

## Subject area II

### Endangered and threatened species



#### The black grouse

The black grouse lives in semi-open, structurally rich landscapes of the subalpine and alpine levels or in moor landscapes at lower altitudes. Structured areas with shrubs, conifers and deciduous trees are preferred habitats of the black grouse.

However, these habitats are increasingly being destroyed, e.g. by draining peatlands and by "clearing out" agricultural landscapes, which eliminates hedgerows and copses as shelter.



#### The house martin

House martins have a similar lifestyle to swifts, although they are not related to them. They are mainly found in farming areas and build nests. They also hunt flying insects and therefore depend on their populations. House martins also suffer from the concentration in agriculture, which leads to the disappearance of many small farms.



#### The lapwing

1. After the original moorland habitat was increasingly destroyed, the lapwings moved to agricultural landscapes. But here, too, wetlands and wet meadows were increasingly pushed back. Lapwings are ground breeders on fields, many nests are destroyed by tractors. Lapwings are thus among the most endangered species.
2. In Switzerland, it has been shown that populations can recover through the establishment of protected areas and their systematic maintenance, as well as cooperation with agriculture.



#### The cuckoo

The cuckoo as a brood parasite suffers particularly from climate change, as it has not changed its migration behavior and thus only returns from its wintering grounds at a time when its host parents have already bred. Thus, it is becoming increasingly difficult for it to substitute its eggs for those of other bird parents. (Mismatch)



#### The swift

1. Swifts are migratory birds that spend only a short time with us for the breeding phase (May to August) and are found in densely populated areas. They feed exclusively on flying insects and depend on nesting cavities on buildings. Both the sharp decline in insect numbers (see Insects unit in T 2 as well as T 3) and the reduction in breeding opportunities due to building renovations threaten populations.
2. - Protect insects to increase their population (see T 2 Insects and T 3)  
- Maintain breeding cavities or install artificial breeding aids on sealed buildings, making sure they are at least 5 m above the ground.



### The white stork

1. After a steady decline from 1840 to 1950, the white stork population in BW almost completely collapsed by 1980, but has been recovering steadily in the western states since then. In the eastern federal states, the development is rather negative.
2. The reason for the different development is on the one hand the different migration routes, whereby the western migrants are at an advantage because they find better feeding conditions in the winter quarters, and on the other hand the increasing drought in the eastern parts of the country.
3. Regionally different. Success only in western Germany, but even here the situation is still not satisfactory. Habitat destruction continues and storks are still hunted in some countries.

## Mammals of the agricultural landscape

### The field hamster

1. It is acutely threatened with extinction. Here, too, the causes lie in the changes in agriculture:
  - Land consolidation led to the loss of small-scale areas and the creation of large "arable fields" with little cover
  - The food basis is missing due to intensive cultivation and the loss of numerous arable plants, thus many hamsters starve to death, as they cannot hoard sufficient supplies for the winter
  - Habitats are fragmented by road construction and other sealing of the landscape.
  - Use of pesticides.
2. Harvesting grain strips only in winter, changed management method. The program suffers from bureaucratic hurdles.

### The brown hare

Its habitat is the open agricultural landscape, where it also sleeps in a coop and raises its young (Sasse.) It feeds on grasses, herbs, crops and sprouts of trees and shrubs. Enemies are mainly birds of prey, foxes and wild boars. According to the Red List, the brown hare is an endangered species because it is losing its habitat due to the intensification of agriculture, urban sprawl and fragmentation of the landscape, and the food supply is reduced. It is also at risk of poisoning by pesticides.

### Comparison of threats to mammals and birds of agricultural landscapes:

The hazards are the same.

