



CROWOLFCON - Conservation and management of Wolves in Croatia

LIFE02 TCY/CRO/014



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#### Project description:

##### Background

Croatia is one of the rare European countries that still represent distribution area for three large carnivore species: wolf, bear and lynx. The wolf population in Croatia is distributed along the borders with Slovenia and with Bosnia-Herzegovina to Montenegro. The current estimated number of wolves ranges from 130 to 170. The protection of the wolf population begun in 1995 and its number has now been stabilised. Conservation of wolves has always been the most complex nature conservation issue involving ecological, economical, institutional, cultural and even political factors. Key of wolf conservation is to decrease conflicts between humans and wolf. These conflicts derive from competition for the same food and economical basis (livestock, game) and negative perception of wolf as bloodthirsty animal, which derives from middle-aged European traditions. The conflict between wolves and the human population in Croatia is further complicated by the fact that the majority of wolf-caused livestock damage occurs in poor and war affected areas (in particular the central Dalmatia hinterland). The result of all this, was that a population of 1,000 wolves, recorded at the end of the 19th century, decreased to only 50 by the beginning of the 1990s. This led to the strict protection of wolves. This decision was made by the competent authority without consultations with interest groups and the local community that was affected by this decision. Immediately a problem of damage to livestock arose, even after the implementation of damage compensation system had begun. This was followed

by negative coverage in the media and general public support for wolf preservation declined. Resistance also came from hunters. As a result, illegal killing occurred without any record. In this context, it was necessary to put a lot of effort into the mitigation of these problems and ensure wolf conservation in Croatia. By the national Nature Protection Law and National Strategy and Action Plans for the Protection of Biological and Landscape Diversity, as well as by international nature conservation agreements such as the Bern Convention, Croatia must protect wolves. Furthermore, as an EU accession country, Croatia must ensure wolf conservation according to the EU Habitat Directive. The competent authority for wolf conservation is the Ministry of Environmental Protection and Physical Planning, and the Committee for Protection of Large Carnivores had been established as the Ministry's advisory body, but there was a lack of trained human resources.

## Objectives

a) Strengthen the capacity of a competent administrative body for wolf conservation and management at national and local level; and b) Establish a mechanism for long-term actions to ensure the conservation of wolves in Croatia in harmonious co-existence with humans.

## Results

The project was implemented through five main activities, achieving the following results: 1. Capacity building A project unit was established at the former Ministry of Environmental Protection and Physical Planning in Zagreb. Two regional offices were established in the project area; one for Gorski kotar and Lika in Gospija and another for Dalmatia in Šibenik. The aim of regional offices was to improve communications between national authorities and local community. In order to improve implementation of the damage compensation system, a number of additional damage assessment experts were hired. With these hires, the entire territory of wolf distribution was now covered, permitting all livestock breeders to report damages, and, if verified, to be compensated. Furthermore, three seminars were held in order to improve the work of damage assessment experts, with presentations on the existing legislation, dissections of animals killed by unidentified predator and discussion on the damage assessment form. 2. Monitoring of wolf population and management activities Monitoring was achieved by the capture of 13 wolves and collaring them with GPS transmitters. The GPS data were incorporated into a GIS model that was developed to identify location and likelihood of the wolf occurrence in the near future. This is a powerful wolf management tool. Mortality of wolves was monitored as well. In order to develop a network for reporting the killings, a corresponding protocol for the collection of protected animal carcasses was prepared and sent to all relevant institutions and partners. Thanks to these monitoring activities, an increasing number of reports have been received, significantly improving insight into the actual rate of wolf mortality. Altogether 39 wolves were killed in the period from 30 November 2002 to 1 December 2005. Interestingly, the most frequent cause of registered mortality was in fact traffic accidents although it is suspected that unreported illegal killing of wolves is also

important. Young wolves are the most vulnerable in this regard. The collection of these data permitted the preparation of the Report on the Wolf Population Status in Croatia 2005.

3. Mitigation of damages A great deal of effort was put into attempts to decrease the animosity between livestock breeders and wolves. Beyond the work of the damage assessment experts, this primarily consisted of a programme of donation of livestock guard dogs and electrical fences to breeders. Two-month-old puppies were given to selected breeders. The breeders were also educated on how to raise the dogs as shepherds rather than as pets. Altogether, 79 puppies were donated, mostly in Dalmatian region. Electrical fences were also donated to selected livestock breeders following lessons on electric fence maintenance. Altogether, 28 electrical fences were donated from the project funds and 13 with the support of the Primorskogoranska County. Most of the fences were donated in the Lika and Gorski kotar regions, since the terrain in Dalmatia is not as suitable for fences. The dogs donated at the beginning of the project are now more than a few years old and have proved highly successful in the field. According to the livestock breeders, not only have there been no damage to herds since the donation of the puppies, the dogs have also made it considerably easier for breeders to control the livestock and to take herds to pasture.

4. Education and information The education and information campaigns were aimed at improving local awareness of wolf conservation issues. Special attention was given to media, since they are traditionally prone to sensationalism reporting and have significantly contributed to the negative perception of wolves. Brochures, posters, bulletins, t-shirts were developed, and a professionally illustrated children's picture book was published. Lectures were given to school children in the project area and even, due to great interest, to schools outside the area. In addition, two documentary films were produced and distributed to schools in the project area. The project's website went on to receive the World Summit on Information Society Award for best e-science project. Constant contact with public media was maintained via interviews, press conferences, and press releases.

5. Strengthening of interest groups involvement The process of developing the wolf management plan involved biologists-researchers, hunters, foresters, representatives of the competent ministries and state institutions as well as NGOs through a series of moderated workshops. On these occasions, participants had the opportunity to talk about their problems and viewpoints on the wolf and propose possible solutions. Subsequently, the plan was officially adopted and implemented by the Ministry of Culture.

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Environmental issues addressed:

Themes

Species - Mammals

Keywords

animal ecology, animal population

Natura 2000 sites

Not applicable

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Beneficiaries:

Coordinator	State Institute for Nature Protection
Type of organisation	National authority
Description	State Institute for Nature Protection - The Ministry of Environmental Protection and Physical Planning was established in 2000. It inherited the tasks from the former Ministry of Zoning, Construction and Housing and State Directorate for the Protection of Nature and the Environment. Since the beginning of 2004, after the ministerial reorganisation, the State Institute for Nature Protection (which falls under the remit of the Ministry of Culture) has been responsible for the project implementation.
Partners	Veterinary Faculty of the University of Zagreb, Croatia

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Administrative data:

Project reference	LIFE02 TCY/CRO/014
Duration	01-DEC-2002 to 01-DEC -2005
Total budget	664,810.00 €
EU contribution	418,200.00 €
Project location	

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Read more:

Brochure	Title: "Vukovi u Hrvatskoj: Simbol očuvane prirode = Wolves in Croatia: A symbol of a preserved nature" (1.35MB) Year: 2005 No of pages: 16
Brochure	Title: Project leaflet (952KB) Year: 2005 No of pages: 2
Leaflet	Title: "Elektricne ograde : U Zastiti stoke d napada vukova" (121 KB) Author: Đuro Huber, Josip Kusak Editor: Ministarstvo zaštite okoliša i prostornog uređenja No of pages: 2
Newsletter	Title: "Bulletin n°1 : Conservation of large carnivores in Croatia" (7.42 MB) Author: Ana Štrbenac, Sonja Desnica, Đuro Huber Year: 2007 Editor: State Institute for Nature Protection No of pages: 52
Newsletter	Title: Project Bulletin N°1 (968 KB) Author: Ana Štrbenac, Sonja Desnica, Petra Štrbenac et al. Year: 2005 Editor: State Institute for Nature Protection No of pages: 50
Newsletter	Title: "Project bulletin : Conservation and management of Wolves in Croatia" (4.37 MB) Author: Ana Štrbenac, Đuro Huber, Josip Kusak Year: 2004 Editor: Državni zavod za zaštitu prirode No of pages: 34
Newsletter	Title: Project bulletin N°2 (1.97 MB) Author: Ana Štrbenac, Josip Kusak, Sonja Desnica et al. Year: 2005 Editor: State Institute for Nature Protection No of pages: 36
Project web site	<a href="#">Project's website (in Croatian)</a>
Publication: Layman report	Title: Layman report (EN) Year: 2005 No of pages: 8
Publication: Management plan	Title: "Wolf Management Plan for Croatia: Towards understanding and addressing key issues in wolf management planning in Croatia" (3.920 KB) Author: Ana ŠTRBENAC Year: 2005 Editor: State Institute for Nature Protection No of pages: 112
Publication: Technical report	Title: "Attitudes of rural and urban public toward wolves in Croatia: Towards a better understanding of human dimensions in wolf management in Croatia"(6.912KB) Author: Aleksandra MAJIĆ SKRBINŠEK, Alistair J. BATH Year: 2005 No of pages: 83
Publication: Technical report	Title: "2006 Report on the Wolf Population: Status in Croatia" (1.04MB) Year: 2006 Editor: State Institute for Nature Protection No of pages: 25

Publication: Technical report

Title: "2005 Report on the Wolf Population:  
Status in Croatia" (705KB) Year: 2005  
Editor: State Institute for Nature Protection No  
of pages: 27

Video link

["Vukovi i Sutra" \(HR\) \(15'\)](#)

Video link

["Prognani domacin" \(HR\)\(16'\)](#)

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