



# What we want to achieve

Strategic framework (2013-2020)



# Foreword



**Freshwaters are amongst the most threatened habitats in our modern world, and it is essential that we have strong independent voices that stand up for them.**

As patron of Pond Conservation I have been proud to see the charity's work over many years: the knowledge and research that forms the basis of their work, their ability to put theory into practice, and their commitment to partnership with land owners, industry and government agencies – not always a comfortable relationship for conservation charities – to ensure results on the ground.

Pond Conservation has already made a major difference to the way in which we think about our smallest standing waters. As the Freshwater Habitats Trust, I know the new charity will bring the same vision, energy and commitment to protecting freshwaters everywhere.

Please join with the Freshwater Habitats Trust, to help make a difference to our freshwaters and their biodiversity: protecting some of the most beautiful and precious habitats in our natural world.

A handwritten signature in black ink that reads "John Selborne".

The Earl of Selborne



# What is the Freshwater Habitats Trust?

## Our aim

To protect freshwater life for everyone to enjoy

## We are:

- an evidence-based conservation charity, with a strong science grounding.
- highly strategic – we target our work where evidence suggests it will be most effective.
- concerned with all freshwaters including those that are small and undervalued like headwater streams, ponds, flushes and ditches.
- working in partnership with people, communities and organisations to get the best results for freshwater wildlife.



Yellow Centaury

## Why change our name?

For us it's not such a big change. When we started Pond Action in 1988 our aim was to help protect all freshwaters. We began working with ponds because they seemed most in need of help; we continued to champion them because, to our surprise, ponds turned out to be extraordinarily important wildlife habitats. Ponds have never been our single focus though, and sometimes we've worked more with streams, ditches and canals than with ponds.

Our new name reflects not only what we've been doing for years – but our conviction that working on a single habitat is the wrong way to protect freshwater wildlife. Just as there is a continuum between all freshwaters – from running to still, large to small and wet to dry – so the best way to protect these habitats is to emphasise the links and connectivity across the freshwater landscape – not their differences.



# The major challenges faced by freshwaters

**‘The low profile of freshwater biodiversity in broad-scale priority-setting, stands in stark contrast to its degree of imperilment’** Millennium Ecosystem Assessment 2005

The pressures on freshwaters are immense, and degrade a shockingly large part of the water environment. Expanding populations and urban, agricultural and industrial development are adding yet more stresses.

In many parts of the UK, damage from pollution, drainage, abstraction, infilling, culverting and channelisation mean that clean natural freshwaters are essentially a thing of the past.

For people this means dirty polluted water to avoid, not enjoy. For wildlife it means the loss and extinction of species that once thrived.

## Just how bad is it?

- **Rivers:** there are no longer any undamaged rivers left in lowland England and Wales.
- **Streams:** 87% of headwater streams are biologically degraded east of a line from the Humber to the Dorset coast.
- **Lakes:** there is just a single lake in England and Wales classified as undamaged.
- **Ponds:** 92% of ponds in England and Wales are biologically degraded; plant richness has declined by 20% in the last decade.
- **Canals:** over 95% of canal lengths have impacted water quality.



# What the Freshwater Habitats Trust will achieve

## Our vision

### • Species

All threatened freshwater plants and animals have recovered and developed sustainable populations.

We aim to ensure that populations of all International Union for the Conservation of Nature (IUCN) threatened species are in Favourable Condition – not just stabilised in a few isolated locations.

### • Habitats

The UK has a functioning network of freshwater habitats: The Freshwater Network.

We aim to ensure that the UK has an interconnected network of high density clean water habitats which protects and links up Important Freshwater Areas.

### • People

People value freshwater habitats and their wildlife.

We aim to ensure that at least half a million people have experience of high quality freshwater habitats, engendering greater understanding and leading to action on the ground.

## Steps to getting there

- **Identify what we have:** locate Important Freshwater Areas (IFAs) in the UK.
- **Protect the best habitats:** ensure that IFAs are recognised and protected.
- **Species conservation:** protect our most threatened freshwater plants and animals.
- **Expand and connect:** build out from high quality areas to create the Freshwater Network.

## How we're going to do it

- **Policy:** champion freshwater biodiversity at national and European levels.
- **Practical projects:** implement practical solutions based on best practice.
- **Public outreach and partnership:** work with people to achieve our aims.
- **Monitoring:** understand national trends and review the effectiveness of our work.
- **Research:** investigate better ways to protect freshwater biodiversity.

## New developments

- **Wider engagement:** many more people to work with us and help achieve mutual goals.
- **Regional project officers:** these are key to delivering practical and outreach projects across the UK.
- **Regional demonstration sites:** catchment-based sites to showcase best practice.
- **Money:** to help make it happen.

**Clean water is a critical pre-requisite for freshwater plant and animals, and even moderate pollution degrades freshwaters irrevocably.**

## The problem

Look in any freshwater habitat - stream, pond, lake, canal - and you'll see the vast difference between the weary monotony of polluted waters and the beauty of clean water habitats.

The problem for our freshwaters is twofold: clean water is almost gone from many landscapes, and there is no political appetite to change this. If we want clean water, and healthy wildlife communities, Non-Governmental Organisations (NGOs) have to make the running.

## What we want to do

### ● Raise awareness: Clean Water Survey

We want people to see for themselves the extent of pollution all around them. To do this, we'll run a national public survey that compares water quality across all waterbody types.

### ● Create new clean waterbodies: Million Ponds Project

Creating new clean water ponds is the quickest and cheapest way to bring clean water back to the countryside, and brings exceptional biodiversity benefits. In 2008 we launched the first phase of a 50-year partnership initiative to restore pond numbers and create networks of new clean water ponds. We're now running Phase 2 (see box opposite).

### ● Find out what works: Water Friendly Farming

Standard mitigation measures to deal with agricultural and urban pollution have a poor track record of significant water quality and biodiversity improvement. We badly need measures that work, and that's what we are researching (see page 16).



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## When 'Good' means mediocre

Government policy over the last 10 years has focused on achieving 'Good' water quality status, but for wildlife the focus needs to be 'High' status. For rivers, research shows that between 'Good' and 'High' status, half of the invertebrate species could be lost, including those that make them so special. Essentially, 'Good' is really mediocre.



NATIONAL TRUST

The Million Ponds Project is a 50-year partnership initiative to create clean water ponds for freshwater wildlife. Now in Phase 2, we aim to create 30,000 clean water ponds by 2020.

## MILLION PONDS PROJECT

### The Million Ponds Project...

- Sustains our freshwater wildlife for the long term – for everyone to enjoy.
- Protects freshwater biodiversity at a landscape-level by creating refuges and stepping stones, restoring connectivity.
- Creates new habitats for threatened species.
- Guards against the impacts of climate change.
- Inspires and changes attitudes and challenges mindsets – with its focus on clean water and good design.

### Achievements so far

- 1023 ponds dug for 49 threatened BAP species through the Biffa Award pond digging fund, and many more created by partners.
- Over 60 organisations involved.
- Over 1000 people trained at over 60 events.
- 50+ factsheets in the online Pond Creation Toolkit.
- More than 500 site advice visits made.
- Over 140 of new ponds monitored.

See [www.freshwaterhabitats.org.uk/millionponds](http://www.freshwaterhabitats.org.uk/millionponds)



JULIA DRAGE

“It has long been an axiom of mine that the little things are infinitely the most important.” Arthur Conan Doyle

## The problem

In the UK, freshwater protection and monitoring is almost completely focussed on large waterbodies: rivers and lakes. Our evidence shows that most freshwater biodiversity lives in small waterbodies. Britain's SSSIs and Natura networks and national water quality surveillance programmes should be representative, but they aren't. One implication is that we have almost no idea of whether our smallest waterbodies and their species are declining. If, as suspected, they are, we risk losing much of their biodiversity simply because there is no impetus to save them.

## What we want to do

### ● Work to influence EU and national legislation

To get some progress, the quality of small waterbodies needs to matter at political level. Over the next few years we will be working with European NGOs to ensure that small waterbodies are monitored, included in River Basin Management Plans, and that European biodiversity and water quality legislation are better integrated.

### ● Monitor small waterbodies: WaterNet

Because small waterbodies are so poorly monitored, we think there is a need for a volunteer-based surveillance network. Building on the PondNet trial developed with Natural England and Defra, and other partners, we hope to launch WaterNet in 2014.

### ● Promoting a landscape-scale vision of freshwaters, including small waterbodies

We know how important small waterbodies are – but it helps if you can show the difference they make in the landscape. We already work in test catchments in Oxfordshire, Hampshire and Leicestershire, demonstrating ways to integrate small waterbody and species protection to maintain freshwater biodiversity. Over the next few years we aim to roll-out best practice nationally.

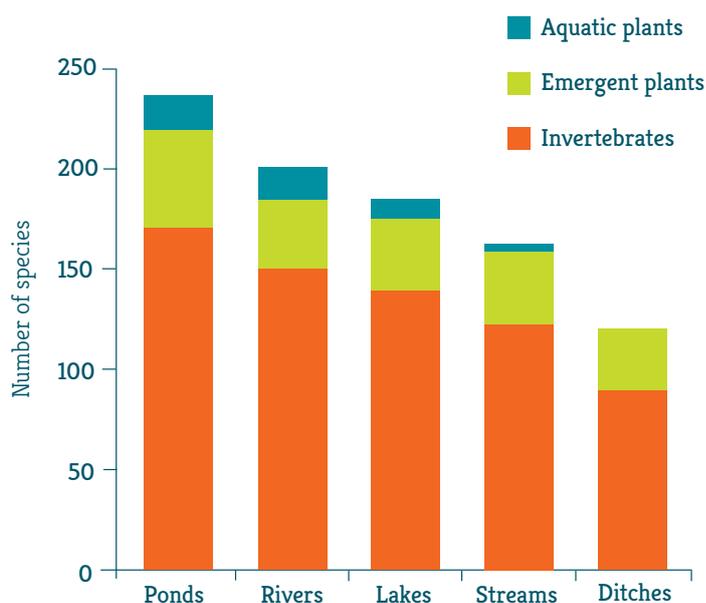




## Why focus on small waterbodies?

Small waterbodies are everywhere, and their importance vastly outweighs their size.

- 80% of the European running water network is composed of **headwater streams** which support both unique species and are a refuge for animals like our native crayfish.
- There are almost half a million **ponds** in the UK and they support around 70% of freshwater species at landscape level, and more endangered species than lakes, rivers, streams or ditches.
- c.10% of **all Biodiversity Action Plan species**, terrestrial and aquatic, found in the UK occur in ponds.
- **Fenland ditches** are as rich as the best rivers in the UK with higher macroinvertebrate species richness than virtually all rivers and streams, and a higher proportion of endangered plants.
- **All small waterbodies** play a critical role in ecosystem services: intercepting, storing and routing water and nutrients, and transporting and transforming carbon.



## Our evidence

In 2004 we published the first data worldwide to compare the biodiversity value of the different waterbody types: streams, ditches, rivers, ponds, lakes. The results showed that ponds were exceptionally important at the landscape scale, supporting more plants and animals than other waterbody types. Ditches were also important because they supported unique rare species. This same pattern has now been shown in other catchments across Europe.

# Saving our threatened plants and animals

## The problem

So many freshwater species are threatened by pollution and habitat loss that lowland English counties have now seen a host of vulnerable species like the Shining Ram's-horn snail and Water-violet go extinct. The only surveillance data available for ponds shows that even amongst common species, there has been massive loss in the past decade.



## What we want to do

We think that there needs to be much greater ambition to protect vulnerable plants and animals. These species need to recover to sustainable levels, not levels that still hover on the brink.

Our planned projects to map and monitor our most threatened species (Important Freshwater Areas and WaterNet) will establish a strong basis for prioritising action on the ground. Phase 2 of the Million Ponds Project will continue to create many thousands of new clean water habitats for threatened species.



Water-violet

In addition, we believe there needs to be strong affirmative action to protect these threatened freshwater species:

### ● Set targets

How do we know when an endangered species has recovered? There are no targets to tell us! We plan to work with other NGOs to identify what Favourable Status means for critical freshwater species - giving real targets to judge success against.

### ● Work with a wider range of threatened species

Rather than just work with the Biodiversity Action Plan species identified by government as a priority for action, we aim to consider all IUCN threatened species, ensuring that our rarest plants and animals don't decline to critical level.

### ● Action on the ground

We've seen many threatened species lost from freshwater sites simply through poor understanding. Our belief is that the best way to prevent this happening is by increasing local knowledge and responsibility. Our new Flagship Sites project aims to link local people and landowners with experts to create a long-term relationship that ensures key sites are well monitored, managed and protected.

### ● Beyond the minimum

Given the threat many species face, we think that attitudes towards species re-introductions are often overly cautious, and that there is a greater role for well documented and monitored captive breeding, habitat creation and introduction of species using IUCN criteria. Rare animals like Mud Snail and plants like Pillwort are easy to breed, so why not involve local schools and community groups in their propagation?



ROGER KEY

Two-toned Reed Beetle



IAN RALPHS

Floating Water-plantain



FRED HOLMES

Common Toad



JEAN-FRANÇOIS CART

Fairy Shrimp

# Protecting the best, and making more

## The problem

High quality, unpolluted freshwaters are disappearing from our landscape. This is worrying because the majority of our threatened freshwater species and communities are now restricted to these biodiversity hotspots.

Evidence shows that restoration schemes often fail to deliver significant biodiversity benefits because the species' populations have been depleted and habitats are too fragmented for species to re-colonise.

## What we want to do

### ● Find the best areas

Amazingly, there has been no systematic assessment of where high quality freshwater sites are located. Identifying Important Freshwater Areas (IFAs) is essential to prioritise action on the ground and target restoration and creation schemes where they're most likely to work.

### ● Expand from the best

We'll work with other NGOs and statutory agencies to develop a Freshwater Network that creates new habitats around biodiversity hotspots, links Important Freshwater Areas and builds out to form a wider network.

### ● Integrating freshwater habitats

Most freshwater species are not habitat snobs – at least a third live in both still and running waters, and few are restricted to a single waterbody type. The new Freshwater Network will integrate all waterbodies, helping to sustain freshwater communities long term.



Bladderwort and Frogbit in a Pevensy Levels ditch

EVAN JONES



JEAN-FRANÇOIS CART

Tadpole Shrimp

## The New Forest – working on the whole water environment in a Flagship Catchment

The New Forest is an outstanding area of lowland Britain for freshwater wildlife. Working in partnership with a wide range of stakeholder groups and with funding from the National Park Authority, the Environment Agency and the Forestry Commission, we have developed the first water management plan to take account of all freshwaters, big and small, and to place the emphasis on keeping waters truly unimpacted by pollution, vital to maintain the wildlife of the Forest's freshwaters.

- A catchment work programme: aiming for the highest possible standards in streams and rivers.
- Ensuring the best ponds are identified and managed with new habitat creation for our rarest species.
- Training for landowners and land managers to raise awareness of the importance of the New Forest's small waters landscape.
- Volunteer training and monitoring of rare wetland species – with an alert system for the rarest: the Tadpole Shrimp.
- Baseline assessment of waterbodies prior to the implementation of agri-environment schemes to monitor changes.
- Research to investigate key issues like the impact of control measures on the invasive non-native plant New Zealand Pygmyweed.



IAN RALPHS



# Working with people and in partnership

## People

To achieve our aims we have to work closely with people at all levels: from policy makers to the general public, and from individuals to multinational organisations.



Many people have less contact with freshwaters than they do with terrestrial habitats like woodlands and meadows. Our view is that the best way to ensure freshwaters are better valued is to increase people's enjoyment, knowledge and experience of them.

We aim to achieve this as a three stage process:

- 1 Increasing contact and experience with freshwaters:** close to home through garden wildlife pond creation, and better still in the countryside itself through initiatives like Forest Schools.
- 2 Greater understanding and appreciation of freshwaters:** through projects like our Clean Water Survey and more broadly through involvement in local catchment management decision-making.
- 3 Direct involvement and action to protect habitats:** through national surveillance projects like WaterNet, species and habitat protection work for the Million Ponds Project, Flagship site protection and through active monitoring and management of catchments.

## Partnerships

Partnership working is critical to achieve our goals. We already work with many partners through existing projects. As the Freshwater Habitats Trust we aim to develop relationships with new partners as well as deepening relationships with those we already have.

In particular we want to:

- **Better disseminate our existing knowledge and information** through key organisations, especially where this is likely to make a difference on the ground.
- **Collaborate more actively with other organisations**, particularly fellow NGOs, to develop and achieve mutual goals.
- **Benefit from the information and expertise of others**, and use this to find new ways forward.





## 'People, Ponds and Water' project

In 2015 we aim to launch the 'People, Ponds and Water' project which is currently at development stage, supported by a grant from the Heritage Lottery Fund. The aim is to work with many thousands of people to raise awareness, gather information about the quality and trends in rare species, as well as protect some of the most important freshwater habitats for the long term. The project has three interconnected elements:

- **Clean water survey:** a citizen science project using test kits to compare the quality of all waterbody types: rivers, streams, both countryside and garden ponds, lakes, ditches and canals. The aim is to raise awareness of the true extent of pollution, identify clean water habitats and encourage action to create more.
- **PondNet:** following successful trials, we want to roll out this partnership volunteer surveillance network across England and Wales. The aim is to build up a much needed overview of rare species trends and the condition of ponds in different habitat types, feeding this information into a national database.
- **Flagship Ponds** are some of the UK's most important waterbodies. We will work with landowners, community groups and local experts, giving them the knowledge and confidence to act as the first line of defence, monitoring, managing and protecting these exceptional sites.



# Evidence – the things we don't do

**Evidence isn't always popular or convenient, especially if it challenges the things we hold dear.**

Here are some of the things which our own and others' research tells us are true – but which are often ignored in practice. They explain some of the things which we won't do as an organisation.

## River restoration

There is a mass of research data, our own included, that shows limited biodiversity benefits from river restoration projects. Putting bends back into rivers, or adding features like flow deflectors, makes little difference to most wildlife and doesn't bring back natural communities: giving poor value for money. Part of the problem is that poor water quality rather than bank structure is often the limiting factor for species; another is lack of species to re-colonise the newly restored habitat.

**We won't:**

- Advocate river restoration projects that simply focus on re-meandering the channel in the lower reaches of rivers.
- Push dirty river water onto floodplains, damaging the clean water habitats there.

**We will:**

- Investigate the benefit of restoring water quality and structure in headwater streams - then working down the catchment.
- Work on river habitats where there is evidence it protects endangered species, and restore clean water floodplain habitats.

## 'People projects'

We think that many environmental projects involving people achieve too little, both for people and the environment. This includes public participation surveys which are more about raising organisations' profile than gathering useful data, and habitat management projects where positive environmental outcomes are unlikely.

**Our aim is to only engage in:**

- public participation surveys where people gather data of real value.
- habitat management projects which evidence suggests are likely to benefit the environment directly, or provide evidence of what works and what doesn't.



## Agri-environment measures to protect freshwaters

There is remarkably little evidence that standard agri-environment measures like buffer strips and wetland interceptors make a significant difference to freshwater wildlife. Part of the problem may simply be the limited research base and piecemeal application of measures. Alternatively such measures may just be inadequate to solve water quality issues, prevent habitat loss or mitigate damage to existing wildlife communities.

### We won't:

- Advocate agri-environment measures that perpetuate the status quo.

### We will:

- Research the benefits of a wide range of agri-environment measures including new and novel techniques.
- Consider the effect on the whole of the freshwater environment including the role of ponds, ditches and flushes in protecting freshwater life.

## Water Friendly Farming: can we improve the quality of the freshwater environment in the farmed landscape?

**Globally, farming has many unintended impacts on freshwater biodiversity through pollution, drainage and infilling. Despite substantial agri-environment funding to mitigate these impacts, there is remarkably little evidence of their benefit for freshwater biodiversity.**

To understand how to protect freshwater whilst maintaining productive farming, we started the Water Friendly Farming project. Working with the Game & Wildlife Conservation Trust in Leicestershire, and with funding from the Environment Agency and industry, we are working in three Leicestershire test catchments, each about 10 square kilometres in area. Unique elements of the project are:

- The long 3-year baseline to understand the current condition of the water environment, something rarely done in previous work.
- Application of a range of novel techniques including bunding ditches and intercepting drain flow.
- Monitoring across the whole of the freshwater catchment, not just streams and rivers – including ditches, ponds and flushes.



Water Friendly Farming test catchment

# What we need to get there

## What we need is to:

- **Support existing projects** to make the most of what is already set up and working.
- **Develop projects** to achieve our aims through practical work, research advocacy and public engagement.
- **Purchase land** so we can set up demonstration sites and showcase our work in the regions.
- **Support the organisation's core activities** including administration, fundraising and communication.



EVAN JONES

Bladderwort

## How you can get involved

- **Get your company involved**  
Make a gift, become a corporate member or hold a bespoke fundraising event.
- **Become a Freshwater Champion**  
Sponsor our national projects, and/or help us develop projects which your local community can join in with.
- **Spread the word**  
Share our resources with your network and help others realise the importance of freshwater and the issues facing it.
- **Make it happen**  
Create clean water ponds on your land or review the management of freshwaters on the land you own or manage.
- **Give your time**  
Get involved with our citizen science activities.



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**Freshwater Habitats Trust**

c/o Oxford Brookes University, Gypsy Lane Campus, Headington, Oxford, OX3 0BP

T: 01865 483249 · [info@freshwaterhabitats.org.uk](mailto:info@freshwaterhabitats.org.uk)

[www.freshwaterhabitats.org.uk](http://www.freshwaterhabitats.org.uk)

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