

Breeding

Merlin nest in shallow scrapes on the ground within areas of tall heather, which they line with heather twigs, bracken, and other material - but in several regions will also nest in trees using old crow nests. They lay 3-5 eggs between May and early June which hatch 28-32 days later. Male merlin will typically provide most food while nestlings are being reared, with females responsible for incubating eggs, brooding young nestlings, and defending the nest. Nestlings will leave the nest and begin to fledge at 25-32 days, becoming independent one month after fledging.



Merlin chick

Diet

Merlins specialise in hunting small birds such as meadow pipits and skylarks, however insects such as fox moths are also an important



Fox moth

part of their diet. Merlin require open ground for hunting, where they typically perch to locate prey before giving chase low to the ground and catching prey in mid-air. Mating pairs may also hunt cooperatively, with one member flushing prey towards their mate.



Skylark

Grouse moor management

Merlin breed on grouse moors, where gamekeepers are employed to produce harvestable surpluses of red grouse for driven shooting. They do this through managing the heather through burning and cutting, and by controlling generalist predators such as foxes, stoats, and crows. Merlin, being a ground nesting bird, benefit from the protection from predators during the breeding season and the landscape-scale retention of heather moorland. However, managing heather by burning and/or cutting is contentious, with some seeing this as either neutral or even beneficial to merlin, while others believe that it reduces the availability of tall heather for nesting and the availability of key prey, such as meadow pipits and skylarks.



Merlin Magic - our new project funded by the Green Recovery Challenge Fund - aims to help conserve merlin through collecting vital data on breeding habitats and prey abundance to help inform moorland management. Scientists, gamekeepers, and raptor workers will collaborate to study breeding merlin on our moorlands and better understand how we can guide conservation to support both merlin and other species in upland habitats.

To find out more visit:
www.gwct.org.uk/merlinmagic

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A guide to merlin and why they need our help



Green Recovery Challenge Fund





Merlin

Scientific name: *Falco columbarius*

Merlin are the UK's smallest bird of prey with a wingspan of 50-62cm, being only slightly larger than blackbirds. They can be recognised by their blunt tails and pointed wings which allow fast, agile flight. The smaller males have blue-grey wings and an orange-cream underside. Females, which are roughly a third larger in size, are mostly brown with dark streaks.

Habitat and distribution

In the UK, merlin breed in moorland habitats of northern England, Wales, and Scotland, but can also be found on the edges of coniferous woodlands where they adjoin moorland. They can be seen in their breeding habitats from late March to October. Between August and October, merlin begin to migrate to inland lowland and coastal areas of the UK where they spend the winter months, with some birds migrating as far as south and west Europe. This movement coincides with the migration of their main prey species - meadow pipits and skylarks - away from upland habitats. During the winter, UK merlin numbers increase when they are joined by birds migrating from breeding sites in Iceland.



Population trends

In the mid-20th century, the UK population of merlin crashed due to the use of organochlorine pesticides, which caused numbers to quickly plummet through the 1950's to just 550 pairs by 1960. The last UK survey of merlin in 2008 estimated that there were 1,162 pairs in Britain, 301 of which were found in England, 733 in Scotland, 94 in Wales, and 32 in Northern Ireland. Comparisons with data from 1993/4 suggest that overall the population is stable, but with some marked local declines, particularly in the south-west where pairs declined by 83% and in northern England, with reported declines of 69% in Northumbria and 47% in both the North York Moors and South Pennines.



Conservation

Merlin are legally protected and of long-term conservation concern in the UK because their recovery from decline has been slow. They were added to the UK Red List for Birds in 2015, meaning they are in urgent need of conservation action. Merlin are threatened by habitat loss and disturbance by human activities during the breeding season. The loss of favourable moorland habitats from commercial afforestation, or loss of heather to grass moor through overgrazing by sheep has often led to grouse moors being the only favourable habitats remaining. Here, recent intensification of strip-burning or heather cutting to benefit grouse may have reduced the availability of tall heather for nesting and with it, numbers of small moorland birds - such as meadow pipits and skylarks - which are preferred prey.



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