

The Otter in Britain

Last year the FPS together with the Council for Nature asked the Mammal Society to investigate the status of the otter in Britain in view of the widespread belief that numbers had declined seriously, especially in the south. This interim report from the Mammal Society, published here in full, confirms these fears, suggests causes, and what action should be taken.

THERE appears no doubt that, over the southern part of Great Britain there has been a very considerable decrease in the otter population. There is no direct evidence of the causes but several appear to be possible. These require investigation. They fall into two classes: the first, including the increase of fishing, tourism, riparian clearance, and an increased use of riverside 'amenities', may have to be regarded as a permanent and inevitable outcome of the increased human population, means of travel and the redistribution of wealth. The second class include those of a temporary nature (although repeatable) such as the very severe winter of 1962-63 and the increase of an insecticide pollution of a kind previously unknown. The cessation of such temporary adverse conditions could be followed by a return to a new normality provided other, more permanent, factors did not press too heavily during this period of recuperation. There is no evidence - and it has been looked for - that the introduction of the mink has in any way affected the otter population.

Against the known destruction of riparian habitats, either directly or by day-time disturbance, the otter may well be supplying the answer itself. Most mammals display a high degree of adaptability of behaviour under adverse conditions. The unanswerable factors are untimely death and possible inability to reproduce.

For at least the next five to ten years therefore the killing of otters and further pollution should be reduced as much as possible. This will at least allow time to find out if the analysis of the causes is a correct one and at best allow the otter to re-establish itself and adjust to the increased human disturbance.

Information Received

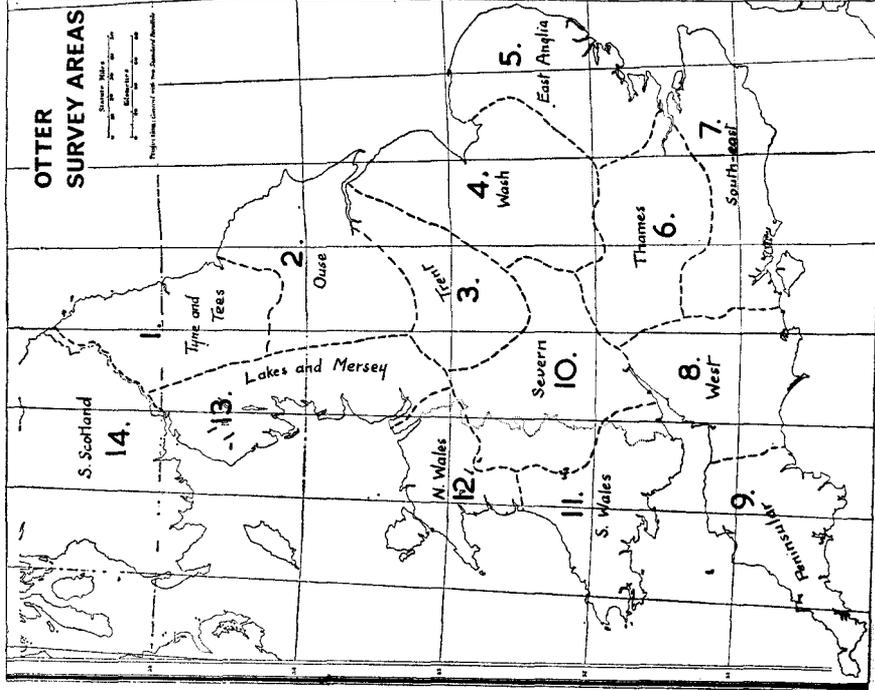
The British Field Sports Society circulated questionnaires to all otter hunts, and returns have been received from 13. All but one were able to supply figures extending over considerable periods as follows:

<i>No. of otter hunts with data for:</i>	1900	1937	1947	1957	1967
	7	12	8	12	12

This is all the numerical data received. It covers all England and Wales except for the major conurbations of London, Birmingham and the Black Country and South Lancashire. The Association of River Authorities

OTTER SURVEY AREAS

Map2



OTTER HUNT DISTRICTS

Map3

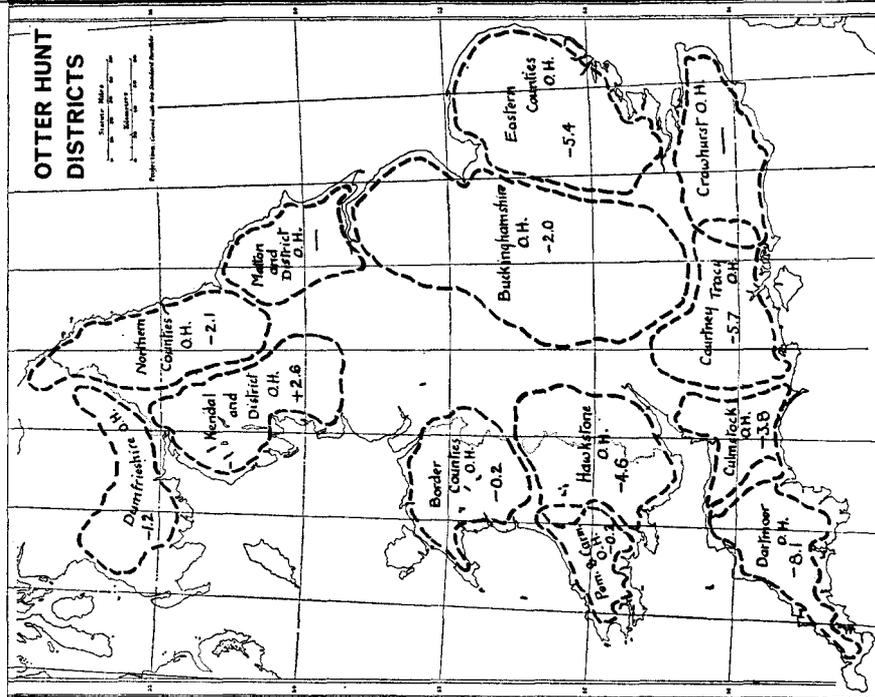


Table 1

Total numbers of otters found, killed and of days hunting

Year	Found	Days hunting	Killed	No. found per 100 days	% of found killed
1900	226	351	116	64.4	51.3
1937	520	764	266	68.1	51.0
1947	221	227	100	79.8	45.2
1957	398	556	205	71.6	51.5
1967	228	523	51	43.6	22.4
Total (5 years)	1593	2471	738	[Av. 64.5	46.3]

supplied names and addresses of the RAs in England and Wales and questionnaires were sent to all. The number of returns and acknowledgments was 20, but five did not provide any usable data. No information is available for England north of the Trent, for the Thames basin or for Sussex. No RA data has been forthcoming for South Wales.

Individual returns varied in origin from organised enquiries to spontaneously supplied isolated data. In all about 160 returns have been received of which 25 are not of use for comparative study. The remainder are of very unequal distribution and scope. However, they have all been roughly evaluated and used in compiling the summaries (see Appendix 1).

Methods Used

The country has been divided into 17 areas based on river basins and having some regard to the distribution of available data. These are listed in Appendix 1 and shown in Map 1. Since the otter hunts' data were the only figures available they have been treated as the most objective material and submitted to simple mathematical treatment. Using these results as a basis each area has then been summarised bringing in such river authority returns and individual reports as are available.

Otter Hunt Returns

Using the total figures Table 1 has been constructed. Taking the last two columns at the right hand side, the first of these presents an over-all index of the abundance of otters for the five years concerned and it will be noted that there is no significant difference between 1900 and 1937. After the second war the population appears to have risen significantly, but even by 1957 it had dropped almost to the pre-war level. (The figure of 71.6 per 100 days hunting is probably not significantly different from that 68.1 of 1937.) By 1967, however, the figure of 43.6 is very significantly different and indicates a considerable decrease in the population.

Turning to the last column, the figures for 1900, 1937 and 1957 are remarkable for their consistency, indicating a very steady level of expertise in hunting. The figure of 45.2 per cent for 1947, while significantly different, is explainable probably on the grounds of loss of expertise due

Table 2

Hunt	Nos. found per 100 days hunting					Average annual %age change	
	1900	1937	1947	1957	1967	1937-57	1957-67
Dartmoor	15	65	33	76	14	+0.8	-8.1
Courtney Tracy	-	68	59	82	35	+1.0	-5.7
	(1908)						
Eastern Counties	82	76	-	70	32	+0.3	-5.4
Hawkstone	114	84	124	126	68	+2.9	-4.6
Culmstock	25	90	93	75	47	-0.8	-3.8
Northern Counties	-	96	-	54	43	-2.2	-2.1
Buckinghamshire	-	55	-	55	44	0.0	-2.0
Dumfriesshire	64	83	76	94	85	+0.7	-1.2
Border Counties	36	71	71	58	57	-0.9	-0.2
Pembroke & Carmarthen	-	73	46	32	26	-2.8	-0.2
Kendal & District	-	40	-	36	46	-1.0	+2.6
Crowhurst	-	-	-	-	-	-	-
Molton & District	-	38	75	67*	20*	-	-

*This hunt only had a total of 15 days' hunting in three years with eight 'finds'. These percentages are therefore not to be used for further analysis.

to the intervention of the war; four of the 12 hunts had not recommenced by that date. Finally the figure of 22.4 per cent for 1967 reflects the policy adopted of calling off hounds before a kill thus reducing the percentage kill by about half.

A study of these figures leads to the conclusion that they are intrinsically accurate as measures of otter populations.

The returns of the individual hunts were then examined in respect of Finds. These again were treated as 'Finds per 100 Days Hunting' and are set out in Table 2 in the five left-hand columns. In the remaining two columns on the right are set out figures which represent changes over the last 30 years. These figures are derived from the percentage increases, or decreases, taking the figures for the earlier year as 100 and then dividing by the number of years involved. Thus for the Dartmoor Otter Hunt in the years 1937-57 there was an average of 0.8 per cent *increase* per annum, based on 64.6 per 100 days in 1937 and 75.5 per 100 days in 1957; but from 1957-67 there was an average of 8.1 per cent *decrease* per annum based on 75.5 per 100 days in 1957 and 14.3 per 100 days in 1967. In Table 2 the hunts have been set out in the order of the last column, namely that showing the greatest decrease is at the top and that showing an increase at the bottom. The figures of this column have been inserted on Map 2 to show their geographical distribution. From this it will be seen that those hunt territories least affected tend to be in the west and north while those worst affected lie to the south and east. Comparison between the two right-hand columns shows that, generally speaking,

those territories worst affected between 1957 and 1967 tend to be those in which some positive increases had taken place between 1937 and 1957. This merely means that the later decrease is not quite so catastrophic as some of the figures imply. They are, however, serious enough.

The Areas

Summaries for each area are given in Appendix 1. It is inevitable that in making such summaries the otter hunt figures play a considerable part and weighed heavily, but it is fair to say that returns by river authorities and by individual investigators did not, in any area, contradict the findings based on the otter hunt returns. Only in a very few localised areas are there any indications of a stable population or of an increasing one. These individual reports of increase all refer to very recent changes comparing 1968 with 1967 and this may be of some significance.

Very few records have come from Scotland (Areas 14–17). Although Area 14 (South Scotland) depends on the Dumfriesshire Otter Hunt return, Areas 15 and 16 (West and North-east Scotland respectively) only have individual reports, all from knowledgeable people. Here there does not appear to be any marked change and otters remain plentiful.

Causes of the Decrease

There are a number of statements in the reports which are of significance if only because they mention causes associated with the timing of noted decrease, and because these causes are quoted by several observers independently. In addition a very interesting document was prepared by the Herefordshire & Radnorshire Nature Trust which again lays emphasis on the same possible causes. Several have noted that after the severe winter of 1962–63 the number of otters appeared to have decreased considerably. It is worth noting that it was the south and east of England which suffered worst, and that the north and west of Great Britain had less severe weather conditions for a much shorter time. It is also suggested that the incidence of a high level of pesticide pollution followed upon this; consequently the reproductive potential of the otters was reduced so that a return to normal numbers was prevented. Again it may be noted that those areas whose otter populations are most affected are also those predominantly corn-growing and consequently most likely to have been affected by seed dressings. With the reduction of pesticide levels some return to normal breeding might be expected. This may therefore be the explanation of the *very recent* increases reported, since in nearly all instance the appearance of otter kits (not seen for some time) was associated with the increase.

Other contributory causes appear to be the increase in fishing which in some parts of the country is now intense, the increased tourist and pleasure boat pressure on the eastern and southern rivers, increased trapping due to the high value of the uncured pelt (£5–£7). Two reports, quite independent, mention the retreat of otters away from rivers to make their lairs in woodland, returning to fish only at dusk. One of these associates this change of habit to the destruction of the riparian habitats in the interests of drainage.

From the otter hunt figures it is clear that, other things being equal, the cull by this means did not cause any significant decrease in the population between 1900 and 1937. Nor, even with the reduced numbers of the '60s would an annual total of 50 be significant – about 1000 mink are being trapped each year. In the worst affected areas there might be an effect at this level, although there are no means of checking this.

Appendix 1: Summaries of Areas

	No. of Individual Reports used	
1. Tyne & Tees	2	Considerable decrease
2. Ouse	1	Recent increase in north-west but decrease in East Riding and most of West Riding indicated
3. Trent	–	Insufficient evidence
4. Wash	–	Considerable decrease (possible causes are insecticide pollution and pelt trapping)
5. East Anglia	9	Considerable decrease particularly in southern part. Still plentiful in parts of Norfolk in the Broads and marshes where habitats remain and pesticide content not too high. Pelt trapping, destruction of habitats and pesticides as possible causes
6. Thames	–	Insufficient evidence for firm statement but probable decrease indicated
7. South-east	48	Insufficient evidence from eastern part (Kent & Sussex). On Rivers Loddon, Meon, Hamble, Test there has been considerable decrease. Rivers Itchen & Lymington appear to have remained stationary. Increased pollution as cause. Areas showing little change have habitats very little altered
8. West	11	Stationary but parts of Avon show slight increase, other parts slight decrease
9. Peninsula	6	Considerable to slight decrease
10. Severn	13	Lower rare or absent; Middle Severn and Wye show slight to considerable decrease; Worcs and Warwick Avon areas stationary to slight decrease, Upper Severn shows some increase
11. S Wales	17	Slight to considerable decrease

12. N Wales	23	Upper Dee – considerable decrease. Caernarvon area – probably stationary. Clwyd and lower Dee – considerable decrease
13. Mersey & Lakes	4	Southern part (Ches. & South Lancs) stationary (but rare). Northern part (Lakes) slight to considerable increase
14. S Scotland	–	Slight decrease
15. W Scotland	1	Probably stationary or slight increase (Plentiful)
16. NE Scotland	2	Stationary (Plentiful)
17. N Scotland	–	No evidence

The Mammal Society has prepared this interim report 'because it has become clear from the paucity of individual returns that without highly-organised investigations little further information of value can be obtained. This would take a great deal of time and some conclusions are possible at the present which could influence action at once. Moreover, the indications are that the population status of the otter may well be undergoing rapid changes so that prolonged investigations may not lead to further results capable of easy analysis. This interim report is confined to consideration of *changes* in the population. The answers to all other queries of the questionnaires remain to be analysed.'

FILMING WILDLIFE

Journal of the Society of Film and Television Arts. Double issue Nos. 32–33. Wildlife: Film and Television, 10s 6d.

Without films or television few people today would get to know much about animal life. To those of us who are concerned with fostering an interest in animals so that their future conservation may be assured, this special issue is a valuable and interesting document. The development of wildlife filming is traced in articles on the main production units including British Instructional Films, who were responsible for the splendid 'Secrets of Nature' series, British Transport Films, Countryman Films, the Children's Film Foundation, the RSPB Film Unit and others. The backgrounds to the better known television natural history programmes – BBC's 'Look', Anglia's 'Survival' and Granada's 'Zoo Time' are given. Independent film-makers such as Heinz Sielmann and Christopher Mylne have their say. Practical aspects of film-making, including the use, or mis-use, of music in natural history films, and a rational ethic for natural history film-makers are discussed. The results of two surveys are analysed, one on animals that make a particular appeal to audiences and the other on the general public's attitudes and tastes in wildlife programmes on television.

Perhaps the most penetrating statement comes from Mr Henry Geddes, Executive Producer of the Children's Film Foundation: 'The only way to ensure that animals will survive is surely by showing children the truth about them so that when their turn comes to decide what is to be done, they may take a balanced view of the various factors. Perhaps if the cinema had been invented a couple of hundred years earlier, the dodo might well be alive today.'

JOHN CLEGG