

# LIFE+



# **Nature & Biodiversity**

# Projects 2010



nature



# LIFE+ Nature & Biodiversity 2010: Commission funds 64 innovation projects in 23 countries with €125 million

The European Commission has approved funding for 64 new environmental innovation projects in 23 countries under the LIFE+ Nature & Biodiversity programme 2010. These projects will demonstrate new methods and techniques for dealing with a wide diversity of Europe's environmental problems. The projects are led by 'beneficiaries', or project promoters, based in Austria, Belgium, Bulgaria, Cyprus, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Italy, Latvia, Lithuania, Malta, the Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain and Sweden. They represent a total investment of €223 million, of which the EU will provide some €125 million.

### LIFE Nature in 2010

LIFE+ Nature & Biodiversity projects improve the conservation status of endangered species and habitats. Of the 203 proposals received, the Commission selected for funding 64 projects from partnerships of conservation bodies, government authorities and other parties. Situated in 23 Member States, they repre- sent a total investment of €223 million, of which the EU will provide some €125 million. The majority (55) are Nature projects, contributing to the implementation of the Birds and/or Habitats directives and the Natura 2000 network. The other nine are Biodiversity projects, a LIFE+ project category for pilot schemes that tackle wider biodiversity issues. The total invested in Biodiversity projects will be €18.3 million.

### Background

LIFE is the EU's financial instrument supporting environmental and nature conservation projects throughout the EU and in certain non-EU countries. Since 1992, LIFE has co-financed some 3 500 projects, contributing approximately  $\in 2.7$  billion to the protection of the environment. LIFE+ is the new European financial instrument for the environment with a total budget of  $\in 2$  143 billion for the period 2007-2013. During this period, the Commission will launch one call for LIFE+ project proposals per year.

LIFE+ Nature & Biodiversity is one of three thematic components under the LIFE programme. The other two components, LIFE+ Environment Policy & Biodiversity and LIFE+ Information & Communication, focus respectively on supporting pilot projects that contribute to the development of innovative policy ideas, technologies, methods and instruments; and on disseminating information and raising the profile of environmental issues or providing training and awareness-raising for the prevention of forest fires.

More information on each LIFE+ project is available at: <u>http://ec.europa.eu/environment/life/project/Projects/</u> <u>index.cfm</u>

It is also possible to contact the relevant national authorities:

http://ec.europa.eu/environment/life/contact/ nationalcontact/index.htm

# Index of Nature & Biodiversity projects selected in 2010

Location	Project number	Title of project
AUSTRIA	LIFE10 NAT/AT/000015 Untere March-Auen	Restoration of the Lower Morava floodplains
	LIFE10 NAT/AT/000016 Netzwerk Donau	Danube Network
	LIFE10 NAT/AT/000017 LIFE+ Lavant	LIFE+-Lavant: Habitats network for endangered small fish species
BELGIUM	LIFE10 NAT/BE/000706 Ardenne liégeoise	Restoration of natural habitats in the "Ardenne lié- geoise" region
	LIFE10 NAT/BE/000709 ELIA	Development of the beddings of the electricity trans- portation network as means of enhancing biodiversity
BULGARIA	LIFE10 NAT/BG/000146 BGNATURAGENEFUND	Conservation of the Genetic Fund and Restoration of Priority Forest Habitats in Natura 2000 Sites
	LIFE10 NAT/BG/000152 Return of the Neophron	Urgent measures to secure survival of the Egyptian vul- ture ( <i>Neophron percnopterus</i> ) in Bulgaria and Greece
CYPRUS	LIFE10 NAT/CY/000716 OROKLINI	Restoration and Management of Oroklini Lake SPA (CY6000010) in Cyprus
	LIFE10 NAT/CY/000717 JUNIPERCY	Improving the conservation status of the priority habi- tat type 9560* (Endemic forests with Juniperus spp.) in Cyprus
DENMARK	LIFE10 NAT/DK/000099 SMOOTH	Restoring Sølsted Mose - a contribution to the network of Danish raised bogs (7110*) in favourable conserva- tion status
	LIFE10 NAT/DK/000102 Lille Vildmose	Restoration of active raised bog - Lille Vildmose
ESTONIA	LIFE10 NAT/EE/000107 URBANCOWS	Restoration and Public Access of Urban Coastal Mead- ow Complex in Parnu Town
FINLAND	LIFE10 NAT/FI/000047 NATNET	Increasing the ecological connections and coherence of the Natura 2000 network in South-west Lapland
	LIFE10 NAT/FI/000048 Species-rich LIFE	Improving the Conservation Status of Species-rich Hab- itats
FRANCE	LIFE10 NAT/FR/000192 LIFE Continuité écologique	LIFE ecological continuity, management of catchment area and associated patrimonial fauna
	LIFE10 NAT/FR/000197 Life+ Râle des genets	Conservation of major breeding sites and implementa- tion of innovative and demonstrative actions for the French Corncrake
	LIFE10 NAT/FR/000200 SUBLIMO	Biodiversity Survey of Fish Post-Larvae in the Western Mediterranean Sea
GERMANY	LIFE10 NAT/DE/000005 LIFE rund ums Heckengäu	Habitat improvement for endangered animals and plants in the NATURA 2000 areas of Stromberg, Heckengäu and Schönbuch
	LIFE10 NAT/DE/000006 Allianz Borstgrasrasen	Conservation, regeneration and development of matt- grass meadows in the highlands of the Eifel in North Rhine-Westphalia

Location	Project number	Title of project
GERMANY	LIFE10 NAT/DE/000007 KTKK HX	Dry, calcareous habitats in the cultural landscape of Höxter
	LIFE10 NAT/DE/000008 Rur und Kall	Rur and Kall – fluvial habitats
	LIFE10 NAT/DE/000009 Eichenwälder bei Wesel	Acidophilous oak woods with bogs and heaths
	LIFE10 NAT/DE/000010 Emmericher Ward	River and floodplain improvement Emmericher Ward within the EU Bird Area Unterer Niederrhein
	LIFE10 NAT/DE/000011 Wachtelkönig&Uferschn epfe	Waterlogging and grassland extensification in Lower Saxony to improve habitats of the Corncrake ( <i>Crex</i> <i>crex</i> ) and the Black-tailed Godwit ( <i>Limosa limosa</i> )
	LIFE10 NAT/DE/000012 Schreiadler - Schorfheide	Improvement of the breeding and feeding habitats for the Lesser Spotted Eagle ( <i>Aquila pomarina</i> ), as well as for the Corn Crake ( <i>Crex crex</i> ) and the Aquatic Warbler ( <i>Acrocephalus paludicola</i> ) in the SPA "Schorfheide- Chorin"
GREECE	LIFE10 NAT/GR/000637 ANDROSSPA	Management of the SPA site of Andros Island to achieve a Favourable Conservation Status for its priority spe- cies
	LIFE10 NAT/GR/000638 Safeguard LWfG	Safeguarding the lesser white-fronted goose fennos- candian population in key wintering and staging sites within the European flyway
HUNGARY	LIFE10 NAT/HU/000018 Pásztó habitat restoration	Restoration and conservation of the Pannonic salt steppes of Pásztó grassland with sustainable manage- ment
	LIFE10 NAT/HU/000019 HELICON	Conservation of imperial eagles by managing human- eagle conflicts in Hungary
	LIFE10 NAT/HU/000020 HUTURJAN	Conservation of priority natural values in 'Turjánvidék' Natura 2000 site southern unit
ITALY	LIFE10 NAT/IT/000224 C.I.SPI.VE.HAB.	Conservation and Improvement of Spina Verde SCI Habitats
	LIFE10 NAT/IT/000237 Zelkov@zione	Zelkov@zione - Urgent actions to rescue Zelkova sicula from extinction
	LIFE10 NAT/IT/000239 RARITY	Eradicate Invasive Louisiana Red Swamp and Preserve Native White Clawed Crayfish in Friuli Venezia Giulia
	LIFE10 NAT/IT/000241 TIB - TRANS INSUBRIA BION	TIB - Trans Insubria Bionet. Habitat connection and improvement along the Insubria ecological corridor be- tween the Alps and the Ticino valley

Location	Project number	Title of project
	LIFE10 NAT/IT/000243 LIFE MAGREDI GRASSLANDS	Restoration of Dry grasslands (Magredi) in four Sites of Community Importance of Friuli Lowland
	LIFE10 NAT/IT/000244 ST.e.R.N.A.	LIFE+ Ponds: Environment and nature restoration in Casaraccio
	LIFE10 NAT/IT/000247 VAL.MA.CO.	Marangone Valley, a territory to defend and enjoy: conservation of avifauna in north-west area of the SPA IT6030005
ITALY	LIFE10 NAT/IT/000256 MC-SALT	Environmental Management and Restoration of Medi- terranean Salt Works and Coastal Lagoons
	LIFE10 NAT/IT/000262 MAESTRALE	Actions for the recovery and the conservation of dune and back dune habitats in the Molise Region
	LIFE10 NAT/IT/000265 IBRIWOLF	Pilot actions for the reduction of the loss of genetic pat- rimony of the wolf in central Italy
	LIFE10 NAT/IT/000271 SHARKLIFE	SHARKLIFE – Urgent actions for the conservation of cartilaginous fish in Italy
LATVIA	LIFE10 NAT/LV/000159 FOR-REST	Forest Habitat Restoration within the Gauja National Park
	LIFE10 NAT/LV/000160 HYDROPLAN	Restoring the hydrological regime of the Kemeri Na- tional Park
LITHUANIA	LIFE10 NAT/LT/000117 Buveinių tvarkymas	Restoration of degrading habitats of Community inter- est in the protected areas of Lithuania
MALTA	LIFE10 NAT/MT/000090 MALTA SEABIRD PROJECT	Creating an inventory of Marine IBAs for <i>Puffinus Yelk-ouan, Calonectris diomedea</i> and <i>Hydrobates pelagicus</i> in Malta
THE NETHERLANDS	LIFE10 NAT/NL/000023 Wuthering heaths	Restoration of inland dunes and psammophyle heath- land in the North-western Veluwe
POLAND	LIFE10 NAT/PL/000654 Niebieski korytarz Iny	Creating a Blue Wildlife Corridor in the Ina basin
	LIFE10 NAT/PL/000655 ActiveKPN	Protection of natural resources of Kampinos Forest – Natura 2000 Site, through the renaturalisation of bought-up land
PORTUGAL	LIFE10 NAT/PT/000073 ECOTONE	ECOTONE – Management of riparian habitats towards the conservation of endangered invertebrates
	LIFE10 NAT/PT/000075 BRIGHT	Bussaco's Recovery from Invasions Generating Habitat Threats (BIODIV)
ROMANIA	LIFE10 NAT/RO/000740 Iron Gates wetlands	Improving the conservation status for the priority spe- cies and habitats in the Iron Gates wetlands
SLOVAKIA	LIFE10 NAT/SK/000079 APUS & NYCTALUS	Protection of Common Swift ( <i>Apus apus</i> ) and bats in buildings in Slovakia (BIODIV)
	LIFE10 NAT/SK/000080 Natura 2000 BA	Restoration of Natura 2000 sites in cross-border Bratis- lava capital region
	LIFE10 NAT/SK/000083 PANNONICSK	Restoration of endemic pannonic salt marshes and sand dunes in Southern Slovakia

Location	Project number	Title of project
SLOVENIA	LIFE10 NAT/SI/000141 SIMARINE-NATURA	Preparatory inventory and activities for the designation of marine IBA and SPA site for <i>Phalacrocorax aristotelis</i> <i>desmarestii</i> in Slovenia
	LIFE10 NAT/SI/000142 Ljubljanica connects	Restoration of the Ljubljanica River corridor and im- provement of the river's flow regime
SPAIN	LIFE10 NAT/ES/000563 HUMEDALES DE LA MANCHA	Restoration of salt flats around 27 endorheic wetland areas in La Mancha
	LIFE10 NAT/ES/000565 LAMPROPELTIS	Control of the invasive <i>species Lampropeltis getula cal-</i> <i>iforniae</i> on the island of Gran Canaria (BIODIV)
SPAIN	LIFE10 NAT/ES/000570 Iberlince	Recovering the historic distribution range of the Iberian lynx ( <i>Lynx pardinus</i> ) in Spain and Portugal
	LIFE10 NAT/ES/000572 PRO-Izki	Ecosystem Management of the Izki Quercus pyrenaica forest and habitats and species of community interest related to it
	LIFE10 NAT/ES/000579 SOIL-Montana	Agroecosystems health cards: conservation of soil and vegetal diversity in mountain and bottom valley grazing areas (BIODIV)
	LIFE10 NAT/ES/000582 INVASEP	Combating invasive species within the Tagus and Gua- diana river basins in the Iberian peninsula (BIODIV)
SWEDEN	LIFE10 NAT/SE/000045 ReMiBar	Remediation of migratory barriers in Nordic/fennos- candian watercourses
	LIFE10 NAT/SE/000046 UC4LIFE	The thick shelled river mussel ( <i>Unio crassus</i> ) brings Life+ back to rivers

# Restoration of the Lower Morava floodplains



### **Project background**

The project is based on the trans-national contracted action plan of the bilateral general project, the management plan for the Natura 2000 site, Morava-Dyje floodplains, and the management strategy of the nature reserve "Lower Moravia floodplains". It will build on the experiences and findings of a previous LIFE Nature project to ensure a sustainable implementation. The measures already carried out will be also applied to adjacent areas.

### **Project objectives**

The project's overall aim is to restore near-natural river dynamics to the Lower Moravia floodplains in the eastern part of Austria. Today the river bed is regulated, the connection of 36 oxbows to the river are cut off and 75% of the banks are reinforced.

The project will restore floodplains and foster land-use practices that preserve biodiversity and endangered species and habitats.

Project actions will improve the conservation status of EU Habitats Directive habitats such as floodplain forests and floodplain meadows, as well as of a wide variety of Habitats Directive species including the firebellied toad (*Bombina bombina*), Danube crested newt (*Triturus dobrogicus*), European pond turtle (*Emys orbicularis*), European weatherfish (*Misgurnus fossilis*), Green snaketail (*Ophiogomphus cecilia*), red and black kite (*Milvus spp.*) and common tern (*Sterna hirundo*).

In total, the project measures will affect an area of at least 200 ha, improving the conservation status of seven habitat types and 11 species included in the Annexes of the Habitats Directive, and 15 species listed in the EU Birds Directive.

### **Expected results:**

- Renaturalisation of the river banks along a 6 km stretch, where potential areas for characteristic river bank formations such as sandbanks, escarpments, and alluvial forests will be generated. In addition, 4 km of river branches will be revitalised and 16 ha restored through a national programme;
- Improvement of cross-linking of areas through the removal of barriers in at least five spots. As a result, 25 km of near-natural streamed river branches will be created;

### **Beneficiary:**

**Type of beneficiary** Public enterprise

### Name of beneficiary

via donau - Österreichische Wasserstraßen-Gesellschaft mbH

### Postal address

Donau-City-Straße 1 A - 1220 Wien AUSTRIA Phone +43 50 4321 2611 Fax +43 50 4321 2050 Email franz.steiner@via-donau.org

Name of contact person Franz STEINER

### Duration of project:

73 months (01/10/2011 - 31/10/2017)

**Total budget in euro:** 3,491,774.00

**EC contribution in euro with %:** 1,745,887.00 (50.00 %)

- Protection of at least 10 floodplain water bodies in the outer floodplains, which will create good conditions for target species in an area of some 20 ha;
- Extension of cultivation, which will improve and secure a total of 65 ha of ecologically significant open landscape habitats;
- Reintroduction of grazing management, which constitutes a pilot project for the improvement of habitat structures;
- Improvement of habitat conditions of floodplain forests at the river banks by river restoration works and by controlling invasive plants such as box elder (*Acer negundo*);
- Improvement in the conservation status of six representative target species and three types of habitats of Community interest through specific supporting measures; and
- Greater acceptance of conservation measures through specific information and environmental education in four municipalities. Land users and stakeholders will be directly involved in the project implementation.

### **Danube Network**

### **Project background**

Some 352 km of the Danube flows through Austria, where around 80% of the river's course has been shaped by measures taken to regulate the water flow and to enable hydroelectric power generation. The dams built for this purpose have a significant ecological impact and the power plants have split up the river into environmentally unconnected sections. Moreover, the floodplains and floodplain water bodies along the river are now for the most part cut off from the Danube by dams. As a result, the Danube's tributaries are in most cases no longer connected with it or one another.

### **Project objectives**

The project aims to implement measures to improve the conservation status of habitats along the entirety of the Danube in Austria. A total of four Natura 2000 sites will benefit directly from the actions and all the Natura 2000 sites on the Danube in Austria will profit indirectly. The project region extends from the vicinity of Vienna to the German border in Upper Austria.

Specific objectives are to:

- Improve the conservation status of the habitats of the reservoirs at the power plants by creating gravel structures;
- Improve the habitat status by reconnecting existing or newly created habitats, thus making them accessible. To achieve this aim, ecologically effective facilities for fish to bypass barriers will be created.

A significant improvement in the habitat of 17 Annex II and IV species will be achieved within the entire Danube in Austria. Many of the protected species are fast water gravel-spawning fish, which during reproduction and in the juvenile stage will benefit greatly from the planned actions. The creation of structures at the heads of the reservoirs and the bypass branches will result in a significant increase in fish populations. An improvement in the habitat conditions for several 'slow-water' species will also be achieved by the creation and reactivation of backwater systems.

The entire fish fauna of the Austrian Danube, including 57 domestic fish species, will benefit from the project. In the long term, these benefits will be felt upstream and downstream beyond the borders of Austria, thus benefiting neighbouring Natura 2000 sites as well.



### Beneficiary:

**Type of beneficiary** Small and medium-sized enterprise

**Name of beneficiary** VERBUND- Austrian Hydro Power AG (AHP)

### Postal address

Am Hof 6a A - 1010 Wien AUSTRIA Phone +43 50 313 50610 Fax +43 50 313 150610 Email Herfried.harreiter@verbund.at

Name of contact person Herfried HARREITER

### Duration of project:

76 months (01/09/2011 - 31/12/2017)

### Total budget in euro:

14,509,424.00

**EC contribution in euro with %:** 4,379,712.00 (30.19 %)

The project will have a great demonstration value. The comprehensive approach planned for Austria is intended to serve as an example for other countries bordering the Danube.

### **Expected results:**

- The construction of bypass branches (at least 22 km) at three power plants;
- The creation of gravel habitats (gravel banks, gravel islands) in the reservoirs of five power plants on the Danube entailing 325 000 m<sup>3</sup> of gravel; and
- The creation of 500 m of branches on the shores of the Danube.

By the end of the project, the ease in which fish can pass through the Danube in Austria will be restored over a length of 300 km, leaving only two power plants as barriers (one near the border with Germany and the other in the centre of Austria). For the latter, solutions will have been proposed.

# LIFE+-Lavant: Habitats network for endangered small fish species



### **Project background**

The Lavant was historically known as the richest fish river of Carinthia – referring to the occurrence of fish species as well as their density. The main reason for this was the high variety of specific river habitats (meanders, gravel banks, canyon courses). Through massive interventions in the water ecology (including straightening of the water course, disconnection of tributaries, reduction of the river width, bed and bank stabilisation, energy generation and inflow of sewage) only a few fish populations are still present today. The remaining fish stocks are bound to a nearly natural river segment: the canyon courses segment above Lavamuend – the "Lower Lavant", a designated Natura 2000 site.

However, low numbers and lack of genetic exchange are placing under long-term threat of extinction the remaining stocks of especially rare species such as the Annex I-listed Danube gudgeon (*Gobio uranocopus*), Danube barbel (*Barbus petenyi*), Streber (*Zingel streber*), Danube roach (*Rutilus virgo*) and Danube whitefin gudgeon (*Romanogobio vladykovi*).

### **Project objectives**

The project's overall aim is to improve the number and size of the highly endangered small fish species populations in the river Lavant: the Danube gudgeon (*Gobio uranocopus*); Danube barbel (*Barbus petenyi*); Streber (*Zingel streber*); Danube roach (*Rutilus virgo*) and Danube whitefin gudgeon (*Romanogobio vladykovi*).

Specifically, the project will target a significant enlargement of the existing Natura 2000 site and the restoration of important water and forest habitats found there, as well as improvements to the river continuum. The aim is to link specific habitats and allow the migration of the small fish species. Another important goal is to inform local people about the LIFE+ project, the target species and the Natura 2000 network.

### Expected results:

- Enlargement of the Natura 2000 site by 30.43 ha (+ 54%);
- Creation of a continuous river section (without barriers) over 21 km in length, to allow the migration of the targeted small fish species;

### Beneficiary:

**Type of beneficiary** Public enterprise

Name of beneficiary Wasserverband Lavant

### Postal address

Blaiken 64 A - 9433 St. Andrä AUSTRIA Phone +43 58 22247 36 Fax +43 58 22247 30 Email siegfried.juri@ktn.gv.at

Name of contact person Siegfried JURI

Duration of project:

51 months (01/10/2011 - 31/12/2015)

# **Total budget in euro:** 3,082,816.00

**EC contribution in euro with %:** 1,541,408.00 (50.00 %)

- Connection and accessibility of four Lavant tributaries;
- Restoration of 5.5 ha of river habitats;
- Restoration of 2.8 ha of Alluvial forests with Alnus glutinosa and Fraxinus excelsior, Alno padion, Alnion incanae and Salicion albae;
- Restoration of 0.1 ha of Natural eutrophic lakes with Magnopotamion or Hydrocharition type vegetation;
- Reintroduction of German tamarisk (*Myricaria germanica*) in the Lavant;
- Creation of a 1.2 km length side-channel, including 575 m of oxbow lakes;
- Purchase of 6.5 ha of land; and
- Lease of 1.2 ha of forest area that will be converted to natural forest, i.e. without exploitation.

# Restoration of natural habitats in the "Ardenne liégeoise" region



### **Project background**

The project covers a 5 739 ha area and 18 Natura 2000 sites. These high plateaux and valleys of the Liege Ardennes are strategically located between two other natural areas with similar ecosystems that have already taken advantage of large LIFE restoration projects (the high Hautes-Fagnes Plateau and the Tailles Plateau).

It is an area of great ecological value, with at least 14 habitats covered by Annex 1 of the Habitats Directive. Some 64% of the project sites are covered by forests (16% deciduous, 39% coniferous, 9% mixed); 17% by partially humid or mountain hay meadows; and 14% by heaths, grasslands, mires and bogs. The main economic activities in the region are forestry, game and tourism.

Some 1 419 ha are occupied by spruce plantations in areas classified as wet soils - including peat, alluvial, wet and very wet soils, as well as spring areas. These are often located in floodplains, which are very important ecological and migratory areas, and are thus candidates for restoration. Moreover, most of the wet open areas in the region are degraded, even in the 755 ha already protected by a Natural Reserve status. They are therefore also candidate areas for restoration actions.

### **Project objectives**

This project aims to restore a range of peaty and wet habitats, and thereby increase and improve the connectivity between peaty and wet habitats in the Ardennes plateau chain. It will complete the restoration of the network of wet habitats, started in 2002 within the framework of five LIFE projects and further reduce the risks associated with fragmentation. The project will tackle the degrading of sites from spruce plantation, the drying of soils and the recolonisation of areas by purple moor grass.

It will eradicate both deciduous and coniferous seedlings on 750 ha and stop natural spruce regeneration on 100 ha. Some 200 ha of spruce plantations will be purchased for restoration, and 250 ha of spruce plantations will be cut and affected to nature conservation, through contracts or natural reserve status.

### **Beneficiary:**

**Type of beneficiary** Regional authority

### Name of beneficiary

Direction générale opérationnelle de l'Agriculture, des Ressources Naturelles et de l'Environnement (DGARNE)

### Postal address

Avenue Prince de Liège, 15 B - 5100 Jambes BELGIUM Phone +32 81 626 438 Fax +32 81 615 727 Email Pierre.Gerard@spw.wallonie.be

Name of contact person Pierre GERARD

**Duration of project:** 84 months (01/01/2012 - 31/12/2018)

**Total budget in euro:** 6,840,350.00

**EC contribution in euro with %:** 3,420,175.00 (50.00 %)

Hydrological restoration of peaty or very wet soil will be facilitated by: ditch blocking (40 km); building small and large dams (2 km); and digging small ponds (2.5 ha). The project will also restore heaths, meadows and grasslands and introduce measures for their long-term management by appropriate and targeted use of sod cutting (15 ha), rotovating (75 ha), mowing (20 ha) and the introduction of cattle grazing in 10 km<sup>2</sup> enclosures. It will also control natural regeneration on 325 ha of deforested areas and restore natural deciduous forest within 20 km<sup>2</sup> of enclosures.

- Restoration of at least 500 ha of open and forest habitats (mainly peaty/wet);
- Improved connectivity between target high plateau habitats;
- Increase in population numbers of key bird species relying on these habitats; and
- Involvement of local farmers and NGOs in longterm management measures.

# Development of the beddings of the electricity transportation network as means of enhancing biodiversity

### Project background

As a transmitter of electricity, Elia's priority is to ensure the security of the electricity network. This sometimes means that forest corridors are created to secure overhead lines. These corridors are currently often "no man's land", without any vegetation or wildlife. However, these same corridors could form an interesting network of ecological corridors.

At present, public and private owners consider these corridors as non-productive forest sites, while the tourism sector denounces their negative impact on the natural beauty of the landscape. At the same time, transmission system operators spend considerable sums maintaining these areas to ensure that there is no vegetation that can hinder the overhead lines. This corridor maintenance does not currently take into account their potential value in terms of biodiversity.

### **Project objectives**

The aim of the ELIA Biodiversity project is to develop innovative techniques for the creation and maintenance of these corridors under overhead lines, allowing the maximisation of their potential benefits for biodiversity. The expected benefits include: the preservation of the natural beauty of the landscape; improved attractiveness to tourists, hunters and local residents; greater acceptance by the general public of line infrastructure in the landscape; and a better public image for the transmission system operator. The new ecological corridors will allow local biodiversity to develop and will help facilitate the movement of species from one natural site to another, which is especially important in the context of climate change.

Specifically, the project aims to restore 130 km of corridors under overhead high voltage lines in Belgium and France. The corridors will be approximately 50 m wide. It will also seek to demonstrate that active management for biodiversity can reduce the costs of securing and maintaining corridors under overhead power lines. The project aims to become an important pilot at European level that will share its experience with other European electricity transmission system operators, representing 300 000 km of potential green corridors. The project deliberately includes project actions in corridors in three regions of France with very diverse climatic conditions, so as to develop several sets of guidelines and good practices that can be shared with other European transmission system operators.



### Beneficiary:

**Type of beneficiary** Small and medium-sized enterprise

**Name of beneficiary** ELIA System Operator S.A.

### Postal address

Boulevard de l'Empereur, 20 B - 1000 Bruxelles BELGIUM Phone +32 84 366074 Fax +32 84 366074 Email gerard.jadoul@gmail.com

Name of contact person Gérard JADOUL

### Duration of project:

60 months (01/09/2011 - 31/08/2016)

**Total budget in euro:** 2,552,302.00

**EC contribution in euro with %:** 1,165,901.00 (45.68 %)

- The restoration of 70 km of corridor in which "second height trees" will be planted, especially local species;
- The creation of 20 ha of orchards dedicated to the conservation of a genetic pool of rustic species and varieties of forest fruit trees;
- Restoration of 20 ha of peat bog and moors;
- The creation of natural pasturages for wildlife;
- The use of a 25 ha area to take advantage of the pre-existent seed bank;
- The creation of 100 ponds;
- The control of invasive species;
- The creation of 15 km of fences and the mowing of over 20 ha;
- The maintenance of dead wood (10 m<sup>3</sup>/ha);
- In France, the enhancement of 7.5 km of forest edges, the restoration of 5 ha of peat bog and wet and dry moors, the creation of 10 ponds, and the erection of 4 km of fence;
- A website and other communication material for the general public; and
- The building of three observation towers for ecotourism.

# Conservation of the Genetic Fund and Restoration of Priority Forest Habitats in Natura 2000 Sites

### **Project background**

Two types of natural forest habitats found in western Bulgaria, identified as a priority for conservation in the EU Habitats Directive, face similar threats and conservation problems. They are are: Pannonian woods with Quercus pubescens and Alluvial forests with Alnus glutinosa and Fraxinus excelsior. In recent decades, vast tracts of these natural forests, rich in biodiversity, have been cut down and replaced with more productive, commercial monocultures of non-native species such as Pinus nigra, Pinus Sylvestris, Gleditschia triacanthos, Robinia pseudoacacia and others. Biodiversity aspects were neglected or underestimated. Two designated Natura 2000 network sites - Plana and Dragoman - situated in low mountainous areas of western Bulgaria, have been selected as target sites for conservation and restoration actions.

### **Project objectives**

The project aims to improve the conservation status of the two priority forest habitats of the Natura 2000 sites of Dragoman and Plana in western Bulgaria: Pannonian woods with *Quercus pubescens*; and Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior*. This will also indirectly benefit the following priority forest habitats: Tilio-Acerion forests of slopes, screes and ravines; Pannonic woods with *Quercus petraea* and *Carpinus betulus*; Euro-Siberian steppic woods with *Quercus spp*; (Sub-)Mediterranean pine forests with endemic black pines; and Endemic forests with *Juniperus spp*.

Another objective is to create the right conditions for the ex-situ conservation and restoration of other deteriorated forest habitats of European importance in Bulgaria, by establishing a gene bank for reproductive material and provision of plants for restoration.

The project will carry out awareness-raising activities among the local and wider general public on the Natura 2000 network and on the need to adapt forest management to factors such as climate change. It will also provide and exchange information on sustainable restoration methods and conservation management issues for the ecosystems concerned.

These goals will be achieved through various actions including: analysis of threats and risk assessment for

# BGNATURAGENEFUND

LIFE10 NAT/BG/000146

### Beneficiary:

Type of beneficiary National authority

Name of beneficiary Forest Seed Control Station

### Postal address

"Iskarsko Shose" Str., 5 BG - 1528 Sofia BULGARIA Phone +359 889 510 763 Fax +359 2 973 11 80 Email svbozhinova@abv.bg

Name of contact person Svilena BOZHINOVA

**Duration of project:** 46 months (01/09/2011 - 30/06/2015)

Total budget in euro: 589,602.00

**EC contribution in euro with %:** 439,602.00 (74.56 %)

the targeted priority forest habitats; establishment of a gene bank; collection of reproductive plant material; and pilot restoration of priority forest habitats.

- A genetic seed bank for tree species represented in seven priority habitats;
- Collection of genetic material and production of seedlings;
- Restored forest habitats 40 ha of Pannonian woods with *Quercus pubescens* and Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior*;
- Raised awareness of different target groups; and
- Expert analysis / risk assessment and proposed measures / management activities for the adaption of priority forest habitats to climate change and the prevention of natural disasters.

# Urgent measures to secure survival of the Egyptian vulture (*Neophron percnopterus*) in Bulgaria and Greece

### **Project background**

Greece and Bulgaria jointly host almost 70% of the Balkan vulture population (62-71 pairs), of which 30-35 pairs are located in Greece and 32-36 in Bulgaria.

Importantly, the project represents one of the last opportunities to prevent the extinction of a surviving subpopulation of the Egyptian vulture (*Neophron percnopterus*) in Northern Bulgaria, which declined rapidly (from 22 pairs in 2003) to just eight pairs in 2010. The extinction of this subpopulation will effectively shift the distribution boundary for the endangered species southwards by some 300 km. Hence, the overall goal of this project is to seek to preserve the northernmost European boundary distribution of the species.

### **Project objectives**

This project will focus on improving the conservation status of the Egyptian vulture (*Neophron percnop-terus*) in Greece and Bulgaria. It will seek to secure the protection of all the remaining pairs found in 15 Natura 2000 sites in Greece and in 12 sites in Bulgaria. These SPAs host 76-93% of the Greek population and over 90% of the Bulgarian one.

The preparatory work, as well as the concrete conservation actions, will be implemented in all SPAs where the species occurs and the results are expected to directly benefit more than 90% of the national populations of both countries.

The actions envisaged by this project address the most relevant threats and problems for the conservation of the species, as identified in the most recent (2008) EU Species Action Plan for the Egyptian vulture. The most important of these are: the high mortality rate caused by poisoning, direct persecution, accidents caused by human infrastructure and contaminated food.

### Expected results:

The project actions will directly address all the recognised threats that are contributing towards the longterm decline of this endangered species in Bulgaria and Greece. The actions are expected to result in the stabilisation of the Egyptian vulture population in the two countries. Additionally, the publication of a 'flyway species action plan', reinforced by an active expert conservation network, will be an important cata-

# LIFE10 NAT/BG/000152 Return of the Neophron

### Beneficiary:

**Type of beneficiary** NGO-Foundation

Name of beneficiary Bulgarian Society for Protection of Birds

### Postal address

Yavorov Complex - Blok 71 - Entrance 4, Ap. 1 BG - 1111 Sofia BULGARIA Phone +359 2 9799 500 Fax +359 2 9799 501 Email nada.tosheva@bspb.org

Name of contact person Nada TOSHEVA

Duration of project:

63 months (01/10/2011 - 31/12/2016)

**Total budget in euro:** 2,625,742.00

**EC contribution in euro with %:** 1,312,871.00 (50.00 %)

lyst for future conservation action outside the EU that will directly benefit the Bulgarian and Greek breeding population. The project is expected to

provide a valuable model for partnerships elsewhere working with migratory species. The following direct results are expected:

- Significant improvements in knowledge of the mortality factors affecting the Balkan breeding population;
- Increased knowledge of the migration routes and wintering areas of the Balkan breeding population via the use of satellite transmitters for monitoring of 40 juvenile and adult vultures;
- Reduced deaths through illegal poison on project Natura 2000 sites;
- Significant amounts of safe food provided through a series of delivery methods;
- Improvements to breeding via supplementary feeding and improved knowledge;
- Reduction of disturbance and direct persecution affecting the Egyptian vulture; and
- Reduced risk of mortality from collision or electrocution.

# Restoration and Management of Oroklini Lake SPA (CY6000010) in Cyprus

### **Project background**

Oroklini Lake is a designated (SPA and SCI) Natura 2000 wetland site in the Larnaka district of Cyprus. It is one of only three natural wetland areas in Cyprus and is an important bird migratory route and stopover place in spring and winter. It is important for its halophytic (salt marsh) vegetation and for a number of wading bird species listed in Annex I of the Birds Directive, including the Black-winged tilt (*Himantopus himantopus*) and the Spur-winged lapwing (*Hoplopterus spinosus*).

The main threats to the site come from human disturbance due to roads, traffic and the presence of people. The lake also dries at certain times, which allows motorists and motorcyclists to enter the site. The water level is dependent on precipitation, as well as groundwater from the catchment area to the north. However, over-extraction of water due to development in the catchment area has also resulted in earlier evaporation during the summer months and longer periods of drought. The impact of the latter is expected to become more severe with climatic changes. Runoff from urban areas to the north also causes risks of flash floods, a breach of the dam, and pollution. Cultivated fields of winter wheat that surround the site constitute a potential source of nitrate and pesticide runoff, which also causes problems for the target bird species.

### **Project objectives**

The project's main objective is to bring the important bird species of the Oroklini Lake site to favourable conservation status. Besides the two target species, the Black-winged stilt and the Spur-winged lapwing, four other Annex I species regularly nest or have nested at the site: Burhinus oedicnemus, Sterna albifrons, Sterna hirundo and Charadrius alexandrinus. The site is also important for 58 Annex I species that visit, or over-winter, and another 36 regularly occurring non-Annex I species. The rare, halophytic vegetation will be monitored and concrete measures will be taken to establish a favourable conservation status. These measures include: fencing to minimise disturbance, planting of natural vegetation, including Tamarix and Salicornia, to improve screening cover for sensitive species; water management; removal of invasive species such as Acacia and Atriplex semibaccata.



### Beneficiary:

Type of beneficiary National authority

Name of beneficiary

Game Fund - Ministry of Interior

### Postal Address

CY - 1453 Nicosia CYPRUS Phone +357 22 86 77 86 Fax +357 22 86 77 80 Email lemesos.thira@cytanet.com.cy

Name of contact person Nikolaos KASSINIS

### Duration of project:

36 months (01/01/2012 - 31/12/2014)

**Total budget in euro:** 797,070.00

**EC contribution in euro with %:** 398,535.00 (50.00 %)

- A target framework in the form of:
- Reference values for achieving a favourable conservation status for the targeted species and for the site;
- A clear management plan for the site;
- Clear management actions to improve conditions within the site for the target species;
- Awareness raising; and
- A commitment and framework for the continuation of the key actions following the end of the project.

Improving the conservation status of the priority habitat type 9560\* (Endemic forests with Juniperus spp.) in Cyprus

### Project background

Endemic forests with Juniperus spp is listed in Annex I of the Habitats Directive as a priority habitat for conservation. In Cyprus there is currently no documented evidence that active conservation measures have ever been implemented for the protection and restoration of this habitat, which is threatened by low natural regeneration, fire, fragmentation, leisure activities, climate change and dust. This is the first project that will target all its known locations in Cyprus (i.e. within three Natura 2000 sites). These include locations at the Troodos site, as well as in another two sites where the habitat has been recently identified. This project will put into practice, test, evaluate and disseminate actions/methodologies that are unfamiliar to the Cypriot geographical, ecological and socio-economical context.

### **Project objectives**

The project's primary aim is to promote and enable the long-term conservation of the endemic forests with Juniperus spp in Cyprus. Specifically, the project will contribute to the consolidation and dissemination of knowledge on the protection, restoration, monitoring and evaluation of this priority habitat in the country. Furthermore, it aims to: (i) understand, quantify and halt the natural and anthropogenic threats that are contributing to its long-term degradation; (ii) design and implement actions for its protection and long-term restoration; and (iii) provide support for better environmental governance in Natura 2000 sites through stakeholder involvement.

### Expected results:

The expected results on a national level will include the establishment and communication of a knowledge base for:

- Plant communities and juniper population composition and structure;
- Anthropogenic threats to the habitat's ecological conditions;
- Improved participation and governance methods for habitat conservation; and
- Effective monitoring and conservation methods through the drafting of habitat protection and restoration guidelines and monitoring protocols.



### **Beneficiary:**

Type of beneficiary National authority

### Name of beneficiary

Department of Forests, Ministry of Agriculture, Natural Resources & Environment

### Postal Address

Louki Akrita Street CY - 1414 Nicosia CYPRUS Phone +357 22805510 Fax +357 22781419 Email ttsintides@fd.moa.gov.cy

**Name of contact person** Takis TSINTIDES

### Duration of project:

42 months (01/01/2012 - 30/06/2015)

**Total budget in euro:** 1,183,922.00

**EC contribution in euro with %:** 886,338.00 (74.86 %)

The improved conservation status of the habitat and halting of the threats that it faces will be achieved through a series of actions resulting in:

- Updated habitat location, mapping, demarcation and protection of the habitat in Cyprus;
- Enhanced regeneration of the juniper species;
- In-situ and ex-situ conservation of Juniperus spp and habitat keystone species; and
- Minimisation of threats to and negative impacts on all habitats.

Additionally, the long term sustainability of the project results will be ensured through the creation of European and national networks, as well as consideration of activities after LIFE funding has ended.

# Restoring Sølsted Mose a contribution to the network of Danish raised bogs (7110\*) in favourable conservation status

### **Project background**

Sølsted Mose is an area of raised bogs that is threatened by the increasing growth of trees. Together with nearby Kongens Mose and Kogsbøl/Skast Mose, the area is one of the few raised bogs located outside of the former Ice Age-influenced border. Active raised bogs can no longer be found in the area because of drainage.

According to Danish national assessments, the conservation status of raised bog habitat is in danger of further deterioration in the coming years. The restoration of this habitat type will form the focus of management plans and action plans for the Natura 2000 sites in Denmark in the period 2010-2015.

### **Project objectives**

This project targets the restoration of raised bog habitat, which is listed in Annex I of the Habitats Directive, and the management of the Annex II-listed European weatherfish (*Misgurnus fossilis*) within the Sølsted Mose habitat area in Denmark. The main objective is to contribute to the favourable conservation status of raised bog habitat through land purchase and other forms of compensation to private landowners, followed by conservation measures (improved hydrology, vegetation clearings, decreased nutrient availability) and the development of drained semi-natural Annex I-habitat types. These conservation measures are in line with the Natura 2000 planning process currently taking place in Denmark.

### Expected results:

The project is expected to:

- Improve the hydrology of 198.5 ha by increasing the groundwater level;
- Increase the non-forested area by 50 ha;
- Develop raised bog on 155 ha within the pSCI;
- Develop raised bog by actively grafting 10 spots with Spaghnum sp.;
- Protect the raised bog from nutrient input by maintaining buffer zones (forest-like vegetation, meadows and wetlands on 43 ha) bordering the project area;
- Manage 120 ha within the pSCI by grazing to avoid overgrowth of the restored raised bog surface with shrubs and trees;

# LIFE10 NAT/DK/000099 SMOOTH



### Beneficiary:

**Type of beneficiary** Local authority

Name of beneficiary Municipality of Tønder

### Postal Address

Kongevej 57 DK - 6270 Tønder DENMARK Phone +45 74 929279 Fax +45 74 929678 Email oot@toender.dk

Name of contact person Ole OTTOSEN

### Duration of project:

58 months (01/09/2011 - 30/06/2016)

# **Total budget in euro:** 1,941,658.00

**EC contribution in euro with %:** 1,164,994.00 (60.00 %)

- Improve carbon storage as a result of increased amounts of raised bog biomass;
- Maintain 2.8 km of paths with boardwalks, six 'info-tables' and an information leaflet; and
- Increase knowledge about the environmental needs of European weatherfish and ensure that the present population is maintained (or even increased) during the restoration of the raised bog.

# Restoration of active raised bog -Lille Vildmose



LIFE10 NAT/DK/000102

### **Project background**

Active raised bogs are a priority habitat for conservation and are included in Annex I of the Habitats Directive. This habitat has suffered a steep decline in Europe in recent years. In Lille Vildmose (and in Denmark overall) active raised bogs have an unfavourable conservation status. This is mainly due to drainage, the invasion of trees, in particular birch, and deposition of airborne nitrogen from agricultural use and long-distance transport.

### **Project objectives**

The objective of the project is to restore the largest remaining raised bog in lowland northwest Europe, Lille Vildmose. The project will improve the conservation status of this priority habitat by facilitating re-growth of sphagnum moss and raising the water-table in areas of degraded raised bogs or in areas where peat has been excavated. These actions will result in a significant enlargement of the habitat area. Other wetland habitat types, such as natural dystrophic lakes and ponds, transition mires, and quaking bogs will also increase in size and number. Bog woodland coverage will decrease in areas selected for active raised bog restoration but will increase in other areas thanks to restoration – many areas are currently used for peat extraction.

### Expected results:

- Restoration and improved conservation status of raised bogs habitats, in line with the national objective for this habitat type;
- Establishment of larger areas and more sites with natural dystrophic lakes and ponds, transition mires and quaking bogs;
- Improvement of the living conditions for the Annex I-listed species, such as black stork, wood sandpiper, hen harrier, white-tailed eagle, crane and shorteared owl, as a result of the significant enlargement of wetland areas, including lakes;
- Enhancement of the ecological coherence and green infrastructure, resulting in improved conservation status of the entire Natura 2000 site; and
- Increased local, regional and national understanding of and interest in raised bog ecology and conservation. The overall Natura 2000 site will, after the finalisation of the project measures, be one of

### Beneficiary:

Type of beneficiary National authority

Name of beneficiary Danish Nature Agency

### Postal Address

Haraldsgade 53 DK - 2100 Copenhagen ø DENMARK Phone +45 98 39 1014 Fax +45 98 39 2714 Email skn@sns.dk

Name of contact person Søren KJÆR

### Duration of project:

64 months (01/09/2011 - 31/12/2016)

# **Total budget in euro:** 5,592,528.00

**EC contribution in euro with %:** 4,194,396.00 (75.00 %)

the largest and most coherent nature sites in Denmark, presenting a unique opportunity to promote awareness of this unique type of natural wetland.

# Restoration and Public Access of Urban Coastal Meadow Complex in Parnu Town



### **Project background**

Boreal coastal meadow ecosystems are spread all over the western coastline of Estonia, including more than 250 ha in the popular seaside resort of Pärnu (some 500 000 visitors per year). Management of this Annex I-listed habitat is extremely challenging in an area with so many visitors.

The experience gained from previous LIFE projects shows that the most cost-effective action is grazing, combined with reed cutting. Pärnu's coastal meadows became overgrown with reed when grazing was discontinued in the '70s and '80s. It is necessary, therefore, to reintroduce grazing, even though this will be challenging in such an urban environment. The coastal meadows are located very close to the public beach as well as the centre of the resort.

### **Project objectives**

The overall goal of the project is to improve the conservation status of the coastal meadow and costal lagoon habitats in Pärnu, as well as the species profile of these habitats. This will be achieved by managing Pärnu's coastal habitats and raising awareness among local residents and visitors about the ecological value of the site.

Specifically, the project aims to:

Improve the favourable conservation status of the Pärnu coastal meadow nature reserve by:

- Cleaning unwanted vegetation (i.e. reed and brushwood) from the coastal meadow habitat;
- Introducing grazing by building fences and other infrastructure necessary for grazing; and
- · Restoring the natural hydrology of coastal lagoons;

Raise awareness of the sites' ecological value by:

- Establishing visitor infrastructure (trails, observation platforms etc.);
- Raising public awareness of the value of and threats to the coastal lagoon habitats; and
- Educating and involving local inhabitants in the management of the habitats.

Encourage similar action in other areas by:

- Raising awareness among decision makes in other similar areas; and
- Developing management recommendations for urban coastal pastures.

### Beneficiary:

Type of beneficiary National authority

Name of beneficiary Environmental Board

### Postal Address

Narva mnt 7A EE - 15172 Tallinn ESTONIA Phone +372 53411962 Fax +372 6262928 Email murel.merivee@keskonnaamet.ee

Name of contact person Murel MERIVEE

Duration of project:

60 months (01/01/2012 - 31/12/2016)

**Total budget in euro:** 1,138,413.00

**EC contribution in euro with %:** 853,809.00 (75.00 %)

- Reeds and bushes cleared from 220 ha of coastal meadow habitat;
- 50 ha of coastal lagoons restored;
- Grazing infrastructure established (two shelters, fences);
- A species action plan developed and implemented;
- Closure of access to motorised vehicles (in two places) and the risk of trampling removed;
- A nature trail developed (3 km), with an observation platform and information panels;
- The successful completion of a publicity campaign on the values of Pärnu coastal meadow (events, printed materials, nature tours etc.);
- Best practice guidelines printed and distributed (500 copies);
- An international conference to exchange experience of urban semi-natural habitat management, especially in coastal areas; and
- Study trips for decision-makers from similar areas.

# Increasing the ecological connections and coherence of the Natura 2000 network in South-west Lapland

### Project background

The project area includes 32 Natura 2000 network sites (over a total area of 363 000 ha) located in south-western Lapland. The area is extremely valuable and vulnerable due to its unique biodiversity and rare limestone soil. Areas outside the Natura 2000 sites are mostly commercial forests, where mining districts and claims, peat industry and building also take place. This includes some small conservation areas protected by the Finnish Nature Conservation Act and Forest Law. Some state-owned areas are protected by the decision of the Forest and Park Service of Finland. The land use of the project area (i.e. areas outside the Natura 2000 sites) is diverse, but approximately 90% is used for forestry and wood production.

### **Project objectives**

The project's overall objective is to increase ecological connectivity and establish a green infrastructure that will improve the vitality and coherence of the Natura 2000 network in south-western Lapland and raise the biodiversity of the forests in the project area. A series of actions will target the species and habitats of Community importance within the project area, either to improve and restore their conservation status or, in some cases, to maintain a 'favourable' conservation status.

Another objective is to increase the biodiversity in the commercial forests and to protect important areas around and between the Natura 2000 sites. The project will specifically target three rare, forest-dependent species: the fairy slipper (*Calypso bulbosa*), the Siberian jay (Perisoreus infaustus) and Aspen polypore (Polyporus pseudobetulinus). These are all important indicator species of the good conditions of the respective forest/mires' habitats and will benefit from conservation actions in areas where their numbers are in decline.

A further goal is to develop the functional co-operation between different authorities concerning voluntary nature and forest protection. The project will also improve the networking of the forest owners in matters concerning the management of biodiversity and the natural and recreational values of their forests.



### Beneficiary:

**Type of beneficiary** Development agency

### Name of beneficiary

Centre of Economic Development - Transport and the Environment for Lapland

### Postal address

Hallituskatu 58060 FIN - 96101 Rovaniemi FINLAND Phone +358 20 4906700 Fax +358 16 310340 Email paivi.lundvall@ely-keskus.fi noora.raasakka@ely-keskus.fi kirjaamo.lappi@ely-keskus.fi

Name of contact person

Matti DEPOLA

### Duration of project:

72 months (01/01/2012 - 31/12/2017)

**Total budget in euro:** 5,110,246.00

**EC contribution in euro with %:** 2,555,123.00 (50.00 %)

Conservation actions are expected to result in:

- Protection agreements over 2 800 ha; and
- Restoration actions in the Natura 2000 sites (forest restoration on 50 ha; mire restoration actions on 120 ha).

Restoration and nature management practices outside the Natura 2000 sites are expected to result in:

- Mire restoration over a total of 600 ha;
- Production of dead wood over a total of 200 ha;
- Production of charred and burned wood on 150 ha;
- Nature management plans over a total of 5 000 ha; and
- Green infrastructure and ecological connections across some 250 km in total.

# Improving the Conservation Status of Species-rich Habitats



### **Project background**

One of the main threats to natural habitats in Finland is the drastic change in forests caused by modern forestry management practices. According to the Finnish assessment of the conservation status of the habitats of the Habitats Directive, 70% of forest habitat types are threatened. Most of the herb-rich forest habitat types were evaluated as threatened, with the most critically threatened types being the herb-rich forests with different broad-leaved trees. Many of the threatened species in Finland (37%) are primarily associated with forest habitats, particularly herb-rich woodland and oldgrowth forest habitats.

Another threat to Finnish habitats and species comes from the intensification of agriculture and the abandonment of production in less productive areas. Some 28% of the threatened species typically live in traditional farmland habitats Due to abandonment, these species-rich habitats have widely become overgrown and many of their characteristic species are now seriously threatened.

Today, there are some 40 000 ha of valuable semi-natural biotopes left, of which 30 000 are managed to maintain their biological value. However, the present coverage of semi-natural grasslands is far from sufficient to guarantee adequate conservation status.

### **Project objectives**

The overall objective of the "Species-rich LIFE" project is to improve the conservation status of 19 Annex I-listed habitats of the Habitats Directive whose conservation status was assessed as 'unfavourable-bad' or 'unfavourable inadequate' in the Finnish country report on Habitats Directive Article 17 Reporting (period 2001-06).

Target habitats for restoration and management measures of the project include several priority habitats: coastal meadows, various dry meadow and grassland types (and western taiga and deciduous forest types). Moreover, other Natura 2000 habitats are also targeted, i.e. heaths and scrubs, grasslands, bogs and fens, calcareous rocks (and western taiga and deciduous forest types).

Furthermore, several Birds Directive or Habitats Directive species found in these habitats will be concurrently targeted by project actions. In total, the 59 Natura 2000 areas included in the project cover 466 951 ha. Concrete conservation actions will be carried out on 936 ha,

### Beneficiary:

Type of beneficiary National authority

Name of beneficiary Natural Heritage Services of Metsähallitus

### Postal address

Vernissakatu 494 FIN - 01301 Vantaa FINLAND Phone +358 205 645068 Fax +358 205 645050 Email Jussi.Paivinen@metsa.fi

Name of contact person Jussi PÄIVINEN

**Duration of project:** 60 months (01/09/2011- 31/08/2016)

**Total budget in euro:** 3,654,510.00

**EC contribution in euro with %:** 1,827,255.00 (50.00 %)

restoration action planning covers 678 ha and management planning 4 167 ha.

- A species inventory will be conducted in 28 project sites. This will mainly focus on poorly known taxa (e.g. Fungi, Coleoptera, Polypores, Mollusca) and on the sites where existing information indicates probable occurrence of Birds or Habitat Directive species or other threatened species;
- A cultural heritage site inventory will be conducted in 33 project sites. This will increase understanding of how the characteristics of the biotopes have been influenced by early land-use;
- Information from these inventories will be used in the preparation of a detailed restoration action plan for carrying out concrete conservation actions at 38 restoration sites (during the planning process the restoration actions will be prioritized at the landscape level); and
- Management plans will be drawn up for four Natura 2000 sites. These plans will cover 2 596 ha and 4 328 ha, respectively.

# LIFE ecological continuity, management of catchment area and associated patrimonial fauna

### **Project background**

Good water management is necessary for human development to be sustainable: factors affecting rivers have led to the disappearance or decline of important species and to a loss of biodiversity. Water management, in particular, requires the protection and conservation of species that are reliable indicators of the ecological status of rivers. Thus, three species, identified as priority for conservation by the Habitats Directive, are targeted by this project: the white-clawed crayfish (Austropotamobius pallipes), freshwater pearl mussel (Margaritifera margaritifera), and the thick shelled river mussel (Unio crassus). Other important species are also concerned: Brook lamprey (Lampetra planeri), European bullhead (Cottus gobio), and, indirectly, brown trout (Salmo trutta fario). All of these species, which are in significant decline, are very sensitive to physical modifications of their environment and/or to water quality.

This project applies at the catchment area level the experience acquired from a previous project, LIFE04 NAT/FR/000082 "Headwater streams and associated faunistic heritage".

### **Project objectives**

The project objectives are based around four main axes: restoration works on degraded habitats; changes in agro-silvicultural practices along the banks; removing obstacles to improve connectivity; and awareness-raising. The restoration actions will involve the following:

- Rehabilitation of 5 km of streams, removing 25 small and seven large obstacles;
- Placing 10.2 km of fences, 30 fords or watering places and 16 permanent crossing points to protect the river banks from cattle and farming and forestry vehicles;
- Removing conifers along 10 km of banks (20 ha) and replanting 4.5 km with natural vegetation;
- Removing 7 km of Japanese knotweed;
- Removing invasive alien crayfish; and
- Converting 15 ponds to limit diffuse pollution.

The awareness raising work will focus on site managers, the general public, school children and elected representatives.



### Beneficiary:

**Type of beneficiary** Park-Reserve authority

**Name of beneficiary** Syndicat Mixte du Parc Naturel régional du Morvan

### Postal address

 Maison du Parc

 F - 58230 Saint-Brisson

 FRANCE

 Phone
 +33 3 86 78 79 28

 Fax
 +33 3 86 78 74 22

 Email
 nicolas.galmiche@parcdumorvan.org

Name of contact person Nicolas GALMICHE

### Duration of project:

48 months (01/09/2011 - 01/09/2015)

**Total budget in euro:** 3,197,234.00

**EC contribution in euro with %:** 1,598,617.00 (50.00 %)

- The main expected result is an increase in the populations of Austropotamobius pallipes, Margaritifera margaritifera, Unio Crassus, Lampetra planeri, and Cottus gobio. Besides protecting these species, which are in decline, a natural recolonisation will help to prove that their natural habitats were successfully rehabilitated. This rehabilitation will also indirectly benefit all species of aquatic flora and fauna within the streams;
- The efficiency of best practices will be demonstrated at the scale of the catchment area; and
- It is expected that the large scale of the project will help to better raise awareness among local stakeholders and the general public than the isolated actions of the past.

# Conservation of major breeding sites and implementation of innovative and demonstrative actions for the French Corncrake

### Project background

The corncrake (*Crex crex*) is listed as a priority species for conservation in the Birds Directive. In the mid 1970s, the French corncrake population was estimated at 2 800 singing males; by 2009, the population was estimated to be just 550 singing males.

The conservation measures in the national restoration plan for the species drafted by the LPO (2005-2009) focus on the maintenance of wet alluvial grasslands, implemented through CAP agri-environmental measures. However, it has become clear that for the agri-environmental measures to be effective, they also need to be associated with strong habitat conservation actions, particularly land acquisition.

However, the purchase of land is not enough if these sites are in areas where late mowing is not applied, or where there is a prevalence of arable crops. In areas where the application of the species restoration plan has not been able to persuade all the farmers to participate in the measures, or to acquire the grasslands, the decline of the corncrake has continued.

### **Project objectives**

The project's main objective is to implement actions urgently required in order to conserve and restore the French breeding population of the corncrake and the maintenance of its habitats. Specific actions will include acquisition of suitable grassland areas; implementation of concrete management and restoration actions; protection of breeding and fledgling birds; proposal of improvements to agri-environmental measures to make them more attractive to farmers; and raise awareness of the corncrake among all stakeholders.

### Expected results:

- Identification and acquisition of 60 ha of grassland that are favourable for corncrakes;
- Implementation of management agreements over 700 ha of natural grassland;
- Legal tools for the designation of some 1 300 ha (regional and local nature reserves);
- Conversion of 18 ha of old poplar into grassland;
- Maintenance of 2 ha of 'refuge' zones for young birds under threat from mowing;
- Compensation payments for right of use over 80 ha;
- Protection of the young birds by locating their 'ref-



### Beneficiary:

**Type of beneficiary** NGO-Foundation

**Name of beneficiary** Ligue pour la Protection des Oiseaux

### Postal address

Fonderies Royales BP 90263 F - 17305 Rochefort Cedex FRANCE Phone +33 546 82 12 34 Fax +33 546 83 95 86 Email thierry.micol@lpo.fr

Name of contact person Thierry MICOL

### Duration of project:

52 months (01/09/2011 - 31/12/2015)

**Total budget in euro:** 1,213,656.00

**EC contribution in euro with %:** 606,828.00 (50.00 %)

uge' habitats after mowing, and by placing radiotransmitters on up to 70 birds: mapping of the sites used after mowing, and measuring the threats to which corncrakes are exposed;

- Concrete proposals to make the agri-environmental measures more attractive to farmers and more effective for the conservation of corncrakes;
- A standardised framework for a database for the environmental and technical assessment of breeding sites for corncrakes. This should help with the monitoring of the evolution of agri-environmental measures: location, surface area, level of contract;
- Conservation of breeding habitats by increasing knowledge about changes in areas with grassland cover in relation to the agricultural practices (analysis of more than 200 land units, equivalent to a total area of 500 ha of natural grassland, with or without an agri-environmental contract).
- Annual monitoring of the breeding population of corncrakes in France; and
- Various dissemination and communication material.

# Biodiversity Survey of Fish Post-Larvae in the Western Mediterranean Sea

### **Project background**

According to assessments of the Census of Marine Life published in August 2010, the decrease of marine biodiversity is particularly dramatic in the Mediterranean Sea. The causes of biodiversity loss are multiple, but mainly due to human activities. These include: habitat degradation, overexploitation of natural resources, climate change, invasive species and pollution.

### **Project objectives**

The SUBLIMO LIFE+ project proposes a new approach to analysing, monitoring and reducing the loss of marine biodiversity. It will seek to identify and estimate the abundance of coastal fish species that return to colonise coastal habitats and renew the local population.

One of the main goals is to analyse biodiversity at the post-larvae stage. In the fish lifecycle, the arrival and settlement of pelagically- (open ocean) spawned postlarvae in their permanent habitat is a critical phase, during which over 90% of deaths are due to predation and habitat degradation. The innovative technique proposed by the project is to catch a small number of endangered or over-exploited fish species at the postlarvae stage. The selected species will then be reared at two research centres - one in the Gulf of Lion and the other in Corsica. A key objective is to conserve their natural gene diversity. A few months after their ex-situ development, the tank-reared juveniles will be reintroduced into micro-habitats (such as small artificial reefs) to reduce mortality. This will reinforce the populations of endangered or exploited species.

### Expected results:

• The first results relate to the inventory of post-larvae biodiversity. This will feature information on the dynamics of species (e.g. winter/spring reproduction) and will assess the level of species' vulnerability to natural and anthropic pressures. The resulting atlas and database will be produced in both paper and electronic format in order to allow dissemination via the Internet. Both reference sources are targeted at scientists and managers, to be used for the evaluation of the biodiversity of their respective sites. A true distribution map of post-larvae biodiversity will be produced with the data from all the sites. The abiotic (salinity, etc.) and biotic parameters list will allow the definition of the environmental conditions of the post-larvae;



### Beneficiary:

**Type of beneficiary** Research institution

### Name of beneficiary

Centre National de la Recherche Scientifique

### Postal address

3 rue Michel-Ange F - 75794 Paris Cedex 5 FRANCE Phone +33 4 68 66 21 95 Fax +33 4 68 50 36 86 Email lenfant@univ-perp.fr

**Name of contact person** Philippe LENFANT

### Duration of project:

40 months (01/12/2011- 01/04/2015)

# **Total budget in euro:** 1,947,590.00

**EC contribution in euro with %:** 964,252.00 (49.51 %)

- A restocking phase will commence after the rearing phase involving all captured species. Tagging and monitoring will be carried out on (i) endemic species and (ii) exploited species. This will allow for the estimation of survival rates as well as for an assessment of the restocked fishes' interactions with existing species. The threat from non-native invasive species will also be assessed, including an estimation of their dispersal; and
- A study of management requirements will be carried out based on reports from working groups, so as to promote suitable solutions for replenishments. The project will organise the exchange of knowledge and experiences between various partners in the Western Mediterranean. Significant dissemination activities are also envisaged, with the organisation of a workshop and the production of publications on the project's methodological approach, the biodiversity of post-larvae, the lifecycle of the species, and biodiversity management.

# Habitat improvement for endangered animals and plants in the NATURA 2000 areas of Stromberg, Heckengäu and Schönbuch

### Project background

The project area focuses on Natura 2000 sites that cover 234  $\rm km^2$  and extend across the rural districts of Böblingen, Calw, Enzkreis and Ludwigsburg. The sites are located between the large natural landscape areas of the northern Black Forest, Swabian Alb and Odenwald.

### **Project objectives**

The project's overall objective is to improve the conservation status of the rare or endangered animal and plant species found in the Natura 2000 sites of Stromberg, Heckengäu and Schönbuch.

Specific goals are to:

- Improve and extend the endangered open landscape habitat types: *Juniperus communis* formations on heaths or calcareous grasslands; semi-natural dry grasslands and scrubland facies on calcareous substrates partly rich in orchids (high priority); lowland hay meadows; and as well as calcareous rocky slopes with chasmophytic vegetation; partly in combination with habitat optimisation for species under the Birds and Habitats Directive (including smooth snake (*Coronella austriaca*), and sand lizard (*Lacerta agilis*);
- Create suitable conditions to support the habitat type, Oligotrophic to mesotrophic standing with vegetation of the *Littorelletea uniflorae*;
- Create high-priority, alluvial forests with *Alnus glutinosa* and *Fraxinus*;
- Create and improve a network of habitats for the Annex II amphibian species, yellow-bellied toad (Bombina variegata) and crested newt (Triturus cristatus);
- Construct hibernation sites that will benefit a range of Annex II and Annex IV listed bat species and enhance knowledge of those species within the Schönbuch;
- Improve habitats to increase the occurrence of the rare large blue (*Maculinea nausithous*) and scarce large blue (*Maculinea teleius*) butterflies; and
- Improve the open orchard areas of the Stromberg and the hillsides of the Schönbuch as habitats for species listed in the Birds Directive.

### Expected results:

 Some 60 ha of new target habitat areas and the optimisation of semi-natural dry grasslands and scrubland facies of calcarous substrates and lowland hay meadows along hedges on a total area of c.10 km;



### Beneficiary:

**Type of beneficiary** Local authority

Name of beneficiary Landratsamt Böblingen

### Postal Address

Parkstraße 16 D - 71034 Böblingen GERMANY Phone +49 7031 6631276 Fax +49 7031 6631963 Email s.zenger@lrabb.de

**Name of contact person** Siegfried ZENGER

**Duration of project:** 60 months (01/09/2011 - 31/08/2016)

**Total budget in euro:** 1,819,460.00

**EC contribution in euro with %:** 909,730.00 (50.00 %)

- Initial management of succession areas of 59 ha for bird species, nature-conserving pruning of 50 fruit trees and training of LOGL-certified fruit tree managers;
- The training of 20 yellow-bellied toad specialists, the transfer of best practice from other LIFE projects, and the creation of spawning grounds at 30 locations;
- The creation of a 1 500 m<sup>2</sup> pond for the crested newt and for the habitat, Oligotrophic to mesotrophic standing with vegetation of the *Littorelletea uniflorae*, and the securing of spawning grounds;
- Improved knowledge of bat species in the Schönbuch, the extension of measures to other forest areas (multiplier effect), and the creation of two hibernation sites within the region;
- The creation of at least 0.5 ha of alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* and the promotion of dynamic river and floodplain development on the Nagold; and
- Meadow management contracts for at least 5 ha, benefiting the dusky large blue and scarce large blue butterflies.

# Conservation, regeneration and development of matt-grass meadows in the highlands of the Eifel in North Rhine-Westphalia

### Project background

Over the centuries the characteristic landscape of North-Rhine-Westphalia was formed by very extensive sheep and cattle grazing and extensive hay meadows. Species-rich matt-grass (Nardus) grasslands are special grasslands that have evolved from traditional land use practices on acid soils. However, these types of grassland are in rapid decline as a result of afforestation and tree plantations, abandonment of cultivation, nutrient enrichment and ploughing. Nardus grasslands are considered priority habitats for conservation under the EU Habitats Directive. This habitat type is often found growing in areas alongside heathland, Molinia meadows and other special grasslands.

### **Project objectives**

In the Eifel highlands of the county of Euskirchen, some small sections of those vulnerable grasslands still exist today. Protected by nature conservation contracts, they are currently classified as 'vulnerable' because of their degraded conservation status. Thus, the project's main aims are the large-scale restoration of this rare and endangered habitat and the creation of a complex of interconnected Nardus grassland areas over a total area of more than 90 ha across three Natura 2000 sites. It is expected that the connectivity measures will encourage the regeneration and restoration of these rare grasslands in the highlands of the Eifel far beyond their local scope and scale.

Specific objectives for the three Natura 2000 sites (Sistig in the municipality of Kall, the forests of Baasem in the municipality of Dahlem, and the valley of Manscheid and Paulushof in the municipality of Hellenthal) are:

- The regeneration and restoration of Nardus grasslands and improvements to the characteristic species composition;
- To initiate and demonstrate suitable forms of sustainable land use;
- To raise awareness among local communities of suitable land use practices in favour of the valuable grasslands; and
- To encourage acceptance and support for the Natura 2000 network.

The proposed actions will include: the preparation of a detailed management plan; deforestation, shrub clear-



### Beneficiary:

**Type of beneficiary** NGO-Foundation

**Name of beneficiary** Biologische Station im Kreis Euskirchen e.V.

### Postal Address

Steinfelder Str. 10 D - 53947 Nettersheim GERMANY Phone +49 2486 9507 12 Fax +49 2486 950730 Email d.pasch@biostationeuskirchen.de

Name of contact person Dieter PASCH

**Duration of project:** 60 months (01/10/2011 - 30/09/2016)

**Total budget in euro:** 2,601,342.00

**EC contribution in euro with %:** 1,951,006.00 (75.00 %)

ance and removal of drainage systems; re-routing or closure of forest roads in sensitive areas; reintroduction of Nardus grasslands by seed-rich hay transfer; grassland management by mowing and grazing; monitoring; and public relations and awareness-raising. Since the project's success is dependent on the acceptance and support of the public and stakeholders, including land owners, special attention will be paid to the awareness-raising issues.

- Restoration or regeneration of 90 ha of Nardus grasslands in the highlands of the Eifel;
- An improvement in the conservation status and survival prospects of the grassland type and associated rare and endangered species;
- Creation of a sustainable habitat network of interconnected Nardus grassland sites; and
- Scientific surveys/research and monitoring

# Dry, calcareous habitats in the cultural landscape of Höxter



### **Project background**

Dry, semi-natural habitats are among the most speciesrich habitat types of Central Europe. In north-west Germany these dry, calcareous grasslands occur primarily in the Weser Uplands (Weserbergland), a low mountain range, the location of the Natura 2000 sites targeted by this project. This is an area where plants with Atlantic, Continental and Mediterranean distribution converge in a unique combination.

Other valuable habitat types occur in close vicinity: lowland hay meadows, rupicolous calcareous grasslands, calcareous rocky slopes with chasmophytic vegetation, calcareous scree of hill and montane levels and limestone beech forests. For most of these habitat types the conservation status for the continental region of Germany is unfavourable.

### **Project objectives**

The project's overall aim is to improve the conservation status and coherence of habitat types and species found in the Natura 2000 sites located in the Weser Uplands. Since most of the main important habitats of the region are to be targeted by the project, it offers the chance of sustainable conservation over the entire region (Lower Saxony, Hesse, and North Rhine-Westphalia).

### Expected results:

- The proposed management measures for the seminatural dry grasslands and the accompanying woodlands and shrubland will greatly enhance the habitat quality and thus species diversity. The aim is to create 15 ha of new semi-natural dry grasslands, following the removal of trees and shrubs;
- Other deliverables include the improvement of conservation status and the coherence of these often isolated Natura 2000 sites. This will facilitate their sustainable management. For species susceptible to the effects of climate change, suitable alternative habitats will also be developed;
- The rejuvenation of old juniper heaths and their enlargement by some 4 ha through management measures will secure a favourable conservation status for the project area's Juniperus communis formations on heaths or calcareous grasslands;
- The management of the lowland hay meadows in the project area will lead to a favourable conservation status, while increasing its area by some 13 ha. The meadows, which are closely related to the seminatural dry grasslands, constitute important stepping

### Beneficiary:

Type of beneficiary Local authority

Name of beneficiary Kreis Höxter

### Postal Address

Moltkestr. 12 DE - 37671 Höxter GERMANY Phone +49 5271 9654000 Fax +49 5271 9654999 Email m.werner@kreis-hoexter.de

Name of contact person Michael WERNER

Duration of project:

60 months (01/09/2011 - 30/08/2016)

**Total budget in euro:** 1,099,795.00

**EC contribution in euro with %:** 580,361.00 (52.77 %)

stones towards the establishment of a network of calcareous dry habitats of the region;

- Habitat quality of rupicolous calcarerous grasslands, calcareous rocky slopes with chasmophytic vegetation, and calcareous scree of hill and montane levels will also be considerably improved on an area of 2.7 ha. Furthermore, the conservation status of limestone beech forests in the project area will improve. Through the removal of inappropriate species, the total area will be enlarged by approximately 4.8 ha;
- The population of lady's slipper orchid will be enhanced by the propagation of 320 individuals at 17 different sites. Thus the threat to the population of the Weser Uplands from thefts will be significantly reduced; and
- Other species, including the smooth snake, sand lizard and large blue butterfly, will also benefit from the establishment of a coherent network of habitats of suitable size. It is also hoped that the stag beetle and the Birds Directive-listed species, red-backed shrike and grey-headed woodpecker, all of which have important populations in the project area, will indirectly benefit from the proposed management measures of the target habitats and species.

### Rur and Kall – fluvial habitats



### **Project background**

The project area comprises the Natura 2000 sites, Kalltal und Nebentäler and Ruraue from Heimbach to Obermaubach. This area makes up a significant part of the largest river basin of the Northern Eifel. The two Natura 2000 sites cover a total area of 883 ha. The greater part of the area consists of water courses and alluvial meadows.

Two more Natura 2000 sites are located in the immediate vicinity. These are the Rurtal from Obermaubach to Linnich and the major part of the rocky slopes in the Rur Valley, which includes the bird protection area, Buntsandsteinfelsen im Rurtal. The project actions will also have a positive effect on these areas.

### **Project objectives**

The project aims to carry out improvements to the Kalltal and Ruraue Natura 2000 sites. Habitat improvement measures are intended to qualitatively enhance the alluvial meadow landscapes and water courses.

Conservation measures will promote the return or an increase in the density of protected habitats and species in the mid- and long-term, thereby helping to improve their conservation status.

Specific objectives include:

- The construction and restoration of eutrophic water bodies and oxbow lakes;
- Improving the linear, ecological passage and the natural dynamism of the water courses, especially with regard to conservation efforts for migrating fish species;
- Reducing sediment inflow, thereby optimising fish spawning grounds and increasing species variety;
- The development, expansion and optimisation of natural woodland and open countryside habitats of the alluvial plain;
- Enhancement of the habitat of the Violet copper (*Lycaena helle*) an excellent indicatory species for fallow humid meadow habitat;
- Improving the living conditions and conservation status of wildlife species deserving protection, especially species covered by the Birds and the Habitats Directives in the Natura 2000 sites (including bats, Atlantic salmon and black stork).

### Beneficiary:

**Type of beneficiary** NGO-Foundation

Name of beneficiary Biologische Station im Kreis Düren e.V.

### Postal Address

Zerkallerstr. 5 D - 52385 Nideggen GERMANY Phone +49 2427 949 870 Fax +49 2427 949 8722 Email info@biostation-dueren.de

Name of contact person Heidrun DÜSSEL-SIEBERT

### Duration of project:

60 months (01/01/2012 - 31/12/2016)

**Total budget in euro:** 2,846,217.00

**EC contribution in euro with %:** 1,423,108.00 (50.00 %)

### Expected results:

The restoration and optimisation of eutrophic water bodies in the alluvial plain will enlarge this sensitive and endangered habitat type (3150) to more than 10 000 m<sup>2</sup> – an increase of more than 100% in the area of this habitat in the Eifel region. In addition to some 35 km of water courses, around 13 ha of natural woodland and open countryside will also be improved. This will upgrade conditions for the targeted Natura 2000 species and habitats and help achieve their favourable conservation status. The project measures will also lead to a stabilisation and increase in the occurrence of the Violet copper (1067).

After completion of the measures, an area of 8.1 ha in the alluvial plain, springs and bog land areas will have been cleared of Norway spruce (*Picea abies*) and other non-native conifers. This will enable the re-establishment of native, species-rich biotopes (for the most part woodland habitats) in accordance with Annex I of the Habitats Directive. The project will form the basis for the development and long-term preservation of natural habitats with their associated biocoenoses.

# Acidophilous oak woods with bogs and heaths



### Project background

The aim of the proposed LIFE+ project is to improve the conservation status of habitats listed in Annex I of the Habitats Directive in North-Rhine Westphalia. Actions will take place across six Natura 2000 sites with a total area of 1 762 ha. The main threatened habitat is 'old acidophilous oak woods with *Quercus robur* on sandy plains,' which covers small areas.

### **Project objectives**

The project aims to restore the old oak woods habitat to a favourable conservation status by removing the invasive black cherry (*Prunus serotina*) and to improve the conservation status of heath moors within the oak forests by restoring the habitat 'degraded raised bogs' that are capable of regeneration. The original hydrological level of bogs and mires habitats will be restored and buffer zones created around the bogs.

At the Natura 2000 site 'Schwarzes Wasser', one of the only two natural dystrophic lakes in North-Rhine Westphalia, actions are planned to prevent the loss of local pond Littorelletea habitats. The project will also aim to restore dry sand heaths with Calluna and Genista, inland dunes with open Corynephrus and Agrostis grasslands and European dry heaths. It will also create additional North Atlantic wet heaths with Erica tetralix in the boundary areas of the bogs. The management and restoration of existing habitats and the creation of new habitats provide an opportunity for the conservation of existing species included in the Habitats Directive - for each habitat at least one key species has been defined. These are the stag beetle (Lucanus cervus), moor frog (Rana arvalis), yellow-spotted whiteface (Leucorrhinia pectoralis) and floating water-plantain (Luronium natans). A further aim of the project is to involve as many local people as possible in the project actions.

### Expected results:

- Development of new habitats within 'Old acidophilous oak woods with Quercus robur on sandy plains', including the conversion of 25 ha of non-indigenous coniferous forests to oak woods habitat; conversion of up to 70 ha of coniferous forest to habitat 9190; and planting of up to 2.5 ha of oak forest as a compensation for the conversion of pine forests to heaths;
- Development of 1.6 ha of bog woodland, including measures to combat invasion by black cherry;
- Improvement in the state of preservation of peatland habitats 7120, 7140 and 7150;

### Beneficiary:

**Type of beneficiary** NGO-Foundation

**Name of beneficiary** Biologische Station im Kreis Wesel e.V.

### Postal Address

Freybergweg 9 D - 46483 Wesel GERMANY Phone +49 281 9625217 Fax +49 281 9625222 Email kretschmer@bskw.de

Name of contact person Klaus KRETSCHMER

### Duration of project:

60 months (01/01/2012 - 31/12/2016)

**Total budget in euro:** 3,254,676.00

**EC contribution in euro with %:** 1,627,338.00 (50.00 %)

- Development of two new dystrophic ponds with a surface area of approximately 0.3 ha as spawning waters for moor frog (*Rana arvalis*);
- Prevention of the extinction of *Luronium natans* at the site "Schwarzes Wasser".
- Development of an additional 6 ha of wet and dry heaths;
- Restoration of 22 ha of dry heaths, dry sand heaths and inland dunes with open grasslands and installation of a 4.6 km-long fence to enable grazing by sheep on these areas; and
- Purchase of approximately 150 ha of land to implement measures in areas not owned by the project partners.

Some measures are also intended in areas directly adjacent to the existing sites of Community interest (sCl). An application to include these areas in the sCl will then be made, and, if granted, would increase these sites by up to 80 ha. In addition to extensive general publicity and public relations work during the project, permanent information boards will be erected on four walking routes to provide information on the value of the local Natura 2000 areas and their habitats and species.

# River and floodplain improvement Emmericher Ward within the EU Bird Area Unterer Niederrhein

### **Project background**

This project will focus on measures to improve habitats along the Lower Rhine, near Emmerich (Germany), adjacent to the Dutch border. The Emmerich floodplain has been disconnected from the river Rhine since 1850. The area is characterised by some remnants of typical habitats of floodplains of large rivers, such as small areas of alluvial forests, natural river shorelines and various other associated aquatic and dry habitats. The site faces a number of problems including: The very small areas of alluvial forest; reduced connectivity between the river stretch and river floodplain; negative impacts of river navigation; and limited options for regular flooding events because of dykes.

### **Project objectives**

The project intends to construct a secondary channel to reconnect the river with its floodplain, near Emmerich; and to combine this with the establishment of a new area of floodplain forest. The works concern three Natura network sites. Extensive intensive co-operation with the river authority and other stakeholders is foreseen.

Specific objectives are:

- To establish a river stretch with natural dynamic river flow and bank structures, and to initiate a great variety of depth, currents, sediments and sediment dynamics;
- To protect the new river habitats from the negative impact of the swell caused by passing boats;
- To improve the ecological and hydrological connection between the river and floodplain;
- To re-establish the priority habitats alluvial forests and mixed floodplain forest, which are almost extinct in the Lower Rhine region, across an area of 22 ha; and
- To minimise the barrier effect of the forest in the event of flooding by integrating forest aisles.

### Expected results:

- An opened-up river side-channel, (2.2 km long, 25 m wide) reconnecting the river for at least 270 days/year;
- Improved ecological and hydrological connection between the river and its floodplain, as well as an improvement of the amphibian transition zone between the river and the floodplain;



### Beneficiary:

Type of beneficiary National authority

Name of beneficiary NABU Naturschutzstation e.V.

### Postal Address

Bahnhofstraße 15 D - 47559 Kranenburg GERMANY Phone +49 2826 91876 02 Fax +49 2826 91876 29 Email Klaus.markgraf@nabu-naturschutzstation.de

Name of contact person Klaus MARKGRAF-MAUÉ

**Duration of project:** 72 months (01/01/2012 - 31/12/2017)

**Total budget in euro:** 3,077,754.00

**EC contribution in euro with %:** 1,538,877.00 (50.00 %)

- Restoration of spawning ground and breeding habitats for the priority fish species, *Coregonus oxyrhynchus*, and breeding and resting habitats for several migratory fish species and fish associated with fastmoving waters (Annex II, Habitats Directive);
- Development of shallow banks of different sediment types, including for the Habitats Directive-listed habitats: "Rivers with muddy banks with Chenopodion rubri p.p. and Bidention"; "Hydrophilous tall herb fringe communities of plains"; and "Water courses of plain to montane altitudes with the Ranunculion fluitantis and CallitrichoBatrachion vegetation";
- Conservation and increase of the *Cobitis taenia* population, the breeding habitat for Luscinia svecica (Annex I, Birds Directive) and *Luscinia megarhynchos*, as well as for Alcedo atthis (Annex I); and
- The experience gained in construction and maintenance of side-channels can be used elsewhere, as this is an important part of the revitalisation of river and floodplain habitats of community interest along the river Rhine.

Waterlogging and grassland extensification in Lower Saxony to improve habitats of the Corncrake (*Crex crex*) and the Black-tailed Godwit (*Limosa limosa*)

### **Project background**

In recent years, the corncrake (*Crex crex*) has suffered from dramatic losses of adequate hatcheries, particularly near the western boundary of its range, i.e. northwestern Germany and Benelux. Many of the remaining habitats are overlapping with those of the black-tailed godwit (*Limosa limosa*). Today, there are only a few sites where the breeding rate of the black-tailed godwit is sufficient to ensure the preservation of the species. As a result, significant population loss and isolation is occurring across Western Europe. The overall population of the species in Europe has decreased by 50% since 1990.

### **Project objectives**

The project has identified the most important breeding areas of the corncrake and the black-tailed godwit. A total of 12 project locations in Lower Saxony, covering 80 000 ha, with some 45 000 ha of grassland. Approximately half of the corncrake population of Lower Saxony and more than two-thirds of the black-tailed godwit population can be found on this comparatively small area, and thus the project will make a significant contribution to the conservation of these species.

The key goals of the project are to preserve and increase the breeding population of corncrakes in Lower Saxony; convert decreasing populations to source populations for the black-tailed godwit; evaluate strategies for meadow bird protection in the European context; maximise efficient use of financing by closely interlinking the LIFE actions with the existing ELER-programme; and manage re-wetting and use of wet grassland in cooperation with local farmers, thus benefiting typical species found in these habitats.

The project has the following specific objectives:

- Purchase of 623 ha of private land in order to realign boundaries of already existing nature conservation areas and to create re-wetted core areas;
- Re-wetting and optimisation of water levels on 2 000 ha in the parts of the project sites with the highest breeding densities;
- Extension of grassland use and grassland management for nature conservation requirements over more than 10 000 ha; and
- Increase breeding productivity by improving the conditions of the habitats and by active predator control on the East Frisian Islands.



### **Beneficiary:**

**Type of beneficiary** Regional authority

### Name of beneficiary

Land Niedersachsen - Niedersächsisches Ministerium für Umwelt und Klimaschutz

### Postal Address

Archivstrasse 2 D - 30169 Hannover GERMANY Phone +49 5433 1393 Fax +49 5433 8145 Email stefan.heitefuss@mu.niedersachsen.de

Name of contact person Stefan HEITEFUSS

### Duration of project:

108 months (01/11/2011 - 31/10/2020)

# **Total budget in euro:** 22,298,742.00

**EC contribution in euro with %:** 13,379,245.00 (60.00 %)

- Purchase of 623 ha of private land;
- Grassland extension and targeted use of wet grassland over 623 ha;
- Renewed rewetting on 2 000 ha of land for a total area of 7 500 ha of wet grasslands;
- Optimisation of habitats for corncrake and blacktailed godwit;
- Increased reproduction rate (fledged juveniles per breeding pair);
- Conversion of declining populations to source populations;
- Europe-wide exchange of experience among experts and site managers of protected areas;
- Europe-wide valid and applicable criteria for management of wet grassland by farmers that are beneficial for the preservation of meadow birds (complementary to the ELER programme); and
- Development of criteria for quality of wet grassland conservation and a strategy for the management of protected areas for meadow birds in the sub-Atlantic biogeographic region in Europe.

Improvement of the breeding and feeding habitats for the Lesser Spotted Eagle (*Aquila pomarina*), as well as for the Corn Crake (*Crex crex*) and the Aquatic Warbler (*Acrocephalus paludicola*) in the SPA "Schorfheide-Chorin"

### Project background

The lesser spotted eagle (*Aquila pomarina*) is in decline in Germany as a result of the increasing loss of grasslands, drainage of wetland areas and intensification of forestry. The project area in Schorfheide Chorin, northeast Germany, contains nine territories where the species may be found (four of which are currently occupied).

The corncrake (*Crex crex*) and the black stork (*Ciconia nigra*) have also suffered the same downward trend as a result of loss of large, continuous, richly structured grassland and open areas of sedge marshland. Hunting on the migration routes and in the wintering grounds are further causes for their declining numbers.

### **Project objectives**

The project aims to stop the negative population trends of the lesser spotted eagle and corncrake in eastern Germany and to contribute to the recovery of the endangered aquatic warbler (*Acrocephalus paludicola*) population. Further endangered bird species will also benefit from the planned habitat improvement measures, such as the black stork and the spotted crake (*Porzana porzana*).

The following areas will be targeted:

- Forest reserve improving breeding grounds for the lesser spotted eagle;
- Feeding habitats bringing them closer together for the lesser spotted eagle;
- Open sedge marshland and reed beds extending the feeding habitat for the lesser spotted eagle, the breeding habitat for the corncrake and the potential breeding habitat for the aquatic warbler; and
- Moist grasslands rich in species and structures extending the feeding habitat for the lesser spotted eagle and the feeding habitat for the corncrake.

### Expected results:

The main result will be the development and protection of the habitats of the three target species. Specific results will include:

- Securing 600 ha of forest, grassland and peatland;
- Development of at least 50 ha of forest reserves in nine lesser spotted eagle territories;
- Safeguarding at least 60 ha of grassland in the immediate surroundings of the nine forest reserves;



### **Beneficiary:**

**Type of beneficiary** Regional authority

### Name of beneficiary

Landesamt für Umwelt, Gesundheit und Verbraucherschutz

### Postal Address

Seeburger Chaussee 2 D - 14476 Potsdam GERMANY Phone +49 33 201 442 101 Fax +49 33 201 442 190 Email BdP@LUGV.Brandenburg.de

Name of contact person Matthias FREUDE

### Duration of project:

66 months (01/10/2011 - 31/03/2017)

**Total budget in euro:** 7,727,220.00

**EC contribution in euro with %:** 5,795,415.00 (75.00 %)

- Expansion of suitable corncrake breeding habitats from 400 ha to 600 ha;
- Development and restoration of at least 200 ha of open alkaline and calcerous fens as an aquatic warbler habitat;
- Increasing the total reservation area by some 150 ha;
- Recreating 300 ha of waterlogged spring marshland;
- Recreating the water dynamic of an 11 km-long stretch of the Sernitz; and
- Recreating at least seven internal drainage areas.

The results and knowledge gained by the project – in particular, the safeguarding and development of breeding and feeding habitats – will be valuable for the protection of the lesser spotted eagle, corncrake and aquatic warbler throughout Europe. Furthermore, the large-scale use of several processes to re-establish open alkaline and calcareous fens as the best habitat for the aquatic warbler is of particular significance. The measures are designed to result in open sedge marshland that does not require maintenance and can be readily repopulated. Management of the SPA site of Andros Island to achieve a Favourable Conservation Status for its priority species

### Project background

The island of Andros has a great diversity of habitats, the most important of which is the alluvian forest of common alder (*Alnus glutinosa*), European chestnut (*Castanea sativa*) woodland and strands of white willow (*Salix alba*) and white poplar (*Populus alba*).

There are many bird species endemic to Andros. Its rocky coasts host important nesting areas for the shag (*Phalocrocorax aristotelis*), Andouin's gull (*Larus andouinii*) and Eleonora's falcon (*Falco eleonorae*). Bonelli's eagle (*Hieraaetus fasciatus*) and peregrine falcon (*Falco peregrinus*) are resident species. The area is also important for seabirds such as Cory's shearwater (*Calonectris diomedea*) and the Yelkouan shearwater (*Puffinus yelkouan*), as well as for migrating birds.

Threats to these species include: invasive alien species such as the black rat (*Rattus rattus*) and the yellowlegged gull (*Larus michahellis*); a lack of suitable nesting habitats for island nesting birds; the reduction and abandonment of traditional agricultural practices on terraces; and degradation of local wetlands resulting in reduced insect and bird prey.

These threats and exacerbated by the lack of management planning for the Natura 2000 site and the absence of any management authority to conserve the site. Lack of public awareness of these threats also results in a lack of public support or participation in conservation actions.

### **Project objectives**

The ANDROSSPA project aims to significantly improve the management and conservation of the Natural 2000 site in Korthi. The primary tools will be the drafting of a Natura 2000 site (SPA) Management Plan and four species-specific action plans.

In addition, the project will develop monitoring and surveillance plans and a GIS-compatible system to provide the information infrastructure necessary to manage conservation of the target area. It will conduct technical studies for concrete conservation actions and a feasibility study for SPA management, identifying key parameters for its long-term financial viability.



### Beneficiary:

**Type of beneficiary** Local authority

Name of beneficiary Municipality of Andros

### Postal address

Ormos Korthiou GR - 84502 Andros GREECE Phone +30 22820 62319 Fax +30 22820 61419 Email k.mentzelopoulos@gmail.com

Name of contact person Konstantinos MENTZELOPOULOS

Duration of project: 48 months (01/09/2011 - 31/08/2015)

**Total budget in euro:** 1,805,749.00

**EC contribution in euro with %:** 1,354,312.00 (75.00 %)

Planned actions include:

- Introduction of at least 200 artificial nests;
- Planting of 100 endemic shrubs for ground-nesting;
- Rat eradications;
- Revitalisation of at least 10 ha of terraced fields and traditional crop farming;
- Restoration interventions on 5 ha of coastal wetland;
- Installation of three pigeon lofts and 15 ponds;
- Installation and promotion of the use of seagrassfriendly mooring buoys; and
- Delineation of seasonally restricted fishery areas.

These actions aim to improve the availability of suitable nesting, increase the availability of prey and reduce the risk of predation for target species.

- Improved nesting habitat and breeding success for the islet's nesting bird species;
- Improved prey abundance including insects, Chukar partridge (*Alectoris chukka*) and pigeon - for priority bird species; and
- Protection of primary marine foraging habitats for the shag and Eleonora's falcon.

# Safeguarding the lesser white-fronted goose fennoscandian population in key wintering and staging sites within the European flyway

### Project background

The lesser white-fronted goose (*Anser erythropus*) is an Annex I species of the Birds Directive, classified as 'vulnerable' by the IUCN Red List. The global population trend for the species has shown rapid decline (30-49%) during the period 1998-2008, accompanied by breeding range fragmentation. The wild population of the goose in the Fennoscandian geographical area - covering parts of Finland, Sweden, Norway and Russia - was estimated in 2004 at only 20-30 breeding pairs or respectively 60-80 individuals.

The most significant threat to the species has been identified as hunting along the European flyway (Single Species Action Plan, 2008). This project therefore addresses the whole European flyway of the bird, stretching from the breeding grounds in the northern parts of Finland, Norway and Sweden, via the staging areas in Finnmark (northern Norway), the western coast of Finland, western Estonia and eastern Hungary, to its wintering grounds on the Greek and Turkish border.

As a result, the project involves eight partners from four European countries. It builds on a previous LIFE project targeting the same species (LIFE05 NAT/FIN/000105).

### **Project objectives**

The aim of the project is to implement urgent concrete conservation actions in wintering and staging grounds of the Fennoscandian population of the lesser whitefronted goose. It will undertake concrete actions in seven Natura 2000 sites - three in Greece, three in Bulgaria and one in Hungary.

The project will establish a network of experts and trained observers for the provision of up-to-date, reliable and comprehensive information about the goose's movements. The project will introduce a Smart Patrol System (SPS) for monitoring the bird.

Monitoring actions should increase knowledge of the species, its numbers, and its staging and wintering sites, including the discovery of new ones. The project expects to carry out actions to provide suitable foraging and roosting habitats for the species in key sites.

# LIFE10 NAT/GR/000638 Safeguard LWfG

### Beneficiary:

**Type of beneficiary** NGO-Foundation

Name of beneficiary Hellenic Ornithological Society

### Postal address

Vasileous Herakliou 24 GR - 10682 Athens GREECE Phone +30 210 8228704 Fax +30 210 8227937 Email tkastritis@ornithologiki.gr

Name of contact person Thanos KASTRITIS

Duration of project: 58 months (01/09/2011 - 30/06/2016)

Total budget in euro: 2,279,485.00

**EC contribution in euro with %:** 1,668,071.00 (73.18 %)

The project will seek to maximise international co-operation and networking of relevant bodies for the conservation of the species, including the creation of complementary species action plans in Bulgaria, Hungary and Greece. Awareness campaigns on the detrimental effects of illegal hunting for the small Fennoscandian population of the goose will be raised through targeting both the general public and specialised target groups, such as hunters and wardens in the relevant areas.

- Successful introduction, testing and evaluation of a smart patrol system to monitor the lesser whitefronted goose;
- Improved conservation status and reduced mortality and disturbance of the target species;
- Three officially-endorsed national action plans for the conservation of the target species - in Bulgaria, Hungary and Greece; and
- Implementation of the recommendations of the International Single Species Action Plan (AEWA 2008).

# Restoration and conservation of the Pannonic salt steppes of Pásztó grassland with sustainable management

### Project background

The project will target priority habitats listed in Annex I of the Habitats Directive, namely Pannonic salt steppes and salt marshes. Furthermore, the salinity of the target area is increasing due to a drainage system: as water is removed from the surface, water from deeper layers also evaporates. These habitat types are partly of natural origin and partly created by cattle grazing. The area is an important stepping stone between Hortobay and the Koros-Maros region and is home to some rare and protected species. Invasive species, however, are also present and must be eliminated.

The area is locally protected and has been identified as an SAC. Unfortunately, however, its protection has been undermined by budgetary constraints at two NGOs (HOTEK and NIMFEA), which lack the resources for extensive nature conservation programmes. Activities have focused on activities such as grazing, mowing, repatriation of the European ground squirrel (*Spermophilus citellus*) and installation of nest boxes.

### **Project objectives**

The main aim of the project is the restoration and protection of the saline Pannonian steppe of the Pasztoi-legelo Natura 2000 site, focusing on the following plant species: yellow-star thistle (*Centaurea solstitialis*), thistle (*Cirsium brachycephalum*), and grass vetching (*Lathyrus nissolia*), as well as the large copper butterfly (*Lycaena dispar*).

The project also aims to establish a traditional and sustainable extensive grassland management system and a water management system, and to increase public awareness of the role of traditional landscape management in the conservation of biodiversity.

### Expected results:

- A management plan for the Pasztoi-legelo Natura 2000 site;
- The purchase of at least 35 ha of land, with at least 30 fewer landowners;
- The establishment of a board of landowners (co-operative management of a major part of the land);
- The renovation of the barn house and the stable for livestock;



### **Beneficiary:**

**Type of beneficiary** NGO-Foundation

### Name of beneficiary

Nimfea Nature Conservation Association (NIMFEA)

### Postal address

Szabadság út 1-3 HU - 5540 Szarvas HUNGARY Phone +36 56 361 505 Fax +36 56 361 505 Email srb@nimfea.hu

Name of contact person R. Benedek SALLAI

**Duration of project:** 40 months (01/09/2011- 31/12/2014)

### Total budget in euro:

569,731.00

**EC contribution in euro with %:** 427,242.00 (74.99 %)

- The purchase of 100 sheep, 15 Hungarian cattle, 10 Hungarian grey cattle, five buffalo and 10 horses;
- The covering of a 500 m ditch in order to ease access for livestock to the grasslands;
- Insulation of 42 electric pylons; and
- Attraction of visitors through the construction of better infrastructure, and a range of information and dissemination activities.

# Conservation of imperial eagles by managing human-eagle conflicts in Hungary



### Project background

The eastern imperial eagle (*Aquila heliaca*) is a globally threatened Eurasian bird species, with a world population of only a few thousand breeding pairs. Hungary is home to the largest population in the EU.

The favourable conservation status of the imperial eagle in Hungary is seriously threatened by the exponential increase in deliberate killings (poisoning began in 2005, and shooting is also a problem). A total of 54 imperial eagles are believed to have been killed in the past few years (14.2% of the EU breeding population in 2010). Such killings threaten to reverse the positive population trend of the imperial eagle in Hungary and in neighbouring countries.

### **Project objectives**

The main objective of the project is to maintain the increasing population trend of the eastern imperial eagle in Hungary by significantly reducing non-natural mortality rates. The project specifically aims to:

- Reduce the adverse effects of deliberate killings by setting up a veterinary system and best-practice protocol, satellite tracking, nest guarding at key Natura 2000 sites (SPAs), the provision of safe feeding places and the construction of artificial nests;
- Increase the chance of detecting illegal activities and imposing criminal sentences. The project will conduct field surveys, set up a hotline, create a bird-crime database, establish a protocol for investigating incidents, set up an anti-bird-crime action group, and educate stakeholders;
- Increase stakeholder awareness about the overestimated impact of raptor species on game populations and about alternative eagle-friendly game management methods; and
- Draw up and implement a communication plan to increase public awareness about the importance of imperial eagle conservation.

### Expected results:

- The Hungarian breeding population of eastern imperial eagles should increase by more than 20% during the project period and reach more than 140 breeding pairs by 2016;
- The number of deaths due to persecution should decrease to less than five a year on average;

### Beneficiary:

**Type of beneficiary** NGO-Foundation

**Name of beneficiary** MME BirdLife Hungary

### Postal address

Költı u. 21 HU - 1121 Budapest HUNGARY Phone +36 30 525 40 71 Fax +36 1 275 62 67 Email horvath.marton@mme.hu

Name of contact person Márton HORVÁTH

Duration of project:

60 months (01/01/2012 - 31/12/2016)

**Total budget in euro:** 2,141,597.00

**EC contribution in euro with %:** 1,606,198.00 (75.00 %)

- The annual mortality rate of breeding imperial eagles should be less than 20% by the end of the project;
- The average breeding success of imperial eagles should be above one fledgling per breeding pair during the project period;
- Rehabilitation of injured specimens should have a greater than 30% success rate during the project period;
- Serious sentences should be imposed and advertised following bird-crime investigations carried out during the project; and
- The project should appear in more than 1 000 national media reports (with the public reached on more than 10 million occasions). More than 2 million people should visit the project exhibitions in Hungarian zoos; more than 1 million people should visit the project website; the project films should be seen by more than 2 million people; and the Imperial Eagle Visitor Centre and education trail should attract over 2 500 people.

# Conservation of priority natural values in 'Turjánvidék' Natura 2000 site southern unit

### **Project background**

The Turjánvidék Natura 2000 site (SCI) is one of the most extensive and continuously humid sand habitat systems in the Middle-Hungarian Region. The southern part of the Turjánvidék is a diverse mosaic of large natural habitats (mainly seasonally wet grasslands, fens and alluvial forest). In the drier southern part, sandy steppes and woodlands are found. This area is home to the endangered Hungarian meadow viper (*Vipera ursinii rakosinesis*). In the Dabasi area, moderate mowing is carried out during a restricted period in order to protect orchid species. One of the most serious problems facing the area is a shortage of water (caused by drainage channels and decreasing precipitation). The sand steppes and inland dune thickets close to settlements are also affected by invasive species.

### **Project objectives**

The project aims to improve the conservation status of priority habitats and of the Hungarian meadow viper present in the southern part of the Turjánvidék Natura 2000 site. The target habitats comprise alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (91E0); molinia meadows on calcareous, peaty or clayey-siltladen soils (6410); alluvial meadows of river valleys of the *Cnidion dubii* (6440); Alkaline fens (7230); and in the drier sand areas a mosaic of pannonic sand steppes (6260); and pannonic inland sand dune thickets (91N0). Specific project objectives include:

- Increasing the groundwater level of the alder-ash gallery forest habitats near Dabas through water management;
- Eradicating invasive species from sand steppes and alder-ash forests and restructuring the alien forest stands; and
- Managing and extending the potential habitat of the Hungarian meadow viper through the conversion of arable lands into grasslands and two nonindigenous forests into meadows, the use of cattle grazing instead of intensive mowing, and land purchase to avoid cultivation of energy crops.

### Expected results:

- Invasive plant species will be eliminated from 1 100 ha of sand grasslands and thickets;
- A total of 42 ha of non-indigenous sand forests will be converted into indigenous forests;
- Invasive plant species will be eliminated from 71 ha of alder-ash gallery forests;



### Beneficiary:

**Type of beneficiary** Park-Reserve authority

### Name of beneficiary

Duna-Ipoly National Park Directorate Department for Nature Conservation

### Postal address

Strázsa-hegy HU - 2509 Esztergom HUNGARY Phone +36 1 391 4610 Fax +36 1 200 1168 Email siposk@dinpi.hu

Name of contact person Katalin SIPOS

### Duration of project:

60 months (01/09/2011 - 31/08/2016)

**Total budget in euro:** 2,730,102.00

**EC contribution in euro with %:** 2,047,577.00 (75.00 %)

- A water management plan will be drawn up, eight water management stations will be constructed, and water conditions will improve in 88 ha of alderash gallery forests, and in the whole project area;
- · Cattle grazing will be introduced on 500 ha;
- 64 ha of enclosed arable lands and 30 ha of alien forests will be transformed into grasslands to create favourable habitats for the Hungarian meadow viper;
- 191 ha of arable land will be purchased and converted into grasslands;
- Illegal waste deposits (2 000 m<sup>3</sup>) will be eliminated from indigenous habitats, an illegal sand pit (1.3 ha) will be re-cultivated and gravel roads (41 crossing gates) closed;
- Two nature conservation training sessions will be held for environmental officers and communication material will be produced;
- Management and biodiversity monitoring will take place in 15 sample areas;
- Publicity material will be produced and widely disseminated; and
- An After-LIFE conservation management will be compiled.

### Conservation and Improvement of Spina Verde SCI Habitats



### Project background

In the last five years, regional planning for the Lombardy region of northern Italy has focussed on the identification and development of 'priority areas for biodiversity' within the "Rete Ecological Regionale" - RER (regional ecological network). Part of this network, the 1 154 ha Spina Verde National Park is rich in biodiversity, housing several habitats, 150 vertebrate species and a number of invertebrates of European importance. Species in the park that are listed in the annexes of the Habitats Directive include: the Italian agile frog (Rana latastei); Italian crested newt (Triturus carnifex); agile frog (Rana damaltina); Italian tree frog (Hyla itermedia); fire salamander (Salamandra salamandra); European green lizard (Lacerta viridis); and Aesculapian snake (Elaphe longissima). The site also harbours over 20 rare or endangered species of the EU Birds Directive, including the Eurasian sparrowhawk (Accipiter nisus) and peregrine falcon (Falco peregrinus), as well as the kingfisher (Alcedo atthis). The presence of mammals such as Daubenton's bat (Myotis daubentonii) and hazel dormouse (Muscardinus avellanarius) is indicative of the park's high quality forest habitats: "Pannonian woods with Quercus pubescens" and "Castanea sativa woods".

### **Project objectives**

The project's main goal is to improve the conservation status of the following habitats of European importance found in the Spina Verde Natura 2000 SCI:

- "Tilio-Acerion forests of slopes, screes and ravines", "Pannonian woods with Quercus pubescens" and "Castanea sativa woods" – all important for amphibian and invertebrate populations;
- "Rocky slopes" a priority habitat, which is also important for raptor species; and
- "Natural dystrophic lakes and ponds" –important for encouraging the presence of the Italian agile frog.

Public awareness and dissemination activities will also be carried out.

### Expected results:

- A management plan for the Spina Verde Natura 2000 network site;
- The restoration and regeneration of 50 ha of Tilio aceron habitat and the establishment of at least 15 ponds to allow the restocking of the white-clawed crayfish (*Austropotamobius pallipes*);

#### Beneficiary:

**Type of beneficiary** Park - Reserve authority

**Name of beneficiary** Parco Regionale Spina Verde

### Postal address

Via Imbonati n°1 IT - 22020 Cavallasca (CO) ITALY Phone +39 031 211131 Fax +39 031 535864 Email ufficiotecnico@spinaverde.it

Name of contact person Giorgio CASATI

Duration of project:

19 months (01/09/2011 - 01/04/2013)

# **Total budget in euro:** 569,538.00

**EC contribution in euro with %:** 284,769.00 (50.00 %)

- The ecological improvement of 500 ha of "Pannonian woods with Quercus pubescens" and chestnut woods, along with the creation of 30 ha of 'wilderness zones' that will represent ideal habitat conditions for saproxylic (dead wood eating) insects, small mammals, reptiles and birds. In addition, a 10 ha-area of fruit trees will be established to provide food sources for 11 Birds Directive species as well as more than 70 other non-listed bird species;
- The restoration of 3 500 m<sup>2</sup> of "Natural dystrophic lakes and ponds" habitats in the Parè area of ponds and wetland forests. These actions are expected to result in a fourfold increase in the presence of the Italian agile frog and other amphibians;
- The creation of 1 700 m<sup>2</sup> of new "Natural dystrophic lakes and ponds" habitat in Valbasca (Como). This is expected to help stabilise the population of endangered amphibians in the area; and
- The restoration of 150 ha of "rocky slopes" habitat.

# Zelkov@zione - Urgent actions to rescue Zelkova sicula from extinction

### **Project background**

The Sicilian Zelkova (*Zelkova sicula*) is an endemic and very rare tree species of south-eastern Sicily. First recognised by the scientific community in 1991, it is a relict species (surviving remnant) of the European Tertiary Flora, belonging to a group of species that disappeared from the whole of continental Europe during the last ice age.

Until very recently, *Z. sicula* was known to exist as only a single population of approximately 230 shrubs, restricted to an area of less than 0.4 ha within the "Bosco Pisano" Natura 2000 site in the Iblei Mountains. At the end of 2009, a second population was unexpectedly discovered in the same mountain range. As with the former population, this newly-discovered population comprises of just a few hundreds trees, distributed over an area of around 0.8 ha, in quite similar environmental conditions. Thanks to its rarity, the species is included in the IUCN Red List of endangered species as 'critically endangered' and is among the "Top 50 Mediterranean Island Plants" on the brink of extinction [IUCN/SSC Mediterranean Islands Plant Specialist Group]. To date, no legal protection measure has been adopted.

A variety of problems threaten its survival, including:

- Geographic isolation and the small size of the populations, which have severely reduced gene flow, promoting a loss of genetic variability;
- Extremely poor and infrequent periods of fruiting and likely seed sterility;
- Water stress in summer-time resulting in the periodical death of the weaker trees (this threat is likely to be exacerbated by climate change);
- Ecological disturbances leading to habitat degradation; and
- A lack of active protection measures.

### **Project objectives**

The main goal of the project is to ensure the survival of *Z. sicula* through in-situ and ex-situ conservation actions. These actions will limit threats to the species and develop management measures in order to reinforce the present populations and establish novel populations in ecologically suitable sites. These management plans will involve public bodies, NGOs and local stakeholders. A key goal of the project is to encourage the regional administrative authorities to plan and implement legal protection measures for *Z. sicula*.



### Beneficiary:

**Type of beneficiary** Regional authority

Name of beneficiary Regione Sicilia - Dipartimento dell'Ambiente

### Postal address

Via Ugo La Malfa, 169 IT - 90146 Palermo ITALY Phone +39 091 7077181 Fax +39 091 7077294 Email matilde.fiore@regione.sicilia.it

Name of contact person Matilde FIORE

Duration of project:

54 months (01/10/2011 - 31/03/2016)

**Total budget in euro:** 2,334,663.00

**EC contribution in euro with %:** 1,055,501.00 (45.21 %)

- Improvement of knowledge about the biology and the ecology of the target species aimed at longterm conservation planning;
- The establishment of an emergency irrigation system in the tree population site;
- Erection of some 5.8 km of fencing;
- Habitat enforcement/improvement on a 10-ha area including the current tree site;
- Reinforcement of the natural populations of *Z. sic-ula* and the rehabilitation of its habitats;
- Establishment of at least five new populations, two within the current Bosco Pisano SCI and three in other forest areas on Sicily;
- Cultivation of at least 200 trees at two scientific research/conservation centres;
- Recognition of the status of protected species at regional level, and beginning the procedure for its recognition as a priority species (Habitats Directive);
- Implementation of a standard procedure for the protection of threatened species in public/private lands; and
- Various awareness-raising and communication activities to increase knowledge of this emblematic species and support for its conservation.

# Eradicate Invasive Louisiana Red Swamp and Preserve Native White Clawed Crayfish in Friuli Venezia Giulia

### Project background

Friuli-Venezia Giulia is one of the Italian regions featuring a high number of perennial surface water streams and natural lakes. These in turn, feature an extremely rich and diversified fauna including the native whiteclawed crayfish (*Austropotamobius pallipes*) – the country's most widespread, indigenous crayfish species.

The Friuli-Venezia Giulia stock of native crayfish populations is particularly important when compared with those of other Italian regions – and includes some endemic subspecies that represent an important genetic heritage for biodiversity. These regional populations, however, are under serious threat, and may risk complete disappearance, from the recent and widespread appearance of a highly invasive, non-native crayfish species, the Louisiana red swamp (*Procambarus clarkii*).

### **Project objectives**

The project has two overall objectives: Firstly, to combat the spread of the highly invasive alien species, (IAS) *P. clarkii*, which is threatening crayfish native species, biodiversity, and even, in some cases, human health. Secondly, to improve the populations of the native crayfish species, *A. pallipes*.

In order to meet these objectives, the project aims to draw up and implement an effective regional Regulation regarding the fishing of crayfish species in Friuli-Venezia Giulia, promoting the conservation of *A. pallipes*, and combating the spread of *P. clarkii*.

### Expected results:

- A targeted 60% decline of the catchable populations of *P. clarkii*, in the region (and the associated reduction, or non-expansion, of the areas where the IAS is currently present);
- An enhancement of the populations of the native species, *A. pallipes* to be restocked with at least 30 000 juveniles over the course of the project, with an expected 85-90% survival rate (and the associated re-establishment of the presence of the native species in environments where it was reduced or killed-off by *P. clarkii*);
- Reliable and precise data on the distribution and relative abundance of the native crayfish species and its competitor crayfish species in the region;



### Beneficiary:

**Type of beneficiary** Regional authority

Name of beneficiary Ente Tutela Pesca del Friuli Venezia Giulia

### Postal address

Via Colugna, 3 IT - 33100 Udine ITALY Phone +39 0432 551215 Fax +39 0432 482474 Email massimo.zanetti@regione.fvg.it

Name of contact person Massimo ZANETTI

Duration of project:

36 months (01/09/2011 - 31/08/2014)

**Total budget in euro:** 2,674,744.00

**EC contribution in euro with %:** 1,250,545.00 (46.75 %)

- Reliable and precise data on the distribution and impact of pathogens, pollutants, and phytotoxins associated with the presence of *P. clarkii*, and about their potential negative impact on the native cray-fish species, and on human health in the region;
- The implementation of operational and regulatory standards and procedures to maintain results during and after the project. These will be replicable and transferable via dissemination activities to other European countries or contexts; and
- The development of a specific Regulation concerning the management of *P. clarkii* and concerning fishing rights in the region.

# TIB - Trans Insubria Bionet. Habitat connection and improvement along the Insubria ecological corridor between the Alps and the Ticino valley

### Project background

Declining biodiversity is a major environmental problem everywhere, including in western Europe. Habitat loss and fragmentation are the primary cause of this decline: viable populations cannot be maintained without a sufficient habitat. Lombardy is one of the most densely populated areas of Europe, and here the loss of habitats and their fragmentation are obvious. To mitigate this biodiversity loss, the region has studied the functionality of critical passages identified along the ecological corridor and the possibility of implementing a regional ecological network (Rete Ecologica Regionale - RER). One of the weak links of the network, the connection between the Alps and the Apennines through the Po Plain – the only possible route of dispersal for many species – is threatened by human activities.

### **Project objectives**

The general objective of this Biodiversity project is to increase the functionality of the ecological corridor between Campo dei Fiori and the Ticino River Park, an area covering some 15 000 ha and including 14 Natura 2000 network sites. This will be achieved through the improvement of environmental quality and the removal of problems related to the crossing of artificial barriers. Overall, the project will combat the negative effects of climate change by facilitating the mobility of animal and plant species, thus helping biodiversity adapt to climate change.

Specific objectives are to:

- Reduce biodiversity loss caused by habitat fragmentation, degradation, and destruction, and re-establish links between he Alpine bioregion and the Continental bioregion in the area between the Ticino valley and the Varese Pre-Alps;
- Complete the natural ecological corridor between the Ticino River Park and the Campo dei Fiori Park;
- Fight the spread of invasive alien species through strategic environmental enhancement interventions; and
- Raise institutional awareness on the urgent need for systemic interventions in favour of large-scale ecological connectivity, through the dissemination of results, and encourage a culture that acknowledges the value of natural capital and related ecosystem services.



### Beneficiary:

**Type of beneficiary** Local authority

**Name of beneficiary** Provincia di Varese

### Postal address

Piazza Libertà 1 IT - 21100 Varese ITALY Phone +39 0332 252019 Fax +39 0332 252805 Email scapogna@provincia.va.it

Name of contact person Susanna CAPOGNA

### Duration of project:

51 months (01/10/2011 - 31/12/2015)

**Total budget in euro:** 3,093,737.00

**EC contribution in euro with %:** 1,545,425.00 (49.95 %)

- The project will construct five underpasses for amphibians and small animals, eight underpasses for smalland medium-sized animals and a 10 m wide overpass, as well as improving three existing underpasses;
- Three culverts in waterways will be improved; existing wetlands will be restored and new wetlands created;
- 500 m of dry stone walls will be built;
- Invasive tree species will be removed from a 240 ha area;
- Different techniques for the removal of the invasive plants *Nelumbo nucifera* and *Ludwigia grandiflora* will be assessed over 10 000 m<sup>2</sup> areas;
- 150 log pyramids will be added to woodlands in order to increase the number of suitable sites for saproxylic fauna;
- 350 white willow (*Salix alba*) trees will be planted and managed by pollarding;
- Some 40-50 farmers will be encouraged to access Community funds for planting hedgerows, woodlots, and other natural elements useful for biodiversity; and
- Extensive dissemination activities will be carried out.

# Restoration of Dry grasslands (Magredi) in four Sites of Community Importance of Friuli Lowland

### Project background

The dry grasslands, 'magredi', are characterised by coarse soils deposited by the pre-alpine rivers Tagliamento, Cellina and Torre. The high permeability of the subsoil creates particular conditions of dry soil that are very unusual in a rainy area such as northern Italy. The bulk of these dry grasslands have been destroyed by agricultural development over the past half century. Several dry grasslands were ploughed, fertilised and irrigated for cultivating soybean and maize. The only remaining dry grasslands are concentrated in lands owned by the region and the state, but they are under natural pressure from the growth of bushes and the colonisation of invasive alien species.

### **Project objectives**

The general objectives of the project are to stop the degradation of the habitat 'Eastern submediteranean dry grasslands' in the 'magredi' of the Friuli lowlands and to improve its extension through the transformation of cultivated lands and scrubland. The production of seeds and plants of the typical native species will take place in a nursery. Their use will improve the habitat's flora composition, speed up the natural re-colonisation of the lands and efficiently replace non-native species.

The project will increase the connectivity of the dry grassland habitat. Such an increase will be useful to the species linked to grasslands, such as reptiles, invertebrates and some birds. The connectivity of the habitat will be improved through the selection of lands to be restored in order to create a network of grasslands that now are isolated. The terrestrial fauna (mainly reptile and invertebrate) and birds of open land habitats (e.g. the corncrake - Crex crex) will benefit from this action. Species will be monitored by the specific monitoring programmes planned in the framework of the Natura 2000 site management plan. Soil preservation, carbon storage, landscape enhancement of the dry grasslands for tourists and improved awareness are other expected results. An important result will be the transfer of know-how on habitat restoration.

Another objective is the reduction of the alien invasive plants through elimination, the restoration of degraded land (e. g. abandoned cultivated lands), and the seeding and planting of native species to prevent invasive alien species from growing.

# LIFE MAGREDI GRASSLANDS

LIFE10 NAT/IT/000243

### Beneficiary:

**Type of beneficiary** Regional authority

### Name of beneficiary

Regione Autonoma Friuli Venezia Giulia - Servizio Caccia, Pesca e Ambienti naturali

### Postal address

Piazza Unità d'Italia 1 IT - 34100 Trieste ITALY Phone +39 0432 555334 Fax +39 0432 555757 Email daniele.deluca@regione.fvg.it

Name of contact person

Daniele DE LUCA

### Duration of project:

48 months (01/01/2012 - 31/12/2015)

# **Total budget in euro:** 2.152.500,00

**EC contribution in euro with %:** 1.076.250,00 (50.00 %)

- Restoration of dry grasslands on 119 ha of cultivated land;
- Scrub clearance on 141 ha of dry grasslands.
- Restoration of dry grasslands on 105 ha by removal of the alien shrub *Amorpha fruticosa*;
- Restoration of dry grasslands on 53 ha of scrubland;
- Production of 60 000 pot-grown seedlings of grassland plants;
- Delivery of four management plans for the SCIs targeted by the project;
- Dissemination materials, including a website, 10 000 copies of two publications about dry grass-lands; 3 000 copies of a handbook on grassland conservation; and
- 160 days of environmental education, including a contest: 'Knowing the dry grasslands'.

### LIFE+ Ponds: Environment and nature restoration in Casaraccio



### **Project background**

The costal lagoons and Mediterranean salt steppes located within the project area are subject to significant human pressure, especially during the high season for tourism, when thousands of visitors cause direct disturbance to nesting sites and indirect damage (e.g. an increase in the amount of waste to be managed in the local sewage treatment plant).

### **Project objectives**

This project aims to improve the conservation status of two priority for conservation habitats and four bird species included in the Birds Directive (*Egretta garzetta*, *Himantopus himantopus*, *Sterna albifrons* and *Sterna hirundo*) in Sardinia, Italy. It will purchase 5.1 ha of the Casaraccio coastal lagoon, restore the two priority habitats and construct artificial islands for nesting birds. The project specifically aims to:

- Ensure protection and conservation of habitats and species, included in the Annexes of the Habitats Directive (92/43/CE) and in Annex I of the Birds Directive (79/409/CEE) that are present in Casaraccio lagoon Natura 2000 sites ("Stagno di Pilo Casaraccio", "Stagno di Pilo, Casaraccio e Saline di Stintino") in particular, the little egret (*Egretta garzetta*), the black-winged stilt (*Himantopus himantopus*), the little stern (*Sterna albifrons*) and the common stern (*Sterna hirundo*), as well as the coastal lagoons and salt Mediterranean steppes;
- Ensure the conservation status and increase the numbers of the target bird species in the Natura 2000 sites. By restoring the priority habitat, the coastal lagoon, the objective is to assure the habitat quality for the species existing on Casaraccio Lagoon through the creation and development of management actions: restoration, lengthening and cleaning of the channel and embankment rearrangement;
- Promote sustainable economic activities linked to the sustainable management of the natural environment and its resources. The project will clean the mouths and channel of the lagoon thereby improving fishing activities and tourists' enjoyment of the area. It will also make better use of the area by connecting the nature paths of Casaraccio Lagoon with those of adjacent Natura 2000 sites "Coste e isolette a Nord- ovest della Sardegna" within the establishment of an ecological corridor of lagoon and cliff habitats; and

#### Beneficiary:

**Type of beneficiary** Local authority

Name of beneficiary Comune di Stintino

#### Postal address

Via Torre Falcone IT - 07040 Stintino ITALY Phone +39 079 522010 Fax +39 079 523628 Email dirgenstintino@tiscali.it

Name of contact person Gavina TURRA

**Duration of project:** 48 months (01/09/2011 - 31/08/2015)

**Total budget in euro:** 1,916,024.00

**EC contribution in euro with %:** 1,146,521.00 (59.84 %)

• Promote the natural value of the lagoon and the Natura 2000 network.

### Expected results:

The project expects to improve and increase the conservation status of the target species.

Specific results will include:

- Publication of an action plan for the conservation of the target species;
- Purchase of 5.1 ha of the lagoon, the first step towards a long-term goal of purchasing more than 90 ha;
- Construction of artificial islets to favour the nesting of the target species far from areas of tourism;
- Implementation of nature restoration measures in the lagoon;
- Closure to the public of the nesting areas and installation of wooden footpaths and barriers;
- Education and awareness-raising programmes for the local populations and visitors; and
- Monitoring of the conservation measures (including ex-post).

# Marangone Valley, a territory to defend and enjoy: conservation of avifauna in north-west area of the SPA IT6030005

### **Project background**

The Marangone Valley is located along the western edge of the Natura 2000 site "Tolfetano-Cerite- Manziate" and between the external limits of Civitavecchia (Lazio region) and the tourist settlements of Santa Marinella. The area is endangered by habitat degradation, which typically affects peri-urban areas. Additional degradation is caused by the incompatibility of the management of agro-forestry-pastoral resources with the protection of habitats and species of Community interest.

### **Project objectives**

The objective of the VAL.MA.CO. project is to preserve the avifauna of Community interest in the northwest area of the Natura 2000 site Comprensorio Tolfetano-Cerite-Manzianate". This project aims to improve the habitats of a total of 12 bird species included in Annex I of the Birds Directive (*Pernis apivorus, Milvus milvus, Circaetus gallicus, Burhinus oedicneumus, Caprimulgus europaeus, Alcedo atthis, Melanocorypha calandra, Calandrella brachydactila, Lullula arborea, Anthus campestris, Lanius collurio* and *Lanius minor*) and a priority for conservation "Pseudo-steppe with grasses and annuals" habitat. The actions targeting this habitat will increase the availability of food resources for birds of prey.

The project is planned to be implemented in a 269 ha area owned by the beneficiary inside the Natura 2000 site, which covers a total area of some 70 000 ha.

The protection of bird species of Community interest in the area will be achieved by combining restoration and environmental protection with the promotion of traditional and sustainable forms of agriculture (i.e. grazing).

### Expected results:

The project expects to achieve the following results:

- Recovery of 17 ha of degraded pasture areas to promote the availability of trophic resources for birds;
- Construction of 9 km of fences to control and regulate grazing activity;
- Reconstruction and reclamation of 1km of dry stone walls to control grazing and habitat biodiversity;
- Creation of small wetlands near the existing springs for kingfisher (Alcedo atthis) and other waterfowl;



### Beneficiary:

**Type of beneficiary** NGO-Foundation

Name of beneficiary Associazione Agraria di Civitavecchia

### Postal address

Viale Guido Baccelli 35 IT - 00053 Civitavecchia ITALY Phone +39 076620340 Fax +39 076620340 Email agraria.civitavecchi@libero.it / miziolarosa1964@libero.it

Name of contact person Maurizio LA ROSA

### Duration of project:

34 months (01/09/2011 - 30/06/2014)

**Total budget in euro:** 1,144,750.00

**EC contribution in euro with %:** 560,699.00 (48.98 %)

- Recovery of 800 plantations of olive trees, now invaded by shrubs and herbaceous vegetation;
- A memorandum on sustainable management to be adopted by some 2 000 stakeholders in order to regulate the concessions and use of the area; and
- Restoration of 4.5 km. of rural roads and 2.2 km of service paths in order to: i) control the area, ii) prevent accidental fires and iii) promote the proper management of the productive activities in the area.

# Environmental Management and Restoration of Mediterranean Salt Works and Coastal Lagoons

### **Project background**

In the coastal lagoons of Italy, France and Bulgaria, the following main threats have been identified: a progressive decline in the capacity of water circulation; loss of nesting habitat and disturbance from seagulls (Larus michahellis); loss of attractiveness and historical value; coastal habitat degradation and destruction resulting from the construction of embankments; disruption to hydraulic management and loss of favourable trophic and nesting conditions for birds; loss of suitable breeding conditions for colonial coastal waterbirds, including greater flamingo, pied avocet, slender-billed gull, Mediterranean gull, sandwich tern. gull-billed tern and common tern; disturbance of little tern colonies; loss and degradation of nesting habitat for target bird species; degradation of habitats by invasive species; the collision of birds on electrical lines; and accidental fires.

### **Project objectives**

This project targets six Natura 2000 sites in coastal salt meadows in Italy, France and Bulgaria. It aims to improve the conservation status of coastal and dunes habitat types (in particular, coastal lagoons) and breeding bird species (greater flamingo, as well as various tern, wader and gull species listed in Annex I of the Birds Directive – 16 species of Community interest in total).

### Expected results:

- The restoration and conservation of some 14 000 ha of coastal lagoon habitat (7 600 ha in the Aigues-Mortes site, 5 000 ha in the Camargue, 750 ha in the Cervia site and 600 ha in Molentargius);
- The conservation, including fire prevention and invasive plant removal, of a wide range of habitats, including: Salicornia and other annuals colonising mud and sand, Mediterranean salted meadows; 1420 Mediterranean halophilous scrubs (*Sarcocornetea fruticosi*); Mediterranean salt steppes (*Limonietalia*); Southern riparian galleries and thickets (*Nerio-Tamaricetea* and *Securinegion tinctoriae*); and shifting dunes along the shoreline with *Ammophila arenariae*;
- The construction of a new flamingo (*Phoenicop-terus roseus*) breeding ground in the Camargue, and new breeding islets for *Recurvirostra avosetta*, *Sterna hirundo*, *Sterna sandvicensis*, *Sterna nilotica*



### Beneficiary:

**Type of beneficiary** Park-Reserve authority

### Name of beneficiary

Consorzio del Parco Regionale del Delta del Po dell'Emilia-Romagna

### Postal address

C.so Mazzini, 200 IT - 44022 Comacchio (FE) ITALY Phone +39 0533 314003 Fax +39 0533 318007 Email direttore@parcodeltapo.it

Name of contact person Lucilla PREVIATI

### Duration of project:

54 months (01/10/2011 - 31/03/2016)

**Total budget in euro:** 4,949,869.00

**EC contribution in euro with %:** 2,395,663.00 (48.40 %)

and *Larus genei*. The populations of these species are expected to recover to the sizes recorded during the 1980s to early 2000s in "Ancien salins de Beauduc";

- The restoration of suitable breeding conditions, including the mitigation of seagull disturbance, in some 1 500 ha in the Aigues-Mortes site, as well as the burial of 3.5 km of aerial electrical lines, which present a serious threat to the flamingo;
- The construction of 0.2 ha of new breeding islets at the Cervia site and 0.5 ha of islets at the Molentargius site;
- The creation and printing in four languages (English, French, Italian and Bulgarian) of a management model for Mediterranean salt meadows, and the publication of guidelines for seagull disturbance mitigation;
- The construction of three bird-watching towers at two sites; and
- The drawing up of a management plan for the Cervia site (IT4070007).

# Actions for the recovery and the conservation of dune and back dune habitats in the Molise Region

### **Project background**

In recent decades, coastal areas in Europe have been subjected to major changes and pressures. Threats to coastal habitats include uncontrolled tourism, the spread of invasive exotic flora, and natural and/or human induced erosion. Coastal ecosystems are severely constrained systems and contain a distinctive biodiversity in which flora and fauna are highly specialised. Mediterranean coastal dunes could be classified as two major groups: western and eastern Mediterranean types, with the separation line passing through the Italian peninsula.

The coast of Molise, on the Adriatic sea, still contains areas of great natural value and is home to 19 habitats of Community interest and three SCIs: "Foce Trigno - Marina di Petacciato (IT7228221), "Foce Saccione-Bonifica Ramitelli" (IT7222217) and "Foce Biferno – Litorale Campomarino" (IT7282216). These SCIs are important areas for the biodiversity of sandy coastal ecosystems of the Italian Adriatic coast, but, similar to the other European coastal areas, they are increasingly threatened by anthropic pressure.

### **Project objectives**

The overall objective of the project is the conservation of both dune habitats and humid brackish areas, as well as the protection of flora and fauna species in the costal habitats of Molise. The specific project objectives include:

- Increasing the value and recovery rate of coastal habitats, in particular costal dune habitats, temporary Mediterranean ponds and Mediterranean salt steppes present in the three Natura 2000 sites. Recovery and monitoring activities will also target other habitats of Community interest, such as the mobile dunes (seaward dunes);
- Protecting 15 fauna species of Community interest; and
- Raising awareness among coastal communities and visitors.

### Expected results:

• The restoration and improvement of the state of conservation of 51 ha of dune pine forest habitat through the elimination of exotic trees, increasing the cover of native species, and the planting of autochthonous bushes and shrubs;



### Beneficiary:

**Type of beneficiary** Local authority

Name of beneficiary Comune di Campomarino

### Postal address

Via C. Alberto Della Chiesa, 1 IT - 86042 Campomarino (CB) ITALY Phone +39 0328 4841180 Fax N/A Email fusco.sara@gmail.com

Name of contact person Sara FUSCO

### Duration of project:

69 months (19/09/2011 - 30/06/2017)

### Total budget in euro:

1,479,986.00

**EC contribution in euro with %:** 1,109,989.00 (75.00 %)

- Improvement in the conservation status of dune habitats with Juniperus by increasing the cover of native species over 9 ha;
- Propagation of at least 10 000 plants of native woody species and ex-situ conservation of at least 10 000 seeds of the species considered most important for the conservation of dune habitats;
- Increasing the area of temporary ponds and salt meadows and improving their conservation status;
- Increasing Chiroptea populations, increasing the frequency of foraging, and improving their conservation status through the installation of 400 bat boxes and a roost in a dune pine forest habitat;
- Increasing the population of *Testudo hermanni* and *Emys orbicularis* and the improvement in their conservation through the establishment of a recovery centre for individuals that have been injured; and
- The implementation of an environmental education programme and the establishment of teaching laboratories.

# Pilot actions for the reduction of the loss of genetic patrimony of the wolf in central Italy

### **Project background**

The project focuses on a relatively recently recorded threat to wolf (*Canis lupus*) conservation, namely interbreeding with domestic dogs. Wolves and dogs are biologically the same species but, while wolves are biologically natural, dogs are a product of artificial selection managed by humans. Over the past 20 years, sightings of wolves in Tuscany with morphological characteristics different from those of typical Italian wolves have increased. Moreover, genetic analysis has confirmed that some specimens of wild canines (in Tuscany and elsewhere) are not only first-generation hybrids (a cross between a wolf and a dog) but also hybrids subsequently integrated into the wolf population.

The project will have high demonstration value because it will be the first project in Europe to manage wolf-dog hybrids (without simply killing dogs). Although hybridisation between wolves and dogs has been recorded for centuries, the wide-spread presence of dogs and the lack of control of hybrids, together with a reduction of wolf populations, make this a serious threat to the conservation of the genetic identity of the wolf.

### **Project objectives**

The project aims to:

- Identify and remove all the hybrids from two pilot areas in Tuscany;
- Decrease the presence of free-ranging dogs through their removal and the sterilisation of all captured individuals;
- Increase awareness among the general public of the threat posed by hybrids to wolves and to wildlife in general;
- Establish a network of interest groups that could contribute to the development of best solutions for tackling the problem of hybridisation in the longer term;
- Develop and maintain a database for recording hybrid activity;
- Draw up guidelines for the management of wolfdog hybrids, following wider consultation with interest groups;
- Develop areas where hybrids can be kept in captivity for public awareness purposes;
- Establish a network of public administrations from



### Beneficiary:

**Type of beneficiary** Local authority

Name of beneficiary Provincia di Grosseto - Dipartimento Sviluppo Sostenibile

### Postal address

Via Pietro Micca, 39 IT - 58100 Grosseto ITALY Phone +39 0564 484415 Fax +39 0564 28860 Email v.nunziatini@provincia.grosseto.it

Name of contact person Valter NUNZIATINI

.. . . .

**Duration of project:** 41 months (30/09/2011-28/02/2015)

Total budget in euro:

2,296,659.00

**EC contribution in euro with %:** 1,700,906.00 (74.06 %)

areas where the hybrids have been recorded in order to stimulate the replication of successful experiences and the improvement of experimental activities implemented through the project.

- The results expected include:
- The development of a methodology for the identification of hybrids;
- The complete removal of all wolf-dog hybrids (an estimated 15 individuals) from two pilot areas in Tuscany;
- Sterilisation of at least 70% of free ranging dogs in the Province of Grosseto;
- A shared long-term strategy for management of hybrids in the Province of Grosseto;
- Strong collaboration with nearby provinces where hybrids have been recorded;
- A significant increase in awareness about the impact of hybrids on wildlife and the local economy;
- A reduction of at least 50% in the number of freeranging dogs as a result of an awareness campaign

# SHARKLIFE – Urgent actions for the conservation of cartilaginous fish in Italy

### **Project background**

The endangered status of sharks and rays in the Mediterranean Sea was highlighted by the IUCN study, 'Red List 2007 Assessment of the conservation status of cartilaginous fishes (Chondrichthyans) in the Mediterranean'. The study shows that although the Mediterranean is a semi-enclosed sea, it hosts a diverse range of chondrichthyans - an estimated 80 species, including 45 species of sharks. At the heart of the Mediterranean region, Italy hosts 43 species of shark. The IUCN study found that the region has the highest percentage of threatened sharks and rays in the world. Around 42% of the 71 species evaluated are included on the Red List of endangered species (under the categories 'Critically Threatened', 'Endangered' or 'Vulnerable'). The main threat to their survival is fishing, both commercial and leisure, in several bordering countries and in Italian seas in particular.

### **Project objectives**

In line with the European Plan of Action for Cartilaginous Fishes, which was approved in 2009, this project aims to contribute to the conservation of cartilaginous fishes, particularly basking sharks and pelagic stingrays, in Italian seas by reducing the mortality rate caused by commercial and leisure fishing.

The project will promote the use of low-impact fishing devices for pelagic stingrays (circle hooks); develop a system to reduce accidental capture of basking sharks; implement a 'tag and release' policy for fishing tournaments; and carry out tailored training for fishermen, veterinarians and coast guard personnel who oversee controls on fishing.

Expected results:

- An 80% reduction in catches of pelagic stingray (*Pteroplatytrygon violacea*), through the use of circle hooks;
- An end to the catching of sharks and rays in the national fishing competitions through the implementation of a tag and release policy;
- A significant reduction in catches of several species of sharks and rays due to the introduction of innovative fishing devices to reduce by-catch and the promotion of a tag and release policy among leisure fishermen;



### Beneficiary:

**Type of beneficiary** NGO-Foundation

Name of beneficiary

Centro Turistico Studentesco e Giovanile - CTS

### Postal address

Via Andrea Vesalio 6 IT - 00161 Roma ITALY Phone +39 0664960301 Fax +39 0664960335 Email sdimarco@cts.it

Name of contact person Stefano DI MARCO

Duration of project:

39 months (01/10/2011 - 31/12/2014)

### Total budget in euro:

1,337,640.00

**EC contribution in euro with %:** 668,820.00 (50.00 %)

- The adoption of a specific plan of action for the conservation of sharks and rays by the authorities concerned;
- The development of an innovative system for the reduction of accidental capture of basking sharks and other large pelagic species which could be promoted on a large scale;
- A greater consensus among fishermen and local communities about conservation policies and the sustainable use of marine resources; and
- Greater public awareness of biodiversity issues.

# Forest Habitat Restoration within the Gauja National Park



### **Project background**

The Gauja National Park (Gauja NP) includes large areas of broadleaved forests on slopes and alluvial forests of high nature conservation value.

However, there are several challenges and developing problems that, if left unresolved, may jeopardise the achievement of nature conservation goals within the Gauja NP.

Forests are ecosystems with a long regeneration cycle, demanding long-term planning for restoration and management measures. Fragmented and discontinued approaches to habitat restoration are often at the core of insufficient results of restoration measures. Moreover, considerable financial resources and innovative approaches are needed in order to obtain comprehensive and actual data on large areas of forest habitats representing complex structures and even more complex terrain structures (wide river valley, interconnected systems of tributaries, slopes, screes and ravines).

### **Project objectives**

The project's main objective is to establish a longterm forest habitat restoration and management programme for selected priority species and habitat types, to test and demonstrate innovative habitat inventory methods and implement the best practice habitat restoration measures in the Gauja NP Natura 2000 site.

Secondary objectives are:

- To draft a long-term forest habitat restoration and management programme for selected priority species and habitat types;
- To demonstrate and promote innovative habitat restoration and management measures aiming at improving the conservation status of forest habitats;
- To adapt airborne remote sensing technologies for forest habitat distribution evaluation and conservation status assessment as well as for restoration and management planning; and
- To increase the knowledge and awareness of nature conservation specialists, local municipalities and local residents on restoration and management measures for forest habitats of EU importance.

### **Expected results:**

• Obtaining of inventory data on the distribution and conservation status of the selected priority forest habitats within the Gauja NP;

### Beneficiary:

Type of beneficiary National authority

Name of beneficiary Nature Conservation Agency

### Postal address

Baznicas street 7 LV - 2150 Sigulda LATVIA Phone +371 29192799 Fax +371 67971344 Email Janis.Krumins@daba.gov.lv

Name of contact person Janis KRUMINS

### Duration of project:

48 months (01/09/2011-31/08/2015)

# **Total budget in euro:** 823,243.00

**EC contribution in euro with %:** 493,946.00 (60.00 %)

- Preparation of digital maps of the Gauja NP and updating of the Natura 2000 site data sheet;
- Drafting of a long-term restoration and management programme and habitat restoration and management plan for the target forest habitat;
- Implementation of the following restoration / management activities: hydrological restoration of 130-170 ha of bog woodland habitat; management of 280-300 ha of western taiga boreal forest; and management of 60-80 ha of broad-leaved forest;
- Use of the project areas as demonstration sites of efficient restoration and management measures for nature conservation experts, private land owners and other stakeholders; and
- Dissemination activities, including: project leaflets, a printed report on restoration, five short films, a website, and five seminars and experience exchange trips for nature conservation specialists, representatives from local municipalities and local people.

## Restoring the hydrological regime of the Kemeri National Park



### **Project background**

Kemeri National Park was founded in 1997 and covers an area of 36 000 ha. It lies on the coast of the Gulf of Riga and includes forests, swamps and mires, shrubs, lakes or lagoons, natural mineral-springs and muds.

There are eight bogs covering 30% of the park area, making it the second largest bog complex in Latvia. All three wetland types are found here – fens, transition and raised bogs. The Kemeru tirelis raised bog is an internationally important wetland site.

However, drainage systems built in the 1930s and 1970s have caused a reduction of the water table of the raised bogs and black alder swamps within the park. Despite this, the majority are considered capable of regeneration if appropriate management measures are applied. Urgent action is needed to maintain the favourable status of the high quality habitats and to improve the condition of the habitats affected by altered hydrological regimes.

### **Project objectives**

The project's main objective is to establish a hydrological restoration programme and to carry out hydrology restoration measures within three different ecosystems:

- Bog woodland and swamp forest habitats the peripheral forests at the western edge of the Kemeru tirelis raised bog;
- Raised bog habitats the Zalais purvs raised bog; and
- Floodplain meadows the floodplain of the river Skudrupite and the Melnragu meadows.

Secondary objectives are:

- Creation of a hydrological restoration programme for priority areas within the national park, serving as an example for hydrological modelling in the region;
- Implementation of hydrology restoration measures to improve the conservation status of bog woodland and swamp forest habitats, raised bog habitats and riparian meadow habitats;
- Adaptation of airborne remote sensing data interpretation methods for hydrological modelling, habitat conservation status assessment and hydrology restoration planning, and distribution of know-how to other countries; and

### Beneficiary:

Type of beneficiary National authority

Name of beneficiary Nature Conservation Agency

### Postal address

Baznicas street 7 LV - 2150 Sigulda LATVIA Phone +371 29192799 Fax N/A Email Janis.Kuze@daba.gov.lv

Name of contact person Janis KUZE

### Duration of project:

60 months (01/09/2011 - 31/08/2016)

### Total budget in euro:

963,823.00

**EC contribution in euro with %:** 702,337.00 (72.87 %)

• Awareness-raising to change the attitude of local people about hydrology restoration measures targeting habitats of EU importance.

- Inventory data to be provided on drainage systems and conservation status of the habitats of EU importance within the Zalais purvs raised bog and Skudrupite-Melnragu meadows and forests. The site's Natura 2000 data sheet will also be updated;
- Creation of a hydrology restoration programme;
- Implementation of restoration activities on some 1 000 ha of bog woodland and swamp forest, some 550 ha of raised bog habitat and some 85 ha of floodplain meadows (restoring the meandering course of the river);
- The areas of hydrological restoration will be used as demonstration sites for nature conservation experts and other stakeholders; and
- Various dissemination activities will be carried out, including project leaflets and reports, exchange trips and a project website.

# Restoration of degrading habitats of Community interest in the protected areas of Lithuania

### **Project background**

The Salantai regional park, situated in north-western Lithuania, features a tundra-like landscape typical of this region. Since ancient times, the surrounding villages used the area as common pasture land that was intensively grazed. However, the traditional management of the site has discontinued (no grazing livestock), and as a result, its rich biodiversity is being degraded by overgrowth from trees and bushes.

The Kurtuvenu national park provides management of the areas along both sides of the river Dubysa. The river valley contains natural grasslands (and swamps), which are formed by the influence of geomorphologic, hydrographical and historical conditions. The Dubysa is fed with snow melt and rain water. River flow is characterised by very high variability: during the spring thaw, it increases several times (compared with midsummer levels). Flooding benefits the condition of the (alluvial) grassland habitat. However, on the upper Dubysa, conversion (Bubiai pond construction) river flow and spring flooding has decreased. The river grasslands and river valleys located at Bazilionai were grazed in ancient times, and mowed in some areas (where there is a smoother texture and enough dry grassland). The ageing of the local population has led to the gradual disappearance of traditional farming practices, including grazing. As a result, the once natural open grasslands have become overgrown with trees and bushes.

### **Project objectives**

The project's main aim is to restore and conserve the valuable juniper, heath and grassland habitats of the Salantas and Kurtuvenu national parks, including the Vijurku meadows (Dubysa river valley).

Specific goals are:

- To restore and maintain open scrublands, meadows and grassland habitats with their characteristic structure and species composition;
- To establish conditions for grazing and the removal of low value shrubs and trees;
- To provide follow-up care to ensure the good condition of the habitats; and
- To facilitate access to the project's Natura 2000 sites.



### Beneficiary:

**Type of beneficiary** Park-Reserve authority

Name of beneficiary Salantų regioninio parko direkcija

### Postal address

Laivių g., 9 LT - 97314 Salantai Kretingos r. LITHUANIA Phone +370 61448404 Fax +370 44558761 Email asta@salanturp.lt / direkcija@salanturp.lt

Name of contact person Asta BAGOČIENE

Duration of project:

60 months (01/01/2012 - 31/12/2016)

**Total budget in euro:** 631,039.00

**EC contribution in euro with %:** 315,519.00 (50.00 %)

- The restoration and maintenance in good condition of 110 ha of habitats of European importance, including the priority for conservation grassland habitats -Species-rich Nardus grasslands (2 ha) and Xeric and calcareous grasslands (0.3 ha);
- Co-operation between the state parks will be improved with education and information activities extended to local communities (the park authorities will conduct environmental education, prepare and construct information stands, a viewing tower and a nature trail); and
- Various dissemination materials will also be produced, including: four newsletters, four seminars, meetings, presentations of project activities and an educational programme on the natural grassland vegetation and its conservation. In total, an estimated 10 000 people will be informed about the Natura 2000 ecological network and the LIFE+ project.

# Creating an inventory of Marine IBAs for *Puffinus Yelkouan, Calonectris diomedea* and *Hydrobates pelagicus* in Malta

### Project background

The LIFE Yelkouan Shearwater project (LIFE06 NAT/ MT/000097) set a precedent for undertaking seabird research and conservation in Malta, with intensive fieldwork undertaken to ascertain key feeding and rafting areas for the Yelkouan Shearwater (*Puffinus yelkouan*) breeding colony at Rdum tal-Madonna, the largest of its kind in Malta. The research for this project was undertaken with the aim of trialling methods to identify Marine Important Bird Areas (IBAs) for this species and other seabird species, which will help the Maltese government designating Marine Special Protected Areas (SPAs). As a second output, the project has created a roadmap for the Maltese government to fulfil its obligations of designating Marine SPAs for all of its internationally important seabird colonies.

### **Project objectives**

This new LIFE+ project is the logical progression of the EU LIFE Yelkouan Shearwater project and uses the roadmap to address the designation of Marine SPAs for three important bird species, across multiple colonies, through the identification of Marine IBAs. These Marine IBAs will then be designated as Marine SPAs by the Maltese government.

### Expected results:

- Creation of a complete inventory of Marine IBAs for *P. yelkouan*, Cory's shearwater (*C.diomedea*), and storm petrel (*H. pelagicus*) breeding in Malta up to 25 nautical miles, through a combination of boat-based observations, telemetry and modelling, as per established BirdLife International criteria;
- Designation of the relevant sites identified through this project as SPAs forming part of the Natura 2000 network in line with Malta's obligations and its jurisdiction within the duration of the project;
- Identification of Marine IBAs located within international waters (beyond 25 nm) for the project's three target species, and recommendation of their classification as Marine Protected Areas under international Mediterranean Conservation Agreements, such as the Barcelona Convention or AEWA;
- Production of a technical report detailing the overall inventory of Marine IBAs (in both territorial and international waters), including full details and maps of each site;

# MALTA SEABIRD PROJECT

LIFE10 NAT/MT/000090

### Beneficiary:

**Type of beneficiary** NGO-Foundation

Name of beneficiary BirdLife Malta

### Postal address

57/28, Marina Court Abate Rigoard Street MT - XBX 1120 Ta' Xbiex MALTA Phone +356 2134 7644 Fax N/A Email paul.debono@birdlifemalta.org

Name of contact person Paul DEBONO

### Duration of project:

58 months (01/09/2011 - 30/06/2016)

**Total budget in euro:** 873,964.00

**EC contribution in euro with %:** 436,982.00 (50.00 %)

- Enlargement and maintenance of the Central Mediterranean Seabirds at Sea database, following up the results of the LIFE Yelkouan Shearwater project through the creation of a GIS database;
- A report on the diets of the three target seabird species, particularly their main prey species;
- A report on the quantification of conflict between nesting yellow-legged gulls (*L. michahellis*) and *H. pelagicus* on Filfla and methods to resolve this conflict (if any);
- Reports of proceedings from a workshop aimed at countries within the Central Mediterranean concerning collaboration on the designation of shared Marine IBAs in international waters; and
- Widespread dissemination of project actions to raise awareness of seabird conservation and Marine IBAs and SPAs of Malta and how Malta is working to achieve its international obligations.

# Restoration of inland dunes and psammophyle heathland in the North-western Veluwe

### **Project background**

The Veluwe is the most important area in the Netherlands for inland sand drifts, and more than 90% of the inland sand drifts in Europe are found in the Netherlands. The Hulshorsterzand sand drift is a rich habitat for lichens and mushrooms species, several of which are classified as Red List species. The project area is home to many breeding birds, including the European nightjar (*Caprimulgus europaeus*), the Eurasian wryneck (*Jynx torquilla*) and the woodlark (*Lullula arborea*). The project area is also important for reptiles such as the sand lizard (*Lacerta viridis*), adder (*Vipera berus*) and slow worm (*Anguis fragilis*). Other species found there include the stag beetle (*Lucanus cervus*) and giant earwig (*Labidura riparia*).

The sand drift areas, however, have been severely reduced in the past few centuries. The value of the sand drifts was not always recognised and, from the end of the 19th century until about 1950, attempts were made to control these sand drifts, mainly by planting pine trees (Pinus sylvestris). This proved to be highly successful and the remaining sand drifts are now surrounded by coniferous forests. The extent of open areas with sand drifts and heathlands has decreased and the populations of many species associated with sand drifts and heathlands are currently highly fragmented. This is especially the case for less mobile species, such as the ground beetles (carabids), solitary bees and reptiles. A number of species have already disappeared from the area, including breeding birds such as the northern wheatear (Oenanthe oenanthe), the great grey shrike (Lanius excubitor) and the tawny pipit (Anthus campestris).

### **Project objectives**

The main objective of the project is to enlarge and/ or improve the area of sand drifts and dry and moist heathlands in the north-western Veluwe. The project aims to connect different sub-areas with a view to enhancing the dispersion of target species and increasing populations. The implementation of the project actions will contribute to the enlargement and restoration of habitats and associated species in the project area. The project will specifically focus on inland sand drifts in the Hulshorsterzand area, one of the largest and best preserved areas of inland sand drifts in Europe.



### Beneficiary:

**Type of beneficiary** NGO-Foundation

Name of beneficiary Vereniging Natuurmonumenten

### Postal address

Noordereinde 60 NL - 1243 ZS 's-Graveland THE NETHERLANDS Phone +31 35 6559868 Fax +31 35 6559222 Email a.stoker@natuurmonumenten.nl

Name of contact person Andries STOKER

Duration of project:

64 months (01/09/2011- 31/12/2016)

**Total budget in euro:** 2,268,940.00

**EC contribution in euro with %:** 1,134,470.00 (50.00 %)

- Enlargement of the area of dune and heatland habitats by 89 ha. These habitats will develop where the forest has been removed;
- Improvement of dune and heathland habitats in an area of around 250 ha;
- Removal of invasive blackberry (*Prunus serotina*) in an area of 300 ha. Both forest and open habitats of sand drifts and heathland are expected to benefit from this action;
- The zoning of Hulshorsterzand as a recreation area, including the moving of a footpath;
- Ongoing management through the project's restoration and enlargement measures. This management will be carried out by contractors and employees/volunteers of Natuurmonumenten. The continued management of the area will be assured by the work of volunteers and the purchase of the necessary equipment (e.g. monitoring tools).

### Creating a Blue Wildlife Corridor in the Ina basin

# LIFE10 NAT/PL/000654 Niebieski korytarz Iny

### Project background

The Ina basin, in Western Pomerania, Poland, is home to several Natura 2000 sites. Since 2006, a project to restore the population of Atlantic salmon (Salmo salar), a species listed in Annex II of the Habitats Directive, has been taking place in the Ina river. Atlantic salmon reproduction and the first stages of development need to take place in clear, cool and well-oxygenated rivers and streams. To spawn, salmon need large stretches of gravel and rocky-gravel substrate where they dig out nests and hide eggs. The past installation of large numbers of hydrotechnical structures in the Ina basin has made it difficult or even impossible for salmon to migrate to their spawning grounds. This situation, combined with the straightening of the river along a section from the town of Recz to the river mouth, has had a negative impact on the salmon population and the biodiversity of the Ina basin.

### **Project objectives**

The project aims to conserve and improve biodiversity in the Ina basin's water ecosystems that are located in Natura 2000 sites. It will achieve this mainly by linking them within a blue ecological corridor. An additional objective involves restocking salmon populations in the Ina basin. These objectives will be reached by performing the following actions:

- Clearing migration routes in the Ina river and its major tributaries by building 'fish passes';
- Creating artificial spawning grounds and enlarging the area of natural spawning grounds for salmonids; and
- Planting trees along 20 km of the river bank to create shaded areas and lower the water temperature.

Creating inter-linked blue ecological corridors will help facilitate large scale protective measures for currently isolated Natura 2000 sites.

All the problems occurring in the Ina basin (including ecological barriers in the form of old hydrotechnical structures, lack of spawning sites and disappearance of the old river beds) are typical of most of the salmon rivers flowing into the Baltic Sea. Therefore, this project aims not only to solve the problems in the Ina basin but also to demonstrate transferable solutions for reconstructing functional water ecosystems for migratory fish species.

### **Beneficiary:**

**Type of beneficiary** Local authority

### Name of beneficiary

Zachodniopomorski Zarząd Melioracji i Urządzeń Wodnych w Szczecinie

### Postal address

Al. Papieza Jana Pawla II 42 PL - 70-415 Szczecin POLAND Phone +48 91 440 51 14 Fax +48 19 440 51 01 Email life.ina@zzmiuw.pl

Name of contact person

Magdalena WITKOWSKA

### Duration of project:

67 months (01/09/2011 - 31/03/2017)

**Total budget in euro:** 4,173,352.00

**EC contribution in euro with %:** 2,086,676.00 (50.00 %)

### Expected results:

The project expects to achieve the following:

- To clear the channel of the Ina river and its major tributaries;
- To create artificial spawning grounds, increasing the number of fish that inhabit the Ina river, and improving the population of Atlantic salmon; and
- To provide detailed records of fish migration, specifying when and where Atlantic salmon (and other fish species) access the spawning sites. These records will enable the beneficiary to perform more successful protective actions.

# Protection of natural resources of Kampinos Forest – Natura 2000 Site, through the renaturalisation of bought-up land

### Project background

The protection of habitats and species within the "Puszcza Kampinoska" Natura 2000 site is facilitated by the renaturalisation of areas bought by the state and permanently managed by the Kampinos National Park (KPN) authority. The land purchase programme began in 1975 and continues today with various minor modifications.

### **Project objectives**

The project objectives are as follows:

- To improve the conservation status of the many important European species found in the park (i.e. these are species protected by national legislation and also listed in the annexes of the Habitats and Birds Directives): beaver (*Castor fiber*), otter (*Lutra lutra*), Eurasian lynx (*Lynx lynx*), various amphibians and reptiles, the corncrake (*Crex crex*), crane (*Grus grus*), bittern (*Botaurus stellaris*) and the scarce large blue butterfly (*Maculinea teleius*) and large copper butterfly (*Lycaena dispar*);
- To reduce the pressure of urbanisation on the purchased land;
- To improve the hydrological condition of marshland areas within the park;
- To improve the effectiveness of ecological corridors within the park by eliminating strips of privatelyowned land (often fenced). This is an especially important measure for the large mammals, as well as reptiles and amphibians;
- To stop intensive farming activities causing groundwater pollution;
- To increase the park's CO<sub>2</sub> absorption capacity as a result of the growth of biomass in forest ecosystems introduced on former arable land;
- To eliminate or reduce various threats, including from forest fires, road accidents, poaching, the picking of forest fruits, the destruction of raptor nests and beaver dams, littering, and uncontrolled visits to protected areas;
- To increase, through awareness raising activities, public acceptance and support for conservation measures including, notably, the renaturalisation of land purchased by the state.

### Expected results:

- Renaturalisation of 200 ha of land;
- The implementation of active protection measures (mowing) on about 100 ha, in order to preserve



### Beneficiary:

**Type of beneficiary** Park-Reserve authority

Name of beneficiary Kampinoski Park Narodowy

### Postal address

Tetmajera 38 PL - 05-080 Izabelin POLAND Phone +48 22 7226001-350 Fax +48 22 7226560 Email pdzirba@kampinoski-pn.gov.pl

Name of contact person Pavel DZIRBA

### Duration of project:

43 months (01/09/2011 - 31/03/2015)

## **Total budget in euro:** 5,568,653.00

5,568,653.00

**EC contribution in euro with %:** 2,784,326.00 (50.00 %)

grassland and meadow ecosystems, with natural succession on 80 ha. Another 20 ha will be forested;

- The strengthening and extension of the following habitats: *Molinietum medioeuropaeum*, *Arrhen-atheretum medioeuropaeum*, *Carici canescentis* and *Agrostietum caninae*, *Tilio-carpinetum*, *Frax-ino-Alnetum* and *Salici-Populetum*;
- Elimination of 18 barriers to animal migration;
- An increase in the populations of 14 species protected by EU nature directives: Lynx lynx, Castor fiber, Lutra lutra, Botaurus stellaris, Crex crex, Grus grus, Ciconia nigra, Lanius collurio, Sylvia nissoria, Haliaetus albicilla, Aquila pomarina, Circus pygargus, Maculinea teleius, Lycaena dispar;
- A decrease in built-up areas and in the size of the potential development area, as well as a decrease in the number of inhabitants;
- Increased public awareness of the conservation measures within the Natura 2000 site through the dissemination of information about the project.

# ECOTONE – Management of riparian habitats towards the conservation of endangered invertebrates

### **Project background**

Alder forests (*Alnus glutinosa*) commonly grow on the banks of rivers with permanent water flows. This habitat is at its optimum in the middle of river courses.

Past human activity has led to a reduction of many alder forests and much of this habitat is now limited to thin rows of trees located in single lines directly at the riparian edge.

### **Project objectives**

This project is targeting the conservation of alder alluvial forests in two Portuguese rivers, in order to increase the populations of three species of dragonfly (Oxygastra curtisii, Gomphus graslinii and Macromia splendens). The project also sets out to improve the conservation status of two species of water pearl mussels (Margaritifera margaritifera and Unio crassus).

It will achieve its objectives by conceiving, implementing and evaluating active management methodologies targeting improvements to alluvial forests supporting alder and ash (*Fraxinus excelsior*). Forest management methodologies will be tailored to support the conservation status of endangered water pearl mussel populations. Several ex-situ reproduction techniques will be used to increase the mussel populations and to reinforce the populations of fish that are host to these species.

### Expected results:

Project activities will take place along a continuous 12 km stretch of riparian zone on the River Paiva and 5 km on the Torgal stream. This will result in the restoration of some 15 ha of the priority habitat, Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior*, consisting of 11 ha on the "Rio Paiva" Natura 2000 site and 4 ha on "Costa Sudoeste" Natura 2000 site.

An additional 5 ha of the target habitat will be created by the project. Conservation work will involve:

- Planting some 10 000 trees and shrubs to enhance the alder forest's natural floristic composition;
- Increasing dragonfly populations through the settlement of aquatic plants by reconnecting 5 ha of old waterbeds and improving 2 ha of new areas;
- Reinforcing the population nucleus of *M. Margaritifera* by adding 4 500 juvenile individuals to the estimated 500 adults thought to exist in the area;



### Beneficiary:

**Type of beneficiary** NGO-Foundation

Name of beneficiary QUERCUS - ANCN

### Postal address

Centro Associativo do Bairro do Calhau PT - 1500-045 Lisbõa PORTUGAL Phone +351 937 788 473 Fax +351 284 321 320 Email fcnatureza@quercus.pt

Name of contact person José Paulo MARTINS

Duration of project:

48 months (01/01/2012 - 01/01/2016)

**Total budget in euro:** 599,161.00

**EC contribution in euro with %:** 449,371.00 (75.00 %)

- Reinforcing the population nucleus of *U. crassus* by adding 400 juvenile individuals to the estimated 100 adults thought to exist in the area;
- Undertaking two actions targeting fish repopulation;
- Creating and enhancing two areas for concession sports fishing; and
- Producing dissemination materials (including leaflets, posters, videos and an exhibition on riparian alder forests.

# Bussaco's Recovery from Invasions Generating Habitat Threats (BIODIV)

# LIFE10 NAT/PT/000075 BRIGHT

### **Project background**

The Buçaco National Forest was created in the 17th century by the Unshod Carmelites, who fenced off an area of 400 ha and planted 'Biblical' tree species such as cypress and cedar. In 1834, the forest came under State ownership and new trees were planted. Together with other surviving parts of the original forests which are characteristic of the region – especially oak and laurel woods – these autochtonous woods encompass about 17.5 ha of an adrenal habitat, which is unique in Portugal and Europe. Sharing some characteristics with Thermo-Mediterranean and pre-steppe scrub habitats, these relict woods are under threat from the expansion of invasive alien species, such as three acacia species, which have been the subject of eradication attempts in other areas.

### **Project objectives**

The project aims to control and eradicate the invasive alien species that are threatening biodiversity in the Buçaco National Forest. The project also aims to recover local habitats by implementing a set of integrated conservation actions: control/eradication of alien species, propagation/plantation of autochtonous flora that is characteristic of the original habitats, and the active involvement of stakeholders (such as schools, local communities, visitors, and families and employees of local businesses committed to social/environmental policies).

### Expected results:

The main expected results include:

- Actions in all of the existing distribution areas of invading exotics;
- Eradication of alien forest and garden species (*Acacia dealbata, Acacia longifolia, Acacia melanoxy-lon, Ailanthus althissima, Pittosporum undulatum, Robinia pseudoacacia, Cortaderia selloana, Prunus laurocerasus, Pittosporum eugenioides and Fascicularia bicolor*) allowing for the start of recurring and less intensive control works in order to achieve long-term eradication;
- Reduction of the distribution area of river spiderwort (*Tradescantia fluminensis*) to 50% of its current area, and substitution in the formerly occupied areas of intermediate periwinkle (*Vinca difformis*);
- Restoration of 30 ha of autochtonous habitats (including the conservation of 17.5 ha of the unique and rare area of adrenal); and

### Beneficiary:

**Type of beneficiary** NGO-Foundation

**Name of beneficiary** Fundação Mata do Bussaco

### Postal address

Mata do Buçaco PT - 3050-261 Luso PORTUGAL Phone +351 231937000 Fax +351 231937004 Email gabpresidencia@fmb.pt

Name of contact person António FRANCO

**Duration of project:** 60 months (01/09/2011 - 31/08/2016)

**Total budget in euro:** 3,081,876.00

**EC contribution in euro with %:** 1,540,938.00 (50.00 %)

• Conservation of the biodiversity of the Bussaco National Forest, including a unique and rare habitat and many protected fauna and flora.

# Improving the conservation status for the priority species and habitats in the Iron Gates wetlands

### **Project background**

Located in southwest Romania, The Natura 2000 site "Danube water course Bazias – Iron Gates" includes a large area of priority habitats for the pygmy cormorant (*Phalacrocorax pygmeus*). It is also an important stopover point for migrating birds. The pygmy cormorant is one of 23 bird species listed in Annex I of the Birds Directive found at the site, which is also home to three amphibian species listed in Annex II of the Habitats Directive (*Bombina bombina, Bombina variegata* and *Bufo bufo*), a reptile, the European pond turtle (*Emys orbicularis*) and four fish species (*Gymnocephalus schraetzer, Gymnocephalus baloni, Zingel streber* and *Zingel zingel*).

The area is threatened by eutrophication, aquatic invasive species, habitat degradation, unsuitable fishing and wetlands pollution. A lack of understanding of the importance of the Natura 2000 network is another difficulty.

### **Project objectives**

The purpose of the project is to provide a long-term favorable conservation status for priority species and their habitats at the project site, by implementing and disseminating state-of- the-art conservation measures. The project will restore river habitats, as the nesting, resting and feeding habitats of bird species. The actions will benefit two Annex I-listed bird species pygmy cormorant *(Phalacrocorax pygmeus)* and ferruginous duck *(Aythya nyroca)* in the Natura 2000 site "Danube water course Bazias – Iron Gates".

The project specifically aims to:

- Improve the conservation status of priority bird species by restoring wintering, nestling and feeding habitats;
- Improve the conservation status of priority habitats through the demonstrative actions of removing aquatic and riverside invasive species;
- Implement a modern early warning system for invasive alien species in the Natura 2000 site; and
- Increase public awareness of the importance of biodiversity in the Natura 2000 site.

### Expected results:

• A long-term action plan for halting the loss of biodiversity in the Iron Gates wetlands, which will include a weed harvesting strategy and a strategy for



### Beneficiary:

**Type of beneficiary** Local authority

### Name of beneficiary

Caras Severin County Environmental Protection Agency

### Postal address

Petru Maior 73 RO - 320111 Resita ROMANIA Phone +40 255 22 30 53 Fax +40 255 22 67 29 Email carmen.sorescu@apmcs.ro rozylowicz@gmail.com

Name of contact person

Carmen SORESCU

### Duration of project:

51 months (01/09/2011 - 15/12/2015)

**Total budget in euro:** 1,272,540.00

**EC contribution in euro with %:** 954,405.00 (75.00 %)

maintaining a minimum water depth. The plan will be approved by the local environmental agency and integrated into the Iron Gates management plan and the Danube river basin management plan;

- Creation of an up-to-date GIS database in compliance with the INSPIRE Directive that provides support to environmental policies and potential activities that impact on the environment in the areas that can be replicated in other Natura 2000 sites; and
- Purchase of floating equipment for cutting the excessive water plants from the wetlands, especially invasive ones. The equipment will be used in the site's wetlands for demonstrative purposes and for elimination of invasive weeds (i.e. *Eichhornia crassipes, Azolla filiculoides, Nymphoides peltata*). In order to use this equipment, four weed harvesters and four mechanics will be trained by experienced operators from elsewhere in the EU.

# Protection of Common Swift (*Apus apus*) and bats in buildings in Slovakia (BIODIV)



### **Project background**

The swift (*Apus apus*) and some bat species, notably the noctule bat (*Nyctalus noctula*), have until relatively recently been considered as common species in Slovakia. The loss of many of their natural breeding habitats, has been substituted by the creation of appropriate artificial breeding conditions in human settlements. This has resulted in a recorded, gradual shift of roosting and nesting strategies for both species, as they moved from the forests into urban sites, where today they occupy mainly prefabricated panelled houses and buildings.

Nearly 99% of the current Slovak swift population breeds in man-made structures and it is estimated that most of the Slovak noctule populations use crevices and hollows in prefab buildings in new urban sites.

In recent years, the greatest threat to both of these species is from the renovation and thermal insulation of prefabricated buildings. According to recent estimates, the overall Slovak swift population has dropped by at least 50-60% over the last two decades (1990-2010). Without appropriate measures, the Slovak swift population could collapse within next 10-20 years.

### **Project objectives**

The project's main objectives are (i) to halt the recent decline of the common swift (*Apus apus*) and noctule bat populations in Slovakia, and to (ii) protect their nest-ing/roosting habitats – especially in urban areas – by the introduction of suitable management practices aimed at improving the conservation status of the species.

A series of actions are planned, targeting the installation of artificial nesting/roosting facilities and the provision of training and guidance on habitat loss prevention and of the importance of conserving the species. The project actions will be mainly implemented at 48 pilot sites in the city centres and suburbs of eight regional capitals (Bratislava, Trnava, Nitra, Trenčín, Žilina, Banská Bystrica, Prešov, Košice) and 40 provincial towns.

### Expected results:

• A 20% (average) increase in the size of nesting populations of swifts in at least 18 locations and maintenance of the current population size in at least 30 locations;

### **Beneficiary:**

**Type of beneficiary** NGO-Foundation

### Name of beneficiary

The Regional Association for Nature Conservation and Sustainable Development (BROZ)

### Postal address

Godrova 3/b SK - 811 06 Bratislava SLOVAKIA Phone +421 2 55562693 Fax +421 2 55562693 Email sibl@broz.sk

Name of contact person Jaromír ŠÍBL

### Duration of project:

48 months (01/01/2012 - 31/12/2015)

**Total budget in euro:** 1,511,870.00

**EC contribution in euro with %:** 755,935.00 (50.00 %)

- Maintenance of the current noctule bat population at 16 locations (installation of c. 400 nesting boxes in at least, 40 localities);
- An improvement in the overall conservation status of the swift in Slovakia (increased number of colonies and individuals; an 80% drop in reported mortality cases; and an increased number of conservation measures 40 pilot actions, installation of at least 1 200 special nest boxes);
- Guidelines for the protection of swifts and noctule bats during insulation and renovation works to buildings to be approved;
- Public attitudes towards the target species to be more favourable in all 79 urban districts of Slovakia (as measured by questionnaires); and
- Strengthened co-operation between the state institutions, NGOs, key stakeholders and local communities on the practical conservation management of the targeted species and of other nesting species in buildings.

# Restoration of Natura 2000 sites in cross-border Bratislava capital region



### **Project background**

The Bratislava capital region and its surroundings support a high number of habitats and species of European importance. Within the project site, the Pannonian and the Alpine bio-geographical regions meet and there are important lothic and lenthic aquatic habitats as well as diverse man-made habitats and pristine natural forest. A total of 60 species listed within Annex II of the Habitats Directive occur within the project site. These valuable habitats face threats from the abandonment of traditional land-use practices, and a high density of unregulated tourists and day-trippers.

### **Project objectives**

The main objective of this transnational nature project is to establish a functional network of Natura 2000 areas in the trilateral border region close to Bratislava and to secure a favourable conservation status for the habitats of European interest found there. Restoration and management activities will be carried out on 16 Natura 2000 sites in Slovakia and in one site in Hungary.

The project intends to plan and implement conservation measures for five different habitat groups:

- Forest habitats: forest management planning, removal of invasive species, planting of native trees, preservation of individual trees from logging;
- Forest steppe habitats: removal of trees and shrubs, mulching, mowing and grazing;
- Grassland habitats: removal of trees and shrubs, mulching, mowing, sowing of seeds, reopening of a field road and grazing;
- Wetland habitats: removal of bank reinforcements, dredging of backwaters, removal of sediments and waste, reconfiguration of artificial barriers; and
- Rocky habitats and caves: removal of trees and shrubs, access regulation.

Cross-cutting measures include the drafting of management plans for four sites, species inventories, land purchase and the hiring of two rangers to reduce negative impacts by visitors.

### Expected results:

- Forest habitats will be restored on an area of 460 ha. Some 9 000 valuable old trees will be marked and preserved from felling;
- New forest management plans will be implemented, securing sustainable forest management over an area of 15 000 ha;

### **Beneficiary:**

**Type of beneficiary** NGO-Foundation

### Name of beneficiary

The Regional Association for Nature Conservation and Sustainable Development (BROZ)

### Postal address

Godrova 3/b SK - 81106 Bratislava SLOVAKIA Phone +421 907300425 Fax +421 2 55562693 Email ruda@broz.sk

Name of contact person Miroslava RUDÁ

### Duration of project:

63 months (01/01/2012 - 31/03/2013)

### **Total budget in euro:** 3,583,413.00

**EC contribution in euro with %:** 1,791,707.00 (50.00 %)

- Forest steppe habitats will be restored on 115 ha;
- Grassland habitats will be restored on 150 ha;
- Grazing as traditional habitat management will be established on 185 ha;
- Water and wetland habitats will be restored at six localities;
- Restoration and protection of rocky habitats and caves (1.67 ha);
- A fully operational and sustainable Natura 2000 management centre will be created in Bratislava;
- Detrimental and illegal human actions will be reported to responsible authorities. This will lead to a reduction in the significant disturbance of sensitive species on 550 ha;
- Various specific conservation and information actions will be organised (targeting e.g. illegal car access, illegal camping, littering); and
- 250 m of trails will be improved and fences, arbours, benches and information panels will be installed in the Devinska Kobyla Natura 2000 site.

# Restoration of endemic pannonic salt marshes and sand dunes in Southern Slovakia

### Project background

Salt marshes and steppes along the Danube in southern Slovakia lie on the northernmost border of the complex of Central European saline soils. In Slovakia, saline soils occupy the largest area on the Danube Lowland, namely at the Žitný ostrov area and around the towns of Komárno, Nové Zámky and Štúrovo, with northernmost sites situated near the town of Nitra.

Relatively large areas of saline vegetation have occurred in Slovakia in the past. The saline vegetation cover was markedly reduced by massive land reclamation during the last three decades of 20th century. Saline plant community coverage in the Danube Lowland fell from 8 300 ha in 1961 to just 500 ha in 2004, whilst habitats of initial salt marsh communities have been almost destroyed. Pannonian sand steppes on the Slovak Danube plain and in the east Slovak lowlands are also recently fragmented and very rare.

The salt marshes and sand dunes host five priority habitats of the EU Habitats Directive. Due to their limited geographical distribution, they belong to the most threatened European communities. This is confirmed by data from the latest 'Red List' of higher plants of Slovakia", where 23 of obligate halophyts are considered as 'critically endangered' species and three species are regarded as probably extinct.

### **Project objectives**

The project plans to contribute to the conservation of priority habitats and strengthening of the Natura 2000 network in the project area, through the active protection of endemic Pannonic halophytic and psammophytic habitats of Community importance. The project actions will be implemented in 15 Natura 2000 sites located within the Danubian Plain of Slovakia.

Specifically, the project aims to apply restoration management, and to improve and maintain the conservation status of the targeted habitats. The general public also will be informed about the importance of these unique habitats. It is hoped that improved knowledge and information about the habitats should help to improve their chances of survival in the long run.

### Expected results:

• An improvement of the conservation status of targeted habitats on 15 sites;



### Beneficiary:

**Type of beneficiary** NGO-Foundation

Name of beneficiary

DAPHNE – Inštitút aplikovanej ekológie

### Postal address

Podunajská 24 SK - 82106 Bratislava SLOVAKIA Phone +421 908 708175 Fax +421 2 45610202 Email stanova@daphne.sk

Name of contact person Viera ŠEFFEROVÁ

**Duration of project:** 64 months (01/09/2011 - 30/12/2016)

# **Total budget in euro:** 2,367,530.00

EC contribution in euro with %:

1,773,280.00 (74.90 %)

- Restoration management on an area of 379 ha of salt marshes and 15.5 ha of sand dunes;
- An optimised water regime in 10 project sites through the creation of 50 small-scale depressions and clay barriers along a total length of 750 m;
- Eradication of invasive alien tree species (mainly *R. pseudoacacia* and *A. altissima*) from an area of 60 ha;
- The establishment of conditions for long-term traditional pasture management, including the purchase of animals (300 sheep, 100 goats) and building of shelters, fences and water resources;
- Implementation of traditional land-use practices (grazing) on an area of at least 350 ha;
- Yearly monitoring of project plots and hydrological conditions to be carried out and two maps of the vegetation and ecological characteristics of the sites to be drafted in the course of the project (in 2012 and 2016); and
- Raising of public awareness concerning the restoration and conservation of pannonic non-forest habitats (e.g. through meetings, conferences, field visits, media appearances). Dissemination activities will address an estimated 4 000 people.

# Preparatory inventory and activities for the designation of marine IBA and SPA site for *Phalacrocorax aristotelis desmarestii* in Slovenia

### Project background

The Slovenian sea deserves special conservation attention. It is home to a significant portion (11.4 % or around 2 000 individuals in non-breeding period) of the biogeographical population of Mediterranean shag (*Phalacrocorax aristotelis desmarestii*). Other seabirds, such as the Mediterranean shearwater (*Puffinus yelkouan*) and Mediterranean gull (*Larus melanocephalus*) can also be found here in populations of up to 1000 individuals, or 1% or more of their biogeographical population.

The area's lack of any legal conservation status, however, poses a major threat to the favourable conservation status of significant part of the Mediterranean shag population. According to the relevant EU and BirdLife guidelines, knowledge of the distribution, population densities, flight routes and seasonal dynamics of the Mediterranean Shag is required in order to identify a new marine IBA/SPA. However, throughout the designation of a new IBA/SPA, the overall conservation status of the species in the Slovenian sea must also be improved.

### **Project objectives**

This project aims to significantly improve knowledge of the distribution, population densities, flight routes and seasonal dynamics of Mediterranean shag in the Slovenian sea, in order to identify a new marine IBA. It also aims to improve protection of the local population of Mediterranean shag from accidental oil spills by preparing expert guidelines. The project will establish a coordinated management approach among the many stakeholders in the busy Gulf of Trieste, where there is a high possibility of uncontrolled activities that could significantly harm the Mediterranean shag population and its habitat. It will also seek to raise public awareness about the conservation status of Mediterranean shag and other important marine species in the future marine IBA/SPA.

### Expected results:

The expected outcomes of the project include:

- An expert proposal for a new marine IBA in the Slovenian sea;
- Designation of a new marine SPA in Slovenia, on the basis of knowledge acquired during the project;



### Beneficiary:

**Type of beneficiary** NGO-Foundation

Name of beneficiary DOPPS - BirdLife Slovenia

### Postal address

Tržaska 2 cesta 22990 SI - 1000 Ljubljana SLOVENIA Phone +386 1 426 5875 Fax +386 1 426 1181 Email dopps@dopps-drustvo.si primoz.kmecl@dopps.si

Name of contact person Primož KMECL

### Duration of project:

42 months (01/09/2011 - 28/02/2015)

**Total budget in euro:** 474,458.00

**EC contribution in euro with %:** 284,675.00 (60.00 %)

- Expert guidelines for protocol in cases of accidental oil spills;
- Integration of IBA and Natura 2000 targets into the management practices of stakeholders;
- Greater public awareness of the importance of the Slovenian sea to Mediterranean shag conservation.

# Restoration of the Ljubljanica River corridor and improvement of the river's flow regime

### Project background

The Ljubljanica River acts as a corridor, linking the limestone headwater areas and alluvial plain areas of the Sava. Due to its unique character, the Ljubljanica River and its corridor has remained a vital habitat for numerous endangered species, in spite of it being one of the most degraded rivers in Slovenia. Currently, it represents a habitat for 26 different native fish species, including several species listed in the Habitats Directive - Eudontomyzon mariae; Barbus meridionalis; Rhodeus sericeus amarus; Cobitis taenia; Cottus gobio, as well as populations of Danube roach (Rutilus pigus) and striped chub (Leuciscus souffia) and fragmented and heavily endangered populations of Danube salmon (Hucho hucho). The eco-hydrological conditions in the Ljubljanica River corridor also help to maintain the unique habitat conditions in the Ljubljansko Barje wetland area in a fragile ecological equilibrium.

### **Project objectives**

The project aims to improve the coherence of Natura 2000 sites by restoring the functionality of the Ljubljanica River as a corridor linking two sites. It will achieve this by removing barriers to fish migration, enhancing and restoring habitats, improving the water management infrastructure, and putting in place a water monitoring system.

Through implementation of the restoration measures, the Ljubljanica River channel will be renewed and a previously unified population of Danube salmon will be reunited. Other target fish species are Danube roach and striped chub.

The project will also carry out an ecohydrological survey and develop hydrological models. The survey will serve as a basis for drafting a management plan for the project site. The project also aims to promote relatively simple river restoration measures for improving the ecological status of the river to meet the requirements of the Water Framework Directive (WFD). Furthermore, the project aims to raise awareness among the general public, local stakeholders and decision-makers at local and national level.

### Expected results:

• Improved ecological status of the heavily degraded Ljubljanica River corridor;



### Beneficiary:

**Type of beneficiary** University

Name of beneficiary University of Ljubljana

### Postal address

Kongresni trg 12 SI - 1000 Ljubljana SLOVENIA Phone +386 1 425 33 24 Fax +386 1 251 98 97 Email mitja.brilly@fgg.uni-lj.si

Name of contact person Mitja BRILLY

**Duration of project:** 48 months (01/01/2012 - 31/12/2015)

**Total budget in euro:** 1,188,015.00

**EC contribution in euro with %:** 584,382.00 (49.19 %)

- Concrete restoration measures, including the construction of two fish passes, the reconstruction of the Ambrožev trg barrier and the restoration of three meanders that will lead to improved habitat conditions for the target fish species;
- Improved connectivity of fish populations that are now very fragmented;
- Demonstration of how restoring a river corridor can improve the habitat conditions and migration of organisms, as well as enhancing the natural coherence between Natura 2000 sites and the surrounding landscape;
- A hydrological model of the Ljubljanica River for water level regulation and adjustment. The operation of a barrier, according to the hydrological model, will help to re-establish the hydrological functioning of the Ljubljanica River during low to medium flows, which is necessary for the conservation of the Ljubljansko Barje Natura 2000 site; and
- Demonstration of examples of good practice that can be easily applied at various spatial scales and in accordance with a WFD implementation strategy.

# Restoration of salt flats around 27 endorheic wetland areas in La Mancha

### Project background

The La Mancha wetlands (Humedales de la Mancha) are situated in the region of Castilla-la Mancha, in Spain. The wetland complex consists of the 27 La Mancha wetlands Nature 2000 sites (targeted by this project), as well as 15 less well known wetlands in the Ruidera natural park and one in the Daimiel national park.

Some of the water in the wetlands is potable, but in places it can also be saline or hyper saline. The wetlands consist of shallow lakes, with depths of between 1.5 to 2 metres. They form a unique habitat for highly specialised flora and fauna. Some endemic species, such as *Helianthemum polygonoides*, are threatened. Many migratory birds winter there, including the white-headed duck (*Oxyura leucocephala*) and the bittern (*Botaurus stellaris*), both listed in Annex I of the Birds Directive.

In 1980, the United Nations' agency, UNESCO, declared the La Mancha wetlands a 'Biosphere Reserve', in recognition of their importance for water birds and their rich biodiversity. Moreover, the La Mancha wetlands are among the most species-rich wetlands in Western Europe. In addition, two of the lagoons targeted by this project, Laguna del Pueblo" and "Lago Manjavacas", are Ramsar sites of international importance.

The wetlands are surrounded by Mediterranean forest, seasonal grasslands and agricultural land (cereals, vineyards and olive trees). The area's farming activities have the greatest negative impacts on the groundwater and wetland conservation. A significant amount of water is withdrawn for irrigation and the use of nitrate and phosphate has very negative impacts on the wetlands' biology.

### **Project objectives**

The project targets the recovery of the Mediterranean salt steppes (*Limonietalia*), a priority habitat of the Habitats Directive, in the 27 La Mancha wetlands'Natura 2000 sites. The main actions will focus on the purchase of agricultural land surrounding the wetlands to halt their degradation and desiccation, and restore/ recover their hydrological properties. These actions will benefit numerous Annex I bird species.

### LIFE10 NAT/ES/000563 HUMEDALES DE LA MANCHA



### Beneficiary:

Type of beneficiary Regional authority

Name of beneficiary Consorcio Alto Guadiana

### Postal address

Jesús Gonzáles Merlo, 1 E - 13600 Alcázar de San Juan SPAIN Phone +34 926 546255 Fax +34 926 545793 Email director@altoguadiana.es

Name of contact person Enrique Jesús CALLEJA HURTADO

**Duration of project:** 36 months (01/10/2011 - 30/09/2014)

**Total budget in euro:** 2,599,274.00

**EC contribution in euro with %:** 1,949,454.00 (75.00 %)

- An increase in the surface area of the targeted *Limonietalia* salt steppes (to over 400 ha);
- Conservation of the current SPA and SCI areas that provide essential alternative habitats for many species endangered by the loss of suitable wetlands;
- An increase in the size of the buffer zone (between the wetlands and agricultural lands) and the conservation of the wetlands' environment. This should result in improved water quality due to a decrease in sedimentation and nutrient run-off;
- An increase in the public estate (262 ha), giving the regional authority more rights over the management of public access. This should also assist in the task of protecting especially sensitive areas; and
- Knowledge of and recognition of the La Mancha Natura 2000 wetlands (through recreational and environmental education activities) extended to the Ruidera natural park and the Daimiel national park.

# Control of the invasive species Lampropeltis getula californiae on the island of Gran Canaria (BIODIV)

### Project background

Invasive alien species (IAS) are organisms that are non-native to an ecosystem, but which have either been introduced or have spread outside their natural habitats. They pose particular risks for biodiversity, often causing decline or elimination of native species and the disruption of local ecosystems and ecosystem functions. According to the Convention on Biological Diversity (2006), since the 17th century, they have contributed to nearly 40% of all animal extinctions for which the cause is known. They also often cause additional economic or environmental harm or adversely affect human health.

The Californian kingsnake (*Lampropeltis getula californiae*) is an invasive alien snake that is quickly spreading on the Spanish island of Gran Canaria. The Canary Islands have no native snake species whatsoever. It is a powerful predator with a wide range of targets. Among its main prey on the island, we count some reptile species endemic to the Canary Islands. It also poses a serious threat to endangered species, such as the Gran Canaria blue chaffinch (*Fringilla teydea*).

The first indications of the snake's presence on the island date back to 1998, although the naturalisation of the populations was not observed until 2004. It is currently present in two main large nuclei. Given the species's capacity for adaptation and acclimatisation, it is likely to spread to the rest of the island.

### **Project objectives**

The main aim of the Biodiversity LAMPROPELTIS project is to reduce the density and abundance of Californian kingsnakes on Gran Canaria so as to minimise its impact on native biodiversity. The project hopes to contribute to the eventual eradication of this species from the island.

To achieve this, the project will work towards the following sub-objectives:

- Improved knowledge of the species, including its biology, ecology and behaviour as an IAS on islands;
- Development and implementation of reliable techniques for the detection and capture of exotic invasive snakes; and



### Beneficiary:

**Type of beneficiary** Public enterprise

### Name of beneficiary

Gestión y Planeamiento Territorial y Medioambiental, S.A.U. (GESPLAN)

### Postal address

C/ Francisco Gourié, 107-3<sup>a</sup> ES - 35002 Las Palmas de Gran Canaria SPAIN Phone +34 928 30 11 50 Fax +34 928 38 02 99 Email rgalbar@gesplan.es

Name of contact person

Ramón GALLO BARNETO

### Duration of project:

48 months (01/09/2011 - 01/09/2015)

**Total budget in euro:** 1,025,863.00

**EC contribution in euro with %:** 512,931.00 (50.00 %)

• Developing legislation to prevent and deal with further invasions by invasive alien species.

The project will provide public authorities with appropriate and adequate tools for preventing and managing invasions of alien vertebrates and for motivating concerned sections of society to join the fight against IAS.

- A reduction in the California kingsnake population on Gran Canaria;
- Tools for detecting, capturing and controlling the entry of exotic species;
- A good practices handbook for dealing with exotic species; and
- The boosting of international networks involved in the fight against IAS.

# Recovering the historic distribution range of the Iberian lynx (*Lynx pardinus*) in Spain and Portugal

### **Project background**

The Iberian lynx (*Lynx pardinus*) is the most threatened carnivorous mammal in Europe. There are currently only two reproductive populations of the species, both in Andalusia (Doñana-Aljarafe and Eastern Sierra Morena).

This medium-sized feline (8-14 kg) lives in areas characterised by a mixture of dense woodland, Mediterranean scrub and pasture. It prospers in areas with an abundance of its main prey - rabbits - and where interference from humans is minimal. The main causes of its decline have been epidemics that have greatly reduced rabbit population, resulting in a lack of food and loss of habitat.

LIFE projects have already worked to improve the conservation status of this species, improving knowledge and understanding of its needs, developing a captive breeding and release programme and developing rabbit populations. However, many challenges remain and the species is not yet safe.

### **Project objectives**

This transnational project (Spain-Portugal) aims at restoring the historical distribution of the Iberian Lynx across areas of Andalusia, Castilla-La Mancha, Extremadura (all in Spain) and Portugal. The project will work to reinforce numbers of the species in the existing populations, and establish new populations in areas identified as appropriate.

The project will introduce individual animals to increase numbers in the existing populations and increase the genetic diversity of these populations. It will also seek to increase their breeding and survival rates by continuing work to improve the habitat to favour the species and particularly to facilitate a quantifiable increase of connectivity between population cores through corridors.

The project will continue to develop measures to improve the co-operation of relevant stakeholders in protecting the species from accidental road death, furtive hunting and pursuit and other negligent activities, including poisoning.

The project will carefully identify areas with sufficient resources for the reintroduction of self-sustaining pop-

# LIFE10 NAT/ES/000570 Iberlince

### Beneficiary:

**Type of beneficiary** Regional authority

Name of beneficiary Junta de Andalucía - Consejería de Medio Ambiente

### Postal address

Avenida Manuel Siurot, 50 ES - 41071 Sevilla SPAIN Phone +34 670945185 Fax +34 953368750 Email miguelangel.simon@juntadeandalucia.es

Name of contact person

Esperanza PEREA ACOSTA

### Duration of project:

60 months (01/09/2011 - 31/08/2016)

### Total budget in euro:

34,015,188.00

**EC contribution in euro with %:** 20,943,399.00 (61.57 %)

ulations of lynx. It will then use habitat-improvement and threat-reduction measures and strategic release to try to establish four new Iberian lynx populations in the most suitable of these.

- Increase the numbers of existing Iberian lynx populations to 70 territorial females in Eastern Sierra Morena and 25 in Doñana-Aljarafe;
- Increase the heterozygosity of existing populations by 7% in Doñana-Aljarafe and by 3% in Eastern Sierra Morena;
- Decrease in mortality rates of the species from different identified causes: road kill by 30%; furtive hunting and pursuit by 20%; other negligence by 10%; and infectious diseases by 10%;
- Establish four new Iberian lynx populations with five territorial females each in different SCIs where the species was present historically; and
- Achieve a specimen fixation rate of no less than 50% from the released individuals and a recruitment of no less than 33% from the reintroduced females.

# Ecosystem Management of the Izki Quercus pyrenaica forest and habitats and species of community interest related to it

### **Project background**

Izki Natural Park lies on a high plateau surrounded by mountains in the very far southeast of Alava. It contains a rich variety of fauna and flora, including some of the most representative Iberian species and habitats. It covers 9 081 ha, of which 3 500 ha is the largest forest of Pyrenean oak trees (*Quercus pyrenaica*) in Europe.

The absence of nearby population centres and access roads has left the park virtually untouched. The oak woods thus provide ideal habitat for several important species of wild animals, including middle spotted woodpecker (*Dendrocopos medius*), Bechstein's bat (*Myotis bechsteinii*) and the agile frog (*Rana dalmatina*). However, encroachment by acidophilic beech is a potential threat to these oak woods. Furthermore, Izki is home to an important representation of 'depressions on peat substrates of the Rhynchosporion' habitat (7150).

### **Project objectives**

The project's goal is the long-term favourable conservation of the Pyranean oak forest and all the habitats and species of community and regional interest that depend on this ecosystem in Izki Natural Park.

The project will test different management practices for the protection of the Pyrenean oak on designated plots in a 210 ha area. These will aim to increase seed regeneration and trunk strength of the species and thus improve its ability to resist replacement by the surrounding acidophilic beech.

The PRO-Izki project team will establish favourable forest structures for nesting and feeding of the middle spotted woodpecker across 50 ha. They will install 100 shelters for forest bats, particularly Bechstein's bat. They will also create six new ponds in strategic locations within the forest to encourage the metapopulation behaviour of the agile frog and provide drinking and hunting grounds for bats.

The project will create five exclusion zones and establish management guidelines to control livestock pressure on bog areas. The 'depressions on peat substrates of the Rhynchosporion' habitats will be further enhanced by the reintroduction of brown beaksedge (*Rhynchospora fusca*), germinated ex-situ, in two small areas



### Beneficiary:

Type of beneficiary Local authority

**Name of beneficiary** Diputación Foral de Alava

### Postal address

Plaza de la Provincia s/n ES - 01001 Vitoria-Gasteiz (Álava) SPAIN Phone +34 945 18 18 51 Fax +34 945 18 19 15 Email pro-izki@ikt.es

Name of contact person Fernando CAMÁRA

Duration of project:

36 months (01/01/2012 - 31/12/2014)

**Total budget in euro:** 1,112,695.00

**EC contribution in euro with %:** 556,348.00 (50.00 %)

A key aspect of the project will be engagement of farming groups and local authorities and agencies in the sustainable long-term management of the resources and habitats of the oak forests. It will also raise awareness of the local population in the value of the project area through initiatives such as a signposted bird watching itinerary.

- Ensured long-term permanence of the Pyrenean oak forest habitat in Izki;
- Improved colonisation ability and dispersal within the forest habitat of the three target fauna species. Management plans will be agreed for these species;
- The achievement of favourable conservation status for restored and maintained bog habitats, particularly depressions on peat substrates; and
- Improved engagement of key stakeholders with long-term sustainable management of the project area and the Natura 2000 network.

# Agroecosystems health cards: conservation of soil and vegetal diversity in mountain and bottom valley grazing areas (BIODIV)

### **Project background**

Most of the surface of the Basque Country is considered as "disfavoured and mountain agriculture area", according to Directive 75/268/CEE. The economy of these mountain areas is closely related to traditional farming activities based on transhumance - the movement of livestock to higher pastures in summer and to lower valleys in winter.

The socio-economic importance of the grazing areas is enhanced by the inclusion of many of these habitats in Natura 2000 network sites. These habitats include: mountain grasslands; Alpine and subalpine calcareous grasslands; and European dry heaths. This project focuses on the Gorbeia Natural Park and its vicinity, being especially interesting because of the diversity of grazing habitats and the strong and consolidated livestock activity.

Management of these habitats has been mainly based on traditional approaches using visible parameters, especially levels and types of vegetation. However, this is not the best way to manage optimal conservation of soil biodiversity: new methodologies are possible.

### **Project objectives**

The main objective of the SOIL-Montana project is to demonstrate the viability of an innovative methodology for the conservation of soil and vegetation biodiversity in mountain and bottom valley grazing areas, based on the application of an Agro-ecosystem Health Card.

In additional to the traditional physio-chemical indicators of soil quality, the health card will include (micro-)biological indicators. This will provide reference values in terms of soil diversity for the first time and provide for the integral diagnosis of the health of the grazing agro-ecosystems. The card will be directly applicable in any agro-ecosystem.

The project will provide for the study of soil quality based on these indicators using a portable Near Infrared Spectroscopy (NIR) device. The information will be collected in a geo-referenced information system. These methods will enable the prediction of soil health to be enlarged to broader areas in a quick and low-cost way.

Studies of soil quality will significantly increase understanding of the relationship between the biodiversity on the surface (vegetation) and under the surface (soil).



### **Beneficiary:**

Type of beneficiary Research institution

### Name of beneficiary

NEIKER- Instituto Vasco de Investigación y Desarrollo Agrario S.A.

### Postal address

c/ Berreaga n°1 ES - 48160 Derio/Vizcaya SPAIN Phone +34 944 034300 Fax +34 944 034310 Email ialbizu@neiker.net

Name of contact person Isabel ALBIZU

### Duration of project:

40 months (01/09/2011 - 31/12/2014)

**Total budget in euro:** 1,649,448.00

**EC contribution in euro with %:** 787,063.00 (47.72 %)

They will also enable the project to identify and demonstrate both positive and negative impacts of certain agricultural operations in the conservation of soil and vegetal biodiversity in several grazing habitats. This should then inform improved agricultural planning with associated benefits to both agricultural yields and natural biodiversity.

- Design of an Agro-ecosystems Health Card;
- Identification of appropriate microbiological soil quality indicators;
- Measurement of at least 10 soil parameters with portable NIRS technology;
- A geo-referenced Information System containing the information collected;
- Identification of links between agricultural practices and soil quality;
- Modified agricultural practices to improve soil quality; and
- Improved biodiversity.

# Combating invasive species within the Tagus and Guadiana river basins in the Iberian peninsula (BIODIV)

### **Project background**

Invasive alien species are a major threat to native biodiversity; competing with native species for food and habitat. Associated problems include reductions in the populations of native species and decreased genetic diversity. Non-native species can also act as reservoirs of infectious diseases that can lead to the extinction of some rare or endemic species.

### **Project objectives**

The Biodiversity project's global objective is to halt the loss of biodiversity associated with invasive alien species on the Iberian peninsula, thereby contributing to the aims of the European Commission's strategy for "Halting the Loss of Biodiversity by 2010 and Beyond" [COM (2006) 216 final].

Involving cooperation between Spain and Portugal, this is the first trans-boundary project launched in the EU to tackle invasive alien species.

### Expected results:

- Approval of specific legislation to enforce the national Catalogue of Invasive Alien Species;
- An Iberian Action Plan to combat invasive alien species;
- The establishment of an Iberian Working Group on Invasive Alien Species;
- A ban on the trade and sale of exotic pets;
- Accurate information on invasive species, and their presence and distribution within the Tajo and Guadiana river basins.

# LIFE10 NAT/ES/000582 INVASEP

### **Beneficiary:**

Type of beneficiary Regional authority

### Name of beneficiary

Junta de Extremadura - Dirección General del Medio Natural Consejería de Industria, Energía y Medio Ambiente

### Postal address

Paseo de Roma s/n. - Módula A, planta baja E - 06800 Mérida (Badajoz) SPAIN Phone +34 924 006131 Fax +34 924 006126 Fmail dgmn.iema@juntaextremadura.net mjesus.palacios@juntaextremadura.net

### Name of contact person

Guillermo CRESPO PARRA

### Duration of project:

60 months (01/01/2012 - 31/12/2016)

### Total budget in euro:

2,895,267.00

#### EC contribution in euro with %: 1,405,652.00 (48.55 %)

# Remediation of migratory barriers in Nordic/fennoscandian watercourses

### **Project background**

There are a huge number of migratory barriers in the rivers of northern Sweden, primarily consisting of road infrastructure and dams to facilitate the floating of logs by the forestry industry. Inventories show that approximately 30-50% of all culverts are migratory barriers. This has a harmful effect upon the freshwater pearl mussel (*Margaritifera margaritifera*). Badly positioned culverts prevent the Atlantic salmon (*Salmo salar*) and brown trout (*Salmo trutta*) reaching suitable spawning habitats and force otters (*Lutra lutra*) to cross roads rather than go through the culvert, a significant cause of otter mortality.

Furthermore, artificial barriers are a barrier to achieving the good water quality of surface waters required by the Water Framework Directive (2000/60/EC). Nearly 18 % of water bodies in the Bothnian Bay district are below 'good' status because of artificial barriers.

### **Project objectives**

The overall aim of the project is to minimise migratory barriers in five larger water systems in the northern part of Sweden. The conservation status of the Natura 2000 habitats and species will be improved, or maintained, through increased connectivity. The habitats and species targeted by the project are: Fennoscandian natural rivers; Watercourses of plain to montane levels with the Ranunculion fluitans and Callitricho-Batrachion vegetation; freshwater pearl mussel; Atlantic salmon; otter; and bullhead (*Cottus gobio*).

Specific goals are:

- Remediation of migratory barriers to facilitate the migration of Atlantic salmon and bullhead. This will also benefit the freshwater pearl mussel;
- The physical structures and functions of the two habitats will be restored with methods that strive to achieve a natural condition at the water-road crossing, improving the conservation status of the habitats as a result;
- Restoration actions to facilitate safe road crossings for otters on public roads;
- A cost-effective system for knowledge transfer and guidelines for contractors, technicians and landowners;
- Building an expert network and exchanging best practices, knowledge and ideas between countries in northern Europe;
- Constructing easily accessible demonstration areas in strategic locations, representative of the different characters of possible river-road crossings found in



### Beneficiary:

Type of beneficiary National authority

Name of beneficiary Swedish Transport Administration

### Postal address

Sundsbacken 2-4809 S - 971 25 Luleå SWEDEN Phone +46 920 24 37 22 Fax +46 920 24 37 26 Email krister.palo@trafikverket.se

**Name of contact person** Krister PALO

Duration of project:

60 months (01/09/2011 - 01/09/2016)

**Total budget in euro:** 8,169,141.00

**EC contribution in euro with %:** 4,084,570.00 (50.00 %)

different parts of the country. Through these demonstration areas the project will also be disseminated to the public.

- Five water systems to be made significantly more open for fish migration through the conversion of 304 migratory barriers in the project area to functioning passages for the target species;
- Enabling the atlantic salmon and bullhead to have access to additional areas for spawning, foraging and shelter. This will favour the species and their conservation status;
- The establishment of new freshwater pearl mussel populations in the river systems as a result of improved fish migration;
- An increase in the otter survival rate because of safer road crossings (results of otter mitigation will be surveyed and documented in 13 strategic places);
- Construction of two demonstration sites, in easily accessible areas, for knowledge transfer; and
- Training and information material (Swedish-English), workshops and study trips.

# The thick shelled river mussel (*Unio crassus*) brings Life+ back to rivers



### **Project background**

Numerous thick shelled river mussel (*Unio crassus*) populations have become extinct in Sweden. The remaining populations of this endangered species have a fragmented (some 140 sites) and narrow southeastern distribution in Scandinavia.

The decline of the species can be linked to adverse physical changes to its habitats (including fragmentation, regulation, dredging and channelisation of watercourses) and the resulting scarcity of host fish. This may lead to ageing populations that are slowly dying out.

There are also problems concerning how to interpret and apply drainage in areas with protected species. The loss of riparian protection zones, by cutting down shading trees and the removal of riverine structures, can lead to high water temperatures, a homogenous habitat and increased amounts of suspended material in the river, which might negatively affect the mussel and fish populations.

### **Project objectives**

At nine of the 12 project sites, the conservation status of the thick shelled river mussel has been classified as 'unfavourable' according to the Article 17 assessments of the Habitats Directive (2001-06). At the other three sites the species is extinct. This project aims to strengthen the conservation status of this endangered freshwater mussel species and improve the ecological status of the rivers where it is found in Sweden.

This overall goal will be achieved by the following:

- Mapping of host fish to ensure successful conservation actions, beneficial for both Unio crassus and its host fish species at seven project sites;
- Recreating natural river dynamics by restoring structures and processes beneficial for the freshwater mussel species and related host fish species at the 12 project sites; and
- Reintroduction by rearing and stocking juvenile mussels and glochidia-infected host fish to build up populations at two project sites. Allocation of adult mussels to more favourable habitats will also be conducted to improve reproduction at six project sites.

### Beneficiary:

**Type of beneficiary** Regional authority

Name of beneficiary County Administrative Board of Skåne

### Postal address

Kungsgatan 13 S - 205 15 Malmö SWEDEN Phone +46 76 800 31 03 Fax +46 40 252 110 Email Ivan.olsson@lansstyrelsen.se

Name of contact person Ivan OLSSON

Duration of project:

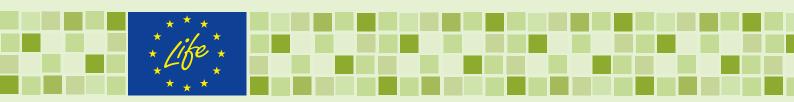
60 months (01/01/2012 - 31/12/2016)

**Total budget in euro:** 4,927,119.00

**EC contribution in euro with %:** 2,463,559.00 (50.00 %)

Alongside the concrete conservation actions objectives, the project aims to build up local awareness for future river management at the 12 project sites through the platform of local water councils.

- Improvements in the conservation status of the mussel at eight of the 12 project sites by increased recruitment rates by juveniles;
- After-LIFE activities at the three project sites where the species is currently absent will ensure that a favourable conservation status is achieved after the end of the project;
- Improvements in the ecological status from 'poor' to 'moderate' - of water bodies at two project sites and from 'moderate' to 'good' in the ecological status at nine project sites; and
- After-LIFE activities, including stakeholder engagement, will, alongside the implementation of the WFD, ensure a continuum of management of the rivers within the project sites.



Europe Direct is a service to help you find answers to your questions about the European Union. Freephone number (\*): 00 800 6 7 8 9 10 11

(\*) Certain mobile telephone operators do not allow access to 00 800 numbers or these calls may be billed.

More information on the European Union is available on the Internet (http://europa.eu).

Luxembourg: Publications Office of the European Union, 2011

ISBN 978-92-79-20031-1 ISSN 1977-2300 doi:10.2779/92068

© European Union, 2011 Reproduction is authorised provided the source is acknowledged.

This publication is only available in electronic format.



