

WEXFORD - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE	Tincone
Other names used for site	Ely House, Ely Lodge
IGH THEME	IGH7 Quaternary
TOWNLAND(S)	Tincone, Burgess
NEAREST TOWN/VILLAGE	Wexford
SIX INCH MAP NUMBER	38
ITM CO-ORDINATES	705667E 622800N (centre of section)
1:50,000 O.S. SHEET NUMBER	77 GSI BEDROCK 1:100,000 SHEET NO. 23

Outline Site Description

This site includes a low coastal cliff section that extends for several hundred metres and is c. 1m-3m high over most of its extent.

Geological System/Age and Primary Rock Type

The cliff section at Tincone is comprised of Quaternary Age glacial sediments, deposited during deglaciation at the end of the last Ice Age.

Main Geological or Geomorphological Interest

The cliff exposes sediments that are important to an understanding of deglaciation in this part of Ireland during the end of the last Ice Age.

The exposure contains five main facies, or units, of sediment:

- (1) A brown to light yellowish brown, well stratified, stony and sandy mud which is relatively clast-poor. This facies dominates the section, and clasts therein have the form of dropstones, with associated soft sediment deformations.
- (2) Lenses within the main facies 1, which have no internal stratification whatsoever.
- (3) A massive, pinkish grey to dark greyish brown clay, with elements of vertical fracturing.
- (4) A stony clay with little or no sand within.
- (5) A stratified pinkish grey to dark greyish brown clay, with elements of vertical fracturing.

The main units are facies 1 and facies 3, which are the tills of contrasting colour. The sequence is interpreted to have been deposited as a waterlain till, from ice, into a proglacial lake which occupied Wexford Harbour during deglaciation.

Site Importance – County Geological Site

The section at Tincone is important as its stratigraphy and sedimentology provides information on regional deglaciation and the section shows an excellent example of a laminated till, and of dropstones.

Management/promotion issues

The site is accessible *via* the public beach and is therefore easily visited. Much of the southern portion of the exposure has been damaged within the last twenty years, owing to a combination of building work, reclamation and drainage of land, coastal erosion and installation of coastal defences. The northern portion of the cliffs are also prone to slumping, and care must be taken when close to the faces. The importance of the section could be highlighted in promotional material for the Wexford Harbour proposed NHA, SAC and SPA.



View southwestwards along the exposed section at Tincone.



The boundary between two of the main till units in the section; see the colour difference.



A cobble dropstone within the section; see the soft-sediment deformations beneath.



The laminations within the section are clearly seen as horizontal fractures.

