
Seaham Harbour [NT 432 497]

Coastal and cliff section

Ownership?

The Seaham exposure provides a section ideally located next to the promenade which allows the outcrop to be examined with great ease. The coast to the north of Seaham Harbour provides by far the best surface exposures of both the Seaham Formation and the Seaham Residue, and is one of the best places in Britain for observing the effects of evaporite dissolution; it is also the best surface exposure of the highest beds of the Roker Dolomite Formation. The Seaham Formation here is unusual in its content of several thick units rich in calcite spherulites, some exceptionally large, and the Seaham Residue, the dissolution residue of the Cycle EZ2 (Fordon) evaporites, is at its thickest and most spectacular.

Proposed action Possible on site interpretation and training for rangers.

Existing designations SSSI GCR

Existing on site interpretation None

Major geodiversity interest This is an important locality for studies of Permian rocks, for it exposes the top of the Roker Formation (EZ2Ca), and Seaham Residue (EZ2E) and carbonates of the Seaham Formation (EZ3Ca). Collapse zones expose brown-red mudstones of the Roxby Formation, Type location for the Seaham Formation in which the full sequence between the Seaham residues and residues of the overlying Billingham Main Anhydrite can be seen. Uppermost beds of HRD and their contact with the Seaham Residues are best examined in the area around Feather Bed north of Seaham. Here the residue crops out for some distance and the top 10m of the dolomites can be examined in detail. Just below the residue, the HRD show a much harder form that is a consequence of dedolomitisation. Very good exposures of the upper beds of the Hartlepool and Roker Dolomite and particularly of overlying Seaham Residue. Exposure is best around Featherbed rocks where the residue horizon shows much contortion and variation in thickness (about 0.5m). The uppermost Seaham Formation is overlain by a small sequence of red and green mudstones revealed in part of the north wall of Seaham Harbour.

Biodiversity interest None

Other heritage links None

Additional comment Coastal rangers often take people to these localities but feel they do not currently have information to explain the rocks. Good locality for parties as all three formations exposed.

Date of photography 2008 and 2003 (bottom)

(Photo 17) Seaham Harbour.

(Plate 7) The Seaham Formation at Seaham Harbour.

(Plate 12) Till (Boulder Clay) slippage in the cliffs north of Seaham (November 2008).

(Plate 20) The Seaham 3 Pits sculpture and a detail from the panel.

[References](#)



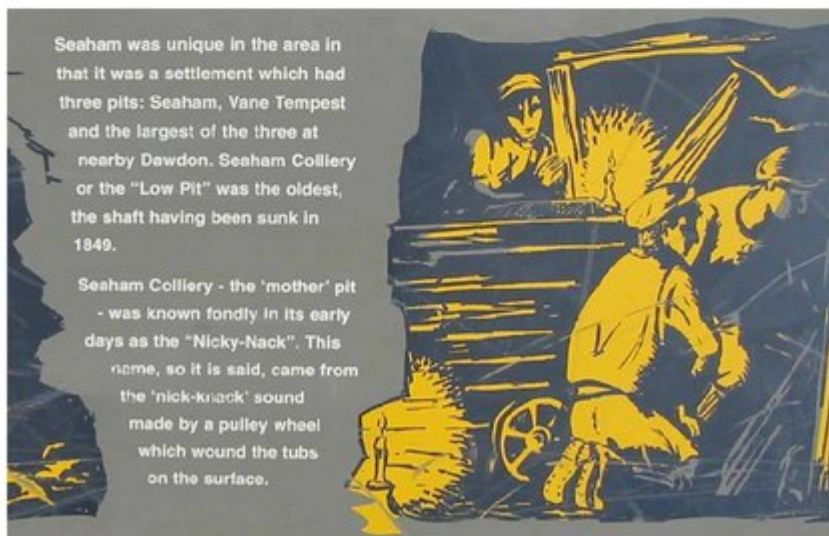
(Photo 17) Seaham Harbour.



(Plate 7) The Seaham Formation at Seaham Harbour.



(Plate 12) Till (Boulder Clay) slippage in the cliffs north of Seaham (November 2008).



(Plate 20) The Seaham 3 Pits sculpture and a detail from the panel.