

CHAPTER 1

INTRODUCTION

Mammals are an important part of our lives, forming key components of both the natural and cultural landscapes. Although the carnivores traditionally have had a bad press, their roles in nature are fundamental, and every effort should be made to determine their status and to ensure that they are conserved in an ever changing world. Our attitudes to members of the British Carnivora are somewhat ambivalent: each in their time has been subjected to vilification and persecution, with some such as wildcat and polecat driven to extinction in England. Over time, others have met with favour, badger and otter currently being icons of the wildlife conservation movement, while the domestic cat has become a favoured companion animal.

By offering lucrative bounty payments, the 1566 Act for the 'Preservation of Grayne' encouraged the destruction of a wide range of what were regarded as 'ravering byrdes and vermyn'. Ironically, by targeting all members of the Carnivora, it was highly likely this legislation (repealed in 1863) actually benefited grain-eating mammalian pests. Fox, otter, stoat, pine marten, wildcat, even polecat (fitch) were killed for their pelts. The 'Sumptuary Laws' of 1363 and 1532 stipulated that cat and fox could be worn by the lower orders of society whereas ermine, the winter pelt of those stoats subject to the winter-whitening gene, was used in regal and lordly regalia (Veals 1966).

In English literature the fox, traditionally regarded as a wily predator of poultry, was characterised as 'the coal-tipped fox of sly iniquity' in Geoffrey Chaucer's *Canterbury Tales* written in the 14th century (Skeat 1947). Five centuries later it appears, still suave and scheming, as Beatrix Potter's (1908) Mr Fox, plotting to feast on the eggs and flesh of naive Jemima Puddle-duck. Conversely, the highly organised, even ritualised sport of foxhunting, celebrates the ingenuity of the fox in providing exciting runs. To produce a reliable stock of foxes to be hunted, the planting of fox coverts effectively modified the enclosure landscapes of Georgian Yorkshire, where tenant farmers could jeopardise their livelihoods by killing foxes otherwise destined to be hunted. Topsell (1607) includes the stoat with '*noysome beasts*' and in the *Hampole Psalter* dated c. 1340, the weasel is used as the personification of predatory malevolence, a characterization which continued into the 20th century with the weasels in Kenneth Grahame's (1908) *Wind in the Willows*.

Otters, enjoyed by some for the sport they afforded to specialist packs of hounds, were heavily culled by keepers in the interests of fishing stocks. In some

districts, Badgers were held to be ‘so obnoxious a pest’ the laws of trespass were waived to achieve their capture and death (Hatfield 1866). Long the subject of rustic field sports, they were (and are) dug out of setts to be baited by terriers and other fighting dogs, once openly in pub yards and market places, now furtively in illegal venues. Though championed by animal welfare and conservation bodies, their association with Bovine TB is eroding their welcome in landscapes managed by the dairy and beef farming fraternity (Wilson *et al.* (1997). ‘The stinking polecat, shunned by most people and persecuted by all’, the judgement of Charles Waterton of Walton Hall, Wakefield (Hatfield 1966), seems never to have been challenged until now, with Johnny Birks' (2009) sterling work canvassing its priority status in the UK Biodiversity Action Plan (2007). The American mink, irrespective of its merits in providing the raw materials for the luxury fur trade, suffers a double prejudice through being both an 'alien', and therefore an unwelcome interloper, and being implicated in the rapid decline of the innocuous 'native' water vole.

The wildcat, the villain in the Barnburgh ‘*Cat and Man*’ legend (Bingley 1802), was used for dramatic effect by Victorian naturalists and topographers (e.g. Barker 1854, James 1865, Hatfield 1866, Harting 1898) to populate, along with other dangerous beasts, the 'hercinian' forests which in unspecified times past were deemed to have clothed the Yorkshire Pennines and Dales. By contrast, the practical function of ‘working’ domestic cats controlling synanthropic rodents has long been part of our culture. In the 14th century, Geoffrey Chaucer writes in *The Maunciple's Tale* ‘Such appetite he hath to eat a mous’ and John Gray (1733), in appreciating the cats’ commercial worth, writes:

‘We rat catchers might raise our fees,
Sole guardians of a nation’s cheese!’

Finally, in our reportedly stress-prone and progressively dysfunctional lives, domestic cats play an important role as therapeutic companion animals (Soulsby & Serpell 1988). This has long been the case; Christopher Smart (1760s), in ‘considering his cat Jeoffry’, writes ‘For every house is incomplete without him...’. however, this affection or dependency may be having marked ecological repercussions in carnivore intra-guild relationships. Harris *et al.* (1995) estimated that the population of domestic cats in Britain was in excess of eight million, outnumbering by more than five-fold the total British populations of all other members of the Carnivora.

Students of the changing status of Britain’s mammals during historic times have relied on such authorities as Harting (1878, 1891a, 1891b), Millais (1904), and Barrett-

Hamilton and Hinton (1910-1921). Though towering landmarks in the subject, they were, however, dependent on the accumulated subjective opinions proffered by their correspondents and interpretations of a relatively few, mainly 19th century, records and anecdotes in the contemporary literature. In an attempt to investigate the complex and varied histories of mammals in Yorkshire, Howes (1984) explored a range of novel data sources and provided a substantial platform of information which revealed changes in status and distribution over time.

Langley and Yalden (1977) suggested that the relative paucity of data on the history of British mammals, linked with doubt cast over the authenticity of early records, have discouraged critical examination of the subject. Notwithstanding these limitations, they warned that to delay investigation would only increase difficulties as information sources become progressively less readily available. By utilizing published regional and county by county sources, primarily the standardised mammalia sections in the series of *Victoria Histories of the Counties of England* (e.g. Grabham 1907), Langley and Yalden (1977) presented in sequential dated maps what has proved to be a highly influential assessment of changes in the distribution of three of Britain's rarer carnivores during the 19th century. An acknowledged weakness of the VCH mammal status statements was their inevitable reliance on few records and subjective opinion. Yalden (1982, 1999) critically evaluated available information on the origins of Britain's mammal fauna and reviewed the diverse methodologies employed in studying its early post-glacial history, using many techniques not available to 19th and early 20th century chroniclers.

Howes (1976, 1980), returning to less sophisticated methodologies, employed local topographical treatises and press reports of the 18th and 19th centuries, together with samples of vermin bounty payment records of the 16th to 19th centuries in churchwardens' accounts from ecclesiastical archives, to monitor and interpret the decline of the otter in South Yorkshire and the polecat in Yorkshire and adjacent counties. Results demonstrated that data derived from churchwardens' accounts could provide a numeric basis to illustrate, or even challenge, the timing of status changes already suggested by traditional anecdotal sources. They could also produce evidence of status changes hitherto unnoticed.

Using the pre-1974 county of Yorkshire as a study area, Howes (1984) visited institutions and organizations with holdings of archives, literature and specimens relating to the history of mammals from 1600 to 1980, locating considerable additional data sources from local and regional natural history societies, fox hunting literature, and

even place-name evidence, not normally used by mammalogists to monitor past status trends. As a consequence, Howes (1984) assembled a major body of information for future researchers which includes tables and gazetteers of Yorkshire Naturalists' Union field excursion circulars and reports (1871 to 1980) and their annual mammal reports stretching over almost one and a half centuries. These data were used for long-term monitoring of status changes of eight target mammal species (dormouse, pine marten, wildcat, harbour seal, grey seal, red deer, sika deer, and fallow deer).

Using the material accumulated in Howes (1984), brief reviews of the histories of six of Yorkshire's carnivores were contributed to *Yorkshire Mammals* (Delany 1985), namely fox, pine marten, polecat, otter, wildcat, and feral domestic cat. The sources and recommended methodologies in Howes (1984) subsequently led to a series of research projects on the otter in the Humberhead Levels (Howes 2000a) and East Yorkshire (Howes 2003a), with preliminary studies on otters in the industrial Rivers Rother (Howes 1991b) and Don in South Yorkshire (Howes 2000b), and the Calder in West Yorkshire (Howes 2003b). Since the rivers of Nottinghamshire pass northwards into, or adjacent to, the old West Riding of Yorkshire, a historical study of that county's otters (Howes 1998) was also relevant to an understanding of the Yorkshire fauna. The sources also enabled the production of a review of badger persecution in Yorkshire (Howes 1988), a survey of pine martens in South and West Yorkshire (Howes 1991a) and studies on the history of the wildcat in Yorkshire (Howes 2002b).

The current study has utilised similar sources and methodologies to substantially expand information with which to investigate the histories and distributional trends in Yorkshire since 1600 of ten taxa of the mammalian order Carnivora. These are fox (*Vulpes vulpes*), badger (*Meles meles*), otter (*Lutra lutra*), pine marten (*Martes martes*), stoat (*Mustela erminea*), weasel (*M. nivalis*), polecat (*M. putorius*), American mink (*M. vison*), wildcat (*Felis silvestris*) and domestic cat (*Felis catus*). Again, the area of study is the pre-1974 Yorkshire which comprises the five 1895 Watsonian vice-counties 61 to 65, its geology, topography and natural history being outlined in Sledge (1971), Bell (1996), Muir (1997) and on the Natural England undated website on character areas in Yorkshire and the Humber:

www.naturealengland.gov.uk/ourwork/landscape/englandscharacter/areas

Although Howes (1984) used 16th to 19th century vermin bounty records from 41 largely southern and western Yorkshire parishes, the present study has extended this coverage to the old East Riding, North Riding and northern parts of the old West Riding by examining the archives of 157 parishes and transcribing the vermin bounty records

from 102 of these (see Appendices 2.1, 2.2 and 2.3). Whereas Howes (1984) abstracted short runs of 19th to early 20th century fox hunting records from three Yorkshire hunts, the current study has examined literature relating to 23 Yorkshire hunts, abstracting and generating numeric and distributional data from 11 of these.

For reasons of national wildlife conservation policy and management, a swathe of government and wildlife conservation charity-funded national surveys have been undertaken to monitor the status, distribution and habitat usage of a range of rare members of the Carnivora for which national and EC conservation legislation exists. Of the species that relate to this study, the otter has been investigated in four national surveys, of which the following have appeared since Howes (1984): Strachan *et al.* (1990), Strachan and Jefferies (1996) and Crawford (2003); additional surveys on the pine marten in Strachan *et al.* (1996) and Birks *et al.* (2004), the polecat in Birks and Kitchener (1999) and Birks (2008), and the wildcat in Easterbee *et al.* (1991) have been published.

For reasons of veterinary and agricultural concern, the distribution and status changes in badger have received national attention, as for example in Clements *et al.* (1988), Cresswell *et al.* (1990) and Wilson *et al.* (1997). The fox has been intensively studied, more particularly by Baker *et al.* (2001), Soulsbury *et al.* (2007) and Wilkinson *et al.* (2001).

The recent rapid decline in populations of the water vole in Britain, particularly as a consequence of the rise in American mink numbers, has been the focus of national status monitoring of both these mammals by Strachan and Jefferies (1993). Status changes in those members of the Carnivora regarded as pests on shooting estates, principally the fox, stoat, weasel and mink, have also been the focus of historical and current monitoring by the Game Conservancy, its work being reviewed in Tapper (1992, 1999).

The following chapters cover the methodologies employed, particularly where they differ from Howes (1984) and delimit the geographical areas under study. Individual chapters are devoted to each of the selected Carnivora. For the latter, each carnivore review includes a detailed discussion, and the final chapter provides an overview of the information assembled for all the taxa, and a summary of the findings. This work is supported by a comprehensive bibliography, a series of substantial appendices (provided on computer disc), and facsimiles of relevant published papers by the author since Howes (1984).