



REPORT

BG

2014

Project LIFE08 NAT/BG/000281

# CONSERVATION AND RESTORATION OF FOREST HABITATS IN 10 NATURA 2000 SITES

Conservation and Restoration of 11 Natura 2000  
Riparian and Wetland Habitats in 10 SCI's in Bulgarian Forests

# PROJECT DATA

PROJECT LIFE08 NAT/BG/000281

## Conservation and Restoration of 11 Natura 2000 Riparian and Wetland Habitats in 10 SCI's in Bulgarian Forests, LIFE08 NAT/BG/000281

[www.wwf.bg/what\\_we\\_do/protected\\_areas/10parks/news](http://www.wwf.bg/what_we_do/protected_areas/10parks/news)

### CO-FUNDING:

LIFE + Programme (EC financial instrument for the environment).

### DURATION:

January 2010 - June 2014

### PROJECT BUDGET:

1 236 834 €, of which 615 199 € EC co-funding

### PARTNERS:

Executive Forestry Agency (EFA), WWF, 10 Nature Park Directorates: Bulgarka, Vitosha, Vrachanski Balkan, Zlatni Pyasatsi, Persina, Rilski Manastir, Rusenski Lom, Sinite Kamani, Strandhza, Shumensko Plato, Sofia Forest Seed-Control Station and Pazardzhik Poplar Station.

# PROJECT GOALS

**The project goal** was to improve the conservation status of 10 Sites of Community Importance (Natura 2000 sites) managed by the Executive Forestry Agency (EFA) through conservation and restoration of 11 riparian and wetland habitats in forests. The total area of target habitats conserved or restored is 21 000 ha. The intention was to achieve the conservation of target habitats through placement of specialised infrastructure (fences, wooden grates, bridges, tourist spots) in order to restrict human impact (access of people and vehicles). Activities were conducted to remove waste and to raise awareness for the protected habitat types. The restoration of protected habitat types was planned through removal of alien and invasive species and through planting of

local trees and shrubs.

Habitat quality improvement was planned through restoration of rare plant species characteristic of the target habitats.

Bulgaria has limited experience in management and restoration of riverine and wetland habitats. The current project was an opportunity to gain experience and share the lessons learnt through distribution of good practices for conservation and restoration of habitats in sites managed by the EFA, which can be used in other Natura 2000 sites in the country.

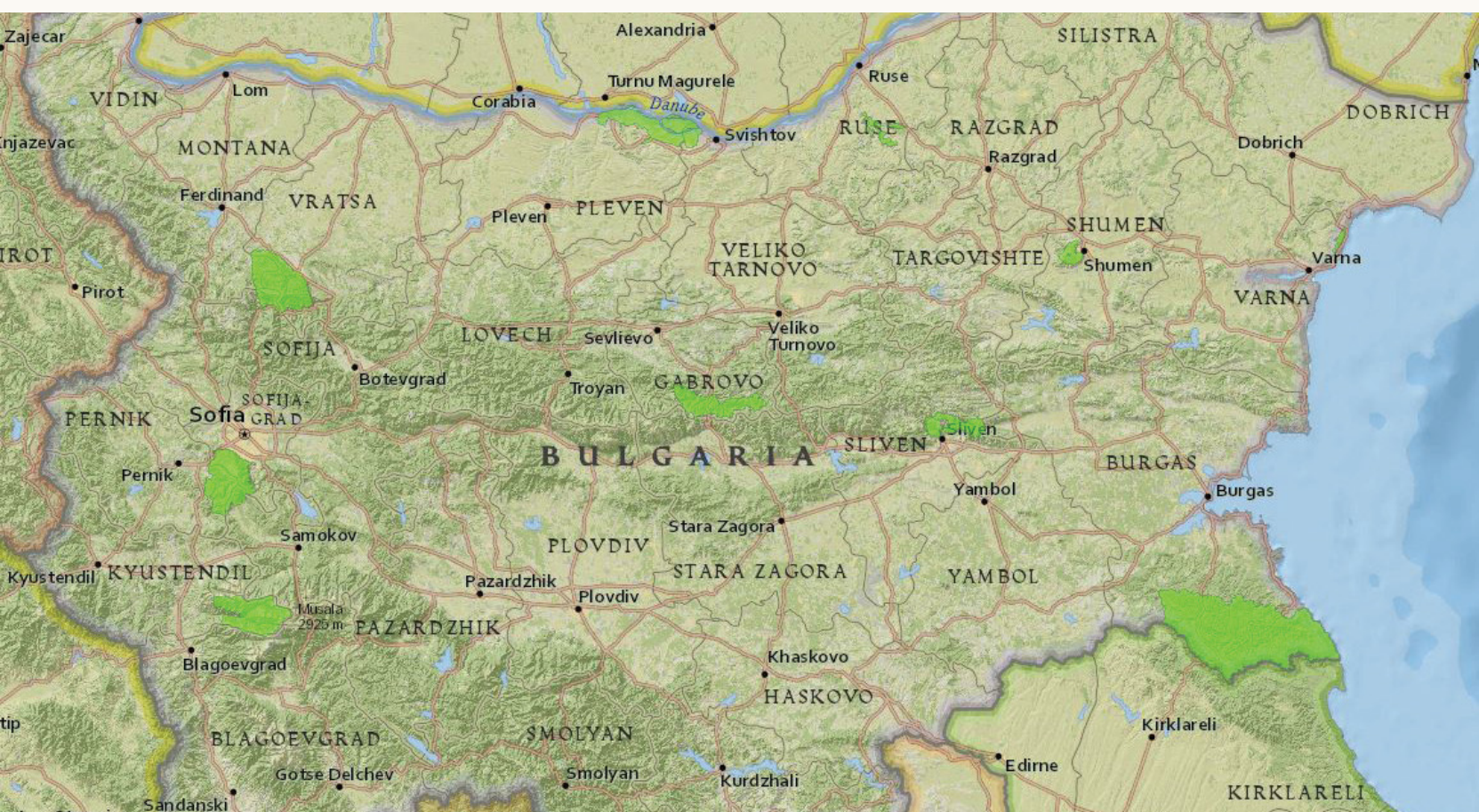
Another important objective was to inform and raise awareness on Natura 2000 through specialised and the wider public, as well as build capacity of partners from various stakeholders.

# PROJECT TERRITORIES\*

| Nature Park |                   | Site of community importance from the Natura 2000 Network |
|-------------|-------------------|-----------------------------------------------------------|
| 1           | Bulgarka          | Bulgarka, BG0000399                                       |
| 2           | Vitosha           | Vitosha, BG0000113                                        |
| 3           | Vrachanski Balkan | Vrachanski Balkan, BG 0000166                             |
| 4           | Zlatni Pyasatsi   | Zlatni Pyasatsi, BG0000118                                |
| 5           | Persina           | Persina, BG0000396                                        |
| 6           | Rilski Manastir   | Rilski Manastir, BG0000496                                |
| 7           | Roussenski Lom    | Lomovete, BG0000608                                       |
| 8           | Sinite Kamani     | Sinite Kamani, BG0000164                                  |
| 9           | Strandzha         | Strandzha, BG0001007                                      |
| 10          | Shoumensko Plato  | Shoumensko Plato, BG0000382                               |

\* Besides protected areas under the national legislation, nature parks in Bulgaria, are also part of the ecological network of the European Union - Natura 2000.

# PROJECT MAP



# PROJECT RESULTS

- 5 forest habitat types restored through planting saplings from local species on an area of 80.6 ha in 7 nature parks.
- 43.4 ha cleaned from alien species in 4 parks.
- A newly created gene bank of Black Poplar and White Poplar on a surface of 2 ha.
- 13 rare plant species, characteristic of 4 habitat types restored in 4 parks.
- 144.1 ha of young forests, cultivated under Saarland method in Strandzha Nature Park.
- 11 habitat types protected through newly built park infrastructure: 19 tourist spots, 1 tourist track, 27 small wooden bridges, 133 information boards, 246 redirection boards, 70 prohibiting signs, 735 m fences, 386 m wooden grates, 35.5 wooden steps, 473 m wooden parapets.
- Repaired park infrastructure: 1 tourist track, 10 wooden bridges.
- A one-day event Clean-up Nature Park Days carried out in 3 consecutive years with 9400 volunteers and 36 tons of anthropogenic waste removed.
- Over 10 training events of non-state forest owners on sustainable forest management.
- Aerial photos of project sites, taken during three consecutive years.
- Travelling exhibition showing project activities in 10 towns in the country.
- Laboratory equipment provided for izoenzyme analysis; tractor provided with attached equipment for processing of poplar reproductive material and gene bank.



# REMOVAL OF ALIEN SPECIES

## JAPANESE KNOTWEED (*REYNOUTRIA JAPONICA*) IN BULGARKA NATURE PARK

The species has been widely spread along the Sivyak River. Removal methods included the mowing of the same area 24 times per year for 3 consecutive years. As a result further spreading along Siviyak River was stopped.



## INDIGO BUSH (*AMORPHA FRUTICOSA*) IN PERSINA NATURE PARK

The species was widely spread in the light plantations of hybrid poplars on the Gradina Island, which had been cut down for timber. Removal methods included: uprooting and ploughing. The cleared area was used for planting new saplings, followed by cultivation to be carried out over 3 years. The expectation is that the growing saplings will shadow the Indigo Bush and suppress its vegetation.



## COMMON LOCUST (*ROBINIA PSEUDOACACIA*)

The Management Plan of Rusenski Lom Nature Park envisages conversion of common locust plantations in the park with local forest species. The common locust was removed through cutting down of a surface of 30.8 ha, uprooting and ploughing. Saplings of local tree species were planted in their place. During the years 2013 and 2014 cultivation was carried out through mowing between the rows, which removed most of the sprouts. In Zlatni Pyasatsi Nature Park common locust was removed from an area of 0.4 ha.





BLACK ALDER, VRACHANSKI BALKAN



SYCAMORE, SINITE KAMANI



FIELD ELM, LOMOVETE



PEDUNCULATE OAK, PERSINA



EUROPEAN BEECH, SINITE KAMANI



SILVER LIME, LOMOVETE

# RESTORATION AND CONSERVATION OF FOREST HABITAT TYPES IN 7 PARKS

The objective was achieved through planting local tree and plant species, characteristic for the target habitat types over an area of 80.6 ha.

## THREE TYPES OF RIPARIAN FORESTS:

| Habitat type                                                                                                                                                                                                      | Nature Park       | Surface (ha) | Species                                                         | Location of activity                                                                                                          |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|--------------|-----------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|
| 91E0* Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (Alno-Pandion, Alnion incanae, Salicion albae)                                                                                   | Bulgarka          | 4.2          | Black Alder, White Willow and European Ash                      | Valley of the Sivyak River territory of Gabrovo State Forestry Enterprise (SFE)                                               |
|                                                                                                                                                                                                                   | Persina           | 27.0         | Black Poplar, White Willow, Pedunculate Oak, European White Elm | Gradina Island, land of Dragesh Voyvoda, territory of Nikopol SFE                                                             |
|                                                                                                                                                                                                                   | Vrachanski balkan | 2.3          | Black Poplar, Black Alder, White Willow                         | Iskar River valley, not far from Iskar Rivar, near the town of Mezdra, territory of Mezdra SFE                                |
| 91F0 Riparian mixed forests of <i>Quercus robur</i> , <i>Ulmus laevis</i> and <i>Ulmus minor</i> , <i>Fraxinus excelsior</i> or <i>Fraxinus angustifolia</i> , along the great rivers ( <i>Ulmenion minoris</i> ) | Zlatni Pyasatsi   | 0.4          | Caucasian Ash                                                   | Territory of Varna SFE                                                                                                        |
| 92A0 <i>Salix alba</i> and <i>Populus alba</i> galleries                                                                                                                                                          | Vitosha           | 0.5          | White Willow                                                    | Upper valley of the Struma River above the Chuyetlovo Village, territory of Vitoshko - Studena State Hunting Enterprise (SHE) |
|                                                                                                                                                                                                                   | Sinite Kamani     | 0.3          | White Willow                                                    | Asenovets Dam, Sliven SFE                                                                                                     |
|                                                                                                                                                                                                                   |                   |              | <b>Total</b>                                                    | <b>34.7</b>                                                                                                                   |

## MIXED FOREST ON SLOPES:

| Habitat type                                                              | Nature Park   | Surface (ha) | Species                                               | Location of activity                                               |
|---------------------------------------------------------------------------|---------------|--------------|-------------------------------------------------------|--------------------------------------------------------------------|
| 9180* Mixed forest of <i>Salix alba</i> and <i>Populus alba</i> galleries | Lomovete      | 30.8         | Turkey Oak, Silver Lime, Field Elm, European Ash      | On the territory of Danube - Rousse State Hunting Enterprise (SHE) |
|                                                                           | Bulgarka      | 6.4          | European Beech, Sessile Oak, Sycamore and Silver Lime | Gabrovo State Forestry Enterprise (SFE)                            |
|                                                                           | Sinite Kamani | 3.0          | Sycamore and European Beech                           | Daulite area, on the territory of Sliven SFE                       |
|                                                                           |               |              | <b>Total</b>                                          | <b>40.2</b>                                                        |



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## RESTORATION OF DWARF MOUNTAIN PINE IN VITOSHA NATURE PARK



The Dwarf Mountain Pine slows down the snow melting thus regulating water retention and protecting slopes from erosion. In the past, the mountain was covered with vast areas of dwarf pine, but they were regularly

burnt down to open areas for pastures. Today the Dwarf Pine is limited to two localities. For reasons which are still unclear, no natural regeneration of the species in the area is observed today.

The first method included production of saplings from seeds and planting them in two locations on a total surface of 5.7 ha above the village of Chuypetlovo and in the area of Aleko Chalet. Planting of saplings on the southern side was

unsuccessful, but on the northern side - the survival rate was far higher. To compensate for the losses on the southern side we tested the planting of seeds on the southern side in the spring of 2013.



Seeds germinated and seedlings survived the summer and the winter, showing good growth in the spring of 2014. The experiment was successful and more seeds were planted in the spring of 2014.



© Katerina Rakovska

## CULTIVATING YOUNG FORESTS IN STRANDZHA NATURE PARK

The Park protects one of the largest low-mountain forest massifs in Europe. The natural regeneration of the forest here is very good, no additional afforestation is needed and therefore the focus is put on the improvement of forest quality. A new, environmentally friendly method for young forest management was chosen, known as the Saarland method.

The method has big potential in Bulgaria, as significant areas with young forest are available. The method is low cost, and secures protection of the permanent forest cover and the forest ecosystem functions. Its goal is the production of high quality timber at minimal cost meeting high standards of environmental protection. Costs are minimized as expensive afforestation

activities are replaced by natural regeneration. A trained forester could cultivate an area up to 5 times larger per day compared to the traditionally used silvicultural systems.

Under the Saarland method the so-called tree of the future is chosen. Depending on its ecological characteristics, such a tree could be cultivated for several decades in order to accumulate the parameters needed. Only the specific trees that are immediate competitors of the chosen tree, are cut. The surrounding ones are left as they provide its mechanical stability in case of extreme climate.

Experience showed that in 2011 when heavy snowfall occurred in Strandzha not a single tree of the ones chosen was damaged.

# GENE BANK OF BLACK POPLAR AND WHITE WILLOW

A gene bank of black poplar and white willow was created on a surface of 2 ha in Pazardzhik Poplar Station. The gene bank provided us with cuttings for cultivation of black poplar saplings used for afforestation and has already been used by other nature conservation projects. It will be available after the end of the current project for future cultivation of cuttings as well.





# RESTORATION OF RARE PLANT SPECIES

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## PERSINA NATURE PARK

Marshes on the territory of Belene Island (also known as the Persin Island) are a key habitat type for conservation. The number of plants, characteristic of the islands decreased quickly and in some cases disappeared after the construction of a dike along the entire island in the 1970s and the subsequent changes in the hydrological regime.

Marshes have been partially restored due to a restoration project in 2009. For the complete restoration however, the typical plants with conservation importance (also important for many animal species) needed to return to the marshes as well. In view of the regulated flow of the water the natural restoration process would have been very slow. Therefore we supported the

restoration process by reintroducing 5 plant species, which still occur in other areas. A major challenge, working with Persina water species was the fact, that at the time of elaborating the restoration programmes for the five plant species, the marshes were always full of water after the restoration in 2009. The extremely dry and hot summers of the years 2012 and 2013, resulted in drying out of the marshes. The main mitigation measure for this problem was spreading the provision of reproduction material in time and planting it at different locations.

### White Water lily (*Nymphaea alba*)

It was an extinct species for the Persina marshes, although in the past the biggest Bulgarian locality of the species was located there. In 2011 we collected rhizomes from Malak Preslavets Marsh Protected site and introduced them in the Peschina Marsh. The first flowering plant was registered in 2012. In spite of the drying up of the marsh in the autumn of years 2012 and 2013, the plants survived and we registered a blossoming water lily in the spring of 2014.

### Yellow Water lily (*Nuphar lutea*)

Up to 2003, a small Yellow Water lily population could be found in the central drainage canal of the town of Belene on the mainland. It was not sighted since then and the species was considered extinct for the park. In 2012 and 2013 rhizomes were taken from the Veleka River in Strandzha and introduced in the Peschina Marsh. The marsh dried up in both years and the plants did not survive.

The last rhizomes group was introduced to one of the channels near Belene which does not dry up. Monitoring indicated that the individuals had survived there after the past winter. Under favourable circumstances, plants are envisaged to be taken out and planted in the island's marshes.

### Water Chestnut (*Trapa natans*)

Until 2006, a significant population could be found in the draining canal of the Belene plain. Today a population is preserved in the area in a small artificial wetland on the mainland but not in the marshes on the Belene Island. In the years 2012 and 2013 rosettes of Water Chestnut were planted in Peschina marsh.



Collecting White Water Lilies, © Svyan Mitrov



Planting Yellow Water Lilies, © Persina NPD



Collecting European Watercress, © Konstantin Ivanov



Planting Water Soldier, © Konstantin Ivanov

## European Waterclover (*Marsilea quadrifolia*)

Until 2006, a small population could be found in the central draining canal of the town of Belene. In 2010 it was not confirmed and probably the plant disappeared from the Park. In 2011 specimens were taken from the draining canal near Obnova Vilage into Peschina marsh. The plant could not be found after the drying out in 2012 and additional plants had to be introduced.

Populations of both species are very dynamic, and the success of introduction has not been confirmed yet, therefore the experts of Persina Nature Park Directorate will continue the monitoring.

## Water Soldier (*Stratiotes alooides*)

There is no literary data for the occurrence of the species in the Peschina marshes, however in the

past it was spread widely along the Danube River. The negative changes in the hydrological regime have caused a significant reduction of its area of coverage limiting it to one certain locality - the Srebarna Nature Reserve. Having just one locality for a species means that its very existence in the country is vulnerable to potential natural or manmade disasters.

In 2011 some plants were taken from Srebarna and planted into Peschina marsh. These first plants disappeared after the drying out in 2012. A second group of plants was introduced in 2013 in an artificial wetland on the island that had never dried out previously. A survival rate 100% was registered and 130% growth. The establishment of a second viable population was an important objective and an outstanding success of the project as no one has ever worked with this specific species.

## RILSKI MANASTIR NATURE PARK

### Common Yew (*Taxus baccata*)

The Common Yew is an endangered species, one of the rare evergreen plants, present in the Park's flora since before the glacial period. Cuttings were taken from the existing trees in the nature park and were cultivated in a nursery to enhance its population. Planting of the rooted cuttings was carried out in the area of Kirilova Polyana in the spring of 2013. Results in 2014 showed very good success due to the correct choice of planting location, good soil pre-treatment and the follow-up cultivation.

### Pancic's Angelica (*Angelica pancicii*) and Rila Rhubarb (*Rheum raponticum*)

The Pancic's Angelica is found only in the Balkan Peninsula and is part of the conservationally important species in the Park. The Rila Rhubarb is one of the rarest species in Bulgaria endemic only to Rila. Its natural regeneration is difficult as the species has specific ecological requirements. The two species are part of habitat type 6430 Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels. Our task was to enhance their populations and in this way improve the structure of the

habitat. Two methods were used. The first one consisted of collecting seeds and planting them in favourable habitats. Seeds germinated and the new plants were in good condition. Under the second method (collecting seeds and producing sprouts in a nursery) 550 young plants of Pancic's Angelica and 310 young plants of Rhubarb were produced, and planted in 2013 in the area of Rilska River. Planted specimens showed a high rate of survival. The monitoring in May 2014 indicated that part of the sites were dug out by wild animals. The restoration of Rhubarb and Angelica pancicii was most successful through enhancing the populations by direct seed planting.

### Rila Primrose (*Primula deorum*)

The species is a Bulgarian endemic predating the glacial period. Our task was to enhance the populations of Rila Primrose as part of habitat **7140 *Transition mires and quaking bogs***. Restoration of this species through production of sprouts from seeds was unsuccessful. We were successful through taking plants from localities with strong population and planting about 100 plants in the area of the Kalin Dam and Ribni Lakes. The success rate is 80%.



## STRANDZHA NATURE PARK

### Common Yew

Common Yew is one of the rarest evergreen plants in Strandzha Nature Park flora. Only five specimens are found and all of them male, which made natural reproduction impossible. Therefore cuttings were collected from the territory of Strandzha and from Bulgarka Nature Park, where female specimens occur. 100 of cuttings rooted in a nursery were planted in the autumn of 2013. During 2014 the

plants were in an excellent condition. Restoration of this species in a natural environment in Strandzha happened for the first time.



### Caucasian Whortleberry (*Vaccinium artcostaphylos*) and Black Sea Holly (*Ilex colchica*)

The two species exist since before the Ice Age and in Europe and Bulgaria it grows only in Strandzha. The local populations of the species are small in number and occurring in limited areas. Our objective was to enhance their populations as a part of habitat 91So \* Western Pontic beech forests. The species have never been subject to restoration activities and therefore this process was a real challenge for us. We collected cuttings, and they were rooted

in a nursery, but died during the stabilisation process. A second method was tested: production through tissue cultures. During 2014 twenty specimens from each species were planted in suitable places in the Park. Monitoring of the restoration success lies ahead.





## VITOSHA NATURE PARK

### Round-Leaved Sundew (*Drosera rotundifolia*)

This is a rare species with limited distribution in Vitosha Nature Park. It is part of habitat 7140 Transition mires and quaking bogs, a key habitat type for conservation in the Park. Taking water away for drinking purposes and the following negative changes in the hydrologic regime have led to an unfavourable conservation status of the species. Therefore our task was to enhance its populations.

Fifty small boxes with seeds were collected and then cultivated in a nursery. From these seeds 180 young plants were produced and in September 2013 were planted in the areas around Cherni Vruh, along the Boyanska Reka, and in Konyarnika area. During 2014, monitoring showed successful results and there are positive expectations for the plants future development.

### Buckbean (*Menianthes trifoliata*)

In the past the species occurred in the peat areas around the springs near Boeritsa Chalet



under the Black Rock and possibly at other locations. It is part of habitat 7140: Transition mires and quaking bogs, a key habitat type for conservation in the park. Taking water away for drinking purpose and the subsequent negative changes in the hydrologic regime have led to unfavourable conservation status of the species. As the habitats of the Buckbean in Vitosha had not been confirmed for last decades, the species was considered extinct in Vitosha. Therefore our objective was the restoration of the species in the park.

Rootage from 20 plants were collected from the Rhodope Mountain and from them young specimens were produced in a nursery. In 2013 about 70 young specimens of Buckbean were planted in the areas around Konyarnika and Cherni Vrah (the Black Peak). During 2014 successful survival after the winter and the plants were in a very good condition. The restoration of extinct species back in nature in Vitosha Nature Park is one of our most valuable results.



# CONSERVATION OF HABITATS THROUGH SPECIALIZED INFRASTRUCTURE

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Work under this activity comprises protection of target habitats from degradation through specialized infrastructure in all 10 nature parks. Another objective was to inform the visitors about the value of target habitats and concentrate tourist visits away from the sensitive habitats in the park.

Results include construction of:

**11 habitat type protected through newly built park infrastructure: 19 tourist spots, 1 tourist track, 27 small wooden bridges, 133 information boards,**

**246 redirection boards, 70 prohibiting signs, 735 m fences, 386 m wooden grates, 35,5 wooden steps, 473 m wooden parapets, repaired park infrastructure: 1 tourist tracks, 10 wooden bridges.**

Specific examples include:

Habitat type **7220: \* *Petrifying springs with tufa formation* in Shumensko Plato Nature Park.** Fences were constructed and information boards placed to indicate and protect this rare and specific habitat.

Habitat type **7140: *Transition mires and quaking bogs*** in

**Vitosha** Nature Park. 90 m of wooden grate with information boards was installed in one of the locations of this habitat. Standing on the constructed grate, the visitors could observe one of the best preserved populations of Round-Leaved Sundew while the grate protects the habitat from trampling.

fence was built in the middle of the small lake that would limit the access of the animals to its central part, thus providing tranquillity to both animals and plants when water level is low. At the same time it leaves sufficient space for the sheep to drink.

Habitat type 3150: Natural eutrophic lakes can be found on the ridge of **Vrachanski Balkan** Nature Park, where they are used for watering sheep. A

## CLEANING UP TARGET HABITATS



We used heavy machinery to clean up places with illegal landfills and dumped construction waste in all parks. In addition, 3 one-day National Clean-up Parks Days were carried out in three consecutive years

where 9400 volunteers participated. They collected 36 tons of waste from the nature parks. The trend was increased number of volunteers and reduced quantity of waste.

In each Park, 10 information boards were placed reminding the visitors that there is no organized waste collection and transportation in nature parks and tourists should carry their rubbish away themselves.

# COMMUNICATING OUR IDEAS

- We organised a travelling exhibition, presenting the nature parks and the relevant project activities there. The exhibition visited the cities where the nature parks' directorates are located.
- We organised more than 10 training events for forest owners on nature-friendly forest management.

- We created a Project Internet site, containing all Project products:

[wwf.bg/project\\_webpage](http://wwf.bg/project_webpage)

- We organised 3 journalist trips to Bulgarka, Vitosha and Strandzha Nature Parks.

- We described project activities and lessons learnt in a brochure:

[wwf.bg/lessons\\_learnt\\_brochure](http://wwf.bg/lessons_learnt_brochure)

- We designed a multimedia presentation of the lessons learnt:

[wwf.bg/multimedia\\_presentation](http://wwf.bg/multimedia_presentation)

- We organized three press conferences and sent 5 press-releases to media in Sofia. We had 20 meetings in total with journalists in the 10 nature parks.

# RESPONSIBILITY OF THE PARTNERS

## **Executive Forestry Agency (EFA) -**

the Headquarters of the Nature Parks Directorates - coordinating beneficiary, provided overall management and the biggest share of co-financing.

**WWF** – coordinated parks activities, responsible for preparation of the programs for restoration of rare species, responsible for projects communications and preparation of reports.

## **Nature Parks**

**Directorates** - performed all direct conservation activities on their own territory.

**Sofia Forest Seed Control Station** - controlled the quality of the reproductive material, chose the source of seeds and cuttings for production of saplings.

**Pazardzhik Poplar Station** - created the gene bank of black poplar and white willow

# LONG-TERM PROJECT BENEFITS

The greatest long-term benefit from our work is the **living heritage**: over 80 ha of young saplings, which in future will form forests of local species; 13 species of rare plants restored to nature in 4 parks; the gene bank, that is already used in other nature conservation projects; young forests, cultivated in Strandzha that will produce in future high quality wood and will secure preserved ecosystem functions of the forest.

**Park infrastructure** - will allow many more encounters between people and nature, thanks to the bridges built, wooden grates, tourist spots; and the information boards will keep educating the visitors.

The **experience** gained has a long term effect because of the know-how about the restoration of local species, and working in partnership - between NGO and state administration. This first project under LIFE+ Programme

gave confidence to the **Bulgarian Executive Forestry Agency**, which is already a partner in 4 other LIFE+ projects today.

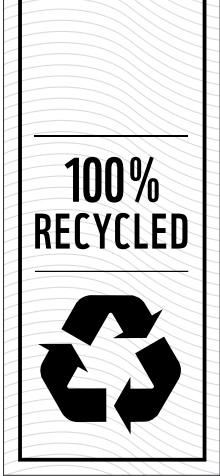
All partners built their **expert capacity** on restoration and conservation of nature habitats and project management. State Forestry Enterprises and private legal entities, related to wood-processing and timber industry upgraded their expert capacity as well, receiving knowledge on environmentally friendly forest management.

**Public involvement** - through communication activities and on the National Clean-up Parks Day, thousands of volunteers are now aware of and care for nature in nature parks. Many of these people have already formed networks for volunteer work.

NATURAL HABITATS TYPES  
TARGETED BY THE PROJECT:

|       |                                                                                                                                                               |
|-------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 3150  | Natural eutrophic lakes with Magnopotamion or Hydrocharition - type vegetation                                                                                |
| 3160  | Natural dystrophic lakes and ponds                                                                                                                            |
| 6430  | Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels                                                                       |
| 7140  | Transition mires and quaking bogs                                                                                                                             |
| 7220* | Petrifying springs with tufa formation                                                                                                                        |
| 9180* | Tilio-Acerion forests of slopes, screes and ravines                                                                                                           |
| 91D0* | Bog woodland                                                                                                                                                  |
| 91E0* | Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Pandion, Alnion incanae, Salicion albae)                                                   |
| 91F0  | Riparian mixed forests of Quercus robur, Ulmus laevis and Ulmus minor, Fraxinus excelsior or Fraxinus angustifolia, along the great rivers (Ulmenion minoris) |
| 91S0* | Western Pontic beech forests                                                                                                                                  |
| 92A0  | Salix alba and Populus alba galleries                                                                                                                         |

# CONSERVATION AND RESTORATION OF 11 NATURA 2000 RIPARIAN AND WETLAND HABITATS IN 10 SCI'S IN BULGARIAN FORESTS



80.6 HA

RESTORED FOREST  
HABITATS IN 7 NATURE  
PARKS

13 PLANT

SPECIES RESTORED  
IN 4 NATURE PARKS

144.1 HA

YOUNG FORESTS CULTIVATED  
IN STRANDZHA NATURE PARK

43.4 HA

OF INVASIVE ALIEN  
SPECIES CLEARED  
FROM 4 NATURE PARKS

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**Why we are here.**  
To stop the degradation of the planet's natural environment and  
to build a future in which humans live in harmony with nature.  
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