## **MEATH - COUNTY GEOLOGICAL SITE REPORT**

NAME OF SITE Other names used for site IGH THEME: TOWNLAND(S) NEAREST TOWN SIX INCH MAP NUMBER NATIONAL GRID REFERENCE 1:50,000 O.S. SHEET NUMBER **Boyne Valley** Boyne Terraces IGH 7 (Quaternary) Numerous Navan, Slane, Drogheda 18, 19, 20, 25, 26 298000 273000 = N 98 73 42, 43 **1/2 inch Sheet No.** 13

**Outline Site Description** 

River valley.

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

Quaternary deposits, channels and terraces of a relict glaciofluvial system.

### Main Geological or Geomorphological Interest

The Boyne Valley is a characteristic glacially modified lowland valley formed during the last Ice Age (before c. 10,000 years ago). It is characterised by hummocky topography and steep sided valley walls that have cut into the surrounding landscape. Features within the valley include suites of glaciofluvial and delta terraces. These are significant linear shelves generally subparallel to the meanders along the rock gorge. The terraces were formed by the meandering of the river after the channel had been deepened by large volumes of glacial meltwater. The Boyne Valley is complimented by many glacial meltwater channels, which feed into the Boyne system from either side.

#### Site Importance

This is a nationally important example of a glacially derived valley, with easily accessible features along both sides of the Boyne River. It is an excellent teaching locality and is commonly used by the public for recreational purposes (walking, canoeing, etc). Many of the important glacial features detailed above already lie within the Boyne Woods NHA (01592) and the River Boyne SAC (02299).

#### **Management/promotion issues**

This is a well maintained stretch of the River Boyne with many sites along its banks detailing significant sections of Ireland's history. The addition of signage would greatly enhance people's awareness of this area's equally significant geological history.



Above: The Boyne Valley, beside Slane. This broad, flat, steep sided glacial valley represents a period in Meath's geological history, when the land was dominated by massive, slow moving ice sheets and the large volume of erosive meltwater they generated.



Top: A delta terrace (terrace or slope left behind by an ancient meandering river channel). Middle: The River Boyne with its steep sided wooded banks (commonly used for recreational sports such as kayaking). Bottom: Digital elevation model (DEM) illustrating the pronounced glacially derived valley that is cut into the Meath landscape.

# Boyne Valley





