

The return of the polecat

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One of our least-known mammals, once almost driven to the point of extinction, is making a comeback across Britain.

The polecat, *Mustela putorius*, is a native British mammal, a member of the weasel (mustelid) family and related to the stoat, *M. erminea*, weasel, *M. nivalis*, otter, *Lutra lutra*, and pine marten, *Martes martes*. The polecat is a similar size to a ferret, with a long slim body, dark fur and a 'bandit-like' mask of dark and light fur on its face. It lives in a variety of habitats, from farmland to woodlands to wetlands, and typically dens in rabbit burrows, log piles, hay stacks and sometimes farm buildings. Polecats are mostly nocturnal and solitary, and their diet consists largely of rabbits and rats. They mate during early spring and give birth to an average of four to six young, known as kits, during May or June.



Human-wildlife conflict

Once widespread in Britain, the polecat was probably the third most common carnivore during the Mesolithic period, with an estimated population of 110,000 individuals. Historically, it has suffered a troubled relationship with humans. The name 'polecat' is probably derived from the French expression *poule-chat* meaning 'chicken-cat', which is likely to be a reference to its partiality towards chicken. The term polecat was also used as an insult; famously used in Shakespeare's *The Merry Wives of Windsor* in the lines 'Out of my door, you witch, you rag, you baggage, you poulcats, you runnion! Out, out!'

To add to its woes, the polecat's reputation for being foul smelling, as a result of the strong smell emitted from its anal gland as a defence when frightened or injured, is reflected in its Latin name *Mustela putorius*, which translates as 'foul-smelling musk bearer'. The polecat population underwent a severe decline during the 18th and 19th centuries, with the animals being killed in high numbers in order to protect poultry and game birds.

By the early 20th century, the polecat was on the brink of extinction, having been wiped out across most of Britain and confined to a small area of mid Wales and parts of Herefordshire and Shropshire. Thankfully, the polecat's fortunes improved and, due to a reduction in trapping pressure, the population began to recover during the 1930s. The presence of woodland has played a role as polecats have spread back across the landscape. Radio-tracking studies reveal their preferred habitat is woodland-edge, likely due to the concentrations of rabbits in this type of habitat.

Back from the brink

The Vincent Wildlife Trust (VWT) has carried out three national distribution surveys to document the polecat's recovery and range expansion. These surveys have been based on collecting records of individuals from naturalists and members of the public. The majority of records received are of polecats killed on roads, but many people report sightings of live animals, and some people are lucky enough to have them visiting their gardens.

Once polecats had become widespread again in Wales in the 1980s, they began to spread back into England and re-colonised parts of the Midlands during the latter part of the 20th century. The VWT's most recent national survey, carried out during 2014-2015, confirmed they continue to expand their range and have now re-colonised much of central, southern and eastern England. Today, polecats are found as far east as Suffolk and Norfolk and

as far south as Devon and Cornwall. They are also present in north-west England, due to reintroductions during the 1960s-1980s, and this population is slowly spreading into Northumberland and Lancashire. Polecats are scarce in Scotland, with small populations present in parts of the central and northern parts of the country that originated from releases. On a national scale, the mammal is more widespread today than it has been in over 150 years, and has re-occupied much of its former range.

As polecats have spread from Wales, they have bred with feral, escaped or released domestic ferrets, *Mustela putorius furo*. When polecats and ferrets breed they produce hybrids known as polecat-ferrets. Distinguishing between the true species and hybrids can be difficult and prove challenging when recording, although they can generally be identified based on pelage (fur) characteristics.

The significance of the Welsh polecat population in a British context has recently become apparent from research at Cardiff University. Genetic analysis found that polecat-ferret hybrids most commonly occur outside Wales and on the edges of the polecat's range, thus highlighting the importance of the Welsh population for the conservation and restoration of the genetic identity of the British polecat.

Positive but tentative

Today, for the most part, this once heavily persecuted species has an improved relationship with humans, compared with 100-200 years ago. The polecat is legally protected under the Wildlife and Countryside Act 1981, which prohibits certain methods of killing or taking them, so fewer are intentionally killed than they were historically.



However, although its conservation status is favourable, there are several threats on the horizon which may hamper the ongoing recovery of the polecat. Firstly, they are vulnerable to poisoning from second-generation anticoagulant rodenticides. This occurs when they eat contaminated prey, such as rats, *Rattus* sp.. Research by the VWT in the 1990s revealed that a third of polecats had been contaminated by these rodenticides. As polecats spread into parts of the country with higher human populations and more intensive agriculture, it is possible that exposure to rodenticides will increase and hamper their recovery in some areas.

Secondly, polecats are vulnerable to being injured or killed in traps set for other species, such as rats, stoats or weasels. On occasions where they have the opportunity to take chickens or game birds, it brings them into direct contact with humans. In a survey carried out in the 1990s, most gamekeepers classed the polecat as a minor pest due to predation of game and wildlife. Although these negative attitudes are countered by the belief among many farmers that polecats control rabbits and rodents and thus provide valuable 'pest control'.

Overall, the picture looks positive for polecats as they continue their comeback across the country. It is seen as a real conservation success story and the return of a native species once on the brink of extinction is cause for celebration.