

# Great spotted woodpecker

## (*Dendrocopos major*)



This is the commonest of the UK's three woodpecker species and is often heard drumming in the Caledonian Forest in the spring.

### Worldwide distribution

The great spotted woodpecker occurs throughout Europe and northern Asia, with a range that extends from the UK and Scandinavia across all of Russia to the Korean peninsula, Japan and China. It also occurs in central Asian countries such as Kazakhstan and Azerbaijan, and in southeast Asia in Myanmar (Burma), Laos and Vietnam. In North Africa, it is found in Morocco, Algeria and Tunisia, and it

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is also native to Turkey, northern Iran and India. Despite its presence throughout Europe, the great spotted woodpecker has been absent from Ireland, although it is likely it occurred there in the past, when there was greater tree cover on the island. A small population has recently become established there, probably as a result of colonisation from Britain.

Within the woodpecker's wide range, a number of subspecies are recognised, for example in North Africa, and on islands such as Corsica, Sardinia and the Canary Islands. The UK population is treated as a distinct subspecies (*Dendrocopos major anglicus*).

### Distribution in Scotland

The great spotted woodpecker occurs throughout Scotland, from the south to the northern tip of the mainland. It has increased substantially in numbers from a historical low in the middle of the 19th century, and now breeds in every mainland county. It is more sparsely distributed in Caithness and Sutherland, reflecting the limited amount of suitable woodland habitat there. It also occurs on some of the more wooded inner islands such as Mull, Skye and Jura, as well as on Hoy and the main island of Orkney, while there have been occasional sightings on Shetland.

### Conservation status

Because of its wide geographic range and healthy population size the great spotted woodpecker is classified as Least Concern on the IUCN Red List of Threatened Species,

meaning that it is not facing any imminent threats at a global level. It is the most common species of woodpecker in Europe, and the population there is estimated at 12 – 18 million breeding pairs. In the UK the breeding population is approximately 140,000 pairs. Overall, in a global context its population



**Above:** Female great spotted woodpecker at its nest hole in an aspen tree on Dundreggan. **Main photo:** Male great spotted woodpecker.

is considered to be increasing. The two subspecies endemic to the Canary Islands (one on Tenerife, the other on Gran Canaria) are listed in Annex 1 of the European Union's Birds Directive, signifying that they are vulnerable to extinction because of the low numbers of breeding pairs.

### Physical characteristics and behaviour

The great spotted woodpecker is a medium-sized member of the woodpecker family, the Picidae. It measures 23 – 26 cm. in length, from the top of the head to the tip of the tail, and has a wingspan that ranges from 38 – 44 cm. The plumage consists of a pattern of black and white on the head, shoulders and upper breast, while the back is black and the wings are barred. The underside of the body is an off-white colour, and there is a bright red patch under the tail. Males have a red patch at the back of the head, whilst juveniles are distinguished by having a red crown, which disappears as they mature. The legs are grey-green and the bill is slate grey.

The pied plumage makes the great spotted woodpecker comparatively inconspicuous in its forest habitat, and in many cases it is often heard before it is seen. In spring the male makes a distinctive and characteristic drumming sound, which is produced by a rapid hammering sequence of blows from its bill on the trunk or branch of a tree. This is used to both proclaim his territory and also to attract a female for mating. The bird call is a simple but widely recognisable 'kik' or 'tchik' sound, which is sometimes repeated.

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The woodpecker's flight has an undulating or rhythmic pattern to it, as it makes a few beats of its wings and then folds them flat against the body, before making another short sequence of flaps. The tail feathers are specially stiffened, and it uses these as a prop, to provide leverage and rigidity when it is holding on to a tree trunk and searching for food or drumming. The toes are arranged to provide a strong grip, with two pointing forwards and the other two facing backwards.

The diet varies with the seasons, with the woodpecker feeding during the spring and summer on insects and larvae, which it probes for with its bill in the trunks of trees. The long, sticky tongue has a pointed tip that is used

for impaling and extracting insect prey. It also drinks the sap of trees from holes it has made in their trunks.

A characteristic feature is the woodpecker's use of 'anvil' trees to feed on nuts and the seeds of trees such as Scots pines. Once it has found a pine cone or a hazelnut, it wedges these into

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a crevice in the bark of a specially-chosen tree, and uses its bill to crack open the nut or pry the cone apart to reach the seeds inside. One woodpecker was observed to feed on 2,000 cones using two adjacent anvil trees in a single winter.

The great spotted woodpecker also takes the eggs and chicks of small birds during the summer. It raids the nests of species such as the blue tit (*Cyanistes caeruleus*), great tit (*Parus major*) and house martin (*Delichon urbica*), and will use its bill to enlarge the entrance holes of nest boxes, in order to gain access to the eggs or nestlings.

Mating begins with aerial flight displays in the spring, and once a pair bond has been formed, both the male and female will excavate a nest hole in a tree trunk. A new nest is used each year, possibly to avoid the build up of parasites such as fleas. The trees chosen for nest

holes are often ones weakened by fungi, which cause heart rot, therefore making the wood easier to excavate. In Scotland this includes aspen trees (*Populus tremula*) infected by the aspen bracket fungus (*Phellinus tremulae*).

The female lays 4 – 7 eggs in the excavated nest chamber, which is lined with woodchips. The young hatch after 10 - 13 days and are fed with insects and larvae by both parents. The adults keep the nest clean, removing the chicks' droppings, and fledging occurs between 20 and 24 days after hatching. The great spotted woodpecker produces a single brood each year, and the young reach sexual maturity the following year.

### Ecological relationships of the great spotted woodpecker

Like other insectivorous birds, the great spotted woodpecker exerts a controlling influence on the populations of some insects, particularly bark beetles.

Parasites associated with the great spotted woodpecker include the hen flea (*Ceratophyllus gallinae*), a nematode (*Ornithocapillaria picorum*) and a chewing louse (*Penenirmus auritus*).

Predation of woodpecker chicks in the nest by pine martens (*Martes martes*) may occasionally occur. Freshly-excavated nest holes are sometimes usurped by the European starling (*Sturnus vulgaris*). Disused great spotted woodpecker cavities are utilised as nesting sites by several secondary cavity-using species, including the great tit and the pied flycatcher (*Ficedula hypoleuca*).

The population of the great spotted woodpecker has increased in Britain in recent decades, and this is likely to continue in Scotland, as further restoration of the Caledonian Forest takes place.



**Above:** Hazelnut and Scots pine cone worked by a woodpecker in an 'anvil' tree on Dundreggan.