographs

(Photo 10-1) Cliff face showing rocks on the headland, Tynemouth.

(Photo 10-2) View south of Tynemouth Castle and Priory.



(Photo 10-1) Cliff face showing rocks on the headland, Tynemouth.



(Photo 10-2) View south of Tynemouth Castle and Priory.