

DEAD OTTERS in SOMERSET

Somerset Otter Group, An update and summary of dead otter records.

Records

The Somerset Otter Group has access to extraordinary otter data, including historical dead otter records courtesy of the James Williams Archive.

Partners

The Somerset Otter Group works with the Environment Agency (EA), who initially funded autopsies done by Vic Simpson in Cornwall. James Williams persuaded them to extend this service to otters from Somerset. In 2007 this funding temporarily changed to the Cardiff University Otter Project, where since 2007 Somerset has sent its dead otters.

We coordinate with the EA in the completion and numbering of records and for the last 3 years the group has taken over the responsibility for the transfer of bodies to Cardiff University.

It is important the group is informed of any otters likely to be placed in the freezers, if we don't know about them we can't process them. See our website for current contact details for Jo Pearse.

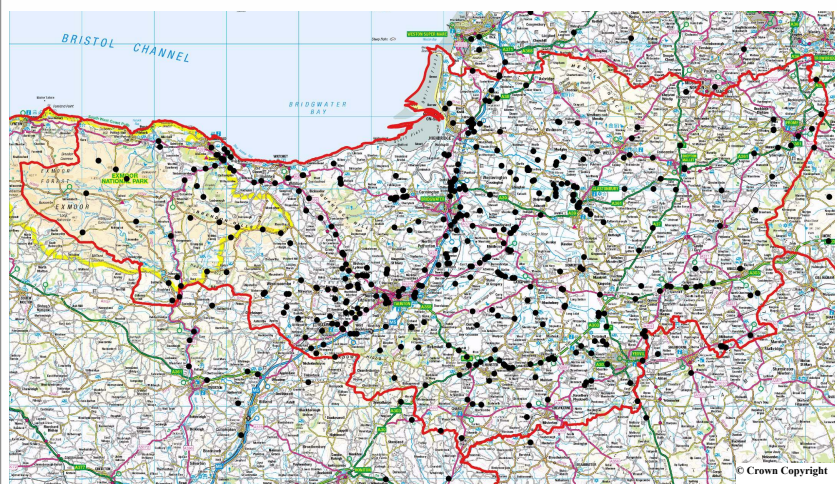
Secret World kindly house a freezer purchased by the Somerset Otter Group. West Hatch RSPCA kindly provide a freezer for the same purpose, both assist in booking in the otters. Rob Williams houses a transit freezer in Wellington.



It is sad to record otter deaths and sad that Somerset has so many records. But the information obtained from both recording and recovering otter bodies provide an exceptional opportunity to learn much more about this iconic species. And where possible install mitigation measures to prevent further deaths.

The fact we have so many records is not an indication of an extraordinary number of deaths but an example of huge effort dedicated over decades by a group of people. Initially enthused by James Williams, and suitably carried on, as he handed over the baton.

Thank you to everyone who has assisted in the reporting, collecting, recording, storing, transferring or autopsying of dead otters in Somerset.



Dead Otter records in Somerset, 1999 to 2017

Cardiff University Otter Project

The Project runs a long term environmental surveillance scheme, using otters found dead to investigate contaminants, disease, and population biology across the UK.

Visit their website;
www.cardiff.ac.uk/otter-project

Or follow them on



Taxidermy

We receive anecdotal evidence of otters going for taxidermy, but we are losing valuable information. There are a few legitimate reasons for taxidermy, so if an otter is taken please ensure that it is also reported to the Somerset Otter Group or to the Environment Agency. Cardiff University otter project can advise on what unwanted parts can be retained for them and we can organise transfer of those parts. At the very least we would like to know the details of where and when the otter was found.

Licence

In keeping with the protected status of the otter a licence is required to handle any part of a dead otter. The Somerset Otter Group operates under the licence held by the Cardiff University Otter Project in collecting the dead otters.

Summary of dead otters in 2017

We have recently received all the autopsy reports from Cardiff University Otter Project for the 2017 otters. 33 deaths were recorded and 22 were collected and sent for autopsy. 13 males and 9 females, one of which was unfortunately lactating which signals the additional loss of her cubs, not included in the totals.

Five of the 33 were sub adults, two male, two female and one unknown. One female had a very small heart and possibly died through a heart defect.

Two had thickened gall bladders indicating possible fluke infection; an adult male on the River Parrett near Langport and an adult female on minor rhynes of the River Axe (North), near Weston Super Mare.

Three were confirmed negative for fluke; one on the Haddeo, River Exe catchment, had signs of a fibrous gall bladder and was outside the area known for fluke, but was confirmed by Cardiff University as negative for fluke.

Several deaths reported in the same area on the River Parrett resulted in mitigation action being raised with the Environment Agency, the results of that work awaits.

Mitigation

Recording otter deaths highlights blackspots and enables mitigations such as; reflectors, ledges under bridges, tunnels and steps at weirs to reduce otter deaths on the road.



Occasionally altering a fence line is all that is required to keep an otter waterside and off a road.

2018 Deaths

So far this year there have been 17 dead otters recorded, 15 of which have been secured for autopsy.

One on the River Parrett in January was sadly a lactating female.

With the clocks going back, bringing rush hour traffic into the dark and rain in the forecast, that number will unfortunately rise.

A fuller breakdown with the figures added into charts will take place when all autopsies are received next year.

Otter Dispersal

The fluke presence or lack of it give an indication of otter dispersal.

In the 14 years that the fluke has been known about within Somerset it is odd an otter has not been killed dispersing west and carrying the fluke. A few would surely be expected. This could be an indication the direction of otter dispersal remains from west to east in the County, as in the 1980's with the otter's revival.

We will hopefully know more when the DNA study from Cardiff University concludes.

Bile Fluke, *Pseudamphistomum truncatum*

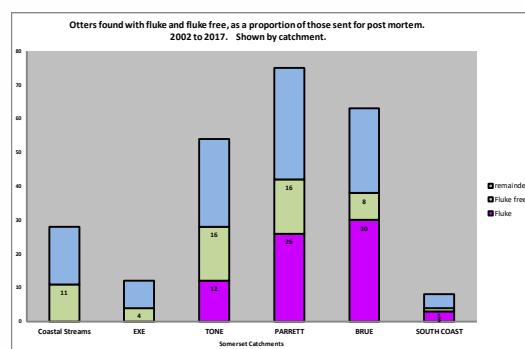
In 2004 wildlife vet Vic Simpson was the first to discover the bile fluke, *Pseudamphistomum truncatum*, in a British otter from an otter on the Somerset levels, writing a joint paper on the fluke with his friend James Williams.

In 2009 Simone Gentner conducted a study into bile fluke eggs found in otter spraint in Somerset. Her Dissertation can be found on our website.

James Williams and the Somerset Otter Group were Case Partner with Cardiff University for Eleanor Sherrard-Smith's PhD study; Distribution of Eurasian otter biliary parasites, *Pseudamphistomum truncatum* and *Metorchis albidus* (Family Opisthorchiidae), in England and Wales.

A few otters over the years have died as a direct consequence of fluke infections but how many otters are dying hidden away out of sight?

This chart shows the spread and numbers of otters with fluke signs through the Somerset Catchments.



The map shows the distribution of otters with signs of Fluke infection, often a thickened or fibrous gall bladder, between 2002 and 2017. The distribution has not changed in the last 5 years with no otters found much further west than Taunton. One suggestion for the otters to the west remaining fluke free is the snail vector which is apparently absent from fast flowing water.



Otters with fluke signs ●

Otters free from fluke ●

Male and Female

The map shows the sex of dead otters recorded from 1999 to 2017.

Not all dead otters reported are recovered and so not all are sexed. An average of 60% of the dead otters recorded in Somerset have their sex known.

There is a bias towards male deaths with 193 male and 155 female between 1999 to 2017. However that bias is not repeated every year as can be seen with the chart. There are several years when the number of female deaths are higher than those of males.

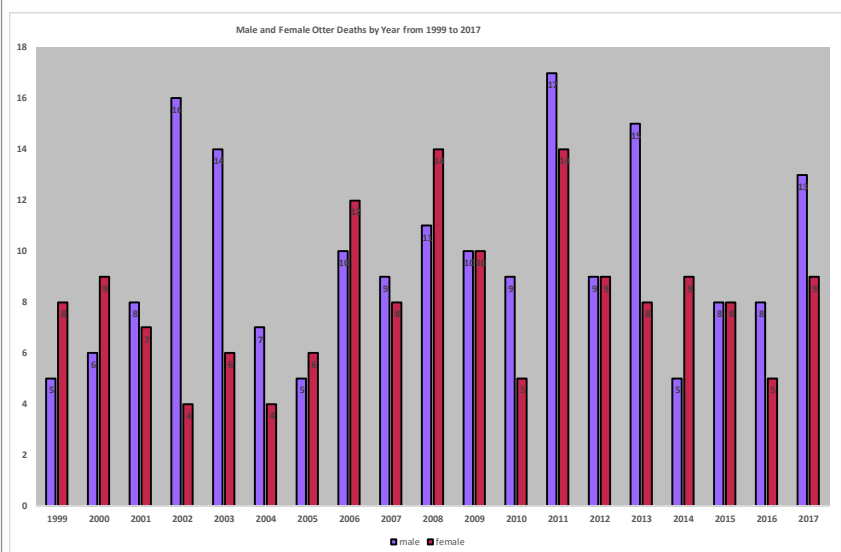
Unusually the bias does not extend to sub adult deaths, with 46 female and 41 male. However these figures are for 19 years of records combined and there can be years when the bias applies, but there is no room here for more than a snapshot of data.

Otter deaths vary considerably between the years and fluctuations are often reflected in the Somerset Otter Groups 2 day annual surveys. Illustrating that however healthy the population appears it is easily influenced. It is so important we continue monitoring the otter population in the county.

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Male Otters ● Female Otters ●



Sub adult males ● Sub adult females ● Lactating females ●

Please report all dead otters in Somerset either to the Somerset Otter Group direct or through the Environment Agency.