

Birds in Our Neighbourhood

Birds are a very popular group of animals. Many species live in our proximity. When they start singing early in the morning, we know the spring has arrived and when they flock together, it means the fall is coming. Migratory species are fascinating, and we admire how accurately they leave for their wintering grounds to come back again when days get longer.

Many species are very social and nest in colonies, helping each other to forage, taking rest next to each other. And just like humans, they can disagree and fight as well as get along, instruct their offspring, they have their own hierarchy and still compete for their status. Males bring their female partners presents to impress them. Some birds even "kiss".

They are very close to humans, and we could not imagine our lives without them. The amazing world of birds is very colourful, and we can both admire and help them.



Adaptations of Birds

Birds are the most abundant group of vertebrates with forelimbs transformed into wings. They are found on all continents (in about 10 thousand species), which proves that they have adapted to diverse conditions. Some adaptations (legs, beak, way of nesting) have evolved for *very long period* and help birds survive in different environments, such as water, forest, or meadow.

Beak Shape

One of the most typical adaptations is the shape of the bill. It can be used to distinguish what the bird feeds on. Diverse beak types have formed in the long-term adaptation process – birds have accommodated to the prevailing diet in their environment.

Short and cone-shaped beak – true finches (e. g. finches, the goldfinch, or the bullfinch) can shell pits or peck at seeds with their short, strong beak (the hawfinch can even deal with cherry pits).



Hook-shaped beak – birds of prey (hawks, eagles, buzzards) use their hook-shaped beak to rip off pieces of meat from their prey. Such prey also includes animal casualties in road traffic (mostly in winter). While owls, with some exceptions, swallow their prey whole, hawks or eagles often split their prey into smaller pieces.

Chiselling beak (chisel-shaped beak) – woodpeckers or nuthatches use it to cut out larvae from wood (often dead) or to open nuts (mostly hazelnuts). In winter, for instance, the middle spotted woodpecker, which normally feeds on larvae, breaks this way apricot pits from the feeder. Woodpeckers also carve hollows with their sharp beak in trees where they nest or stay overnight.



Combined beak – this beak must be capable of everything: pick berries, catch insects, or cut dead animals. It is typically found in corvid species (jays, magpies, crows) or shrikes. It has so-called “tooth” at the end, which helps to firmly grasp living prey (such as vole or grasshopper).



Catching beak – swallows, martins, sand martins, swifts, and nightjars, catch their prey in flight. Their beaks are short yet open wide in the corners. They serve for capturing insects, making the birds flying flytraps.



Long beak – straight, sharp, and long beak is intended for fishing and can be seen in herons or the common kingfisher.

Flat beak – mute swan uses its flat beak to bite off aquatic plants. Mallards have broad and flat beak with lamellae for filter-feeding in water.



Foot Shape

Aquatic birds have webbed feet.



Birds of prey have strong claws for capturing and ripping prey.



Feet of woodpeckers have opposingly growing toes, which enable them climb trees.



From Nature to City

Some birds have succeeded in adapting to a different way of life in a relatively *short period*. Although they did inhabit natural environment in the past, they have also found their homes in cities, everywhere where it reminds them of their original habitat. Actually, they thrive.



The **common wood pigeon** originally lived in forests. Unlike the urban pigeon, it still feeds on seeds, flying to fields to find them, even several kilometres from the city. First specimens were observed in Slovak cities in late 1980s and early 1990s. It refuses bread as food supplement but besides nesting in trees, it can also do so on windowsills or in recesses of buildings. At present, it outcompetes the Eurasian collared dove from cities, which was originally a steppe species.

The **Eurasian magpie** is a species subject to a number of prejudices. In cities, it feels safer than outside the urban areas where it can be preyed upon. Its diet is very varied, from insects to dead animals, including waste. Magpie partners form couples for life. They nest very early, and their abandoned nests are used by species that cannot build a nest of their own – e. g. falcons.



The **common kestrel** uses nests left by corvid species and will be happy to nest in balconies, inside flowerpots. Synanthropization (i. e. adaptation to urban environment) in our country started more than 70 years ago. It preys on small rodents but in urban areas, its menu is much more varied as it also feeds on bats or lizards. It often hunts using the typical flapping flight.

The **black redstart** is a species that originally inhabited sea reefs and rocks. After London bombing in the World War II, it moved to the city that was less densely inhabited. It provided a rocky environment that it was not afraid to colonize. Little by little, it has adapted to lively environments in our urban areas. It can build nests in all kinds of recessed structures but will happily accept also man-made semi-nest boxes.



Myths About Birds

- Birds are subject to many myths. One of them is that birds, just like mammals, have well-developed sense of smell. This is false, which is why, for instance, they do not reject offspring touched by humans.
- Myths have always related to the "crooked beaks" – raptors and owls. Birds of prey are considered to be pests causing decline of smaller animals, such as hares or pheasants. Birds of prey are, in fact, at the top of the food pyramid. The overall number of these species is low. In nature, they serve important functions – control overpopulated rodents (e. g. voles), some feed on diseased and dead animals (so-called sanitary role).
- In the past, owls have been attributed with magical abilities too, such as that the little owl's night-time call, at the window of the sick person, announced the death coming. In reality, it is only attracted by the light where it can catch the circling insects.
- Have you heard that swallows "bury themselves into mud" for winter? This is how people in the ancient times explained the migration, that is (from their point of view) the "disappearance" of swallows in autumn and their "miraculous" comeback in spring.
- Why did the superstition take hold that cuckoos turn into sparrowhawks in winter? Cuckoos fly to Africa for winter and since sparrowhawks appear more frequently around human dwellings in winter, preying there on wintering birds, it gave rise to the myth.



Kestrel



Little owl



Swallow



Sparrowhawk

Cuckoo

First Aid for Birds

In spring, when the bird nesting peaks, people try to help the chicks. Often, such help is useless and unnecessary. When the young fledglings fly out of the nest and remain in its proximity, they learn to fly, and the bird "parents" keep feeding them. People feel sympathy and take them home, alarming the environmentalists in the effort to "protect" the birds. All our wild bird species (with the exception of urban pigeons) are protected by law, which means it is forbidden to capture or keep them at home. If you find an injured animal, it is necessary to contact the State Nature Conservancy of the Slovak Republic (www.soprs.sk) and search for contact based on the location of the find.



Blackbird

How Can We Help Birds

- We start **feeding** in autumn and end at the beginning of spring – the full feeders are also visited by the birds that return from the wintering grounds to their nesting sites from February to April.



- On warm days, we can help birds by installing a **drinker**. All we need is a shallow flowerpot with a stone, placed out of the reach of predators. In winter, a good source of water may be apple halves stuck on tree branches.



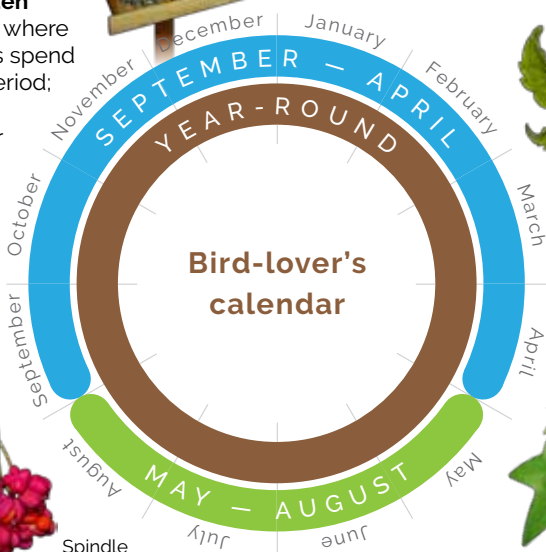
- **Bird-Friendly Garden** has uncut sections where insects and spiders spend their hibernation period; fallen leaves with diversity of feed for birds (earthworms, gastropods, and insects) and compost.



Elder



Spindle



Clematis

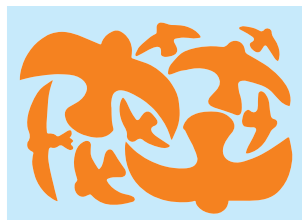


Ivy

- **Growing bushes** (black elder, dog rose, European spindle, common hawthorn, common dogwood, honeysuckle) will support various species of pollinators and provide birds with food. Growing native fruit trees (such as rowan, cornel) will provide nesting opportunities, shelters, and a food source.



- **Climbing plants**, such as Virginia creeper, clematis, or ivy, protect birds from predators and provide nesting opportunities. Planting coniferous trees will aid birds in leaving the nests. Their nests will thus be less accessible to cats and other predators (e. g. corvids), which improves chances of the offspring for survival.



- **Waste should never be discarded in nature** because it could injure birds. Birds will often use the rubbish as dangerous material for building a nest.

- **Glass panes should be equipped with special etiquettes** – to prevent birds collide with the glass.

Birds Nesting in Urban Areas

The **common house martin** feeds on insects and builds nests on human dwellings. Some people may mind the messy droppings. In such cases, we recommend installation of a capture plate under the nest (e. g. a piece of cardboard) that would prevent dirty windows or windowsills. After the birds leave the nest, the plate can be discarded as waste. If you want to encourage martins in nesting, you can buy a special nest – it is sold with the plate.



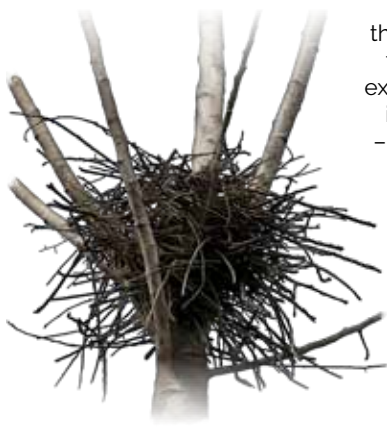
The **common kestrel** (often only referred to as "the kestrel") feeds on rodents. It has become accommodated to life in the city, feeling safe here. Very often it builds nests on balconies – e. g. inside flowerpots. Do not disturb kestrels. Especially at the beginning of their nesting period, the female is suspicious and often would leave the clutch of eggs, which could cool down and die. If kestrels choose an inappropriate nesting site (such as exposed to direct sunlight), it might be possible to move the chicks to a safer place within the balcony. However, such operation should only be carried out with assistance of someone who has authorization to manipulate with protected animal species.



The **common pigeon** (incorrectly also called the domestic pigeon) is the only Slovak bird species that is not protected. If it builds a nest on your balcony, do not contact the State Nature Conservancy. It has been found that if you want to prevent pigeons from nesting, you might install all kinds of barriers. Pigeons sit on balconies of abandoned apartments, more frequent visits to the balcony also help to avoid pigeons nesting there.



In autumn, after the leaves have fallen, we can see better the abandoned **bird nests**. We recommend that you remove them. Songbirds like to build new nests every year (with the exception of martins or swallows). The original nests are often infested with parasites. Their secondary use is not desirable – they would weaken the chicks or the incubating female. By their removal, we free space for building more new nests.



Significance of Every Individual in Nature

The landscape known to our ancestors from last century has changed much. In the past, small fields were separated by unploughed boundaries overgrown with field weeds, bushes, and alleys. There were more meadows that were mowed down in different seasons of the year and less frequently. Fruits of herbaceous plants as well as bushes and trees provided birds with sufficient food even during cold and long winters. Many species went extinct or have been reduced, also owing to our activity. A typical example is the sparrow – in the past, it was an abundant species around human dwellings, feeding on seeds found around here.

People have learned to classify species into useful and useless. Nature, however, does not respect such division and every single species has an important role. The significance of many species in nature is often unknown. The following examples may help us understand the context.

Birds as Builders

Magpies and other birds of the crow family build nests that can be used by falcons.

Sanitary Role of Birds

Birds of prey feed on sick and dead animals.

Significance of birds within the ecosystem

Adult **white stork*** feeding its offspring (May to July) catches around 40 voles every day. 1 vole eats about 2 kg of crops, which makes a nesting couple of storks save 4,800 kg of crops.

Long-eared owl and **common kestrel**** catch 2 voles on an average day of the year. Thus, they save around 1,500 kg of crops a year.

Tit – 1 family catches 120 million insect eggs, 150 thousand caterpillars and 75 kilograms of imagines (adult flying insects). ***

** We need to add around one more metric ton of crops due to voles caught in the fields by the stork family before they depart for the wintering grounds.*

*** In winter, they catch 1 vole a day, during nesting season, it can be up to 5 – 6. Moreover, camera trap record from seasons of vole population expansion show that one couple can bring almost 30 voles per day as food for their offspring.*

**** Converted to a tit family - 10 chicks and 2 adult birds. Some tits actually nest twice a year. Every day, tit eats about as much insect material as the tit weighs. This means that a single bird consumes 5,5 – 6 kg insects a year. This calculation shows the importance of installing nest boxes in gardens and cities.*



Tips on Helping Birds on Cold Days

- Place the feeder out of the reach of predators, mostly cats, at least 1.5 m above the ground, at a visible place away from roads and glass panes that birds could fly into.
- Birds like sunflower seeds the most, you can also feed them with rapeseed, millet, oats, or wheat; ideally, these should be always mixed with the sunflower. Tits and woodpeckers favour nuts and tallow, mainly beef. Magpies and jays like corn seeds.
- Feeder is not a trash can. Bread and bakery products, salty, smoked, and flavoured foods are improper feed for birds, possibly causing digestive problems and death.
- Feeder should be regularly cleaned to prevent spreading of diseases. If you observe birds with signs of disease (lethargy, preened feathers, death), stop providing feed for a week. Remove the feeder and disinfect with an agent eliminating bacteria, fungi, moulds, and viruses. When manipulating, pay attention to your own safety.
- If you see a raptor at the feeder, such as a sparrowhawk preying on other birds, do not interfere – it wants to live too.
- Water birds may be given corn seeds, wheat, barley; swans and ducks also favour vegetable cuttings, as they feed on plants in nature. We never feed them with bread. It has no nutritional value for the birds and may cause them to develop digestive or plumage problems and bone development issues resulting in so-called angel wings in swans (wing deformation that causes problems in flight).



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Authors: Martina Brnziková Badidová, Roman Slobodník | **Illustrations and graphic design:** Riki Watzka

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