# **GALWAY - COUNTY GEOLOGICAL SITE REPORT**

NAME OF SITE	Cur Hill
Other names used for site	Knocknagur, Cur
IGH THEME	IGH5 Precambrian
TOWNLAND(S)	An Chórr (Cur), An Raithe (Raithe), Mám Gamhna
	(Maumgawnagh)
NEAREST TOWN/VILLAGE	An Mam (Maam Village)
SIX INCH MAP NUMBER	25
ITM CO-ORDINATES	492950E 753000N (famous folded outcrop)
1:50,000 O.S. SHEET NO. 38	GSI BEDROCK 1:100,000 SHEET NOs. 10, 11

# **Outline Site Description**

A prominent hill in the centre of the Maam Valley, situated along the Western Way trail.

# Geological System/Age and Primary Rock Type

The hill is predominantly Lakes Marble Formation (white-grey marble, schist, amphibolite, gritty psammite), with Ballynakill Schist Formation (psammite, semi-pelite, quartzite) on the lower northern and southern slopes. The lithologies are part of the Connemara Dalradian (Argyll Group), and are of Neoproterozoic age.

# Main Geological or Geomorphological Interest

White to pale grey calcitic marbles are characteristic of the Lakes Marble Formation (in contrast to the green-yellow-white marbles of the Connemara Marble Formation). Ribs of resistant calc-silicate can be seen within many of the marbles outcrops. Areas of marble bedrock are relatively easy to identify from the overlying fertile, grass cover. Basic metamorphosed volcanics (amphibolites) occur in the upper part of the Lakes Marble Formation, their black, fine textured lithology contrasting with the grey marble and pale schist and quartzite. Areas of metavolcanic and schist/quartzite are poorly drained and often boggy underfoot. The green valley wherein lies the famous 'folds outcrop' hosts some spectacular karst features such as runnels, swallow holes and springs.

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

This site is an important County Geological Site as it hosts spectacular examples of folds in the Lakes Marble Formation, and is internationally renowned as an excellent teaching site. The hill is an overturned anticline, with the older amphibolite in the core of the fold forming the high hill and summit, and the younger marbles found in the lower hill slopes. The site is located within the Maamturk Mountains SAC (002008).

### Management/promotion issues

Photographs of the famous marble 'folds outcrop' have been published in geology books in international circulation (e.g. Leake and Tanner 1994), national geological guide books and several academic publications pertaining to Connemara (see Bibliography). Cur Hill, and the 'folds outcrop' in particular, have served as a popular and important field study site for Irish and visiting overseas research groups. The site is grazed throughout the year and is in private ownership. Access to the site should be sought appropriately from landowners.



View of Cur Hill looking northwest from road to Cur (Golden Mile). Amphibolite, schist and quartzite occupy dark hilltop areas and marbles along lower green areas.



Famous Lakes Marble Formation 'folds outcrop' at Cur.



Folds in Ballynakill Schist Formation (north side of hill).



Marble-amphibolite fault contact several metres uphill from 'folds outcrop'.



Prominent ribs of calc-silicate folds in marble in green valley near 'folds outcrop'.

