

NEWSLOTTER

Somerset Otter Group Summary of Results and Work - 2017

Two-day event 2018

This year's two-day event will take place the weekend of 28th and 29th April. In addition to the whole of Somerset, for the 10th year we will support Exmoor National Park in a complete survey of the park, and for the first time we will work with the Blackdown Hills AONB to cover the whole of the Blackdowns.

Genetics Study

2018 will be the end of the spraint collection phase of the genetics study by Cardiff University on the rivers Tone and Brue. Spraints will be collected in January/February and April/May, mainly around the two-day event. Nia Thomas will then start the extraction and analysis phase and we look forward to hearing the results.

Coastal Survey

During 2018 we will finally start to look at the use of coastal habitats by otters in Somerset. If anyone is interested in being involved, or finds spraint or sees an otter in coastal areas of Somerset please do contact Rob Williams.



2017 was a much more normal year for otters in Somerset after the anomalies of 2016 and both the two-day event and dead otters pointed to a recovery of the population. 33 were picked up dead on the county's roads and the two-day event had a 66% positive rate, though we still had 22 blank patches. At least 11 litters of cubs were detected in 2017 and camera-trapping continues to give insights into the county's otters.

The coming year ends the field collection phase of the DNA Spraint study in the Brue and Tone catchments. We will also finally get the coast otter survey underway and will try to move towards a better understanding of the otter-fishery conflict in the county.



Otter Surveying:

Grid References - keep it simple

Recording of surveys is one of the most important aspects of the Somerset Otter Group. The remarkable data set for otters is the best in the country and possibly globally. Every piece of information you contribute to those records is significant and important.

In order to maintain the database it is critical that information is recorded correctly, especially for repeated surveys of the same sites where a constant effort is being made, be this monthly or annually. Perhaps the biggest, and most time consuming (for Lucy and Jo), problem we have is with locality information, especially grid references. GPS technology now allows our phones or GPS devices to give us locations at metre level resolution. Whilst useful for some things, it is meaningless for otter recording and results in multiple records at the same place being recorded as different locations and skewing results.

We therefore request that sites are referred to by six figure grid references (100 m resolution) and that the same 6 figures are used for each survey at the same site. It is worth drawing up a list of your survey locations and the grid references for them and then using the same ones each time. Many thanks for your help with this.

Two-day event 2017

A recap of the summary: We surveyed 138 patches, a total of 496 sites of which 326 were positive, 22 blank patches – an improvement on the 25 in 2016 but still up on the 8 year average of 13. 66% of sites had some signs and of all the sites 18% had fresh work on the second day. The results were collated to give an estimated 66 ranges, 9 on the Exe, 7 on the coastal streams, 13 on the Tone, 15 on the Parrett, 10 on the Brue, 2 on the Axe, 3 on the south coast headwaters (Yarty, Culm, Otter), 6 on the Frome and 1 on the Cale.

Exmoor National Park was surveyed, both Somerset and Devon. The Devon side fielded 13 people who evaluated 69 sites in 13 patches, of which 71% were positive. One had fresh work on day 2 and there were 7 “near misses” and 3 blank patches of which 71% were positive. One had fresh work on day 2 and there were 7 “near-misses” and 3 blank patches giving a total of 5 adjudicated ranges.

Thanks to all who took part.

Dead Otters in 2017

33 Dead Otters were recorded across the country in 2017. All but one were killed on roads, the other was emaciated and jaundiced. 20 were recovered for autopsy and will be transferred to Cardiff University in the coming months. This is a return to a normal number, the annual average since 2000 being 30.

Our thanks to everyone who assisted in their collection; Non group members- Matt Phillips from Kier construction, Michelle Hall, SJ Cooper White, Anne walker – Exmoor National Park and Sian Massie. Otter Group surveyors- Denis Pavey, Martin McNeill, Jillie Leonard, Margaret Mead, Ken Burrell, Rob Williams, Lucy Mead, Wendy Welland, Jo Pearse, Tony House, Nigel Case and Michelle Werrett. Thanks to the staff at Secret World and RSPCA West Hatch, who enable the storage prior to transfer to Cardiff University.

Autopsy Reports from 2016

Our review of 2016 highlighted concerns about that year’s deaths and survey results. The number of road casualties were extremely low but with an extraordinarily high proportion of non-road deaths combined with an unusually high number of blank patches in the survey.

Members Meeting

It was great to see just over 100 people attend the joint meeting held with Somerset Mammal Group in Wellington, on 16th January 2018, where Stephen Powles shared the story of his incredible relationship with Hammer Scar, a female otter he has followed virtually nightly since 2013. His incredible patience, field and technical skills have given new insights into an otters life.

Hammer Scar.

Just over a week after the meeting Hammer Scar was killed on a road whilst moving one of her cubs following very heavy rain. Stephen located the other cub which has now been taken into care. A sad end for an inspirational otter that taught us all so much through Stephen's incredible relationship with her.

SERC Agreement

We have just signed a new data agreement with Somerset Environmental Records Centre. This ensures the group's data is safe in a well maintained database and available for conservation and planning



Four otters had signs of fluke, this is not unusual but two from the Brue catchment were classed as having chronic infestations of the bile fluke, *Pseudamphistomum truncatum*. One of these was judged to have died as a direct result of the fluke and had gall bladder failure. The other two otters were from the Parrett catchment and had fibrous gall bladders, one of these otters was diseased and emaciated. All were found within the usual area for fluke infestation.

Four others were emaciated, two in the Parrett catchment, a sub-adult on the Norton Brook (a tributary of the Avon) and a sub-adult on the Exe that had bites and a chest wound (possibly from another otter).

It seems improbable that so many are starving due to shortage of food. In 2014 Dr Vic Simpson informed us that bites can easily cause sepsis which results in emaciation and it seems that most of these may be a result of otters fighting.

Mitigation: Dunball

2017 saw 4 otters killed at Dunball, 3 on the A38 and 1 on the railway. This unprecedented cluster raised concerns and it was found that recent works at Dunball Wharf has blocked the route between the end of the King's Sedgemoor Drain (KSD) and the River Parrett with concrete walls and metal fences. This change is related to work on the KSD following the pumping that took place there in 2014 and the changes to Dunball Wharf to facilitate the arrival of aggregate for Hinkley. The changes mean that the otters are being forced to cross the railway and A38 now. Rob Williams undertook a site visit with the Environment Agency and we hope modifications will be made next year.

Work like this highlights the importance of reporting all deaths as quickly as possible, even if the body is not recoverable for autopsy.

Otter Release

Secret World released a rescued otter in the north of the county. SOG was pleased to be consulted on the released site on private land and our survey found there was only occasional use by wild otters and no evidence of cubs in the area, making the site suitable.

Research: DNA Spraint Study

A message from Nia Thomas, Cardiff University Otter Project

Thanks to all the SOG volunteers this year for their hard work hunting out fresh spraints across both the Tone and Brue catchments – as of this November we have 315 samples collected and transported back to the otter archive freezers in Cardiff. There will be two more sampling periods in 2018: a 6 week winter period from mid-January until the end of February and the 2 day event on the 28th and 29th April - it would be great if as many of you as possible could help with this last push in finding as many fresh spraints as possible.

During this year CUOP applied for (and received) two grants to help fund the otter population genetic work on the Tone and Brue catchments. The first was from the People's Trust for Endangered Species who awarded us nearly £15,000 towards the enhancement of our methods. This includes improvement of a genotyping method which we hope will improve success rates using spraint as a DNA source, as well as volatile organic compound analysis ('smell'!) on spraint samples to determine otter age class. The second was from the NERC Biomolecular Analysis Facility in Sheffield who have awarded us the equivalent of £15,000 in Next Generation Sequencing runs and associated bioinformatic training. With the funding from both of these grants we will now be able to genotype all of the spraint collected across both catchments (subject to DNA quality)!

After a nasty bike crash in May, 1 was forced to take 4 months off work over the summer while on crutches. Although not completely healed yet, she's very happy to be well on her way to recovery and back at work full time since October. The project has been set back slightly due to this but we're hoping to catch up the lost time over the next 2 years.

Nia addresses the SOG members meeting Wellington - January 2018



SOG hosts visit from Holland

The Eurasian Otter is recovering across Europe. In Holland preparations are being made for its return, with a focus on measures that can be taken to facilitate its use of man-made waterways and habitats. Four people from Vereniging Nederlands Cultuurlandschap [Association for Dutch Cultural Landscape] visited the Somerset Levels to hear what measures have been taken here by the Environment Agency and others and how SOG monitors the otters here. Thanks to Andrew Baines and Jo Pearse for showing them around and sharing their knowledge.



Otter Predation Mitigation

During the year the group received seven requests for advice or help with Otter predation on fisheries or ponds. The group will continue to support fishery owners in finding solutions to otter-fishery conflict. In 2018 we will be looking towards increasing our understanding of otter-fishery perceived and actual conflict in Somerset. If you hear of any problems please let us know or encourage fishery owners to get in touch.

Dead Otters should be reported immediately to the Environment Agency (03708 506506) or Jo Pearse (07855 773697).

Please report and records of breeding - sightings, spraint or padding of a female and cub(s) - direct to Jo Pearse (sogjopearse@gmail.com).