

BLOCK 5



BIRDS LIVING NEXT TO US



BLOCK 5.

BIRDS LIVING NEXT TO US

- Urban areas create a specific biotope where natural environmental elements have been either markedly changed or eliminated due to men activity or antropogenic factors. It does not evi-dently mean that an urban environment is solely assigned to men population. Apart from its domi-nated role and prevalence, we can find here an abundant world of living organisms both plants and animals. From historical perspective the first human settlements resulted in the development of agriculture and transition from migratory to the settled way of life. Usually they appeared in the regions where efficacy of crops was high, in the basins of big rivers with fertile areas. One of the first traces of agricultural activities comes from over 11000 years, from the so called 'Fertile Crescent Region', i.e. basins of the rivers Tiger and Euphrates. Due to gradual improvement of the land cultivation, followed by food overproduction, part of farmers took up craftsmanship and trade, which in consequence influenced the development of transport. The ability of minerals exploita-tion, as the source of energy and the development of industry triggered a dynamic development of urban areas, caused by the inflow of man power to factories. New cities consecutively occupied surrounding areas, changing them by the development of housing and industrial infrastructure.
- How do animals, especially birds, exist in this altered environment?
- Two basic causes may be mentioned:
 - absorbing natural environments together with existing fauna and flora (some species can adapt themselves to new conditions eg. species associated with remaining watercourses, if they were not vitally modified and polluted),
 - entering new species to the area occupied and altered by man.
- The process of adaption to self-contained, independent from men will, occupancy of human set-tlements or their nearest vicinity by species of wild animals (adaptation of animals to antropogen-ic environment) is called synanthropisation, whereas adaptation of species of wild animals to living in urban condition is called synurbization.
-
- What encourages birds to stay in a city?
 1. Abundance of food sources of antropogenic origin (food available at rubbish dumps, dump-ing grounds, grocery shops and feeding by men).
 2. Better wintering conditions – air temperature is even 10°C higher as compared to surround-ing areas. For warm-blooded vertebrates, like birds, it is especially important, because it allows to restrict energy lost connected with maintaining proper thermo-regulation. A city, therefore, forms so called 'the island of warmth' which produces and retains warmth.
 3. Abundance of hiding places and places for procreation (birds, can use habitats natural for them, such as trees and bushes or various elements of urban infrastructure).



-
- Figure 1. The nest of mallard in a non-typical place. Pixabay
-
- 4. Limited number of natural predators,
- 5. Lower number of competing species,
- 6. Friendly approach of man towards birds (though some inconveniences due to their presence may appear, such as droppings or 'loud behaviour' e.g. seagulls and magpies).
- Considering the consistency of bird's connection with a city, we may distinguish two basic categories:
 - birds living periodically in a city (migrants, birds passing the winter, birds coming randomly),
 - birds living permanently in a city (primary species living in a city, immigrant species which domesticated in a city, fugitives from animal breeding, species unintentionally trailed).



FOT. 1.A MALLAR NEST IN AN UNUSUAL PLACE.
SOURCE: PIXABAY.

- It is worth mentioning that some species characteristics encourage to settle in cities, such as food opportunism and behavioural flexibility (seagulls, corvine birds).
- That for many birds eager to live in cities the resemblance of urban build to natural rock environments, from where these birds originate, is very essential e.g. urban pigeons descending from rock pigeons.
- It is interesting that some species divide into city population, preferring urban areas and populations devoted to primary areas, which manifest traditional behaviour and life style. The most known example of such diversification is a blackbird, which forms urban resident populations and forest populations taking traditional spring-autumn migrations.
- It was also noticed that long staying at specific special structures, generated by urban buildings, leads not only to the change of food habits, but also to the change of behaviour (e.g. less timidity) and causes morphologic and anatomical changes. Longer feathers, longer tails



and increased hearts, which result from short distance flights, often vertical, requiring more energy.

- Apart from many benefits resulting from living near men, there are also inconveniences such as concentration of population and lower vitality due to contamination and pollution of urban environment. Birds are also exposed to the aggression of stray dogs and cats, as well as to collisions with vehicles, overhead energy lines, and tall, poorly visible obstructions.
- These factors may markedly influence their mortality rate. In a complex urban build area, where large glass surfaces are common, more and more birds lose their lives smashing against windows, balcony doors, glass terraces or acoustic screens.
- The visual field of birds differs completely from the human one. Although it is wide because of eyes situated on the sides of head but it contains considerable 'dead field' (i.e. the area in the visual field where we see poorly or not at all). Birds also have got a very narrow range of spatial vision (overlapping visual field of the right and left eye), allowing to see three dimensionally and to determine actual distances from obstructions and between obstructions. If we add to this the speed of flight and a space view behind a glass or sky reflecting in it, then it is a dangerous trap in which unfortunately many birds are caught. Birds do not see glass as the obstruction and hit it in full speed which for small birds may be even several dozen kilometres per hour.
- Not only the way birds see the world influences their collisions with glass. Equally important is the strategy of their translocation. It is worth noticing that considerable amount of birds living near men relates to trees and thick bushes.
- For birds our gardens, orchards, and parks are nothing else than modified wood environment. They exploit the same system of translocation which proved true among trees, treating bright points between obstructions as clearances. Unfortunately, such an interpretation in comparison with a building and glass turns out critical in consequences. Of course, it does not happen on each glass and not every day. However, American scientists proved that 1 to 10 dead birds fall on each building.
- So, called thermo-modernisation and repairs, increased in recent years, insulate inlet holes to nesting places, creating a serious problem for species nesting in wall gaps and flat rooves of the urban build.
- Consequently, some species are in danger even in the European scale. It includes swifts, sparrows, tree sparrows, chimney -swallows, and jackdaws.
- Other dangers for the health of birds such as rooks, jackdaws or herring gulls may be open dumping sites. These species exploit them as feeding places.
- Dumping sites are a potential source of pathogenic microorganisms, that are dangerous not only for birds but also, they can be transferred to other animals and areas.
-
- How can we prevent birds not to smash against glass surfaces?
 - • to foresee proper system of cornices and eaves at the planning stage of a building,
 - • to apply glass reflecting UV radiation or to cover it with special foil,
 - • to apply window screens with a soft surface or without reflexes,



- • to cover glass by washable tempera paint (a form of season decoration),
- • to cover shades and shutters at the pitch of spring – summer passage of birds,
- • to apply foil and paper labels in the form of dots or stripes (the best are vertical stripes distributed every 4 cm or horizontal ones every 2 cm).
- Shades, lights in a window, curtains and drapes do not provide full safety because they do not restrain reflexes on a glass when sun is low on the sky. Although, eaves and canopies, protect a window against sky reflection but sometimes, like in a camera, they shed reflection on a window, so it does not diminish danger for birds.
-
- Source: <http://jestemnaptak.pl/artukul/szyby-a-ptaki-niewidzialne-zagrozenie#>
-
- How can we help birds in cities?
- Our activities can embrace various aspects of life of our flying co-inhabitants, among others:
 - • support in satisfying their food needs (hanging feeders, constructing feeding places, grow-ing fruit plants our in-house gardens, feeding water birds with appropriate food, etc,
 - • providing nesting places (hanging nest boxes, trimming trees and bushes),
 - • providing safety (to restrict access of pets such as dogs and cats to the places where birds stay),
 - • restricting any possibilities of collisions with the objects of urban infrastructure (visual and acoustic marking).

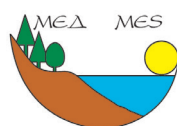






This material was prepared as part of the project „We live in harmony with nature. The educational program for teachers of pre-school and primary education”. The project involved selected non-governmental organizations involved in the protection of birds associated as part of the international BirdLife International federation. In addition to the National Society for Bird Protection, which ran the project, the Spanish Ornithological Society (SEO), the Slovak Ornithological Society (SOS), the Macedonian Ecological Society (MES), the Czech Ornithological Society (CSO) and BirdWatch Ireland (BWI) were involved. The University of Gdańsk became the substantive partner of the project responsible for creating materials for teachers.

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.



Publikacja została zrealizowana przy wsparciu finansowym Komisji Europejskiej.
Publikacja odzwierciedla jedynie stanowisko jej autorów i Komisja Europejska oraz Narodowa Agencja Programu Erasmus+
nie ponoszą odpowiedzialności za jej zawartość merytoryczną. PUBLIKACJA BEZPŁATNA