

Freshwater Habitats Trust

Stow Bedon Common

Flagship Pond Site

PROJECT REPORT: 2015-2019

Project Summary

In 2015, our charity began the 'People, Ponds and Water' project, a 3 year initiative backed by Heritage Lottery Fund, to help thousands of people in the UK to engage with, and protect, their local water environment.

Flagship Ponds is the most critical element of the larger 'People, Ponds and Water' initiative. It focuses on working with local communities to make a practical difference to the long-term protection of ponds at 70 sites of exceptional importance for freshwater wildlife: securing the survival of some of the UK's most endangered freshwater wildlife species.

This Report summarises the work carried out on one of Freshwater Habitats Trusts Flagship Pond site: Stow Bedon Common between 2015 and 2019 with funding from Heritage Lottery Fund, Biffawards and Anglian Water.



Building communities. Transforming lives.

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LOTTERY FUNDED

1. Context

About Freshwater Habitats Trust

Freshwater Habitats Trust (FHT) is an evidence-based UK charity, founded in 1988. Our mission is to “*protect freshwater biodiversity, for everyone to enjoy*”. We do this through practical conservation projects, public outreach, policy engagement and research. We work strategically, prioritising work that will have a national impact on biodiversity.

FHT’s science background is recognised as exceptionally strong. However, our concern has always been to ensure that our knowledge is used to protect freshwater biodiversity on the ground. After a major organisational review in 2008 we saw that FHT’s original priority - to provide high quality research data and advice on biodiversity protection - was not being adequately translated into action. To address this we transformed our organisation, and now drive and deliver major biodiversity projects with a national impact based on a strong understanding of the freshwater environment.

About Stow Bedon Common

Stow Bedon Fuel Allotment, is one of the most important pond sites in the country. Alongside neighbouring Thompson Common, the land is now awarded Site of Special Scientific Interest status (SSSI) as well as being a Norfolk Valley Fens Special Area of Conservation (SAC). It is owned and managed by Stow Bedon Fuel Allotment Charity, originally set up to provide fire wood for local community.

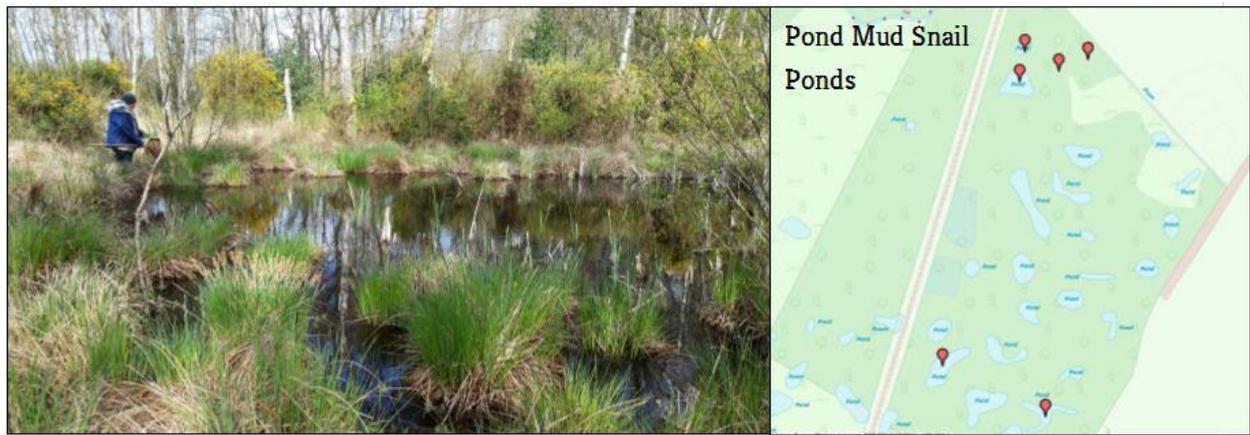


Historically, Stow Bedon Common would have played a significant part in the lives of local people, benefiting the Parish ‘poor’ who had a right to cut timber or ‘furze’ for fuel. Villagers would certainly have grazed their animals on the common too, helping to keep the site an open heath with just scattered mature trees. Today, with the sandy, acidic soils of this area, and a lack of grazing since the 1940’s the site has largely reverted to woodland. With a few open areas containing a scattering of mature oaks, birch and crab apple, the vast majority of the birch which now dominates is 45 years old or less. Amidst the tree cover however, are over 30 water filled depressions known as Pingos. These pools formed by the freezing and thawing of ground frost that took place some 12,000 years ago when Breckland was a tundra-like landscape. It is remarkable that they remain in our changed and degraded landscape. Many of the

Breckland Pingos have been lost to the plough, or in filled to make space for agriculture or planted up for forestry. Where protected from pollution, Brekland's remaining pingo ponds, including those at Stow Bedon, are some of Britain's very finest freshwater habitats.

2. Flagship Ponds: 2015-2017

Through the Flagship Ponds project, funded by Heritage Lottery Fund, we have helped the local community and Flagship group to better understand the significance of the pingos by commissioning professional baseline surveys for plants and invertebrates. These surveys were carried out in 2015 & 2016 by Martin Hammond revealed that Stow Bedon Fuel Allotment supports large and important populations of the near Threatened Pond Mud Snail *Omphiscola glabra*.



It is a distinctively elongate pond snail, closely associated with pools and pond margins in agriculturally-unimproved habitats. This species has seriously declined; there are post-1999 records from only 47 hectads in Great Britain, and only one hectad record in East Anglia. This grid square includes Stow Bedon and Thompson Commons. In contrast to Thompson Common, where it was only found in one pond (41 ponds surveyed), it was found in six ponds on Stow Bedon (16 ponds surveyed).

Pond Mud Snails show a preference for ponds with dappled shade which allows some marginal plant growth, but will decline in fully shaded or completely open conditions. A different management prescription is therefore required on ponds where Pond Mud Snail are found.

Stow Bedon Common's ponds are also home to an impressive range of water beetles, numerous dragonflies and damselflies, and uncommon water plants like the carnivorous Bladderwort.

Our advice will ensure that any work to the ponds is undertaken with due care and takes into account the habitat preferences of the snails. Explaining what these results mean in practical terms both site managers and Natural England has been a big part of Flagship work.

Following on for the survey work completed in the spring of 2016, in October 2016 we engaged with key stakeholders to highlight the importance of the invertebrate community on the site by running an 'Introduction to Pingo Invertebrates workshop'. Representative from Amphibian & Reptile Conservation, Forestry England, Natural England and Norfolk Wildlife Trust all came together with our invertebrate expert Martin Hammond for both an indoor and on site session. As our survey was the first to be carried out on the site, many of rare and interesting creature were observed by the group for the first time.

3. Biffa Award: 2017-2018

In 2017 an grant of £32k was awarded by Biffa Awards to fence the whole site, enhance pingos by clearing scrub and trees from select pingos, undertake a Pond Mud Snail survey event. Engaging with Norfolk Wildlife Trust and agreeing in principle to allow their stock onto the common.

With the Biffawards grant in place, alongside funding from Anglian Water's 'Flourishing Environment' Fund, we were able to use the results of the Flagship Ponds Project survey to create a management plan with actions to protect the site for the long term. Having good data upon which to base management decisions has been critical for the whole project. Using the survey data, we drew together a detailed plan of tree management and scrub removal. During 2018 specialist contractors carefully remove scrub and trees from selected ponds with low diversity of wetland plants and animals, opening up years of tree growth which was shading out and reducing the potential for wetland plants to thrive.



Whilst in general, opening up recently wooded pingos is a good idea to encourage mossy margins to establish, one of the specialist species found on Stow Bedon Common thrives in more shaded ponds where competition is lower. The seasonal, temporary ponds on the fringes of the common are ideal for Pond Mud Snail (*Omphiscola glabra*). They can hunker down in the dry months, burying themselves deep in the pond base, waiting for water levels to refresh. When conditions are right, the snails thrive and can be prolific in their reproduction.

In May 2018 a Pond Mud Snail event held on the site revealed, in a single sweep of the net, 20 or more individuals amongst the leaf litter and decaying plant matter. Stow Bedon and adjacent Pingo sites, are a stronghold for this species in East Anglia – we know of just one other record in West Norfolk!

To sustain the tree management work, the ambition is to return grazing animals to the common. This would ensure the Pingos remain open and in balance. The Biffa Award funding has paid for the start of this work – the essential infrastructure to make grazing possible. Two km of high quality stock-proof fencing now surrounds the 2 compartments of the site, replacing the old fence which is thought to be

over 150 years old! In the short-term, livestock from the adjacent Thompson Common will have access to Stow Bedon, via a new connecting gate, so pond edges can be lightly grazed once again.

4. Anglian Water: Flourishing Environment Fund: 2019

In 2019 a grant from Anglian Water was awarded to further engage with the wider community to highlight the importance of Stow Bedon Common as an important site for Freshwater Biodiversity. Building on the success of the project so far the aim was to establish a permanent group of volunteers to work alongside site owners, The Stow Bedon Fuel Allotment Charity. Our vision is to have a 'Freshwater Friends' group who can undertake species surveys, help with practical management and take ownership – all whilst maintaining the wild, undisturbed nature of this site.

In September 2019 a Stow Bedon 'Conservation Weekend' Event was organised and widely publicised on social media, including Facebook, Twitter, on our Website and via our Ripples newsletter. Information about the event was also shared by local organisation such as Norfolk Wildlife Trust, Friends of Thetford Forest, Norfolk Biodiversity Information Service (NBIS) Biodiversity e-bulletin, Norfolk Natural History Society and Norfolk Conservation Corps. On a more local level, posters were pinned up on notice boards in the surrounding villages including on the Pingo Trail and at Caston Village Hall. In addition to this all the houses in the surrounding villages, including Stow Bedon, Caston and Thompson where leaflet dropped prior to the event and leaflets were also left in local pubs and shops. A total of 350 leaflets were distributed.



Prior to the event the new interpretation board, funded by Biffawards and Anglian Water, was fitted on the track way adjacent Stow Bedon Common, to highlight the rare and wonderful species on the site.

The planned event went ahead, however the format of the event changed due to circumstances beyond our control. Following a very dry winter and summer all of the ponds were either completely dry or inaccessible so we were unable to carry out the Pond Mud Snail Survey or Clean Water Quality survey. With this in mind we condensed the event into one day, which was a great success. We engaged with 12 individuals in total including three very enthusiastic children, four members of the 'Norfolk Conservation Corps' and a member of staff from Norfolk Wildlife Trust, who manage Thompson Common, adjacent Stow Bedon.

On the Saturday morning we met at a local village Hall and we did a presentation about the history of the site and also presentations about Pond Mud Snail and Water Quality Testing. Although we were unable

to survey for Pond Mud Snail we did have some specimens to show to folk and we also demonstrated the clean water kits (N&P). Luckily we managed to obtain one water sample the previous day, so we were able to show everyone the water quality of one pond which was, as we had hoped, free from pollution. In the afternoon we reconvened at the site and had a wonderful few hours walking around the common and although the ponds were dry, we were able to enthuse everyone about the wonderful reserve and highlight the work done previously, including the new fencing and major clearance around some of the ponds. Many interesting species were also found including several dragonfly species, common lizard and Great Crested Newt, a great bonus as many of the attendees were not familiar with these wonderful creature.



A great deal of networking took place and at the end of the day Phil Childs, who has been looking after the site on his own for the last few years was rejuvenated with the offer of help. We had planned to carry out some management work in the afternoon, but in the event the walk around took over and at the end of the day, plans were being put in place for members of the Conservation Corps to return at a later date to carry out regular management tasks (with the aid of tools obtained for the group from the grant), and the help of the local volunteers. Plans were also formulated with the Norfolk Wildlife Trust to get the grazing in place, now that the fencing is up. So all in all a great outcome.

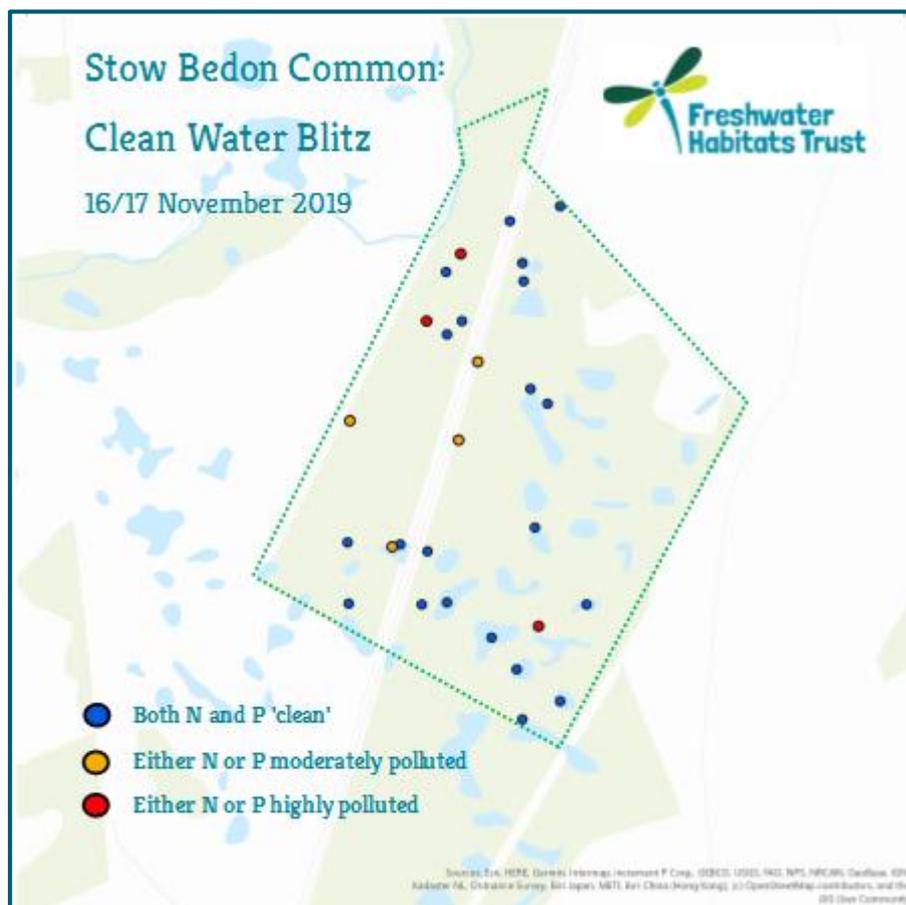
Following on from the initial event in September a second event was planned and carried out in conjunction with an inaugural Stow Bedon task organised with the Norfolk Conservation Corps to carry out management work on the site.



After autumn rainfall many of the ponds on the site were beginning to fill up with water so over a weekend in Mid-November we carried out a Clean Water Blitz alongside the practical management. Again this event was publicised on social media and in total we engaged with 10 enthusiastic individuals.



All in all we sampled around 30 of the ponds on the site for Nitrate and Phosphate, with many more dried ponds mapped using GPS. Scrub was also cleared from around the pond adjacent to the interpretation board on the track, to open up the area and allow wetland plants to thrive.



5. Summary

Between the start of the Flagship Ponds Project in 2015 and the end of 2019 with the help of our funders, Heritage Lottery Fund, Biffawards and Anglian Water, we have been able to raise the profile of Stow Bedon Common as an outstanding Freshwater site by:

- Carrying out detailed Invertebrate and plant surveys to provide a baseline.
- Mapping the extent of the rare Pond Mud Snail populations
- Drawing up management plans based on the results of the surveys.
- Implementing management work on site to improve the habitats for the special creature that live there.
- Carrying out extensive capital works, including replacing the stock fencing around the entire site, to enable grazing of the site to be reinstated.
- Engaging with the local community and other interested partners to enable them to understand and appreciate the site.
- Mapping the extent of clean water across the site.
- Helping to set up a 'Freshwater Friends' Group.

6. Useful links

More information about this Flagship Pond site including links to the Survey Reports can be found on our website:

<https://freshwaterhabitats.org.uk/stow-bedon-flagship-site>