





Conserving Herefordshire's Ice Age Ponds September 2021 update

Dear Volunteer,

Welcome to our summer newsletter! And what a few months it has been for the project. It has been wonderful to see so many of you out and about again and I hope you have all enjoyed the different events over the last few months.

Project Trainees, goodbye and thank you.

Firstly, we have some sad news that over the last few weeks we have had to say goodbye to our great team of Project Trainees, Sarah, Rose and Kath who have been such an enormous boost to the Project since the beginning of the years, helping to coordinate and organise surveys and training as well as lots of Social Media posts. However they are all going on to new projects to further their careers in Ecology and Conservation so it may not be the last time we see them!

Kath has gone back to finish her University course and Rose has gone to assist with a PhD project in Namibia. Sarah will be leaving the project (but still keeping involved from time to time hopefully) to take up a position on HWT's Team Wilder Project which aims to get people and communities involved with their local wildlife.

Good luck and many thanks to them all for their work on the project.

Training and events

Ecological survey training days

Throughout July and August project ecologists Will Watson and Giles King-Salter have been carrying out detailed ecological surveys of a number of sites across the project. These surveys involve making a detailed record of species both in and around the pond, everything from tiny water beetles to surrounding vegetation is recorded. On a number of the visits they were joined by volunteers who braved everything from rain to 30 degree heat to help out. These surveys help us to develop a much clearer idea of the state of the pond and plan any management work that is needed. With Will and Giles on hand to help with identification these were some excellent training days.



Medicinal leech training and survey day

On 23rd July we had our much anticipated medicinal leech online training provided by the Freshwater Habitats Trust, followed on 24th August by the survey day at Moccas Park. Along with project trainees Kath and Rose, and overseen by Will and Giles, a group of volunteers spent the morning imitating cattle in the shallows, splashing their pond nets up and down. After ten minutes of splashing the team were then able to look for leeches in the unsettled water. The group found a number of duck leeches but sadly no medicinal leeches. This doesn't mean they aren't there as there could be a number of reasons the leeches weren't attracted to the splashing nets.

We hope to hear soon whether the Freshwater Habitats Trust will still be coming to carry out an eDNA sample.

Reserve warden volunteer day at Birches Farm

A group of Herefordshire Wildlife Trusts volunteers including some of the reserve wardens, the reserve trainees and some members of the Kington branch joined the project team at Birches Farm for an afternoon learning about the project. David, Will and Beth gave talks on the project itself, the ecology and geology of Ice Age Ponds, this was then followed by a pond dipping session from Will and Giles and a tour of the reserve given by Beth and reserve warden Bob North. Luckily the weather held and we were treated to some wonderful views from the top of Little Bank.



Pond surveys

Volunteer pond surveys

The volunteer pond surveys continue with more of you going out throughout July, August and into September. With Covid restrictions easing we were able to carry out some of these surveys in groups which was a nice opportunity to meet more of the volunteers face to face.

Water quality testing

A huge thanks go to Rachel, Roland and Rhian for accompanying Sarah, Kath and Rose on round two of the water quality surveys. Rather than the torrential rain of the first round of surveys the group found a number of the ponds very low on water or in some places completely dry. Luckily they were still able to sample 19



out of 20 ponds and the results will be added to the first round of surveys to start to build up a picture of how water quality changes over time.

Geophysical surveys

Our MSc student, Olivia, and her supervisors Dr Ian Simpson and Dr Richard Waller came down to Herefordshire for 3 days of geophysics surveys across some Ice Age Ponds.

The surveys, using ground penetrating radar and resistivity, aim to see if there are differences to the structure of the ground underneath different Ice Age Ponds. This involved laying long cables across the features, and walking or pushing a device over the ground. The surveys went well (apart from Beth getting very wet feet due to losing wellies in very deep mud).

It is hoped that this will help us better understand how these features formed and how large they are. We will have to wait for the full results of the survey but the initial results seem to show that there are features within the soil structure – so they aren't just wet parts within the fields, there is more to it.

Once we know whether this technique works, we are planning on running another follow-up day which will be open to volunteers to come along and see the surveying in action (and perhaps have a go with the kit as well). If you are interested in joining us for this session then please do get in touch – e.andrews@worc.ac.uk.

The final results will be presented at our end of project conference, but we will keep you up to date with any extra findings.

We send huge congratulations to Olivia, who has been presenting her initial findings at several conferences and won an award for her poster at the British Society for Geomorphology Annual Meeting.





Ice Age Ponds exhibition and Town trail

In July the Ice Age Ponds exhibition went to the Leominster festival and there was a town trail around a number of shops in Leominster. This was followed in August by a town trail in Hereford and the exhibition was hosted by Hereford museum. The Hereford town trail started at the museum and ended at the Black and White house museum, stopping at a number of shops along the way. The prize was a woolly mammoth key ring, and around 80 visitors completed the trail and claimed their prize.



Ice Age pond app

The much anticipated Ice Age Pond app is now available to download from the playstore or appleplay. The app includes a number of excellent features:

- A detailed introduction to the Ice Age in Herefordshire
- A car or cycle trail taking you right across the project area with lots of stops for photos or points of interest
- A number of walking trails around different sites of interest, from Breinton Common to the Birches farm reserve
- And, not to be missed, the mammoth selfies at the Sturts reserve and Birches farm

Please take the time to download the app and explore its features. Any feedback you have would be excellent. Search: IceAgePonds by BrookesDesign

Ice Age Pond film

Over the last few weeks the team have been joined by the Rural Media team at a number of events. Rural media will be producing a short film about the project, its history and the work we have all been doing. On Thursday 9th a group of volunteers joined us at the Sturts reserve for a day of pond dipping, filming and augering. We had such a brilliant day, with masses of great diving beetles, finding preserved wood in one of the dried ponds and lots of opportunities to film different activities. Thanks to everyone who came along and we can't wait to see the film when it is complete!









Social media and blogs

Hopefully you have all been enjoying the fortnightly blogs going out, we have certainly enjoyed writing them. Click <u>here</u> for a link in case you have missed any. If there are any topics you'd like covering or if you'd like to contribute an article, please get in touch.

We have also been having a big push on social media and it's proving very worthwhile, with engagement going through the roof and follower count increasing all the time. If you aren't already, please follow us <u>@herefordshirewildlifetrust</u> and <u>@earth_heritage_trust</u> on Instagram, <u>@HerefordshireWT</u> on Facebook and <u>@HerefordshireWT</u> and <u>@BuildingStones</u> on Twitter and show us some support too, commenting helps with the algorithm (don't ask us why!)

Geocache update

Following the publication of the traditional geocache trail three Earthcaches have also been published. These can be found on the Geocaching website <u>here</u> and are numbers Ice_Age_Hereford_1, Ice_Age_Hereford_2 and Ice_Age_Hereford_3. Earthcaches are not a physical item to find but rather a geological feature in the landscape and in order to claim your cache you must answer a series of questions on the feature you can see. These feature the meltwater channels and Breinton, the ponds at Kenchester and Brockhall Quarry.



Pond management

Our team have been working hard with landowners to plan the pond management for the remainder of the year and it has been wonderful to get many new landowners onboard with considering how to look after their ponds.

Ghost Pond restoration at The Sturts Nature Reserve. August 2021.

The Ice Age Ponds Project has just completed its first 'Ghost Pond' Restoration project at Herefordshire Wildlife Trusts Sturts Reserve.



This project at Sturts was targeted at a location where experts have predicted an ancient pond once occurred. We have carefully excavated soil overlying the ancient pond sediments and restored what we think is the original profile of the pond which includes grey clays laid down when this area was a glacial lake. Beneath these clays our Project geologist has found a layer of peat which is preserved organic matter which may have been formed many thousands of years ago. These

deposits may still contain viable seed from species which could be 'resurrected' as a result of the work. Once the pond fills up with autumn and winter rainfall it will provide much needed early successional freshwater habitat to add to the more mature ponds in the area attracting a host of freshwater plants and animals to boost the already abundant biodiversity of the reserve and surrounding landscape.

The overall dimensions of the pond are approximately 35m x 20m and the profile created has very shallow edges grading into a steeper, deeper section at it's centre. The extracted soil has been spread on species poor grassland nearby an will colonise with native wildflowers and grasses.

The ponds on the reserve were originally created during the last Ice Age 15-2000 years ago at the bed of a large glacial lake. Many of these ponds have been modified or filled in over the centuries but their origins and close proximity gives the ponds at Sturts increased biodiversity value.









Project Geologist Beth Andrews with her auger and a peat sample.

The Ice Age around the UK

A fantastic short animation has been created showing what the sheet of ice over the Scottish city of Dundee would have been like during the last ice-age. Although it wasn't exactly like this here in Herefordshire, it is a wonderful film showing how ice shapes our landscape. <u>https://www.livescience.com/giant-ice-sheet-dundee.html</u>

Events for the Calendar

8th and 10th October Conservation work parties at Blakemere -sign up on Eventbrite For the 8th: <u>https://www.eventbrite.co.uk/e/170435001678</u> For the 10th: <u>https://www.eventbrite.co.uk/e/170437266452</u>

Date TBC - working party at the Sturts

6th November 2021 – Volunteer get together – join us for tea, cake and maybe a guided walk to say thank you for all the work you, as our volunteers, have put into the project. Sign up on Eventbrite:

https://www.eventbrite.co.uk/e/volunteer-get-together-tickets-177263288267

2nd March 2022 - End of project conference