

## WHAT IS BIODIVERSITY?



**Biodiversity** - the diversity of life on all levels of its organization.

According to the [Convention on Biological Diversity](#) from 1992, biodiversity means the variability among living [organisms](#) present on [Earth](#).



### **Swiss-Polish Cooperation Programme**

In order to maintain the biodiversity of species in selected areas of natural environment in Poland, the Swiss-Polish Cooperation Programme stretched its support onto biodiversity as one of the ten thematic area of the Programme.

The majority of projects were initiated at beginning of 2012. The first one is scheduled to end in autumn 2013: KIK/31 - *"The Carpathian Mountains friendly to people - local partnership initiative for the sustainable use and conservation of mountain areas of the Podkarpackie Voivodeship"*; the last one is to finish in 2016: KIK/25 - *"Protection of biodiversity of valuable habitats on farmland in Natura 2000 areas in Lubelskie Voivodeship"* and KIK/37 *"Spawning grounds in the Upper Raba"*.

The specific character of the above projects consists in the fact that their implementation starts with the creation of an inventory determining the biodiversity resources of a selected area, taking into account the specific character of its biodiversity. On the basis of the inventory, actions are planned depending on the nature of each project.

Common ground for the tasks to be undertaken:

- ⤴ field work, such as planting trees, removing pollutants, creating buffer zones, improved monitoring,
- ⤴ development of methodologies, strategic protection documents for selected areas,
- ⤴ after the inventory work and fieldwork, creating final products for each project, for instance maps on which ecological corridors are outlined (KIK/53 - *"Protecting wildlife refuges of Carpathian forest fauna - migration corridors"*),
- ⤴ information and promotional activities, aimed at disseminating information about the project and raising public awareness of the need for fauna and flora protection and conservation, and the exclusion of forms of farming that are excessively invasive and harmful to the environment in protected areas.

### ***What does the sustainability of results mean?***

An important element in the implementation of projects consists in concrete actions aimed at protecting the natural resources in certain areas, as well as the implementation of various types of tools and the promotion of behaviour that protect biodiversity following the completion of the project. In this way, the results of the project can be consolidated.

The scope of measures taken in the framework of the above projects is quite broad and includes the protection of many species of flora and fauna, among others mammals, fish, birds and various forms of plants in areas of geographical concentration which, thanks to the implementation of the above projects will be provided with better conditions for growth and vegetation. This will be achieved, among others, through the specially developed micro-maps outlining ecological corridors and migration corridors for animals.

### ***4 x the Carpathian Mountains!***



As many as four out of the seven biodiversity projects relate to the region of the Polish Carpathian Mountains. In order to preserve the natural wealth of the region, a variety of measures aimed at the protection of birds, large mammals such as deer or large carnivores such as wolf, lynx, wildcat and brown bear are carried out. These species are thus provided with favourable living conditions. The Executing Agencies (EA) of the above projects carry out a number of initiatives, projects, information and promotional actions in order to raise public awareness of the main tasks within projects and the expected results of their implementation. They also disseminate practical information about manners in which to protect various species of flora and fauna, for instance through an active involvement of local communities in various actions aimed at saving species from extinction.

### ***Protection of birds - a challenge for all!***

One of the examples of such actions carried out by the EA is the *"Inventory of key bird species of the Polish Carpathian Mountains and the creation of a monitoring and protection system"*, implemented by the National Society for the Protection of Birds. The website of the project, [www.otop.org.pl](http://www.otop.org.pl), presents practical information on manners in which to provide assistance to birds that are wounded or need help.

Even though not all of us can boast a thorough knowledge of ornithology, anyone can tell a stork from other members of the species. We often see storks strolling through the meadows or sitting in their nests, but probably not many people are aware that our civilization sometimes poses the greatest threat to these birds. As it turns out, each year storks are exposed to many dangers: the most serious are collisions with aerated cables and other elements of the power grid. Within only one year, nearly 500 storks were killed following contact with these devices in Mazowieckie Voivodeship alone. Electrocution is the cause of death mainly among young storks who sit on the power grip while learning to fly. The problem also affects adult storks, especially in the period of the so-called assemblies. During the day, large flocks gather in meadows, and in the evening many birds sit on transformer stations and die of electrocution.

Fot. Cezary Korkosz



### ***Should we help storks and how to do it?***

In practice, municipalities have an obligation to help wild birds, but lack financial resources for such activities. A wounded stork can be captured with the help of the police, the municipal police or a fire brigade. Anyone can also try to do it themselves. It should be clear that this practice is authorized and in many cases even desirable. A wounded stork should be taken to a veterinarian, who decides whether the bird needs treatment or it has to be put down. It is extremely important that the bird is captured and transported safely. One must be very careful with an injured stork, as a frightened bird can be dangerous. Storks should be transported in cardboard boxes (ensuring that the transported patient is not able to stand up in it), which should be appropriately secured. When trying to capture a stork, one should first hold it by the beak, as an upset bird may try to hit the person in the eyes.

### ***Birds and man - coexistence***

Similar help, not as risky as in the case of storks, can be provided to all birds. According to weather forecasts, we can expect a heat wave this summer - it will be difficult to bear not only for humans. High temperatures are also very difficult for birds. IR - OTOP calls for providing birds with water. The best containers to use are flat, allowing birds easy access to water, for instance flower pot saucers. More information on how each of us can help protect different species of birds can be found on the following website: <http://www.otop.org.pl/ptasie-porady>. Through active participation in similar rescue and aid actions, we can learn a lot about birds, also through our own observations.

### ***Protecting the forest fauna of the Carpathian Mountains***



In the framework of the project entitled "*Protecting wildlife refuges of Carpathian forest fauna - migration corridors*", carried out by the "Pro Carpathia" - Association for Development and Promotion of Podkarpacie, a number of monitoring activities are conducted in order to observe and track large herbivorous mammals (deer, bison), large carnivores (wolves, lynxes, wildcats, brown bears) and birds; the purpose of these actions is the mapping of migration corridors of these animals.

### ***Migration corridors in the micro scale***

Migration corridors must be mapped following the undesirable fragmentation of habitats, which can be partly eliminated through the restoration of connections between habitat patches and populating them with animal species.

Given that it is not feasible to cater for all the needs of all forest fauna species for which the existence of migration corridors is particularly important, their mapping is based on the monitoring of selected indicator species, with particularly large habitat requirements, such as carnivores (wolf, lynx, bear), ungulates (deer, wild boar, bison, elk) and birds of prey (lesser spotted eagle).

The drawing of such a micro-scale maps can bring many benefits to animals, as they will be provided with more favourable conditions for growing and development in selected areas. Also, in special cases, humans will be able to assist them or provide them with food in winter.

The project involved the purchase and installation of appropriate equipment, such as photo traps that register the movement of animals in forests and woods, allowing for the observation of animals crossing public roads in winter.

### ***Media about the project***

In the framework of promotional and educational activities, several episodes of an educational program dedicated to ecological corridors were produced, including "Barriers and corridors" - the importance of ecological corridors and preventing the formation of barriers, and "Local corridors" - on problems of the maintenance of wildlife crossings at the local level, for instance in municipalities. Videos were broadcast on local television and TV Rzeszów, and they have been issued on DVD.

Thanks to the wide range of information and education campaigns undertaken by the EA at different levels, there is a chance that the public will grow more aware of the need for a sound coexistence with the biodiversity of the environment.

***Example of an informational and promotional action*** conducted by the Executing Agency of the project *"The Carpathian Mountains unite people - a mechanism for consultation and cooperation in the implementation of the Carpathian Convention."*

On 21 April 2013, a traditional ceremony ***Redyk in Ludźmierz*** was held as an opening of the herding season. It is one of the most important celebrations of the year.

Every year on St. Adalbert's day, shepherds from Podhale come to Ludźmierz. Traditionally, festivities must be held before sheep venture out to pastures. For this purpose, the trailing of sheep was organized on the church square, led by shepherds and accompanied by a folk band.

This year's festivities were special. The Podhale shepherds came not only from the Polish Carpathians, the Beskids and the Gorce Mountains, but also from Slovakia, the Czech Republic, Ukraine and Romania.

*Photos from websites of the Executing Agencies, that is the Polish Society for the Protection of Birds [www.otop.org.pl](http://www.otop.org.pl), the National Foundation for Environmental Protection - Environmental Information Centre UNEP / GRID - Warsaw [www.karpatylacza.pl/](http://www.karpatylacza.pl/), "Pro Carpathia" - Association for the Development and Promotion of Podkarpackie [www.procarpathia.pl](http://www.procarpathia.pl) or directly from the photographer, Mr Cezary Korkosz.*