



Otter Predation – Finding Ways Forward
AT & IFM Joint Workshop. Friday June 8th 2018
Summary & Key Outputs

Delegates

Paul Coulson (IFM)	Shaun Leonard (Wild Trout Trust)
Iain Turner (IFM)	Matthew Pettitt (Embryo Angling Habitats)
Andy Pledger (Fisheries Scientist)	Rob Hughes (Angling Trust Carp Consultant)
Rob Britton (Bournemouth University)	Liz Chadwick (Cardiff University)
Dave Webb (UK WOT)	Tim Small (British Trout Association)
Pete Reading (Barbel Angler)	Derek Stritton (Carp Society)
James Champkin (Angling Trust)	Chris Burt (Carp Society)
Martin Salter (Angling Trust)	Jake Davoile (Angling Trust)
Mark Owen (Angling Trust)	Richard Bamforth (Angling Trust)
Mark Lloyd (Angling Trust)	Mark Walsingham (Carp Fishery Owner)
Mark Wilton (Angling Trust)	Eric Edwards (Specialist Anglers Advisory Group)
Paul Floyd (RACG/Fishery Predation Survey)	Stuart Morgan (Barbel Angler)
Shaun Nurse (RACG/Fishery Predation Survey)	Nigel Shelton (Natural England)
Tony Gibson (PAG)	Tom Fuller (Defra)
Tim Paisley (PAG)	Dai Gribble (Angling Trust Specialist Consultant)
Roger Handford (EA)	
Graham Scholey (EA)	

The objectives of the workshop were to:

- To highlight myths and facts around the impacts of the otter revival on fish and fisheries.
- To examine practical measures that can be delivered.
- To assist IFM and AT to produce a new and useful guide to fishery owners and angling clubs.
- To look at sensible policy reforms that could be considered.
- To consider existing research from Cardiff and Bournemouth Universities and possible new areas for study.
- To allow the EA, NE and others to set out their positions.
- To consider other impacts on fish populations including: habitat loss, barriers to migration, siltation of spawning gravels, pollution and abstraction.

Presentations

1. Environment Agency Policy and Position - Roger Handford & Graham Scholey
2. UK Wild Otter Trust – Dave Webb
3. Predation Action Group – Tony Gibson
4. Cardiff University Otter Project – Dr Liz Chadwick
5. Bristol Avon Impact Study – Stuart Morgan
6. Fishery Predation Survey Project – Paul Flloyd
7. Impacts of otter predation on trout farms – Tim Small
8. Bournemouth University Study on Hampshire Avon Otter Diet (Rob Britton – presented by Pete Reading)
9. Can habitat quality influence predation risk? The case of spawning gravels and fish egg predation (Andrew Pledger, Loughborough University)
10. Otter Impacts on Stillwater Fisheries (Chris Burt)
11. Fencing and Deterrents – Matthew Pettitt
12. Utilising the Angling Improvement Fund (Mark Wilton)

These presentations can be downloaded [here](#).

Some comments outlined below were from individual participants and do not necessarily reflect the views of all those present and the organisations they represent.

Key Points

1. The Environment Agency experience frequent criticism on social media for their lack of action in mitigating the impact of otter predation on fisheries, even on completely unrelated matters. The EA never organised the release of captive-bred otters, but they are the lead organisation for otter conservation under the Government's Biodiversity Strategy, chair the UK Otter Biodiversity Action Plan Steering Group, and have occasionally cited the recovery of the otter populations as an indicator of improving water and habitat quality. The EA provides funding for otter fencing through the Angling Improvement Fund (AIF).
2. The UK Wild Otter Trust (UKWOT) is an entirely separate body to the organisation that oversaw releases of captive-bred otters in the 1990s. The UKWOT is a body for the conservation of the Eurasian otter and organises limited rehabilitation of injured and orphaned otters, although the numbers are very small. The UKWOT was integral in organising the CL36 Class Licence from Natural England for the humane capture of otters trapped within fenced fisheries.
3. Road Traffic Accidents of otters are increasing in frequency, and hundreds of otters killed by RTAs are now reported to the EA, Cardiff University Otter Project and UKWOT every year.
4. The vast majority of otter recolonisation is natural from remnant populations, and not from the releases of captive-bred otters undertaken in the 1990s. Descendants of these individuals can be identified genetically through the presence of a specific allele. Data from Cardiff University have shown that the original captive bred otters released in the late 90's failed to spread significantly from their release areas.
5. Otters never experienced top-down pressure from other predators that have since been removed from Britain. The recovery seen in the otter population in England in recent years primarily a result of the decline in the levels of environmental contaminants such as organochlorine pesticides and PCBs. The population will recover to a carrying capacity dictated by available food supply; locally, human intervention is likely to have influenced this carrying capacity, e.g. through the increase in man-made still waters stocked with fish.

6. Spraint analysis is a reasonably accurate way to assess otter diet, and fish species can often be identified to species level if their vertebrae are present. However, it has limitations – the vertebrae of larger fish are unlikely to be consumed by otters and therefore they may not show up in faecal samples. DNA and scale analysis have also been carried out to provide a clear picture of the diet of otters.
7. Otters are claimed to have had a severe impact on the barbel population of many rivers, including the Bristol Avon. However, alternative causal factors of barbel decline include significant summer floods in the coinciding years (2007) and an ageing population of large, naive barbel that have been failing to recruit successfully over many years. On other rivers, such as the Hampshire Avon, the presence of otters seems to have had little impact on the barbel population and on some rivers, otters and barbel seem to coexist. Large barbel are particularly vulnerable when torpid in cold winters.
8. The Fishery Predation Survey Project was set up to help establish the abundance, distribution and impacts of all predators, including otters. Several hundred reports have been submitted thus far.
9. Although it is often said that otters are still being bred in captivity and released in England, there is no evidence for this at all. Eurasian otters are actually very difficult to successfully breed in captivity, and there is no incentive to do this. Eurasian otters are also rarely kept in captivity compared to some other species of otter. The sudden arrival of a number of otters on a stretch of river where they have been absent for many years may seem to anglers to be the result of releases, but it can often simply be the result of one or more family groups becoming more mobile and visible as young reach a certain age and are able to follow their mother.
10. Some degree of regulatory control for the care and release of rehabilitated otters could be considered, although responsible rehabilitators already follow a code of practice. The numbers of otters rehabilitated and released back into the wild is very small in relation to the numbers of wild otters, although the total number is unknown and regulatory controls may provide some clarity. The perception that large numbers of otters are being released each year is however untrue. The code of practice developed by the RSPCA includes the guidance that rehabilitated otters should if possible be returned to the catchment where they were found. If not reared and rehabilitated with care, the behaviour of rehabilitated otters might be markedly different to wild individuals due to habituation to humans over their time in captivity; the code of practice is designed to prevent this.
11. The argument was made that we should not be rehabilitating otters when their numbers will eventually reach a natural balance determined by their 'carrying capacity'. However, care and rehabilitation of injured and orphaned otters is a legitimate animal welfare activity in the same way as other animals are cared for and released back into the wild.
12. The dominant component of otter diet is small fish. Otters are also opportunistic predators and will also take birds, small mammals and amphibians, as well as large fish. However, anglers were advised to be careful about seeking to use the predation of birds by otters as a 'trump card' to help their case because their impacts on overall bird populations are likely to be negligible. Predation is a natural and important component of any functioning environment.
13. Otters will at times take other species of conservation concern, such as salmon and eels, but there is no evidence that the decline of these species have any relation to otter predation and there are other pressures affecting these species – these species have co-existed with otter predation for millions of years.

14. Some fish farmers are experiencing huge impacts from otter predation. Some individual trout farmers have lost tens of thousands of pounds worth of stock, and in many farms there is little that can be done to protect stock – fencing is frequently not feasible due to their location and the requirements of the Health and Safety Executive. There was a request for clarity about the legality of scaring or otherwise interfering with otters’ natural behaviour.
15. The impacts of otter predation on still water fisheries has been (and continues to be) characterised as enormous. The Predation Action Group has estimated an impact of £2.7m in carp losses in Yorkshire alone, and it is now thought that specimen carp fisheries would not be sustainable without fencing. Still water fisheries are likely to become increasingly commercial, as more ‘natural’ waters with smaller numbers of specimen fish will struggle to sustain themselves.
16. Fencing fisheries creates a barrier to other wildlife entering and exiting the still water. Concern was expressed that this may also increase road traffic accidents of other wildlife (although there is no evidence for this), and displaces the otter problem onto other fisheries or fish farms.
17. Despite more funding being available than ever, the cost of fencing remains a significant barrier to fishery managers and angling clubs seeking to protect their waters. Furthermore, terrain can make fencing impractical and the permissions required – from landowners, Environment Agency flood defence teams, local authorities, the Highways Agency etc. – can mean major delays and many fishery managers are put off from fencing as a result. It was felt by some that there is a real lack of understanding from some of these other agencies/departments about the need for otter fencing and it was suggested that some clarity could be provided so that all statutory bodies understood the rationale.
18. Evidence was presented as to how individual otters can display very different behaviours. For example, some individuals are naturally much more cautious and afraid of humans, but other animals are much bolder and will actively approach people. These animals can prove the most damaging to fisheries, quickly learning to negotiate inadequate fences.
19. The Angling Improvement Fund (AIF) reinvests Environment Agency fishing licence money, and is administered under contract by the Angling Trust. It has provided a regular source of funding for predation projects, including otter fencing, over the past three years to a total value of about £1m. Individual grants of up to £20,000 are now available for fencing projects.
20. Sedimentation through agricultural pollution is likely to be having a major impact on barbel recruitment in lowland rivers. Sedimentation of spawning gravels means that larval emergence occurs significantly earlier, with the emerged larvae blind and unable to swim. This makes them more susceptible to predation and downstream displacement. It was speculated that the increased effort required by barbel to spawn in gravels heavily polluted with fine sediments may make them more vulnerable to otter predation themselves, but this hypothesis is unproven.

Conclusions

Given the diverse spread of opinions and interests represented, not all those in attendance would necessarily subscribe to all of the following points. However, there was a measure of agreement in respect of many of these topics.

- Anglers feel aggrieved when told that otters must be allowed to reach a natural balance because of a host of other issues affecting our environment and reducing or limiting already depleted fish populations, as recognised in the declining number of waterbodies that have

reached the good ecological status required under the WFD with many that are failing for fish. Many in the angling community want to see more action being taken to limit impacts and fishery managers and fish farm owners need to be able to dissuade otters from attacking their stocks and damaging their businesses.

- The impacts of cormorants, mink and signal crayfish exacerbate the damage caused by otters by reducing the numbers of juvenile fish. We therefore need to take a holistic approach to predation in a functioning ecosystem.
- The perceived impacts of otters on riverine fish stocks is highly variable and each venue needs to be judged in isolation. These perceptions vary river-by-river and we need to do more to tackle issues around poor flows, sedimentation, habitat damage, agricultural pollution and water quality. If recruitment improves then smaller rivers will be able to better withstand predation from otters.
- It was claimed that the building of artificial otter holts is largely ineffective but their presence on a fishery can be hugely damaging to an angling club's ability to attract members. The time and expense of construction should be used for more valuable activities.
- Some delegates felt that the level of protection afforded to otters is way out of line with a species no longer at risk in the UK. There is no longer any good reason why scaring or disturbing an otter should be prohibited if this was for the purpose of protecting a legitimate business.
- Although legislative change would be required to formally regulate otter rehabilitations, which is highly unlikely given the current pressures on parliamentary and government department time due to Brexit, and the relatively small scale of the activity, it was felt that this should be given further consideration. However, in the meantime a Code of Conduct should be implemented with all those carrying out this activity. This is primarily an animal welfare issue. The Environment Agency indicated that there is already a code of conduct, produced by the RSPCA, but further discussions on this are planned at the Otter BAP Steering Group. Natural England agreed to work with the Angling Trust to further develop a consistent code of conduct if required.
- The Environment Agency accepts that the issue of otter predation is certainly still an emotive issue, but also believes it is greatly misrepresented. They actively provide advice and funding for affected still waters. Otters and fish are both natural components of river ecosystems, conflict can occur where there are large numbers of specimen fish on rivers that have developed in the absence of otters (and can be considered by some as an unnatural phenomenon). Any attempt to control otter numbers at an optimum or 'acceptable' level would be fraught with complexities and has no ecological basis, as they regulate their own populations.
- Stillwater fisheries cannot expect to be sustainable without adequately protecting their stock and good mixed fisheries may have to replace specimen fisheries in many places. However, mixed fisheries are also under pressure from cormorants and signal crayfish.
- The impacts (or perceived impacts) of otters on trout fisheries (both riverine and still water) are varied.
- Despite some improvements in water quality in urban rivers and the reduction in presence of some now-banned chemicals, phosphate and sediment pollution is in many places getting worse and this can prevent the successful recruitment of fish and much of the food they live on.

- Fishery managers have to pay a high cost to fence fisheries and the support from the Environment Agency (although welcomed) does not go far enough.
- Calling for lethal control of otter numbers would be rejected out of hand by ministers and would be a huge risk for angling because it would alienate the public.
- Fisheries are incredibly valuable assets bringing in valuable money to rural economies. The presence of fisheries and the funds they create also help drive nature conservation around them.
- All agreed that more action was needed to deal with the issues affecting recruitment of river fish: pollution, abstraction, habitat damage, barriers to fish migration. A more healthy fish population would be better placed to withstand the impacts of otter predation.
- The Environment Agency is planning a series of workshops and a conference around management of still water fisheries over the coming year that will provide guidance around designing resilience to predation

Key Outputs

- 1. The Angling Trust and IFM will produce a guide for angling clubs and fishery managers setting out the legal situation, correcting some of the misunderstandings around releases and captive bred otters and what can be done to protect fish stocks against otter predation.**
- 2. The Angling Trust and IFM will request the statutory agencies to streamline the consent processes for permitting otter fencing on still waters and press for an increase in funding.**
- 3. The Angling Trust will lobby the government for the long-term regulation of the rehabilitation of injured and orphaned otters and a Code of Conduct in the short-term.**
- 4. The Angling Trust and IFM will press for further research to be commissioned into deterrents for unfenceable waters**
- 5. The Angling Trust and IFM will press for clarification regarding scaring or disturbing an otter as a result of either protecting a legitimate business or installing in stream habitat enhancements.**