TIPPERARY - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE	**Nore Valley Bogs**
Other names used for site	Timoney Bog
IGH THEME	**IGH7 Quaternary, IGH16 Hydrogeology**
TOWNLAND(S)	**Cappalahan, Timoney**
NEAREST TOWN/VILLAGE	**Roscrea**
SIX INCH MAP NUMBER	**18, 21**
ITM CO-ORDINATES	**617455E 685045N**
1:50,000 O.S. SHEET NUMBER 60	**GSI BEDROCK 1:100,000 SHEET NO. 18**

Outline Site Description
An expansive area of raised bog approximately 5 km southeast of Roscrea, and south of the M7 motorway.

Geological System/Age and Primary Rock Type
After the end of the last Ice Age, the area occupied by Nore Valley Bogs was the site of a shallow lake (Holocene, 11,500 years ago). The bog peat formed in the marshy conditions that became established in the lake between 10,000 and 7,000 years ago. The site overlies Lower Carboniferous marine lithologies varying from Ballysteen Formation (fossiliferous muddy limestone) and Lower Limestone Shale Formation.

Main Geological or Geomorphological Interest
Nore Valley Bogs is situated between the M7 motorway and the Timoney Hills, some 5 km southeast of Roscrea. The site is bisected by a road, and comprises raised bog in the townlands of Cappalahan (west) and Timoney (east). The course of the River Nore follows a cut along the northern margin of the bog. The bog developed as a result of peat accumulations in a topographic depression floored by Carboniferous limestone and limestone till subsoil. The bog comprises the characteristic features of raised bogs: hummocks and hollows, wet pools, flushes, and active *Sphagnum* and peat growth. Areas of cutover and degraded bog are found around bog margins where the hydrology has been affected by peat cutting and bog drainage.

Site Importance – County Geological Site
Nore Valley Bogs is a designated NHA (001853) and is recognised as being of high conservation importance. Active raised bogs are an increasingly rare and threatened feature of the landscape in the Irish central midlands. Raised bogs are important natural soak systems, and are increasingly under threat due to large-scale peat extraction in Ireland.

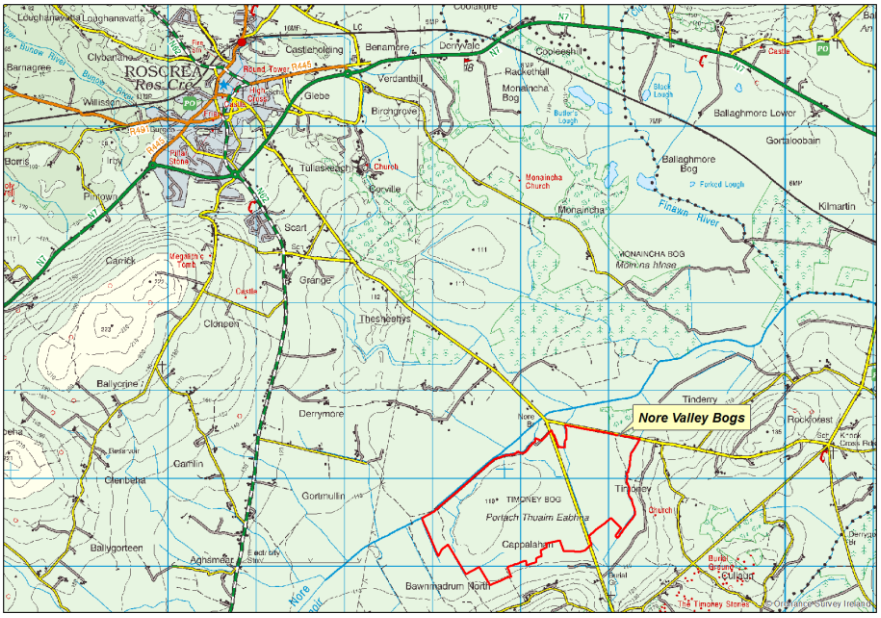
Management/promotion issues
Mechanical peat extraction using hopper and field press machinery is active (2019) in northeastern parts of the bog. The cutting and the lowering of the water table through drainage can detrimentally affect the condition of the bog. Peat extraction and land reclamation are the main threats to the site. A stone-laid trackway, two wooden troughs and other artefacts (TIM018-003) were discovered in the bog in the 1950s. Radiocarbon dating of wooden stakes gave a date of 1280-1520 AD. A public information panel at Nore Bridge crossroads would serve to improve public perception of the unique ecology, hydrology and geomorphology of raised bogs, and the importance of conserving these landscapes and habitats.

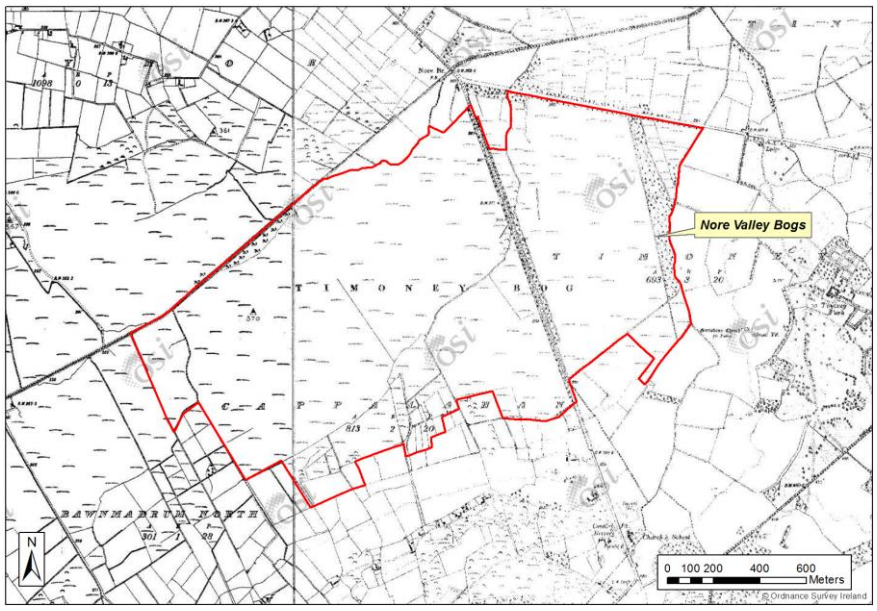
View south across Nore Valley Bog (Timoney Bog) towards Black Hill (228m). Bog regeneration in action along margins of bog.

Regenerating bog at south end of Nore Valley Bog (Timoney Bog). Facebanks and deep pools are evidence of past mechanical peat extraction operations.

Tree roots and stumps exposed by mechanical peat extraction at NE part of bog near M7 motorway.

Cut tuff drying out at northeast part of bog near M7 motorway.





Gallagher *et al.* 2019. Geological Survey Ireland