County: North Yorkshire **Site Name: Whitby-Saltwick**

Status: Site of Special Scientific Interest (SSSI) notified under Section 28 of the Wildlife and Countryside Act, 1981

Local Planning Authority: Scarborough Borough Council and North York Moors National Park

National Grid Reference: NZ 901115 – NZ 916109

Ordnance Survey Sheet 1:50,000: 94 **1:10,000:** NZ 91 SW

Area: 17.5 hectares 43.3 acres (Scarborough)
24.9 hectares 61.4 acres (NYMNP)
42.4 hectares 104.7 acres (Total)

First Notified: 1985

Description:
On the coast between Whitby and Saltwick three blocks of geological interest have been identified covering vertebrate palaeontology, palaeobotany and Toarcian exposures.

This stretch of coast is of international stratigraphic significance for its classic section in the Lower Toarcian; a critical Jurassic exposure forming the type locality for the Whitbian Substage. There are superb exposures in the highly fossiliferous Jet Rock and Alum Shale Series of *falciferum* and *bifrons* Zone age. Additionally there are excellent exposures of the unconformable contact of the here attenuated Dogger Formation with the Alum Shales.

Many of the best museum specimens of Middle Jurassic plant fossils originated in the cliffs to the south of Whitby. These came from a lens within the filled sandstone channels of the Saltwick Formation. Of the numerous species recorded, particularly noteworthy are the spectacular examples of bennettitalean reproductive organs, such as those of *Williamsonia* and *Weltricha*. This is an outstanding site for its superlative plant material and, particularly, their bearing on bennettitalean history.

The Upper Lias of the coast east of Whitby, the richest Upper Liassic reptile site in Britain, has yielded many fine specimens of plesiosaurs, ichtyosaurs, and marine crocodiles, including type specimens of 10 species. The first fossil "alligator" from Whitby was reported in 1759, and discoveries since then have proved extremely valuable in studies in marine reptiles. The reptiles occur in the Main Alum Shales within the Alum Shale Formation (*bifrons* Zone; *commune* and *fibulatum* Subzones).

Other Information:
1. This is a new site identified as of international importance in the Geological Conservation Review.
2. The site lies within the North Yorkshire Heritage Coast.