WICKLOW - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE   **Glasnamullen**
Other names used for site
IGH THEME   **IGH 12 Mesozoic-Cenozoic**
TOWNLAND(S)   **Glasnamullen**
NEAREST TOWN/VILLAGE   **Roundwood**
SIX INCH MAP NUMBER   **12**
ITM CO-ORDINATES   **719900E 709480N (centre of outcrop)**
1:50,000 O.S. SHEET NUMBER   **56**   **GSI BEDROCK 1:100,000 SHEET NO:**   **16**

Outline Site Description
 A long stream section with rock exposures in the bed and banks.

Geological System/Age and Primary Rock Type
Tertiary (Miocene) fault breccia exposed in the bed and banks of the stream.

Main Geological Interest
The site comprises the exposures of a breccia deposit created by a major fault which moved in the Tertiary Period, approximately 12.1 million years ago. Evidence of such faulting is rarely seen, except through interpretation of outcrop patterns. This site and the Powerscourt Deerpark cave site are both surface outcrops providing direct faulting evidence.

The movement on this Shankhill Fault Zone has been dated elsewhere, at Cloghleagh Mine, by radiometric method, using the isotopes of ^{40}Argon/^{39}Argon. The argon isotopes were contained within the potassium-bearing manganese oxide, cryptomelane. The mineralisation was generated as a hydrothermal breccia. The breccia at Glasnamullen is a part of the same fault zone.

Site Importance - County Geological Site
The site represents a rare example of evidence of faulting in eastern Ireland from the Miocene, and complements both Cloghleagh Mine and Powerscourt Deerpark Cave sites.

Management/promotion issues
The stream is in wild hillside, dividing farmland from forestry and is in a small gorge in places. It would appear to be under little threat, but if the landuse were to change in the vicinity, it could. Any forestry or farming operation such as drainage would have the potential to create new exposures.

Some of the breccia exposed in the stream bed, in the upper part of the site.

Left: Some of the breccia exposed in the stream bank.
Right: The stream is in a gorge in the lower part of the site.

Glasnamullen

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