R. Strachan: Pine martens in perspective: changes in distribution and status of pine martens in England and Wales.

In mediaeval times, pine marten pelts were relatively expensive, suggesting that the animal was uncommon even at this time. By the 18th century it was still widespread until marten hunting became recognised as a field sport. Victorian county records show that it had become rare or extinct, surviving only in moorland/forest areas. Between 1900-1959 the pine marten was still recorded, and since 1960 there has been a resurgence of records in the north and Wales. In Scotland, range expansion was confirmed by Willander.

Wlander's (1980-82) survey of pine martens in Britian showed that they were confined to north west Scotland. All sites in England and Wales proved negative, but records suggested that it might be present in northern areas.
R. Strachan was commissioned to carry out a baseline survey in England and Wales, with the aim of tracing any records and surveying listed areas. As a result, 786 records were logged, consisting of 401 from published literature and 385 responses to questionnaires and advertisements.
Field signs of the pine marten include its 5-toed track with crescent-shaped pad, and cylindrical, twisted scats which have a characteristic sweet, musty odour. Radio tracking revealed information on home range and den site location. Of 896 sites surveyed, 78 showed evidence of pine marten. The main population centres were shown to be north Wales, north Yorkshire, Cumbria and Northumberland. Compared to Scottish sits, signs were rare and populations fragmented, leaving doubts over their long-term viability. Mosaic habitats, containing areas of forestry, moorland and rock outcrops, were favoured. It is not known whether these are relicts of the 19th century population, or if there have been deliberate releases, since some animals are of foreign origin.

D.W. Yalden: Thoughts on owls, their prey and mammalogists.

Studies on owl pellets can reveal information on small mammal habitat and ecology.
In habitat analysis, the characteristic prey species for particular habitat types are studied. For example, 50% of the barn owl's diet nationally comprises of field vole. However, in farmland areas, brown rat is an important prey item, while in Ireland (where the field vole does not occur), their diet consists mainly of rat and woodmouse. Tawny owl pellet examination has shown that in woodland the main prey species are woodmouse and bank vole. In the Peak District, the main prey species is the field vole, while in the New Forest it is the woodmouse. Seasonal diet variation, reflecting prey abundance patterns, can also be observed. In barn owl diets, the proportion of field vole falls in summer, to be replaced by shrews. In a study in West Berlin, tawny owls were found to prey on yellow-necked mice and birds. Birds predominated in summer, while mice were the main prey in autumn. A long term change occurred due to mouse population cycles. More birds were taken, which affected the breeding success of the owls.

V.Clinging : Mountain hares in the Peak District

The mountain hare is smaller than the brown hare with shorter legs and no black on the tail. The mountain hare turns white in winter and has black ear-tips. There is considerable range overlap in the eastern Peak District, but the brown hare prefers grassland while the mountain hare is more common in moorland areas. The Peak District mountain hare colony is the only one in England. The hares were introduced from Scotland from the 1860s onwards for shooting.

The colour change takes the form of a moult triggered by photoperiod. Moult phenology depends upon temperature. The Sorby Naturalists set up a colour change recording scheme. They found that while there was much individual variation, all hares go completely brown in the summer but not all turn totally white in the winter. The spring moult (white to brown) is more gradual than the winter (brown to white) moult. In very cold winters, hares appeared to stay whiter for longer.

The Sorby Naturalists hold an annual mountain hare walk along Derwent Edge, Derbyshire in March. Hares are counted and distribution details plotted. In the severe winters of 1978-79 and 1985-86 many hares died. Since 1986, the population has appeared to increase but it is now more localised.

M. Dyson: The distribution of badger setts and some responses to the environment in South Yorkshire

Since the national badger survey of 1963, persecution of these animals in the form of digging, snaring and blocking up setts has increased in South Yorkshire. Rechecking of 1963 records for the region has revealed that many setts have now become inactive, with an overall decrease of 60% across the county. The remaining badgers appear to be utilising unusual habitats for sett construction, with 54% of setts occuring in mines, rocks and drains. 10 % of setts are found more than 1,000 feet above sea level.

D. Jackson : Common seal resarch in the Tees Estuary

Very little is known about the history of the common seal in the Tees Estuary. A recent study was initiated by David Bellamy Associates with the aim of discovering why