



Wildlife Acceptance

Objective: Increase wildlife acceptance within local communities

Carpathian Mountains
status: mixed



Problem: Ecosystem restoration does not succeed without community support. Foundation Conservation Carpathia aimed to reintroduce European bison (*Bison bonasus*) and European beaver (*Castor fiber*) to the Făgăraș Mountains. For this to be successful, community understanding of their ecological importance (such as the effects of beavers on [water quality](#) and [biodiversity](#)), and support for their presence, would be needed.

Action: Between 2020 and 2024, Foundation Conservation Carpathia reintroduced 25 European bison and 30 beavers to the project area. At the same time, they worked with local communities to promote awareness and understanding of the importance of bison and beavers, including through creating visitor centres, running projects with schoolchildren, organising the annual Făgăraș Fest community event, and through [media and communications campaigns](#). Foundation Conservation Carpathia also work with local communities to create and strengthen [sustainable enterprise opportunities](#).

Indicator: Tracking the wildlife acceptance capacity of local communities, which measures willingness to accept a certain population size of a species as well as tolerance for some level of threat or damage the species may pose, indicates progress towards Foundation Conservation Carpathia's goal of increased wildlife acceptance. It also allows Foundation Conservation Carpathia to target future communication and outreach efforts.



Reintroduced bison. Photo: Mihai Cațan.



Reintroduced beaver. Photo: Liviu Ungureanu.

Methods

This indicator focused on understanding local community residents' attitudes, beliefs and wildlife acceptance, specifically related to bison and beaver. Surveys were run across the project area and surroundings, using closed-ended questions using a five-point Likert scale, related to the following topics:

- Attitudes, beliefs and values towards bison and beaver, in general and in the local area
- Attitudes, emotions and beliefs towards bison and beaver reintroduction
- Acceptability of ways to manage human interactions with bison and beaver
- Factual knowledge about bison and beaver characteristics and behaviours

Demographic data about the respondents was also collected.

Data was collected annually from 2019 – 2022, across different communities in Argeș, Brașov, Sibiu and Vâlcea counties.

Surveys in 2019 and 2020 were administered using hard copies. During Foundation Conservation Carpathia's activities in schools in the region, questionnaires were distributed among students to take home as homework and be completed by a parent or guardian. Data collection in 2021 and 2022 used an electronic version of the survey. For this follow-up data collection, any residents (not just parents of schoolchildren) were randomly and invited to participate by completing the survey with the guidance of a field agent.

A total of 1080 adults completed the survey (323 in 2019, 148 in 2020, 309 in 2021 and 300 in 2022). Overall, 56% were female and 43% were male.



Community outreach event. Photo: Georgiana Andrei.



Wildlife watching at the annual Făgăraș Fest. Photo: Mihai Donea.

Results

Attitudes toward bison remained stable during the 2019-2022 period, except for 2020, when attitudes were significantly more positive (Fig. 1). In contrast, attitudes toward beavers became less positive over time (Fig. 1), with decreases in the reported importance of their existence in the area both currently and for future generations.

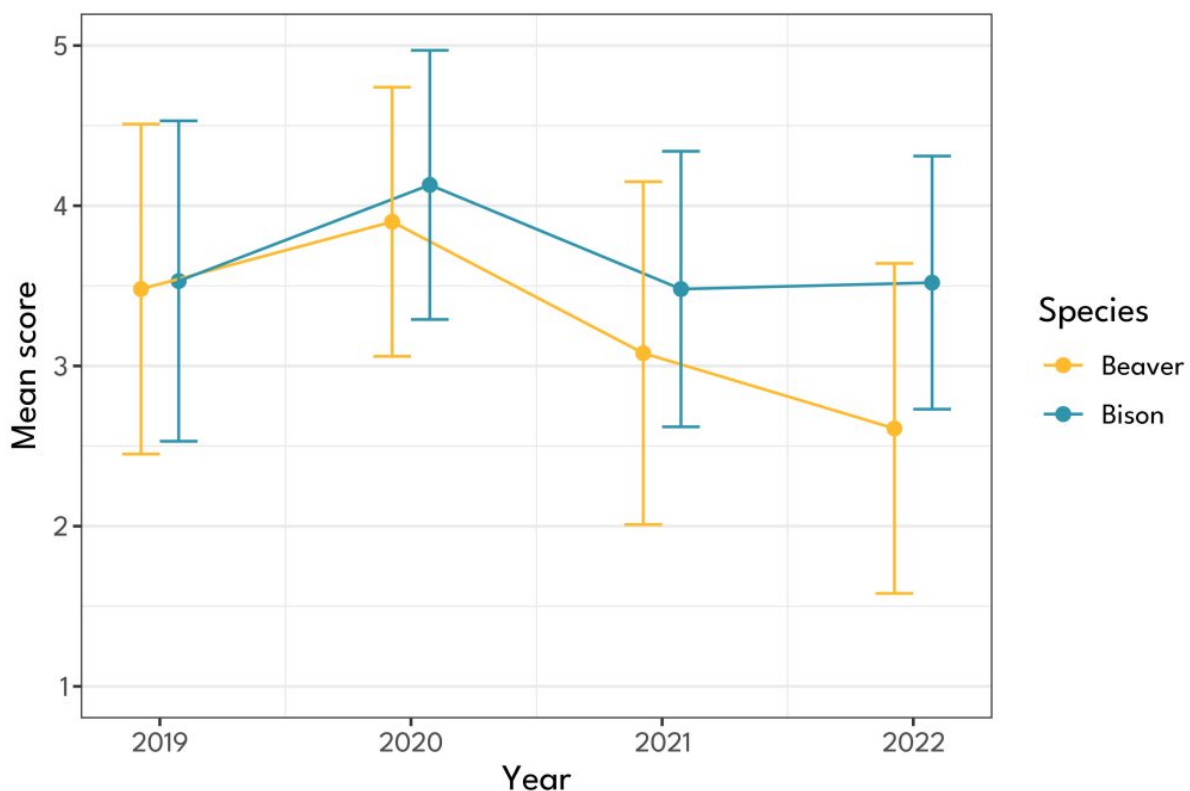


Figure 1: Change in attitudes towards bison and beavers over time. Scores are on a Likert scale ranging from Strongly dislike (1) to Strongly like (5). Positivity towards beavers declined significantly, while positivity towards bison remained stable.

On average, participants' fear towards bison decreased significantly from 2019 to 2022, particularly in relation to personal safety and spread of diseases, while fear of property damage remained stable (Fig.

2). For beavers, fears for personal safety and the spread of diseases decreased, while fear of property damage increased.

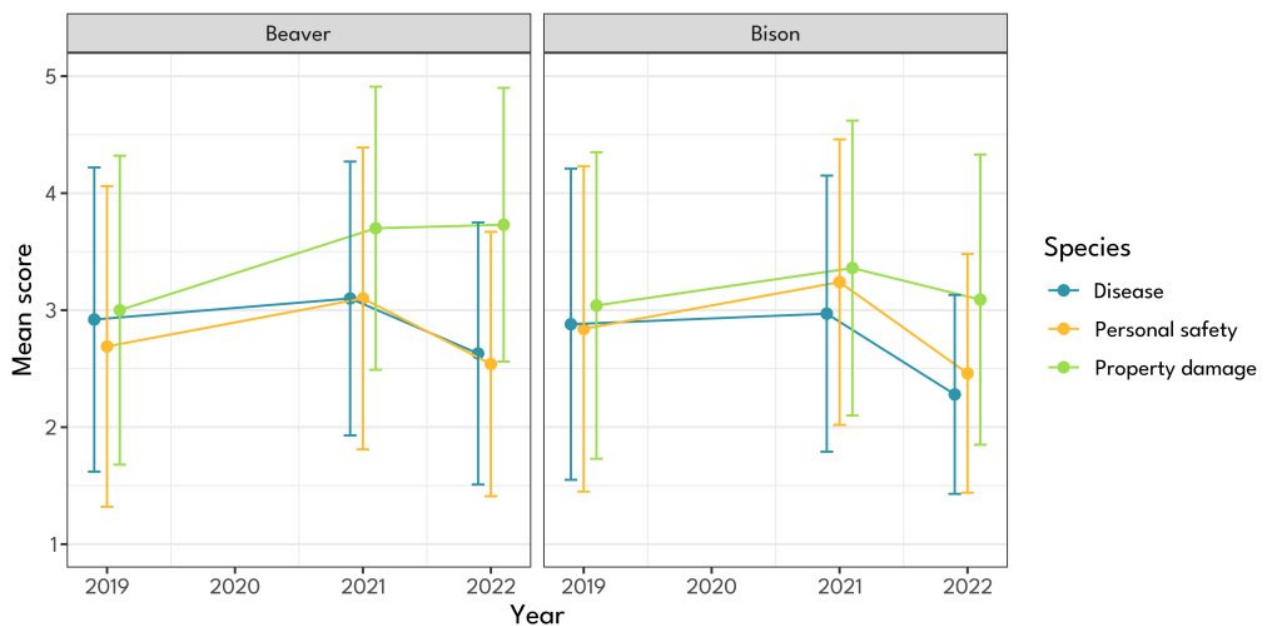


Figure 2: Change in fears related to the reintroduction of bison and beavers. Scores are on a Likert scale ranging from Strongly disagree (1) to Strongly agree (5).

In relation to costs and benefits of reintroductions, overall respondents perceived more benefits than costs of reintroducing bison. From 2019 to 2022 there was a steady increase in the belief that bison would cause damage to trees. However, there was a decline in perceptions that bison would be a threat to people. In contrast, respondents on average perceived higher costs than benefits of reintroducing beavers. Beliefs that there would be an increase in hunting and tourism opportunities declined from 2019-2022, while perceptions that beavers would damage crops, farmland and fishing ponds, and impact forestry, increased during the period.

There was an increase in positive attitudes and support for bison reintroduction, as well as increasing consensus, but a decrease in support and consensus for beaver reintroduction (Fig. 3).

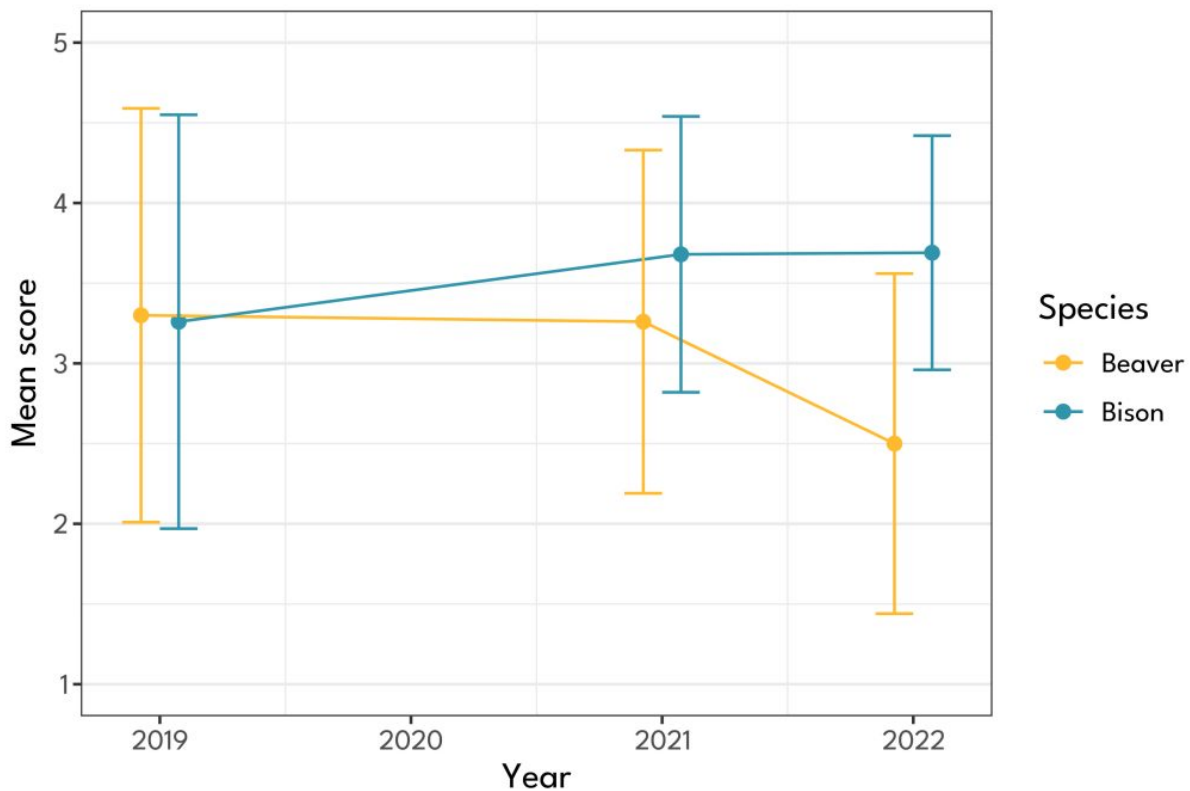


Figure 3: Changes in support for reintroduction of bison and beavers. Scores are on a Likert scale ranging from Strongly disapprove (1) to Strongly approve (5).

Looking at interventions to manage human-wildlife interactions, for both bison and beaver the support for stronger interventions (monitoring the situation, frightening the animal away, and killing the animal) increased over time, with lower support for doing nothing. Respondents were more likely to support killing beavers than bison.



Bison reintroduction. Photo: Călin Șerban.



A beaver being released. Photo: Călin Șerban.

Interpretation

Targeted educational messages regarding bison appear to have worked over the study period, as shown by decreases in fear and increases in positive values. Some concerns remain about possible property

damage, but the large percentage of neutral responses offers an opportunity to target messages and sway the public from neutral to positive views.

While beavers are also being restored to the Făgăraș Mountains, attitudes and support toward beavers is decreasing. Discussing issues around risks of property damage by beavers could help with this, while further research could explore financial compensation to alleviate fears about property damage.

Large charismatic animals tend to be perceived more positively by the public than smaller species; this seems to be the case with bison and beavers. As numbers of bison and beavers change, public support for the species may also either improve or decline. Residents have little experience with either species and thus attitudes and values are just being formed. With increased experience with the two species, attitudes and values may become stronger and entrenched, either positively or negatively, depending upon these experiences.

Citations

Engel, M.T. and Bath, A. J. (2024). Human Dimensions study in attitudes toward bison and beaver in the Făgăraș Mountains, Romania. Bath and Associates, Middle Cove, NL. Canada. Final Report

Partners

