NEWSLOTTER

Somerset Otter Group Summary of Results and Work - 2019 2020

Two-day event 2021 POSTPONED

Sadly, due to the ongoing danger of the pandemic another April will pass without the two day survey. Keeping people safe is all our responsibility. For any surveys you are doing, please continue to log with SERC. We will use these later in the year to look at distribution. All your records are valuable - Thank you!

New surveyors

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Despite the difficulties of lockdowns and social distancing, SOG has still been able to complete training, even if it has not been as comprehensive as previous years. Welcome to Jason, Keith, Nick, Fiona, Dela, Kate, Angela, Emma and Isha. Thank you for your interest and support of our otters.

Sharing news

Increasingly social media is being used to share otter information and with so many trail camera's set up on river banks, we are seeing some lovely footage on SOG's facebook page. We have also recently set up a Twitter account. As usual our webpage is still regularly updated:

www.somersetottergroup.org.uk

www.facebook.com/groups/176 6109836946606

twitter.com/SomersetOtter



Welcome to the 2021 edition of SOG's Newslotter, the first since the 2019. Apologies to those missing the publication, a combination of events has meant the last year or so have provided some challenges.

Of course, 2020 was a difficult year for everyone, but otter group activities have continued to function, if in a less energetic way.

From surveying, to collecting dead otters, transport runs to Cardiff, coordinating catchments coverage for the two day survey, reporting crimes and more, thank you all for your efforts monitoring and protecting the otters of Somerset.



Female otter with cubs, on a Tone Tributary, reproduced with kind permission of Chris Butler.

Somerset, UK

Cancelled Two Day Events

As we began plans for the 2020 county wide survey at the start of the year, the shadow of COVID-19 appeared and so by March the decision was made to call off the event, becoming the second cancellation in SOG's history, the first being in 2001 at the time of the foot and mouth crisis.

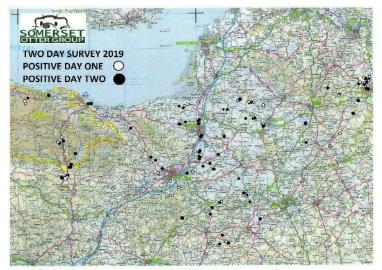
Unlike 2020, the Foot and Mouth cut off all access to the countryside for five months. In the NewslOtter from that year, our much missed chair, James Williams wrote:

"I wonder if the otters wonder where we have been all spring and summer. The deserted countryside, with no fishermans, no walkers, no otter group members under bridges must seem to them very quiet all of a sudden. In my view, that will make very little difference to their lives, but I half expected to get a few complaints from the otters themselves about overgrown footpaths; they make full use of our routes for ease of getting about, and must be rather fed up at all the overgrowth impeding their travels."

2014 caused a further hiccup in records, when heavy rain caused rivers to be in spate. Despite gallant efforts of surveyors, many of the banks and ledges were submerged. The results that year were lower than average, not due to a change in distribution but because some sites were impossible to survey.

Two-day Event 2019

The road map below provides a visual record of the results of 2019's Two Day Event. The white spots show site usage on the Friday evening to Saturday morning and the black solid dots Saturday evening to Sunday morning.



Overall we had good coverage with 94 surveyors covering 122 patches or 473 sites. We can be confident we picked up most of our counties otter activity. There was however some gaps in coverage. If recent intelligence had been received the results were adjudicated in those blank areas.

Equally important as the areas that an otter has been located are the blank spots. We can build up a picture of these areas over time and investigate why that might be the case.

63 sites had fresh spraint, padding or castling on the second day. There was 8 near misses where the otter producing the signs on the first day was not located on the second.

A minimum of 56 ranges were located.

Thank you to all intrepid surveyors that took part in the 2019 survey, it was quite a stormy event, with some sites effected by wind and rain.

| | | | | | | _ | | | | | | | | _ | | | | | | | _ | | | _ | _ | | _ |
|----------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|------|------|------|------|------|------|
| /ear | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
| | | | | | | | | F&M | | | | | | | | | | | | | spate | | | | | | C-19 |
| Patches | | | | 31 | | | | | | | | 58 | 65 | 69 | 109 | 129 | 121 | 124 | 127 | 143 | 135 | 138 | 139 | 137 | 138 | 122 | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fotal Sites | | | 114 | 145 | 166 | 174 | 132 | | 121 | 126 | 275 | 239 | 271 | 309 | 428 | 520 | 521 | 477 | 519 | 564 | 524 | 510 | 531 | 496 | 496 | 473 | |
| sites Positive | | | 84 | 98 | 100 | 124 | 78 | | 56 | 96 | 198 | 169 | 197 | 227 | 306 | 381 | 380 | 318 | 331 | 390 | 273 | 372 | 304 | 326 | 243 | 249 | |
| % Sites Positive | | | 73 | 67 | 60 | 71 | 59 | | 46 | 75 | 72 | 69 | 73 | 74 | 71 | 73 | 73 | 66 | 64 | 69 | 52 | 73 | 57 | 66 | 49 | 52 | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| lits | 9 | 11 | 18 | 39 | 26 | 42 | 42 | | 27 | 26 | 71 | 30 | 35 | 68 | 99 | 95 | 109 | 91 | 76 | 114 | 68 | 102 | 71 | 89 | 71 | 63 | |
| Vear Misses | 8 | | 7 | 11 | 17 | 11 | | | | 14 | 7 | 8 | 6 | 11 | 16 | 17 | 30 | 16 | 26 | 22 | 18 | 25 | 19 | 21 | 19 | 8 | |
| Fotal Scores | 17 | 11 | 25 | 50 | 43 | 53 | | | 27 | 40 | 78 | 38 | 41 | 79 | 115 | 114 | 139 | 107 | 102 | 136 | 86 | 127 | 90 | 110 | 90 | 70 | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ocated | 15 | 16 | 25 | 32 | 37 | 34 | | | 21 | 30 | 54 | 39 | 32 | 44 | 54 | 59 | 66 | 66 | 55 | 64 | 47 | 66 | 50 | 66 | 56 | 56 | |
| Adjudicated Ranges | | | | | | | | | | | 54 | 50 | 45 | 45 | 65 | 62 | 69 | 69 | 67 | 67 | 56 | 66 | 56 | 66 | 56 | 56 | |
| % Total sites with Hits | | | 16 | 27 | 16 | 24 | 32 | | 22 | 20 | 25 | 12 | 13 | 22 | 23 | 18 | 21 | 19 | 15 | 20 | 13 | 20 | 13 | 18 | 14 | 13 | |
| % Positive Sites with Hits | | | 21.4 | 39.7 | 26 | 33.8 | 53.8 | | 48.2 | 27 | 35.8 | 17.7 | 17.7 | 29.9 | 32.3 | 24.9 | 28.6 | 28.6 | 22.9 | 29 | 25 | 27 | 23 | 27 | 29 | 25 | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3lank Patches | | 5 | 1 | | | | | | | | 4 | | | 5 | 6 | 10 | 8 | 8 | 15 | 9 | 22 | 10 | 25 | 20 | 30 | 26 | |

2 Day Survey Ranges

At times we see our score of ranges misinterpreted as a count of individual otters. They are not a count of otters. Our surveys provide a comparable index of data in Somerset.

Porpoises

Had our 2020 survey gone ahead, some lucky surveyor may have come across a pair of porpoises swimming in Somerset's rivers in April 2020. They were spotted in Bridgwater and on the River Tone at Burrowbridge, travelling 15 miles form their normal coastal habitat.

Sadly, the plight of harbour porpoises echo's the familiar fate of otters from previous decades. They are at risk of breeding failure due to the prevalence of banned PCB chemicals in the marine system. Sadly, its bio accumulative effect is now shown to effect both male and female porpoises' reproductive organs.

https://www.bbc.co.uk/news/scienc e-environment-55625096

Please continue to log wildlife sightings with SERC



Two Day Survey Results - By Catch

Every year, SOG submits to SERC a record of other riparian species of interest identified over the two day survey. Below is a table of main species.

We keep an eye on American mink prevalence in the county . Only two records for mink during 2020, so please do let Jo Pearse know if you find clear signs or see one. The two records are from King Sedgemoor Drain and another in Frome. Frome is a known mink hotspot and the one spotted there was a rarer black coated one.

| TWO DAY EVENT OTHER MAIN SPECIES | | | | | | | | | | | | | | |
|----------------------------------|---------|--------|--------|-----------|------------|----------|------|---------|--|--|--|--|--|--|
| SPECIES | bittern | cuckoo | dipper | g.wagtail | kingfisher | I. egret | mink | w. vole | | | | | | |
| 2019 | 0 | 1 | 15 | 3 | 3 | 0 | 7 | 0 | | | | | | |
| 2018 | 1 | 2 | 14 | 4 | 4 | 4 | 4 | 2 | | | | | | |
| 2017 | 0 | 0 | 15 | 7 | 7 | 4 | 0 | 0 | | | | | | |
| 2016 | 2 | 0 | 18 | 5 | 5 | 1 | 3 | 3 | | | | | | |
| 2015 | 2 | 0 | 16 | 5 | 5 | 2 | 14 | 4 | | | | | | |

Beavers in Somerset

It won't be news to many that we now have beavers in Somerset. 2020 saw the 'reintroduction' of enclosed beavers at the National Trust's Holincote Estate on the edge of Exmoor National Park. Somerset Otter Group's chair, Dr. Rob Williams and group members Jillie and Marc visited the estate to be shown around by the ranger to ensure the enclosure did not impede on otter access. Later stage trial cameras showed that the grills placed across the stream were wide enough to allow the otter to come and go.

Further to the south side of the county, beavers have dispersed over the Devon border of the River Otter to Otterhead Lakes where they have been sighted. We also continue to hear tantalising reports of beavers in other areas of the county. Could 2022 be the first year beaver signs are added to our by catch list?



Trail camera footage by Tony House of beaver teaching its kit to lodge build.

Surveying for Beavers

Experienced Somerset Otter Group surveyor Tony House has been studying the beaver.

It may be a while before we see signs on our surveys, but for when that time comes below are images Tony has kindly shared to help surveyors with identification.



This gnawed tree was worked on over several months.



A beaver lodge - the pile of sticks cover underground chambers.



Beavers have large webbed feet that can leave prints in soft mud.

The Beaver in Somerset continued...

Beavers are no threat to otters, they both have a semi aquatic lifestyle but rely on different food sources. Beavers have exceptional skills at creating wetland habitat that benefits many species including the otter.

Beavers have superficial visual likeness to otters, they are both largely nocturnal semi aquatic species, brown in colour, with a strong useful tail.



Otter swimming - photo by Chris Butler



Beaver swimming - photo by Tony House

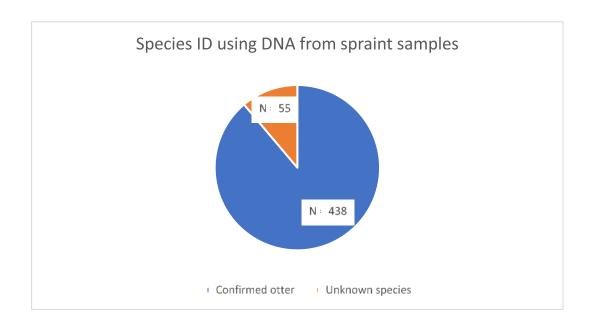
Research: DNA Spraint Study

In 2016 SOC case partnered Cardiff University in a 3 year Phd study on otter population structure, examining dispersal, home ranges and landscape barriers using DNA from some 493 fresh spraint collected by SOG surveyors. After the last collection in 2018, the Phd student Nia Thomas began the laboratory work. Below is an update from Nia.

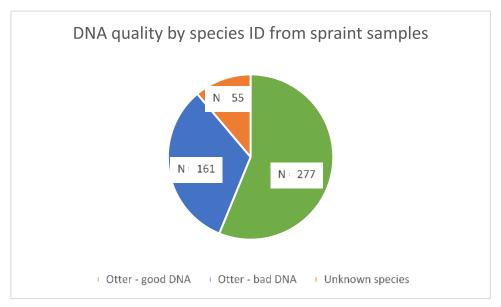
A message from Nia Thomas Cardiff University Otter Project

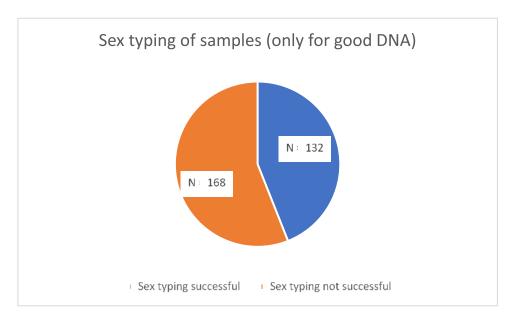
As with everyone else, this year brought great changes and challenges to the way in which I could work on my PhD due to the ongoing pandemic. In March we left the labs at Cardiff University to work from home and after 5 months of no access we had to take the hard decision to restructure my PhD to avoid any further lab work so that I could complete the thesis by May 2021.

This unfortunately means that the final genetic work to get individual identities from the spraint samples collected by all the SOG volunteers has been put on hold. We have however, spoken with the external funder for that section of the project and they have agreed to let us continue the work after I've handed in my PhD thesis – so I will keep you updated on this. We have already managed to use the DNA extracted from the samples to check for a species ID and to sex type the samples which has given us a good idea of the quality of DNA in the samples. See the graphs below for a summary of what we have learnt so far from those two steps.



A message from Nia Thomas Cardiff University Otter Project continued....





One area of the research that has continued to progress under lockdown/general pandemic restrictions is working with a Statistician at Canterbury University in Kent to use the fresh spraint counts and locations from the two-day event data to model the otter population size across both the Tone and the Brue. This work is still fairly preliminary, but the models are running successfully for the Tone catchment and we are continuing to tweak some of the parameters to make the estimates a reliable as possible. My hope is that we can produce a model that can be used by SOG with future two-day events to estimate population size each year and thus detect any significant changes.

Thank you once again for all your time and help in collecting otter spraint over the three years and I will continue to send updates via the SOG Newslotter and other SOG channels as and when I have them.

Nia

Somerset Otter Births and Deaths 2019 and 2020

Breeding Records

Most breeding records are provided by surveyors from the two day survey. However, during 2019, we only had 7 reports of breeding - a much lower figure than the usual 15 to 30.

Some of the reports from the annual tally may be repeats so don't represent a true number. Otters are highly mobile and as the juvenile's stay with their mother for a considerable time - up to 18 months the records can be duplicated over time and area. Each report is noted and provides evidence of successful breeding.

Increasingly, trial cameras are providing indisputable evidence of cubs. In 2020 we had a more normal total of 21 reports.

Unfortunately, 4 of these also appeared on our dead otter list. Sadly a young cub was found on the River (north) Axe with it's mother from a traffic accident. The finder kindly took to the streams to look for possible orphaned siblings.

A further 3 cubs on the breeding list were orphans, 2 siblings found further down the Axe. Another on the Tone headwaters was found wandering on a main road. Efforts were made on both occasions to locate the mother - alive or dead, eventually all went to rehabilitation centres.

It is never too late to add to breeding records so do inform Jo Pearse . If you have trial camera footage we are always keen to see it, especially of cubs as it can help to assign an approximate age.

When surveying, cub signs to look out for Include different sized padding, numerous fresh spraint, very narrow spraint or rarely if the cubs are still feeding from mum, milky spraint.

Otter Deaths

There was 29 reported deaths in 2019 across all catchments bar the Frome. There was an unusually high number of non road kill collections. Three were beside lakes, one of which was thought to have drowned in an illegal fishing net, two were found on reserves and one was found in Godney a few months after the large scale pollution event that happened on the Sheppey. One was lost at Dunball near Bridgwater, an otter accident blackspot.



22 deaths were recorded in 2020 across all catchments except the Frome. A lower number than previous years, probably due to the effects of the lockdowns - fewer cars and fewer people out spotting them.

Many thanks to all who reported and collected dead otters. It is an important task allowing us to log patterns of health and mortality across the county.

Due to the lockdowns Cardiff University shut it doors to new deliveries and temporarily suspended post mortems. This resulted in a cessation of collections and a backlog of otters at Cardiff. Some 2019 otters are still to be examined and all of 2020. Cardiff will no longer be producing the long post mortem results. If you collected one you will still however be informed of the result but with less detail included.

SOG meets with Avon and Somerset Wildlife Crime Unit

It's a sad fact that wildlife crime happens, so in August 2020 SOG met up with members of the Wildlife Crime Unit PC Pete Wills, Sergeant Andrew Murphy and Pcso Michael Storey for a socially distanced walk along the River Huntspill. It was useful to share concerns about wildlife crime and the best ways to support the police in tackling it.

Pete and members of the Rural Crime Unit later came along to one of our informal training sessions. We are grateful they took the time from their busy schedule to advise on reporting concerns and actual wildlife crimes. They asked for our help in reporting wildlife crime by phoning 999 if you witness it taking place or for evidence or suspicion of otter crime phone 101. Or email the information to ruralandwildlifeunit@avonandsomerset.police.uk Please always ask for a crime number.

We would be grateful if you let us know of any suspected otter crime in the county, we can contact the police on your behalf if you prefer and if appropriate we can contact the local surveyor and ask them to be vigilant.



Otter Predation Mitigation

As in previous years the group received requests for help and advice with predation of fish on lakes and ponds - both commercial and domestic. We can offer surveys to ascertain if the problem is otter related, we can advise on fencing and the correct measures to ensure worried owners stay within the law.

We have found that those contacting us have always been interested in our advice. Please, if you know of anyone concerned about predation suggest they contact us. As the Somerset otter has recovered across its former ranges, if you are a lake or pond owner we can help you to be proactive to protect your stock before predation becomes a problem.