

# LONGFORD - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE	Carrickboy Quarry
Other names used for site	Thompson's locality
IGH THEME	IGH8 Lower Carboniferous, IGH3 Carboniferous - Pliocene Palaeontology
TOWNLAND(S)	Carrickboy, Tennalough
NEAREST TOWN/VILLAGE	Carrickboy
SIX INCH MAP NUMBER	19, 23
NATIONAL GRID REFERENCE	621350E 764400N (new quarry) 620555E 764920N (old quarry)
1:50,000 O.S. SHEET NUMBER	41
GSI BEDROCK 1:100,000 Sheet No.	12

## Outline Site Description

Two disused limestone quarries (old and new) situated on an elevated area near the crossroads at Carrickboy.

## Geological System/Age and Primary Rock Type

Bedrock comprises massive and bedded Waulsortian limestone and shale. The fossiliferous deepwater limestones and shales formed topographic highs (reefs) on the Carboniferous seafloor around 340 million years ago.

## Main Geological or Geomorphological Interest

The northeast face of the new quarry exhibits two dolines, which would have been plugged with glacial till. Much of the unconsolidated debris has since collapsed into the quarry and quarry lake-floor as the doline walls were removed.

Three main banks of rocks have been described in the old quarry (ITM 620555 764920). The lower reef rock here is dark, calcite mudstone, with bryozoan fossils, and is overlain by thin bedded dark limestone and blackish shales, overlain again by more calcite mudstones. Fossils are relatively abundant throughout, with several limestone beds are rich in crinoid fossils. Blastoids, an extinct type of stemmed echinoderm (*Ellipticoblastus ellipticus*) occur in shales near the top of the reef exposed at the older Carrickboy Quarry. The type specimen of an extinct genus of mollusc, *Conocardium inflatum*, was described at the old quarry at Carrickboy. Fossil fauna associated with the reefs in the Dublin Basin are late Courcayan-early Chadian in age.

## Site Importance – County Geological Site

This is an important area for research conducted on tabular-form Waulsortian banks and knoll-reefs and Carboniferous palaeobiogeography. The old quarry, to the northwest of the Carrickboy crossroads is listed in the 1972 Report on Areas of Scientific Interest in Longford. The stratigraphy at the old quarry site was described in detail in 1964.

The new quarry provides good exposure of the inclined Lower Carboniferous strata, but the quarry faces are not accessible owing to the quarry floor being flooded.

## Management/promotion issues

The new quarry at Tennalough was operated by Carrickboy Quarries Ltd between 2002 and 2009. This site is now flooded and no longer quarried (2015). The old disused quarry is fenced off by the landowner, and is not observable from the R393 road, even though the quarry face is only 100 metres from the road, being well hidden by hedges and trees. It is of interest primarily to geologists.



The flooded “new” quarry, viewed from the quarry service road, looking east.



Trigonometrical (Trig) pillar sited on the rath enclosure just west of the “new” quarry.



Syncline exposed in west side of “new” quarry adjacent to two dolines.



Glacially smoothed and striated limestone boulder at south side of “new” quarry.



Massive limestone exposed in northwest face of “new” quarry.



