# By J. F. D. FRAZER

The Kent Field Club has now been in existence for ten years and during that period I have been Recorder for mammals. The present paper is intended to draw attention to the data which have reached me, and also to certain startling deficiencies in these records, which I hope members will rectify. I am grateful to a number of individual members for records, and in particular to the Recorders of the London Natural History Society for an ex- change of data where their area overlaps the County of Kent.

## **INSECTIVORA**

**Hedgehog (Erinaceus europaeus).** Common throughout the county, ranging from Woolwich Arsenal to Dungeness. An albino was recorded at Chiselhurst by G. H. Wade (Webb et al., 1899).

**Common Shrew (Sorex araneus).** Very common, but records refer almost entirely to N. and N.W. Kent.

**Pigmy Shrew (Sorex minutus).** Stated by Baker (1908) to be getting rare. Only nine records of actual localities held, although these are well dispersed.

Water Shrew (Neomys fodiens). Nine localities recorded none in E. Kent.

Mole (Talpa europaea). Common and widespread.

### **CHIROPTERA**

Only a small number of people have worked on the bats of the county, so the records are scanty.

Noctule (Nyctalus noctula). Records from ten localities suggest that this is widespread.

**Leisler's Bat (N. leisleri).** Recorded from Chislehurst, Abbey Wood and Sevenoaks. Harrison (1958) who recorded the last pointed out that the combination of meadows with deciduous woodlands and coppices seemed to be the favourite haunt of the species.

Pipistrelle (Pipistrellus pipistrellus). Very common, but records only from six localities.

**Serotine (Eptesicus serotinus).** Recorded from eight localities.

Daubenton's Bat (Myotis daubentoni). Recorded from five localities.

**Whiskered Bat (M. mystacinus).** Recorded from four localities. Specimens are in the Maidstone Museum from a cave where it was found plentifully in 1955.

Natterer's Bat (M. nattereri). Recorded from four localities.

Long-eared Bat (Plecotus auritus). Common, but only seven localities recorded.

**Barbastelle (Barbastella barbastellus).** The first specimen recorded in England was from Dartford (Lydekker, 1895). Records from North Kent only.

**Greater Horseshoe Bat (Rhinolophus ferrum-equinum).** 50-year-old records from N. Kent only.

Lesser Horseshoe Bat (R. hipposideros). Recorded from six localities only.



Click Here to upgrade to Unlimited Pages and Expanded Features npson and Worden (1956) have pointed out that following nes, rabbits had by 1709 become important items of feasts is, normally on the parish boundary, and the number of

place names with warren in them gives an idea of their distribution in the Middle Ages. They only became widespread over the countryside in general during the last century.

Myxomatosis started in this country at Edenbridge in 1953, and by the end of 1954 had spread almost throughout Kent. During the next year there were still two small areas unaffected, around the Medway towns and in Thanet. After almost total extinction elsewhere, rabbits were already reappearing by mid-1955. Within a year or two they were again locally abundant, but have since been assailed again by myxomatosis. Regular cycles of rise and fall seem now to have set in. Small populations can be found throughout the county, even on the shingle at Dungeness,

**Hare (Lepus europaeus).** Plentiful and well-distributed, recorded even from the beach at Cliffe and the Dungeness shingle. Numbers seem to have risen over the past few years.

#### **RODENTIA**

Bank Vole (Clethrionomys glareolus). Plentiful and widespread.

**Short-tailed Vole (Microtus agrestis).** As early as 1600 this species is recorded as having "caused much loss in Kent" (Baker, 1908). Wide-spread, being even found on Medway islands and Sheppey saltings.

Water Vole (Arvicola amphibius). Common and widespread. Black form noted in 1958 at Cliffe.

Wood Mouse (Apodemus sylvaticus). Abundant and widespread.

**Yellow-necked Field-mouse (A. flavicollis).** Recorded from four localities only, three of these around Maidstone. One was found in a squirrel's dray twenty feet up an oak tree.

**Harvest Mouse (Micromys minutus).** A number of records from scattered localities show that this species is probably commoner than is generally realised.

**House Mouse (Mus musculus).** Although believed to be common, only six localities are known. In at least one of these it became extinct shortly afterwards as a result of direct competition with man.

**Black Rat (Rattus rattus).** After its arrival in England in the thirteenth century, the universal distribution of this species is attested by the spread of the Black Death in 1348-9, borne by its parasite. With the coming of R. norvegicus in 1728, the more arboreal R. rattus has been driven out of Kent apart from a few ports. By 1951 it could be found in some Thames-side areas, Chatham, Maidstone, Ramsgate and Dover. In 1956 a single specimen was taken at Ramsgate (Bentley, 1959).

**Brown Rat (R. norvegicus).** Abundant. First reaching England in 1728, it has competed very successfully with R. rattus and is now the common rat of both town and country.

**Dormouse (Muscardinus avellanarius).** In 1908 stated to be "widely distributed ... not very abundant" (Baker, 1908). Recorded recently from a number of localities.

**Red Squirrel (Sciurus vulgaris).** In 1908 this was very common (Baker, 1908), but corpses found at Edenbridge between 1904 and 1926 showed signs of coccidiosis (Shorten, 1954). By 1945, the species had become confined to the eastern half of Kent and along the county's western border (Shorten, 1954), but could still be found in 336 parishes. By 1959 it could only be recorded from four parishes (Lloyd, 1962).

ing successful introduction at Benenden between 1892 and 1954) by 1930 most of Kent was occupied, apart from the d Sheppey. By 1935 these pockets were filled (Parsons and ly Thanet was still unoccupied. This remained the case in he species fluctuate with good and bad breeding years.

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**Coypu (Myocastor coypus).** A male shot at Boxley in 1956 was probably one of two which had escaped earlier from the Maidstone Zoo.

## **CARNIVORA**

**Fox (Vulpes vulpes).** Plentiful everywhere in the county, including suburbs. An albino was recorded from Chislehurst in 1952.

**Badger (Meles meles).** In 1908, Baker was only able to say "rareo breeds annually near Maidstone and occasionally at other places". Now fairly plentiful throughout the county. An albino female is believed to have been released in a Kent woodland a few years ago ("Countryman", 1961).

Otter (Lutra lutra). Occurs.

**Pine Marten (Martes martes).** As long ago as 1809, Pocock recorded it as "uncommon and seldom seen". It may have survived up to a century ago, but is now certainly extinct in the county.

Stoat (Mustela erminea). Fairly common. A partially white one seen in February 1960 (Gray, 1962).

Weasel (M. nivalis). Common.

**Polecat (M. putorius).** Now extinct, but formerly plentiful, although rare by the 1870s, when one was trapped at Chattenden (Baker, 1908). Formerly found at Bromley (Tutt, 1909).

**Mink (M. vison).** Several fur farmers keep mink in Kent, but the first feral specimen recorded was a young female shot at Chetney Marshes in 1961.

**Wild Cat (Felis silvestris).** Although this is now considered a wholly Scottish animal, it formerly occurred in Kent. By 1809 Po cock recorded it as "uncommon and seldom seen". It is reported to have been taken at Chattenden and elsewhere (Baker, 1908), but at this date it is difficult to distinguish between true wild cats and feral domestic ones.

#### **PINNIPEDIA**

While seals are generally uncommon, they have been noted from the Thames and Medway.

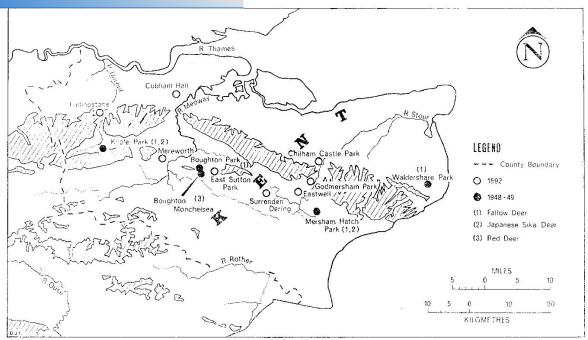
Common Seal (Phoca vitulina). Thames, Medway and Dungeness on occasion.

**Walrus (Odobenus rosmarus).** While this Arctic species seems at first sight a most unlikely visitor, it should be remembered that in February 1954, an apparently healthy female was photographed on the Aberdeenshire coast (see Hardy, 1959), while the Narwhal recordl(see below) also gives credibility to the statement that in the year A.D. 808 "a large sea-horse was taken in the Medway at Maidstone" (Ireland, 1829).

## **PROBOSCIDEA**

**Indian Elephant (Elephas maximus).** It may seem levity to record a dead young one washed ashore in November 1960, at St. Margaret's Bay. Yet at least one very rare bird has been found dead on the shore and reverently placed in a museum as a true vagrant. Similar status is given to the corpses of cetaceans found on the shore.

hick Here to apprade to Inlimited Pages and Expanded Features t bear a serious relationship to the number of deer parks, county. Certainly some feral deer (e.g, at Cobham) are of known deer parks are shown on the accompanying map.



**Fallow Deer (Dama dama).** Fair numbers are found around Cobham, where the deer park fence was breached during the 1939-1945 war. Others have recently been recorded near Maidstone.

Sika Deer (Sika Nippon). Fair numbers are said to occur in the Challock woods.

**Red Deer (Cervus elaphus).** Outliers from the staghounds have been free for some months on occasion.

**Roe Deer (Capreolus capreolus).** Although this species is generally stated not to occur, there is now evidence that there is at least one buck present in the county.

## **CETACEA**

As many zoologists are not very conversant with these, the opportunity is taken to draw attention to some points about their anatomy which are more normally considered the function of a textbook. Cetaceans may be divided into two great groups, the toothed (or odontocetes) and the toothless (or mysticetes). The odontocetes bear teeth in one or both jaws, though these teeth may be reduced in size and numbers, and there may in some species be only a single pair remaining. The mysticetes, which include the largest mammals, have no teeth, but have developed a series of plates with fringes which hang down on both sides of the palate, much after the fashion of an internal and bushy moustache. They are, in general, feeders on small crustacea, and they do this by swimming through a shoal with their mouth open, closing their mouth and expelling the water through the fringes on which the crustacea are caught, and these can be swallowed. While the largest whales feed only on such diet, smaller rorquals may take fish up to two or three feet long.

One other general adaptation for marine life has been the movement back of the nostrils to form a single or paired blowhole on the top of the head, which can be firmly closed by a strong valve system, but can be opened for respiration as soon as the top of the head comes above the surface of the sea. In addition, all cetaceans are covered with a layer of subcutaneous fat which helps to insulate them against excessive cold. This fat is the major source of the oil which the whaling industry pursues.

ena). One of the smallest toothed cetaceans, recorded from eland, 1829) in the words "a whale and two porpusses taken tly be seen in the Dungeness area.

between 1935 and 1947 penetrated up the Thames to London.

White-sided Dolphin (Lagenorhynchus acutus). An 8' 6" specimen of this northern species was stranded at Birchington on September 10th, 1941 (Fraser, 1953).

White-beaked Dolphin (L. albirostris). An inhabitant of the North Sea, which is rarely found in the Channel, but has been recorded from Ramsgate and Folkestone (Baker, 1908).

**Bottlenose Dolphin (Tursiops truncatus).** This species (the "porpoise" of the Americans) migrates annually up the Channel to the North Sea about May. There are four records of passage up to London between 1918 and 1939.

**Killer (Orcinus orca).** A large odontocete which feeds, inter alia, on other cetaceans, hunting in schools. A thirty-foot specimen was killed at Greenwich in 1793 (Baker, 1908).

**False Killer (Pseudorca crassidens).** This is really an oceanic species, whose schools may on rare occasions (as in 1935) be seen off the coast.

**Pilot Whale (Globicephala melaena).** Some schools of this may be very large. More often found to the north of the British Isles. A skull of one was found at the mouth of the Thames and purchased by the British Museum in 1858 (Baker, 1908).

**Narwhal (Monodon monoceros).** This Arctic species is unique amongst cetaceans in the prolonging of the lefthand of the male's two teeth to form a tusk. It has only been recorded six times from this country, in 1588, 1648, 1800, 1808, 1949 (when one was stranded on the Essex coast of the Thames) and when a female came ashore in the Medway. The skull is now in the British Museum (Natural History).

Sperm Whale (Physeter catodon). This is the largest of the odontocetes (up to 65 feet long), and can be identified by the enormous cuboidal head and minute lower jaw. It normally migrates northwards in summer to the west of Ireland, turning southwards in September. In 1788 one was cast up alive at the Lower Hope, a number of others being washed ashore on the Kent and Essex coasts. In February 1829, a 62-footer was off Whitstable, and in August 1898, a small one of 42 and a half ft. came ashore at Birchington (Baker, 1908). Judged on size the 66-foot Hyperoodon recorded as stranded at the Royal Arsenal, Woolwich, on November 27th 1899 (Tutt, 1909), must have belonged to this species.

**Bottle-nosed Whale (Hyperoodon rostratus).** Up to about 30 ft. long. An adult female was taken at Whitstable in 1868; its skeleton is now in the British Museum (Natural History). Two were at the mouth of the Thames in July 1891 (Baker, 1908).

**Risso's Dolphin (Grampus griseus).** Length up to about 13 ft. Not often recorded from these shores, but in January 1962, a ten-foot female was washed ashore at Sandwich Bay. The photograph in the local Press makes it quite clear that it was of this species. Previously, an 11 ft. male was stranded just outside the county at Rye Bay, on March 19th 1938 (Fraser, 1953).

**Blue Whale (Balaenoptera musculus).** The largest mammal known ever to have existed. This is one of the rorquals, streamlined whalebone whales, which have long "pleats" beneath the jaw, enabling vast expansion of the mouth when this is full of water. This species migrates northwards from mid-Atlantic in early summer, to the margins of the Arctic ice, returning by the same route southwards in the autumn. Stragglers occasionally reach the British coasts.

Click Here to upgrade to Unlimited Pages and Expanded Features argest rorqual, only reaching a mere 80 ft. maximum against similar migrations, but goes possibly not quite as far northen was killed at Greenwich. while in November 1899, a pair een the Albert Docks and Barking Creek (Baker, 1908).

to the Arctic cold. It likewise migrates in summer up the west coast of Ireland, North of Scotland and west coast of Norway, returning southwards at the first cold weather. A 35 ft. specimen was stranded in the Thames at Tilbury Dock in October 1887, and one was captured at Gillingham in August 1888 (Baker. 1908).

**Little Piked Whale (B. acutorostrata).** The smallest rorqual is easily distinguished by the white band across its black flipper. It only reaches a maximum length of 35 ft. While its northward route is similar to that of the other rorquals, it travels south along the mainland coast, so it is not surprising that it has several times been recorded from the mouth of the Thames (Baker, 1908). In July 1961, a 15 ft. female penetrated as far upriver as Kew, where it stranded.

**Humpbacked Whale (Megaptera novaeangliae).** This is a shorter but fatter whalebone whale with very long flippers. Maximum length 60 ft. Its migration normally keeps it away from our coasts, but one went as far up the Thames as Deptford Creek in 1842.

From this brief survey have been omitted species now extinct in Britain, whether known to have existed here in historic times (e.g., wolf and beaver) or whether extinct since the Pleistocene (straight-tusked elephant and others). Not only does this make for greater simplicity, but there is no need to debate where the dividing line should be placed.

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