

Site Name: Llangurig (Nant Cae-garw)

Grid Reference: SN 946797

RIGS Category: Educational & Scientific

Earth Science Category: Quaternary & Geomorphology

Geology 1:50,000:

RIGS Statement of Interest:

Peat-filled depressions, surrounded by distinct circular ridges (ramparts), are located at the bottom of the Nant Cae-garw valley, approximately 4 km due east of Llangurig, at altitudes of between 275-305 m. These 'ramparted depressions' were the first in the British Isles to be interpreted as the remains of open system pingos (for this and other definitions, see Geological setting section below) (Pissart 1963; Watson 1971), and have been frequently cited as key examples in many geomorphological textbooks and publications (e.g., Ballantyne & Harris 1994; Pissart 2000, 2003). Although these landforms have several features characteristic of collapsed open system pingos (circular ramparts, deformation structures, deep basins with thick sequences of Holocene organic deposits), there remains some uncertainty as to their precise origins. Their formation could also have been the result of the decay of lithalsas (mineral palsas) (Gurney 1995; Pissart 2000, 2003), or the melt-out of stagnating glacier ice during the last deglaciation. It is recommended on the basis of this site's research history and potential, that the landforms within the Nant Cae-garw valley should be designated as a RIGS. The Holocene peat-infills of the central basins are also important attributes of the site.

Surveyed by: N. Ross