# WESTMEATH - COUNTY GEOLOGICAL SITE REPORT

NEAREST TOWN/VILLAGE

1:50,000 O.S. SHEET NUMBER

SIX INCH MAP NUMBER

**ITM CO-ORDINATES** 

**Horseleap Esker** 

IGH7 Quaternary Kilbeg, Coolalough, Ardnucher, Templemacateer, Brackagh Horseleap 34 627885E 738800N 48 GSI BEDROCK 1:100,000 SHEET NO. 15

# **Outline Site Description**

A partially tree-covered esker ridge to the north of Horseleap.

# Geological System/Age and Primary Rock Type

The esker traverses landscape underlain by Carboniferous Waulsortian limestone and mudstone. The esker and surrounding fan sediments are Quaternary in age and were deposited towards the end of the last glaciation, around 14,000 years ago, either under or at the edge of the westward-retreating ice sheet during deglaciation.

# Main Geological or Geomorphological Interest

Horseleap esker comprises a 4km long esker system exhibiting classic esker ridge morphology. The esker comprises about nine individual segments. A quarry at Ardnurcher exposes the esker sands, gravels and boulders. The glaciofluvial sediments were deposited in tunnels at the base or margin of the ice sheet that covered this region during the end of the glaciation. This esker, along with several other eskers (Moate, Split Hill, Clara, Ballyduff, Kilcormac) converge eastward in a large fan shape, which is reflective of the meltwater regime present during deglaciation events. The esker is bisected by the R391 road and by the Midland Great Western Railway (Clara Branch) line, which closed in 1965.

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

The Horseleap esker is important to the interpretation of meltwater flow regimes that were present towards the end of the Pleistocene deglaciation period. The esker is one of several eskers that comprise 'tributaries' within the greater subglacial esker 'river' system that prevailed in the Irish Midlands. A nationally important esker system, the Horseleap esker has particularly high sides and can be observed from the N4 or the R391 road just outside Horseleap. The esker is of important geodiversity and biodiversity value.

# Management/promotion issues

To a greater extent, the esker is covered with mature deciduous woodland, with grazed grassland cover along northwestern sections. A large sand and gravel pit occurs on the esker at Ardnurcher, about 800m north of Horseleap. Some smaller pits have been excavated along the northwestern grassy esker sections.



View of Horseleap esker, looking south from minor road in Ardnurcher.



Horseleap esker viewed from R390.



Boulders at foot of quarry- face at Ardnurcher.



Entrance track to quarry at Ardnurcher.







Meehan et al. 2019. Geological Survey Ireland.