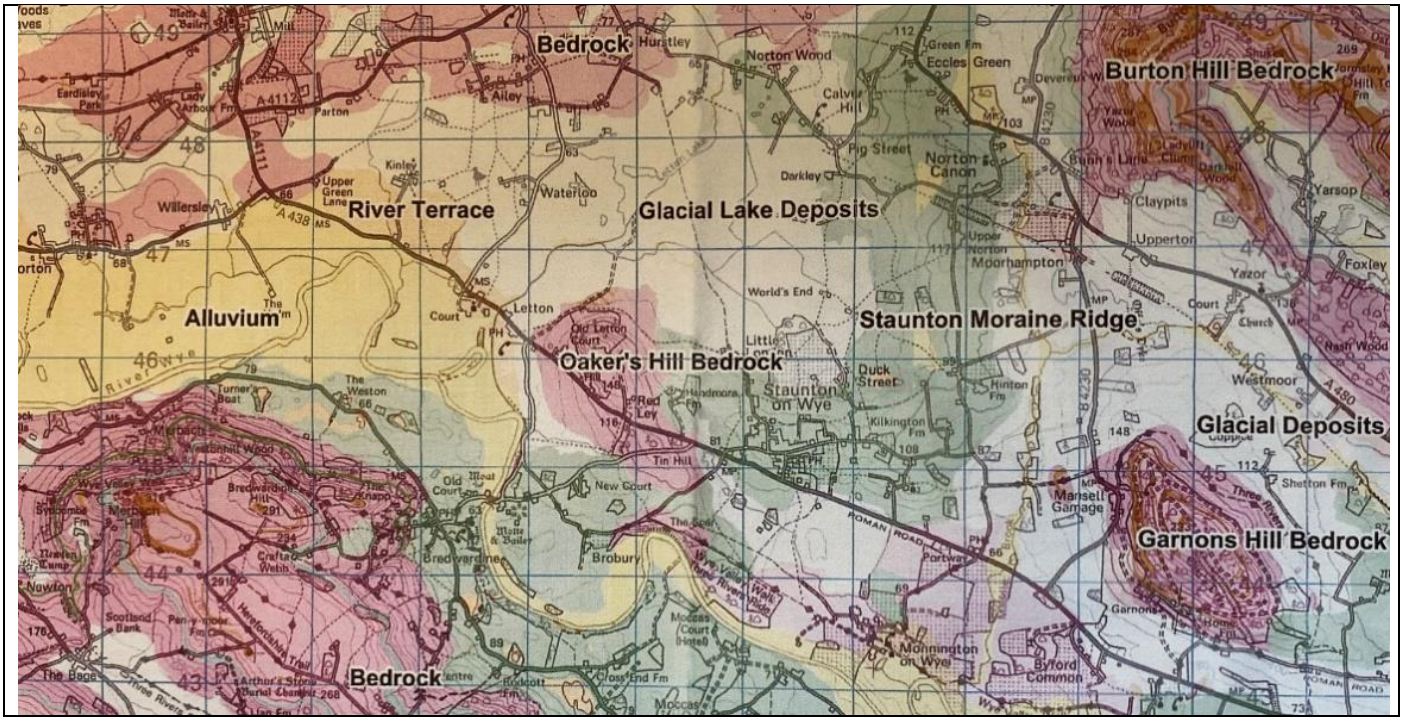
Woolhope Club Field Visit. The Ice Age Ponds in Sturts Nature Reserve. 21 August 2021

Despite an atrocious weather forecast, a group of ten members met our leaders for the day, Will Watson and Moira Jenkins, at the car part at the Sturts Nature Reserve. The promised rain held off and we set off about 10.30 to explore the reserve. We were later joined by Steve and Sarah who graze the land in agreement with Herefordshire Wildlife Trust but who had kindly removed the cattle before our visit.

Will explained that the Sturts reserve is one of the sites studied by the Conserving Herefordshire's Ice Age Ponds Project, a partnership between Herefordshire Wildlife Trust, Herefordshire and Worcestershire Earth Heritage Trust and Herefordshire Amphibian and Reptile Team which has been funded by the Heritage Lottery.

Moira distributed attendees with a geological map and a leaflet on a new app which is being developed for use by visitors. She went on to explain that the landscape had been formed around 25,000 years ago by ice sheets which spread across Western Herefordshire.



The Sturts Nature Reserve is in an area where melting ice was dammed by a ridge of moraine and a lake formed.

Several Ice Age ponds have been identified in the area. As the ice retreated, large blocks of ice grounded on the lake bottom, and sediment accumulated around them. When the ice melted ponds formed in the hollows.

As we walked into the North Sturts reserve Moira pointed out the characteristic 'hummocky' moraine which indicates an area of glacial lake deposits. The hollows contain water in winter but most dry out in the summer. These are subtle features which are hard to see and are shown by the different vegetation consisting of water-loving plants. Steve noted that the area is in the Wye flood plain and that water levels have risen very rapidly on occasion. This seems to be becoming more of a problem in recent years.

At two sites in North Sturts Will drew our attention to plants which like to grow in very damp ground, including Water-pepper (*Persicaria hydropiper*) and Water Mint (*Mentha aquatica).*

At an ice age pond site in the South Sturts section of the reserve Moira described the characteristic features of an ice age pond.

These have a distinct outline, frequently occur in clusters and are not connected to streams or other drainage. Over time the water has drained away and the hollows have become filled with sediment so many now appear as shallow pools.

Geophysical investigation at this site has shown an infilling of slightly different sediment 11 metres deep which indicates the depth of the original pond. Will pointed out the characteristic vegetation.
The group continued on to a site where a pond had become infilled and was a 'ghost pond'. This has been re-excavated this year. The pale-coloured clay layers in the excavated area were pointed out and Will and Steve confirmed that water had started to gather in the pool very soon after it was dug out, because the clay does not allow water to drain away.

Moira showed us a sample of peat taken from a core 1.5 metres below the bottom of the excavated base. Thistles were observed to be beginning to colonise the edge of the cleared ground and Will commented that within a year the surrounding area will have been covered.

We made our way back to the cars arriving there about 2.30pm where Sue Olver thanked our leaders, on our behalf, for a very enjoyable day. With the rain continuing to hold off, most of the group stayed on to eat their packed lunches before departing for home.

Jane Adams and Moira Jenkins