Mammal Ecology in Five North Yorkshire Rivers

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Research into the ecology of the four principal land mammals that spend a fair proportion of their time in the water is the subject of my M.Phil study at the University of York. While the four - the otter (*Lutra lutra*), water vole (*Arvicola terrestris*), water shrew (*Neomys fodiens*) and mink (*Mustela vison*), have been studied as individuals - usually in one water system - I am looking at the distribution and habitat relationships between all four in five rivers within the boundaries of the North Yorkshire Moors National Park.

One of the major difficulties in studying British mammals is the fact that many of them cannot be observed for any length of time so that the correct interpretation of field signs becomes of overriding importance. This raises the interesting question as to whether field signs like footprints, droppings, etc. can be quantitatively related to population numbers; to answer this question much of the work has to be backed up by capture - mark - release programmes, except of course, in the case of the otter.

Thirty-six research sites distributed over the five rivers have been selected to give as diverse a range of habitats as possible; these can be roughly categorised into open bank, tree lined, woodland and highly disturbed areas. A very detailed vegetation survey has been carried out at each site in spring, summmer and autumn by taking transects at 5 to 10 metre intervals, allowing quantitative comparison to be made between sites on each river.

The sites are visited regularly - at least once a month - and all exposed sandbars, mudflats and banks carefully inspected for signs of activity by the four aquatic mammal species as well as their use by terrestrial mammmals, for example grey squirrel, stoat, etc.

From these an index of activity is calculated. Only by carrying this out for at least two years can real trends be shown. Some interesting patterns have already emerged such as the onset of water vole breeding activity; a well defined interaction between mink and water vole and a major peak of mink activity in spring. All these appear to be correlated between the different river systems. Monitoring of tracks has shown the wide range of habitats water voles explore at different times of the year.

Unfortunately my study rivers had to be omitted from the past Nature Conservancy Council national otter surveys so this work will help to complete our knowledge of the status of the otter in North Yorkshire. In addition I am interested in receiving any evidence of otters throughout Yorkshire as I am collecting data relating to both this county and Cleveland. Such information, I add, would be treated with the strictest confidence.

It is quite significant that otter footprints were found from time to time on all the rivers in 1985 but only on one occasion was there any evidence of sprainting. Normally spraints are expected where there are healthy otter populations so it would suggest that the signs I am finding are due to solitary animals moving along these rivers and a very fragmented population. Therefore, it becomes more essential than ever to keep rivers where there are signs of use by otters as free from disturbance as possible, while the need for preservation and creation of dense river-side cover is a priority.

As an adjunct to this study I am trying to obtain the hunting records of the Northern Counties Otter Hounds for this area; records which could well throw light on when the otter went into decline in North Yorkshire.

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NAPS - Dilemma for Bats

My first reaction on reading the booklet "Bats - Dilemma for an Industry" (produced by Nationwide Association of Preserving Specialists - NAPS), was to write an article condemning it in the strongest possible terms. After taking a deep breath and re-reading it, I realise I did not have to do this - as it condemns itself. All I have to do is highlight the major inaccuracies and distortions.

In order to support its case, that Lindane is not toxic to bats, it manipulates the facts:

It libellously misquotes bat specialists, in particular Dr. R. Stebbings of the Institute of Terrestrial Ecology.

It dismisses any experimental or observational evidence of toxicology studies.

It questions the credibility of bat experts, scientists, enthusiasts and the Nature Conservancy Council.

It misleadingly quotes batty snippets, taken completely out of context, giving incorrect reference sources.

It is a totally distorted view of bat conservation and the 1981 Wildlife and Countryside Act, based mainly on the successful escape from prosecution of a roof treatment "specialist" who "unintentionally" sprayed Lindane in a roof with a bat roost.

The British Wood Preserving Association (BWPA) is the long established association of the timber treatment industry. In any controversy BWPA would advise its members to "err on the side of caution and follow the recommendations of the Nature Conservancy Council" - which is sensible advice in the light of NAPS emotive hue and cry.

The Fauna and Flora Preservation Society has asked NAPS to withdraw all copies of this damaging booklet or it will take legal action.

Angie Hibbert