# The New Forest Catchment



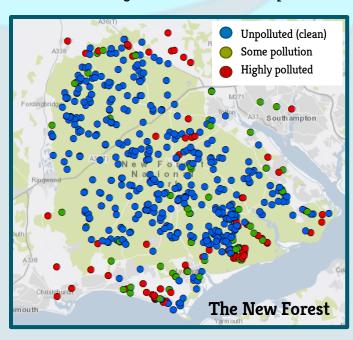


## What is Clean Water for Wildlife?

Clean Water for Wildlife is part of a Heritage Lottery Funded nationwide project to raise awareness of the critical importance of clean water for freshwater wildlife. In the first national survey of its kind, we're using the power of citizen science to gather results from all kinds of freshwaters including ponds, lakes, rivers, streams and ditches, all of which are important for freshwater wildlife. The survey uses 'quick kits' to assess the level of nitrate and phosphate pollution; two nutrients which can pose a major risk to wildlife if they are above natural levels.

#### Our aims

- To engage many thousands of people to help them learn about, participate in, and enjoy their freshwater heritage
- To create a map of water quality from over 10,000 freshwaters, and uncover the best, most unpolluted habitats
- To make a significant difference to the protection of freshwater biodiversity in the UK.



#### **Clean Water Case Studies**

All the results from the Clean Water for Wildlife survey are available to view and download from WaterNet, the data hub for the People, Ponds and Water project. But, we are also producing a series of case studies which illustrate some of the most interesting results. This case study concentrates on The New Forest Catchment.

## Description of the survey area

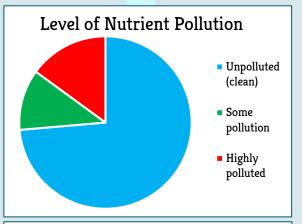
The New Forest catchment covers over 300km<sup>2</sup> and largely corresponds with the New Forest National Park. The landscape is dominated by semi-natural habitats (heathland, woodland, grassland, mire, freshwater and coastal habitats) maintained by traditional and extensive grazing; but it also includes a number of urban areas and some intensive agriculture on the park's periphery.

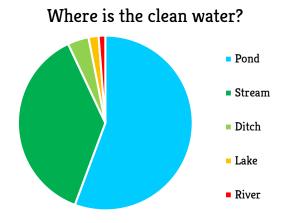
#### The results

675 water samples were collected from the New Forest Catchment and surrounds over a three month period from 12<sup>th</sup> March to 12<sup>th</sup> June 2016. In total 314 pond, 13 lake, 277 stream, 19 river and 35 ditch samples were collected by a team of over 80 volunteers.

Just under three quarters - 74% - of sites showed no evidence of nutrient pollution. The clean water habitats were dominated by ponds (54%), but there was also a large number of clean water streams (36%) and some clean water lakes and rivers. The 'open forest', the area of uncultivated land in the core of the Forest produced 72% of the clean water samples, whilst the intensively farmed and urban areas on the edge of the Forest were dominated by polluted samples (76%).

Table 1: Level of nutrient pollution Unpolluted Some pollution Highly polluted (clean) Pond 270 32 12 Stream 181 30 66 5 Ditch 19 11 Other 12 0 5 Lake 9 3 1 River 6 7 6 77 **TOTAL** 497 101









## Understanding the results

The survey shows how exceptionally important the New Forest is for freshwater wildlife. Many ponds, lakes, streams and rivers are in better condition than is usual for lowland Britain because a large percentage of the surrounding land is comprised of uncultivated habitats which have been managed traditionally for 100s of years. In other catchments we've surveyed, more than 75% of sites sampled are polluted by nutrients; in the New Forest 75% of sites are pristine. Current water management policy does not reflect the value of these small clean water habitats. At present, both nationally and in the New Forest, water management policy focuses on protecting and improving the condition of large rivers and lakes, and with a few exceptions, does not cover ponds, small lakes or take account of high quality headwater streams.

Where the streams and rivers flow through towns and farmland on the edge of the New Forest they are often more seriously degraded – pollution from urbanization and intensive agriculture has some of the worst impacts on freshwaters. There are also issues within the best areas of the New Forest which need to be addressed, from poorly maintained septic tanks and small waste water treatment works to recreation management and runoff from farm yards. The survey shows the Important Freshwater Area in the New Forest that we should be promoting and protecting, and locations where we could extend the network of clean waters by making ponds, or extending downstream from clean streams or ditches.



A headwater stream in the New Forest - naturally low in nutrients this habitat supports uncommon plant and animal species including pillwort, Hampshire purslane and southern damselfly - species which are rare in the rest of lowland Britain, where the majority of streams and all the rivers, suffer serious nutrient pollution.

The New Forest Catchment survey is part of Freshwater Habitats Trust's Heritage Lottery Funded project 'People, Ponds and Water' <a href="freshwaterhabitats.org.uk/projects/people-ponds-water">freshwaterhabitats.org.uk/projects/people-ponds-water</a>. Additional funding and support was provided by the New Forest Catchment Partnership through the Catchment-based Approach programme. The project was undertaken by a fantastic group of volunteers, including members of the New Forest Association, New Forest Study Group, Blackwater Valley Conservation Group and New Forest Catchment Partnership <a href="www.newforestnpa.gov.uk/info/20095/habitats\_and\_wildlife/244/new\_forest\_catchment\_partnership">www.newforestnpa.gov.uk/info/20095/habitats\_and\_wildlife/244/new\_forest\_catchment\_partnership</a>

## **New Forest Catchment Partnership**

The New Forest is a unique and precious landscape. It contains many small rivers and streams which begin in boggy heathland mires, as well as small lakes, numerous ponds and coastal saltmarshes. These habitats are some of the most important areas for wildlife in the UK and Europe. We aim to protect and improve these freshwaters by addressing threats such as water quality and water quantity; whilst maintaining the naturalness of the channel in which the water runs, and supporting the pastoral economy on which this dynamic landscape depends.

The New Forest Catchment Partnership was created out of an initial pilot funded by Defra and lead by the Freshwater Habitats Trust and the New Forest National Park Authority. We work with local communities and organisations to identify opportunities to improve the health of streams, rivers, lakes and ponds. This will help meet legislative requirements, but more importantly it will raise the profile of this internationally important area for freshwater wildlife and improve the quality of the local environment now and in the future.