



Biodiversity meets music

Little owl (*Athene noctua*) - strictly protected indicator species



Species conservation is habitat conservation!

Little Owls inhabit open and grassland-rich cultivated landscapes with a good supply of caves. Short-grassed pastures and orchards are preferred hunting grounds. For ground hunting, low vegetation with sufficient food supply is crucial. Breeding territories can be between 5 and 50 hectares. The territorial birds use tree hollows (especially in fruit trees and pollarded willows) as well as caves and niches in buildings and cattle sheds as breeding sites. They also like to nest in nest boxes. The main courtship takes place in February/March. The breeding season begins in mid-April and the young fledge by the end of June. After 2 to 3 months, the young Little Owls are independent and migrate. They usually settle close to their birthplace (up to 10 km), although individual birds may disperse further. The Little Owl is almost widespread in NRW, especially in the lowlands. Regional density centres are in the Lower Rhine lowlands and in the Münsterland.

Profile: Characteristics and behaviour

The Little Owl is our smallest owl species: Ground colour brown, lightly speckled, eyes yellow. Call: a bright, penetrating "kwiu". Predominantly crepuscular, but sometimes diurnal hunter. Territory size: 10 - 40 ha!

Biotope choice and food

Mainly inhabits old orchards and extensively used pastures with pollarded trees and snow-peaked bays. Here it finds sufficient food as well as suitable nesting cavities. In addition to natural tree hollows, breeding sites in old walls or artificial tubes are also used. The Little Owl prefers small mammals as food. However, it also eats small birds, insects and even earthworms. As the final member of the food chain, the Little Owl is an excellent indicator of a structured, extensively used cultural landscape.

Population and population development

The Lower Rhine Valley is the main distribution area of the Little Owl in Germany: the district and the city of Aachen are populated with low densities up to the southern border (Schmidthof, Breinig, Gressenich). The higher altitudes are avoided for climatic reasons. Since the 1950s it has suffered dramatic population losses in the region, as in the whole of Europe. RL NRW: 3

The total population is estimated at 6,000 breeding pairs (2006). The aims of the mapping are the determination of the population in the district of Aachen, the population development by comparison with older mappings, the investigation of territorial ties to meadow orchards, and the determination of the efficiency of artificial breeding tubes

Threats and impairments:

The main cause of the continuous decline is the parallel destruction of habitat: land consolidation, clearing of old orchards and pollard trees, destruction of local pastures by new housing developments. In addition, the use of pesticides and increasing car traffic have a negative impact on the population.

- Loss or devaluation of cultural landscapes with agricultural structures, pastures and orchards (e.g. new housing developments, bypass roads, conversion of grassland to arable land).
- Dissection and reduction of habitats (especially road and path construction, settlements).
- Deterioration of the food supply.
- Loss of suitable nesting sites in trees or in cattle sheds, barns, farm buildings (especially abandonment of agriculture, modernisation of farms, elimination of entry points).

Conservation objectives and management measures:

In the Aachen region, richly structured grassland areas (incl. pollarded trees, hedges, old orchards) must be protected and recreated. Since almost no fruit trees were planted in the 60s to 80s, the installation of artificial breeding tubes is often necessary.

- **Preserving and developing of cultural landscapes with pastures and old orchards** (especially on the outskirts of villages and settlements, farms).
- Avoiding fragmentation and isolation of habitats (e.g. roads, expansion of settlements).
- Improving the food supply (e.g. no biocides).
- Maintaining and promoting a permanent supply of cavity trees; increasing the supply of breeding sites (**nesting aids**) in trees and on buildings (e.g. opening barns).
- Avoiding disturbance of breeding sites (March to June).