

France - Hungary

*Foundations' Network
for biodiversity in Hungary*





Brunia - South Africa



Zanclus cornutus - Indian Ocean



Inca Tern - Peru



Ceratophrys cornuta - Guyana

What's the FGEF?

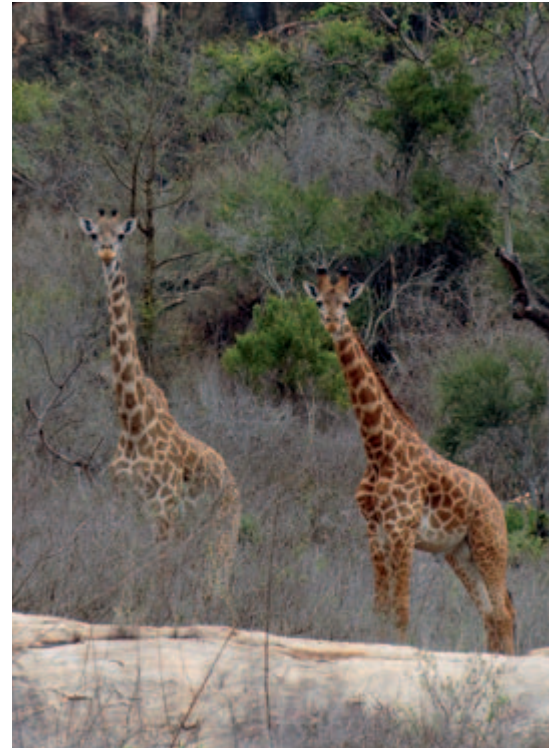
The FGEF (French Global Environment Facility) is a public bilateral fund which was set up in 1994 by the French Government following the Rio Summit. Its aim is to promote protection of the global environment in developing and transitional countries.

The FGEF supports sustainable development projects in following areas to help preserve the main factors of global equilibrium:

- biodiversity;
- climate changes;
- international Waters;
- land degradation;
- persistent organic pollutants (POPs);
- ozone layer (Montreal protocol).

Actions of the FGEF to promote biodiversity

Biodiversity is defined as our planet's entire pool of genes, species and ecosystems. The growing impact of Man on natural habitat induces a massive extinction of living species without precedent. Consequences of this large-scale erosion are considerable from a global natural equilibrium point of view, which is fundamental for all human societies. To strive to stop this loss of biodiversity, the FGEF supports projects entering in the framework the Convention on Biological Diversity.



Giraffe - Kenya

These projects are related to:

- strict biodiversity conservation: ecosystems, species, particularly endangered breeds and varieties;
- sustainable management of natural resources;
- valorisation of biodiversity in order to use it as an advantage of economic and social development.

There are two priority lines of approach:

- involvement of local populations in biodiversity conservation activities;

- integrating biodiversity protection into development approaches on the principle of "reasonable use".

The FGEF intervenes in ecosystems where biodiversity is particularly rich, endangered or includes rare or endemic species and where biodiversity losses are an issue of global importance extending beyond the region or country concerned. Projects involve local populations in the protection of their environment and ensure that they benefit directly from the results.



Angraecum littoral - Madagascar

Zonocerus - South Africa



Gaulette fishing - Reunion island



Dam in equatorial environment



Greenhouse gas emission

In Hungary, a unique biodiversity in the heart of Europe

Hungarian territory constitutes the major part of the biogeographical **Pannonic** region (with a bit of the Czech Republic and Slovakia). It is one of the smallest and the most singular European natural territory because of its climatic and geomorphologic features. It is populated with a unique fauna and flora.

The Carpathian pond, the heart of the region, is a large plain area located between 200 m and 500 m high, completely surrounded by mountains whose altitude exceed 2000 m. The bottom of the pond is composed of thick sedimentation made of determinant sands and slits for local ecosystems.

The climate of the big Hungarian plain is arid with cold winters and warm summers. The climate is wetter toward the West and milder toward the South.

Main vegetal formations developing there are steppes on limestone or acid sands, steppes on loess, marshes, steppes and continental salt meadows, oak woods as well as grasslands and dry lawns. Alluvial forests and wet meadows edge the rich rivers network. More than fifty vegetal species are endemic of the Pannonic region. A diversified and rich fauna developed there. Steppes and meadow species as well as wet areas' species are the most represented.

Objectives and expected benefits of the project

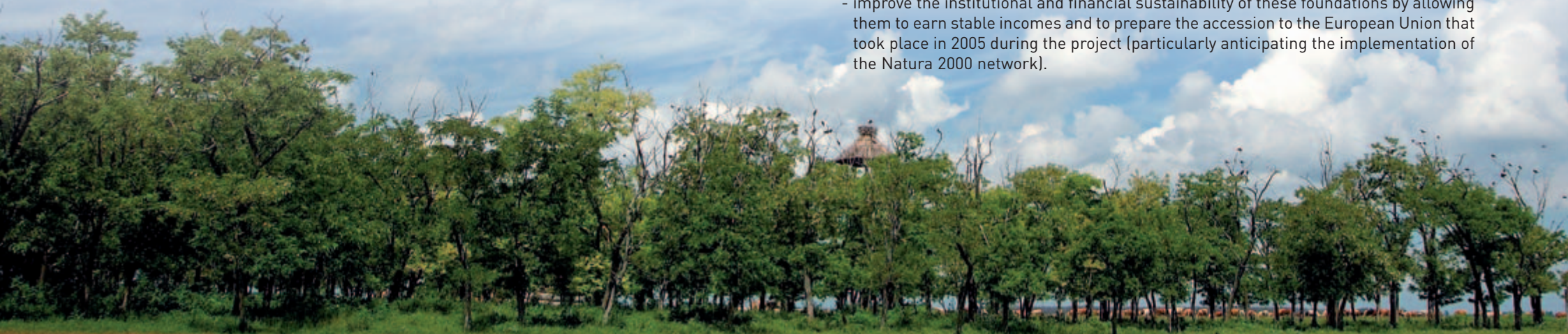
The federation of natural areas conservatories supports the project designed together with five Hungarian public foundations for nature conservation.

The project aims at safeguarding significant ecosystems and endangered species of Hungary by supporting the action of these five foundations, which are striving to preserve natural areas but also the features of their rural culture or of the patrimony built in different Hungarian regions. Their means of action, supported in the framework of the project, are:

- land control by acquisition or management delegation;
- design, implement and ensure a scientific follow up of management plans and their effects;
- economically upgrade those protected spaces by commercialising natural products (meat, hay, crops...) or thanks to ecotourism;
- promote environmental education.

By supporting these foundations, the FGEF aims at granting areas tackled by them with significant advantages in an ecological, socio-economical and institutional point of view:

- safeguard characteristic steppe habitats, grassland or wetlands and associated flora;
- preserve characteristic birds like the Great Bustard, the Imperial Eagle, the Aquatic Warbler, the Corncrake, the Redfooted Falcon...
- develop stable economic sectors respecting ecosystems (extensive crops and breeding, ecotourism);
- improve the institutional and financial sustainability of these foundations by allowing them to earn stable incomes and to prepare the accession to the European Union that took place in 2005 during the project (particularly anticipating the implementation of the Natura 2000 network).



Five Hungarian foundations and one French federation of conservatories for a single sustainable project

A Land at a historic hinge

Until 1989, the way of using soils and the existence of large military zones allowed a de facto conservation of large natural areas. By the change of political system, the process of re-distribution and privatisation of lands had dramatic effects on biodiversity. Land control quickly appeared as a key of nature conservation policy. For regulatory reasons, public authorities or foundations are the only one able to acquire farmlands in order to protect them. Different public foundations including authorities, NGOs and individuals were supported by the project.

Natural areas conservatories federation

Thanks to a coordinated approach and to an areal anchorage, Natural areas conservatories (CEN) have been promoting the French natural and landscape patrimony for 30 years. 30 CEN in the French metropolis and in French overseas territories are managing more than 140 000 ha, particularly thanks to land and use control.

The natural areas conservatories federation (FCEN) created in 1988 regroups all natural areas conservatories. Its main targets are to represent the conservatories network, to produce tools and services to the CENs and to promote exchanges between its members in order to strengthen their actions on the land. The federation is acting as a moderator in projects as well in France but also in Europe (Hungary, Slovenia...). The FCEN is a member of Eurosite, an NGO regrouping natural areas managers in Europe since 2000.

The FCEN is one of the beneficiaries of the projects it initiated together with 5 Hungarian foundations. It is thus receiving funding from the FGEF and justifies the technical and budgetary progress of the project. The FCEN and the 5 Hungarian foundations are linked by bilateral agreements.

Zöld Folyosó Public foundation

This foundation was funded in 1995 by the local government of Somogyfajz, Somogy Provincial Association for Nature Conservation and 4 private persons.

Its operating area is located to the south west of Hungary, to the south of the Balaton Lake. It includes the Korokna River water catchment, with its dry or wet meadows and its alluvial zones, the wild marshes of the Nagyberek River which ends in the Balaton lake and the woody meadows of Somogyfajsz which form a very rich mosaic of woods, sandy grassland and marshes. The foundation owns and manages almost 800 hectares of meadows, marshes and ponds. Those habitats have a very valuable flora including many orchids and the very rare Small Pasque Flower (*Pulsatilla pratensis* subsp. *nigricans*). Fauna is very valuable as well with

birds like the Ferruginous Duck, the Black stork, the White-tailed Sea Eagle or mammals like the European Otter.

Pro Vértés Public Foundation

It is the oldest foundation as it was created in 1991 to solve the nature conservation and cultural patrimony conservation problems induced by privatisation.

Its operating area is located in the region of the town of Csókvár, to the west of Budapest, and includes the Vértés hills, the Zámoly Bassin and the Velence Lake. The Duna-Ipoly National Park is in the neighbourhood. Natural habitats are composed of 75% dry or wet meadows or grasslands. The rest being crops, woods (among which the Burok Virgin Forest) and marshes. The foundation owns and manage almost 800 ha.

The area is characterized by the presence of different rare birds of prey as the Imperial Eagle, the White-Tailed Eagle. Spindle, cranes and free water species as the Greylag are living in wet meadows. Dry and steppic meadows are populated by the Great Bustard.

Tiszatáj Public Foundation

Funded in 1995 by the Hungarian Ornithological and Nature Protection Society and by the municipality of Tiszadob, the Tiszatáj Foundation manages a large marshes area covering more than 2000 ha to the North-East of Hungary, near the Bükk National Park. Land purchased within the program was focused on the Kesznyéten Landscape Protection Area. Its boundaries are the rivers Tisza, Lakta, Sajó and Tisza Holt Tisza. The habitat is made of rivers' beds, old beds, fossil arms, flood meadows, marshes, alluvial woods and bogwoods. Drier areas as sandy steppes or coniferous wood are also present inside the marsh. Big hydraulic works done in the 19th and 20th centuries isolated the marsh from the rivers' bed and gradually induced its drying out, which became more important in the 90ies. The management



reversed this trend and today the nature is back. Fauna and flora in the region are very valuable: rare flora from fresh waters and wet meadows, very rare insects as the Giant Diving Beetle (*Dysticus latissimus*) and the *Carabus granulatus*, the European Pond Turtle, European Otters, Mud Loaches, Spined Loach, a great number of aquatic birds: Herons (Great White Egret, Purple Heron...), birds of prey (Saker, Imperial Eagle...). The very rare Corncrake can also be seen.

Bihar Public Foundation

Funded in 1999 by regional governmental and non governmental conservation organisations, Bihar foundation owns and manages almost 1100 ha of meadows, steppes, salt lakes, crops and fallow land and 500 ha of lakes or fish ponds. It operates to the east of Hungary near the town of Földes.

The area near Földes – mostly grassland with patches of sedge – is one of the biggest continuous meadows. The presence of the Sarrét Chanel and its water gave birth to a wet areas' life: Wood Sandpiper, Snipe, Blacktailed Godwit ... are common in the region. Extensive steppe areas are broken up by small patches of woodlands in which the rare Redfooted Falcon breeds.

There are beautiful wet meadows and salt meadows in Bihar and Nyírség. They host a significant flora more particularly Siberian Ibis (*Iris sibirica*) and the endemic *Plantago schwarzenbergiana*. Marshes and salt lakes of Konyári, characteristic of halophytic pannonic vegetations, are hosting valuable birds population as the Black-winged Stilt or the Lapwing.

Biharugra and Begécs fishponds are one of the biggest areas of this kind in Hungary, a paradise for birds' breeding and for ducks and geese wintering.

Public Foundation Hortobágy

It was created at the beginning of this century by the local government of Nádukovar, local public nature protection societies, public organisations, experts in environment protection and farmers. Its operation area is located in the eastern part of the country near the national park of Hortobágy, the most famous area of Hungarian puszta (large area of plains and marshes).

The foundation manages one hundred hectares, the half of it being its own property, the rest being the property of the Natural Park.

The major part of the operation area is composed of wet zones as the Justzus-kis marshes, the Karácsony Cape, and the Akadémia lake, offering various valuable habitats of salt marshes, abandoned rice swamps and lakes used as stopover by migrating birds. Many rare plants as the High Stolon Wheat (*Elymus elongatus*), are colonising these typical habitats of the big pannonic plain. These wetlands are a real haven for all water birds (waders, ducks, cranes, herons, terns...). Drier habitats of steppes and saline plain grassland, rich in endemic plants as Saline Rose (*Aster tripolium* subsp. *pannonicum*) or the Hungarian Saline Flower (*Limonium gmelini*), are feeding places for many rare species as the red-footed Falcon or the Lesser Grey Shrike.

Ploughland are hosting a strictly protected bird, the Great Bustard.

Protection and management of outstanding natural habitats

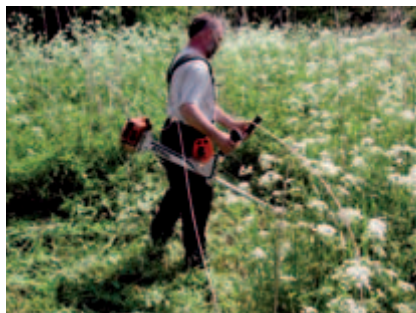
Protection and restoration of wet zones

The project supported the implementation of a range of management and restoration actions of extremely endangered wet zones. Intensive agriculture and modification by man of natural hydraulic systems are deeply changing wet habitats by disturbing the natural rhythm of submersion and immersion periods requested to maintain fauna and flora from these ecosystems. The general principle of management consists in suppressing drainages in order to strengthen the wet character of the site or realizing, sometimes heavy, hydraulic works, to control artificially the flooding of the different areas depending of the objectives of the management plan of habitats and species. Following examples were realized during the project:

- restoration of the wet character of heaths, moorlands and wet meadows of Csikvarsa (Pro Vértess);
- building of an aqueduct at Karácsony Cape and restoration of the filling canal of Akadémia lake to keep the mosaic character of the habitat (Hortobágy);
- management of Biharugra and Begécs fish ponds by mowing and fine hydraulic planning (Bihar);
- dredging of a field channel and construction of a sluice to restore the Disce Lapos swamp (Tiszatáj);
- habitat restoration by the watering of Körisberki lakes (Zöld Folyoso);
- restoration of an extensive fish-farming on a 500 ha wet woodlands area (Zöld Folyoso).



Hills



Semis clearance



Imperial Eagle

Restoration and management of steppes, meadows and salt areas

Different kinds of meadows and grasslands are building together with wetlands, the major ecological stake in Hungary. These highly diversified habitats, depending on moisture, substrate, and salt content are the heart of these typically pannonic biodiversity. Many actions were taken by the 5 foundations in the framework of the project:

- purchase of real estate;
- purchase of heavy agricultural machinery;
- purchase of herds;
- restoration of degraded habitats;
- management by mowing and/or grazing;
- ecological follow-up;
- ...



Marsh Orchids



Conservation and management of species

Beyond actions related to habitats, managing attempts have also been made related to one or different species:

- installation of nest boxes or artificial nests for the Saker, the White-tailed Sea Eagle, the Hoopoe, tits... (Pro Vértés);
- monitoring of birds of prey's nests;
- conservation plan for white and black storks (Zöld Folyoso) ;
- protection and management of the Great Bustard's habitats;
- ...

Scientific follow up and improvement of knowledge

Applied ecology and habitats management are quite new. Few things were known about applicable protocols to pannonic species and habitats. The project promoted tests in real conditions of different methods and actions and allowed scientific capitalisation thanks to the networking of those foundations with French and European networks. The impact of mowing on invertebrates' population, for instance, was more particularly studied.

Managing invasive species

The majority of species introduced by Man are not spreading through the nature by themselves. Nevertheless some vegetal or animal species tend to proliferate suddenly and strongly threaten indigenous biodiversity with which they get in competition: they are invasive species.

The project allowed some foundations to fight efficiently against these plagues as, for instance, Black Locust (cleared off by hard labour done by volunteers) and Giant Goldenrod (mowing and grazing) in Zöld Folyoso.

The Great Bustard: symbol of Steppes and extensive crops

The Great Bustard is one of the most outstanding and endangered birds in Europe. It usually lives in steppic habitats and colonised extensive and opened crops as lucerne or rape. The intensification and mechanization of agriculture strongly threatened this species in Europe. Big Hungarian plains have always been the favourite habitats of this magnificent bird. The project allowed to restore and to manage (purchase of real estate, restoration of habitats, purchase of agricultural machinery...) a lot of extensive crops areas in favour of the Great Bustard: planting adapted species, suppression of insecticides, harvest after chickens have fly away, mechanised management taking the presence of birds into account...

Environmentally friendly agricultural and pastoral management

Mowing and agriculture respecting fauna and flora

Mowing is, together with grazing, one of the most important way of managing grasslands. Depending of the site (plain, mountain...), of the kind of meadow (dry, wet...) and of the species to be promoted (butterflies, orchids...), mowing protocols are very different:

- mowing technique;
- number of cuts;
- seasons;
- coupling with grazing;
- ...

Studies and scientific follow-up allowed setting up mowing protocols ensuring the best ecological efficiency.

Cropped lands are prone to a great animal diversity (bustards, birds of prey, suzlukies, insects...) if the extensive methods used are environmentally friendly: crops' selection, diversification and rotation; prohibition of phytosanitary treatments and of fertilizing chemicals, respect of nesting periods...

Thanks to the project, the 5 foundations could purchase the necessary machinery to ensure an efficient mechanised agriculture.

Hay and all harvested products are used as food for livestock in the foundations or sold to promote the self-financing of the foundations.

Hungarian hardy domestic breeds

Hungary is famous for its various hardy domestic breeds. These animals are an outstanding gene pool. Beyond that, they are very good assistants in managing grasslands. They are very resistant, need little care and allow an optimisation of natural habitats preservation.

The most famous is probably the Hungarian Grey Cattle with its big horns. Its herds in the vast plains are one of the strongest pictures illustrating traditional ways of life in rural Hungary.

Other domestic breeds as Racka Sheeps, Hungarian Vernier horses or Mangalica porks can be mentioned as well. The project allowed the creation of herds and the implementation of grassland management (fences, grazing protocols...).

In the future, revenue from herds (milk, meat, wool, young animals...) should promote self-financing for the 5 foundations.



Hungarian grey cattles



Hungarian Vernier Horse



Racka Sheeps

Education, awareness rising and ecotourism

Education and awareness rising

One of the most important tasks is to promote awareness about environmental issues and natural habitats value, particularly for younger generation. So naturally, parts of the projects were dedicated to these issues:

- publications related to the projects;
- organisation of contests for primary schools;
- organisation of ringing camps;
- information campaigns promoting actions for nature protection and management (storks' program for instance);
- scheduled meetings with farmers or teachers;
- purchase and conversion of buildings in education centre for environment or in educational farms;
- creation of nature trails for schoolchildren;
- building of fauna's observatories;
- realisation of a movie;
- the project has been presented together with its results in June 2008 in the French Institute in Budapest with the participation of the Embassy of France.

Ecotourism

Ecotourism, complement to environmental education, presents the dual advantage of spreading the interest in nature protection among a very broad audience and of promoting financing conservation actions by strengthening the independence of management organisms.

Many actions were created or supported in the framework of the project:

- creation of accommodation and information centres or of sample farms for visitors (centre of Kesznyéten...);
- creation of theme parks (Somogyfajsz Shepherd Park, Petesmalom Otter Park...);
- creation of accommodation for tourists (Ciframalom Fishermen's Lodge...);
- creation and planning of nature trails;
- exhibitions on nature, traditions and landscapes of rural Hungary;
- events and meetings focused on traditional way of life of horsemen and shepherds;
- naturalistic excursions with guides;
- excursions in trailer;
- trekking in the region of Somogy organised by Zöld Folyozo foundation.



Birds observation in Somogyfajsz



Trailer tour



Environmental education

Conservation of natural sites and monument protection

Monuments restoration

Besides nature protection, some foundations aim at preserving, restoring or re-building typical monuments of their region. This restored heritage is used as administrative centre, as accommodation for ecologists, as educational centre or as accommodation centre for visitors. The Geszner house, the castle of Kund, the typical farm buildings of Putza's plain or the Hunters' chapel are valuable examples.



Hunter's chapel

The Vértes Natural Park, first natural park of Hungary

As regional natural parks in France, the Vértes natural park, desired and managed by local or regional authorities, is dedicated to the promotion of a rural natural and cultural heritage. Created in 2005, it is the first Hungarian natural park. Funded by about 20 authorities, it is still granted with the support of the experience and the help of the Pro Vértes foundation. Its major activities are:

- development of rural tourism and of ecotourism;
- establishment and maintenance of tracking, bicycling and horseriding trails, thematic and educational trails;
- establishment of outdoor education centres;
- promotion of local products on the market;
- development of a solid uniform image for the region;
- production of educational and communication materials;
- information and naturalistic activities.

Designation of local natural parks and collaboration with natural parks

The Hungarian law allows the municipalities to protect some natural areas. The Pro Vértes foundation promoted and manages 5 local natural areas, for instance. Foundations' territories are often neighbouring Natural Parks so that their action is completed:

- Duna-Ipoly National Park (Pro Vértes foundation);
- Bükk National Park (Tiszatáj foundation);
- Hortobágy National Park (Hortobágy foundation).

In these cases, the teams of the foundations are working together with the authorities of the parks to coordinate their efforts for conservation, management and public reception.



De Kund castle



Petesmalom



Geszner house

Lessons and perspectives of the project

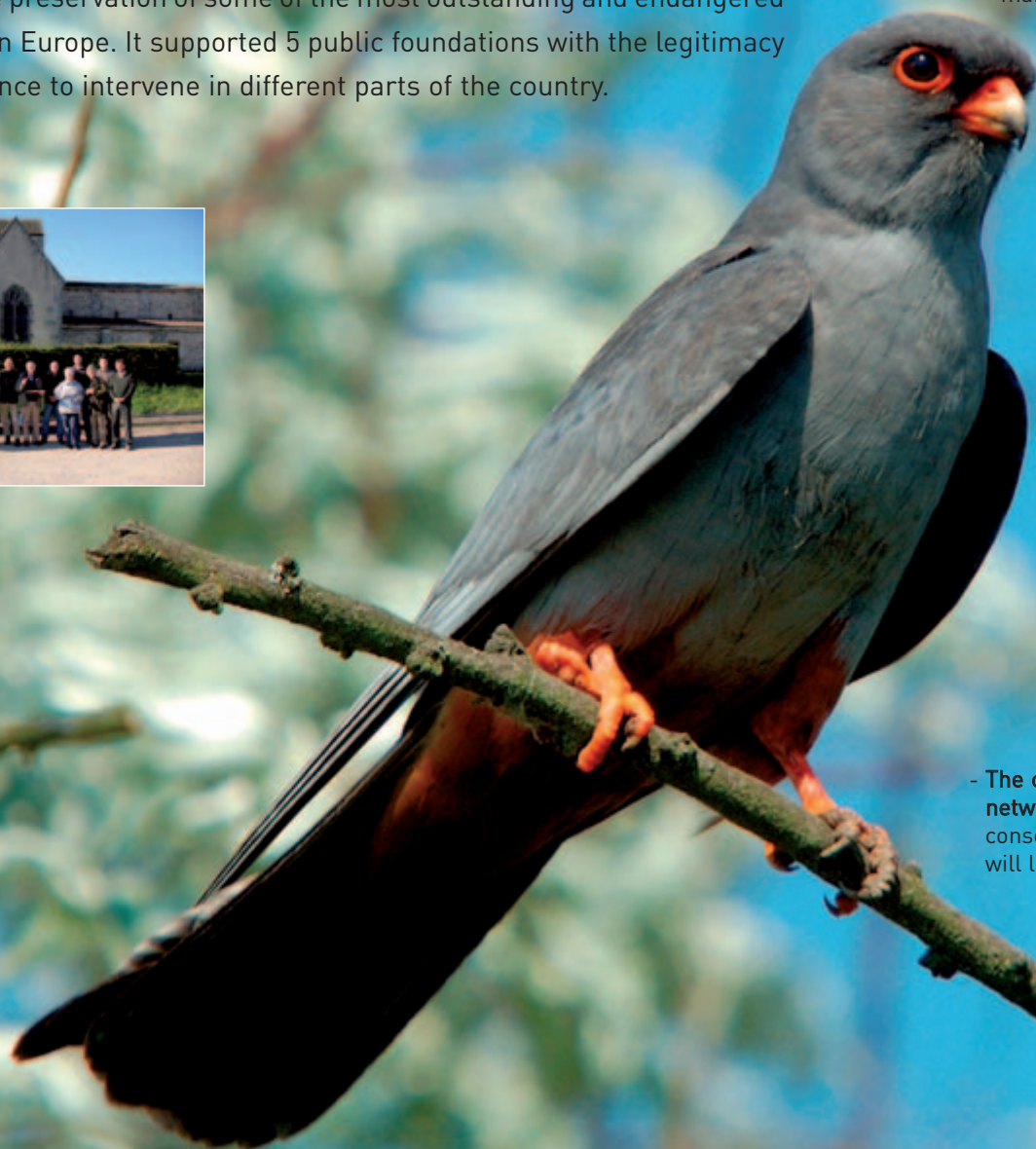
Initiated at a very important moment of the history of the country, the change of regime and the accession to the European Union, this project promoted the preservation of some of the most outstanding and endangered ecosystems in Europe. It supported 5 public foundations with the legitimacy and competence to intervene in different parts of the country.



Visit in France

The main achievements of the projects are:

- **The purchase of many valuable natural or agricultural areas** strongly endangered at short term. These areas, now protected at long term, are hosting major pannonic ecosystems and many protected species at a European scale;
- **The implementation of an efficient ecological management** combined to **extensive agricultural and pastoral productions** and promoting biodiversity. Foundations now have modern infrastructures and equipments and well-trained staff. Distributed products are promoting traditional agriculture and the self-financing of conservation;
- **Know-how exchange between French and Hungarian managers**, particularly during crossed experts' mission in France and in Hungary.
- The creation of accommodation facilities for the public for **awareness rising and educational purposes**. Foundations are now fitted to promote nature conservation ideas by the inhabitants (shepherds, farmers ...) and younger generations;
- The planning of **ecotouristic accommodation**. Foundations now have infrastructures and competences to attract many national and international tourists in order to show them the natural wealth of Hungary. **Ecotourism also contributes to the self-financing** of these foundations;
- **The institutional strengthening of the foundations in Hungary**. Beyond the national financial lever, the project helped the country in the harmonious integration of the consequences of the accession to the European Union and in the granting of European funding to take over: implementation of Natura 2000, common agricultural policy, LIFE programs,...
- **The creation of a public foundation network in Hungary and of an international network**, particularly thanks to the action of the federation of natural areas conservatories and to the valuable relationships knotted during the project that will last afterwards.



Red-footed Falcon



Addresses and contacts:

- Fonds Français pour l'Environnement Mondial:

Ghislain Rieb - riebg@aefd.fr - www.ffem.fr

- Ministère de l'Écologie, de l'Énergie, du Développement durable et de l'Aménagement du territoire:

Emmanuel Morice - emmanuel.morice@developpement-durable.gouv.fr - www.developpement-durable.gouv.fr

- Fédération des Conservatoires d'Espaces Naturels:

Marc Maury - marc.maury@enf-conservatoires.org - www.enf-conservatoires.org

- Fondation Pro Vértès :

Melle Dora Karsa - provertes@provertes.hu

Texts: Biotope (F. Melki, M. Briola)

Layout: Biotope (F. Pruneau)

Pictures: M. Bodnár, G. Bona, F. Melki, J.Y. Kernel, V. Kerekes, I. Sándor, M. Souquet, A. Szilágyi, T. Tömösvári, R. Ványi, V. Rufray, L. Viszló

