

LIFE BEAVER

Layman report





Basic information on the project

Akronym: LIFE BEAVER

Project number: LIFE19 GIE/SI/001111

Title: LIFE with the beaver, wetlands and climate change

Duration: 1. 9. 2020 – 30. 4. 2025

Budget: 913.861 € (EU contribution : 491.647 €)

Cofinancers: Ministry of Natural Resources and Spatial Planning (SI),
Ministry of Public Administration (SI)

Coordinating beneficiary: Lutra, Inštitut za ohranjanje naravne
dediščine (SI)

Project partners: Sveučilište u Zagrebu (HR), Gozdarski inštitut Sloveni-
je (SI), Muzej Ivanić-Grada (HR)

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Introduction

After centuries of relentless persecution and hunting, the beaver was exterminated in most European countries over two centuries ago and was on the verge of extinction. In recent decades, thanks to numerous reintroduction programmes, the species has been returning to its historic habitats. The reintroduction of beavers in Croatia nearly 30 years ago started with 85 animals. Today, the population exceeds 10,000 individuals, spread across Croatia, Slovenia, Bosnia and Herzegovina, Serbia, Austria, Hungary and Italy.

As the beaver population increases, so do conflicts between beavers and humans. Fallen trees, feeding on crops, and local flooding due to dams or blocked culverts are often reported as damages. Measures such as protecting trees with wire mesh or installing flow devices in dams can reduce conflicts without removing beavers or their dams.

The purpose of the LIFE BEAVER project is to welcome the return of the European beaver to Slovenia and Croatia after two and a half centuries.

Project area covers the entire existing and potential range of the species in Slovenia and Croatia. In order to ensure public acceptance of the beaver and create a positive attitude among people, we planned a number of activities for different target groups. We provided stakeholders and all target groups with reliable information about the life of the beaver, with an emphasis on its positive impact on the environment.





Beaver as an Ecosystem Engineer

The beaver is a herbivore, feeding on bark, branches, leaves and herbs. It never eats fish. By cutting down trees and building dams, it creates wetlands, which are a habitat for many other species. Wetlands retain water, reduce the risk of flooding, make an important contribution to water purification and mitigate climate change. They provide us with numerous ecosystem services: they mitigate floods and droughts, enrich groundwater, retain carbon and increase biodiversity. They also have recreational and tourist value.

In Slovenia and Croatia, the beaver is a protected species, as are beaver lodges, dams and other structures necessary for the reproduction or survival of the species, and their destruction is prohibited. Any intervention in a beaver lodge or dam requires prior permission from the competent Ministry.

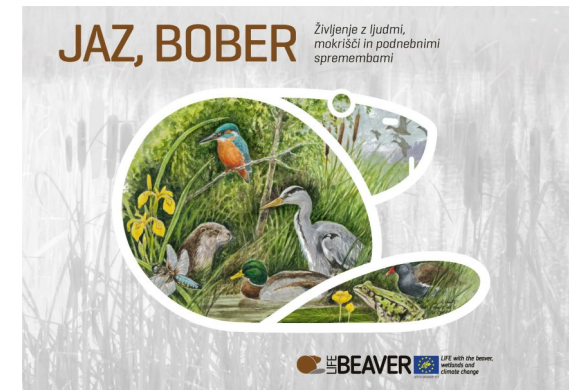
What are Ecosystem services?

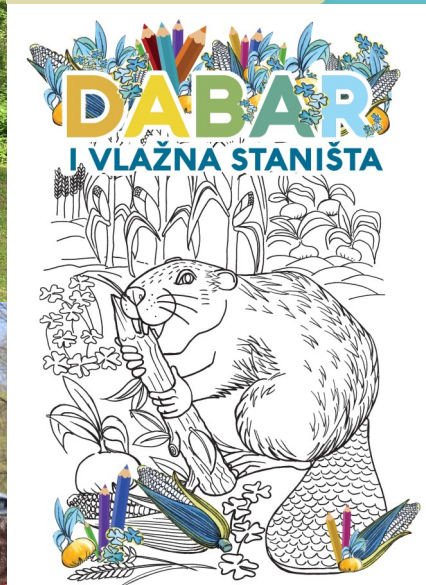
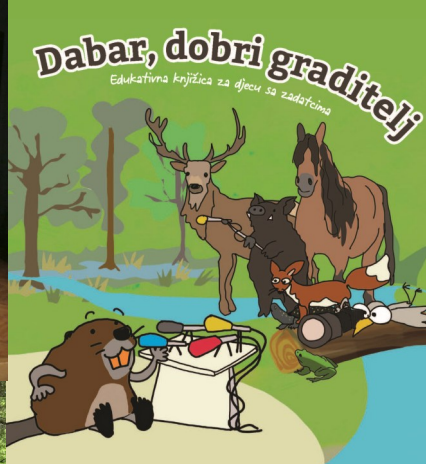
Ecosystem services are the services that an ecosystem supplies and on which humans depend. Ecosystem services from which humans benefit are often categorised as follows:

- **Provisioning services:** supply of food, drinking water, medicines, fuel, construction materials, fibers for textiles, and genetic resources;
- **Regulating services:** regulation of climate and natural hazards, control of pests and spread of diseases, pollination of plants, water purification;
- **Habitat services:** provision of favorable living conditions for the organisms that make up these ecosystems;
- **Cultural services:** such as recreation and tourism;
- **Supporting services:** soil formation, pollination, and nutrient cycling .

The main objectives of the project:

- to increase the knowledge of the general and professional public about beavers and benefits of wetlands,
- **promote wetlands** and their ecosystem services,
- **raise awareness** among the general public and improve attitudes towards beavers,
- to present **best practices for reducing conflicts**,
- prepare a **model of beaver distribution** and habitat suitability,
- **to evaluate the economic value of ecosystem services**,
- strengthen **cross-border cooperation** between Slovenia and Croatia,
- **explain the connections** between beavers and **water and agricultural policy**.





Major achievements

More than **200 workshops** and nature education days were attended by **4,058 children**.

We prepared a fun and educational **theatre play "The Beaver's Secret"**, which delighted **4,291 children**.

We equipped **30 beaver educational toolboxes** for schools and printed numerous educational materials (brochures, coloring books, posters, worksheets, exhibitions).

Lectures and guided walks for the general public were attended by **1,186 visitors**.

We prepared **13 workshops** for the professional public and stakeholders for **399 participants**.

Through various project events, publications, media contributions and advertising on the Internet and city posters, we **reached more than 3 million people** in Slovenia and Croatia.



Preparation of expert bases

Handbook on challenges and practical **solutions** for coexistence with beaver LIVING WITH BEAVER.

Beaver distribution and habitat suitability model.

Economic value of wetland ecosystem services and positive impact of beaver on ecosystems.

Guidelines for water management and **agriculture** considering beaver as a key species of water ecosystems.

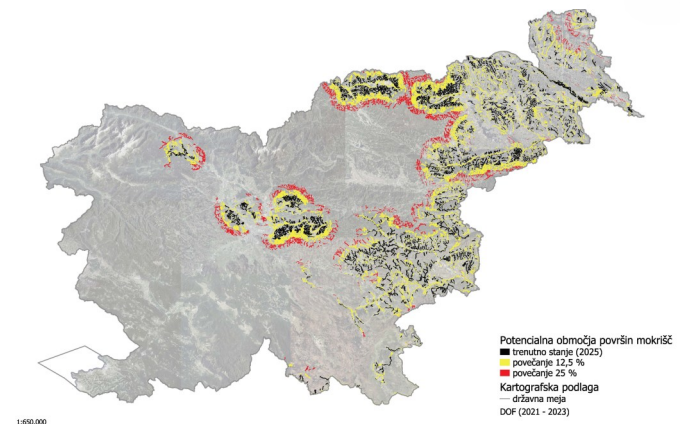
Expert proposal for **changing existing incentive schemes, compensations and measures to reduce conflicts** between beaver and humans.

Demonstration of measures to reduce conflicts :

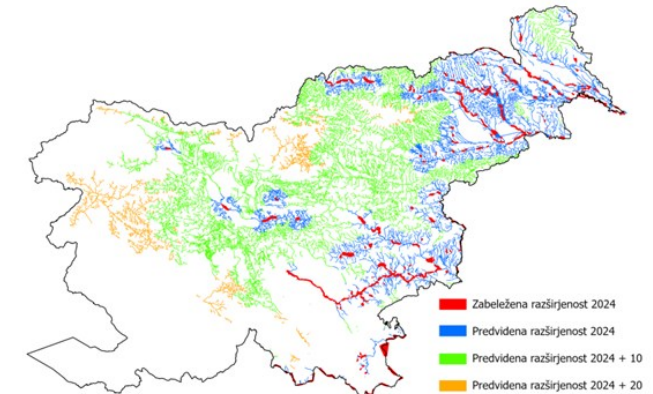
- ⇒ demonstration of measures to reduce conflicts”,
- ⇒ we lowered four beaver dams,
- ⇒ protection of numerous trees and provided advice on crop protection

We reduced beaver conflict at 109 locations through demonstrations or advice.

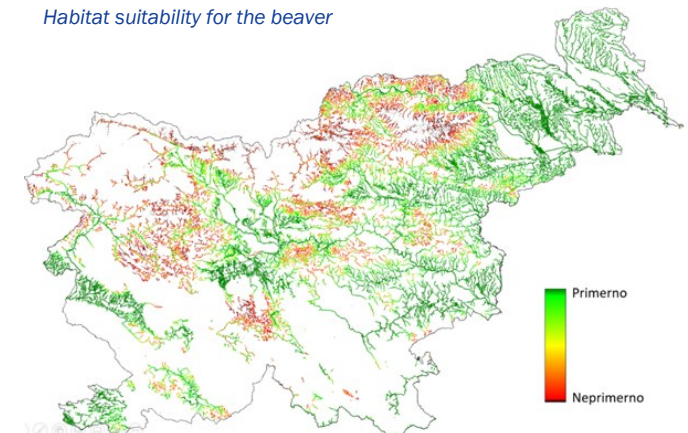
Potential expansion of wetlands created by the beaver



Model of beaver distribution



Habitat suitability for the beaver





BEAVERTRACK

The **Beavertrack web application** allows for the collection of data on beaver distribution using “citizen science”. During the project, we collected 1,260 data entries and recorded 814 users.



Have you seen a beaver track?

Enter it in BEAVERTRACK!





The report was prepared as part of the LIFE BEAVER project – Life with the beaver, wetlands and climate change, project reference: LIFE19 GIE/SI/001111, and is co-financed by LIFE (the European Union's financial instrument for the environment and climate action), the Ministry of Natural Resources and Spatial Planning (SI) and the Ministry of Public Administration (SI). The content reflects the views of the authors only. The European Climate, Infrastructure and Environment Executive Agency (CINEA) and the European Commission are not responsible for it or for any use that may be made of the information contained therein.