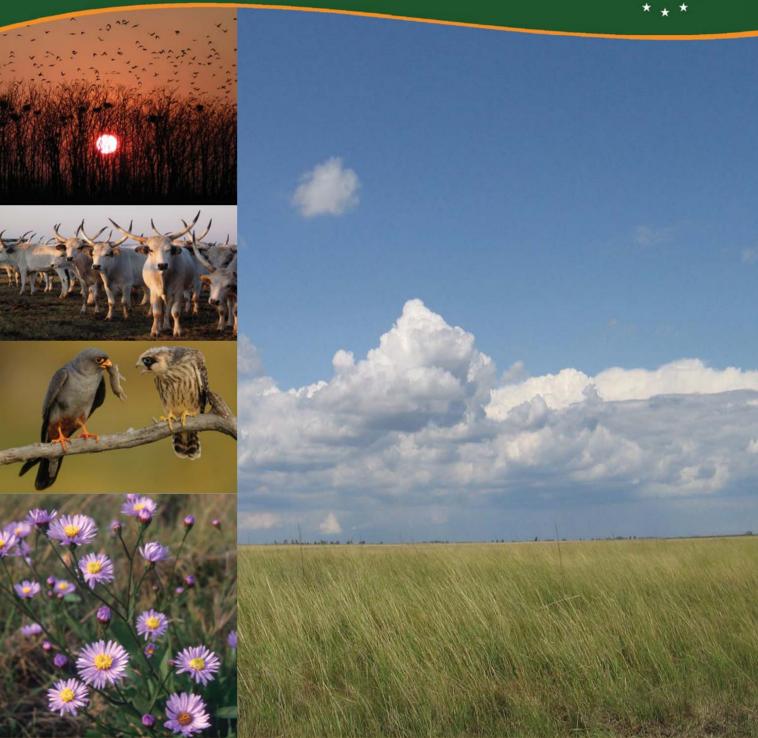


STEPPIC RAMBLE

Natural and cultural values of the Pannonian steppes







Introduction of the project sites of the LIFE Nature project titled "Conservation of red-footed falcon in the Pannonian Region"







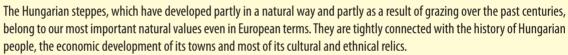


Wooded steppe of Abony

(Natura 2000 site – HUDI10001) Duna-Ipoly National Park Directorate H-1121 Budapest, Költő u. 21., Hungary, Tel: (+36-1) 391-4610, Fax.(+36-1) 200-1168, dinpi@dinpi.hu, www.dinpi.hu







The steppes of Abony and Jászkarajenő are such shrinking habitats yet still having a significant natural value today. Their survival

is ensured by the Hungarian and European nature conservation through the Natura 2000 network.

Rambling the pastures and meadows you can find several types of growing environments in the region from barren salty ground through sandy steppe grasslands to fen meadows. There are a dozen of protected plant species living here, such as *Plantago schwarzenbergiana* typical to the saline soils of Eastern-Hungary, *Gentiana pneumonanthe* blooming in fen meadows in autumn or *Astragalus exscapus* remained in loess patches. Wildlife is not less abundant. Amphibians are represented by the European Fire-bellied Toad, Green and Common Toad. There are also reptiles including the Balkan Wall Lizard, Sand Lizard, Grass Snake and Pond Turtle.

These bird areas of European importance give breeding, feeding and roosting place to more than 150 bird species. One of the most famous is the Rook colony surviving in the black locust forest of the Wooded Steppe of Abony and the connected colony of some 30 pairs of Red-footed Falcons. Saker, Roller, Eurasian Stone Curlew and Lesser Grey Shrike also breed here in large numbers. In winter the steppes are not empty either: you can meet eagles, harriers and buzzards in many places there.







Regional Conservation Office, Southern Pest County H-2750 Nagykőrös, Kálvin tér 6., Hungary, Tel: (+36)-06-30/504-6559 (ranger)



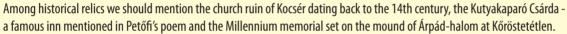


Steppes of Jászkarajenő

(Natura 2000 site – HUDI10004) Duna-Ipoly National Park Directorate H-1121 Budapest, Költő u. 21., Hungary, Tel: (+36-1) 391-4610, Fax.(+36-1) 200-1168, dinpi@dinpi.hu, www.dinpi.hu

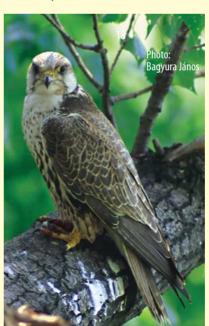






Human activities causing significant damage to nature have not avoided this region either in recent decades. Ploughing up grasslands, the drying out of the steppes by canals draining inland waters, the fall of grazing livestock and the cease of homestead farming all endanger the survival of local natural values and the lives of the local community.

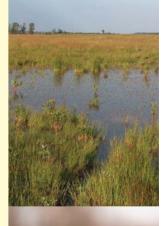




Nowadays people farming in the steppes manage grasslands by their grazing sheep and cattle stocks with respect to conservation interests.

Regional Conservation Office, Southern Pest County H-2750 Nagykőrös, Kálvin tér 6., Hungary, Tel: (+36)-06-30/504-6559 (ranger)







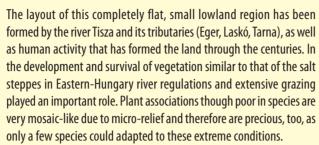






Heves Plain

(Natura 2000 site – HUBN10004) Bükk National Park Directorate H-3304 Eger, Sánc u. 6., Hungary, Tel: (+36-36) 411-581, Fax: (+36-36) 412-791, www.bnpi.hu



However, from about 400 bird species found in Hungary 285 species were observed in the region of Southern-Heves. This relative abundance in species is due to the special characteristics of the area. As the Heves

Plain is situated near the river Tisza and Lake Tisza reservoir, it falls to the edge of the main lowland migration route of birds. The vicinity of hills and the hillfoot region, brooks running down from the hills, the mosaic of extended salt steppes, wetlands and arable fields increase the number of diverse bird habitats.

The most important, rare and strictly protected ornithological values of the region are the Great Bustard, Imperial Eagle, Saker,

Red-footed Falcon and Montagu's Harrier. Special attention should be paid to its Roller population and the Stone Curlews breeding in an agricultural environment, but local character species, such as Hoopoe, Lesser Grey Shrike, Little Owl, Corn Bunting and Yellow Wagtail have to be mentioned, too. The area has a significant role in migration. The most spectacular is the migration of waterfowl and shore birds, when hundreds of Ruffs, Godwits, Eurasian Golden Plovers, Lapwings and different kinds of ducks can be seen. From the nearby Lake Tisza masses of wild geese come to feed in Southern-Heves plains and in the flocks of mainly the Greater White-fronted Goose more and more times appear specimens of the globally threatened Lesser White-fronted and Red-breasted Goose, too.

Within the settlements and in their outskirts finds from the Sarmatian and Ancient Avar periods, as well as the era of the Hungarian conquest, have been unearthed. Witnesses of these times are the burial mounds found in several places and the defensive long ditch and dyke systems (e.g. the legendary Csörsz-ditch and the shorter, but sometimes deeper and wider Kis- (or Small)-ditch).

Local settlements mentioned in writing already from the middle of the 13th century have once been settled, and other times died out, especially following the demolition by the Turks. There are only old maps verifying the one time existence of the earth fortification on the border of Heves.

A few peasant houses built in the last century and typical to the region can be found in almost every village. Some of them (e.g. Kakashouse at Átány, peasant house at Poroszló) functions as a museum demonstrating the one time way of life. The taste and everyday life of the wealthier is illustrated by the region's halls and mansion houses and also the Casino of Heves. Crafts connected to the peasant and shepherd way of life, and having been almost forgotten, may be seen mostly at fairs on and saint's days. Quality products of the still surviving crafts that have a value of folk art gained international acknowledgement

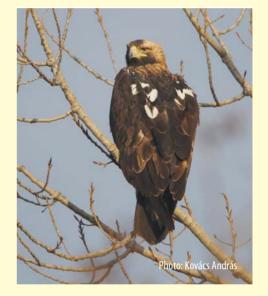


Photo: Borbáth Péter



(e.g. The Home Craft Co-operative and potters in Heves). About the characteristics and history of the countryside of Southern-Heves the rich collection of the Museum of Local History in Heves provides a comprehensive picture.

Regional Conservation Office, Southern Heves County: H-3373 Besenyőtelek, Tepély-puszta, Hotel Fauna, Tel/Fax: (+36-36) 441-613, e-mail: heptk@axelero.hu.







Borsodi Mezőség Landscape Protection Area

(Borsod Plain Natura 2000 site – HUBN10002) Bükk National Park Directorate H-3304 Eger, Sánc u. 6., Hungary, Tel: (+36-36) 411-581, Fax: (+36-36) 412-791, www.bnpi.hu

This area is comprised of two distinctive units of landscape. The steppic part is huge grassland established on a ridge of alluvial deposits. It is waterlogged by winding marshes that follow earthed up, ancient river beds. In the dry loess steppic grasslands lowland species can be found, just like the plants of the wooded steppes that were "carried down" by brooks from the hill foot region of Bükkalja. While loess grasslands are more sensitive, the open salt steppes are expressively maintained by grazing. Salt steppes are characterised by blooming chamomile in the spring and the blue flowers of *Limonium gmelinii ssp. Hungaricum* in late summer. Real rarities of the salt marshes are the earthed



up residues of bogs where Carex elata, Orchis laxiflora, Gentiana pneumonanthe and Viola stagnina grow. In the tall herb vegetation of salt soils the protected Iris spuria, Clematis integrifolia and Allium fuscum may occur, but Aster sedifolius and Peucedanum offi-



cinale are the dominant species. The latter one is the only food of the caterpillar of the very valuable, rare and protected moth *Gortyna borelii*. Other rare representatives of the diverse butterfly fauna are *Dioszeghyana schmidtii*, which develops in the remains of loess oak woods, *Lycaena dispar*, which is still common in marshy areas and *Catopta thrips*, found during the most recent researches. Other protected insects are *Calosoma auropunctatum*, *Purpuricenus budensis* and *Acrida hungarica*. Marshy places are rich in amphibian and reptile species. The Common Spadefoot Toad is a favourite food of the Red-footed Falcons that nest here in a colony of over hundred pairs. The also strictly protected Saker and Montagu's Harrier breed here,

too. The main values of the bird fauna are Great Bustard, Roller and Lesser Grey Shrike. Through autumn migration masses of Cranes and wild geese roost here, while at springtime large flocks of Sandpipers and Lapwings are typical. A special treasure living in the tall turfed steppes and arable fallows inserted in the grasslands is the Southern Birch Mouse. The protected Suslik is an important prey for steppic raptors and carnivores (e.g. the Steppe Polecat).

The other region of the area that used to be the live floodplain of the river Tisza (until 1939) is very different. Floods used to overflow it regularly, thus its marshes have been partly earthed up and dry out easily in summer. River regulations in the past have also resulted in the conversion of many marshes. Local population fosters traditions of hunting and fishing in the marshes. The reconstruction of wetlands (Nagyszéklápa) resulted in a fast recovery of indigenous fishes (e.g. Weatherfish, Tench) and introduced ones that had disappeared due to drainage. It also led to the successful colonization of all of our four grebe species and Ferruginous Duck. Around the old oak trees of the floodplain forest Stag and Rhinoceros Beetles live



and the Lesser Purple Emperor Butterfly also occurs. Typical birds here are the Black Stork, the Tawny Owl and the Black Woodpecker. In the tall grass of wet hay meadows Corn Crake settles sometimes in large numbers. Besides the Polecat, Stoat is a typical protected mammal here.





Human traces of ancient times are represented by remains of mounds and earth fortifications (Fehér-ló earth fortress at Tisza-bábona; Csörsz-ditch). Foundation letters of nearby villages originate from the abbey that stood on the now marshy Százdi-island near Tiszakeszi until 1241. Matyó towns and villages (Mezőkövesd, Szentistván) adjacent to the protected area are famous of their embroidery and folk costumes. For those who long for a bath, the open-air swimming pool of Mezőcsát and the famous Zsóry Spa is recommended.

Regional Conservation Office, Southern Borsod County: Tiszaújváros, Liszt Ferenc u. 2., Hungary, Tel: (+36)06-30/349-5718 (lead ranger), e-mail: tiszatajair@ominet.hu













The salt lakes of Kiskunság and the Őrjeg Fen

(Natura 2000 site - HUKN10002) Kiskunság National Park Directorate H-6000 Kecskemét, Liszt Ferenc u. 19., Hungary, Tel: (+36-76) 482-611, Fax: (+36-76) 481-074, www.knp.hu





The western part of Kiskunság is a matchless area not only in Hungary, but also in the European Union. A chain of salt steppe lakes are preserved here in their natural state bordered from the east by the Fenland - a mixture of sand dunes and fens. Around salt lakes, on the higher relief grasslands of Puccinellia limosa and even higher, salt steppe association of Artemisio santonici-Festucetum pseudovinae form the natural vegetation. Salt lakes have an extraordinary importance in the migration period. Each year thousands of geese, ducks, gulls and shorebirds appear in this area, including such rare species as the Lesser White-

fronted Goose. There, on the salt lakes can also be found the so called salt steppe breeding bird community, the presence of which inside the continent is unique. A major part of the area is strictly protected and can be visited only by having preliminary permission. However, it is possible to participate in open tours organized and advertised in advance by the national park.



In the smaller woodland patches of higher relieves a couple of hundred Rooks nest regularly in several rookeries, the nests of which are occupied by Red-footed Falcons, Kestrels or Long-eared Owls following the fledging of Rook nestlings. In case of a lack of Rook nests the latter species can be settled in the woodlands with the help of artificial nest-boxes. If conditions are given, Red-footed Falcon likes to nest in colonies of pairs of tens (around Soltszentimre, Fülöpszállás).

Among botanical values first of all orchids and irises need to be mentioned, which have nice stands especially in the fens and the salt steppe of the Mikla-puszta.

The proper status of the surroundings of salt lakes is maintained by livestock grazing. Wet areas that lie deeper are grazed mainly by Hungarian Grey or Pied Cattle herds and there is also a buffalo herd. A part of the grasslands is grazed by sheep flocks.

From among the cultural sights of the region we have to note the collection of local history in Harta and Szabadszállás. Relics of old, traditional architecture are saved by Bordatanya farm near Fülöpszállás built by a wealthier farmer. In autumn the merry vintage events organized at almost all settlements are worth a visit as they offer rich and colourful programmes. After rambling in the region it is nice to rest at one of the local inns where real Hungarian food specialities are offered to the guests.









Salt steppes and the Kunpeszéri Fen

(Natura 2000 site – HUKN10001) Kiskunság National Park Directorate H-6000 Kecskemét, Liszt Ferenc u. 19., Hungary, Tel: (+36-76) 482-611, Fax: (+36-76) 481-074, www.knp.hu



The second largest salt steppe of Hungary lies between Kunszentmiklós and Apaj. The feature of the land is first of all determined by a vegetation of dry salt steppes. In spite of that, wetlands cover ever bigger areas as a result of flooding of conservation interest and the establishment of fish ponds. There is a considerable proportion of arable land, too. The salt steppe is embraced on the east side by the Meadows of Peszéradacs which are pied with fen meadows. The biggest part of the area is strictly protected and can be visited only with a preliminary permission.

Woodland patches in the salt steppe give home to large Rook colonies. Sometimes a Red-footed Falcon settles in the rookeries, though this raptor, usually nesting in colonies, here breeds rather in solitary nests of Magpies and Hooded Crows. The colonization of Red-footed Falcons can be assisted by the implementation of nest-boxes. Artificial nests are also favoured by its close relative, the Kestrel.

The area gives home to several special animal species. The most important domestic population of Great Bustard, the biggest flying bird of Europe can be found right here in the Upper-Kiskunság region. A bird of prey of the steppes, the rare Saker also breeds in the area. This species is said to be the 'turul', the saint bird of ancient Hungarians. The latest verified data of occurrence of the Slender-billed Curlew that is threatened by extinction also originates from Apaj, in 2001. One of the most valuable populations of the especially precious Hungarian Meadow Viper lives in the surroundings of Kunpeszér.

Artificial overflows began in recent years created favourable conditions for migrating and breeding birds. Several thousands of ducks, geese, shorebirds and gulls appear each year in the flooded water surface, which is furthermore very important in respect of breeding waterfowl, too. The flooded area is managed by grazing cattle and buffalo herds: by their grazing and trampling they prevent reed from forging ahead.

Among botanical values the rich orchid flora of the Kunpeszér area worth to mention first of all, though you can find here several other plant specialities, too. Regarding insects, the Kunpeszér area is very rich, as well.

The centre of the region is Kunszentmiklós which has lots of sights of cultural history in store for the visitor. Virágh-mansion

is well worth seeing, where an exhibition displays the local peculiarities of ethnography and natural history. For families taking a free excursion along the study trails established by the national park and the thermal spa in Kunszentmiklós may offer substantial recreation. During Kunszentmiklós Days, held in early September, a fair and a variety of programmes await the interested. Furthermore, a good opportunity presents itself to have tasty Hungarian dishes in the fine restaurants of the town.













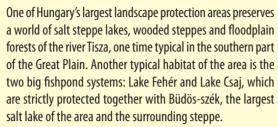






Pusztaszer Landscape Protection Area

(Lower Tisza-valley Natura 2000 site – HUKN10007)
Kiskunság National Park Directorate
H-6000 Kecskemét, Liszt Ferenc u. 19., Hungary, Tel: (+36-76) 482-611, Fax: (+36-76) 481-074, www.knp.hu



A small colony of 5 to 10 pairs of Red-footed Falcon, a species that do not build nest but breeds in colonies, remains here. This interesting falcon species nowadays nests only in man-made nest-boxes in the tree groups of the steppe. Until the 1980's there was no need for nest-boxes, as the patches of oak trees in the steppe housed large Rook colonies that provided secure breeding place for a colony of Red-footed Fal-



cons counted still 50 to 60 pairs at that time. By today, however, the Rook has become extinct from the majority of the southern part of the Great Plain and until they hopefully recover, Red-footed Falcons need help.

Outstanding natural values of the landscape protection area are the birds, more than 300 species of which have been observed here. There are rare typical breeders of salt lakes, such as Avocet, Black-winged Stilt and Kentish Plover. Almost all European heron species breed in the heron colonies of the larger reed beds of the fishponds, and in Lake Csaj you can find the biggest breeding island of Mediterranean Gull in Central-Europe. In addition, you can see numerous migratory birds, e.g. thousands and tens of thousands of Cranes and wild geese accompanied often by 10 to 15 White-tailed Eagles. The sacred turul bird of our conqueror ancestors, the rare Saker can also be observed here as 2-3 pairs breed in the protected area.

At our standing waters Otter occur still in several places. The protected Suslik was quite common in the steppes a few decades ago. Following its extinction a repatriating project was started in 2007, thus now a small population of it can be found again in Szeri-puszta. Botanical treasures of the landscape protection area include some of the domestic orchids, *Sternbergia colchiciflora*, *Phlomis tuberosa* and *Astragalus exscapus*.

From among our traditional domestic animals the Hungarian Grey Cattle and buffalo herds of the Kiskunsági National Park not only fit in the steppic environment, but due to their grazing also are crucial for the management of conservation area. Buffalos play an important role, too, in the reconstruction of Vesszős-szék, a salt lake that became swampy.

Historical and ethnographical values of the Pusztaszeri Landscape Protection Area are connected to the more than thousand year long history of the Hungarian people. The Memorial Park of National History at Ópusztaszer lies in the legendary ground of one of the cradles of the Hungarian



Conquest, the National Assembly of Szeri. Therefore, this place is a treasure house of such cultural, spiritual and natural treasures that has few to compare within Hungary. Houses, courtyards and objects of the ethnographical collection revive the era of our great-grandfathers and great-grandmothers which allows visitors to get familiar with their roots, and discover the realities of peasant life as well as the secret of its harmony.



KNPD Regional Office, Szegedi, H-6724 Szeged, Föltámadás u. 29., Hungary, Tel/Fax: (+36-62) 498-058, (Tisza–valley Visitor Centre, Szatymaz, at road Nr. E5 157. km)



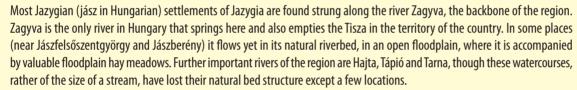




Jazygia (Jászság)

(Natura 2000 site – HUHN10005) Hortobágy National Park Directorate H-4024 Debrecen, Sumen u. 2., Hungary, Tel: (+36-52) 529-920, Fax: (+36-52) 529-934, www.hnp.hu

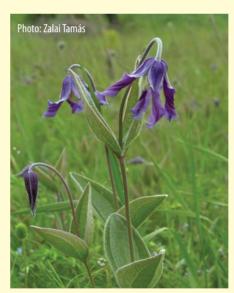




Most part of Jazygia is agricultural land, but you can still find valued scattered salt meadows or ones getting saline, where numerous protected plants live (e.g. *Scilla vindobonensis, Iris puria, Phlomis tuberosa, Adonis vernalis* and *Clematis integrifolia*). Such areas can be found especially in the outskirts of Jászboldogháza (grasslands along the Tápió), Jászberény (Borsóhalmi-pasture) and Jászárokszállás (Király-rét i.e. King-meadow).

Outstanding is the strictly protected bird fauna of the region. Some one quarter of the Imperial Eagle and Saker population of the country live in Jazygia. Other bird species of high value in the area are Red-footed Falcon, Roller and Lesser Grey Shrike. Red-footed Falcon, as a result of recent conservation measures, is present here in continuously growing numbers and one of their largest autumn roosting sites in the country can be found here as well.

Old, near-natural stands of oaks much more valuable than the mainly planted, commercial woods of the small region range in the area of Jászapáti and Jászjákóhalma (Woods of Kapitányrét). Preserved in a state closest to natural forests there are only very small patches of hardwood groves, such as Berki Woods near Alattyán and the Wood of Pusztamizse at the border of Jásztelek.



The capital of Jazygia is Jászberény, the cultural and touristical centre of the region. In the Jazygian Museum of the town can be seen the Hamza Collection. Notable events are every summer the Csángó Festival and the World Meeting of Jazygians. Eco-touristical developments target mainly footpaths and bike and riding trails that integrate the more wooded places of excursions and other natural sites. Several settlements possess valuable medicinal and thermal waters. Especially outstanding spas are in Jászapáti, Jászszentandrás and Jászberény. Further opportunities for recreation are offered by the angling ponds near Jászkisér and Jásztelek.

Central-Tisza river and Jazygia Regional Conservation Office H- 5000 Szolnok, Tabán u. 50., Hungary, Tel: (+36-56) 376-899 (Office hours: Monday and Thursday, by primary telephone registration)

















Hortobágy National Park

(Hortobágy Natura 2000 site – HUHN10003) Hortobágy National Park Directorate H-4024 Debrecen, Sumen u. 2., Hungary, Tel: (+36-52) 529-920, Fax: (+36-52) 529-934, www.hnp.hu







The Hortobágy National Park was established in 1973 as the first national park in Hungary and since then has been the largest one, as well, with its extension of 82 000 ha. The core area of the park is a Biosphere Reserve and about one third of it falls within scope of the Ramsar Convention. UNESCO enrolled the park 10 years ago to the World Heritage List in the cultural landscape category, acknowledging that pasturing livestock management going back more than 2000 years in which man and his environment lived together on the puszta. Hortobágy is the largest continuous salt steppe in Central-Europe. The work of rivers converting the landscape played an important role in its development. So much the more, as Hortobágy has been the floodplain of the river Tisza before the beginning of the large river regulations in 1846. The one time wildlife of the wetlands has shrunk into its fraction as the life-giving floods of the river constrained between dykes ceased, but fortunately found new opportunities in relation with the construction of the fishpond system started in the 1910's. Today Hortobágy houses a fishpond system of the largest freshwater surface in Central-Europe. It covers more than 5000 ha, providing thus feeding, migrating and breeding sites for that several hundreds of thousands of waterfowl that choose Hortobágy as a place of living from year to year, for a shorter or longer period of time. These ponds serve as important roosting sites for wild geese turning up in autumn in flocks of ten thousands. The swarm comprises mainly of Greater White-fronted Geese, but strictly protected Red-breasted Gees and Lesser Whitefronted Gees also occur. In the latter case, Hortobágy is known as their only migration site in Hungary. The Crane well deserves to be the heraldic animal of Hortobágy: based on autumn roosts counting 100 000 specimens at one time this is the most significant crane roosting site of Europe. As of the number of breeding pairs of Red-footed Falcons, which happened to be around 250-280 pairs in recent years, this area is the most important breeding site in Hungary. Except Hortobágy, there is no other known domestic breeding site of the Aquatic Warbler which usually nests in wet meadow zones of marshes.





Characteristic buildings of Hortobágy are the country inns (csárda), which used to give an opportunity to drink for the herded livestock and for shepherds to have a rest. Traces of human hands in the steppes are mounds or tumuluses which might have served many functions, but most of all known as burial sites. They also have conservation importance as rising out of the salt steppe environment they give home to many plant species connected to loess soil which are protected or should deserve protection. One of the most important events in the life of the puszta is the Shepherds' Feast held at Pentecost for several days.

Hortobágy National Park Visitor Centre and Craft Yard H-4071 Hortobágy, Petőfi tér 13., Hungary, Tel: (+36-52) 589-000, Tel/Fax: (+36-52) 589-321





Bihar Plain

Hortobágy National Park Directorate





The Bihar Plain Landscape Protection Area was founded in 1998 in the extensive flat area of the Hungarian territory of the Bihar region. The checkered landscape is abundant in natural values also outside the conservation areas.

Besides arable lands there still can be found salt steppes of huge extension – often a continuous few hundreds of hectares – and smaller or larger pastures. Nevertheless, the countryside is pied by groups of trees, smaller woodlands, flat wet areas and salt marshes.

Red-footed Falcons nesting in colonies find their breeding and hunting ground in this diversified environment. These small size raptors return each year into several smaller or larger colonies in the Bihar. Their nest colonies are regularly found in such shelter belts or groves which

are fringed by bigger pastures. After the breeding season hundreds of birds may gather in their traditional roosting sites at nights to leave for the southern parts of Africa in late September, early October.

The heraldic bird of Bihar Landscape Protection Area is the Great Bustard. It has a significant population preserved in a mosaic-like land of shifting agricultural crops and grasslands. As a result of conservation efforts taken in the interest of their protection their population has started slowly to grow in the past few years.

Once the majority of the Bihar Plain used to be under permanent or temporary water cover, which provided a habitat for swarms of breeding and migrating birds. Traces of this wetland wildlife still can be seen today. Most birds are attracted by An-



daháza, located between Berettyóújfalu and Földes. Due to conservational reconstruction works of the past years thousands of waterfowl can be found in this area at almost any time of the year. The Bihar Plain study trail starting nearby, leads to the lookouts from where visitors can have a look at the birdlife of the area as well as the life of a buffalo herd living there. With the help of informative sign boards situated along the trail one can get familiar with the most typical habitats and species of Bihar. Moreover, there is a Red-footed Falcon colony at the starting point of the trail.

In addition to its natural treasures, the vernacular architecture of Bihar is also of high value. In almost all villages remained peasant houses, mansions or smaller halls, the majority of which functions now as a museum (Zsáka, Bakonszeg, Nagyrábé, Biharnagybajom). In the pastures characteristic buildings of extensive animal husbandry can be found, though the number of typical barns and sheds that really fit in the landscape has ebbed away.

Bihar Plain Regional Conservation Office: Földes, Fő út 4., Hungary, Tel: (+36-30) 218-4125 (lead ranger)















Vásárhelyi- and Csanádi-steppes

(Natura 2000 site – HUKM10004) Körös-Maros National Park Directorate H-5540 Szarvas, Anna-liget 1., Hungary, Tel./Fax: (+36-66) 313-855; www.kmnp.hu











Viharsarok (i.e. Storm Corner) is a corner of the southern part of the Great Plain that, regarding nature conservation, takes pride in its outstanding natural values. Both steppes and wetlands can be mentioned among its treasures. One of the natural wonders of Hungary, the Fehér-tó (White Lake) of Kardoskút, one of the most precious salt lakes in the country, is located here. The lake and its surroundings is one of the most important bird reserves, which serves not only as breeding place for several salt steppe

bird species, but also falls into the migration route of some 150 species. It is a strictly protected area and can be visited only by primary registration on arrival.

"White Lake's Day", the feast of the lake, is held each year, on the third weekend of September in the conservation display centre of Pusztaközpont (i.e. Steppe Centre) near the village of Kardoskút.

Surviving salt steppes embraced by arable fields are grazed by Hungarian Grey Cattle herds. In the small steppic woodland patches more than one fifth of the country's Redfooted Falcon population breeds in crowded colonies common with Jackdaws, Kestrels and Long-eared Owls.

Among the numerous protected plant species typical to salt steppes there is an outstanding value, one of the most endangered rarities of the area: *Adonis hybrida*, which starts flowering in March.

In October, the White Lake becomes the home of several thousands of Cranes, which roost here during their migration route to the south. At gloaming, observing from the lookouts, flocks of Cranes drawing in to the lake for the night provide an impressive spectacle.

At the fringe of the steppe, 17 km to the east of Hódmezővásárhely stands the church ruin of Csomorkány. The village of Csomorkány, founded in the Árpád-era, has developed into a market town in the 14th century but finally was devastated in 1596. The brick church with semicircular apse and counterforts was built in the 13th and 14th century in Romanesque and gothic style.

The region is rich in thermal waters and because of their health-giving effect many people visit each year the surrounding spas, such as Gyopáros Spa in Orosháza, the Thermal Spa of Makó and Rózsa Spa of Tótkom-



Photo: Sallainé Kapocsi Judit

lós. The gastronomic speciality of the latter settlement is the thick sausage of Tótkomlós; this serves as a basis of the sausage making contest of Komlós held in each May. Those who are fond of good living can also visit every year the culinary events of European Bread Feast in Orosháza and the International Onion Festival in Makó.

Körösvölgy Visitor Centre H-5540 Szarvas, Anna-liget 1., Hungary, Tel: (+36-66) 313-855, (+36-30) 475-1789





Kígyósi-steppe

(Natura 2000 site – HUKM10001) Körös-Maros National Park Directorate H-5540 Szarvas, Anna-liget 1., Hungary, Tel./Fax: (+36-66) 313-855; www.kmnp.hu

Leaving Békéscsaba towards Kétegyháza and covering some 10 km you reach a "pearl" of the Körös-Maros National Park: the Kígyósi-steppe (Kígyósi-puszta). This territorial unit comprises of among others the Large Forest (Nagyerdő) and the Large Grassland (Nagy-gyöp), a marshy area ofmosaic-like structure, waterlogged by the earthed-up river branches of the ancient river Maros. It also includes salt and loess steppe grasslands on the higher relieves, which provide habitat for to-day's already rare plant and animal species.

The area has diverse vegetation. In the deeplying swamps you can find marshes with *Bolbo*-



schocnus maritimus, Eleocharis palustris and Carex melanostachya, while on the higher relieves hay meadows of Alopecurus pratensis grow. A protected, endemic species of the marshes that starts blooming in mid-summer is Cirsium brachycephalum. In saline brooklets stands of Puccinellia limosa of the salt benches and Camphorosma annua of the barren salt grounds, as well as on the somewhat higher, but still saline relieves steppes of Artemisia santonicum and Achillea millefloria contribute to the diversity of the landscape. In autumn, in the remnants of salt woodland meadows within the forest clearings you can admire stands of the protected Peucedanum officinale and Aster sedifolius. In parts having the best soil features small patches of loess steppe grassland mosaics can be found with the protected Sternbergia colchiciflora that flowers in autumn.

In wet, rainy years, in addition to wild goose, duck and shorebird species roosting in large flocks at spring and autumn migration

period, many species of birds of prey that either breed or winter in Hungary can be observed in the area. Nowadays among the breeding species we can note the Hobby and Red-footed Falcon nesting in colonies, but White-tailed and Imperial Eagles can be seen regularly, too.

The region is also very rich in the relics of cultural history. At Szabadkígyós you can see from the distance the landmark of the 32 hectares park: the tower of the Wenckheim Castle. The building of the Roman Catholic church at Újkígyós and the construction of St. Ann's Chapel in classicist style at Szabadkígyós is connected to the name of count Antal József Wenckheim.

In this small region of Békés County the



town of Gyula plays an important touristic role with its world famous spa, many parks, art relics, historical monuments and intimate streets. The main sights of the town comprise the fortress and the fortress spa, the famous Hundred Year Old Confectionary (Száz Éves Cukrászda) founded in 1840 and the Almásy Castle. It's worth visiting the town's large-scale events: the Renaissance



Carnival, Gyula Days, the international Brandy Festival and Butchers' Days, the Multi-Art Festival of Fortress Theatre, Egg Barley Festival and Fortress Nights.

The centre of the small region and the Viharsarok (Storm Corner) is Békéscsaba. The town is deservedly famous of its gastronomic specialities and events, e.g. the unique Hungarian-made sausage of Csaba and the festival based on it. The Munkácsy Mihály Museum, named after the famous painter born in the town also provides an unforgettable experience for the visitors.













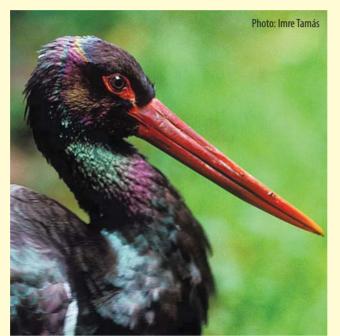
The region along the river Túr, the Nyírség and the Károlyi Plain

(Natura 2000 sites – ROSPA0016 and ROSPA0068)
Office for Environmental Protection of Satu Mare County
Satu Mare, Strada Mircea cel Bătrân, nr.8/B, 440012, Satu Mare County, Romania; e-mail: office@apmsm.ro



In the north-eastern corner of the Great Plain a small, winding river, the Túr runs from among the hills to the plains. Oxbows, floodplain forests, marshes, fen meadows, grasslands and pools hide numerous natural rarities. The botanical values of wetlands include *Salvinia natans, Stratiotes aloides* and *Urticularia vulgaris*. On higher relieves oak-ash-elm gallery forests have developed. At springtime *Fritillaria meleagris* and *Crocus heuffelianus* bloom in the floor layer of the forests. There are several rare fish species, such as Danubian Roach living in the oxbows' water and the Túr. Typical ornithological values of the Túr-region are the Black Stork and Lesser Spotted Eagle.

Villages settled on the ridges of the Túr-region and accompanying arable fields were established on the higher relieves protected from floods that frame today a diverse cultural landscape. Visiting these settlements the traveller can admire romantic



country halls (e.g. Vécsey Castle at Sárközújlak, Perényi Castle at Túrterebes) and mansion houses (Galgóczy Mansion at Mikola) as well as the masterpieces of vernacular architecture.

To the southwest of Nagykároly a traveller finds a peculiar landscape: there are sand dunes rolling after each other. Its surface was developed mainly by the rivers and the wind: rivers established ridges of alluvial deposits and a thick layer of sediment along their abandoned beds which was accumulated by the wind. The ancient vegetation was characterized by oak woods remittent by dry and very wet grasslands, but today sandy grasslands are pied by black locust plantations. Plant rarities of the area are Iris arenaria and Pulsatilla pratensis, and Suslik is quite frequent on open dune ridges. In deeper relieves among the dunes there are flat swampy patches with beech trees providing rich wetland wildlife. Typical representatives of the fauna of the Nyírség are the European Weatherfish, European Fire-bellied Toad and Moor Frog.

The Nyírség reaches into the Károlyi Plain to the east. According to the legend, the town of was Nagykároly built around the castle of the Károlyi family that still can be seen, was situated originally on the high bank of the stream Mérges, in a place called Bobáld, and is said to have moved to its present site later. Bobáld today is an archaeological site where several finds of different eras have been unearthed. The sole colony of Red-footed Falcons that remained in the region can be found in the same place.











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Érmellék and Berettyómente: the region along the Ér and Berettyó rivers

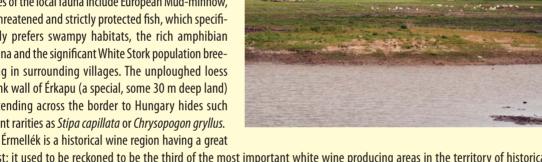
(Natura 2000 sites - ROSPA0016 and ROSPA0067) **Office for Environmental Protection of Bihor County** Oradea, B-ul Dacia, nr.25/A, 410464, Bihor County, Romania; e-mail: office@apmbh.ro



Érmellék, the region running along the river Ér, a land that has been inhabited by Hungarians since the Árpádera, is a 50 to 60 km long and 5 to 10 km wide valley. The present features of the region were developed during the interglacial periods when melted waters flew towards the Great Plain. Since the larger rivers (Szamos, Kraszna) have left the valley, the Ér, a small brook springing in the Szekeres-wood, has become the lord of the land. In the waterlogged, boggy, swampy areas rich marshy flora and fauna have developed, while on higher relieves forests ad clearings have been created. Following the drainage of the Sárrét (Mud-meadow) and the Bog of Ecsed, the marshland along the Ér was the last one that remained in the region. In the middle of the last century, however, Érmellék also fell victim to flood protection works, but its remnants can still be found in the low-lying wet patches, brooklets and valleys wedged in among the hills. Valuable representatives of the local fauna include European Mud-minnow, a threatened and strictly protected fish, which specifically prefers swampy habitats, the rich amphibian fauna and the significant White Stork population breeding in surrounding villages. The unploughed loess bank wall of Érkapu (a special, some 30 m deep land) extending across the border to Hungary hides such plant rarities as Stipa capillata or Chrysopogon gryllus.







past; it used to be reckoned to be the third of the most important white wine producing areas in the territory of historical Hungary. Besides the Bakator, traditional grape varieties of the region were also the Sárfehér and Juhfark. Only in Szalacs there are more than a thousand wine cellars — more than the houses in the village! Érmellék has given many great men to the Hungarian nation: Endre Ady (Érmindszent), Ferenc Kazinczy (Érsemjén) and Ferenc Kölcsey (Sződemeter) were also born in this land.

Parallel to the Ér there is another river running down to the Great Plain: the Berettyó. The Lower Berettyó-valley running between the rolling land on the left hand side of the Érmellék and the hills of Várad and Hegyköz joins the Érmellék when it reaches the plain. At the junction of the two notable rivers wet hay meadows and pastures meet extensively cultivated arable fields. In the one-time floodplain of the Berettyó, in woodlands of black locust planted next to the oxbows on the conserved side of the river, several rookeries are known. The most important Red-footed Falcon population of Bihar County nests here.





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Körösök-köze

(Natura 2000 sites – ROSPA0015, ROSPA0103 and ROSPA0097)
Office for Environmental Protection of Arad County
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With an eye of the naturalist, the area extending from Bihar to Arad County, wedged in among the Sebes-, Fekete- and Fehér-Körös rivers is one of the most, if not the most diverse region of Western Romania. The plains of the intrefluve region of the three rivers, i.e. the Körösök-köze is so rich in flora and fauna that rambling naturalists getting familiar with its wildlife can return

home with lots of nice experiences.



South of the river Sebes-Körös, next to the state border was established the Nature Park of Cséffa. The fishpond system, the Radványi Forest, the scattered grasslands and marshes all are abundant in plant and animal species. Botanical values of the area comprise *Trapa natans, Nymphoides peltata* and *Cirsium brachycephalum*. Most animal species typical to the one-time wetland wildlife of Kis-Sárrét can be found in the area, yet the most feared for treasures of Cséffa are among the birds. On top of the seaweed vegetation of the fish-

ponds hundreds of Ferruginous Ducks and Whiskered Terns build their nests and in the reed beds Purple Heron, Great White Egret and Eurasian Bittern live. Fishponds drained in the migration period waits several thousands of Black-tailed Godwits, Ruffs and other shorebirds with laid table. The Radványi Forest hides the largest mixed heron colony of the region.

To the south of Cséffa range the steppes of Nagyszalonta. Grasslands and extensively managed arable lands belonging to the birth town of the great poet, János Arany, are the only habitat complex in Romania where Great Bustards can be regularly observed.

Between the rivers Fekete- and Fehér-Körös, in the vicinity of Székudvar, Kisjenő and Zerind villages, as an extension of the

Kígyósi Plain in Hungary there are huge salt steppes extending remittent with floodplain forests stretching along the Fehér-Körös and Tőz rivers. In the enormous salt grasslands of *Artemisia* and *Festuca sp.* lives the endemic *Plantago schwarzenbergiana* and in the loess patches of higher relieves Susliks dig their burrows. Along marshes and brooklets often occurs the protected *Marsilea quadrifolia*. Within the tree groups inserted in grasslands you can discover rookeries with their certain tenants: the Red-footed Falcons. This area is of extremely high importance in respect to the conservation of the population of our target species in the Partium.

The presence of Roller and Montagu's Harrier as breeding species also proves the high value of the steppes of Székudvar.







The Maros Floodplain and the Arad Plain

(Natura 2000 site – ROSPA0069) Office for Environmental Protection of Arad County Arad, B-ul Dragalina, nr.16, 310132, Arad County, Romania; e-mail: office@apmar.ro

Arad is the economical and cultural centre of the region as well as the site of the most tragic day of Hungarian history: the execution of the thirteen hussar officers known as the martyrs of Arad. Through 150 years, in good and in bad times, Arad has pre-



served their memory as the dead of her own and in 1890, on the main square of the town, a group of statutes was erected, which has since been referred to only as the "Statue of liberty". Following the Treaty of Trianon the Romanian state had had the statue dismantled, then later, in 2004, had it erected again in the memorial park dedicated to Romanian—Hungarian reconciliation.

The geographical features of the region were formed by the river Maros to such as we know it today. The river stepping out of the straight between the Zaránd Mountains and the Hills of Lippa is the border river of the Partium and the Banat. Beneath Arad there are extensive gallery forests edging the river Maros, where the Maros Floodplain Nature Park has been es-



tablished. The oak-ash-elm gallery forest itself, preserved in near-natural state, reckons among the high values of the area. Oxbows accompanying the river and smaller or larger islands give a romantic atmosphere to the landscape. Protected and typical representatives of the fauna of the Maros Floodplain are the snail species *Chilostoma banatica*, the Zingel, the Roller breeding in the softwood groves, the Lesser Spotted Eagle present in remarkable numbers, the White-tailed Eagle, the Otter and the repatriated Beaver.

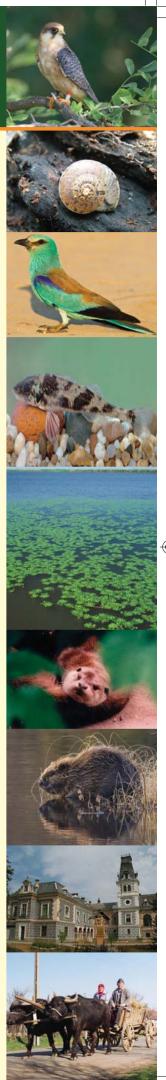
The high riverbank of the Maros lying between the villages Pécska and Szemlak and the numerous mounds found in the

area have a significant botanical value. These are the sole sites in the region where loess species, which used to inhabit the loess steppes before they vanished almost traceless as a result of the agricultural activity of man survived. Outstanding among these are the burial mounds at Öthalom from the era of the Hungarian Conquest, where *Bupleurum affine, Asperula cynanchia* and *Dianthus pontederae* can be found.

Going to the west the Arad Plain goes into the Loess Ridge of Csanád, which preserves further patches of the one-time vegetation cover in the vicinity of Nagyiratos and Tornya. Travellers roaming in the region should not miss to visit Mácsa, where the park of the Csernovics Castle designed by Miklós Ybl, the famous Hungarian architect, functions as an arboretum. And last, but not least, one of the region's most important Red-footed Falcon colonies is known to be here.













The Plateau of Vinga and the Plain of Aranka

(Natura 2000 site – ROSPA0047 and ROSPA0078)
Office for Environmental Protection of Timiş County
Timişoara, Strada Amurgului, nr.1, 300278, Timiş County, Romania; e-mail: office@apmtm.ro



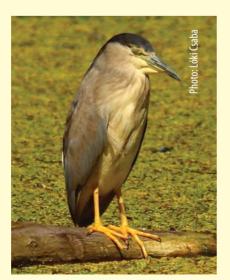












Between Arad and Timişoara (or Temesvár) the traveller crosses a peculiar countryside. The land so far as flat as a table is changed to a countryside cut up by deep valleys. This is the Plateau of Vinga, named after the former township seat of the region: Vinga, which is inhabited mainly by the Bulgarian population. With an eye of the naturalist the scenery is somewhat illusory, hence due to the extremely productive chernozem soil there is everywhere intensive crop production on the slopes and the spectacle of endless wheat and corn fields does not promise much of interest to the rambler. However, peeping into the valleys enmeshing the area you can discover places of special value. In a few places the steep banks of the valleys remained unploughed, thus the original loess vegetation has survived in several sites. For those who are familiar with botany, it can say a lot that such species were found in the area as Adonis vernalis, Dictamnus albus, Echium russicum, Chrysopogon gryllus and Rosa spinosissima.

The small region is also rich in zoological values. Grasslands survived on the slopes and in the valley bottoms give place to the most important Suslik habitats in the region. At the same place, hills of the Lesser Mole Rat have already been observed. Booted Eagles nesting in the nearby hills often appear above the pastures: the large Suslik colonies provide a feeding ground for several of our protected birds of prey. It also needs to be mentioned that in the groups of black locust trees hidden in the sides of the valleys and also providing shade for livestock, you can find the most valuable Red-footed Falcon colony in the Western-Romanian part of the Great Plain.

Temeskenéz, situated in the south-western part of the region, is widely known as here can be found the last messenger of the one-time marshlands. It houses the mixed nesting colonies of the bird reserve, where Glossy Ibis, Pygmy Cormorant, Night Heron and Little Egret breed.

Westwards the Plateau of Vinga goes into a lower and smoother relief, the plains of Aranka and Zsombolya. Nevertheless, in zoological respect this area does not differ much from the above mentioned. Flagship species of the small region are Suslik and Red-footed Falcon, which can be found at the border of almost all villages that have rather extended grassland.

Regional Environmental Agency, Timişoara Timişoara, Strada Amurgului, nr.1, 300278, Timiş County, Romania; e-mail: office@arpmv5.ro





The Plain of the river Temes

(Natura 2000 site – ROSPA0095)

Office for Environmental Protection of Timiş County
Timişoara, Strada Amurgului, nr.1, 300278, Timiş County, Romania; e-mail: office@apmtm.ro

Temesvár is the biggest and most populated town of the region as well as its cultural and economical centre. On the town's border flows the river Temes giving the name to the city and the county and which — along with its tributaries — determines the features of the majority of the Banat region. The Nagykövéresi and Sági Forests of large extension as of today's terms preserve the memory of the one-time





extensive gallery forests edging the Temes. The importance of their survival is underlined by the fact that several strictly protected birds, such as Short-toed Eagle, Booted Eagle, Lesser Spotted Eagle and Black Stork breed here. In the holes of old poplar and willow trees remaining on the floodplain Roller is not a rare breeder. The third important woodland of the Temes is the Macedónia-forest, where the uproar of a large heron colony gives a special atmosphere to the land.

In the southern part of Temes County a visit to Detta and Bánlak promises interesting sights for the traveller: the monument-like tower of the fire arm in Detta, and the Karácsony Castle with its castle park in Bánlak are significant historical relics. Between



the two settlements lies the Forest of Detta and nearby the still cultivated rice fields of Topolyapuszta, which belong today to the village of Partos. In addition to their importance in economical history, rice fields are important feeding and roosting sites of migrating shore birds.

In the western part of the region, along the lower flow of the river Béga and Temes, you can find an area comprising of a mosaic of mostly woodless agricultural land and extended salt grasslands. Salt steppes developed in the place of drained marshes located at the border of Fény, Gyülvész and Torontáldinnyés villages are valuable on their own, while on the higher relieves there are nice patches of loess steppes. In this kind of habitats, as well as in old cemeteries, which have avoided ploughing, there are many protected loess species, including *Anchusa ballerieri* and the longhorn beetle *Pilemia tigrina* living on the plant, *Amygdalus nana* and *Teucrium chamaedrys*.

The Banat, in respect of the territories of the Great Plain that belong to Romania, takes pride in the most significant Rook and Red-footed Falcon population. Besides the preservation of the typical steppic groups of trees in the region, the conservation of breeding colonies established in secondary, man-made habitats, such as road-side alleys or tree groups at village borders is a vital pre-condition of the survival of these two species.





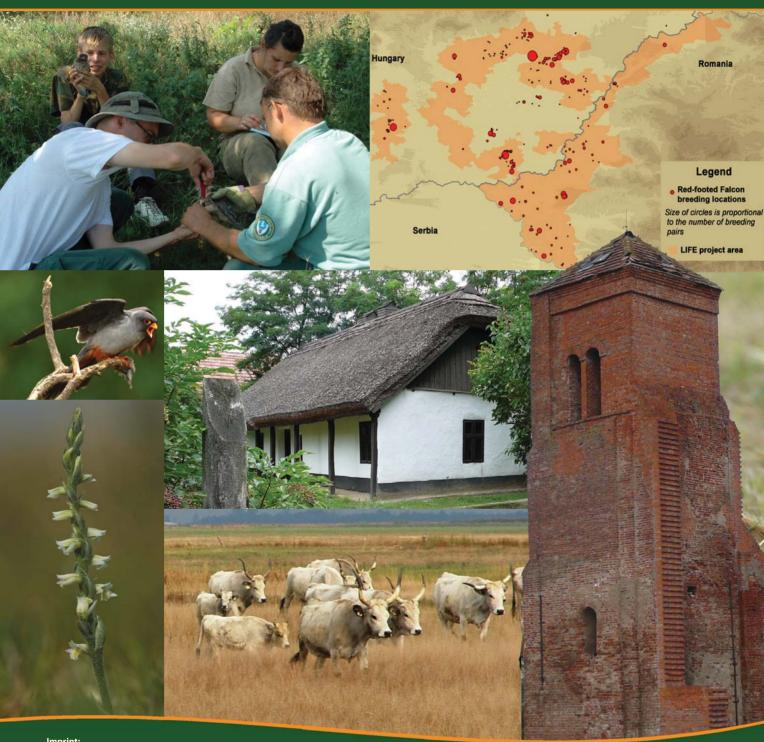






This publication was prepared as an attachment of the Layman's Report of our LIFE Nature project titled Conservation of Red-footed Falcon (Falco vespertinus) in the Pannonian Bio-geographical Region (LIFE05 NAT/H/000122) 2006-2009. Our objective was to give a foretaste of other natural and cultural-historical values of the project areas so important in the conservation of the strictly protected Red-footed Falcon. With our modest guidebook we would like to encourage an adventurous and exciting discovery of the hidden treasures that can be found in the Pannonian steppes. We hope that many naturalists will take a fancy to roaming about the steppes and get more familiar with our countryside in Hungary and across the border.





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