

Grey Herons



Grey Herons (scientific name *Ardea cinerea*) are members of the heron family *Ardeidae* and are the largest herons in Europe, weighing between 1.3 and 2.0 kilograms and reaching a height of about 1 metre. They are at the top of the food chain in freshwater habitats, preying mainly on fish, but will also hunt frogs, voles and ducklings as the opportunity arises. As a top predator, their presence in an area can indicate a healthy freshwater environment.

Current status and conservation

At present, grey herons are faring well in most of Europe. There was a Europe-wide population decline in the 1960s, which has been attributed to prolonged cold weather in the winters between 1961 and 1963. But in Britain, previous sustained low numbers were also thought to be the result of pollution from toxic organo-chlorine pesticides. These persistent toxins become concentrated in grey herons, killing adults, decreasing productivity by causing embryo deaths and thinning egg shells making them very fragile and easily broken.

Heron numbers are now on the increase following bans on the use of certain toxic pesticides and the increase in water quality. They can be seen at an increasing number of sites throughout London. In 1985 there were three heronries in London containing 114 nests, and by 2000, this had increased to 16 heronries with 302 nests. London is quickly becoming a grey heron hotspot.

Grey herons are protected under the Wildlife and Countryside Act (1981, as amended) making it illegal to kill, catch, hold herons in captivity and to wilfully destroy nests.

Factors affecting grey herons

- ❖ **Water quality** Improvements in water quality leads to higher natural fish populations.
- ❖ **Severe winters** The last severe winter that affected heron populations was 1985/86.
- ❖ **Human persecution** Herons can be seen as a pest by fish farm managers and by owners of ornamental fish in garden ponds. Herons should not be persecuted through shooting and trapping, but measures should be taken to prevent herons reaching these high concentrations of fish e.g. by putting nets over ponds.
- ❖ **Cormorants** Inland cormorant populations are increasing and may become a threat if they start to compete with herons for nest sites.
- ❖ **Disease** For example a number of young from a heronry in Nottingham hatched deformed and died in the nest. The cause of these deformities is not known, but the problem has not been observed in London.

Feeding

Grey herons are well adapted to catching fish and hunting other small prey:

- ❖ Their long legs and toes enable them to stand and wade in water up to half a metre deep, and their long necks give them the reach to strike at prey.
- ❖ Their eyes are set wide apart and can be directed forwards to provide binocular vision, enabling a heron to judge distance. They can also be directed downwards so that they can scan an area both ahead of, and below the bill whilst keeping the head motionless.
- ❖ They can feed in almost any shallow water habitat containing fish – rocky seashores, estuaries, lochs, marshes, rivers and streams, ditches, garden ponds and fish farms. In early spring they eat a lot of frogs. They can also be found in drier habitats looking for prey e.g. stalking voles in rough pastures and walking in the furrows of newly ploughed fields eating earthworms.
- ❖ Once they have caught their prey, they flick it up in the air to turn it round before swallowing it. For example, they prefer to swallow fish head-first so that the scales and fins do not catch in their throat.

Breeding

- ❖ Grey herons are monogamous and most breed in colonies. Nests are usually in places inaccessible to ground predators (mainly in trees) and are built of sticks, creating large platforms up to a metre across. Many nests are used year after year.
- ❖ Courtship activity usually starts around early December, and eggs are produced after Christmas. Heron eggs are relatively small compared to the size of the bird – about the size of a hen's egg but a bit longer, usually oval and coloured plain blue-green with a few white chalky streaks. Most clutches are of three, four or five eggs, although six are not uncommon. Incubation takes about 25 days for each egg.
- ❖ Newly hatched chicks squawk, making a persistent *chack-chack-chack* noise as they beg for food. Chicks are fed by the adult with regurgitated fish. The first chicks to hatch will inevitably be larger than the last and often the smallest chicks will not survive. Complete broods of five or six are uncommon.
- ❖ At five to six weeks juveniles start to wander out of the nest onto adjacent tree branches and by eight weeks they have learnt to fly. They remain dependent on their parents until nine or ten weeks after which they disperse and leave the vicinity of the colony.
- ❖ Life is tough for young herons as they learn the skills required for successful fishing. Juvenile mortality varies with the severity of the winter weather as competition for fishing spots increases. Overall, only about one in five juveniles will survive to breeding age.

For further information on Grey Herons, visit:

RSPB	www.rspb.org.uk
British Trust for Ornithology	www.bto.org.uk
London Biodiversity Partnership	www.lbp.org.uk