

BLOCK 3



IN THE BIRD PANTRY



BLOK 3.

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When and why should we feed the birds?

The birds should be fed only when the weather conditions prevent access to natural food resources (frost, freezing rain, intensive snowfall forming a covering lid). We should keep in mind that birds as warm-blooded and extremely active animals, have a high demand for food, especially during the winter time, however short winter day limits their feeding possibilities. Then again, the act of feeding and giving help can have educational value and can bring us lots of joy. It can be a chance for children to get to know birds' habits and behaviors but also to stimulate their interest in the wild life and nature protection.

Before we start the feeding, we should observe birds in their natural environment to check how and what they eat. There are two reasons why we should know birds' food habits: it simplifies searching for the specific species (for example: we will not search for the great cormorant in the forest) but it will also let us to prepare the most appropriate kind of food which will be adapted to the special needs of birds.

Some birds will look for food on the ground or in the grass; other among the shrubs or on the trees, another group will collect the food from the water surface or dive to find it. Some of them will even hunt for different birds or animals. It is worthy to show children, that the beak is very helpful in getting food and its construction is connected with the food preferences of specific species.

The beaks of the birds eating hard plant material (cereal and fruit seeds), which has to be crushed, looks different. It is massive and large, just like the common bullfinch's or the hawfinch's beaks.

The beaks of the birds which eat soft food (like fruits) looks completely different (e.g., robin or blackbird).



FIGURE 1: MALE BULLFINCH
Autor: Juan Varela.



FIGURE 2: HAWFINCH
Autor Juan Varela.



It is thinner and longer.

We should keep in mind that many species (tits, thrushes, starlings, sparrows, finches, woodpeckers) change their diet between the seasons. It is a result of limited availability of different kinds of food and varied demand for nutrients at different times of the year. In the time of raising chicks, parents give their young mainly animal



FIGURE 3: BLACKBIRD
Autor Juan Varela.



FIGURE 4: ROBIN
Autor Juan Varela.

food with high protein content, which has a positive effect on the growth rate of hatchling. In the winter, both young and adults choose the plant food, which in our climate conditions, is easier to find. Some birds do not change their food habits, for example: birds of prey or those connected with water environment like piscivorous cormorant.

What and how often do we feed the birds?

The diet of the birds is varied so we should try to put different kinds of food in the feeder to satisfy the feeder's guests. We will prepare different food for granivorous – birds, which eat seeds; different for insectivorous and different for the ones, which eat fruits and berries. We should mention to children, that it is important when and how much food we put in the feeder. The food should always be available in the feeder but the feeder cannot be overloaded because food excess may get spoiled. Constant observation is a great task, which brings lot's of new sensations; it teaches how to be systematic and responsible for the life of bird friends.

What can we feed to birds?

- cereal seeds (millet, oats, wheat, barley), good for collared doves, sparrows, tree sparrows, buntings, greenfinches, bullfinches and hawfinches;
- plant seeds (flax, hemp, sunflower, poppy, pumpkin, corn, linseed, rapeseed, agrimonia, black millet). Seed mixtures available in pet shops can also be used (for tits, finches, greenfinches, goldfinches, siskins, bramblings);
- cereals: oat, barley, wheat and rice, wheat bran (coraled doves, sparrows, tree sparrows);



- groats (barley, buckwheat, rice), they can be cooked or dried (for collared doves, pigeons, sparrows, tree sparrows);
 - nuts (walnuts, hazelnuts, peanuts); cannot be flavored; they should be shredded for collared doves and tits or let as a whole for woodpeckers;
 - fruits and seeds of wild plants (for example: rowan, blackberry, hawthorn, wild rose, blackthorn, barberry, sea buckthorn, silver berry, aronia, black and coral elders, apple tree, beech, hornbeam, lime tree, juniper, plumeless thistle, burdock, dandelion, knotgrass). They can be bought in herbal store or can be gathered in autumn and properly dried. To dry the fruits, oven or fruit drier can be used (for tits, buntings, sparrows, tree sparrows, collared dove, finches, goldfinches);
 - fresh fruits (cut apples, pears (also cores and peels), banana slices or grapes); when the temperature is not so low, the bird's diet can be enriched with fresh fruits (blackbirds, thrushes, fieldfares, starlings);
 - fatback, tallow, lard those fats are a very valuable source of energy for birds (tits, woodpeckers, jays), however they definitely cannot be salted or flavored;
 - cooked vegetables. Cooked or steamed vegetable (potatoes, beetroots, carrot, parsley) can be served to water birds. They have to be cooked without salt so the leftovers from our tables will not be good for birds. You can feed them to the ducks, coots, swans and omnivorous ravens as well as partridges and pheasants, living outside the cities.
- Birds should have a constant access to water so we should put drinkers with warm water so that the water will freeze more slowly.

What should NOT be given to the birds?

- salted and flavored products;
- processed products;
- poor quality products;
- bread (stale, shredded bread can be given in small amounts but it cannot be the basis of the diet). Most of the breads are made of highly processed flour with lots of salt, chemical preservatives and flavor enhancers. All of these substances are not good for birds and can cause problems with digestive track.
- Food with high water content should not be given during cold and frosty weather.

When should we start and finish feeding?

We should start feeding birds usually in autumn, most often at the beginning of November. Birds must have a chance to get used to the place and accumulate the appropriate fat layer before cold days. Birds which are not accustomed to our winter conditions, should leave and fly away to the places, when temperatures are higher and more comfortable. Give them a chance and do not stop them by starting the feeding too early.

The canteen should be closed in early spring – at the end of April and not earlier. This is because the early spring is a very hard and difficult time for birds – the amount of food is



very limited and fat layer accumulated for winter has mostly been used.

What rules should we follow when feeding the birds?

- do not feed the birds in summer, when the food is commonly available, to not make them dependent on our actions and deprive their independence;
- feed the birds regularly and constantly. When we started feeding the birds, we should not to stop it until the end of winter; it should be done systematically and always in the same place. Fed birds very fast get used to the place, where they can find food in winter. When the food is not there, they will be forced to find it in the new places. Because of this they may lose a lot of energy and not survive frosty weather.
- remember to clean the feeder regularly. The feeder is a place of meeting for many individuals of different species. It can promote the spread of diseases, especially when the spoiled food or feces are present. It is best to clean the feeder in the rubber gloves to avoid direct contact with dirt.

What should we know about the feeders?

TYPES OF FEEDERS

The simplest feeder has a traditional form and looks like a small house; it consists of the floor, roof and four pillars to support the roof. The floor and roof can have any shape. To protect the food and eating birds from the rain and snow, the roof should be larger than the floor. Extendable floor can be helpful and can facilitate the cleaning. There should be enough space inside the feeder for all the birds, both small and big ones. The right height of pillars (the space between the floor and the beginning of roof) is about 20 cm. It should not be lower than 16 cm so birds can use it freely. It also should not be too high in order to prevent the predators from sneaking in – it may happen that cats can visit the feeder.

We can also nail the low slats around the floor. They will prevent the food from being blown out from the feeder by the wind. One wall should be completely built-up and then, the feeder should be placed with that wall to the western direction (eastern winds are prevailing in Poland), so that it will be quieter inside. We can even construct the feeder with two or three walls.

Where should we place a feeder?

Those kinds of feeders should be made of natural wood. Particle boards (chipboards) or plywoods are not proper because they contain toxic substances. The wood should be smoothed



and all places of joining (nails, screws) should be protected to avoid the injuries. The wood should also be protected with nontoxic impregnation in natural colors. Bright colors may scare the birds.

The feeder does not have to have a traditional form of a house. The feeders made of many kinds of materials, in fancy forms and sophisticated designs are also available on the market. The feeders made of recycled materials have been very popular recently. We should keep in mind that they have to be



FIG. 1. TRADITIONAL BIRD FEEDER. Autor: Iwona Majcher.

safe for the animals. Instead of the feeder, we can hang a special seed dispenser (tube feeder) – we can buy it in the pet shops or we can do it ourselves from a plastic or glass bottle.

We can also hang the fat balls full of seeds, which can be handmade. Fresh fat (beef or lamb tallow or fatback) should be melted and mixed with seeds or shredded nuts. Solid and formed fat should be placed in the plastic net (with eyes) and hung for the birds. Tits, woodpeckers and nuthatches will readily use it. The mix of seeds and fat can also be placed in plastic or cardboard boxes, to which, twine, tape or wire should be fasten.



FIG. 2. TUBE FEEDER. Autor: Jadwiga Moczarska.

Where the feeder should be located?

The feeder should be located far away from shrubs or any other places, which can be a good hideaways for cats; at the same time, it should provide unrestricted access and escape route for birds. The feeder should be placed 150 cm above the ground – it would be the best to put it on the column or hang it on the tree, but in a place which is inaccessible for cats. If we have cats, walking freely in the garden, we should not consider having the feeder at all. Cats cannot stop their hunting instinct and it is also not true that a castrated cat loses interest in hunting.



FIG. 3. DECORATIVE BIRD FEEDER. Author: Iwona Majcher.

Hanging the feeder on the wire or putting it on the column



with wire protective collar will help prevent the attacks of land predators. Untypical feeders like plastic nets should be hung in the screened places, for example on the porch, under the hood, on the branch of lone tree. If we want to observe birds from the house, the place of the feeder should be well visible from the window. However, the feeder should not be located near a large, glass surfaces, because it increases the risk of the bird crashing into it, when flying in the feeder's direction. The feeder may also be placed on the window sill (it has to be stable and well fastened). The feeder should be located in the southern part of the garden, where it is usually warmer and the snow will melt faster.



FIG. 4. FAT BALL.
Autor: Iwona Majcher.

Apart from having a feeder, it is worth to arrange the garden in such a way to give birds shelters and the opportunity to bring up their young, but also to supply proper food. We



FIG. 5. EXAMPLE OF AN INCORRECTLY PLACED FEEDER WITH EASY ACCESS FOR THE CAT
Autor: Iwona Majcher.

can achieve that by introducing appropriate plant species to the garden. Almost all fruit trees and shrubs can play the role of the gardens pantry, not only because of the fruits but also because of the insects living on them. Some species of ornamental plants, such as paradise apple tree, hawthorn, barberry, cotoneaster, rowan, blackthorn, dogwood or black elder can be an excellent source of food. Properly selected plants can also serve as shelters and can be a safe place to set up a nest - high thujas, covering the wall of creepers or dense hedges of the ligustru. When designing our garden, we should keep in mind that birds will avoid large, open spaces. For this reason, it is worth to plan some

plants in groups to create a thicket.

Figure 5: An example of incorrectly located feeder with an easy access for a cat.



Selected species of birds, which are fed by people

- Great tit – the biggest and the most numerous tit in Ireland and also a very common guest in the gardens. It lives in many kinds of forests, on the trees between fields, and it is often observed near the human neighborhood – in parks, gardens, greenery in cities and villages and in orchards. It nests in the old and light, deciduous and mixed forests. Great tit sets a nest in hollows, nesting boxes and hedges but in the absence of proper place, the nest can be located in the old kettle, mailbox, pipe or ventilators. Diameter of the hole is an important factor, which provides the safety – too wide hole may not protect eggs and hatchlings from the predators. Great tit tolerate the human presence and often visits the feeder in the winter, where it prefers seeds of oily plants, fatback or fat balls.
- House Sparrow is a well known bird because it has always been connected with the human and lived close to the houses. The sparrow's nest is round and made of grass, feathers and different kinds of fibers (containing cords, dangerous for birds). It sets the nest in the building slots especially under the roof. It also readily occupies nesting boxes. Clogging the gaps and openings in the buildings deprive the sparrows of proper places for a nest. Together with the increased pressure from the predators such as cats or magpies as well as cutting shrubs and old hedges, which are perfect hideouts – it influences the reduction of sparrow population in recent years. Sparrows mainly eat different kinds of seeds (herbs and grass). They also eat wastes from human homes. Sparrows may also hunt for insects, which are food for their hatchlings. This bird is a very popular guest in our feeders, where it eats sunflower, millet, wheat, groats, hemp seeds and nuts.
- Tree sparrow is a close relative of sparrow – smaller than its cousin. Sexual dimorphism is not observed in this species, so female and male have the same plumage. Tree sparrow differs from the house sparrow with a brown cap and white cheek with black spot. Tree sparrow lives in the open spaces and fields, but also in human habitats like cities, parks and gardens. Tree sparrow forms migrating (nomadic) herds, often with house sparrows, greenfinch and buntings. It also visits the feeders.
- Magpie has a characteristic black-and-white plumage, long black tail and short wings. Originally, it was associated with the areas of farmlands with small tree stands or shrubs. In recent years, it also numerously appears in cities. The nests of magpies are usually found high on the trees however they can also be located lower, in the bush e.g. hawthorn. The nest of magpie is a large, spherical construction, made of twigs and covered with a loose roof. Magpie is an omnivorous bird, like most corvids, so it can easily find food in the city. They also feed on chicks of other species.
- Mallard is the most widespread duck species in Poland. It inhabits all kinds of water reservoirs, ponds and lakes, also in cities, where it is easy to get used to and enjoy using human food. It avoids rivers with fast currents and nutrient-poor water reservoirs. Mallards form nests in coastal bushes and grass, and sometimes, for safety reasons, also on trees near the water. In the city, these birds can build nests in more unusual places, such as balcony boxes or garden pots. Mallards use a variety of food gathered mainly in water.
- Woodpeckers inhabit all types of forests, and also parks and gardens in cities. They nest in hollows. Due to the strong beaks, most species of woodpeckers forge the hollows by



themselves. Insects and their larvae extracted from the bark of trees are the main food of the woodpecker. Sometimes they also eat fruits and seeds, while at the feeder also fatback and tallow. The presence of woodpeckers is important for other species of birds, which use hollow trees carved by a woodpecker (flycatchers, tits, redstarts). There are several species of woodpeckers in Poland, among which great spotted woodpecker is the most frequent. Lesser spotted woodpeckers, European green woodpeckers and black woodpeckers (the largest species of woodpecker in Poland) are also quite often seen.

Milder winter climate conditions in recent years caused that some of the species in our species abandoned winter migration. It mostly concerns urban areas. Staying in the city, they permanently create local, urban populations (blackbirds, tits, mallards, swans). Birds entering to the cities and settling there, find, not only better conditions for winter due to higher temperatures even by a few degrees, in relation to neighboring areas (the city is the so-called „island of heat”, which is the result of compact buildings and accumulation of heat produced by the city). They also have many opportunities to shelter in various types of urban technical infrastructure and development, less chance of meeting with a predator and less competition from other species.

How do the birds cope in winter?

For herbivorous species, all fruits left on the trees and shrubs (hawthorn, rowan, sea-buckthorn), cones full of seeds and other plant seeds that are not covered by the snow will be important. Birds connected with water environments gather in places where the water surface has not been frozen.

The species that are characterized by high food plasticity and can use such food, which is then available, changing seasonally their food habits are in better situation. Many of them use food wastes that can be found, for example, in landfills. Unprotected landfills are a real „Eldorado” for many animals, including birds such as seagulls and corvids, which are a classic example of food opportunists. Interestingly, even storks in a situation when they are surprised by the return of winter after returning to the country, are able to use the landfill.

Being in a group, very often helps birds survive the winter. Many species create smaller or larger herds, feeding and resting together (siskins, greenfinches, bramblings). It is easier to cope with the common experience in finding and getting food, and at night you can reduce the heat loss by sleeping together. Such species as tree sparrows or long-tailed tits, can occupy a free hollow or nesting box with a large group and thus survive a cold night. Another way for the night cold is to bury yourself in the snow, which is a bit like building an igloo and waiting for the morning when you can supplement energy losses with food. That’s what little newcomers from the north do – snow buntings and much bigger black grouse. Still other birds, if they do not find the right shelter, try to stay close to each other on a twig (collared doves, tits).

The most unusual strategy for surviving difficult night conditions is hypothermia, i.e. a short-lasting slight decrease in body temperature and falling into a kind of numbness that slows down life processes and reduces energy consumption. It is mainly used by small birds, including tits. Body



temperature of most birds during rest in normal conditions varies around 40 deg. C, and during hypothermia an animal can reduce it even down to 30 degrees. This allows to reduce energy expenses by up to 30%. Due to that, the sleeping bird additionally protects itself against the cold, by pushing the feathers and hiding the legs and beak under them, i.e. those parts of the body that lose the most heat - it can save up to half of the energy needed for survival.

Winter is a great time to learn how to recognize species and learn about the habits and behavior of birds in their feeding areas. It is worthy to pay attention to the way of feeding. The great tits are approaching the feeder, they grasp the grain and move away, eating it elsewhere, greenfinches and tree sparrows „sit” in the feeder for longer and try to eat as much as possible without leaving. Other species, such as finches, buntings and pigeons, collect food from the surface of snow or ground. Of course, when there are lots of birds, there may be conflicts and a fight for access to food. Also interesting is the order in which feeder visitors appear and the time of the highest intensity of visits. Usually at dawn, tits are the first to appear, which as the smallest ones lose the most energy at night to maintain their body temperature. Other species, such as greenfinches and tree sparrows, appear a bit later. If we conduct observations for a long time, we can try to determine what weather conditions affect the increase, and which to decrease the number of birds observed at the feeder.

Another opportunity for the winter bird watching is to visit the nearest unfrozen or partially frozen water reservoir. These can be park ponds, river banks, lakes or sea coasts located outside of towns or villages. With such observations it is good to have binoculars or a telescope. Regular observations in permanent places can provide valuable information on changes in the number of wintering birds (see more about Monitoring of Wintering Birds). How should observations be conducted over water reservoirs? As in the case of feeder observations, we note weather conditions, species, number of individuals and behavior of birds, as well as the place of staying (on land, shore or in flight). If possible, we recognize gender.

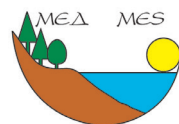






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BirdWatch Ireland is a non-governmental organization with a public benefit status, dealing with the protection of wild birds and the places where they live. The aim of the Society is to preserve the natural heritage for the benefit of present and future generations. BirdWatch Ireland is the Irish partner of the global federation of bird protection societies - BirdLife International.



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