

REASSURING IMPLICATIONS FROM A 45 YEAR STUDY OF OTTERS IN SOMERSET

IOSF Conference 2012

James Williams, Chairman, Somerset Otter Group, President, Taunton Flyfishers.

There has been an ongoing study of the otter population in Somerset for some 45 years, initially by me, and latterly by the many members of the Somerset Otter Group. These records started before the decline which removed most of the otters from the whole of England. The first national survey, done to evaluate the extent of this disaster, found that almost half of the otters in England were confined to rivers originating on Dartmoor. My records show that in the early 1970's otters were still present in all parts of Somerset and East Devon, but that by 1979 they had disappeared from over half this area, and that in 1984 they were so scarce as to produce only 12 records for the whole area for the whole year. There were slight signs of recovery the next year, and subsequent records clearly demonstrate a steady spread eastwards from the R. Exe in the west back across the county. These gradual annual increments give the lie to current allegations that otters were released; it was a natural recolonisation.

But the recovery seemed to fail around Bridgwater. Our maps clearly show an empty area which we called the Bridgwater gap, which we could not explain at the time. We realised the cause when it suddenly filled several years later. A munitions factory had been discharging acid from TNT manufacture into a 7km open ditch, under Crown immunity. When the works were privatised, the pollution had to stop, and the otters could survive in that area. Not only does this detail reinforce the evidence that our population regenerated naturally, but the late date, 1992/3, was at a time when the recovery of the otter across England was being generally celebrated. I feel this disturbing instance demonstrates that the wide-ranging otter is susceptible to considerable harm from localised pollutions or other hazards, and that its recovery should not be too loudly celebrated just yet.

Another detailed local study scheme also points this out. The otters reached my local river, the Tone, in 1987. In 1988 I moved to a house with a tributary in the garden, and built an 'Otter Loo' to record spraint daily, as I still do. This simple but effective monitoring system showed an increase every year for 11 years, from 10 visits in the first year to 66. The graph then plateaus out in the late 1990's at between 50 and 60 visits each year, a simple indication that the population on the R. Tone had stabilised. In 2002 the score crashed to 30; there was a bad pollution, deliberate dumping of slurry, which killed all the fish, and we had no otters for 5 months. This again shows the sensitivity of this species to damaging incidents, and also the value of monitoring at a scale which picks this sort of thing up. In 2003 we started to hatch trout to restock the stream, and the otters came back, and even bred, but in 2006 the records fell away to a similar level as after the pollution. There had been no pollution, and they recovered well the next year, but that something had affected them was confirmed by other of our studies, which showed similarly worrying downturns across the whole county. Had we not known about the slurry, the lack of otter visits would still have told us that there was a problem with the river.

SOG undertakes an annual co-ordinated survey of the whole area. Some 130 trained volunteers look at most of the water- courses in the county on a nominated Saturday, and scratch out any spraints or padmarks. They then look again the following morning, and record any fresh evidence. This is not the same as counting spraints, but it does give the undoubted

location of many otters on the same night. It was originally started to see whether the otters were recolonising, but over time it shows trends and variations. For instance, it showed that 2006 was a problem year across most of the county, and this was later reflected in the very increased annual total of dead otter records. We did not get onto this problem sufficiently quickly to investigate it at the time, but our guess is that it was in some way connected with the very dry, hot summer, possibly Blue-green Algae. But this blip apart, the surveys show that Somerset consistently has a widespread population of otters.

The coarse fishermen already knew that, they claim; they also claim there is a very large number in total, mostly released by us. It would be very helpful in this debate to be able to assess just how many otters there are in our successful area. A clue to this comes through a study on the R Tone. In the year 2000 a study of that river, through the medium of DNA from fresh spraints, revealed a resident population of 7 otters. Comparison of our annual survey results since then with this unassailable distribution confirms that level of occupation, and, over the full extent of the catchment, rather more than the DNA study area, shows consistently about 10 or 12 adult otters. That this method of two-day survey accords so well with the DNA result emboldened us to extend the method to the whole county. The last five years, since recovering from the collapse of 2006, we recorded 65, 62, 69, 69, 67 otters. The maps indicate that there is not much room for more at the same spacing. We consider this an informed estimation of the extent to which predation can be expected, a useful counter to extravagant claims.

However, it is not a high total for so large and well-watered an area. We also record deaths, and collect as many as possible for post mortem examination at Cardiff University. In a normal year we average about 30 deaths, rising to 43 in a disaster year. Most are collected from roads, but on examination two other problems come to light. There is a lot of fighting, with wounds severe enough to compromise the viability of that animal; the otters control their own population density, so the claims of major infestations of predators are unlikely, or even impossible. In addition, many of our otters, in fact almost all from the slower rivers, carry a burden of the newly imported parasite, the bile fluke, first discovered in one of our otters in 2003. The full extent of the impact of this is being investigated by Cardiff University, but it has already been shown to be sufficiently damaging to be a worry for the future of otters in some areas.

We think that these accumulated results from interested amateurs show that otters can recolonise our aquatic habitats again now, but that they will limit their own presence to a level at which it should be possible to accommodate both otters and anglers. We find that looking in closer detail at local populations also reveals that they are still very vulnerable, and that we should not assume that they are firmly established without survival problems yet.