NEW FOREST WATERNEWS

The New Forest Catchment Partnership is coordinated by the New Forest National Park Authority and Freshwater Habitats Trust who are working alongside other organisations and communities to protect and improve the special freshwater habitats of the New Forest. This newsletter showcases the work of those who are committed to improving the freshwater environment of the New Forest.

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WILDER FOR WATER, ENGAGING TO PROTECT

A FRESHWATER HABITATS TRUST PROJECT

The New Forest is an Important Freshwater Landscape, which supports an incredible diversity of wildlife, boasting the highest proportion of designated land for nature conservation than any other National Park in the country. The freshwater habitats in the New Forest are extremely important. With a significant proportion of all lowland bog and valley mire in NW Europe, hundreds of ephemeral ponds full of rarities, and a network of small streams of extremely high quality which have no lowland equivalent in the UK. This rare waterscape and high biodiversity value is underpinned by two important factors, traditional grazing management and a diverse suite of running and standing waters which are free from agricultural and urban pollution.

Each year thousands of holiday makers and day trippers choose to visit the New Forest, giving the local economy a boost and providing people with a connection to nature - a real tonic for body and mind. However, increasing our wellbeing and keeping us healthy, it's important that we understand the true environmental value of these spaces and that in their own right, places like the New Forest are living breathing landscapes and are sensitive to certain pressures, including recreation.



New Forest ponies grazing in a clean water ephemeral pond near Brockenhurst.

Ensuring we don't leave a scar on the landscape will keep the Forest in its pristine state and allow it to continue as a space where people can visit and be in harmony with their natural surroundings. Unintentionally a visit to the Forest can disturb wildlife, erode and compact the banks of sensitive waterbodies, and add pollutants. High visitor numbers concentrated in small areas around water, such as Hatchet Pond or Balmer Lawn, result in damaged habitats. In addition to this, campsite owners and observers of car parks have noticed visitors improperly disposing of wastewater. The quantity of visitors the New Forest receives means that small actions that would normally have minimal impacts are compounding and resulting in a serious risk to the biodiversity.

Creating a project to target the issue

Identifying visitor pressures has led to the development of the Wilder for Water project. The aim of the Wilder for Water project is to share the special qualities of the New Forest wetlands alongside a set of best practice behaviours with visitors.

Wilder for Water is funded through the Green Recovery Challenge Fund and the Environment Agency's Water Environment Improvement Fund and shares the larger goal of protecting the New Forest environment. The project will work with partners and businesses, and covers engagement across a wide range of audiences, from policy makers to school groups, to foster and create positive social change. The project seeks to find solutions to visitor related issues by listening to partners and building a network of freshwater champions.



Wilder for Water project officer delivering a talk to New Forest National Park Authority Ambassadors while on a public litter pick from Hollands Wood.



Children at Ringwood Eco-fair making paper dragonflies, while learning about the New Forest's freshwater landscape and how to visit in a responsible way.

So far...

In the first year (2021/22), the project focused on fundraising, providing resources and content for partners, and liaising with landowners to identify issues and interventions which would reduce pressure on the water environment. We developed a New Forest Water Code, with input from partners, to outline a set of best practice behaviours for visitors to follow.

This year (2022/23), we have been able to employ a Wilder for Water Project Officer to deliver our messages more directly to visitors.

Since April, we have been to 27 events (averaging more than one event per week), and directly engaged with over 5,600 people! We've also distributed more than 600 Water Code leaflets and posters, at 17 campsites, 25 activity centres and recreation outlets, and 5 public toilets in and around the New Forest. Plus our weekly social media posts via Twitter, Facebook and Instagram which have reached a further 14,700 people!

Through passive and direct engagement, residents and visitors will learn about the New Forest's freshwater and coastal landscape and how to access it in a responsible way.

Our Water code

Our <u>Water Code</u>, promoting responsible behaviour, is condensed into six succinct positive actions we are encouraging visitors to take: Leave no trace; Use suitable facilities; Check, clean, dry; Right activity, right place; Stick to the pitch; and, On the right track.

Each month, during the busy summer season, we have been focusing on one of these messages while maintaining the idea that planning a visit is key and thinking ahead means visitors know where the public toilets are, where the nearest bins will be for pet waste or litter; and that BBQs and fires are banned in the New Forest.



The New Forest Water Code, which provides a set of best practice behaviours to follow when visiting the New Forest.

A trip to the New Forest should be tranquil, whether for a day visit or a holiday retreat. The overriding message is leave nothing behind and take nothing away, except for a love of the Forest.



Water Code leaflets being displayed at Avon Tyrrell activity centre, alongside the New Forest code and other leaflets.

Leave No Trace

The first of our key messages, leave no trace, is not a new message and has been applied across the British countryside and worldwide. But, it is especially important for freshwater habitats and even more important in a protected landscape such as the New Forest. The message goes beyond litter (the very visible evidence of visitor impact) to also include human and dog waste. Water quality, along with habitat loss, is one of the biggest drivers of species extinction in freshwaters - and it's crucial to remember that this applies to all freshwaters (ponds, lakes, rivers, streams and ditches). In fact small habitats, like headwater streams and ponds, which are the most wildlife rich freshwater in the New Forest, are also the most vulnerable due to their small size.

Wilder for Water sits within a broader context, helping to promote regional and national campaigns seeking to drive social change to reduce waste alongside removing litter from the environment. Nationally, WWF are running a 'No Plastic in Nature' campaign, Keep Britain Tidy supports many local litter picking groups and there is a zero-waste movement. Locally, we've also been working with the New Forest National Park Authorities Ambassadors scheme and other organisations to run litter picking events.

This included a joint litter picking event as part of the Environment Agency's <u>Preventing Plastic Pollution</u>. This pilot project, which is currently being trialled with 7 Catchment Partnerships in the CaBA network (<u>Catchment Based Approach (CaBA)</u>), seeks to remove plastic from the environment and influence consumer choice around plastic, to improve the quality of transitional waters between parts of the North West Coast of France and the South Coast of England.

Preventing Plastic Pollution will work with businesses, schools, water sport enthusiasts and the general public to achieve:

- A 10% improvement in good ecological status in transitional waters.
- A reduction in the harm caused by plastic pollution in rivers and the sea equivalent of up to €126 million (150 km river/coast cleared, 200 tonnes plastic removed).
- A plastic-free charter implemented by 650 businesses and 50 supply chains modified.

Projected uptake will include 10 more catchments 2 years post-project, and 100 catchments after 5 years. We hope that the New Forest Catchment will be ahead of the game with the work we've already started during Wilder for Water.



Thea Margetts (Wilder for Water Project Officer) at an Environment Agency, preventing plastic pollution event. The table behind displayed plastic free products and had surveys to record data about the quantity and type of litter collected.

If you want to learn more about the other messages we're promoting through Wilder for Water, and our work with visitors, schools, organisations and local businesses along with up-coming events, surveys, and the Water Code leaflet please visit the project web page: New Forest Wilder for Water.

Green Recovery Challenge Fund



The National Lottery Heritage Fund







THE RSPB IN THE NEW FOREST

IT'S NOT JUST ABOUT BIRDS!

The New Forest is one of the RSPB's 'Priority Landscapes', giving recognition to its significant value for nature and providing impetus to increase our work in the area. To this end, a conservation officer was appointed to protect and enhance the nature value of the landscape (which covers not only the New Forest National Park but also the Avon Valley and parts of East Dorset) and in 2018 we acquired a 400ha site at Franchises Lodge in the northern part of the Forest — our first land holding here and an opportunity for us to become a significant landowner and manager.



Franchises Lodge (in red) showing designated areas (SSSIs in blue and SAC with diagonal lines), with the open forest to the south and Loosehanger Copse and Langley Wood to the north.

We are very much a new arrival on the New Forest scene and have spent the last few years getting to know our site at Franchises, as well as the wider area, and improving our understanding of how the Forest works. We now have the beginnings of a plan for our work going forward. Although very much in its infancy, and still evolving subject to our increasing knowledge, the RSPB is very excited about the potential we have to make positive impacts on the landscape. Whilst some birds feature in our plans, about making more habitat improvements to encourage a whole suite of species.

At Franchises Lodge, suitable management is very much in our gift. The land has been in private ownership for many years, and we have been finding out what's there to create a baseline for any work we do. The site is largely covered by conifer plantations and rhododendrons at present. In the past it would have been ancient woodland and more open habitat, with mires and wet heath in the area known as Pimlico Bottom. Open habitats would have connected from east to west, with woodland on the slope near Telegraph Hill. Most of the open land was lost under conifer as the country sought to boost timber production after the second world war. Now only a few fields and clearings remain. A lot of the hardwood was removed too, but pockets remain, much of which is designated SAC and SSSI woodland.

Our aim is to restore a mosaic of habitats to allow for greater connectivity through the landscape. Open habitats will be restored to allow east to west movement, whilst thinning or removal of conifers, and restoration of native woodland, will create a north to south corridor. We would then become a key piece of the landscape puzzle, connecting the open forest to the south with Loosehanger Copse and Langley Wood, both designated areas, to the north. Grazing has already been reintroduced to support wood pasture management, we have started the task of removing rhododendron, and increased the intensity of deer management to encourage a shrub layer to develop.

The southern edge of Franchises Lodge sits on the scarp, which slopes downhill to the north. We have several springs along the slope, making our land the head of a tributary of the Blackwater. The map below shows the extent of our current channels, and you can see that some of these have been straightened historically to help drain the site. This is especially evident around the fields at Pimlico, where there was a working farm for a period in the 1860s and 1870s. The fields would have been reclaimed from the bog, but it would have been very challenging farming this area due to the wet nature of the ground. A small part of it is designated SSSI for its wet meadow plant assemblage. This had become overgrown due to a lack of management, but we now have cattle on the ground to help bring it back into favourable condition.



Franchises Lodge (outlined in black) with adjacent water sources and channels (in blue).



There is also a lake on site, originally built around 1850 and subsequently extended with a dam on the eastern side. It was used as a decoy pond and to add amenity value to the estate house. We have records of the numbers of duck taken in some years from the pond, and some of the infrastructure for this remains in the undergrowth. There are also recollections of children swimming or boating here, and even ice skating (which can't have been a regular occurrence)! At least one fish introduction was attempted, but it was unsuccessful, and the status of fish in the lake remains unclear, though we have no evidence so far that any are present. There are, on the other hand, tens of thousands of toads using the lake, leading some to suggest that it is the largest population of toads anywhere in the country. Apparently, the pond has been drained in the past and herons arrived from nowhere to feast on the toadlets left exposed!

An image of a toad in the grass at Franchises Lodge, suggested to be part of the largest toad population in England.



A satellite photo of the lake, built around 1850 as a decoy pond and to add amenity value to the estate house. There is now consideration to change the lake to restore natural flow and re-wet areas as the RSBP have acquired meadows downstream.

We considered what the land in this area would have looked like originally and would like to restore a wetter system than there is now. We will likely keep the lake due to the species interest but could encourage a more natural flow of water in the meadows downstream (visible behind the lake in the photo below). Fortunately, we have now acquired land further downstream which gives us ownership of both meadows and a section of woodland that could also be re-wetted.

Beyond the reserve, the water flows into the Blackwater, running east under the A36 and past East Wellow before entering the Test just north of the M27, from where it drains into the Solent at Totton. In terms of wider catchment issues, we know there are invasives including Himalayan balsam just downstream from Franchises, and there has been work by the Blackwater Conservation Group to remove some of that. There was an unsuccessful bid for funding to create a landscape scale project using woodland buffers to protect riparian habitats in the area around Franchises Lodge, working with several partners. Although the bid failed, this is the sort of work and collaboration we will seek out. We will look to support wetland restoration across the landscape, working with others to develop projects and policies that help to achieve this, and we hope that we can play some part in protecting and enhancing the blue landscapes of the New Forest

NEW FOREST WETLAND RESTORATION

A FORESTRY ENGLAND UPDATE

As part of the New Forest Higher Level Stewardship (HLS) scheme, Forestry England has been working with partners to restore New Forest wetlands to improve the conditions of these internationally important habitats.

Since 2010, the HLS scheme has delivered dozens of projects across the New Forest, totalling 20 miles of restoration to watercourses and approximately 5,000 hectares (more than 7,000 football pitches) of SSSI wetland habitats being improved and protected.

After restoration work has been completed, we continue to monitor the sites to ensure they are functioning as expected. Some of the more sensitive sites may require further intervention to make minor adjustments to short stretches to prevent any issues from reoccurring. We visited over 40 freshwater and wetland sites this winter where previous restoration work was carried out to reverse the damaging effects of historical artificial modification and straightening. Over 73km of watercourse were surveyed to check for any damages to ford crossings, signs of eroding nick points, exposed clay, and any evidence of gravels being washed out, which are potential indicators that further enhancements may be required to stabilise the watercourse.



Three of the sites where work will be carried out in the summer. Each picture shows evidence of erosion, the above photo a nick point that is due to be infilled with rocky material.





In total, we found a shortlist of 8 sites where short stretches of watercourse needed further intervention this year. A number of additional sites require ongoing monitoring in the coming years, to review if repairs or modifications to the original restoration is required. Past experience has taught us that with time, some areas are able to naturally stabilise and recover without intervention, so we will keep a watchful eye on these.

Enhancement work on these 8 sites were due to be carried out over the summer, when water flows are at their lowest and conditions are dry in order to protect ground conditions. Any sensitive areas that might still be wet will be avoided, or preserved using ground protection, such as bog mats. As these works are minor repairs and enhancements to safeguard the restoration work previously carried out, practical work is only expected to take a limited time on each site. Once work has been completed vegetation regrowth will help consolidation and recovery of the watercourse.

The New Forest is a SSSI (Site of Special Scientific Interest) and is one of the most important areas for freshwater wildlife in Britain. When carrying out wetland restoration work, we factor in constraints such as ground nesting birds, fish, reptiles, other protected species, and archaeology features, working with partnership organisations to build in the necessary mitigation to ensure wildlife is protected and no impact is caused to any of the sensitive heritage areas.

This summer's programme of enhancement work will help continue our commitment to care for the <u>wetland habitats</u> of the New Forest.

PERSONEL PROFILE: THEA MARGETTS

FRESHWATER HABITATS TRUST'S WILDER FOR WATER PROJECT OFFICER

This is really the start to what I hope will be a long, exciting career in nature conservation. I entered this job role six months ago and have been learning something new about the New Forest Wetland each day.

This is not where I expected to be and being honest, I was unaware of Freshwater Habitats Trust until I saw the job advert. As a child, I did not have any ideas of what I wanted to be, it was only as I grew up and learnt about the world that I decided I wanted to work on projects that improve the environment.

I studied geography at university trying to keep my options open, as I had little idea at that stage about where my future was heading. I had



Thea Margetts in the New Forest videoing for a Vlog while it was raining.

lectures on a full range of things from globalization and the connections cities have in a global market, to floods and invasive species. I was most interested by the lectures focused on explaining ecosystems and how environments could change. Learning about the impacts of human behaviour on habitats gave me a drive to try and deliver positive change. However, I do wish I had taken the river ecology module now.

I volunteered after graduating, on a project called <u>Dynamic Dunescapes</u> in North Devon with the National Trust. I learnt the reality of trying to improve environments manipulated by people for centuries. Innovation was needed to have effective change. New no-fence collars for cattle were opening areas to a more traditional style of grazing. Ideas of wildflower cultivation to jumpstart the diversity of grasslands creating more priority habitats were starting to be actualised. Volunteering gave me many skills, including how to engage with the public about ecology, tree planting and estate skill such as installing gates.

Wilder for Water was a natural and exciting next step for me. The project aims to protect one of the best landscapes in the UK for biodiversity by educating visitors and residents of the New Forest. With a best practice set of behaviours, the hope is the human behaviour negatively impacting the life water of the Forest will be prevented. Engagement being an exciting way to take a proactive, rather than reactive approach, to conservation. Being in the New Forest has given me a chance to see what the other areas of the UK have lost and what environmental conservation projects are aiming for.

My job role is a new position created by <u>Green Recovery Challenge Fund.</u> As a new position there as plenty of challenges, finding contacts, opportunities and creating resources, but is fulfilling to be raising the profile of wetland rarities in the New Forest. It is great to be working and learning from all the different partners that are within the New Forest.

SPECIES PROFILE: TADPOLE SHRIMP

ONE OF THE UK'S RAREST POND CREATURES

The tadpole shrimp is a very rare and special freshwater invertebrate, its generic name *Triops cancriformis* hints at its prehistoric origins. There are fossil records of very similar organisms from over 200 million years ago. The Triops referring to its 3 eyes has more of a sci-fi ring to it.

In the UK the tadpole shrimp is only found in two sites and one of these is the New Forest. Temporary ponds are scattered across the New Forest drying out in the summer and re-wetting during the autumn and winter, they tend to be small and shallow and provide the ideal habitat for the tadpole shrimp.



Temporary pond habitat, the left image showing how it looks when dry in the summer and the right image showing when the pond is temporarily filled during the autumn and winter. The pond small and shallow when filled with water.

Tadpole shrimp eggs hatch when the ponds refill with warm summer rain water. They grow rapidly and a large adult can reach 6cm in length including its forked tail. They have a fast life cycle and can reach maturity and lay eggs in 2 weeks, this is important, as summer ponds may dry up quickly. The eggs settle on the silt at the bottom of the pond and are pushed deep into the mud by the ponies and cattle that drink at the ponds; here the eggs can survive decades in the mud until triggered to hatch.

Spotting tadpole shrimp can be tricky, they move quickly around the vegetation and disappear under leaves or into the mud if startled. The smallest hatchlings have the characteristic shape of the adult but are translucent, as they mature, their carapace darkens and they are well camouflaged against the vegetation and muddy pond floor. Ideal tadpole shrimp spotting conditions are a calm, dry day, as wind and rain disturb the water surface. You may have to stand still, staring into the water for well over 5 minutes before you see one of the elusive tadpole shrimp.

The difficulty in finding tadpole shrimp and estimating their numbers was highlighted to me a few summers ago when I regularly saw 4 - 8 tadpole shrimp scuttling through the vegetation but following a dry spell the pond dried very quickly leaving the tadpole shrimp stranded in the mud and the actual number in the pond was far higher - I counted 86 adult bodies. The jackdaws and crows had a feast!

My role as a volunteer is to visit the ponds at least once a month and since 2016 I have measured and recorded the water temperature, conductivity, secchi score and pH.

I also estimate the percentage of water in the pond and vegetation cover. I take photos of the ponds, and anything else of interest, just using my mobile phone. We are gathering information on trends which will hopefully help to protect the tadpole shrimp and may help to predict the effect of changes to their environment.

I enjoy pondwatching and am grateful to the friendly and knowledgeable support from everyone at Freshwater Habitat Trust.



A tadpole shrimp scuttling through the vegetation in shallow temporary pond on a still day. The carapace the perfect colour to camouflage to the muddy pond floor.



Ponies and cattle play and important role in maintaining conditions in ephemeral ponds. Keeping vegetation in check and adding dung which supports the food web in the these naturally low nutrient habitats, as well as pushing the shrimp eggs into the soil which aids survival during the ponds dry phase.

THE NEW FOREST CATCHMENT PARTNERSHIP

The partnership is a group of organisations that are working with local communities, landowners and businesses to protect and improve the outstanding freshwater environment of the New Forest.

W: FRESHWATERHABITATS.ORG.UK/PROJECTS/CATCHMENT-PROJECTS

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