

Research

Mousehold Heath has been researched for many years. Its position close to the city has made it a popular place to study wildlife, geology and landforms.

1. Researching geodiversity

Members of the Geological Society of Norfolk and the British Geological Survey have been studying Mousehold. It is relevant to the story of East Anglian glacial geology, one of the frontier areas of science today where lively controversies thrive. Our understanding is continually developing as new discoveries are made, and we hope that the Trail will stimulate future research.

The project will involve re-cutting and cleaning up some of the degraded geological exposures on the Heath, providing new windows into the geology at different levels in the sediment stack.



1. Volunteers exposing glacial outwash gravels at Birch Walk on Mousehold Heath, February 2012.

Questions we would like answered include

- Can we identify deposits of two separate glacial periods on Mousehold?
- In which directions did the glacial meltwaters flow?
- In what period of the Norwich Crag were the sands and clays at St James' Pit deposited?
- In what horizon of the Chalk in St James' Pit were the *Mosasauros* fossils found?

Further reading

- 'The origin of Mousehold Heath, Norwich' by Brian Funnell (Transactions of the Norfolk and Norwich Naturalists' Society, 23; 1975).
- 'The geology of the country around Norwich' by FC Cox, RW Gallois and CJ Wood (Memoir for 1:50,000 geological sheet 162; British Geological Survey; 1989).
- 'The History of Mousehold Heath' by Edwin Rose (1984).
- 'Mousehold – A short history' by Geoffrey Goreham (1978).
- 'The Geology of the country around Norwich' by HB Woodward (Memoirs of the Geol Survey, England & Wales, Explanation of Quarter Sheets 66NE and 66SE; 1881) – downloadable from www.archive.org/details/cu31924004541177

2. Researching biodiversity



2. The ant hills in Heathland Restoration Area 3, made by the Yellow Meadow Ant *Lasius flavus*. This is just one of the ant species being researched in Norfolk. Such ant hills may be of great age and size, and contribute to the biodiversity of grasslands.

Members of the Norfolk and Norwich Naturalists' Society have an ongoing programme of recording fauna and flora on Mousehold, and the results will feed into the ecological restoration programme here. The heathland is a precious remnant of the former greater Heath, and it is now a refuge for species lost from the wider area.

Mousehold is especially notable for its Hymenoptera (bees, wasps and ants) – no less than 83 species have been recorded. 'The key value of the Heath is for its dry and open habitat invertebrate species.' (GW Hopkins, 2009).

'There is... very little in the way of unshaded steep slopes or cliffs' [on the Heath]. 'It would be great to see some fresh digging in the open areas to create low cliffs, or see trees removed from south facing slopes of some of the wooded pits. The most important area for nesting Hymenoptera is currently the open area around the Vinegar Pond where the historic sand and gravel digging has created a really varied topography. The site was probably at its best for Hymenoptera in the 1800s when it was treeless, sheep-grazed and actively quarried. There are certainly a fair number of species recorded there in the 1870s that are no longer present'. (T Strudwick, 2012).

There are a number of notable heathland plants on Mousehold, including Western Gorse *Ulex gallii* and Trailing St John's-wort *Hypericum humifusum*, and some rare bramble microspecies (over 20 have been recorded on the Heath, making it one of the best sites in the county).

Photo credits

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