



LIFE BISON

Layman's report



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This document was elaborated in the frame of the LIFE 14 NAT/NL/000987 “Urgent actions for the recovery of European Bison populations in Romania” (LIFE RE-BISON), implemented by Rewilding Europe, in partnership with Association WWF Romania, financed by the European Union through LIFE Nature and Biodiversity. The contents are the responsibility of WWF Romania and Rewilding Europe and do not reflect the views of the European Union.

“Urgent actions for the recovery of European Bison populations in Romania”

Acronym: LIFE RE-Bison
Reference code: LIFE14 NAT/NL/000987
Duration: 5 years and 9 months
Start date: 01.01.2016
End date: 30.09.2021
Total budget: 1816 991 euros
EU contribution: 1362 735 euros
Coordinating beneficiary: Rewilding Europe
Associated beneficiary: WWF Romania
Website: www.life-bison.com

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This Project is co-funded by the LIFE Programme of the European Union.





Introduction

Romania's Southern Carpathians mountain range is a land of rugged peaks, sprawling forests and fast-flowing rivers, interspersed with large areas of mosaic vegetation shaped by traditional agriculture. This dramatic landscape is a treasure trove of biodiversity, hosting large populations of bears, wolves and lynx. It was also one of the last strongholds of the European bison in Romania, before the species disappeared more than 200 years ago (mainly due to hunting and habitat loss).

Rewilding Europe and WWF Romania have been working to reintroduce European bison in the Southern Carpathians since 2014 – with the European Union's LIFE programme providing invaluable support between 2016 and 2021, through the LIFE RE-Bison initiative. This has seen bison reintroduced at two sites – one in the Țarcu Mountains, and one in the Poiana Ruscă Mountains, which are part of the Poiana Ruscă-Țarcu-Retezat Corridor. Both of these sites are part of the European Natura 2000 protected area network. Rewilding efforts, involving multiple translocations and releases, have seen the area's free-roaming bison population grow to over 100 animals (including nearly 40 calves born in the wild), representing the largest bison population in Romania.



As this bison population continues to grow it is having an increasingly positive impact, both in terms of local wild nature and the communities living in and around the rewilding area. The presence of this iconic keystone species is benefitting myriad other animals and plants and enhancing the functionality and resilience of local ecosystems. It is also driving the development of a thriving nature-based economy, complete with growing economic opportunities for local communities, and strengthening the connection between people and the resurgent nature around them.

With the LIFE RE-Bison initiative ending, a second phase of rewilding will now begin, with continued releases to further build the bison population to a minimum viable level (150 animals). This will include continued monitoring and efforts that enable local people to derive even greater benefit from bison presence.



About the European bison

The fall and rise of Europe's largest living land mammal

With fully grown bulls occasionally tipping the scales at over 850 kg, the European bison is Europe's largest living wild land mammal. Resembling its North American cousin, it is less shaggy, with a more lanky body shape and curved horns. A typical European bison is about 2,1 to 3,5 metres long and can run at speeds of up to 55 kilometres (40 miles) per hour. As a herbivore it is primarily a grass eater, but it also feeds on bushes, brambles and trees – bison can consume an impressive 60 kilogrammes every day.

Many people connect bison with the prairies of North America, where the animals used to roam in their tens of millions before being hunted to near extinction. The decline of the European bison mirrors that of its American counterpart – it once roamed across the entire continent (except for parts of Spain, Italy and northern Scandinavia), but sustained hunting and habitat loss saw its range continually shrink across the centuries. When the last wild European bison was shot in the Caucasus in 1927, there were only 54 European bison left alive, all in captivity.

It is from this low point that the European bison has slowly but surely inched its way back, supported by various breeding programmes and reintroductions, with the first bison released back into the wild in Poland's Białowieża Forest in 1954. Over the last 10 years the number of free-roaming European bison has increased from 2579 to around 7000 individuals, with the largest herds found in Belarus and Poland. In 2020, the status of the European bison was moved from “Vulnerable” to “Near Threatened” on the International Union for Conservation of Nature's Red List of Threatened Species, although there is still a long way to go before the species can be considered out of danger.

Bison rewilding in the Southern Carpathians of western Romania reached a milestone moment itself in 2021, when the translocation of 26 bison took the total free-roaming population to more than 100 animals - the largest bison population in Romania.

Since 2004, most restoration efforts involving European bison have been guided and coordinated by a Bison Action Plan, produced by the IUCN's Species Survival Group, in collaboration with the European Bison Conservation Centre (EBCC) and others. The main aim of the plan is to increase the size of European bison populations, preserve genetic variability, and enable free-ranging viable populations to function as a natural component of European ecosystems.

Why are we reintroducing European bison?

With its positive ecological and socio-economic impact, the European bison is a flagship rewilding species

Good for nature...

The European bison is considered a keystone species, since it plays a very important ecological role in the landscapes that it inhabits. As such, the reintroduction of bison not only helps the recovery of the species itself, it also benefits nature in myriad other ways.

In addition to consuming great quantities of grasses and feeding on shrubs, European bison impact vegetation by de-barking trees, breaking open dense undergrowth and creating bare soil patches and sand pits. They disperse nutrients and seeds, while breeding birds often use bison winter fur as nesting material. Where they inhabit landscapes alongside predatory species such as wolves and bears, free-roaming European bison become an increasingly important part of local food webs, while bison carcasses act as a food source for scavengers and replenish soil minerals.

In the Southern Carpathians, herds of reintroduced bison are already helping to create and maintain half-wooded, half-open landscapes, with the animals grazing excess vegetation from forest openings, meadows and forested meadows. As the diversity of the landscape and vegetation increases, so a range of habitats are created that are suitable for other grazers, small mammals, birds and invertebrates.





...and good for people too

In addition to its important ecological role in European nature, the European bison can also have a positive socio-economic impact, particularly in areas of Europe experiencing rural depopulation and economic decline.

As Europe's largest living land mammal, the mighty bison typically acts as a tourism drawcard. In the Southern Carpathians, reintroduced herds are attracting growing numbers of tourists and wildlife enthusiasts, supporting the development of a thriving nature-based economy and a growing number of jobs and livelihoods.

The reintroduced bison are also strengthening the connection between local communities and wild nature, with the animals quickly becoming an important part of local culture and a growing source of pride.

The positive social and cultural impact of the bison reintroduced to the Southern Carpathians was confirmed in a recent sociological study, conducted as part of the LIFE Bison initiative. In the village of Armeniş, the vast majority of the local community perceived the animals to be beautiful, worthy of protection and suitable for the local landscape.



The rewilding bison initiative in numbers

Supporting wildlife comeback

- ▶ European bison disappeared from southwest Romania around **200** years ago.
- ▶ **14** bison transports to the Southern Carpathians were carried out between 2016 and 2021.
- ▶ Around **38** bison calves were born in the wild in the Southern Carpathians between 2017 and 2021.
- ▶ More than **100** European bison are now roaming free in the Țarcu Mountains.
- ▶ **Two** bison rewilding areas were established in Armeniș and Poieni.
- ▶ **One** reproduction centre was established at the Hunedoara Zoo.
- ▶ **Four** bison rangers are now employed in the Southern Carpathians.
- ▶ A network of **32** partner reservations has been established to source bison for translocation.
- ▶ **129** DNA tests carried out and hundreds of hours of bison monitoring.
- ▶ **One** nature observatory was constructed, two hamlets and two rangers' huts were restored.

Promoting harmonious relations

Wildlife doesn't recognise the boundaries that humans draw on maps. The LIFE RE-Bison team has used a range of measures to ensure relations between reintroduced bison and local communities remain harmonious.

- ▶ **28+** bison monitored via GPS collars and virtual fences and more than **9+** km of electric fencing installed.
- ▶ **One** local intervention team established and one management conflict protocol developed, in case bison wandered too close to villages.
- ▶ **One** animation created explaining how residents and visitors in the Southern Carpathians rewilding area should behave when they encounter a European bison.
- ▶ **89%** of the people of the Armeniş and Densuş communities consider the bison beautiful and important animals for the environment.
- ▶ Over **200** tourists visited the Bison Hillock rewilding site between 2016 and 2021.
- ▶ **180 000+** euros were generated from bison-related tourism experiences.
- ▶ **Six** business plans were developed, helping local entrepreneurs to develop sustainable economic opportunities based on the reintroduced bison.
- ▶ **Five** primary schools and over **100** students involved in the "TANZ" school clubs, helping to connect young people with nature through **70+** nature-related workshops and trips to the field. **One** activity manual was developed as part of the education programme.
- ▶ **200+** meetings and consultations were held with national and local authorities and stakeholders.
- ▶ **Three** photo missions and over **900** professional photos were delivered by **three** wildlife photographers.
- ▶ **Nine** photo exhibitions and one virtual gallery were organised, reaching **24 000+** people.
- ▶ **5 000+** followers were engaged on the initiative's social media channels.
- ▶ **43 000** unique views of the LIFE RE-Bison project website
- ▶ **One** documentary selected at 10 national and international festivals
- ▶ **Four** information panels were created for the areas.
- ▶ **One** brand was developed for promoting local nature-based products and services.
- ▶ **Two** press trips and numerous national and international media visits to the bison reintroduction areas were facilitated by the rewilding team.
- ▶ **Three** influencers/bloggers visited the area to promote bison tracking experiences.
- ▶ **18** press releases were issued at national and regional level by WWF, in coordination with Rewilding Europe, which promoted important milestones, such as bison transports, coexistence and nature-based tourism.
- ▶ **2 million** people reached via mass-media
- ▶ Over **200** hours of camera trap footage was captured.
- ▶ **2** human dimension studies were conducted within the two local communities near the rewilding areas.

Activities and achievements

Cooperation at European level

During the nearly six years of the initiative the LIFE Bison team has worked with 32 breeding centres, zoos and wildlife parks across Europe. In terms of key national stakeholders, the team has collaborated with the Environmental Protection Agency, Romanian Academy, Forest Guard, Environmental Guard, various hunting and forest units, and local municipalities.

One of the most important partnerships was with the European Bison Conservation Centre (EBCC) Poland and the Warsaw University of Life Sciences, as they maintain the genetic record of all European bison living in captivity.

At least eight universities and institutes from across Europe were involved in activities related to the LIFE RE-Bison initiative, such as DNA monitoring, data analysis and internships for 25 students from 11 countries between 2016–2020.

The initiative was presented at several conferences across Europe (such as the annual EBCC Conference and EAZA (European Association of Zoos and Aquaria) Conference 2018), while the team exchanged knowledge with other European bison reintroduction projects from EU countries such as Poland and Germany and non-EU countries, such as Ukraine, Belarus and Russia. One bison breeding centre was established at Hunedoara Zoo in Romania.



Selection and breeding

The selection of bison for reintroduction was a complex process, involving a lot of breeders and other key stakeholders from across Europe (such as EBCC Poland, Warsaw University of Life Sciences). During the LIFE RE-Bison initiative a total of 91 bison were selected and translocated to the rewilding area (Armeniș and Poieni).

We learned that selecting bison according to specific criteria – such as the degree of inbreeding, age of the animals, appropriate gender ratio, health condition and habituation to humans – can increase the survival rate of the species in the wild and could thereby improve the outcome of the overall initiative. All data/information about the bison, particularly those of LC (Lowland-Caucasian) origin and a percentage of the LC founders, were confirmed by EBCC Poland.

Before and during the initiative we translocated animals in two separate ways:

- ▶ acquired separately and then placed together in the acclimatisation zone (2014, 2015, 2016, 2018)
- ▶ in pre-formed social herds before transportation, accompanied by an adult female to provide social stability (2017, 2019, 2020 and 2021).

We found that animals in pre-formed social herds had a higher rate of survival (ie. a lower rate of mortality).

For the selection of animals we worked with different bison conservation and breeding experts. Two of the breeding centers were involved directly in the selection of bison – Springe Wisentgehege and Zweckverband Donaumoos. Since 2019, six groups of bison were prepared at these two breeding centers before their translocation to the Armeniș rewilding site. The animals making up these herds were selected from different breeding centres and kept at Donaumoos and Springe for between four and eight months in an enclosure, with minimal human contact, to ensure social bonding.



Transports

During the LIFE Bison initiative 14 bison transports took place. A clear transportation protocol was developed, involving the rewilding team, breeders, veterinarians, transport companies and veterinary authorities at the loading and unloading points. Each transport was adapted to the size and height of the biggest animal, the number of animals, and the nature of the loading and unloading points.

Due to the remote nature of the unloading point at the rewilding sites, and the difficult nature of the approach roads, the transport company had to meet certain technical obligations – a short truck with trailer to enable manoeuvring in limited space, and a high vehicle ground clearance to enable passage on forestry roads.

Transport	Year	Animals	Destination
1	2016	10	Armeniș
2	2016	2	Hunedoara
3	2017	9	Armeniș
4	2018	2	Armeniș
5	2018	7	Armeniș
6	2018	2	Poieni
7	2018	12	Poieni
8	2019	8	Armeniș
9	2019	4	Armeniș
10	2019	1	Hunedoara
11	2020	8	Armeniș
12	2021	13	Armeniș
13	2021	6	Armeniș
14	2021	7	Armeniș
Total		91	



Monitoring

Nine different ways of monitoring the reintroduced bison and their environment were employed during the LIFE RE-Bison initiative:

- ▶ Direct bison observation
- ▶ Indirect bison observation
- ▶ DNA monitoring
- ▶ Parasitological monitoring
- ▶ Human-bison conflict monitoring
- ▶ Telemetry monitoring (via GPS collars)
- ▶ Health status monitoring
- ▶ Camera trap monitoring
- ▶ Monitoring of other species

As part of this monitoring regime:

- ▶ Bison (individually or in herds) were directly observed over 200 times.
- ▶ Tracks and other signs of bison presence were recorded over 750 times.
- ▶ DNA tests were carried out on 34 blood samples, 25 saliva samples and 67 scat samples.
- ▶ Parasitological tests were carried out on 247 scat samples, with 11 types of parasites identified.
- ▶ 28 bison were fitted with a GPS collars over the six years of the initiative.
- ▶ 12 human-bison conflicts were closely monitored and managed (across both sites).
- ▶ 20 camera traps were set up to observe the health and behaviour of the bison and other species.
- ▶ 515 indirect and indirect observations of other mammal species were recorded.





Coexistence and human dimensions study

The support of local communities was vital to the success of the rewilding bison initiative, which is why significant efforts were made to promote and maintain harmonious human-bison relations.

Such efforts included:

- ▶ The fitting of 28 bison with GPS collars to monitor their movement, and to alert the team when the animals wandered too close to sensitive areas such as hamlets and villages, orchards and haystacks.
- ▶ Constant monitoring by bison rangers to keep track of bison location (particularly those without any GPS collars) to prevent conflict.
- ▶ From 2019 onwards all GPS collars were fitted with virtual fence functionality – such fences were established around all villages in the initiative area.
- ▶ A total of 12 human-bison conflicts occurred during the initiative across the Armeniș and Poieni rewilding sites. Two bison were tranquilised and relocated.
- ▶ One case of poaching was successfully resolved (a calf was caught in an illegal snare intended for wild boar).
- ▶ During harsh winters food for bison (hay) was placed in several places in remote areas typically frequented by the animals at that time of year.

- ▶ Around 9 km of electric fence was placed around 18 private properties to protect them from bison damage.
- ▶ 33 shelters, 6 orchards, 6 holiday houses, 3 grasslands, 2 agricultural areas and 8 sheep pens were registered in the bison home range as having potential for conflict.
- ▶ One local intervention team was established in 2019 to help with monitoring and proactively intervene to prevent possible human-bison conflict when necessary.
- ▶ Non-lethal wildlife deterrent ammunition (produced by EDM engineering office, Viena) was used for the first time in Europe to manage human-bison conflict.

Two human-dimension studies were performed to gain a better understanding of how the local communities perceive and evaluate the project for the reintroduction of the European bison in the South-Western Carpathians, namely in the two targeted locations, Armeniş and Densuş-Poieni. The surveys were based on a questionnaire and a series of qualitative assessments.

The first study was performed in June 2016, when 131 questionnaires, 66 (50,38%) questionnaires Armeniş, and 65 (49,61%) in Densuş. The 2020 survey comprised a total of 156 completed questionnaires, of which 44 (28%) from the Densuş area and 112 (72%) from the Armeniş area.

Key findings from the first study show in Armeniş, 84,9% support the project and in Densuş only 66.1%. In Armeniş 59% were optimistic that one of the benefits of the project will be more income and employment in the area, while in Densuş only a little less, 50%.

In 2020 the data shows 89% of the people of the Armeniş and Densuş communities consider the bison beautiful and important animals for the environment. In Armeniş, much more than in Densuş-Poieni, people express an understanding of the non-intervention policy. Only 57% of the population of Densuş-Poieni still agreed with the project, while in Armeniş the percentage of support rose to 90%.

The study shows that both communities support and appreciate conservation initiatives, and understand the plight of endangered species.



Policy

The fact that LIFE RE-Bison was a pilot initiative meant that unexpected situations arose over the course of its six years. An unresolvable situation, unfortunately, resulted in the closure of the rewilding site in Poieni, which led to many consultations with the Romanian Ministry of Environment concerning legislation. This revealed significant legislative gaps regarding species reintroduction and post-release management in the wild.

Over the last three years we have focused mainly on clarifying responsibilities regarding biodiversity conservation and game/hunting management, as the bison falls under two different pieces of Romanian legislation: Hunting Law (Law No 407/2006), where the European bison is listed in Annex 2 of the Hunting Law as a protected species (i.e. off limits for hunting), and Natural Protected Areas Law (OUG no 57/2007), where the European bison is listed in Annex 3 and 4A. According to OUG no 57/2007, the European bison is a strictly protected species and its presence in an area leads to Natura 2000 site designation. Unfortunately, these inconsistencies remain unresolved as of now.

For the reintroduction of bison in Armenis and Poieni sites an Environmental Permit/Authorization was issued according to the Minister Order No 979/2009 which complies with the legislation transposing the Natura 2000 Directives. The permit does not include clear reference to the responsible institutions for managing the species after the release in the wilderness, assuming that they become part of the national natural capital.

In 2016, a national working group for the conservation of European bison was established by representatives of the Ministry of Environment, WWF Romania and other experts involved in bison reintroduction initiatives. The working group had the mandate to develop the National Conservation Strategy for the European bison. Unfortunately, the working group was not formalised by a Ministerial Order and in the absence of a formal framework the few informal meetings did not bring more clarity or concrete solutions.



Research

The data collected from the GPS collars on the bison – together with environmental variables such as elevations, land use and vegetation indices – were used to calculate home range and suitable habitat. The home range analysis revealed that the 95 percentile range (home range = entire area that bison use for living and moving on a periodic basis for food, shelter and reproduction) was approximately 89 km², while the 50 percentile area (core range = most frequented) was 18,4 km². (see Figure 1)

Habitat suitability modelling showed that the composition of forests – such as broadleaf trees, natural grasslands and transitional woodland/shrub – together with factors such as the availability of water and incline – have the highest influence on bison distribution. When applied to a much larger area that could be considered for future rewilding, this modelling revealed several suitable habitats (see Figure 2). The habitat suitability index (HSI) ranges between 0 and 1 (green to red), representing low to high suitability areas. Certain areas, depicted in red and orange, can be seen as highly suitable for bison.

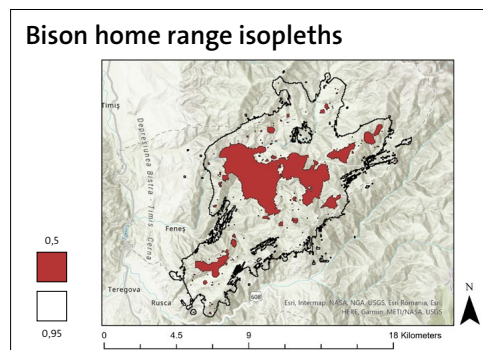


Figure 1. The 50% (0.5) and 95% (0.95) isopleths of the entire bison dataset calculated from the Elliptical Time Density method.

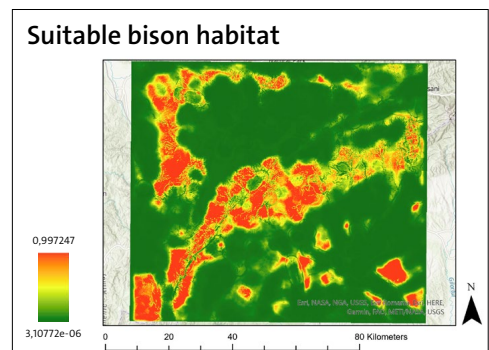


Figure 2. Maxent's projection of main suitable habitat in the projection extent.

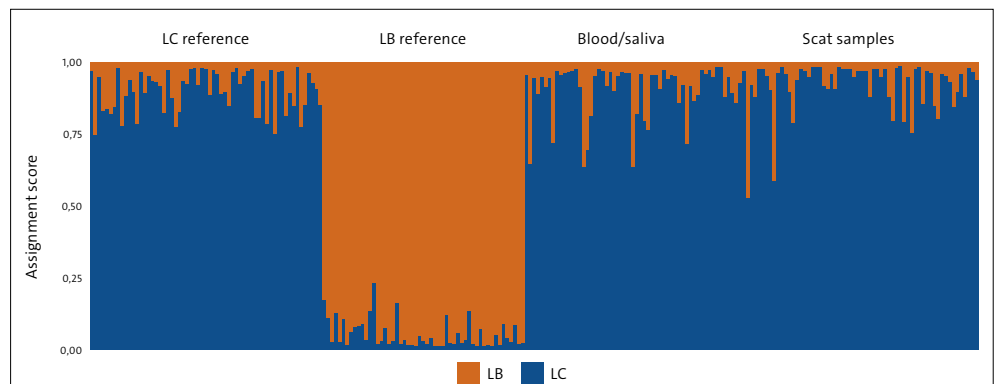


Figure 3. Individual assignment scores for scat and blood/saliva samples of *B. bonasus*, shown together with assignment scores for established reference samples for the LC and LB breeding lines respectively. Each column represents the assignment score of an individual genotype.

DNA analysis through SNP genotyping was successful for 119 of the 127 analysed samples, resulting in a >93,7% success rate. The results reveals the following:

- ▶ The sex marker successfully confirmed the 10 known males from the blood/saliva samples and further indicated that 26 males were present in the scat samples. For the remaining samples we assume “female” as the most likely sex
- ▶ 27 samples entered the paternity analysis as potential offspring/siblings, together with all blood samples as potential parents. Here, we found potential paternal assignments for 9 scat samples and potential maternal assignments for 5 scat samples. For 21 scat samples, the analysis found potential full sibling relations
- ▶ Breeding lineage assignment based on Bayesian clustering in STRUCTURE v2.3 (Pritchard et al. 2000) assigned all samples in the present analysis with high confidence to the LC breeding line (Figure 3 on page 18).
- ▶ The Southern Romanian bison reintroduction carries most of the globally available genetic diversity of the European bison LC lineage.





Education

An ambitious education programme was launched in 2017 at both of the initiative's rewilding sites. Its aim was to involve youngsters in the conservation of local wild nature - with a particular focus on the reintroduced bison – as a way of developing the region and motivating young people to remain and work in their communities. The programme followed a model established by WWF Romania in the Southern Carpathian region between 2014 and 2016, when five youth clubs were established.

The non-formal education programme involved five schools from the counties of Hunedoara and Caraş-Severin (Armeniş and Feneş Primary Schools, Densuş and Sarmizegetusa Primary Schools, and “St. Dimitrie” Technological High School Teregova), where over 100 students participated in nature-focused youth clubs. It was initially scheduled to run for two school years and involve students from the fifth to eighth grades, but continued until June 2021, with activities for all children who showed an interest in nature conservation.

Teachers from each of the schools were trained at the launch event and used a personalised manual created to assist them with concepts linked to wildlife, citizenship, the development of soft skills and a series of educational activities. A comic book named "Beyond the Horizon" presenting the Banat area and the bison initiative was distributed to students in schools across Romania. The clubs showed most interest in group activities, nature exploration and two workshops organised as part of the programme: one hosted by a professional nature photographer, and another on ornithology, led by two biologists. To better develop their soft skills the students worked on long-term projects that could benefit their community and nature. The club in Sarmizegetusa,

for example, planned a recycling campaign in partnership with local authorities; in Teregova efforts were focused on keeping rivers clean; and in Densuș club members designed nests for local and migratory birds.

In 2019, all five clubs took part in activities for Earth Hour, to raise awareness of climate change in their community. In 2020, online sessions about protected areas and active citizenship were held for the sixth graders in Teregova, culminating in a photography contest and award ceremony. In Armeniș, the bison rewilding team collaborated with professors to create a useful corner for outdoor lessons and relaxation – this contained murals and photographs with species and landscapes from the area, educational panels about key species, and information on nature-friendly behaviour.

Having participated in the clubs, teachers noticed that students understood their role in nature conservation better and that they were able to describe protected areas, habitats and species in their region, including the bison. They acquired skills related to wildlife identification and monitoring, and also tried to improve their local environment by living in a more nature-friendly way – for example, by recycling more or consuming less paper. Local teachers acquired the knowledge and skills to oversee and develop the bison youth clubs in collaboration with the LIFE RE-Bison rewilding team.

Information sessions about the LIFE RE-Bison initiative and the importance of communicating about nature conservation were held in person and online every year for the students of the Department of Systems Ecology and Sustainability, at Bucharest University's Faculty of Biology.



Rising awareness for rewilding bison

Since the initiative began it has been promoted through a variety of local, regional, national and international media activities. Through the use of communication strategies based on various target audiences, relevant content for digital and traditional media channels was created and shared regularly.

18 press releases have been issued at national and regional level by WWF in coordination with Rewilding Europe, which promoted important milestones, such as the bison transports, ecotourism and education activities. News reached an audience of over 2 million people worldwide. Frequent media visits to the bison reintroduction sites took place with CNN, Deutsche Welle (DW), ARTE, TVES, Al Jazeera, National Geographic, Digi24, Libertatea, TVR and other significant media outlets also communicated on the project activities (PROTV, The Guardian, The Economist, Discovery Channel, South Africa Today, Radio Romania International, Dilema Veche, Făclia etc.)

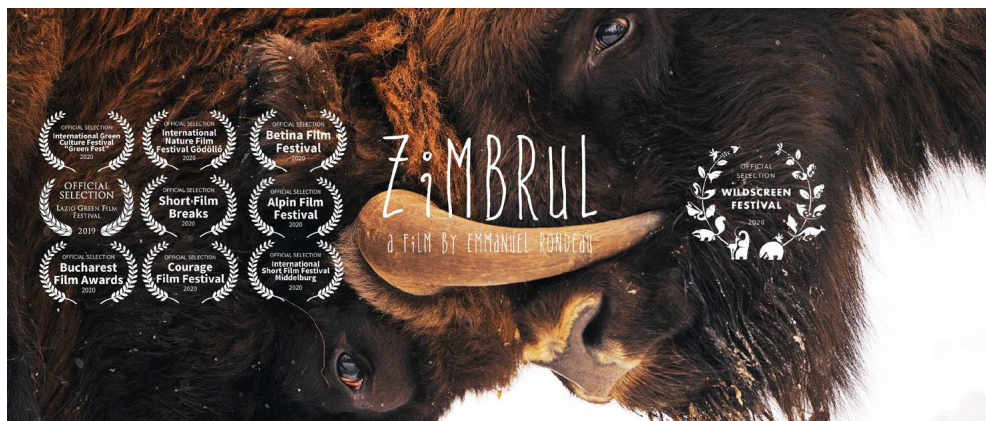
The project website was accessed more than 50 000 times since the launch. It was regularly updated with useful materials and information. It contains a photo gallery and a news section with 45 articles covering the key activities and results. The social media following of the project (Facebook, Twitter, Youtube channels) was organically grown to over 5 000 people due to diverse and dynamic content consisting of photography, videos from camera traps, news reports, and activities from the field, events, stories, quizzes and interaction with project followers.





A bilingual newsletter was sent to announce project progress to a database of 70+ key stakeholders including, partner organisations, breeding centres, specialist groups, biologists, universities from all across Europe.

A nine-minute documentary, entitled “Zimbrul” (Romanian for “bison”), showed the reintroduction of the European bison through the eyes of the local communities of Densuș and Armeniș. Shot by award-winning French filmmaker and photographer Emmanuel Rondeau, it was selected at 10 festivals and screened in events and on national TV.





Nature-based tourism

The Armeniș project area received alongside the bison reintroduction a much needed eco-tourism boost which complemented its rich natural and cultural values. Enterprise development activities have taken shape as tourism packages linked to bison tracking experiences were promoted and sought out by national and international visitors.

With the collaboration of the locals an award winning nature observatory which melted into its surroundings was constructed, several hamlets were restored for accommodation and services such as transport and catering were made available to tourists. In 2016 the opening of the Visitors centre in Armeniș created added-value for the project. The team engaged with a marketing incubator from Bucharest (ACU), a local action group (Țara Gugulanilor) and a product distribution network from Timisoara (ASAT) to discuss possible development directions and collaboration ideas for a local product range, based on learnings from the test product collection launched under the bison-friendly label in the summer of 2016. The labels were produced and placed on products available in the Armeniș Tourist Centre to better brand the destination known under the name of Magura Zimbrilor (Bison Hillock).

Informational leaflets and presentation cards for the bison tracking experiences in Armeniș were produced and distributed at European nature parks information centres (Hungary, Austria and Switzerland), and at events in Romania such as the Arad Tourism Days, Timișoara La.Pas gastronomical festival, or Alpin Film Festival in Brașov.

Another Escape magazine, The Guardian, National Geographic Magazine Romania and other media outlets have recommended the Bison Hillock as a sustainable and unique destination. Three travel bloggers shared their experience in the area on their social media accounts and blogs.

In the second rewilding area, starting with 2019 we discussed closely with the representatives of the Retezat Tourism Association and the Țara Hațegului Dinosaur Geopark to develop a common strategy of promoting the bison return, as part of the overall tourism programme of the already popular eco-destination named Țara Hațegului. Due to late commencement of the project in the area, and other challenges the development of an eco-touristic programme was delayed and implemented only partially. In the Armeniș area however training sessions on hospitality, restoring hamlets, building new infrastructure such as the wildlife observatory, and giving locals concrete examples from other parts of Romania where eco-tourism is blossoming helped them embrace the development of wildlife experiences promoted by Rewilding Europe and WWF Romania. Since 2016, the area saw over 30 households get involved, received 200+ tourists, and a generated income for the locals over 180 000 euros. This result shows the effort behind an inclusive way of developing eco-tourism where the community was consulted and guided to take the lead in creating a better socio-economic scenario for the present and the future.

The need for sustainable tourism practices throughout the value chain (recycling, energy and food consumption, minimizing carbon footprint etc.) ignited the spark of creating a local tourism hub that consists of wildlife tours, a campus of sustainably built wooden cabins, and a common building destined to bring together locals and visitors to learn from one another. Financial and human resources are needed to grow and maintain the interest of the locals, to train them, and also to sustain the long-term promotion of the area.



Moving forwards

Building on the achievements of the LIFE RE-Bison project, bison rewilding in the Southern Carpathians will now begin a new chapter.

Nature moves to its own rhythms and timescales, which is why rewilding will always be a long-term commitment. With the first phase of bison reintroduction in the Southern Carpathians coming to a close, the existing free-roaming herds will now be allowed to breed naturally, creating a viable population that supports a thriving wild nature and local nature-based economy. Further bison reintroductions will be carried out at other sites in the Southern Carpathians, and possibly to supplement the existing population, if the need arises.

This second rewilding phase will include continued management and monitoring of the existing bison population to keep animals safe and healthy, as well as efforts that enable local people to derive even greater benefit from bison presence. This will include DNA and parasitological monitoring to prevent issues such as disease outbreaks and high levels of inbreeding. A stakeholder network will also be created to enhance bison monitoring and keep human-bison relations harmonious.

The rewilding team will also focus on improving the legal framework for bison reintroduction and management, and set up a management model for the species. They will propose a national action plan for European bison conservation and a national conservation strategy for European bison to the Romanian Ministry of the Environment, as well as a clear procedure for the management of free-ranging bison populations.

All in all, the future for European bison in the Southern Carpathians looks promising. Supported by the ongoing efforts of the rewilding team, this impressive and influential animal should continue to benefit the wild nature and communities of the area on a growing scale, contributing to the overall recovery of the species in Europe.



Acknowledgements

The diverse achievements of the rewilding bison initiative would not have been possible without the support of a wide range of partners and associates. The LIFE RE-Bison team would like to express its profound gratitude to:

Breeding centres, zoos, reserves and specialists involved in the bison reintroduction project: Thomas Hennig, director of Springe Wisentgehege and vet. Johannes Riedl, from Zweckverband Donaumoos, vet. Sven Bjorck, vet. Ciprian Hodor, IUCN SSC Bison Specialist Group, Altshonau, Bavarian Forest National Park, Bad Berleburg, Bayerischer Wald, Berlin Zoo, Tierpark Berlin, Bielefeld, Cuxhavener Kuster, Damerower Werder, Landratsamt Neuburg-Schrobenhausen, Edertal-Hemfurth, Farchau Hardehausen Wisentgehege (l. Regionalforstamt Hochstift), Heimattiergarten Furstenwalde, Karlsruhe, Kiel, Landeshauptstadt Kiel, Hasseldieksdamm, Tierpark Neumünster, Tierpark Hirschfeld, Tierpark Straubing, Tierpark Suhl, Tierpark Sababurg, Wismar, Wildpark Tiergarten Weilburg, Avesta Visentpark Sweden, Kolmarden, Busselongo, Parco Natura Viva, Slivuş-Haţeg, Vama Buzăului, Hunedoara Zoo, Thoiry, Le Breil-sur-Merize, Han-Sur-Lesse, Tierpark Bern, Tabor Zoo and many others.

Specialists from universities and national and European institutes: prof. dr. hab. Wanda Olech, Warsaw University; Faculty of Life Science and coordinator of EBCC Poland, prof. Mihalca Andrei, USAMV, Cluj-Napoca, Tobias Kuemmerle, Humboldt University of Berlin and representatives from Senckenberg Center for Wildlife Genetics: M.Sc. Gerrit Wehrenberg, former Master student at the Senckenberg Wildlife Genetics Center (WGC) and Goethe-Universität Frankfurt, Dipl.-Biol. Berardino Cocchiararo, lab manager of the Senckenberg WGC, M.Sc. Michelle Müller, project manager at WGC, Dr. Carsten Nowak, head of the WGC.

Members of the local communities: Cristian Ioan Vela, Mayor of Armeniş; Popescu Ioan, Deputy Mayor Armeniş; Petru Vela, former Mayor of Armeniş; Monica and Mihai Miculescu, Ion and Dosia Vela, Simona Capverde, Eduard Terschak, Mircea Dragomir, Ioan and Ana Boştîuca, Petru and Lina Stoicănescu, Iacob Hurduzeu, Ana Hurduzeu, prof. Iconia Miculescu, prof. Maria Damian, prof. Nicoleta Coseriu, prof. Ioan and Oxana Feneş, prof. Vela Ani, prof. Maria Haţegan Brumar, prof. Daniela Uglai, prof. Mari Iordache, prof. Argentina Tonca, and all the children involved; Adrian Vîrtopean, Mayor of Densuş, Bernard Alexe, Dorin Socaci, Ioan Costea, the local intervention team from Armeniş: Hurduzeu Tudor, Miculescu Petru Vali and Velescu Mihai, and anyone who supports the rewilding initiative.

Notable contributors to the initiative: Romanian Academy, Romanian Ministry of Environment, National Forest Administration ROMSILVA, Caraş-Severin Forestry Direction, Teregova Forestry Unit, National Agency for Natural Protected Areas, Caraş-Severin Agency for Environment Protection, Caraş-Severin Inspectorate, The Forestry Guard Caraş-Severin Inspectorate, AJVpS The County Association of Hunters and Fishermen Caraş-Severin, Armeniş Group, Sanitary Veterinary and Food Safety Authority, Environmental Guard, management of protected areas and parks such as: Vânători Neamţ Nature Park, Retezat National Park, Domogled – Valea Cernei National Park, Mountain Rescue Teams, AER, Erika Stanciu, Adrian Hăgătiş, Alexandru Bulacu, Marius Nistorescu, Adrian Grancea, Marius Berchi, Mara Cazacu, Marius Drugă, Georg Messer, Cătălin Gavrilă, Asterta Cîrstea, Toni Romani, Ioan Moldovan, Krisztina Bocos, Andrei Tache, Nicolae Lupu, Miodrag Stoianov, Dan Dinu, Bogdan Comănescu, Daniel Mîrlea, Emmanuel Rondeau, Cristian Ilea, Mei Elderadzi, Rohan Wadhwa, Angus Walker, Diana Cuzmanovici Bogeia, Alina Floroi, Kinga Mihali, Teodora Domşa, Anca Rusu, Cristian Ciobanu, Monica Vasile, Irina Opincaru Orieta Hulea, Cristian-Remus Papp, Mădălina Corciu, Adriana Trocea and many others.

WWF Romania and Rewilding Europe staff involved in the project preparation and implementation as well as the other organizations that put efforts together for the benefit of the bison population and local communities.

“The reintroduction of the European bison into the Southern Carpathians has put the region on the map, not only in Romania and Europe, but even beyond

The next challenge is twofold: first, we need to make sure we can continue to build the bison population further to the minimum viable level of 150 animals. Second, we need to ensure this landmark reintroduction is embedded in a larger rewilding initiative in the region.

Rewilding Europe is committed to continue working with all key stakeholders to make this happen.”

FRANS SCHEPERS

Managing Director of Rewilding Europe

“The support of local communities is critical to the ongoing success of bison rewilding in the Southern Carpathians, which is now delivering sustainable benefits to both nature and people.

Reintroducing the European bison, which embodies the grandeur and beauty of Carpathian nature, has shown how rewilding can act as an ecological and socio-economic force for good.”

ORIETA HULEA

Director of WWF Romania

