# **EDC 15: Gallow Hill, Milton of Campsie**

**Grid reference:** [NS 63841 76704]

Site type: Natural landform

Site ownership: Not known

Current use: Agricultural land

Field surveyor: Sarah Arkley & Luis Albornoz-Parra

Current geological designations: None

Date visited: 10th March 2009

## Site map

(Figure 15) Gallow Hill Location Map

## Summary description

Gallow Hill is a mound of sand and gravel, surrounded by the flood plain of the Glazert Water, the present river course includes a meander within the site.

The ice-contact sand and gravel deposits, from the last glaciation, have been assigned to the Broomhouse Sand and Gravel Formation. The alluvium of the Glazert Water could be assigned to either the Kelvin Formation or Law Formation.

The sand and gravel mound forming Gallow Hill is thought to have ice-contact, glaciofluvial origins due to its 'moundy' nature. However the RIGS site list records the site as 'terminal moraine'. The mound is approximately 300 m x 150 m and up to 10 m high, no exposures of the deposits were found.

The Glazert Water flows immediately to the south of Gallow Hill and its wide flat floodplain surrounds the mound, suggesting that in times of flood the mound would become an island. The resulting fertile land is currently used for grazing livestock. A 'point bar', located on the inside of the river meander, is composed of cobbles, indicating a fairly high energy flow. There is a 'river cliff' at the other side on the outside of the meander. Cobbles on the point bar show imbrication, there are lithologies of various origins, most are subrounded and range from 3–20 cm in diameter, although the largest can reach 75 cm.

However, this sand and gravel mound also has a darker side to it; historical references refer to an event in 1639 when Lord Kilsyth hanged one of his servants here, and is presumably where Gallow Hill acquired its name.

## **EDC 15: Stratigraphy and rock types**

Age: Holocene Formation: Kelvin Formation or Law Formation

Rock type: Alluvial deposits: clay, silt, sand and gravel

Age: Quaternary Formation: Broomhouse Sand and Gravel Formation

Rock type: Glaciofluvial deposits: sand and gravel

#### Assessment of site value

#### Access and safety

#### Aspect/Description

**Road access and parking** Restricted parking space N of hill on main road with possibly more spaces at Lennoxlea Farm, south of Hill but then access will involve a longer walk as bridge does not exist any more between farm and site. Both rough and good tracks surrounding area. Minor rubbish along river banks.

**Safety of access** Public footpaths, farm tracks and farmland Safety of exposure Care should be taken at river edge Permission to visit No permission sought

Current condition Good, best definition seen when crops are very young or fields are ploughed, currently grassed.

Current conflicting activities Ploughing will over time 'smooth out' the feature

Restricting conditions Time of year - crop height

Nature of exposure Natural landform

## Culture, heritage & economic

Historic, archaeological & literary associations None know (?origin of the name). Rating: 0.

Aesthetic landscape Farmland, good views to the Kilsyth Hills to the north. Rating: 3.

History of earth sciences None known. Rating: 0.

Economic geology None recorded. Rating: 0.

## **EDC 15: Geoscientific merit**

## **EDC 15: Gallow Hill, Milton of Campsie. Geoscientific merit.**

## **Total Geoscientific merit score 16**

#### Current site value

**Community** Public track along the dismantled railway to the north of site, 10 gets regular use by dog-walkers, joggers, etc.. Rating: 10.

Education Not very impressive site but displays features important to the 3 local post-glacial history. Rating: 3.

## Fragility and potential use of the site

Fragility Development. Potential resource of sand and gravel.

Potential use School

## **Geodiversity value**

The site displays 'hummocky' ground, composed of sand and gravel deposits, and formed in an ice-contact environment during the last glaciation. The site is further enhanced by the modern river features produced by the Glazert Water

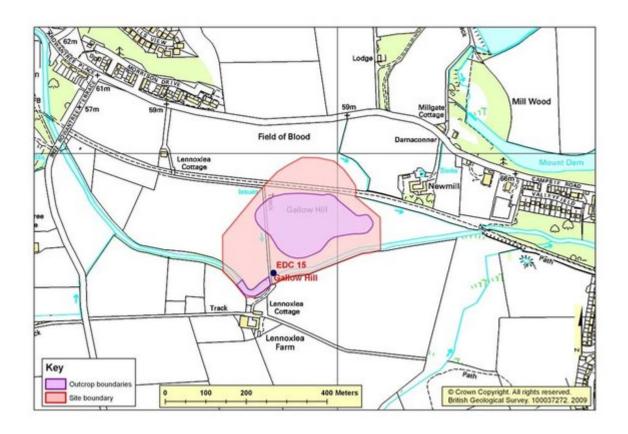
# **Photographs**

(Photo 81) Panorama of Gallow Hill illustrating the undulating form of the sand and gravel mound. The volcanic Kilsyth Hills are in the distance to the NW. The sand and gravel was deposited at the end of the last ice-age by meltwater streams issuing from glaciers retreating in a northwest direction towards the main Highland ice-sheet. The name Gallow Hill comes from a site to place gallows, and it is recorded that as late as 1639 Lord Kilsyth hanged one of his servants here.

(Photo 82) Gravel point-bar forming on the inside of a meander in the Galzert Water. A river-cliff can be seen forming on the opposite side where water the bank has been undercut. Looking SW.

(Photo 83) Cobbles transported downstream lodged against a larger boulder on the point bar are stacked up in the direction of river flow in a process known as imbrication. This example of a modern- day sedimentary process, can help geologists to determine the 'palaeo' flow direction in ancient sedimentary rock deposits. Looking NW.

## **Bibliography**



(Figure 15) Gallow Hill location map.

GeoScientific Merit	Rarity	Quality	Literature/ Collections	1st
Litho Stratigraphy	2 ~	1 ~	0 ~	
Sedimentology	2 ~	3 ~	0 ~	
Igneous/Mineral/ Metamorphic Geology	0 ~	0 ~	0 ~	
Structural Geology	0 ~	0 ~	0 ~	
Palaeontology	0 ~	0 ~	0 ~	
Geomorphology	4 ~	4 ~	0 ~	V

EDC 15: Gallow Hill, Milton of Campsie. Geoscientific merit.



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