



FACT SHEETS ON HUNGARY

MINISTRY OF FOREIGN AFFAIRS BUDAPEST

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Environmental and nature protection

Hungary lies in the centre of Europe, midway between East and West, North and South, ringed by the Alps and the Carpathians. Its undulating lowlands, low hills, fine rivers and grass plains extend over an area of 93,000 km². Our ancestors, migrating from the east, were drawn to settle in this land rich in natural resources 1100 years ago. On arrival in the Carpathian Basin they came across fertile plains, rivers abounding in fish, and hills full of game.

Over succeeding centuries, and primarily in the 19th and 20th centuries, this land and environment, naturally, underwent considerable change. Thankfully, however, agriculture has always had a greater role to play in Hungary than industry, and the country has preserved a considerable part of its natural values to this very day.

The intimate relationship binding Hungarian people to nature derives from an intense love and respect for life. Hungary harbours many untouched areas, landscapes and ecological paradises of value to the entire continent, and on accession to the European Union we would thus like to enrich the community receiving us.

This country has devoted considerable effort to meeting EU environmental

protection norms. Negotiations on the environmental protection chapter were provisionally concluded in Brussels in June 2001. When the talks were initially opened Hungary presented derogation requests in nine areas. In the wake of discussions Hungary finally submitted a plea for temporary derogation in just four fields, and even then the deadline was shortened from that earlier requested.

THE ISPA AND LIFE INTERNATIONAL PROGRAMMES

Within the framework of ISPA Hungary receives an annual EUR 88 million from the European Commission from 1 January 2001. One half of this sum must be devoted to environmental aims, the other half to development of the transport network. Under present practice ISPA covers about 50% of the costs of the projects; the remaining part must be generated from own resources, occasionally with the involvement of international credit institutions. Self-governments submitting bids for tenders have to undertake to shoulder at least 10% of the costs of the project from their own budgets. The local governments can access the remaining sum from the central budget, various earmarked subsidies or loans.

From 2001 Hungary has been participating in the EU LIFE 3 programme. This programme provides a broad scope of opportunity for both natural persons and legal entities to bid for nature and environmental protection support. In other words, LIFE 3 opens the door to the co-financing of small scale, local level and non-governmental





initiatives. This permits organizations which otherwise would not be eligible for subsidies provided through pre-accession funds to also have access to Union support.

TASKS TO BE RESOLVED

The proportion of hazardous waste in total waste in Hungary is particularly high. At present there are very few waste treatment sites, selective waste collection is restricted, and waste recycling is limited. For this reason the environmental protection portfolio is giving its backing to the introduction of low-waste technologies, the formation of comprehensive waste treatment systems, enforcing the principle of manufacturer responsibility, introducing a waste return and treatment liability and increasing the proportion of re-usable products. The development of geographical information systems (GIS) and the

drafting of damage containment strategies for plants which could threaten water quality are of outstanding importance in the field of environmental safety.

Public opinion is increasingly focused on environmental safety and environmental health concerns. In this regard environmental health is particularly important. Major tasks here are protection against biological allergens (for example, ragweed), reducing concentrations of allergens and establishing an environment offering an acceptable quality of life.

WATER PROTECTION

Regarding its natural waters, Hungary can be considered a transit country; this means that the quality of its water resources is to a large extent contingent on neighbouring countries, and thus the maintenance and improvement of the state of its waters can only be achieved through international collaboration. There is no better example of Hungary's vulnerability than the pollution which flooded the Tisza in 2000, when quantities of cyanide and material containing heavy metals released in Romania were washed into the river, leading to a huge ecological catastrophe.

Hungary is a signatory to every international water protection treaty, and it has concluded bilateral water quality protection conventions with all its seven neighbouring countries.





Tivadar Csontváry Kosztka: Storm on the Great Hortobágy

The number of settlements supplied with mains drainage has increased considerably due to developments carried out with considerable state support. At present around 2 million houses are connected to the public mains drainage network, but deficiencies in sewage drainage and treatment still represent a considerable threat.

NOISE PROTECTION

As a consequence of the increasing number of vehicles in the country year on year, ever more settlements – in an effort to halt rising noise pollution – are fighting to have by-passes built around residential neighbourhoods and get bans on heavy goods transit traffic. Approximately 100,000 m² of noise baffles have been installed alongside motorways and main roads. This work is continuing apace.

WORKING FOR CLEANER AIR!

Emissions from fixed air polluting sources have been continuously reduced since the early 1990s. This is partly due to the increasing availability of modern technologies, and partly to planned environmental protection measures. Although the air in Hungary is cleaner because of the constant tightening of regulations related to vehicular traffic and improvements in fuel quality, still the unchanged high level of air pollution in

towns can be put down to, first and foremost, traffic.

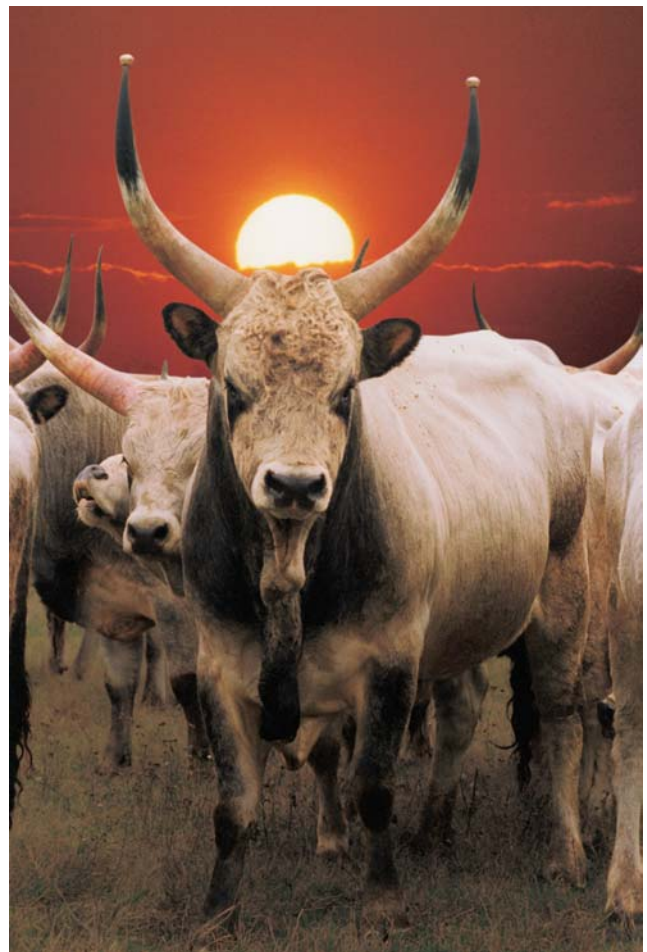
Hungary actively participates in the implementation of international treaties – including the agreement on protecting the ozone layer – concerned with the widespread pollution of the atmosphere spreading across borders.

LANDSCAPE PROTECTION ZONES AND NATURE PROTECTION AREAS

In Hungary, in addition to the 10 national parks the total area enjoying nature protection status is further extended by 36 landscape protection zones and 142 nature protection areas of national significance.

Landscape protection zones cover an area of 310,000 hectares, and nature protection areas of national significance

a further 26,000 hectares. Taken together with the wetlands and alkaline lakes, as well as the nature protected areas of local significance, all of which come under the pro-



tection of the law, 9.9% of the territory of the country is under nature protection.

NATIONAL PARKS

HORTOBÁGY NATIONAL PARK

Hungary's first national park was established in 1973 across 81,000 hectares. Today the area, shaped by the movement of water in the past, is Central Europe's largest area of grassland (Puszta) and a World Heritage site. Its entire territory is a biosphere reserve and specially protected under the Ramsar Convention on Wetlands. It can be split into three landscapes: floodplain forests and ox-bow lakes, marshes and lakes, and the Hortobágy Puszta. The Hortobágy Puszta is best characterized as being like a sea of grass. The virtually billiard-table-smooth plain with its minimal height variations of just a few centimetres and different soil conditions combine to create variable micro-regions. Drought-resistant and halophyte plants blanket the landscape in a mixture of green, red and gold foliage.

Until the regulation of the river Tisza in the 19th century the Hortobágy was criss-crossed by waterways with large areas of wetland. It only turned to the alkaline flats we see today after this mammoth engineering project was completed. Grazing has preserved this short grassland state to this day. This is the most important semi-nomadic shepherding region in Hungary. The remarkable phenomenon of the *fata morgana* or mirage can be observed in the Hortobágy on hot summer days.

KISKUNSÁG NATIONAL PARK

Sited across an area of 76,000 hectares between the Danube and the Tisza, this national park was founded in 1975. In 1979, two-thirds of the park was declared a biosphere reserve under the UNESCO Man and the Biosphere Programme. The Ramsar Convention affords increased protection to the aquatic habitats. The park comprises nine discrete parts. The Upper Kiskunság Puszta is the second largest alkaline grassland of the Great Plain; its flora includes halophyte species. Even today the Fülöpháza sand dunes "move", blown by the wind in a northwesterly-



southeasterly direction. The Bócsa-Bugac sand dunes and Puszta form the park's largest and most variable section. Here the visitor comes across a succession of sandy forests, sand and alkaline grasslands, lines

fauna and indigenous Hungarian domestic breeds; indeed, Hungary's very first national park museum is located here. One important function of the national park is the maintenance of the farming lifestyle



of dunes, natron lakes, marshes, meadows, flats and fields. The Ancient Juniper Grove is of particular importance. The national park constitutes a rich reserve for flora and

and traditional farming methods practised over the course of many centuries, as well as the preservation and presentation of objects linked to the peasant culture of old.





BÜKK NATIONAL PARK

No less than 90% of this national park (sited in northeast Hungary over 43,200 hectares and established in 1976) is covered by forest. The limestone surface making up the Bükk Hills is varied, and hides between 500-600 caves in its depths. The total length of these caves extends to some 35 km. Bükk karst waters require neither filtration nor chlorinating, and for this reason they represent an important water supply for towns and villages in the region. Crags and rocky cliffs, particularly attractive formations in the national park, afford excellent vantage points from where to view the landscape near and far. One particularly famous site in this park is the stepped waterfall (with a fall of 17 metres) on the Szalajka stream. The forests are mostly beech (*Fagus sylvatica*). One wood is the renowned Ancient Forest where there has been no felling for a century now. Fossilised flora dating back to the Ice Age has also been found, and many of the caves have yielded up rich collections of Stone Age tools.

AGGTELEK NATIONAL PARK

The national park formed in 1985 covers 20,000 hectares of northeast Hungary. The area's greatest attraction is the Aggtelek and Slovak Karst cave system. Both sections have enjoyed international protection since 1979 when they were qualified as a biosphere reserve under the UNESCO Man and the Biosphere Programme. The cave system was listed as a part of the World Heritage in 1995. The majority of the cave is open to tourism, and the wondrous stalactites make for an unforgettable experience. Patients suffering from respiratory diseases are treated in several of the huge underground caverns, and the excellent acoustics also permit the regular staging of concerts.

FERTŐ-HANSÁG NATIONAL PARK

This national park of 23,600 hectares in northwest Hungary was set up in 1994. The shallow, alkaline Lake Fertő, ringed with reed-beds (*Phragmites australis*) and located on the Austrian-Hungarian border, is an aquatic habitat of European significance. In addition to the protected and rare flora it is also home to many

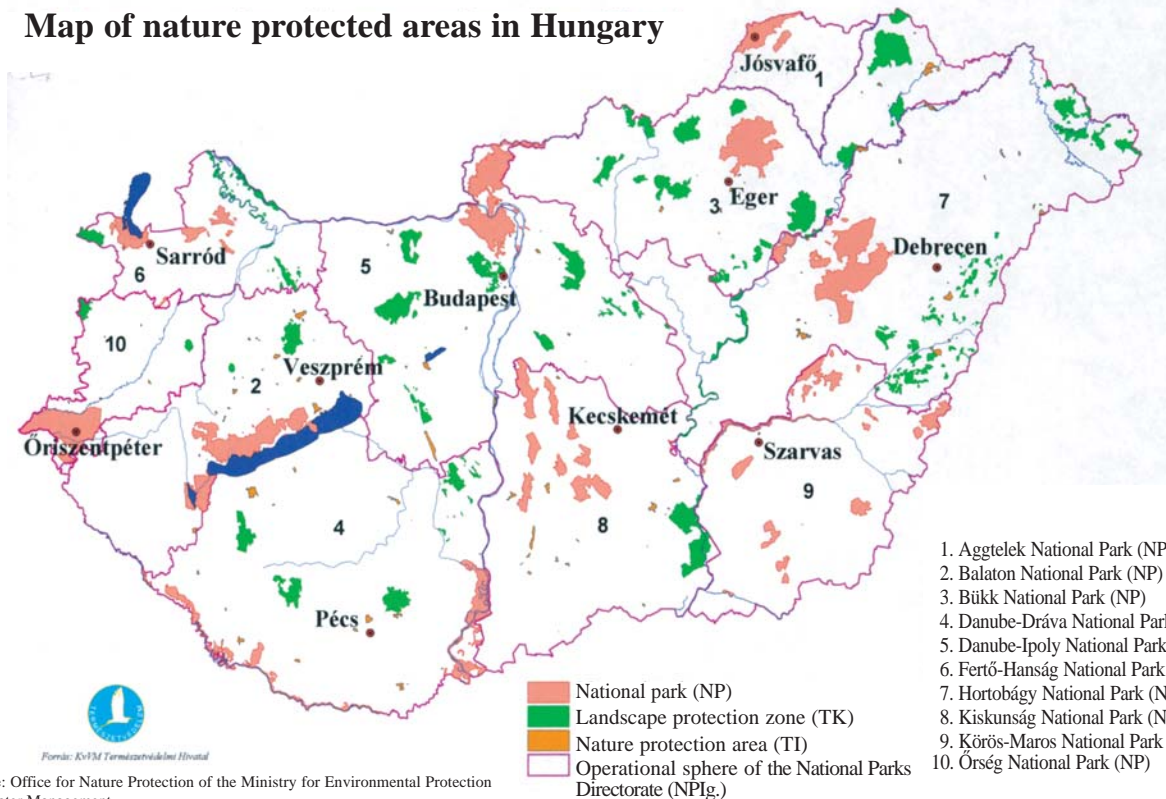
endangered amphibian and reptilian species. It boasts a very rich stock of waterbirds. Early Magyar domesticated animals – grey cattle (*Bos taurus taurus*), “Racka” sheep (*Ovis aries strepsiceros Hungaricus*) – and herds of buffalo graze the Puszta grasslands around the lake. The Madárvárta ornithological station and study centre built on the lake shore has an important role to play in nurturing environmental and nature protection awareness among the young.

As a result of human intervention – draining, peat cutting – the majority of the formerly interconnected huge wetland of Lake Fertő has been tamed, although the characteristic species of flora and fauna and the unique landscape itself have successfully been preserved. One of the tasks of the national park is to preserve ethnographical features of the one-time marshland. Animals were grazed on the meadows hereabouts as late as the first half of the 20th century, the fishermen, marsh dwellers and crab fishermen wove wicker fish-traps and baskets, and fashioned footwear, wall protectors and bags from rushes and sedge. In short, this region provided them with a livelihood.

DANUBE-DRÁVA NATIONAL PARK

The 49,500-hectare national park (founded: 1996) is to be found in the south of Hungary. This region includes sections of the Danube and Dráva rivers framing the hills of Southern Transdanubia as well as the alluvial plains. In pre-river regulation days the marshlands covered a huge area; today they extend across just a fraction of their former territory. Interestingly, the national park does not comprise an interconnected series of areas but it is rather a mosaic-like patchwork. Among these sections the best known is the Gemenc, famed far and wide for its superb game stock, as well as Béla-Karapanca which extends across the marshes, pastureland and floodplain of the lower course of the Danube. The area is home to Hungary's greatest osprey (*Haliaeetus albicilla*) nesting site. The Dráva is rich in fish of all kinds; certain rare species are only to be found here. The highly protected lesser tern (*Sterna albifrons*) is also unique in nesting in these

Map of nature protected areas in Hungary



parts only. The Barcs juniper groves are also famous, for they represent the unique habitat of two native flowers, the Royal Fern (*Osmunda regalis*) and the Shepherd's Cress (*Teesdalia nudicaulis*).

DANUBE-IPOLY NATIONAL PARK

This protected area extending over 63,000 hectares of north Hungary was brought into being in 1997. Its primary attraction is the Danube Bend. It is special for having terraced valleys, the meeting point of the plain and the hills, from where we get the extraordinarily varied natural habitats. The park actually encompasses the bare, steep slopes of the Pilis Hills, dotted with caves, the Visegrád Hill famed for its medieval castle, and the Börzsöny with their spectacular serrated cliff formations. 60% of Hungary's stock of birds is to be found in the Börzsöny Hills. Several Roman and medieval sites are located within the boundary of the national park.

KÖRÖS-MAROS NATIONAL PARK

This park is in southeast Hungary, covering an area of 51,000 hectares. It was established in 1997. Of the 13 areas it is

important to mention the Dévaványa-Ecseg Puszta famed for its bustards (*Otis tarda*), the largest-bodied land bird in Europe, Mágor Puszta with its objects from settlements established by early man, and the Kígyós alkaline grassland. Due to its unique position on the migratory route of birds in Europe Fehértó at Kardoskút is particularly noteworthy; it is the central part of the protected areas. The tributaries of the river Maros have provided an extremely rich wetland habitat for many waterfowl, and naturally the Ramsar Convention also covers these areas. This



part of the country was inhabited 7000 years ago; the monasteries and convents date from the Middle Ages.

BALATON NATIONAL PARK

The national park was formed in the centre of western Hungary over 57,000 hectares in 1997. This is one of the most popular parts of Hungary for tourists, including as it does Central Europe's largest lake, the Balaton. Visitors are met by a host of cultural and natural values. The Small Balaton, one of the most valuable parts of the national park, is a nesting site for close on 250 species of bird, and among these at least a dozen are listed in the Red Data Book. The Tapolca Basin is noted for its volcanic caps and remnant hills, with vineyards planted on their lower slopes. Of the flora that survives on virtually bare rock surfaces the most noteworthy include the Mediterranean Fern of St. George's Hill and the Lip Fern (*Cheilanthes marantae*), the only place in Hungary this plant is to be found. The low hills around Balatonfüred are characteristically Mediterranean, sub-Mediterranean. Within the park, even the centres of a few settlements are listed as protected. Salföld is one such village. Visitors are welcome to visit the bird-watching tower on Kányavári Island and the buffalo reserve at Kápolnapuszta.

ŐRSÉG NATIONAL PARK

This 44,000-hectare national park in southwest Hungary was established in 2002. Visitors are attracted here for its gentle hills and streams running through shaded valleys, its deciduous and pinewood forests, emerald-green meadows, marshes preserving flora from the Ice Age, crystal-clear springs and brooks, the tranquillity and fresh air, folk traditions and customs retained in their original forms, and the fine produce of the local small farms.

This is Hungary's region with the greatest precipitation; annual rainfall varies between 700-950 mm. The climate of the area is balanced, being sub-Alpine with no extremes.

Most of the arable land hereabouts is of limited fertility.

Wood has long been used as a building material in the Őrség. Today we can still see many different types of the characteristic log-wall structures. Typical Őrség houses are formed in a U shape. Bell stands are fine examples of vernacular wooden architecture.

Forests cover 63% of the area of the national park. There are 111 protected species of flora in Őrség alone. The region's vertebrate species are many and varied.

The rivers and lakes are the breeding grounds for 45 species of fish, and seven highly protected bird species nest in the area. The deer stocks of the area are also valuable.

ENVIRONMENTAL INSTRUCTION

The aim of environmental instruction is to make all members of society aware of their own responsibility, and teach them what impacts their activities have on the environment as a whole. In Hungary, environmental instruction forms part of the school curriculum. Our ten national parks are the locations for "forest school" programmes and environmental and nature protection camps. During one- or several-day excursions, the study path networks and education-presentation centres prove an excellent method of getting the message across. Trained guides show kids the local flora and fauna and characteristic features of the area.

Environmental instruction begins at nursery school, allowing children to establish a harmonic emotional relationship with nature at an early age. Tuition in primary school aims to get



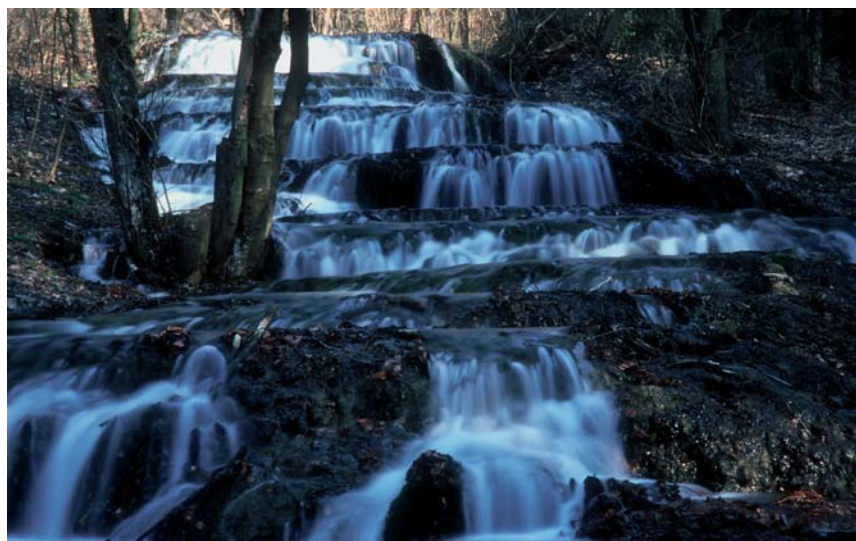
children to join in studies which bring them closer to nature, and as a result of the experiences they gain in the course of these classes to have them commit themselves to environmental protection.

Every secondary school student takes part in some sort of environmental protection scheme. The requirement for becoming an environmentally-conscious adult is that young people should be taught about nature protection as teenagers. By 2002, every university and college student in Hungary will participate in environmental and nature protection education.

FOREST SCHOOLS

The forest school is a collective term. A forest school can be established in a forest, by a lake or river, or even in a tiny village. The essence is that the kids and teachers enjoy themselves in a natural environment, while useful information is imparted.

The first forest school opened in Charlottenburg close to Berlin, Germany, at the beginning of the 20th century. Its initiators were driven by the wish to give children growing up in a metropolitan, industrial area the opportunity to get out to a



healthy, natural environment. The youngest generations were not spared lung diseases arising from the environmental pollution that accompanies industrialization. Thus school sanatoriums were established for children as a means of preventing the onset of illness or as places to cure those who had already fallen victim to disease. Here teaching was conducted in the open air. It was particularly noticeable that children released from rigid, strict school rules were very quick to learn, particularly about the environment and plants and animals. Later this educational method spread to other European countries. It was taken up in Hungary in 1908.

Today the institution of the forest school has come back into fashion, particularly since there is ever less green space in settlements these days, especially in the big cities. Thus forest school programmes have become popular again. Naturally they should not be confused with school outings, when the aim is to enjoy a break during school holidays. On the contrary, the "classical" forest school operates with a defined curriculum, and has the task of developing healthy lifestyle abilities in harmony with the environment. Knowledge gained in the forest school is brought to life with practical insights into rural lifestyles and attitudes, and tasting real village dishes.

Via ecology classes children can get to know the typical flora and fauna of the area they are in and experience first hand the relationships between rainfall, number of hours of sunshine, soil characteristics and flora habitats. They can observe what roles individual plants and animal species have in the food chain.

Animal stalking at night, ringing birds and the inevitable evening campfire are exciting and memorable events. Children get so much closer to nature when they have the opportunity of observing right before their very eyes the flowers of the fields, the seas of flowers blooming in spring and early summer, the flight of dragonflies in the sunshine, the sudden splash of swift otters in the ox-bow lakes, and hearing the song of birds or tasting the different fruits of the forest.

In Hungary the forest school programme assisting in the environmental instruction of children is being realized through the joint organization of the Ministry of Environmental Protection and Water Management, the Ministry of Agriculture and Regional Development and the Ministry of Education, together with the Environmental Instruction and Communication Programme Office of the International Union for Conservation of Nature.

BUDAPEST ZOO

The wonderful world of the zoo enriches children with new experiences and knowledge. Personal contact with animals engenders a sense of responsibility. The most important task of zoo-pedagogy is shaping an environmentally-conscious behaviour and approach.

Annually 50-70,000 pre-school and school children take part in zoo studies at the Budapest Zoo. In addition, a further several hundred thousand children gain unforgettable experiences in the course of zoo events and programmes.

The establishment of an ecological approach starts with the animal's pen. Animals are kept in environments similar to their original habitats, and thus children are able to directly experience the tropical scents and walk amidst desert cacti.

The Zoo Climate Park presents the global dangers that threaten our world. Larger children can find the way out of the dead-ends the world has gone down in the Ecological

Labyrinth created out of hedging. "Noah's Ark" allows observation of animals' natural behaviour from close up: feeding, movement and camouflage. The unusual initiative has also been taken to have visitors accept and learn to love the less popular animals – cockroaches, millipedes, mice, snakes – for they too have their place in the wonderful world all around us.

The Zoo's nature protection teaching park has an "animal corner" and fully equipped lecture room for special interest groups, playhouse classes, student courses and teacher further training. There is an interactive information system in the Zoo. Teachers will find the different task papers and methodological publications and games – designed for different ages – helpful in their work.

Nature and animal protection organizations arrange competitions for children on "green days" i.e. World Animal Day, Earth Day, Day of Birds and Trees. Thought is also given to disabled children who can take part in special programmes organized on Disabled Children's Day in September.

