

Beavers on the River Otter, east Devon – Natural England update 20 March 2014.

Summary

The farmer, where three beavers were filmed on the River Otter in February, does not want them to be removed. A nearby licensed keeper, who has a pair of beavers in a fenced enclosure, does not believe that he has had any escapes. Field surveys of the River Otter up- and downstream of the location where the beavers were filmed have identified evidence of beavers over approximately 1.5km of the river.

There are only two organisations known to have imported European beavers in recent years. Records of their imports, though not yet complete for one, indicate that wild-caught animals are mostly accounted for. Claims by the licensed keeper in the area, that a litter produced in 2009 was of only two animals, and that both died, cannot be substantiated. The true size of the litter is unknown and one of the animals was never recovered – so is only assumed to have died. Despite the claims of the licensed keeper, it is also possible that breeding occurred in 2012 and 2013 and a further one or two litters produced.

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Background

Film broadcast by the BBC (27 Feb) showed three beavers at liberty on the River Otter, east Devon. The presence of an individual had been known of for some time.

The source of the animals is unknown. There are specific concerns about the potential for these animals to be infected with *Echinococcus multilocularis*, which is present in Bavaria (estimated 2.5-5%), where most wild-caught beavers imported into England originate. There is one licensed keeper in the area, licensed to possess two wild-caught European beaver, located 2km from the R Otter. In 2010 a beaver which died at this premises was found to be +ve for *Em*. GB is currently *Em* free.

The beaver is a potential intermediate host of *Em* and for the parasite to complete its life-cycle an intermediate host must be predated, or scavenged, by a definitive host – normally the red fox. For this reason, the risk only arises with wild-caught beavers – captive-bred animals (or those bred in GB) would not carry the parasite.

Investigation

Visit to ██████:

On 5 March I visited ██████, Ottery St Mary, on whose land the beavers had been filmed. I explained the potential disease risk and that the option of trapping and removal is being considered. I was directed to the location where the film was taken and also walked part of the river bank to check for further evidence.

██████ do not want the animals removed. ██████, in particular, is opposed to this, though ██████ appears to be more open to persuasion if ██████ is convinced that this is the proper course of action.

However, they only own one field adjacent to the river, accounting for ~400m of river frontage. Since 2010, sightings/reports have been received over a length of ~15km of river.

During the visit I checked the section of river up- and downstream of the [REDACTED] land, from Ottery St Mary [REDACTED] (the path had been destroyed by flooding below this point), and found evidence from the immediate outskirts of Ottery to ~[REDACTED] – approximately 1.5km of river length.

The location where the film of the beavers was taken is at [REDACTED]. Some tracks were found near this location, but no evidence of burrows or lodges was found.

Visit to nearby Licensed Keeper:

There is one licensed keeper of European beavers in the Otter Valley area: [REDACTED], Escot Ltd (Escot Country Park), Ottery St Mary [REDACTED].

Beavers at Escot are kept in a fenced enclosure of ~1.2ha which is about 2km from the R Otter and 100m from the River Tale, a tributary of the Otter. To date, [REDACTED] has denied that any beavers at large are from his enclosure (apart, possibly, from one in 2011 – see below).

I tried to contact [REDACTED] w.b. 3 March, but he was away that week. I contacted him on 10 March and arranged to visit the following day. During the visit he provided me with a record of the beavers that have been kept at Escot as follows:

- 8 June 2007: Pair supplied by [REDACTED] – wild-caught in Bavaria – quarantined for 6 months;
- June 2009: 2 kits born – one 'runt' died after first sighting – male(?) kit killed 10 October by falling tree;
- 17 May 2010: Adult female found dead (original Bavarian animal) – PM'd by AHVLA ([REDACTED]) and found to be carrying *Em* infection;
- 29 July 2010: Replacement adult female supplied by Wildwood, Kent ([REDACTED]) – wild-caught in Bavaria;
- 23 Aug 2010: Replacement female killed by electrocution on electric fence;
- 17 Nov 2010: Second replacement female obtained from Cotswold Water Park, via [REDACTED] – captive-bred;
- 23 June 2011: Female killed on electric fence (fence design has since been modified) – initially thought to be male until PM'd by [REDACTED];
- 29 June 2011: Replacement male (due to initial misidentification of dead animal) obtained from Beaver Water World, Kent, via [REDACTED] – captive-bred;
- 4 July 2011: New male found in extremis, outside enclosure – was recaptured but died shortly after – PM'd by [REDACTED] – water in lungs – presumed drowning;
- 13 Nov 2011: Replacement female obtained from Scotland via [REDACTED] – captive-bred.

The following further clarification was obtained from Escot and from [REDACTED] ('Escot Jottings' September 2006 & telecall with [REDACTED] 14 March):

The original adult female was actually obtained in late 2006 via Cotswold Water Park where it had been rejected by the family group introduced to an enclosure there. It was a wild-caught Bavarian animal originally supplied by [REDACTED]. He supplied the male in 2007.

The litter produced in 2009 was only *assumed* to have comprised of no more than 2 animals. It is quite possible that there were more kits (litter sizes commonly range from 1 to 5, with an

average of about 3 for Eurasian beavers^{i ii}) and the 'runt' presumed to have died was never found, so is unaccounted for.

The female obtained in 2011 was from the Aigas Field Centre in Scotland, where there is a captive colony, and is therefore confirmed as captive-bred in GB. The animals currently present are, therefore, the original wild-caught male and a captive-bred female.

Signs Survey:

A further site visit was undertaken on 12 March to search the river up- and downstream of the sections checked on 5 March. The river was walked from Newton Poppleford (SY088900) to Woodford Barton (SY102970) – approximately 8km. No additional evidence was found, beyond that already recorded on 5 March.

Records of Wild-caught Imported Animals:

As far as is known, there are only two organisations that have imported wild-caught European beavers in recent years; Wildwood Trust, Kent and the Derek Gow Consultancy, Devon. It is understood that small numbers of animals were imported in the past by Blackpool Zoo, but this was apparently in the early 1990s. Some Canadian beavers are also believed to have been imported by Drusillas Park, Alfriston, East Sussex.

Records of imports have been obtained from Wildwood and from [REDACTED].

Wildwood imports: Between February 2000 and November 2008, Wildwood imported 18 wild-caught beavers (see accompanying spreadsheet). The first two (Feb 2000) were from Poland and the second two (June 2004) from Germany (presumed Bavaria). The remainder of the animals were all imported from Bavaria in 2008. Six animals went to the Kent Wildlife Trust Ham Fen project, one of which was later recaptured and returned to Wildwood, three were retained at Wildwood and nine died, either in transit, in captivity or, in one case, as an RTA shortly after escaping. All Wildwood imports are therefore accounted for.

Derek Gow Consultancy imports: So far it has not been possible to obtain full records from D Gow Consultancy as their earlier records are not on their current computer system. The information provided so far covers imports since 2010, plus two from ~2006. Of these, only the animals imported ~2006 were wild-caught. One of these is the adult male at Escot Park and the other was a female imported at the same time, which died during quarantine. The two wild-caught animals are therefore accounted for and the remaining, recent, imports were captive-bred animals.

Potential sources of River Otter animals:

Wild-caught animals imported by Wildwood can be ruled out as a potential source of the animals on the River Otter. Until full records are obtained from the Derek Gow consultancy these cannot be ruled out, but two animals imported in 2006 are accounted for and those imported more recently were captive-bred.

Since the true size of the litter produced at Escot in 2009 is unknown, and the assumed death of the animal described as a 'runt' was never confirmed, it is possible that one or more animals escaped at this time and were not missed. [REDACTED] does not believe that any further

litters have been produced since then. Since the adult females died in early summer in both 2010 and 2011, no litters could have been produced in these years. [REDACTED] believes that, because the pair were temporarily separated in winter 2011/12 and 2012/13, as a result of flooding, and the installation of new fencing, that breeding could not have taken place in these years. However, although female beavers come into estrus for only 12-24 hours, if not impregnated, they may come into estrus again in the same season, up to 3 timesⁱ. It is therefore quite possible that mating did occur and that a further one or two litters could have been produced. Although the enclosure at Escot is small, it is notable that in comparable circumstances, such as the small enclosures at the Wildfowl and Wetlands Trust, animals have been overlooked and the number present underestimated.

[REDACTED]
[REDACTED], Natural England, 20 March 2014.

ⁱ Müller-Schwarze, D. & Sun, L. (2003) *The Beaver: Natural History of a Wetlands Engineer*, Cornell University Press, New York.

ⁱⁱ Kitchener, A. (2001) *Beavers*. Whittet Books, Suffolk.