

ESTIMATION OF THE SIZE OF THE OTTER POPULATION

IN THE COUNTY OF SOMERSET, ENGLAND

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A series of 15 annual co-ordinated surveys, when approximately 130 teams of volunteers inspect nearly 500 sites along 125 preselected stretches of waterway on the same 2 consecutive days, has produced results consistent enough with each other to allow an estimation of the numerical size of the adult otter population across the whole county. The aim is to try to progress beyond mapping those 10km squares that are now positive again for otters after the major collapse of the 1970's. Our region has long had a widespread re-established presence, but in order to counter exaggerated claims about the predator menace on reared fish stocks, and to assess the effect on the otters of the new parasite infecting many of the casualties that we send for post mortem, we need to know more or less how many otters are involved. The waterways of the 8 basic river systems are divided into a total of 190 survey lengths, and as many as possible are surveyed twice on the same consecutive days in April. The results from 500 sites are categorised as positive or negative for any otter signs, and as having fresh evidence on day one or day two. That just over 70% of the sites checked are positive, shows that the survey is searching in enough places; fresh evidence is found at 30% of these sites, indicating that otters utilise about a third of their territory in any one night.

Mapping of this simultaneous information gives a picture of the spread of otters, and incidentally mink, on the intermediate night across the whole county. Analysis of it enables a numerical estimation of the minimum, or approximate, strength of the adult population, (cubs are not included), on an assumed basis of one adult per discovered range.

This estimate is validated by comparison with the results from a DNA survey conducted by the Environment Agency, which looked at the feasibility of using DNA from fresh spraints to assess the strength of a population of otters. Two of the four rivers they used are in our county, so their result of the number of otters identified provides a baseline for comparison with our subsequent findings. And it is validated by consistency with other sources of information: we do another series of checks on

a monthly basis, we record all known deaths, and we log all reliable reports from fishermen and farmers etc. So far, none of these sources of information has led to any surprising departures from what our annual survey has revealed. Mapping of the results indicates that our waterways are occupied at or near full capacity, and the low total of between 65 and 70 adult ranges across an area of 3700 square kilometres is useful in countering some of the wilder claims of the fish rearing and angling interests.