



The Polecat



What is a polecat?

The polecat is a native British mammal and is widespread in western Europe. Its full name is the European or Western polecat *Mustela putorius*, which distinguishes it from a close relative, the Steppe or Siberian polecat *Mustela eversmannii* that is found from eastern Europe to China.

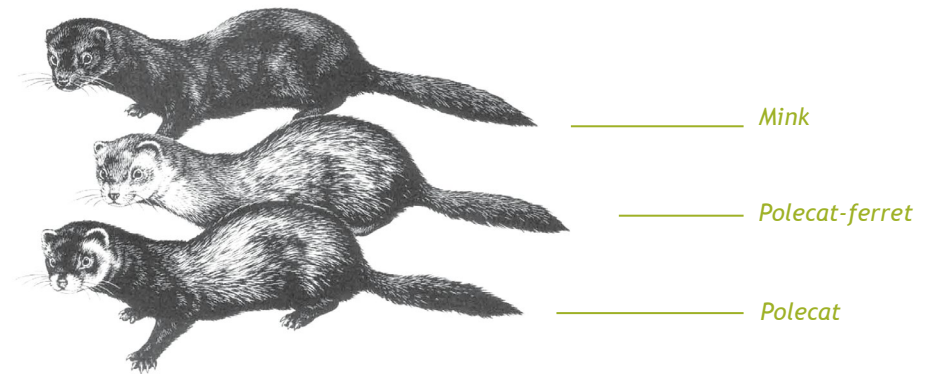
The polecat belongs to the weasel family, the Mustelidae, comprising over 60 species of badgers, otters, skunks, martens, mink, ferrets, stoats and weasels. Like many in this family, the polecat has a long body with short legs. It is generally dark in colour, especially on its chest, legs and tail that are covered in near-black fur.

Paler underfur gives the body a slightly lighter appearance, particularly in winter when this pale underfur is longer and thicker.

The polecat's most striking feature is the mask-like pattern of dark and light fur on its face. This may serve as a warning to potential predators.

Photo: Polecat © Jane Parsons

The name 'polecat' may be derived from the early French expression *poule-chat* (chicken-cat), a reference to its perceived liking for poultry. The polecat's Latin name *Mustela putorius* means 'foul-smelling musk bearer', referring to the pungent smell which the animal releases from an anal gland as a defence when it is frightened or injured. This also explains the polecat's old English name 'foulmart' which distinguished it from the 'sweetmart' or pine marten that has no defensive 'stink'.



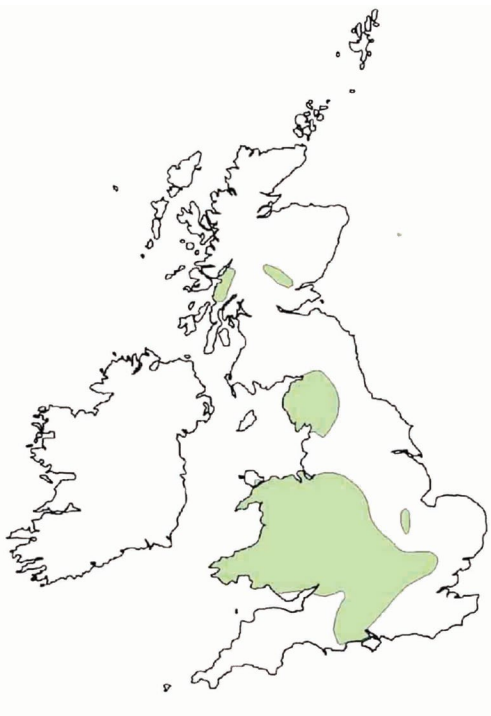
Polecats and Ferrets

The polecat's closest relative is the ferret *Mustela furo*, which was domesticated in southern Europe over 2,000 years ago. Ferrets and 'polecat-ferrets' (dark-eyed animals with fur which is darker and more polecat-like than that of the albino ferret) are commonly kept as pets or working animals used to bolt rabbits. When they escape into the wild, ferrets may become 'feral', though many do not survive because domestication has reduced their ability to fend for themselves. As a result, self-sustaining feral ferret populations are not common in mainland Britain, though they do thrive on some off-shore islands (especially Shetland and the Hebrides) where rabbits are abundant and potential competitors are scarce or absent. Escaped or feral ferrets may breed with wild polecats to produce wild polecat-ferret hybrids. These can be difficult to distinguish from pure polecats. The occurrence of wild polecat-ferrets tends to increase towards the fringes of the polecat's main range in Britain, and is especially high in isolated polecat populations arising from reintroductions.

History in Britain

Polecats probably colonised mainland Britain from continental Europe at the end of the last Ice Age some 9,500 years ago (they did not reach Ireland). Like most predators, their early relationship with humans was troubled. They were reviled as poultry killers, and in the Middle Ages a bounty was paid by church wardens for each polecat killed. Up until the mid-19th century polecats remained common and widespread, but increased predator control associated with game shooting caused a sharp decline thereafter.

By 1915 the polecat had been eradicated from most of its British range, remaining well established only in a small part of mid Wales, Herefordshire and Shropshire, where pressure from humans was lowest.



Map: The main areas of polecat distribution in 2006

Reduced predator control following the First World War led to a slow recovery in polecat numbers. The cessation of commercial rabbit trapping in the 1950s further eased the pressure by reducing accidental polecat mortality in traps.

By the 1960s the species had expanded its range in Wales, and had begun to recolonise the English border counties. Subsequently the increase in rabbits (the polecat's main prey), after the effect of myxomatosis on their numbers had waned, almost certainly helped to strengthen the recovery.



Photo: Polecat © Frank Greenaway

The current situation

By the end of the 20th century polecats had recolonised England as far north as the southern fringes of Manchester, as far south as Wiltshire, and east into Derbyshire, Leicestershire, Northamptonshire, Oxfordshire and Berkshire - counties where the species became extinct over a hundred years earlier. A survey conducted during 2004-2006 suggests that the polecat's main range has continued to expand in central and southern England.

Beyond the polecat's main range in Wales and central England, isolated populations have been recorded further north in Cumbria, Argyll, Perthshire and Caithness. Most of these are believed to result from escapes or reintroductions of polecats since the 1970s. Compared with the polecat's main range, these isolated populations contain a higher proportion of polecat-ferrets and may perform less well.

At the start of the 21st century the polecat's conservation status in Britain is much more favourable than it was a hundred years ago. Provided that no new serious threats emerge to halt the current recovery, it seems likely that the polecat will become widely re-established in mainland Britain. This contrasts with the situation in continental Europe where the polecat is declining in some countries and is classified as being of "unfavourable conservation status".

Habitat

Polecats in Britain are able to live in a wide range of landscapes, with no strong dependence upon a particular habitat (in continental Europe, by comparison, they tend to be associated with wetlands). However, polecats are more numerous in lowland landscapes where their prey are more abundant than in the uplands. Provided there is sufficient prey, such as rabbits, polecats are able to thrive on open farmland.

Radio-tracking has shown that polecats make particular use of hedgerows and woodland edges and in winter they visit farmyards and farm buildings to hunt rodent prey. Polecats are capable of digging their own dens, but they prefer to use existing sites such as rabbit burrows, hay stacks and log piles.

Behaviour and breeding

Polecats are mainly solitary, though home ranges of different animals may overlap. Male home ranges are usually larger (1.5-5.0 km²) than those of females (0.4-3.0 km²). Polecats are nocturnal, except in mid-summer when breeding females may hunt in daylight to feed their young. During the day the animals normally rest



Photo: Polecats © Jane Parsons

in dens, a number of which may be used by one individual over a short period. Polecats population densities normally range from 0.5-1.0 animals per km². In Britain populations are apparently distributed more patchily, or with lower densities, towards the fringes of the species' range.

Polecats breed once a year. Mating takes place between March and May, and 4-6 'kits' are born after a gestation of 42 days. Males play no part in rearing the young. Juvenile polecats are independent by the age of three months, with most dispersing in September to set up their own home ranges. Many die in their first year.

Diet

The polecat is a nocturnal predator that feeds on a wide range of prey. Wild rabbits are a most important food, comprising 85% of the diet of polecats in the English midlands. Most rabbits are killed underground in their burrows, where polecats prefer to rest during daylight. Other prey includes rats, small mammals, amphibians, birds and earthworms.

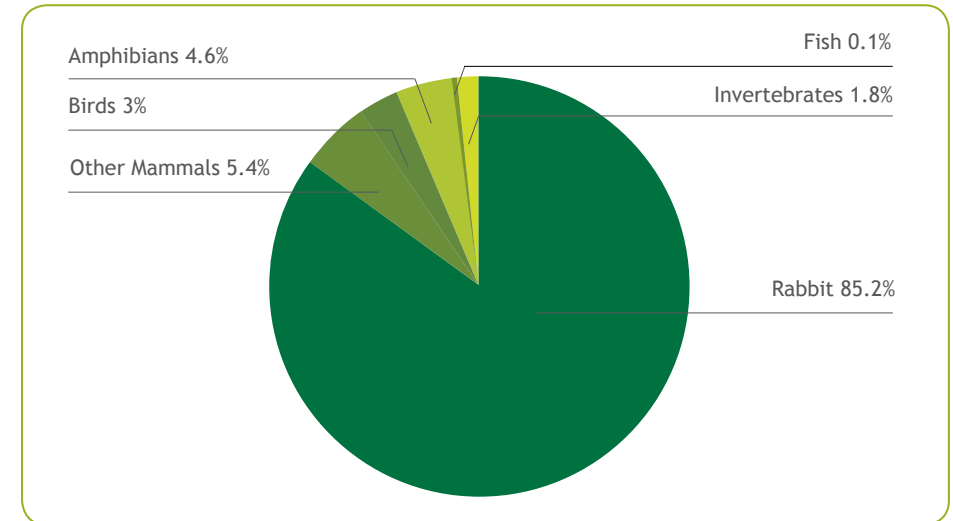


Diagram: Diet of English polecats from the 1990s

Mortality

Polecats are commonly killed on Britain's roads and this is a major form of mortality. Many road casualties occur in the period September to December, when young polecats disperse and the population is at its annual maximum, with another peak in February/March when the mating season is approaching.

Polecats are also vulnerable to accidental death in traps set for other species such as stoats and weasels. Some die from accidental poisoning after eating rats contaminated with rodenticides. Few polecats are probably killed by other predators in Britain because their ability to produce a powerful smell when frightened is such an effective defence.

Signs of polecats

Unlike some of their relatives, polecats do not leave many distinctive field signs. Their footprints and droppings are very similar in size and shape to those of mink and feral or escaped ferrets. Polecats can be recorded on camera traps. The most common evidence of the presence of polecats is the bodies of animals killed on roads.

Polecats are not easy to see in the wild because they are nocturnal and, unlike badgers, are unpredictable in their movements and denning behaviour. Most sightings of polecats are made by chance, for example by car drivers at night. However, polecats commonly visit gardens, even in suburban areas, so some sightings may be made when polecats take food put out at night for other species, such as foxes or hedgehogs.

Polecats, Livestock and Game

Like many predators polecats are attracted to concentrations of vulnerable livestock, such as poultry, penned pheasants and captive wildfowl. Predation may occur where poor husbandry allows polecats easy access to such birds. Prevention of such problems is not difficult and wise precautions include securing domestic fowl at night in solid, custom-built hen-houses, and nightly closure of 'pop-holes' - the ground level access points that allow birds to re-enter pheasant pens. Polecats may squeeze through gaps as small as 4cm, so pens should be built accordingly; wire mesh and wooden henhouses should be checked regularly for gaps or weak points. Although polecats can climb, most attempts to break into game and poultry pens occur at ground level. A policy of polecat exclusion based on sound husbandry of domestic fowl and game is recommended as an alternative to trapping (which requires a licence). Trapping of offending animals is not a long-term solution to problems caused by poor husbandry, because any polecats removed are soon replaced by others.

A questionnaire distributed to farmers in England and Wales revealed very little evidence of damage by polecats to agricultural interests. The polecat's predation upon serious agricultural pests such as rabbits and rats is a good reason for farmers and landowners to tolerate its presence.

Polecats and the law

Because it is still scarce in Britain, the polecat is listed on Schedule 6 of the Wildlife and Countryside Act 1981. This prohibits certain methods of killing or taking the animal.

It is an offence to set a trap for a polecat without first obtaining a licence from the appropriate authority (in connection with the protection of livestock this is the relevant government agriculture department; in connection with wildlife conservation or research this is the relevant statutory nature conservation agency).

Those using traps designed to kill other small ground predators are required to take reasonable steps to avoid injury to Schedule 6 species such as polecats. This can be achieved by restricting the size of the entrance to 'tunnel' traps.

Recent work by The Vincent Wildlife Trust

Since 1993 The Vincent Wildlife Trust (VWT) has undertaken conservation-directed research and survey work on polecats. This has included monitoring the changing distribution of the polecat in Britain; establishing, with the Royal Museum of Scotland, an important collection of polecat specimens; a study of the genetic relationship between polecats and ferrets; radio-tracking studies of polecat behaviour and conducting questionnaires among farmers and gamekeepers.

During 2014 and 2015, the VWT is undertaking its third national polecat survey to gather up-to-date information on the distribution of the polecat in Britain. The Trust is keen to receive records of polecats and polecat-ferrets during this time, including carcasses for rodenticide analysis and genetic research. To submit records, email enquiries@vwt.org.uk, phone **01531 636441** or visit www.vwt.org.uk

Further information on the VWT's work on polecats is available in two reports, published in 1999 and 2008, which can be purchased from the VWT's head office. The VWT has also produced a free leaflet entitled *Polecats and Ferrets: How to tell them apart*.



Further information

The Vincent Wildlife Trust

The Vincent Wildlife Trust is a registered charity and has been involved in wildlife research and conservation since 1975. It has focused particularly on the needs of British mammals and has concentrated on species such as the otter, pine marten, polecat, stoat, weasel, water vole, dormouse and the bats. Currently the VWT's work is centred on the bats, polecat and pine marten.

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