2016 DWT Otter Survey

Summary of Results

The fourth DWT Spring Otter Survey took place over the weekend of the 23rd/24th April 2016 and once again we extend our thanks and congratulations to all the volunteers who took part. For the second year Tees Valley Wildlife Trust also joined the survey and increased the number of patches covered in the Tees Valley from last year. The event was well supported again and everyone who took part contributed to that, regardless of whether they found evidence of otters or not. It really is just as important to get information on where otters are not being found as to record where they are!

The weather this year turned out to be pretty good for surveying in most areas, Saturday was generally clear and sunny (although very cold) and some overnight rain helped to freshen the ground so that Saturday night/Sunday morning field signs were easier to spot.

One hundred and seventeen teams of volunteers checked a patch of watercourse over the weekend amounting to over 150 people in total. That is five more patches than last year – largely thanks to the increased effort by Tees Valley Wildlife Trust - containing 644 sites (36 more than 2015). There were unfortunately quite a lot of empty patches this year (29), due to late drop-outs because of illness and the non-returned forms of some participants. So we still have a few gaps in our coverage, but participation in eastern County Durham is improving. The by-catch of other species reported was once again impressive and the results of those sightings are shown in the table below the otter data.

Otters

Of the 644 sites checked 281 (44%) were positive for otter signs which is very similar to last year. A further 15 had possible or inconclusive signs. There were 344 sites (53%) which were totally negative – an identical percentage to 2015. This does sound a lot, but it gives us confidence that we are looking in enough places as there are still more sites where there are no otters than sites where we find evidence of otter activity. It is unlikely therefore that we are overlooking many. However, the large number of empty patches this year does mean we are likely to have missed some. There were 78 Day 2 ‘hits’ (fresh signs) which is a large increase on last year. As in previous years however, many of these ‘hits’ were close together in the same or neighbouring patches and so, as usual, have been adjudicated as a single territory. There were four patches where reasonably fresh deposits were found on Day 1 but nothing new was discovered on Day 2, and that were sufficiently isolated from the next nearest ‘hit’ for us to be fairly confident that we were just not looking in the right place on

the Sunday. These have been adjudicated as ‘Near Miss’ otter territories. There were also several sightings of an otter in the South Tyneside area in the week before and after the survey weekend. No fresh signs were found in that patch but the sightings were reliable enough for us to class this as a Reasonable Suspicion otter.

As always I have erred on the side of caution when allocating ‘hits’ to territories and have tended to lump fresh signs together into one territory rather than split them into two if they are quite close together.

For those unfamiliar with the way the data are analysed it is important to emphasise that we are counting otter territories here not individual animals. It is reasonable to assume therefore that many of the adjudicated territories will contain females with cubs meaning the number of actual otters will be greater than the number of territories. This is as accurate as we can be when surveying for an elusive, wide-ranging, cryptic animal that has no individually identifiable markings.

You will see in the results table below that the number of estimated territories this year is 35. This is one fewer than last year. This being the fourth year of the survey it is reassuring that the results have been remarkably consistent from year to year. Not only does this give us confidence that we are getting things about right, but it also suggests that the otter population is relatively stable at this time. Whether that population is at carrying capacity (the maximum number of animals that can be supported in a given environment in terms of food and habitat) or not it is difficult to say.

Other species

There was a huge increase in the number of reported sightings of other species this year with a record 96 species in total!

The dipper count fell back slightly, but there were two barn owl sightings as well as two red kites, 10 buzzards and four linnets. For mammals, the reports of deer tracks/visuals were the same as 2015 at 21. No fewer than 11 brown hares were seen as well as three stoats, two common shrews and a wood mouse. Less good news however is that once again there was an increase in sightings of mink scat and tracks - up from 18 last year to 32 this year! We are planning to start mapping our mink records and comparing them with the otter data in the coming year so please do report any sightings or scat that you find regardless of whether it is for the survey.

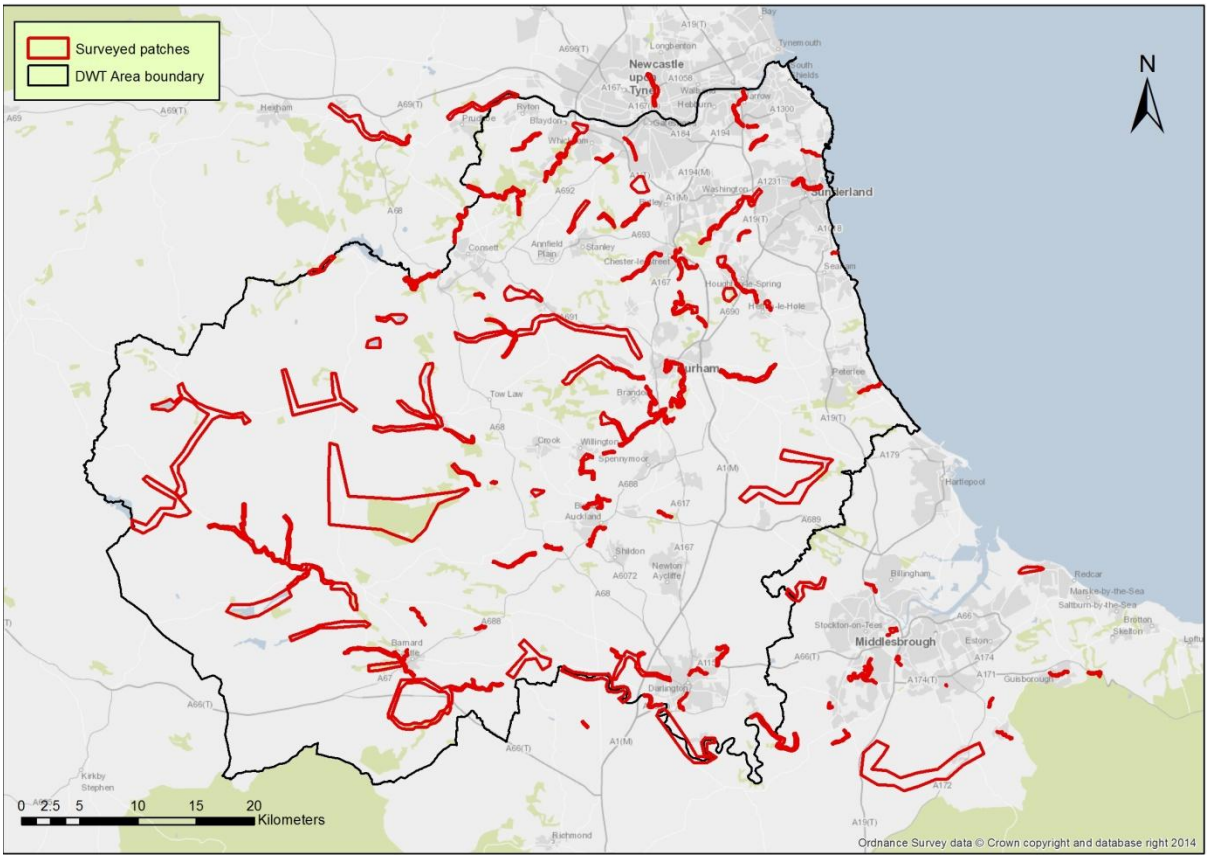

Figure 1. Map showing patches surveyed in 2016

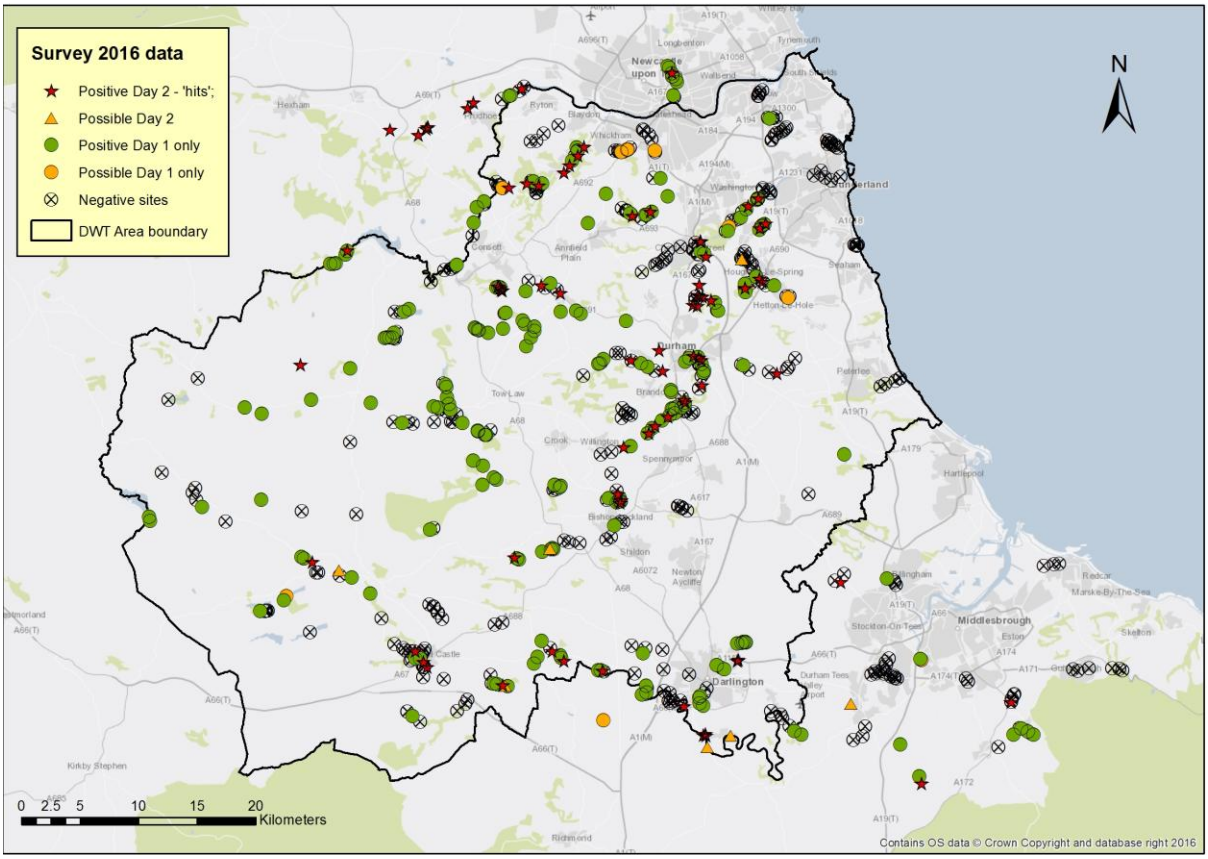

Figure 2. Map showing all data points from 2016 survey

Otter Survey data

Catchment	Patches	Sites	Negative sites	Positives (possibles)	Hits	Near miss and reasonable suspicion	Otter territories
Tees	43	194	120	69(5)	17	2	10
Tyne	22	126	67	50(5)	19	1	8
Wear	52	304	137	162(5)	42	2	17
Castle Eden Dene	1	5	5	0	0	0	0
Cut Throat Dene	1	10	10	0	0	0	0
Ryhope Dene	1	5	5	0	0	0	0
Totals	**119***	**644**	**344**	**281(15)**	**78**	**5**	**35**

*1 patch had sites in both Tees and Wear catchments

2016 Summary	
Empty patches	29
Otter territories located	30
Reasonable suspicion/ near misses	5
Total adjudicated territories	**35**

	Surveys Summary			
	April 2013	**April 2014**	**April 2015**	**April 2016**
Patches	93	100	112	119
Total sites	517	588	608	644
Sites positive	216	212	260	281
% sites positive	42	36	43	44
% sites negative	56	60	53	53
'Hits'	59	67	56	78
Located territories	26	29	27	30
Near misses/Reasonable suspicion	3	6	9	5
Adjudicated territories	**29**	**35**	**36**	**35**

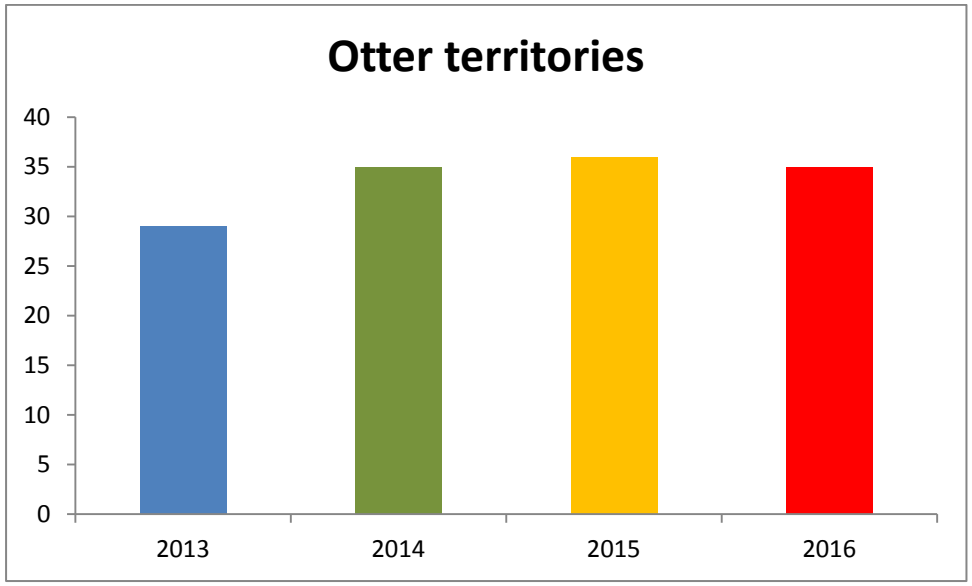

Figure 3. Otter territories identified in four DWT Otter Surveys

By-catch of other species

	Species	Number
Birds	Barn owl	2
	Black-headed gull	1
	Blackbird	5
	Blackcap	4
	Blue tit	3
	Buzzard	10
	Canada goose	1
	Carrion crow	2
	Chaffinch	4
	Chiffchaff	7
	Collared dove	1
	Common sandpiper	9
	Coot	3
	Cormorant	10
	Curlew	10
	Dipper	20
	Dunnock	3
	Goldcrest	2
	Goldfinch	10+
	Goosander	35+
	Great black-backed gull	1
	Great crested grebe	3
	Great spotted woodpecker	5
	Great tit	4
	Green woodpecker	1
	Greenfinch	2
	Grey heron	15
	Grey wagtail	22
	Greylag geese	100+
	Herring gull	3+
	House martin	10+
	Jackdaw	4
	Jay	1
	Kestrel	2
	Kingfisher	2
	Lapwing	2
	Linnet	4
	Little grebe	1

	Little owl	1
	Long tailed tit	2+
	Magpie	5
	Mallard	40+
	Mandarin duck	1
	Meadow pipit	1
	Mistle thrush	3
	Moorhen	8+
	Mute swan	15+
	Oystercatcher	10+
	Pheasant	4
	Pied wagtail	5
	Pochard	2
	Red grouse	1
	Red kite	2
	Redshank	1
	Redstart	1
	Reed bunting	8
	Ringed plover	1
	Robin	6
	Rook	10+
	Sand martin	3
	Shelduck	17
	Skylark	3
	Snipe	1
	Song thrush	4
	Starling	5+
	Swallow	20+
	Teal	6
	Tree creeper	1
	Tufted duck	3
	Wheatear	1
	Willow warbler	4
	Woodpigeon	4
	Wren	6
	Yellowhammer	1
	Total bird species	**74**
Mammals	Badger (tracks/setts/latrine)	6
	Brown hare	11
	Brown rat	4
	Common shrew	2

	Deer (tracks/droppings)	9
	Grey squirrel	1
	Hedgehog	1
	Mink (tracks/scat)	32
	Rabbit	1
	Roe deer (visual)	12
	Red Fox (tracks/scat)	4
	Stoat	3
	Water vole visual	1
	Water vole (latrine/burrows)	6
	Wood mouse	1
	Total mammal species	**13**
Amphibian	Common frog	1
	Smooth newt	4
Reptile	Common lizard	1
Fish	Stickleback	Many
	Trout	1
Insects	Buff-tailed bumblebee	1
	Green veined white butterfly	1
	Small tortoiseshell butterfly	4
Plant	Himalayan balsam	**4**
Species Total		**96**

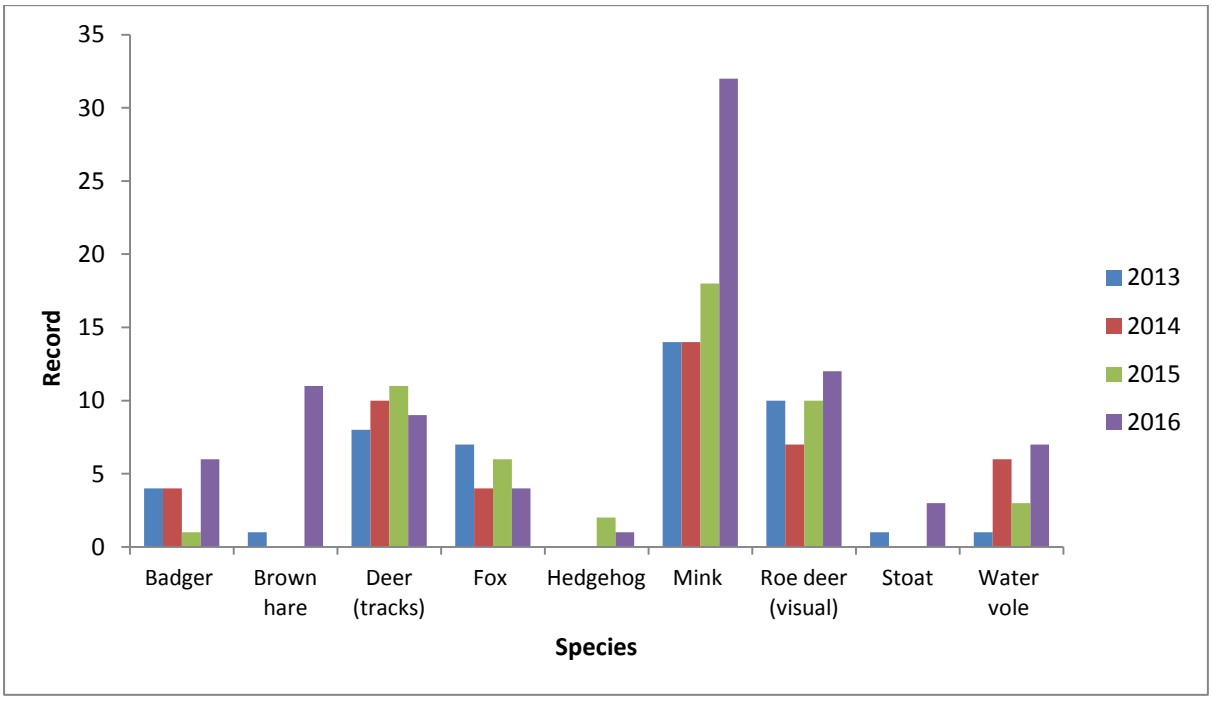

Figure 4. Chart comparing mammal sightings across surveys