

10. Vinegar Pond Gravel Pits



1. The site of Vinegar Pond (marked X) on a map of 1881.

Sand and gravel was been dug on this part of the Heath since at least the Middle Ages. It was used for making up roads as well as aggregate for building. Quarrying stopped here after 1880. Fresh-looking hummocky ground nearby is probably the result of wartime dumping of soil. Vinegar Pond is a wet hollow left by the quarrying and wartime manoeuvres; it is a 'dew pond' which tends to dry up in summer, as it is only fed by rainwater.

People were sometimes killed when working in the gravel pits on Mousehold. A Coroner's inquest from 1751 states that Robert Burgess 'being sometime this morning at a certain place on Mousehold Heath called *The Stone* by some accident the edge or Brow of the Hill fell upon him by reason of which falling of the Earth the said Robert Burgess was stifled to Death".

The highest land on Mousehold Heath is a plateau made of layers of Ice Age sand and gravel. It is the remains of a glacial outwash plain or 'sandur' deposited during a later phase of the Anglian glaciation, perhaps 440,000 years ago. Sandurs are formed where meltwater emerges under pressure from beneath an ice sheet and dumps its bedload of stones. A spreading apron of sand, gravel and boulders is formed, with streams threading their way across its gravelly surface.



2. An outwash plain at Skaftafell, Iceland

Geologists need to do more research before it is possible to say in which direction the water was flowing at Mousehold. However we know that there was large ice sheet which passed to the south and west of

Norwich, so it is quite possible that the water came from there. The Heath is part of a larger tract of sandy land dipping gently north-eastwards towards Rackheath and Salhouse, and this area may be the downstream end of the outwash plain.

There are some geological exposures in this area of the Heath. Because the area has been so disturbed by quarrying it is difficult to know whether any of the original, natural land surface of the Heath has survived. Can you work out where?



3. Vinegar Pond has recently been scraped out to improve its value for wildlife. It is full of frogs' spawn in spring, but tends to dry out in summer, as it is only fed by rainwater.



4. Much of the wooded land around Vinegar Pond is made of old quarry spoil. A geological exposure just north-east of the Pond shows an original quarry face (yellow sands on the left) buried under a mound of brown spoil.



5. Yellow glacial sands are interbedded with brown clay-rich sands, and show evidence of 'plastic' disturbance. This may have been caused by load pressure from overlying ice, while the sediments were in a semi-fluid, water-charged state.

Photo credits

1. Courtesy Norfolk Record Office NCR Case 6a/8, 2. © British Geological Survey P603278, 3., 4. and 5. © Tim Holt-Wilson.