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.

IN THIS ISSUE:

The New Forest 1 & 2
Curlew Project

Trout Feel the 3 to 5 Heat in the Forest

Renewable Energy 6 to 8
- The Power of
Water

Clean Water 9 to 11 Camping

Species Profile: 12 Eurasian Curlew

Profile: Dom 13 Longley



THE NEW FOREST CURLEW PROJECT

A LOCAL CALL TO ARMS TO HALT A DRAMATIC DECLINE

The sight and sound of curlews displaying over a New Forest valley mire on a crisp spring morning is a wildlife experience to cherish, but as Prof Russell Wynn of Wild New Forest reports, such experiences may soon be relegated to history unless a dramatic decline can be halted.

In 2016, <u>Wild New Forest</u> and Forestry England began a programme of survey and monitoring of breeding curlews in the New Forest National Park, following a 'call-to-arms' to halt a dramatic decline in the UK and wider global population. The survey was co-ordinated by Prof Russell Wynn (Director, Wild New Forest) and Andy Page (Head of Wildlife Management, Forestry England), and relied heavily upon volunteer observers and public sightings.

After the first year of fieldwork, covering about 100 km² of suitable habitat, it was clear that recent New Forest population estimates of 100-130 pairs were far too high, and that the true figure was in fact closer to 40 territories, an alarming reduction of as much as two-thirds in the last 25 years. It was also clear that the productivity of breeding pairs was worryingly low, with many monitored nests failing at the egg stage and few chicks seen making it to fledging.

In 2017 and 2018, further monitoring confirmed the size of the breeding population at 40 territories, and deployment of 24 nest temperature loggers (sponsored by the New Forest Association), revealed that as many as 50% of nests were failing at the egg stage, largely due to predation by mammals such as foxes. Reports from surveyors in the field also highlighted issue the recreational disturbance and confirmed that few pairs were successful in hatching chicks.



In an attempt to halt the decline and mitigate the key pressures, Forestry England and partners have modified signage and introduced seasonal rangers and reduce recreational to try disturbance, while the new survey data has been used to support seasonal closure of a car park in one of the remaining curlew hotspots. Wild New Forest have worked with the New Forest National Park Authority to secure features in local media, as well as BBC Countryfile in spring 2018, reaching an estimated five million viewers. However, the issue of how to tackle high numbers of generalist predators is a difficult one, and is currently hot topic amongst conservationists and land managers across the UK.



Preserving the UK's breeding curlews has generated interest in high places, with curlew conservation summits being held at 10 Downing Street in July 2019 (hosted by Lord John Randall, Environment Advisor to Theresa May) and at Highgrove House in Feb 2020 (hosted by Prince Charles). Russell Wynn represented the New Forest

Curlew Project at both these fora, highlighting the important role that volunteers and the wider public can play in generating data and supporting behavioural change.

In 2019, the full suite of breeding waders in the New Forest were surveyed as part of the New Forest Higher Level Stewardship (HLS) scheme, commissioned by Forestry England and delivered by a team of volunteer observers co-ordinated by Hampshire Ornithological Society. The results are currently in preparation and will be reported in a later edition.

Wild New Forest and Forestry England are continuing to monitor the remaining curlew population, although coronavirus restrictions will likely hinder fieldwork activities in 2020.

To end on a more positive note; actions being taken to reduce the decline in the UK curlew population will undoubtedly benefit a wider range of species, and in the New Forest this totemic species is being used to highlight the vulnerability of our internationally important freshwater habitats. Let's hope we can tip the balance back in favour of our New Forest curlews, ensuring that this wild icon continues to delight and inspire future generations.



Page 2 Professor Russell Wynn, Wild New Forest

TROUT FEELTHE HEAT INTHE FOREST

Insights from Juvenile trout population surveys

The New Forest streams comprise the many westward-flowing Avon tributaries, the catchments of the Lymington and the Beaulieu Rivers and a multitude of smaller, self-contained streams such as the Bartley Water, Dark Water and Avon Water. These watercourses all support fish communities dominated by wild brown trout, a large proportion of which migrate to sea to feed, grow large and return to lay many thousands more eggs than if they had stayed in the river. Brown trout are a tough, adaptable species and, in the Forest in particular, they can cope with relatively warm, dry conditions. However, they are a cold-water species and have specific thermal limits.

Data from recent surveys indicates that these limits have been exceeded more often in recent years, reducing survival and putting the species under increasing pressure.



This is what our surveys are all about: "young of the year" wild brown trout. Turfcroft, Ober Water, July 2019.

Due to the conservation and fisheries importance of New Forest sea trout stocks, the Environment Agency runs a programme of juvenile trout population surveys (using small-scale electric fishing equipment) at sites spread across the Lymington and Beaulieu Rivers: 14 sites on each river are surveyed once every six years.

Having completed the latest round last summer, we're able to compare the results from 2007, 2013 and 2019, a total of 84 individual surveys.



This is a non migratory brown trout adult, who will spend its life in freshwater. Sea trout are the same species but will spend most of its life at sea and return to freshwater to spawn.

Map 1 shows the locations of the fourteen survey sites on each river, with the green markers sized according to the number of trout caught in 2019. Red markers indicate that no trout were caught.

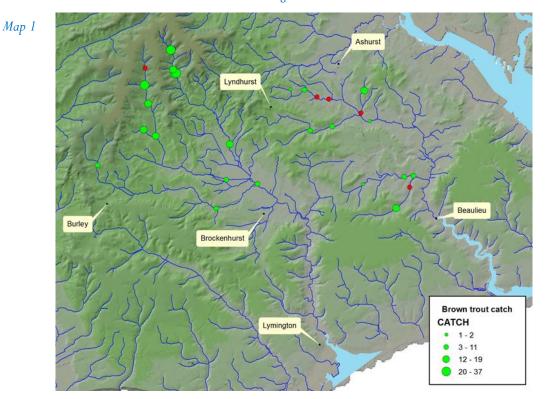


Figure 1 summarises the entire trout survey dataset: each "boxplot" represents all 14 brown trout catches on each river, in each survey year. The bars, or whiskers, show the maximum and minimum catches in that year; the bottom and top of each box represents the 1st and 3rd quartiles, respectively, and the line in the middle of each box is the median value. In short, the higher the upper bar, the top of the green box and the median line, the larger the trout population.

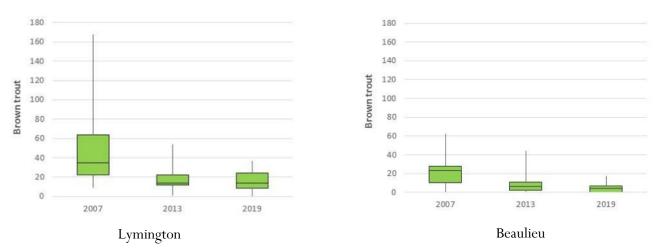


Figure 1: Brown / sea trout catch data box-plots

The five red markers in Map 1 and the low trout abundance on both rivers for 2013 and 2019 shown in Figure 1 are cause for concern - something has been suppressing trout survival in recent years. With the exception of reaches affected by historic drainage engineering, Forest streams are generally in pretty good physical condition, providing excellent trout habitat. In addition, as you would expect in a National Park, impacts from land use and industry are also generally of a low magnitude. So what factor could override good habitat and water quality and put trout populations under significant pressure? The most likely answer is: heat.

Across the South of England, we have seen evidence of declines in the most temperature-sensitive fish species (the salmonids) in recent years: Atlantic salmon, grayling and brown trout. Unlike the other two species, there has been less evidence of a problem in brown trout populations in water courses with more stable flows regimes, such as the Hampshire chalk streams.

However, New Forest streams are at the other end of the spectrum in terms of flow - they are more akin to ephemeral, upland streams, but exposed to a South-coast climate.

Since 2007, the year of our first comprehensive round of Forest fish surveys, both peak and average summer temperatures have been on an upward trend.

Figure 2 gives the highest daily maximum air temperature recorded and the average daily summer temperature (June, July and August) in the Met Office's Central England Temperature dataset for each year .

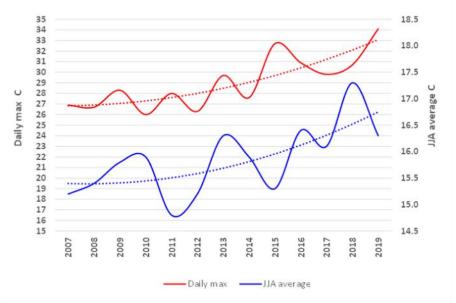


Figure 2: Daily maximum temperature (red line, left-hand vertical axis) and average daily summer temperature (blue line, right-hand vertical axis) Central England (Hadley 2007-2019). Trendlines included for both graphs.

Brown trout have specific thermal limits: maximum growth occurs at 13°C and growth ceases altogether at 19.5°C. The species' seven-day upper lethal limit is 25°C, so water temperatures between 19.5-25°C are critical and are likely to result in stress, disturbance to normal behaviour, higher susceptibility to disease and, ultimately, reduced survival.

But, there is potential to implement solutions to the pervasive threat of a warming climate at a local level. It has always been the case that New Forest trout are dependent on "thermal refuges" in order to survive the hottest, driest periods each summer.

Thermal refuges are deep, dark, cool parts of the river, shielded from the blazing sun and warming breeze and in places which also provide the trout with the cover that they need as protection from predators. Refuge can be found beneath the deeply undercut roots of bankside trees, within the tangled mass of debris-dams, and in the scour-holes under fallen trunks and branches.

By ensuring the availability of these refuges, the thermal resilience of trout populations may be increased, but that will be to no avail if there's not enough water in the first place. As you would expect, the increase in summer temperatures has gone hand in hand with decreasing flows and more prolonged dry spells, the greater the pressure on trout.

The "reservoirs" of the Forest are the mires and raised bogs. They collect and store rainwater, and the more slowly and consistently they release it to the stream channels, the more stable the river flow regimes. Therefore, the health of the rivers is dependent on the health of the mires and bogs.

Finally, if water entering a shady woodland is already too warm, then it takes time and distance to shed that heat. One solution could be to identify reaches, where stream water is exposed to heat most intensively, and to focus efforts on diversifying habitats to reduce temperatures (carefully balanced against the needs of other very rare New Forest species).

To those of us that are fanatical about the Forest's trout, the sight of those little, spotty-brown fish darting to the surface of a shady pool to snatch a fallen caterpillar on a summer's afternoon, or of the mounded gravel of a freshly -cut redd in midwinter, are iconic sights of the Forest, but they're also indicators that stream-dwelling wildlife in general is thriving. Right now, these "canaries in the cage" are singing that their home streams are gradually becoming too warm for them and that we should take action now.

The full version of this report can be found on out Catchment Reports page here

RENEWABLE ENERGY – THE POWER OF WATER

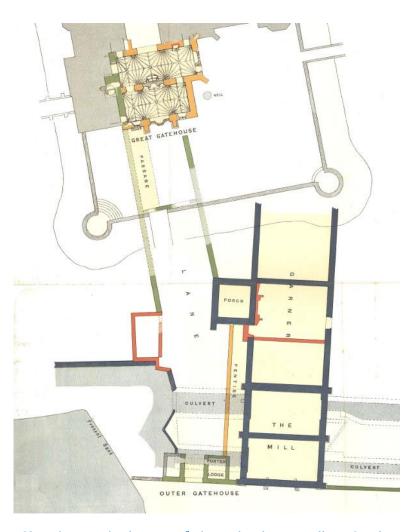
HISTORIC BEAULIEU

Our understanding of the current freshwater environment is greatly enhanced from an appreciation of its past. The Catchment Partnership commissioned Richard Reeves, as part of its work in the Beaulieu catchment on the Living Waters Our Past Our Future project to investigate its freshwater heritage. Here Richard reveals more fascinating history of how its watercourses were used.

As an estate, Beaulieu has always had a generous supply of water and this was not allowed to go to waste. Instead, the potential power in that water was put to good use, powering a grain mill as well as being harnessed for industrial scale activities.

The Corn Mills

The medieval corn mill at Beaulieu sat within the precinct of the Abbey and was 42ft east to west and 53ft north to south, with the southern wall forming part of the precinct walls. The mill pond has been identified as being medieval in origin, and its original location indicates that the mill was powered by a combination of water from the river and the tide. The water drove two undershot wheels, one of which may have driven a saw mill.



Plan showing the location of the medieval corn mill at Beaulieu, identified by excavations carried on by Hope & Breakspear in the early 1900s.

An essential part of any rural economy, the mill ground the grain grown on the estate.

During the medieval period Beaulieu mill produced four grades of flour, which was supplied to the bakery where it was baked into four grades of bread. These being the conventual bread for the monks, guest-house bread, clermatin and family bread. The latter being for the paid staff; a flour made from a mix of rye, barley, beans, peas and vetches.

The mill would likely have also provided another foodstuff in the shape of eels, many such mills incorporated eel traps to exploit the annual migration of eels heading downstream to their spawning area in the Sargasso Sea.

The mill had probably been moved to the dam of the mill pond by 1538 and was certainly there before the end of the 16th century. This mill, like its predecessor, possessed a pair of undershot wheels. As the mill was largely reliant on the tidal water for its power, it would usually run from $4\frac{1}{2}$ to 5 hours using one tide a day, but when needed would operate on both tides.



Postcard showing the later corn mill by the bridge in Beaulieu, early 1900s.

During the 19th century, a turbine was installed in place of one wheel, and the grinding gear was driven by electricity during the final years the mill operated as such. The remaining mill wheel is over 12ft in diameter with a width of $4\frac{1}{2}$ ft. The mill was last used in 1942 for grinding animal feeds by Norris & Sons, who still operate in the village.

The Fulling Mill

The medieval fulling mill at Beaulieu derived its power from the combined catchments of the Hartford Stream and Shireburn. The need for such a mill arose from one of the core tenets of the Cistercian Order, that of self sufficiency. This included the provision of garments, and with their expertise in sheep farming access to wool was not a problem. Most of the wool produced was sold as a raw material, though some was retained and processed on site so that they could produce their own clothing. On certain days of the year, the monks and lay brothers would be issued with prescribed items of clothing and their old clothing distributed amongst the poor. The Keeper of the Vestiary (clothing store) also controlled the fulling and weaving of cloth.

The fulling process itself followed on from weaving. On arrival at the mill, the cloth had an open weave and was greasy from the lubrication added to the yarn to ease weaving. Fulling involves two distinct processes, performed by pairs of mallets working in specially shaped troughs containing the fulling medium, such as fuller's earth, urine or soapy plant extracts. The mallets, operated by a water-powered camshaft, are alternately raised and dropped on the cloth as it lays in the trough.

The first process removed the grease so that the cloth would later take dye. It took place in the driving or hanging stocks. These were designed with a rounded trough base and mallets with widely spaced notches so that the cloth would move about freely when struck. The second process felted the cloth; tangling the fibres together to form a material that was dense and no longer showed the pattern of the weave. The felting took place in the falling stocks. Here the mallets had closely spaced notches operating in a more confined trough, so that the cloth was thoroughly pounded.

After fulling, the cloth was stretched out on tenterhooks, napped and sheared, then allowed to dry. The resultant cloth might be dyed before being compressed between hot iron plates and packed. It was perhaps to support the post fulling process that the large east-west range was originally constructed.

A fulling mill is recorded at Beaulieu in the surviving accounts of 1269/70 when it employed two men. Also included was the cost of a horse, raising the possibility that this early mill was always or occasionally horse-powered rather than water-powered. However, a water-powered fulling mill was in operation from the third quarter of the 14th century. To obtain the water power necessary to operate the mill, an overshot wheel was fed by a leat, which derived its supply from ponds created in valleys to the north-east. Here at least three, probably more, triangular ponds were formed by damming the valleys, a large one on the Hartford Stream (Boarmans Pond) and two smaller ones on the Shireburn (both since destroyed). Two of these ponds bore the appellation of Great and Little Fulmans Pond in 1718, clearly linking them with the fulling process.

The early phase of this mill was a relatively compact timber construction served by an overshot wheel. It sat at the end of the earthen bank which carried water from the leat to the mill, where the stone built remains of the later mill still stand. Much of the stonework appears to date from the mid-15th century. The large stone building attached to the mill that may have acted as a drying and weaving house, and a store to the fulling mill itself. Further internal changes were made in the late-15th or early-16th centuries and possibly represent a change in function. Documentary evidence indicates that fulling was still being undertaken at Beaulieu into the late-15th century, however, by the time of the Dissolution, fulling operations appear to have ceased, while later proposals to set up a new fulling mill seem to have come to nothing.



This building formerly called "The Winepress" was actually a range of buildings attached to the medieval fulling mill.

CLEAN WATER CAMPING

A LOOK BEYOND THE PITCH - WHAT THIS MEANS FOR THE NEW FOREST'S FRESHWATER LANDSCAPE

Personally you may love it or loathe it, but camping is a popular activity. It offers an opportunity, not only for people to reconnect with their families and friends but also to have a 'close up' experience with the landscape which they choose to 'pitch up' in. Each year thousands of holiday makers choose to camp in the New Forest, giving the local economy a boost and providing some well deserved down time from the busy lives people lead. But, are the campers and visitors aware of the special nature of the New Forest's wetlands, or possibly inadvertently damaging the very thing that attracts them here in the first place?

The catchment partnership undertakes regular catchment walkovers (a type of freshwater survey) to map opportunities and threats to the New Forest's rivers, streams, ponds and lakes. Part of the survey considers land use and activities which may impact on the water environment.

A pattern began to emerge:

- Land owners who came to us for advice on land management/water pollution issues, have begun to
 consider that their campsite business could be part of a package of works to reduce, reuse and recycle
 water (preventing runoff and reducing pressure on the local water environment).
- Visitors often make a beeline to water and there are clearly opportunities to help make them aware of the
 vulnerable nature of the habitats, and how to enjoy the New Forest's freshwaters without impacting on
 them negatively.
- Some motor home owners (day visitors) should be reminded about the safe disposal of waste water e.g. don't tip dishwater (plus detergents) into ditches causing nutrient pollution, think about where your water flows. There's an opportunity here to do more to get the key messages enforced.
- We were detecting an increase in nutrient pollution downstream from some campsites not enough to
 cause significant harm to wildlife, but more than desirable given the high status of New Forest's
 freshwaters. We identified the need to be more proactive at these sites to help with measures which could
 reduce the volume of nutrients entering rivers and streams.
- Increasing numbers of visitors just don't know why some types of water based recreation activities are bad news for the New Forest's fragile freshwater environments. Are we doing enough to spread the messages beyond the cattle grids?
- Rangers who interacted with the public didn't feel they had
 the tools and resources, with the key messages, and facts and
 figures about freshwater habitats, to talk confidently about
 the water environment in the same way that they could talk
 about other New Forest topics such as the history of
 commoning, or heathlands for example.
- How can we ensure that the need to protect and conserve the water environment, is given the same high profile as, for example, climate change. We'd like to see freshwater included in every policy document and plan prepared by the agencies responsible for the management of the New Forest.



Ditch water fouled by dish water, in a New Forest car park, where motorhomes park during the day.

WATERNEWS

The New Forest is one of the most visited National Parks in England. It is also the National Park with the highest proportion of designated land of international value for nature conservation in the country. The freshwater habitats in the New Forest are extremely important. With 75% 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.

The impact of recreation on watercourses and waterbodies (and the species they support) has been identified in the Site Improvement Plan for the New Forest's SPA/SAC; "The New Forest attracts high numbers of visitors annually and there is evidence that disturbance affects the breeding



People pressure at Hatchet Pond following relaxation of the restrictions imposed by Covid-19. Hatchet is one of the most wildlife rich small lakes in lowland England, supporting a suite of species vulnerable to disturbance.

success of SPA birds and SAC habitats through erosion, compaction and damage to vegetation and water bodies. Prior to 1972 it was possible to drive, camp or caravan anywhere on the unenclosed forest and a rapid increase in tourism led to considerable damage of habitats and resulted in the creation of 10 specified campsites and 134 car parks. Many of these campsites are located in sensitive areas and have impoverished vegetation due to trampling and infrastructure."

In addition to the small number of large capacity campsites which are on conservation designated land, there are increasingly a larger number of smaller low key sites (permanent and "pop-up" sites) located around the rural villages, with direct access onto the Forest but not located on designated land. The current known picture of camping and caravanning within the national park, is as follows:

- There are 82 camping and caravanning sites distributed across the National Park, equivalent to one campsite every three square kilometres.²
- These provide 6,566 pitch spaces throughout the open season, roughly 29 camping pitches per square kilometre.²
- Around 20% of the campsites (50% of pitch spaces) in the New Forest National Park are on land covered by the primary conservation designations (i.e. SAC, SPA, SSSI, Ramsar). Up to 57% of the campsites (20% of pitch spaces) are within 500m of the primary conservation designations.
- In addition, there are an equivalent 15.2 million days visits per year to the National Park.³

Through the Living Waters Our Past Our Future Project we identified the need to begin to review and pull together information on the issues and opportunities around camping and recreation in the New Forest specifically relating to the freshwater environment. This review will form the basis for a new project to showcase what's special about the Forest's freshwaters, and help local businesses and visitors alike to engage with and benefit from the conservation work underway to protect and restore the New Forest's freshwater landscape.

The review found that planning policy for the National Park acknowledges that there is already good provision for campers, and therefore seeks restraint in new sites. There are however gaps in the regulations. Advice and guidance for the camping and caravanning industry related to how sites operate, and what provisions they must provide, follows national guidance, butmay not acknowledge the sensitive nature of the New Forest as a protected landscape.

Discussions with stakeholders revealed strong feelings that visitors are unaware of the unique nature of the New Forest with recreational activities inappropriate to place with sensitive freshwater locations. There is also a growing concern over the levels of provision of waste water disposal facilities and the effect this may have on sensitive waterbodies. Of particular concern were campsite and caravan sites, and day visitors in motor homes which fall outside regulatory schemes. However, there is a strong view that there are plenty of opportunities to work with local business, increase New Forest landscape knowledge amongst visitors and campsite owners, engender a care and responsible usership, promote local tourist attractions and robust visitor locations to protect sensitive places.

The New Forest's Wilder for Water project 2021 - 2024

The New Forest Catchment Partnership have proposed a three-year project that will manage the threat of Protected Area deterioration posed by recreation and camping activities and raise awareness of priority freshwater habitats and species in the New Forest. The project sets out four main key areas of work:

Ensure appropriate regulation and guidance is in place to protect sensitive locations:

- New Forest statutory agencies to take stakeholders views into account when policy, regulations and local plans are under review.
- •Policy, regulation and local plans to recognise the importance and sensitivies of the New Forest freshwater environment.

Ensure adequate sanitation facilities at campsites that can accommodate busy periods:

- Investigate camping and caravan site sanitation facilities and waste water disposal are adequate for the location.
- Provide advice and guidance where necessary to site owners to ensure sanitation facilities are not impacting on freshwater habitats.
- Develop and promote a 'Clean Water Camping' award for owners and visitors alike, raising the standards of facilities, promoting responsible countryside access, and increasing understanding of the important freshwater landscape.

Undertake capital works to reduce and intercept nutrient rich runoff from entering streams in the New Forest and flowing downstream to the coastal waters:

- •Target sites where individual inputs are small but the collective runoff may lead to significant impacts
- Monitor outcomes and use as demonstration of best practice for the wider catchment, adjacent catchments, SE region and National Parks across the country.

Ensure appropriate behaviour, activities and footfall of visitors and dogs, at sensitive locations:

- Identification of sensitive locations impacts/recommendations.
- •Champion specific freshwater locations in the New Forest, create a narrative of their special qualities and 'how' they can be enjoyed.
- •Promote good practice through partners and visitors looking to recreation and engagement staff to advocate on our behalf amongst the public.

We are currently seeking funding from partners and hope to begin work in Spring 2020. The full findings of this report will be uploaded to the Freshwater Habitats Trust website in the near future.

SPECIES PROFILE: CURLEW

THE ICONIC NEW FOREST WADING BIRD

Curlews are a relatively long-lived wading bird, the oldest recorded at over 30 years. The UK breeding population of $\sim\!60,000$ pairs is mostly focused in upland areas of northern England and Scotland, but the relatively small English lowland population is important because of its wide distribution. The New Forest holds up to 10% of this remaining lowland population, and is the most south-easterly in the UK. If it was lost then the distribution map would see a significant retreat to the north and west, and a large number of residents and visitors in the New Forest would lose the opportunity to experience the evocative calls of this wild icon.

Curlews typically arrive back on territory in the New Forest from mid-March onwards, with preferred habitats including bog, valley mire, and wet heath. However, breeding birds will also commute to adjacent pastures and coastal sites to feed, highlighting the importance of connected landscapes for this species. Nesting begins in late April, and for about a month the incubating bird (mostly the female) sits on the eggs in all weathers keeping them at a relatively constant temperature of about 20°C. A paper recently published by the New Forest Curlew Project co-ordinators in the journal British Birds, describes how incubating curlews across the southern New Forest remained on the nest during a severe thunderstorm in May 2018, and actually increased the temperature of the clutch as the air temperature plummeted during torrential rain, in a newly observed behavior termed 'hyperincubation'.

Any surviving clutches usually hatch in late May or early June, and the chicks then have to avoid avian predators such as Ravens, Carrion Crows and Buzzards for a further month or so if they are to survive to fledging. By the end of July the breeding grounds have been vacated; some New Forest Curlews then winter locally in the Solent and elsewhere in southern UK, but at least one colourringed bird from the northern New Forest spent its winters on the French coast near La Rochelle.



Curlew wading through wet heath. Birds arrive from early April to late March and establish territory. During breeding season adults feed on earthworms, beetles, spiders and caterpillars



Curlew eggs are incubated normally from late April to late May



Chicks hatch late May to early July. Chicks feed on surface insects and spiders

Photos © Wild New Forest, Andy page, Shane King (respectively)

PARTNER PROFILE: DOM LONGLEY

ENVIRONMENT AGENCY SENIOR ENVIRONMENTAL MONITORING OFFICER

I remember being told by my ten-year old school friends "You're so obsessed with fish — you'll probably marry one". They were right that I thought about little other than fish and fishing, but wrong (thankfully) about my marital future.

I think there are two things about fish of all kinds that were always at the heart of my obsession: firstly, they're so utterly free: they move in three dimensions more effortlessly than any other creature and glide through life, unencumbered by claws, hands, feet or beaks;



secondly, there's a kind of primal jealousy that they can live, breathe and disappear underwater. For those reasons, I just can't get enough of working in and around all kinds of waterscapes, trying to unravel the mysteries of fish.

I didn't go to university until my late twenties and, having led a fairly nomadic existence till then, was ready to give the Environmental Protection degree my absolute all. Summers had to be spent on work placement and I landed a job as a "summer fish survey assistant" with the Environment Agency in Dorset — they had to repeat the job description to me a couple of times before I'd believe that travelling all over Wessex catching fish actually constituted a job. Just as my third summer placement was coming to an end, a permanent job came up with the Hampshire "Fisheries, Ecology & Recreation Team" and twenty years later, I'm still effectively in a similar post. My job title now is "Senior Environmental Monitoring Officer", which reflects the fact that I've done so many thousands of fish surveys and sifted through so much fish data that I've inevitably gained a bit of knowledge on the subject, although I love to do aquatic plant surveys too. For the past five years, I've managed our salmon counters on the Test and Itchen, which is fascinating and a real privilege.

I've left the EA to broaden my horizons on two occasions: once to spend a year with the Game & Wildlife Conservation Trust radio-tracking trout on Dorset chalk streams and Welsh mountain rivers and, later, to work in commercial consultancy for a couple of years as Senior Consultant for a river restoration company.

Having grown up in Bournemouth, I've been familiar with the New Forest from a young age but twenty years of monitoring its fish populations have shown me so much that I would never have otherwise seen. At the heart of this relationship are sea trout — an enigmatic species that ebbs and flows between the gravelly Forest headwaters, the estuaries and the open sea, connecting them all. It's important to me that sea trout continue to thrive in Forest streams not only because they've become a touchstone in my own life but because they represent the essential continuum between all the terrestrial and submerged landscapes that lie within their range: from mire to saltmarsh; woodland to kelp forest. Because of this, I find them especially life-affirming.

At no time in my career have I felt more like part of a collective when it comes to protecting the wetlands and watercourses of the New Forest – I am troubled by signs of stress in Forest fish populations but it's good to know that alliances between partner organisations are strong.

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: GSTRIDE@FRESHWATERHABITATS.ORG.UK

KEY PARTNERS INCLUDE:































To subscribe click here

Send in your news - please email Gemma at gstride@freshwaterhabitats.org.uk