

Welcome to our summer newsletter. We have decided to focus on key issues for our newsletters. This newsletter is all **the beaver debate**. This is an issue that polarises people, and as we welcome debate, we have asked key partners to summarise their views. We challenged them to write a page each. We finish with **other news** from the Island's rivers and streams.



Photo credit: Nick Upton

MATTHEW CHATFIELD—CHAIR OF THE ISLE OF WIGHT BEAVER INTRODUCTION PROJECT STEERING GROUP.



It's easy to spot people who are already involved in the ongoing debate about the release of beavers on the Isle of Wight. These are people to whom I can introduce myself as the independent chair of Isle of Wight Beaver Introduction Project Steering Group without them breaking into giggles. Once that nudging and winking is out of the way, there remains a serious matter to be discussed. Serious enough, in fact, that a group of people from the Island and beyond meets regularly to consider it.

The group was set up by the Hampshire and Isle of Wight Wildlife Trust in early 2022 to support the process of applying for a licence to release beavers into the wild on the Isle of Wight. It's important to stress that the group won't be making any decisions about the release of beavers - that's a statutory matter which will be decided by Natural England on behalf of DEFRA. At present it is illegal to release a beaver into the wild or an enclosure without a licence. There is no such licence in force on the Isle of Wight and no licence application has yet been made.

The Wildlife Trust has made clear its intention to apply for such a licence, and as a part of that it has decided to set up a steering group to allow engagement and debate. To ensure that this is not directed by the Wildlife Trust, the group is led by an independent chair, which is me. I have plenty of experience of ecology and wildlife on and off the Isle of Wight, and even worked on some previous reintroduction projects. But I have never been involved in beaver release schemes and knew little about the animal until I started this role. So I had no strong feelings one way or the other.

The steering group has explored evidence of the impact of beavers on landscapes and landowners. Looking at the media coverage of beaver introductions across the rest of the UK one might be forgiven for imagining that it is a no-brainer: why would we not want these cuddly ecosystem engineers rewilding our landscapes whilst we sleep? Well, maybe we do. But if beavers are released to deliver those undeniable benefits, we must also be ready to meet the costs and challenges that wild beavers can bring.

Members of the steering group have been to the mainland to explore landscapes where beavers have been released, and speak to those working the land around them. Some landowners are delighted by the beavers on their land. Others are concerned by issues such as damage to paths, ditches, banks and crops. The effect on statutory infrastructure is also something we have considered. For example highways and flood defences can be affected by beaver activity, either directly, by burrows, or indirectly, by raised water levels. If the Wildlife Trust does indeed submit a licence application for the Isle of Wight these are all issues that will need to be considered by Natural England before deciding the application.

The steering group will also consider the question that is perhaps the most difficult to answer: why should we release beavers here, on the Isle of Wight, specifically? It seems that wild beavers in the rest of the UK is a *de facto* reality, or soon will be. Licence or not, they are out there and we will get used to that fact. But the Island is different - beavers will not come here unless we actually actively release them. Is this Island distinctiveness something worth conserving? We already have an unusual mammal fauna that is missing breeding populations of species that are widespread on the mainland: e.g. deer, grey squirrel and otters.

The steering group will be discussing these and no doubt many other issues for a while yet. It's a fascinating process, which has some way yet to go. I have learnt a lot about beavers and about people - I am looking forward to finding out what the Isle of Wight Beaver Introduction Project Steering Group explores next.

Why Beavers on the Isle of Wight?

Hampshire and Isle of Wight Wildlife Trust's Perspective

The Eurasian beaver is a native species that has recently been reintroduced in Britain after being eradicated by hunting approximately 400 years ago. Beavers are now thriving across the UK both in the wild and within enclosures, with around 500 beavers estimated to now be living in England.

These beaver populations have been well studied, with evidence showing that the impacts that beavers have on the surrounding landscape through coppicing trees and building dams can be beneficial in a number of ways. By creating complex wetlands of stored water in ponds behind dams, beavers have been shown to create habitat for many wetland species, leading to increases in abundance and diversity of flora and fauna that have otherwise seen declines through the loss of wetlands through floodplain drainage. Beaver dams have also been shown to deliver several ecosystem services that have direct benefits to humans. Beaver dams can help slow the flow of streams, leading to lower peaks during heavy rainfall and reducing flash flood risk downstream. Wetland creation can also be beneficial during dry periods, when stored water slowly trickling through dams can help maintain stream flows in drought, that can be used for abstraction for agriculture and drinking water supplies. Their dams also act to filter water, trapping silt and other pollutants including nitrates and phosphates, leading to better water quality downstream. Beavers have also been shown to draw people to view them and their constructions through their novelty, charisma and ecosystem engineering, leading to economic benefits from wildlife watchers and ecotourism.

These benefits were outlined in the River Otter Beaver Trial Science and Evidence Report which informed government policy, whereby beavers were given leave to remain in England and were granted native species protected status. As such, HIWWT would like to help beavers return to landscapes where they can deliver these benefits, such as on the Isle of Wight where issues with water quality, flash flooding, and water availability in the summer months could be alleviated. The Eastern Yar river in particular, flanked as it is by nature reserves



throughout the lower catchment from Newchurch down to Brading Marshes, would provide ample space for beavers to become established with minimal disturbance or conflict, leading in time to a sustainable population that could deliver ecosystem services for downstream communities along the river such as Newchurch, Alverstone, Sandown and Brading.

Where beaver impact outside of nature reserves may be unwelcome, the Trust is committed to a thorough monitoring and management programme, and indeed would be obliged to if a licence application were to be successful. By proactively working with landowners and other stakeholders, the Trust would work to protect valued trees and crops from foraging, manage dam heights to prevent localised flooding, and monitor for and infill burrows that represent a health and safety risk. Help for landowners in Scheme living alongside rivers with beavers is now available, with capital grants available from government to protect permanent crops and individual trees with fencing. Government's new Environmental Land Management Schemes are aiming to provide public money for delivering public goods of the type that beavers deliver, and with new payments for the creation of riparian buffers to incentivise landowners to create space for natural processes along rivers, such support can help promote tolerance and coexistence to allow wildlife such as beavers to live alongside us again.

The Unintended Consequences of Beavers—Caroline Knox, landowner

Beavers have been living in Tayside in Scotland for 20 years, initially escaped from two separate private collections at opposite ends of the catchment they have spread across the area, creating their territories, and leaving their mark as the population expands. Tayside is 2000 square miles against the Islands 150. It hosts the mighty River Tay which at 120 miles in length dwarfs the Eastern Yare 12 miles.



From these initial escaped beavers the population has reached 50 miles from the original site and it is apparent from riverside walks how active they are. Tree felling and also ringing where the trees will die slowly are common.

As of course is damming, burrowing and foraging.



Scotland has been living alongside a rapidly expanding population of beavers for 20 years, the costs, responsibilities and control methods for those who need to protect their homes and livelihoods continue to be debated.

I feel that if conflict can arise in a huge, sparsely populated catchment then the consequences of releasing beavers on the Island will be multiplied and we will be spending public money to deter and repair footpaths, cyclepaths, roads and rail as we adapt to living with an animal with such incredible tenacity and skills in a busy modern environment.

Tayside, like the Arretton Valley is an area growing fruit and vegetables in low lying, drained farm land. The effects of damming a drainage ditch will be wide spread as water logging causes crops to fail and machinery to be stuck. The burrows can be very deep and on our sandy land can collapse under the weight of machine, cow or horse.

The members of the farming community in Tayside that I spoke to each estimated the costs of managing beavers of £2-5k per annum, not accounting for land or crop loss through waterlogging.

While beavers are now free living in England and will, as proven in Scotland, continue to expand across the country here, on the Island we are protected by the salty Solent. The only feasibly way breeding populations can arrive here is by human intervention and I would urge the HIWWT to pause. Let's see how England adapts, where the costs fall, what are the unintended consequences of living with beavers.

We can act in haste and repent at leisure or, we can take time to watch and learn then reassess the validity of introducing an animal that has no history of being here to a very modern landscape

Beaver introductions on the Island—Dr Colin Pope, Ecologist

The prospect of introducing Beavers into the Island has generated much interest and enthusiasm. Personally, I am conflicted with respect to Beaver introductions on the Island. I can see plenty of benefits. I have no doubt that an established population of Beavers on our water courses would be of great benefit to the functioning of our historically over-engineered main rivers. Sadly, our Island rivers are not in the best of condition. Beaver dam construction is likely to improve water quality by trapping suspended sediment, nutrients and contaminants. Wetland creation resulting from dam construction is likely to alleviate flooding by smoothing out peak flows during heavy rainfall making downstream flows easier to manage and reducing the risk of flooding. Moreover, further wetland creation would undoubtedly benefit some other species of plants and animals and therefore contribute towards improving biodiversity. All of these are good things which are unlikely to otherwise happen.

On the other hand, I have concerns about introducing species on the Island which have not naturally occurred here for many hundreds of years. One of the things that makes islands special is that they can have plants and animals that do better on an island than on the mainland. Equally important is that islands naturally lack many species that may be common on the mainland and these differences are important to preserve. For instance, on the Isle of Wight we have a stronghold for Red Squirrels which have been lost from most of the mainland. By the same token, our Island is more or less lacking in wild deer, Nuthatches, Tawny Owls, native Solomon's Seal and Herb Paris. These are just few examples of the species that make the Island's biodiversity special and unique.



I said that I was uncomfortable with the introduction of species that have long disappeared from the Island. The White-tailed Eagle is a good example of this. My feeling was that this huge bird did not fit with the intimate, small-scale landscapes of the Island and could have deleterious impacts on native species. However, I have been proved wrong. The eagles have been welcomed on the Island and have settled in to sites where they can survive alongside other species. Moreover, each individual has a huge range and can find the most

suitable places to establish breeding populations across the south coast of England and further afield.

My concerns with Beavers are that the Island is heavily populated with an extensive road network. Beavers are probably best suited to river courses which are largely natural and wild. There are virtually no extensive wild areas on the Island and so the impacts of Beaver dam construction are likely to impact upon many landowners. Some will welcome them; others will not. Many of the fears may well be unfounded but there will undoubtedly be some locally adverse impacts. I am also concerned about the impacts of Beaver activity on our few small high quality botanically rich wetland sites. These tend to be in the upper reaches of smaller tributaries of our main rivers and may be beyond the reach of Beaver activity.

At the end of the day, Beaver introduction is a matter of balance and assessing whether the advantages outweigh the disadvantages.

AND OTHER NEWS!

Following our last newsletter that focussed on combined sewer discharges, Water UK publicly apologised on behalf of the water companies for not addressing sewage overflows sooner and pledged to invest £10bn over 5 years to stop a significant number of sewage spills. They also promised to make data publicly available in a format that would enable it to be collated at a national scale, which goes beyond their legal obligations, and to support communities in creating 100 designated bathing waters.

The Island Rivers Partnership includes Southern Water and we have been working alongside them to support their Pathfinder Project—more details of which can be found at <https://islandrivers.org.uk/pathfinder/>

There will be a big investment on the Island and Pathfinder involves a number of approaches. However, as Keith from Southern Water will tell you, the problem is that there is **too much water** in the system. Their interventions can only go so far, and then it is up to the rest of us to not pave our driveways with impermeable material, to not discharge large amounts of water from rooves into the foul sewer and to 'slow the flow' with gardens.

GET DIRTY WITH US!

This is Ken. Ken want's you to come and join our Himalayan balsam team.

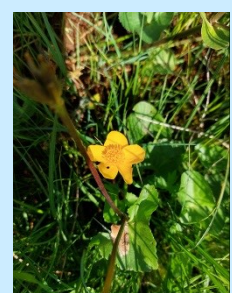


We will be out at least 2 days each week throughout the summer, its really good fun, and you don't need waders like Ken—he's hardcore. Most of the team just wear wellies and old clothes. Find out more about the project here: <https://islandrivers.org.uk/projects/plant-positive-invasive-non-native-species-removal/>

FROGLANDS STREAM

As part of the river habitat enhancement work on the Lukely Brook that Southern Water have been carrying out (see past newsletters), Froglands Stream was realigned at Clatterford last week.

Sometime in the dim and distant past the steam had been diverted to the edge of the field. It is now free to meander across the beautiful flower meadow that is loved and protected by local people.



GET INVOLVED!

ISLAND RIVERS CATCHMENT PLAN This guides the work of Island Rivers and is reviewed annually.

<http://www.islandrivers.org.uk/island-rivers/island-rivers-catchment-plan/>

There is even an interactive map of our projects:

<https://islandrivers.org.uk/map-of-island-river-partnership-projects/>

This word cloud reflects the contents of our Catchment Plan.



VOLUNTEER FOR PRACTICAL WORK Details of opportunities can be found here:

<http://www.islandrivers.org.uk/love-your-river/get-involved/>

ISLE OF WIGHT INVASIVE NON-NATIVE SPECIES PLAN Details threats to the Island:

<http://www.islandrivers.org.uk/isle-of-wight-ias-action-plan-feb2020/>

VISIT OUR WEBSITE It's a massive source of information on the Island's rivers, activities, issues etc

<http://www.islandrivers.org.uk>

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<https://www.facebook.com/islandrivers>



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The organisations helping to steer this project are the Environment Agency, Natural Enterprise, Hampshire and Isle of Wight Wildlife Trust, Isle of Wight AONB, Isle of Wight Council, Southern Water, Natural England, CLA, NFU, Isle of Wight Estuaries Project, Solent Forum, National Trust, Marine Management Organisation, Bembridge Harbour Users Group and Arc Consulting.

FOR FURTHER DETAILS ON ANY ITEMS IN THIS NEWSLETTER CONTACT :

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