

Date Notified: 14 April 1989

County: Humberside

Site Name: Castlethorpe Tufas

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

Local Planning Authority: Glanford Borough Council

National Grid Reference: SE 978077, 986074, 988075

Ordnance Survey Sheet 1:50,000: 112 **1:10,000:** SE 90 NW

Area: 0.5 (ha) 1.2 (ac)

First Notified: 1989

Description:

Castlethorpe is important for Quaternary studies and forms part of a geographical network of sites for reconstructing environmental history through mollusc biostratigraphy.

Fossil pollen and shells are preserved in a deposit of tufa which began to form approximately 10,000 years ago during the early Flandrian period. The earliest tufa deposits formed in open calcareous marshes fed by springs, and in shallow pools prone to periodic drying out. Although initially conditions were open, the area became progressively shaded by trees until closed forest developed.

In the upper levels of the deposit, the fossils indicate a sudden reversion to open conditions. Charcoal is conspicuous and the sudden dramatic change may be ascribed to human clearance of the forest towards the end of the early Bronze Age approximately 3410 years ago.

At Castlethorpe the deposition of tufa ceased at about this time, but further details of the history of the area can be discovered from fossil shells preserved in overlying silts. This shows that the area was not farmed in the period after the woodland clearance and that forest re-established itself.

A peat layer below the tufa at one locality has also yielded fossil pollen which indicates open vegetation during part of the Late Devensian.

Other Information:

1. This site is identified as being of national importance in the Geological Conservation Review.