
ELC_12: Peppercraig Quarry, Haddington

Site information

Location and summary description:

The site comprises a small quarry located immediately north of the town of Haddington. The igneous rock of Carboniferous age extracted from the site was reportedly used to construct many of Haddington's stone buildings. Now largely infilled, the quarry contains a small industrial park but exposures of the porphyritic trachyte remain in the back walls.

National Grid reference:

Mid-point: [NT 50800 74500]

Site ownership: Not known – Guy's Garage forms part of the site.

Site type:

- Artificial quarry works

Current use:

- Disused
- Industrial land

Field surveyors: Sarah Arkley & Rachael Ellen

Current geological designations: None known

Date visited: 16th April, 2014

Other designations: None known

Site map

(Figure 17) Peppercraig Quarry Location Map. The site boundary includes the original extent of the quarry, which is historically and geologically significant due to its importance in providing building stone to the town of Haddington. Exposed rock is highlighted by blue hatched areas.

Site description

Background

Peppercraig Quarry lies on the northern outskirts of the town of Haddington, between the A1 to the north and the A199 to the south. The quarry is composed of a porphyritic trachyte, an ancient lava flow belonging to the Garleton Hills Volcanic Formation. Historically, rock from this quarry has been extracted for the construction of many of Haddington's stone buildings (ELC_12_P1), (ELC_12_P2), (ELC_12_P3) and for road metal. Most of the quarry has been infilled, and few exposures remain throughout the extent of the old quarry. The uppermost 1–2 m of the quarry face remains exposed just to the east of a car servicing garage, at the north-east of the site which, at time of visit, was a building site (ELC_12_P4, (ELC_12_P5). Contractors there revealed that recent boreholes showed 10 m of 'fill' material (presumably quarry infill) before going through at least 6 m of porphyritic trachyte. The contractors also advised that after construction the quarry

walls would remain visible.

Volcanic rocks

The porphyritic trachyte exposed at the site is part of the trachytic lava and tuff sequence which comprise the Bangley Member (the uppermost or youngest part of the Garleton Hills Volcanic Formation). The porphyritic trachyte exposed at the site is part of a massive lava flow (ELC_12_P6), displaying large, up to 1 cm sized creamy-brown feldspar phenocrysts set in a fine grained dark grey groundmass (ELC_12_P7). The rock is highly weathered at the surface (ELC_12_P8), evidenced by intense fracturing at the top of exposures and by replacement of feldspar phenocrysts to clay. Contractors on site advised the porphyritic trachyte at 6 m depth within the borehole did not display this weathering, and was instead a very solid and cohesive rock.

Access and additional information

The site is accessed just north of the roundabout linking the A6137 and A199 in Haddington. The Peppercraig Industrial Estate has a car garage within it, and parking is possible nearby there without restricting access. At the time of visit, building contractors were actively on site, with permission required to gain entry. Once building work is complete the rock face will still be accessible, although it will be fenced off, impeding access to the exposure.

Stratigraphy and rock types

Age: Lower Carboniferous

Formation: Garleton Hills Volcanic Formation (Bangley Member) **Rock type:** Porphyritic trachyte

Assessment of site: access and safety

Road access and parking Located immediately north of Haddington, between the A1 and the A199, there is good road access directly into the site. Turn off the A6137, down a narrow metalled road into the Peppercraig Quarry Industrial Park, parking for a few cars can be found within the estate opposite a car servicing centre. Access to the quarry face is more difficult as it lies behind small industrial units/plots which are largely fenced off.

Safety of access The Quarry is largely infilled, floored by a concrete or rubble surface

Safety of exposure The remaining quarry face is low, less than 2m high, so there is little risk of material falling from a height, however, the rock is very weathered/fractured in places so care should be taken when observing the exposure close-up.

Access The quarry is now an industrial park, most of the quarry face area is fenced off.

Current condition Exposures are from the uppermost part of the former quarry and display weathered (rather than fresh) exposures of the trachyte which was worked. Annual vegetation growth may obscure the quarry face to some extent in the summer months.

Current conflicting activities None known, although any of the businesses located within the site could develop right up to the face or obscure it with stored materials.

Restricting conditions Due to the present industrial use of the site, gaining hands-on access to the quarry face may be difficult.

Nature of exposure Vertical quarry faces

Assessment of site: culture, heritage & economic value

Historic, archaeological & literary associations Historical Ordnance Survey maps record the quarry in existence as early as 1855; it is then shown on the 1895, 1908 and 1938 maps and assumed to be active during this time. Although a reference in The Geology of East Lothian publication (1910) indicates that the quarry was no longer used at that time.

Aesthetic landscape Old quarry on the outskirts of Haddington, revealing the underlying geology

History of earth sciences None known

Economic geology Former building stone and road metal quarry.

Assessment of site: geoscientific merit

	Rarity	Quality	Literature/collections	Primary interest
Lithostratigraphy				
Sedimentology				
Igneous/mineral/metamorphic geology	Local	Poor		X
Structural geology				
Palaeontology				
Geomorphology				

Site geoscientific value

The site provides access to poor quality exposures of porphyritic trachyte within the Peppercraig Quarry. The biggest attraction of this site is its historical connection to the building stones of Haddington, therefore despite having a low rating in rarity and quality this site is important to the heritage of East Lothian.

Peppercraig Quarry provides a poor example of Carboniferous extrusive volcanic rock, with local significance. However, the overall site has important historical associations with the building stones of Haddington.

Assessment of site: current site usage

Community Quarry is located on the outskirts of Haddington and has been redeveloped as a small industrial park with 3 or 4 local businesses occupying the site. The site is probably only frequented by proprietors and clients of these businesses and it is likely that quarry is currently rarely or never visited for its geological interest or historical/economic associations.

Education As the rock extracted from the quarry was used to construct many of Haddington's stone buildings, the site should be of interest to any local school or group investigating the history of the town.

Assessment of site: fragility and potential use of the site

Fragility Natural overgrowth, Likelihood of development

Potential use Include within local history information/leaflets

Geodiversity summary

The main value of this site is its economic/cultural association with Haddington. There are numerous exposures and even quarries in the local area revealing the same porphyritic trachyte seen here, However the local town of Haddington is recorded to have been largely built of the igneous material extracted from Peppercraig Quarry. Haddington is one of the main towns in East Lothian and this link gives the site increased significance.

Site photos

(ELC_12_P1) The building which houses the John Gray Centre in the middle of Haddington contains blocks of porphyritic trachyte, probably from Peppercraig Quarry. © BGS, NERC.

(ELC_12_P2) Detail of part of the north facing wall of the John Gray Centre, displaying irregular shaped porphyritic trachyte blocks making up most of the wall with shaped sandstone blocks forming the door surround. © BGS, NERC.

(ELC_12_P3) Close-up of porphyritic trachyte blocks used in the John Gray Centre. Note the large pale-coloured crystals (phenocrysts) scattered within a fine-grained dark green/purple groundmass. Typical of the material seen in Peppercraigs Quarry. © BGS, NERC.

(ELC_12_P4) Small industrial park which lies within the former Peppercraig Quarry. © BGS, NERC.

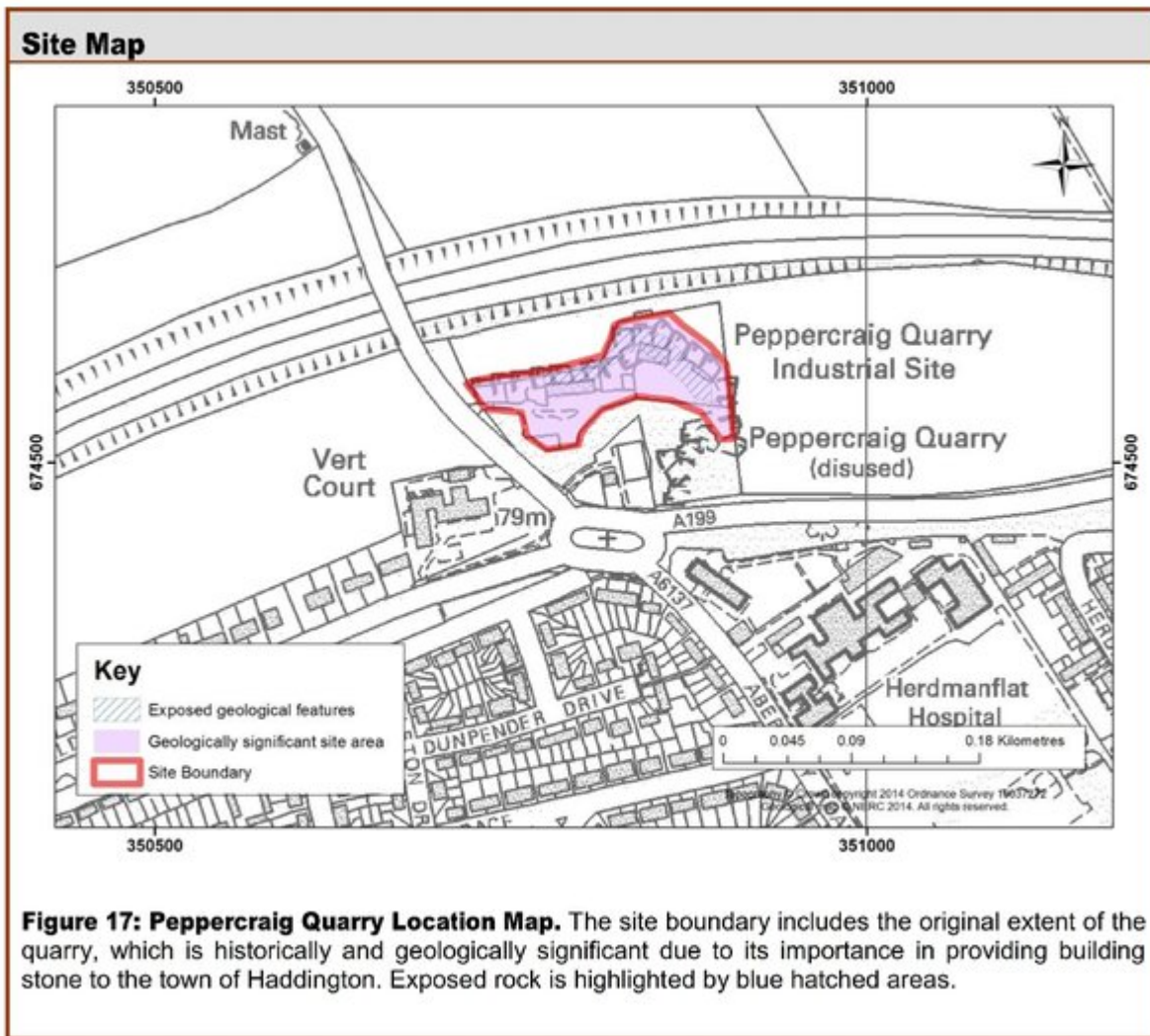
(ELC_12_P5) The uppermost 1–2 m of the quarry face is all that remains exposed following the infilling of the quarry. Although exposures are fairly clean they are generally fenced off and not easily accessible. Quarry face in the western part of the site. © BGS, NERC.

(ELC_12_P6) Ongoing work in the eastern part of the site has cleared material away the quarry face. Although the face will be left exposed, the floor is to be concreted and a fence constructed around the plot, impeding/preventing access to the exposure. Quarry face in the central part of the site. © BGS, NERC.

(ELC_12_P7) Detail of the uppermost part of the quarry face showing the increasingly weathered nature of the igneous rocks towards the natural surface. © BGS, NERC.

(ELC_12_P8) Close up of the porphyritic trachyte which was extracted from the quarry and used to construct many of Haddington's stone buildings. © BGS, NERC.

[References](#)



(Figure 17) Pepperraig Quarry Location Map. The site boundary includes the original extent of the quarry, which is historically and geologically significant due to its importance in providing building stone to the town of Haddington. Exposed rock is highlighted by blue hatched areas.



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(ELC_12_P2) Detail of part of the north facing wall of the John Gray Centre, displaying irregular shaped porphyritic trachyte blocks making up most of the wall with shaped sandstone blocks forming the door surround. © BGS, NERC.



(ELC_12_P3) Close-up of porphyritic trachyte blocks used in the John Gray Centre. Note the large pale-coloured crystals (phenocrysts) scattered within a fine-grained dark green/purple groundmass. Typical of the material seen in Peppercraigs Quarry. © BGS, NERC.



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(ELC_12_P7) Detail of the uppermost part of the quarry face showing the increasingly weathered nature of the igneous rocks towards the natural surface. © BGS, NERC.



(ELC_12_P8) Close up of the porphyritic trachyte which was extracted from the quarry and used to construct many of Haddington's stone buildings. © BGS, NERC.



(ELC_12_P4) Small industrial park which lies within the former Peppercraig Quarry. © BGS, NERC.