

## TIPPERARY - COUNTY GEOLOGICAL SITE REPORT

<b>NAME OF SITE</b>	<b>Glen of Aherlow</b>
Other names used for site	
<b>IGH THEME</b>	<b>IGH7 Quaternary</b>
<b>TOWNLAND(S)</b>	<b>Numerous</b>
<b>NEAREST TOWN/VILLAGE</b>	<b>Lisvarrinane</b>
<b>SIX INCH MAP NUMBER</b>	<b>67, 68, 74, 75</b>
<b>ITM CO-ORDINATES</b>	<b>591780E 630410N</b>
<b>1:50,000 O.S. SHEET NUMBER</b>	<b>65,66,73,74</b>
<b>GSI BEDROCK 1:100,000 SHEET NO.</b>	<b>18</b>

### Outline Site Description

A wide east-west oriented valley, floored by well-drained pastureland, situated at the northern foot of the Galtee Mountains.

### Geological System/Age and Primary Rock Type

The valley floor is Lower Carboniferous (Mississippian) muddy-cherty limestone, and shale. The present valley morphology is Quaternary in age, and was host to a large glacial lake during the last Ice Age. Glacio-lacustrine and glacio-fluvial deposits comprise fine- to coarse-sands, gravels and cobbles.

### Main Geological or Geomorphological Interest

The Glen of Aherlow is a c. 10 km long, 2-4 km wide east-west oriented valley. The River Aherlow meanders eastwards along the gradually sloping limestone valley floor (80 m to 50 m). The valley is bounded by the Upper Devonian lithologies of the Galtee Mountains (<920 m) to the south, and the Slievenamuck ridge (<370 m) to the north. The east and west ends of the valley host moraines, which served to impound a large glacial lake (Lake Aherlow) within the glen. Deltaic deposits have been recorded to the west at Galbally (Co. Limerick) and east around Castlequirk and the N24. The delta deposits, where meltwaters feed into the lake, occupy varying elevations due to the rise and fall of lake-level corresponding to the position of the ice sheet. Thick (>10 m) glacio-fluvial deposits occur on the wide, eastern valley floor at Coolgort, Ashgrove and Clashoquirk. Sands and gravels, derived from Devonian sandstones, are actively extracted from this large deposit for construction and agricultural operations. Aggregate extraction has opened a window into the unconsolidated subsurface deposits which exhibit fine examples of fine and coarse bedding, flow-traces, and channel infill.

### Site Importance – County Geological Site; recommended for Geological NHA

The Glen of Aherlow is a very important County Geological Site (CGS), with well-defined deltas, moraines and channels that record varying lake-levels of an impounded lake during the last Ice Age. The site is in proximity to the Galtee Mountains CGS and the Bansha to Caher CGS, all of which provide morpho-stratigraphical clues that enhance our understanding of the glacial geomorphology and the reconstruction of the glacial history of Late Midlandian ice masses in Ireland. The River Aherlow is part of the Lower River Suir SAC (002137).

### Management/promotion issues

The scenic beauty of the valley and flanking mountainous terrain makes the Glen of Aherlow a popular visitor attraction whether on foot, two-wheels, or four-wheels. An information panel at Lisvarrinane or at the Christ the King statue on the north side of the valley would be a valuable resource in promoting the history of the landscape, and its place in the story of the Ice Age in Co. Tipperary.



View east towards Cahir, over Glen of Aherlow from Christ the King Statue lookout on R664.



Sands, gravel and cobble in quarry face at Ashgrove.



Water-wave flow ripples preserved in sands at Ashgrove.



View from Christ the King Statue lookout on R664, looking southwest.



Cobbles in sands in quarry face.



