EDC 12: Barraston Quarry, Barraston Farm

Grid reference: [NS 60440 75444]

Site type: Artificial quarry works

Site ownership: Not known

Current use: Disused

Field surveyor: Sarah Arkley & Luis Albornoz-Parra

Current geological designations: None

Date visited: 9th March 2009

Site map

(Figure 12) Barraston Quarry Location Map

Summary description

Disused mudstone quarry, formerly used for the manufacture of bricks.

The mudstone beds are part of the Lower Limestone Formation, located between the Hurlet Limestone and Blackhall Limestone.

The quarry is degraded, overgrown and largely flooded. Small friable outcrops through black mudstones containing ironstone bands area seen to the north and west of the quarry. Burnt mudstone waste piles exist to the north. Extensive searching for outcrops of the limestone drew a blank, Robertson, 1937 mentioned outcrops now "much obscured". Few blocks of blue-grey limestone with crinoid fragments found lying around (?Blackhall Limestone).

The mudstones in the lower part of the Lower Limestone Formation are generally barren or only yield ostracods, fish debris or *Curvirimula* (Hall et al, 1998). However specimens of gastropods and bivalves are recorded from here (Strathclyde RIGS designation form). Clayband ironstones on the other hand are abundant in this part of the sequence, north of the Clyde these were known as the Campsie Clayband Ironstones and were worked at Barraston (Robertson, 1937).

Flooded quarry provides wetland habitat which currently has a population of great crested newts (Strathclyde RIGS designation form).

EDC 12: Stratigraphy and rock types

Age: Lower Carboniferous Formation: Lower Limestone Formation

Rock type: Sedimentary Rock Cycles of the Clackmannan Group Type

Age: Lower Carboniferous Formation: Blackhall Limestone, Lower Limestone Formation

Rock type: Limestone

Assessment of site value

Access and safety

Aspect/Description

Road access and parking Small layby at entrance to quarried area off tarmac country road. Quarry itself is largely flooded

Safety of access Around flooded area the quarry is pretty densely wooded, mainly with very spikey hawthorn. Muddy and uneven ground makes walking very difficult to relatively poor outcrops.

Safety of exposure Degraded quarry faces appear stable, low ground is very wet

Permission to visit No permission sought

Current condition Many of the quarry faces are well degraded

Current conflicting activities None

Restricting conditions Difficult access

Nature of exposure Quarry and stream sections

Culture, heritage & economic

Historic, archaeological & literary associations None known. Rating: 0.

Aesthetic landscape Old quarry, part flooded and densely wooded. Rating: 2.

History of earth sciences None known. Rating: 0.

Economic geology Mudstone for brick manufacture. Rating: 3.

EDC 12: Geoscientific merit

EDC 12: Barraston Quarry, Barraston Farm. Geoscientific merit.

Total Geoscientific merit score 24

Current site value

Community Worn footpath from the layby to the loch suggests people do visit. Rating: 6.

Education Mudstone was worked extensively here. Typical example of a 3 disused quarry; displaying features such as disturbed ground, waste material, small sections through the worked material, flooding, no restoration. Site could be compared with an active quarry where operators now have to restore the worked area to how it appeared previously. Difficult access devalues this site. Rating: 3.

Fragility and potential use of the site

Fragility Erosion, Natural Overgrowth, Development

Potential use School, Multidisciplinary

Geodiversity value

There are few places in East Dunbartonshire where such a large volume of mudstone has been removed/processed as seen at this site. Although the remaining quarry faces are much degraded and access is poor to this site, valuable information about our industrial past can be gained from this locality. However, the main value of this site is how a disused quarry left to nature can over time create a valuable habitat for wildlife.

Photographs

(Photo 55) Panorama across the old workings of Barraston Quarry, now partly flooded. Unfortunately only small degraded exposures remain and access is difficult through dense woodland which reduces the potential value of the site. Rating: 4.

(Photo 56) View WNW along the flooded part of Barraston Quarry.

(Photo 57) Burnt shale waste piles are found to the north of the quarry. Looking NW.

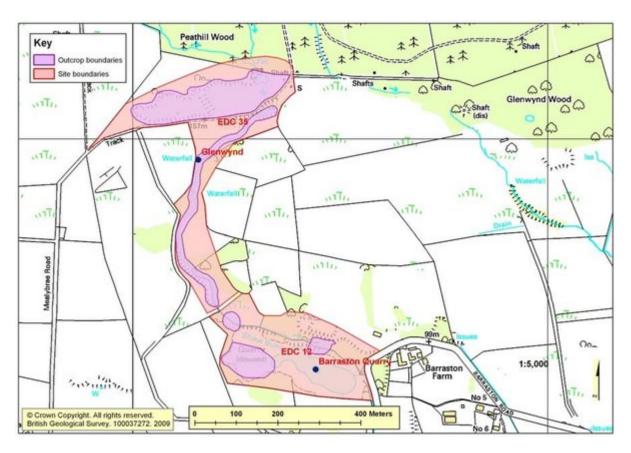
(Photo 58) An ironstone band forms a resistant horizon within the layers of laminated black mudstones, creating a lip for a small waterfall. Looking SW.

(Photo 59) Section through laminated black mudstones with several rusty-coloured ironstone bands. Looking SW.

(Photo 60) The main face at the western end of the quarry, comprising a series of degraded sections through black mudstones. Looking SW.

(Photo 61) A superb example of a striated (glacially scratched) boulder, found in the burn entering Barraston quarry from the northwest. It has probably been washed out of a glacial till deposit. Looking SE.

Bibliography



(Figure 12) Barraston Quarry location map.

GeoScientific Merit	Rarity	Quality	Literature/ Collections	1st
Litho Stratigraphy	4 ~	4 ~	2 ~	~
Sedimentology	4 ~	4 ~	2 ~	
Igneous/Mineral/ Metamorphic Geology	0 ~	0 ~	0 ~	
Structural Geology	0 ~	0 ~	0 ~	
Palaeontology	1 ~	1 ~	2 ~	
Geomorphology	0 ~	0 ~	0 ~	

EDC 12: Barraston Quarry, Barraston Farm. Geoscientific merit.



(Photo 55) Panorama across the old workings of Barraston Quarry, now partly flooded. Unfortunately only small degraded exposures remain and access is difficult through dense woodland which reduces the potential value of the site.



(Photo 56) View WNW along the flooded part of Barraston Quarry.



(Photo 57) Burnt shale waste piles are found to the north of the quarry. Looking NW.



(Photo 58) An ironstone band forms a resistant horizon within the layers of laminated black mudstones, creating a lip for a small waterfall. Looking SW.



(Photo 59) Section through laminated black mudstones with several rusty-coloured ironstone bands. Looking SW.



(Photo 60) The main face at the western end of the quarry, comprising a series of degraded sections through black mudstones. Looking SW.



(Photo 61) A superb example of a striated (glacially scratched) boulder, found in the burn entering Barraston quarry from the northwest. It has probably been washed out of a glacial till deposit. Looking SE.