34 Brampton

Theme: Climate and landscape change

Location

34 Brampton — Kame Belt. Brampton has parking and is served by bus; try the footpath along the Brampton Ridge [NY 536 615].

Description

Anyone who has driven the A69 past Brampton will recognise how hummocky, sandy and red the local landscape is.

Stretching southwards from Brampton to Cumrew is an undulating expanse of sand, gravel, silt and clay around 44 square kilometres in area. Geologists named it the 'Brampton Kame Belt'. 15,000 years ago rivers and lakes draining England's last stagnating ice sheet deposited one of the largest areas of glacial meltwater sediments anywhere in the UK. Only a few thousand years earlier an ice sheet over 1000 metres thick, had advanced down the Irish Sea, across the Solway Plain, joining with ice from the Lake District before flowing south and eastwards through the Eden and Tyne valleys. As the climate warmed, the ice progressively wasted and receded southwards and westwards and the meltwater transported and sorted the debris the ice had carried. The debris (and thus the soil) is red because the ice sheets had eroded the local Triassic sandstone bedrock.

By looking at the shape and composition of this undulating landscape, and comparing it with places in the world where ice sheets are melting today, we can understand how the different ridges, humps and hollows formed. What were once channels for torrents of meltwater are now quiet, dry valleys. Ridges, like the one in Brampton itself, were rivers carrying debris under, on top of, and within the glacier. Flat-topped hills were ice-walled lakes into which deltas flowed, depositing sand, and often delicately laminated silt and clay. Enclosed hollows are 'kettle holes', places where large blocks of dead ice were buried by sediment and then melted, leaving a depression. Talkin Tarn, a Country Park, is in one of the largest depressions. Bog bilberry, very uncommon south of the Scottish Border, grows in woodland here. The glacial deposits have left a fertile landscape, but its ups and downs mean it is often left to pasture. Cattle and sheep farming dominates the landscape but the River Gelt and smaller streams like the Cairn Beck have cut valleys through these soft sediments and are home to ancient woodlands and diverse wildlife.

Photographs

(Photo 34-1) 34 Typically undulating landscape of the 'Brampton Kame Belt' east of Faugh.

(Photo 34-2) 34 Brampton.



(Photo 34-1) Typically undulating landscape of the 'Brampton Kame Belt' east of Faugh.



(Photo 34-2) Brampton.