### **WEXFORD - COUNTY GEOLOGICAL SITE REPORT**

NAME OF SITE
Other names used for site
Ballyteige Bay
Ballyteige Burrow

IGH THEME IGH13 Coastal Geomorphology

TOWNLAND(S) Ballyteige Burrow

NEAREST TOWN/VILLAGE Wexford SIX INCH MAP NUMBER 46, 51

ITM CO-ORDINATES 692550E 606580N (centre of barrier spit)

1:50,000 O.S. SHEET NUMBER 77 GSI BEDROCK 1:100,000 SHEET NO. 23

#### **Outline Site Description**

A long, shingle barrier spit with well-developed sand dunes backing on to Inish and Ballyteige Slob, on the coastline west of Kilmore Quay.

### **Geological System/Age and Primary Rock Type**

A long, dune-capped barrier spit comprising sands, gravels and well-developed vegetated sand dunes, encloses a lagoon backed limestone lowlands. The dunes are Holocene in age, forming 6,000-3,000 years ago, well after the last glaciation. The barrier is underlain by a variety of rock types and ages including Precambrian Rosslare Group gneiss/schist; Permo-Triassic conglomerate/red beds; Carboniferous limestone, and Cambrian greywacke.

#### **Main Geological or Geomorphological Interest**

Ballyteige Burrow (townland) hugs the south Wexford coast for a distance of about 9 kilometres northwest from Kilmore Quay. The large dune system comprises dunes of over 20m in height. Embryonic fore-dunes flank the seaward side and fixed dunes extend along the central axis of the burrow. Blowouts and dune slacks in the fixed dunes expose sand and shingle deposits. A variety of well-rounded colourful cobbles can be seen along the beach.

First edition Ordnance Survey maps show the barrier spit at about 9km long, separating Ballyteige Lough from the sea. During mid-1800s works were carried out to reclaim a broad wetland area of the lough (about 660ha). Works included the construction of the Cull Bank (dam) across Ballyteige Lough, the building of Bridgetown Canal, and the construction of drainage networks across the polders. Today, the narrow spit extends over 5 kilometres northwest from the Cull Bank.

Radiocarbon dating of soil material buried under the dunes revealed dates of about 2,000 years before present. This implies that the sand dunes and shingle barrier were migrating landwards at that time. The name 'Burrow' refers to the historical use of the area as a managed rabbit warren since the High Middle Ages, c.1300 AD.

## Site Importance – County Geological Site

This is a very important County Geological Site considering the coastal geomorphology (beach, barrier spit, dunes, mudflats, saltmarshes), and the recent (<200 years) human-induced changes along the coastline. Ballyteige is recognised as one of the most important shingle-based dune systems in Ireland. This site is renowned for its ecological significance and includes Ballyteige Burrow SAC (000696), SPA (004020) and pNHA (000696).

# Management/promotion issues

Access to the site on foot is easily afforded from Kilmore Quay. Established in 1987, the state-owned Ballyteige Burrow Nature Reserve is one of three nature reserves in Co. Wexford. A smaller area of the burrow is managed by Kilmore Quay Community Development Association as an amenity area. Kilmore Quay is a popular visitor destination, and the erection of a public information panel by the coastal path would help to promote the interesting aspects of this and other county geological sites nearby (Kilmore Quay, St. Patricks Bridge, Saltee Islands, Carnsore Granite).



Entrance to Ballyteige Burrow Nature reserve, and fixed dunes, viewed looking northwest.



Rounded cobbles along the beach.



Fore dunes and beach viewed looking southeast to Saltee Islands.



View of fixed dunes back onto the walking track along the rear of Ballyteige Burrow Nature Reserve. Kilmore Quay visible in background.

