

What impact do badgers have on other wildlife?

The badger population in the UK has increased in recent decades ^[1], although the current culling policy is likely to cause significant local population declines. Badgers will prey upon smaller mammals and birds and also compete with other animals for food and space. Changes in badger numbers may therefore have impacts on other species in the wider ecosystem.

What other species do badgers eat?

In the UK, earthworms are a key food source for badgers, with other invertebrates (e.g. snails and beetles), fruits, cereal crops or animal feed eaten in large quantities when available. Badgers will also eat birds, bird eggs, small mammals (mice and voles), hedgehogs, amphibians and reptiles, although these typically make up small proportion of their overall diet.



Hedgehogs

Badgers are the main natural predator of hedgehogs in the UK and also potentially compete with hedgehogs for food. Badgers and hedgehogs coexist in many areas ^[2,3], but several studies suggest that badgers may have negative impacts on hedgehog populations:



Hedgehogs are most abundant in areas where badger numbers are low. Multiple studies at the national and local scale have shown that hedgehog abundance is negatively correlated with measures of badger abundance or activity ^[2,3,4,5].

Badger culling is associated with an increase in hedgehog numbers. Research during the RBCT (randomised badger culling trial) found that the numbers of hedgehogs doubled in some habitats following culling ^[6].

Hedgehog numbers in the UK have declined in recent years ^[2]. The exact reasons for this are unclear, but it is likely that a complex **mix of factors** including changing badger numbers are the cause of this ^[3]. As the name suggests **hedgerows and areas of cover** are important habitats for hedgehogs ^[7,8]. Declines in these habitats along with reduced prey availability (due to pesticide use and other factors) are likely to have had negative effects on hedgehogs. Main **roads** and high traffic flow are also associated with lower hedgehog numbers ^[2,4]. Changes in levels of traffic, along with changes to the urban environment may, therefore, also be important.



Its not just badgers which affect hedgehog numbers. A recent national survey found that even in areas with no badger setts, hedgehogs were absent from 70% of sites surveyed ^[3], suggesting other factors are also important.



Foxes

Badgers and foxes eat many of the same food sources and foxes will also make their dens in unoccupied badger setts.

Badger culling is associated with an increase in fox numbers

Culled areas in the RBCT had an increase of around two foxes per km² compared to areas without culling [9]. The reasons for this increase are unclear, but possible explanations are that reducing badger numbers means there is less competition for den sites and food. Foxes are active predators and other mammals and birds make up a larger proportion of their diet (compared to badgers). It is possible that changes in fox numbers may, therefore, have effects on other species.

Ground nesting birds

Farmland birds have declined significantly in the UK in recent decades, including several ground nesting species such as skylarks [8]. Extensive research into this subject indicates that changes in land use and farming intensity are the primary causes of these declines [10,11]. Predation of ground nesting bird nests by badgers could potentially have negative impacts on bird numbers in certain localised areas. However, there is no evidence of an association between badgers and bird numbers on the landscape scale (as demonstrated with hedgehogs). Significant declines have occurred in a wide range of farmland bird species (not just those preyed on by badgers) and declines have occurred across the UK and Europe, including areas where badger abundance is very low. This suggests that factors other than badger numbers are responsible for declining bird populations.

- **There is no evidence that badgers have significant impacts on bird populations.**
- **Badger culling is not associated with increases in bird numbers [12].**



Where can I find out more information?

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