

Site Name: Hirwaun Valley

Grid Ref: SN 273473

RIGS Category: Educational & Scientific

Earth Science Category: Quaternary & Geomorphology

RIGS Statement of Interest:

Numerous linear ridges, interspersed with occasional enclosed circular forms, are located across the Afon Hirwaun Valley at altitudes of 110 -130 m OD. The 3-4 m high, elongate ridges have a pronounced northeast to southwest trend and are markedly asymmetrical, with consistently steeply dipping southeastward facing slopes and low gradient northwestern slopes. Originally interpreted as relict open system pingos (for definition see Geological setting section below) by Watson (1972), these landforms were first mapped by Bradley (1980). Alternatively, it has been suggested that these landforms may have formed due to the downwasting of the Irish Sea glacier (Hambrey et al. 2001).

The Hirwaun Valley landforms have potential to provide key information on the nature and environmental context of the Late Devensian Irish Sea glacier around the time of its maximum extent and during the initial stages of its retreat. These ridges may be a type of glacial landform known as 'De Geer moraines', deposited underwater where an ice margin is located in a glacially dammed lake (Lake Teifi?). If these landforms are De Geer moraines, they are unique examples of this type in southern Britain, and possibly throughout the entire British Isles.

Surveyed by: N. Ross