BISON-LAND - European Bison conservation in the Bialowieza Forest, Poland
LIFE06 NAT/PL/000105

Project description
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Project description:

Background

The European bison (*Bison bonasus*), the largest land-based mammal in Europe, faces several threats: it is located in small and restricted areas, where the concentration of individuals is too high and food resources poor and declining; and these areas are fragmented and isolated, resulting in low genetic diversity and high susceptibility to diseases. Furthermore, the species is not well accepted by the local population.

Objectives

The major objective of the project was to set up a new strategy for the sustainable conservation of European bison in the Bialowieza Forest. New corridors would be created in the surroundings of the Bialowieza primeval forest to improve the range of the species. Moreover, detailed plans of migration would be drawn up, checked on the ground and recommended for including into regional and local management plans.

A range of measures for improving food sources and habitat conditions in the forest were planned. These included maintenance of meadows, construction of watering places and the introduction of tree species suitable for browsing. Dispersal of bison in and from the Bialowieza Forest would be stimulated by relocation of the winter feeding sites. Monitoring of the population was another
A key objective. An effective system of bison population monitoring (including yearly censuses, satellite telemetry, and genetic studies) would be implemented. It would provide all the necessary information for the sustainable management of the species in the long term.

Finally, the project would aim to improve the attitude of local communities towards the European bison and its expansion to new areas through better information and educational activities. Potential conflicts caused by damages in crops caused by bison would be avoided by implementing a system of contracting meadows for bison feeding. The development of tourism with bison as the main regional attraction will enhance its role in the development of the Podlasie region and make the species better accepted by the local population.

Results

The project introduced new strategy for sustainable conservation of European bison (*Bison bonasus*) in the Natura 2000 site Bialowieza Forest has overall. The ecological audit and the environmental assessment of the proposals for the ecological corridors were drawn up. The proposals for corridors were included in the Voivodship Spatial Plan of Podlasie region, and the detailed documentation was delivered to the 11 communes for further inclusion into the local spatial plans.

As part of the project, a set of different management action were implemented in order to improve bison dispersal in the area: about 46 ha of meadows were reclaimed for bison, 14 small water reservoirs established, wild fruit trees for future bison were planted on 6 ha and 19 supplementary feeding sites were constructed. Appropriate grazing areas for bison were created and hay was collected and delivered to all the supplementary winter-feeding sites as a result of annual mowing of meadows (on average around 200 ha were mown each year). This result was achieved mostly using other financial sources than LIFE (i.e. national funding and EU subsidies). On average 55 ha of meadows were also contracted for bison over three seasons.

A range of measures were also carried out during the project: protection of agricultural areas affected by bison and managing damage-causing individuals, supervision and annual censuses of the bison, monitoring of bison distribution and dispersal with satellite and radio telemetry, as well as the genetic monitoring of bison population. As a result of these actions, assessment of the space use patterns and genetic structure of bison population were made.

By the end of the project the bison population had increased by 13.6% in comparison with the total number of bison before the project in 2005. The number of mixed herds of bison increased from seven to 12, while the total area covered by the population increased by 32%. During the four years of the project 430 DNA samples of target species were collected and deposited in the European Bison DNA Collection. Data obtained from DNA analyses were added to the European Bison Genetic Data Bank. Bison genetic variability preservation guidelines were also drawn up.

The continuation of the relevant project non-recurring and recurring management activities is currently ensured within the scope of the new project started under the operational programme ‘Infrastructure and Environment’ and
by using the participants’ own resources.

The project has also implemented a set of planned and additional public awareness-raising activities and published/distributed a wide range of attractive dissemination materials/publications, which are also available on the project website. A popular book called European bison conservation in the Bialowieza Forest. Threats and prospects of the population development was published that included the results of the international scientific conference ‘Conservation of the European bison in the Bialowieza Forest’, which was held 25-27 February 2010. Three education seminars for 59 teachers were organised and an attractive lesson synopses book for teachers was published.

Further information on the project can be found in the project's layman report and After-LIFE Conservation Plan (see "Read more" section).

Environmental issues addressed:

Themes

Habitats - Forests
Species - Mammals

Keywords

endangered species, ecotourism, monitoring, protected area

Target EU Legislation

- Nature protection and Biodiversity
- Directive 92/43 - Conservation of natural habitats and of wild fauna and flora- Habitats Directiv ...

Target species

Bison bonasus

Natura 2000 sites

SCI PLC200004 Puszcza Białowieska
Beneficiaries:

Coordinator
Mammal Research Institute
Polish Academy of Science

Type of organisation
Research institution

Description
Mammal Research Institute, Polish Academy of Sciences (MRI PAS) was founded in 1952. It has a long experience of research on all aspects of mammalian biology conducted in Bialowieza primeval forest. Since the 1960s, MRI has been scientifically supervising the reintroduction programme of European bison conducted by the Bialowieza National Park, and carrying out long-term research on physiology, morphology, disease, and ecology of the free-living bison population in Bialowieza primeval forest.

Partners
The Regional Directorate of the State Forests in Bialystok (RDSF), Poland
Bialowieza National Park (BNP), Poland
The Green Lungs of Poland Foundation, Poland

Administrative data:

Project reference
LIFE06 NAT/PL/000105

Duration
01-OCT-2006 to 30-SEP -2010

Total budget
1,381,700.00 €

EU contribution
956,000.00 €

Project location
Podlaskie(Poland Polska)

Read more:

Project web site
Project's website

Publication: After-LIFE Conservation Plan
Title: After-LIFE Conservation Plan Year: 2011
No of pages: 15

Publication: Layman report
Title: Layman report Year: 2010
Editor: Mammal Research Institute, Bialowieza
No of pages: 11

Video link
"Land of the bison" (21')