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## EDC 8: Kilmardinny Loch, Bearsden

**Grid reference:** [NS 54917 72934]

**Site type:** Natural landform

**Site ownership:** Not known

**Current use:** Recreational land

**Field surveyor:** Sarah Arkley & Luis Albornoz-Parra

**Current geological designations:** None

**Date visited:** 6th March 2009

### Site map

(Figure 8) Kilmardinny Loch Location Map

### Summary description

Small inter-drumlin loch in urban environment.

During the Quaternary, the area was covered by ice sheets on several occasions which moulded the topography and laid down extensive glacial deposits. Much of the low ground in East Dunbartonshire is covered by glacial till, some of which has been moulded into elongate ridges parallel to the direction of ice flow (drumlins). On retreat of the ice, meltwater poured from the glaciers over the new glacial topography, hollows between some of the drumlins were flooded and formed lochs. Kilmardinny Loch is thought to have formed in this way; its dimensions are approximately 250 m x 200 m.

The glacial topography and the subsequent flooding of this inter-drumlin area have created an excellent wetland habitat for a variety of birds & animal species. The margins of the loch also support a variety of wetland flora. A wildlife oasis with a built-up environment which is enjoyed by local residents. The site illustrates how the shape of the landscape influences the way man and wildlife can use the area. Despite being located beneath a flight path for Glasgow Airport and very much within the urban environment, the site is rather unspoilt and reasonably well looked after. There are many public footpaths around the loch which are well used by locals. No information about the site was observed, but not sure if any kind of interpretation board would survive here. Cadder Sand and Gravel Formation has been mapped adjacent to the loch but no exposures were seen — may be a possibility for creating an exposure.

### EDC 8: Stratigraphy and rock types

**Age: Pleistocene Formation: Wilderness Till Formation**

**Rock type: Glacial deposits: diamicton**

**Age: Quaternary Formation: Kelvin Formation**

**Rock type: Lacustrine deposits: clay, silt and sand**

**Age: Pleistocene Formation: Cadder Sand and Gravel Formation**

**Rock type: Gravel, sand and silt**

## **Assessment of site value**

### **Access and safety**

#### **Aspect/Description**

**Road access and parking** Small parking area at the east end of the loch, but street parking in the surrounding residential areas should be possible in a number of places.

**Safety of access** Wooded area surrounds the loch, good footpaths into the site and a flat path goes all the way round.

**Safety of exposure** Could get your wellingtons stuck if heading into the wetland areas at the edge of the loch

**Permission to visit** No permission sought

**Current condition** Okay, minor household/garden rubbish

#### **Current conflicting activities**

None

**Restricting conditions** None

**Nature of exposure** Natural landform

### **Culture, heritage & economic**

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

**Aesthetic landscape** Valuable open space with urban environment. Rating: 3.

**History of earth sciences** None known. Rating: 0.

**Economic geology** None recorded. Rating: 0.

## **EDC 8: Geoscientific merit**

**EDC 8: Kilmardinny Loch, Bearsden. Geoscientific merit.**

## **Total Geoscientific merit score 10**

### **Current site value**

**Community** Public park surrounded by housing estates, local residents frequent the site, feeding birds, dog-walking, etc. Rating: 10.

**Education** Small inter-drumlin loch, if an exposure of sand and gravel could be found/created this would add significantly to the value of the site. Thick sequence of sediments may also exist beneath the loch. Rating: 5.

### **Fragility and potential use of the site**

**Fragility** None

## Geodiversity value

Although neither lochs nor drumlins are rare features in the area, Kilmardinny Loch is a good example of a flooded inter-drumlin hollow. However, the main value of the site is that the fact that it is located within the urban environment and could be used as an example of the glacial features and deposits created in the area during the last glaciation and developed to inform residents about their local geological history. Its geodiversity value is enhanced on account of its accessible location. Rating: 3.

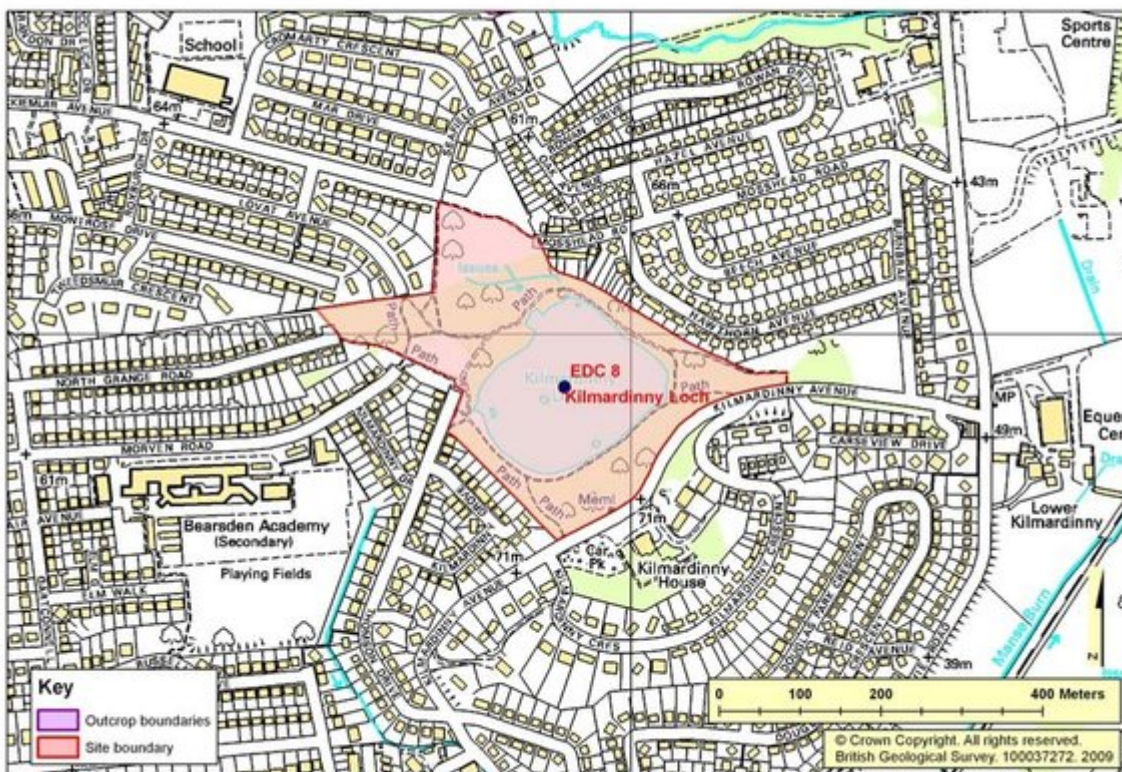
## Photographs

(Photo 34) View SW across Kilmardinny Loch. A good network of footpaths and seating encourages local residents and visitors to enjoy this geomorphological feature.

(Photo 35) Shallow water at the edge of the inter-drumlin loch provides a wetland habitat for a variety of flora and fauna. Looking NNE from the western shore.

(Photo 36) Panorama across Kilmardinny Loch from the southeast shore.

## Bibliography



(Figure 8) Kilmardinny Loch location map.

GeoScientific Merit	Rarity	Quality	Literature/ Collections	1st
Litho Stratigraphy	0 ▾	0 ▾	0 ▾	<input type="checkbox"/>
Sedimentology	0 ▾	0 ▾	0 ▾	<input type="checkbox"/>
Igneous/Mineral/ Metamorphic Geology	0 ▾	0 ▾	0 ▾	<input type="checkbox"/>
Structural Geology	0 ▾	0 ▾	0 ▾	<input type="checkbox"/>
Palaeontology	0 ▾	0 ▾	0 ▾	<input type="checkbox"/>
Geomorphology	4 ▾	4 ▾	2 ▾	<input checked="" type="checkbox"/>

EDC 8: Kilmardinny Loch, Bearsden. Geoscientific merit.



(Photo 34) View SW across Kilmardinny Loch. A good network of footpaths and seating encourages local residents and visitors to enjoy this geomorphological feature.





*(Photo 35) Shallow water at the edge of the inter-drumlin loch provides a wetland habitat for a variety of flora and fauna. Looking NNE from the western shore.*



*(Photo 36) Panorama across Kilmardinny Loch from the southeast shore.*