NEW FOREST WATERNEWS

NEW FOREST CATCHMENT PARTNERSHIP NEWSLETTER

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.

Issue: 3

IN THIS ISSUE:

MONITORING WETLAND RESTORATION

Using the Power of Volunteers to Monitor Wetland Habitats

Forestry Commission

A citizen science project in the New Forest is harnessing the power of volunteers to monitor wetland restorations.

Volunteers are undertaking riverfly surveys across the Forest to see how different species establish in streams before and after restoration.

Restoration of wetlands in the New Forest seeks to reverse the damaging impacts of artificial straightening of streams since the Victorian era. This straightening can cause bogs to dry out, stream banks to erode and the risk of flooding downstream may increase.

The riverflies that the volunteers are sampling are caddisflies, stoneflies and mayflies. They live most of their lives as larvae on the bed of streams, rivers and still waters, emerging as short lived adult flies in spring and summer. Spectacular hatches can trigger fish feeding frenzies.

Riverfly populations are affected by many factors and are very sensitive to pollution. Therefore they are powerful biological indicators to monitor water quality, and are commonly referred to as 'the canary of our rivers.'

More than nine miles of streams have already been restored to their naturally meandering, shallow bed state in the New Forest. During rainfall the water level increases spreading water out of bank to areas that depend upon this seasonal inundation of water allowing rare plant species to thrive.

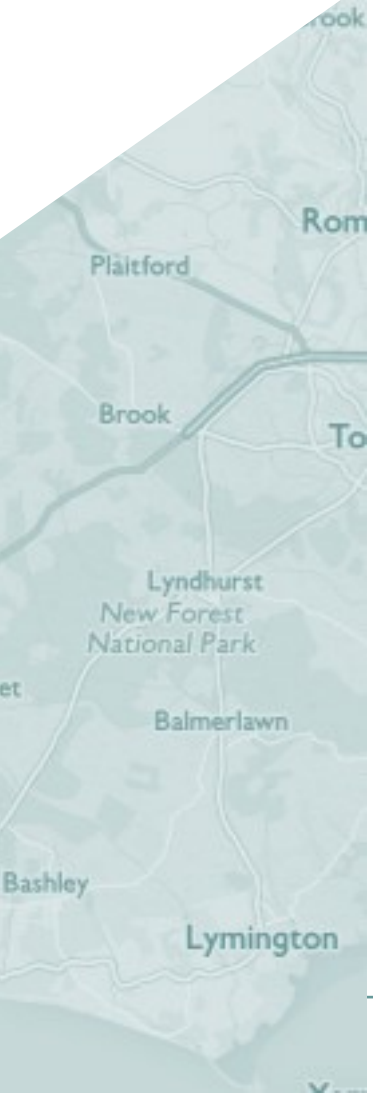
The work is part of the New Forest Higher Level Stewardship (HLS) Scheme, a multi-million pound initiative to restore internationally-important New Forest habitats. The 10-year HLS agreement with Natural England is held by the Verderers of the New Forest. The scheme is managed by them in partnership with the Forestry Commission and the New Forest National Park Authority.

HLS monitoring officer Gemma Stride, said: 'Our Volunteer Rangers are proud to be part of the HLS project in the New Forest. They champion the benefits of wetland restoration and can see how this work enhances the surrounding landscape. Each volunteer team takes pride of sampling their own stretch of stream and can start to see their own results on the online database in which they input their own data.'

To find out more about the benefits of the HLS scheme for wetlands in the New Forest visit www.hlsnewforest.org.uk.

By Gemma Stride
Forestry Commission

Volunteers undertaking a riverfly survey



FLAGSHIP PONDS PROJECT

Managing some of the best of the best ponds & pond landscapes

Across the New Forest there are a wide variety of ponds ranging from ephemeral pools to larger permanent waterbodies. These ponds support exceptional communities of plant and animal species including 38 pond-associated priority species for conservation and over 20 Red Data Book vascular plants. One in three ponds supports at least one Red Data Book macroinvertebrate species. These statistics illustrate how vital it is that these special New Forest habitats are protected.

Freshwater Habitats Trust is running the Flagship Ponds Project, supported by the Heritage Lottery Fund, to help local communities protect seventy of the most valuable freshwater pond sites in England and Wales, together with the rare and endangered species they support. Through the Flagship Pond project we are able to work at a handful of pond sites in the New Forest which are home to many priority species including Fairy Shrimp, Medicinal Leech, Pond Mud Snail, Pillwort, Coral Necklace, Tubular Water-dropwort, Small Fleabane, and Yellow Centaury.

The main focus of the Flagship Project in the New Forest is to find out more about the important species at these ponds. The project will establish the current status of the rare species at the ponds, what threats they face, and how they can be safeguarded. Freshwater Habitats Trust are working with the Forestry Commission, in consultation with local and national species experts, to ensure that there is suitable long-term management of the ponds for the species they support. These bespoke management plans should create the perfect conditions for these rare plants and animals to flourish.

Volunteers monitoring for rare wetland plants including Small Fleabane

The Flagship Ponds project will be running until the end of 2017. Freshwater Habitats Trust are keen to find local volunteers in the New Forest who can survey for some of the rare plants and animals listed above.

If you would like to get involved or find out more please contact the Project Officer Francesca Dunn fdunn@freshwaterhabitats.org.uk.

You can learn more about the Flagship Ponds project by visiting

www.freshwaterhabitats.org.uk/projects/flagship/

By Francesca Dunn
Freshwater Habitats Trust

This unassuming pond is full of rare plants and animals including Medicinal leech and Pillwort

Protecting some of the best of the best ponds in the UK.

NEWS FROM OUR NEIGHBOUR:
THE POOLE HARBOUR SLURRY STORAGE PROJECT

Tackling the issue of storage and the efficient utilisation of livestock manures

Eutrophication is an issue impacting freshwater habitats across the UK and is reeking havoc on much of our freshwater wildlife. It is important to take a collective approach to tackle this problem, working together and listening to the successes and lessons each other has to offer. Poole Harbour is a neighbour to the New Forest Catchment and have been addressing the issues of storage and the efficient utilisation of livestock manures.

Poole Harbour is one of the largest and shallowest natural harbours in the world, with the main freshwater inputs to the harbour coming from the rivers Frome, Piddle, Corfe and Sherford. The harbour is of exceptional ecological value and is protected by a number of conservation designations. However, the harbour is highly eutrophic and improving the upstream waterbodies in the catchment could potentially have a significant positive impact on the status of nutrient levels in the harbour.

The Poole Harbour catchment area is comprised of a range of farm types. These include large arable and intensive livestock units, specifically dairy and pig farms. It is estimated that agriculture contributes 80% of the total nitrogen that enters the harbour with 15% coming from sewage treatment works. A number of partnership projects have been established in the Poole Harbour catchment to manage nutrient loading and minimise leaching and run-off from agricultural sources, tackling the key issues of nitrates, phosphates and sediment to reduce the risk of nutrient enrichment in the harbour.

Estimated that agriculture contributes 80% of the total nitrogen that enters the harbour

To tackle these issues Catchment Sensitive Farming (CSF) and Wessex Water are working on a slurry storage project which looks into how organic manures are produced and used within the Poole Harbour catchment, and to what degree they are moved between individual holdings, and how they can be better utilised within the catchment to minimise nitrate leaching to the environment.

The issue of slurry and manure management has been highlighted at a catchment level, in particular from problems caused by slurry storage capacity. This governs whether slurries are imported or exported, for instance manure producer exporting to neighbouring farms to ensure they meet nitrate vulnerable zone compliance and to manage storage capacity. Typically units with significant arable areas are importing slurries from neighbouring large livestock farms, and the concern is that the slurry exported from producer farms is dilute and therefore the available nitrogen content is not efficiently utilised and is consequently being lost to the environment.

Storage capacity was often given as the reason for minimising the amount of imports onto farms, with farmers in the catchment indicating that additional storage capacity would be of benefit to help manage the high rainfall years when application to land at inappropriate times and inappropriate conditions is forced. In general, farms in the catchment have been increasing storage capacity for manures with a good proportion of new stores installed in recent years, and with the majority of farms having adequate capacity to meet regulatory storage periods of either 4, 5 or 6 months.

Partnership working between CSF and Wessex Water in the Poole Harbour catchment has helped to deliver far greater outcomes for the catchment than we would have been able to attain on our own, through sharing ideas and resources to accomplish a shared vision of achieving the best possible water environment, which is proving to be a success with greater farmer participation and engagement.

By Thomas Hicks
Natural England

The beautiful River Frome

SPECIES PROFILE: **AWAY WITH THE FAIRIES**

The small but mighty Fairy Shrimp

Fairy Shrimp, a beautiful translucent crustacean, are what some would call a living fossil as similar forms have been found dating back in the fossil records for over 140 million years. Although its relatives can be found across Europe, *Chirocephalus diaphanus* is the only member of the Anostraca family found in Britain, where it is now restricted to a few stronghold including the New Forest, the mawn pools of Powys in Wales and Salisbury Plain. They are currently listed as Vulnerable in the Red Data Book and are fully protected in the UK under schedule 5 of the Wildlife and Countryside Act.

An adult female Fairy Shrimp. Her eggs are visible as small white dots within her egg sack (the upwards pointing appendage)

Fairy Shrimp are the archetypal temporary pond species and have quite a unique life cycle. During the hot summer months their eggs lay dormant waiting for autumn rain to fill their temporary ponds. Once it does, they burst forth, quickly growing and breeding before their ponds once more dry out and their short lives come to a close. Their eggs are incredible well adapted to their conditions. Only a proportion of eggs will hatch each time a pond fills with water. Some eggs will remain dormant for many years, in some cases decades. This means that if a pond dries out before the adults have had time to breed all is not lost and the cycle can continue the next time the pond fills.

Fairy Shrimp depend on clean water ponds that annually dry out, along with the right level of grazing to add the few necessary nutrients needed by their food, algae, to grow. These conditions are indicative of a traditional pastoral landscape like the New Forest.

Fairy Shrimp are one of the many freshwater species that make the New Forest such a spectacular landscape for freshwater life.

By Hannah Worker
Freshwater Habitats Trust

THE NEW FOREST WATER BLITZ 2017

Take part in the citizen science survey

Volunteer using quick kits to test nutrient pollution in water

Can you help to find amazing freshwater habitats, free from pollution?

The Clean Water for Wildlife Survey continues into the new year and this spring will see the return of the New Forest Water Blitz. A Forest-wide survey that aims to discover fantastic freshwater habitats that are free from pollution and to build up a picture of the state of water quality across the New Forest. Volunteers can use simple kits to rapidly measure the levels of nitrate and phosphate in their local ponds, ditches, streams, rivers and lakes.

Last year over 675 waterbodies were tested by volunteers. The results were remarkable. The New Forest is a stunning clean water gem, with just under 3/4 of waterbodies being free from nutrient pollution. However it was clear that there are still issues. With increasing pressures on the freshwater landscape it is now more important than ever to find and protect clean water habitats.

Volunteers can sign up to take part in this years Water Blitz. Can you help to discover amazing freshwater habitats, free from pollution, and help to build up a map of water quality across the New Forest?

To take part please email:

hworker@freshwaterhabitats.org.uk

For more information see:

freshwaterhabitats.org.uk/projects/clean-water

Freshwater Habitats Trust

VOLUNTEERING OPPORTUNITIES

New Forest Water Blitz (Freshwater Habitats Trust)

Use quick kits to measure the levels of nutrient pollution in your local freshwater habitats. Help to discover amazing freshwater habitats that are free from pollution and great for wildlife.

W: freshwaterhabitats.org.uk/projects/new-forest-water-blitz
E: hworker@freshwaterhabitats.org.uk

Stop the spread of non-native plants (Wildlife Trust)

Join a work party to help to stop the spread of Himalayan Balsam. For more information please contact Catherine Chatters.

E: Catherine.Chatters@hiwwt.org.uk

Flagship site volunteer (Freshwater Habitats Trust)

Can you help to monitor rare freshwater plants or animals? To sign up or to find out more information please email Francesca Dunn

E: fdunn@freshwaterhabitats.org.uk

Our Past, Our Future (New Forest National Park Authority)

Volunteer for a variety of activities across the National Park, including wildlife surveys and practical conservation tasks.

W: https://goo.gl/HWRxTS
E: richard.austin@newforestnpa.gov.uk

Why not volunteer and discover more about the fantastic freshwaters of the New Forest

EVENTS

28/03/17 (16:00-18:30) - Secrets of the Solent: Calshot Shoresearch (Wildlife Trust)

Take part in the Shoresearch to survey the fascinating seaweeds and animals found on the beach and in rock pools when the tide goes out. Location: Calshot Beach.

W: www.hiwwt.org.uk/whats-on

28/03/17 (19:30-21:30) - Non-native plants: facts, fears, fallacies and fantasies (Wildlife Trust)

An illustrated talk on the myths surrounding non-native plants by Martin Rand. Location: Chandlers Ford Community Centre.

W: www.hiwwt.org.uk/events

Throughout April - Clean Water Event (Freshwater Habitats Trust)

Join FHT for a walk through the New Forest's stunning freshwater landscape. Learn more about the importance of good water quality for wildlife while taking part in a mini water blitz using quick kits to find unpolluted freshwater habitats. For more information please visit the website.

W: freshwaterhabitats.org.uk/projects/new-forest-water-blitz

15/04/17 (13:30-15:30) - Canoeing Easter Egg Hunt (New Forest National Park Authority)

Enjoy paddling on the Beaulieu River in a stable Canadian canoe whilst hunting for Easter eggs! **Cost:** £28 Adult, £22 Child . Location: Bailey's Head.

W: www.newforestnpa.gov.uk/events

SUBSCRIBE

Why not subscribe to make sure you don't miss the latest news from the New Forest Catchment and to receive the quarterly newsletter.

SEND IN YOUR NEWS

Do you have some news we should know about? Is your work benefiting the freshwater landscape of the New Forest?

To subscribe or send in your news please email Hannah at hworker@freshwaterhabitats.org.uk

A BIG THANK YOU

Special thanks to the companies, organisation and councils who helped us spread the word.

RMS Waste Disposal Ltd.
www.rmswaste.co.uk
Beaulieu Estate
www.beaulieu.co.uk
East Boldre Parish Council
www.eastboldre-pc.gov.uk
Boldre Parish Council
www.boldre.org.uk
Minstead Parish Council
www.minstead.org.uk
Hyde Parish Council
www.hydeparish.net
Brockenhurst Parish Council
www.brockenhurst.gov.uk
Burley Parish Council
www.burleyparishcouncil.gov.uk

THE NEW FOREST CATCHMENT PARTNERSHIP

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

W: freshwaterhabitats.org.uk/projects/catchment-projects
E: hworker@freshwaterhabitats.org.uk

Key partners include:

Freshwater Habitats Trust
Environment Agency
SUPPORTED BY NEW FOREST NATIONAL PARK
The Wildlife Trusts Hampshire & Isle of Wight Wildlife Trust
Catchment Based Approach Partnerships for Action
Forestry Commission
Southern Water
Natural England
Beaulieu Estate