



## Beaver Advisory Committee for England (BACE)

### Meeting Summary & Conclusions

6<sup>th</sup> November 2018

Knepp Castle Estate

#### Delegates

Elly Andison (The Environment Agency)	Tor Lawrence (Sussex Wildlife Trust)
Kevin Austin (The Environment Agency)	Alicia Leow-Dyke (Wildlife Trusts Wales)
Mhari Barnes (National Farmers Union)	Leigh Lock (RSPB)
Cath Bashforth (The Forestry Commission)	Ann Maidment (Country Landowners Association)
Richard Brazier (University of Exeter)	Cheryl Marriott (Cornwall Wildlife Trust)
Henri Brocklebank (Sussex Wildlife Trust)	Rob Needham (University of Southampton)
Ellie Brodie (The Wildlife Trusts)	Andrew Pollard (Dorset Wildlife Trust)
Peter Burgess (Devon Wildlife Trust)	Christopher Price (Country Landowners Association)
Charlie Burrell (Knepp Castle Estate)	Rina Quinlan (Knepp Castle Estate)
Peter Cooper (Derek Gow Consultancy)	Archie Ruggles-Brise (Spains Hall Estate)
Kevin Cox (RSPB)	Chloe Sadler (Kent Wildlife Trust)
Tom Dearnley (The Forestry Commission)	Jane Sears (RSPB)
Alastair Driver (Rewilding Britain)	Tom Shelley (Cornwall Wildlife Trust)
Mark Elliott (Devon Wildlife Trust)	Julian Smith (Balcombe House)
Nick Fox (Countryside Alliance)	Fran Southgate (Sussex Wildlife Trust)
Martin Gaywood (Scottish Natural Heritage)	Jonathan Spencer (The Forestry Commission)
Neil Gibson (Dorset Wildlife Trust)	Ginny Swaile (Natural England)
Derek Gow (Derek Gow Consultancy)	Mike Townsend (Woodland Trust)
Penny Green (Knepp Castle Estate)	Isabella Tree (Knepp Castle Estate)
John Gurnell (Queen Mary University)	Martin Varley (Cheshire Wildlife Trust)
Paul Haddaway (Kent Wildlife Trust)	Ian Waller (National Farmers Union)

Matt Heydon (Natural England)

Sarah Webster (Defra)

Rachael Hill (The Environment Agency)

Tony Whitbread (Sussex Wildlife Trust)

Jo Hodgkins (National Trust)

Rebecca Wilson (The Forestry Commission)

Emma Hutchins (Wildfowl & Wetlands Trust)

Chris Jones (Woodland Valley Farm)

## **Apologies**

Mark Lloyd (The Angling Trust)

Claire Robinson (National Farmers Union)

Mike Swan (Game & Wildlife Conservation Trust)

Karen Taylor (Scottish Natural Heritage)

## **Objectives**

This meeting was designed as an opportunity for key stakeholder groups to be updated on the current status of beavers in England and to facilitate discussion of a strategic outlook on the species' future in the country. Current position statements on beavers were provided by Natural England and Scottish Natural Heritage, while presentations on the progress of researchers and conservation groups significantly involved with the species were delivered. An open forum allowed individual views to be discussed and debated in order to determine the most important factors regarding a strategy for beavers in England.

## **Presentations**

### **Session 1**

1. Beavers in England - Matt Heydon (Natural England), Kevin Austin (Environment Agency) and Ginny Swaile (Natural England)
2. The Return of an Ecosystem Engineer, the Beaver, to Scotland - Martin Gaywood (via teleconference, Scottish Natural Heritage)

### **Session 2**

3. Quantifying environmental impacts of beaver and modelling impacts across intensively managed landscapes - Richard Brazier (University of Exeter)
4. The response of a brown trout population to Eurasian beaver habitat modifications in Northern Scotland - Rob Needham (University of Southampton)

5. Lessons from the River Otter Beaver Trial – Mark Elliott (Devon Wildlife Trust)

### **Session 3 (Quickfire Presentations)**

6. Beavers in the Greathough Brook, Forest of Dean, Gloucestershire. A nature based solution? - Rebecca Wilson (Forestry Commission)
7. Cornwall Beaver Project - Chris Jones (Woodland Valley Farm) and Cheryl Marriott (Cornwall Wildlife Trust)
8. Beavers in Cheshire - Martin Varley (Cheshire Wildlife Trust)
9. Beavers at Knepp... coming soon? - Fran Southgate (Sussex Wildlife Trust)
10. Beavers at Spains Hall Estate - Archie Ruggles-Brise (Spains Hall Estate)

### **Presentation summaries**

1. There are currently at least 27 beaver site records from England comprising of both licensed and unlicensed populations either free-living or enclosed, with a further 13 licensed projects proposed or in development. In England there is currently no protective legislation for the species besides basic welfare provisions set by the Animal Welfare Act. All beaver release proposals require a license, which in 2017 was extended to include fenced releases. Natural England would expect any further released animals to be sourced from captive-bred or wild populations originating from countries that are *Echinococcus multilocularis* (EM) free.

A strategic approach to beaver reintroduction would see the animals released in areas where they were least likely to create conflicts with other land uses, and would be accomplished in partnership with a wide variety of user groups utilizing an evidence-based approach. The key decision point for the future of beavers in England would be the conclusion of the River Otter trial in 2020. Natural England would make a recommendation based on the outcome of this trial alongside other projects and expert advice.

The Environment Agency is supportive of beaver reintroduction provided it had been fully benefit/risk assessed and subject to research and consultation. They could provide a partnership role in training, advice and communication.

2. Scottish Natural Heritage remains actively involved in the collation of research and the support of existing beaver populations in Knapdale and Tayside. Since the Scottish Parliament decision in 2016, these populations are allowed to remain and expand their range naturally, provided they are managed when conflicts occur. Other releases have been prohibited.

Strategic environmental and health risk assessments have been completed, and a management framework is being developed with partners is now almost complete. It is planned to create a Scottish beaver mitigation scheme in the future and form a technical to develop and trial new mitigation techniques.

3. In the 7 years since two beavers were introduced to a 3ha enclosure in Devon, dramatic effects in the site's hydrology continue to be recorded by the University of Exeter. These include a 20-fold increase in surface water, 30% reduction in peak flow below the study area, and up to 70% of upstream sediment being held within the site. Models have been developed to map potential beaver habitat and the capacity for catchments to support dams. Such techniques are precise and can be applied on a national scale, creating a valuable tool to predict where conflicts are likely before they can occur.
4. There are both potential benefits and concerns to the impact of beaver dams on fish, particularly salmonids, and a greater understanding of their impact is crucial. At a Scottish site containing 5 beaver dams and associated ponds and a control non-modified site, brown trout were tagged and their movements monitored. Although further work is required on the issue of beavers and fish migration, in this study beaver ponds held a higher abundance of trout which tended to be larger and of a greater range of age classes, and motivated dam passage was observed and likely aided by the presence of side channels.
5. The River Otter Beaver Trial (ROBT) in Devon is the only licensed wild beaver population in England, with the trial phase coming to an end in 2020 when the status of this project (and wider beaver populations in England) will be reviewed based on its outcomes by Defra. An estimated 8 family groups currently occupy the catchment. A core part of the trial has been education and awareness raising, with over 262 events been carried out since the trial's inception. A management strategy is in place for the entire catchment, but so far conflict potential has been very low. Modelling of Dam Capacity has been trialled identifying areas where conflicts with existing infrastructure could be anticipated. Impacts on fish populations are also being assessed and a protocol for managing conflicts with fish passage is also being developed. The ROBT Steering Group comprises multiple stakeholder groups representing various land uses, and the framework of the ROBT showcases that with a robust, funded management strategy, a similar

model could be applied to catchments across England. This can be adapted for the contexts of different catchments, and Devon Wildlife Trust are developing policy recommendations on key issues for beaver restoration.

6. A pair of beavers was introduced into an enclosed site at the Greatbough Brook above Lydbrook in the Forest of Dean this summer. This Forestry Commission-lead project was created in response to downstream flood risk in Lydbrook as a result of poor drainage systems, and was utilized as part of a suite of Natural Flood Management (NFM) initiatives. Baseline monitoring of hydrology and ecology was conducted prior to the beavers arrival, and since their release 7 dams have been built in the space of 3 months.
7. The Cornwall Beaver Project was set up by organic farmer Chris Jones at Woodland Valley Farm in response to the need for cost-effective NFM given recent flood events in the village of Ladock downstream. A partnership with Cornwall Wildlife Trust was formed, and baseline monitoring of hydrology and wildlife started in 2015. A pair of beavers were released into an enclosed area in June 2017, and through the construction of 7 dams and significant felling, reductions in flow and increases in biodiversity are already been seen. Group visits and education are a core part of their work, with over 1,000 visitors so far from different land use interests.
8. Earlier proposals to bring beavers back to Cheshire were refused, including on a site that was designated SSSI status. The current proposal is a landscape-scale scheme in partnership with the Shropshire Wildlife Trust's Meres & Mosses Project, and a Water Environment grant for the project has been submitted. Previous experience from these proposals shows that consideration of designated sites in relation to beavers should be a facet of a future strategy.
9. A proposal to introduce beavers into the Knepp Estate is being developed with Sussex Wildlife Trust. A large sub-catchment of the Adur has been identified for an enclosed release in the first instance and hydrological and ecological monitoring is underway. The next step will be to apply for a license application.
10. The Spains Hall Estate in Essex are investigating several NFM initiatives, one of which is beavers. In the space of a year, SHE have secured the

funding required and received a license to release the beavers from Natural England. It is subsequently hoped to have a pair of beavers released into a fenced area in Spring 2019. The site consists of two tributaries, one where the beavers will be released and the other where engineered NFM methods will be deployed, allowing a direct comparison as to which if any is more efficient.

## **Key Conclusions**

- Landowners need to be financially supported to allow beaver-engineered wetlands to develop on their land. Natural Flood Management (NFM) funding can support beaver projects, such as through local levy schemes, and there lies potential for this in the new Environmental Land Management Schemes (ELMS).
- Landscapes where the greatest environmental benefits from beavers can be gained should be prioritised as reintroduction sites.
- Management plans must be catchment specific, particularly in regard to areas where conflict would likely be high such as regions of low-lying farmland.
- Licensing of enclosed projects ensures owners have a responsibility to manage and recapture in the event of escapes. Caution should be erred on an over-prevalence of enclosures as opposed to free-release as they don't demonstrate the practicalities of living alongside beavers, but they can be important sources of captive-bred animals for licensed wild release.
- A national strategy/management plan should be completed prior to beavers becoming more widespread in England. Education and mitigation/management advice should be consolidated and be available to communities before conflicts can rise to a significant level.
- Sensible protection that complies with international obligations would be granted if beavers are allowed to remain in England following the 2020 ministerial decision date.
- A robust and flexible approach to management would be needed where conflicts occur. It needs to be established who would be responsible for advising and performing this function – the Deer Initiative was discussed

as a possible model for how for how beavers might be managed, with a potential role for other NGOs and volunteers.

- While the benefits of beavers to flow rate, sediment trapping and biodiversity are being made clear by research, the impacts on fish populations and migration in the British context remains one of the largest data gaps that requires further understanding.

### **Actions**

- BACE should develop a set of Core Principles for the Management of Beavers in England (and Wales) that could provide consistency across new catchments where beavers might be re-introduced, learning from similar work being carried out as part of the River Otter Beaver Trial, Scottish Beaver reintroductions and European Partners.
- BACE or Statutory agencies should carry out a prioritisation of catchments for determining licence applications, identifying catchments where releases might not be encouraged