

Annual Report 2021

Foundation Conservation Carpathia

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Foreword

The year of 2021 started with big hopes, Covid vaccines became available and it seemed the nightmare of the pandemic would be over by the summer and all could go back to normal life. Unfortunately, this didn't happen. Anti-vaccination campaigns upset many people and after a good start, the majority of people in Romania, especially in the rural areas, remained unvaccinated with resulting outbreaks of Covid, overfilled hospitals, and the highest deathrates anywhere in Europe during the month of October. Both plantation periods in spring and autumn overlapped with the major waves of Covid in 2021, which made the work very complicated, since daily labourers usually turned up unvaccinated and eventually refused to even get tested.

With all these difficulties, the achievements of our team were even more outstanding throughout 2021. We have made huge progress on all five fields of activity, we have created new strategically important partnerships, and we have managed to become an integral part of the local communities, wherever we are

active. Despite the travel restrictions due to the pandemic, our tourism programmes earned record revenues both in Cobor and with the wildlife hides.

The international context was also favourable: The Biodiversity Strategy, adopted in 2021 by the European Union, requests all member states to have 30% of their territory under a protected area status and to fully protect 10% of their landmass. Together with the Coalition Natura 2000, the federation of conservation NGOs in Romania, we requested this back in 2016 for Romania. Given our good relations with the European Commission, we will have strong support now in helping implement this within Romania.

Through our new strategic partnership with eMAG, the largest online retailer in eastern Europe, we learned a great deal as to how a large company functions and concluded that the processes and the tools which are being used in the corporate world are not so different from what we need to do. Despite the fact that we don't sell goods to people but want to create a new National Park with and for people.

Consequently, we re-organised all our activities, which have continued to grow substantially, and adapted and enlarged our staff structure (throughout 2021, our team grew from 96 to 113 dedicated people). In the summer we began the revision of our Masterplan, which includes all these new activities with detailed needs of staff and budgets. This updated plan will then allow us to be more targeted in raising the necessary funds and we assume that we can keep up the speed of development over the next five years.

Now, when writing this annual report and looking back to 2021, it seems almost like looking back at a different era. Who would have thought back then that a war between the two largest European countries would take place on our doorstep? It also shows how much peace and dependency on fossil energy are linked to our well-being. The solution is clearly conservation. A life in harmony with nature, where beauty, happiness, and satisfaction are purely unlimited, is the only way to get us out of this situation. With the war in the Ukraine, the work of FCC has become even more important.



Barbara Promberger-Fuerpass

Executive Director



Christoph Promberger

Executive Director



In memory of Bebe Nicolae and Markus Jebesen

Sadly, we lost two people in 2021, who were not only friends, but also integral parts of CARPATHIA. First, in May, Florin Nicolae (nicknamed Bebe) lost his fight against cancer. He had been under treatment for over two years, when in early 2021 it seemed he had got over it, only to suddenly find out that the tumours had further spread. Bebe was not just a ranger, he was our very first ranger in Rucar. We remember very well when in 2010, just at the height of the illegal logging, we were desperately searching for a trustworthy person to help us protect the forests we had acquired up till then. All fingers pointed to Bebe, he would be the one who could safeguard these forests. For him, it was a big step, leaving a safe job at the state forest administration and joining what was at that time a small team in an organisation surrounded by a lot of rumours. One of the first trips with him led us to the upper Dâmbovită Valley, to a meadow along the river which had started to be over grown with spruce, some 2-4 meters high. Obviously, we would prefer to have the natural species in every location, in this case alder trees. In our ignorance of the legal situation, we asked Bebe to cut down

the spruce in favour of the alder trees – Bebe's answer was very clear and unmistakable: he understood that this was the right thing to do, but in order for him to do it, it must be both the right thing and legal too; without a logging permit he wouldn't cut these trees. That was Bebe - he is greatly missed!

In June, we lost Markus Jebesen, founder and board member of FCC, through a car accident in South-Africa, where he was on his way to his beloved Zingela Nature Reserve. Markus was a shining and outstanding character, who believed in protecting the last wild places of the world, and who generously supported what we were trying to do in Romania. We still remember when this big great man came first through our door back in 2006, when nobody knew about us and when nobody believed we could do what we were dreaming of. He had a look at the forests and a look at the Transylvanian hills and he decided there and then to get involved – in both areas. For us this was mind-blowing, as back then Romania wasn't really a country best known for safe investments, but he simply believed in us and our ideas.

In 2015, he turned investment into philanthropy and donated all his land in Romania to FCC, including all the land which would later become the Cobor Biodiversity Farm. Thank you, Markus – your spirit will continue to live in the forests of the Dâmbovită Valley and the Cobor Farm!



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Introduction

There is no shortage of inventories, warnings and figures to illustrate that the earth is experiencing mass extinction and, fuelled by climate change, ecosystems are deteriorating at a rapid pace. Nature seems to be the victim of an economy grown out of control, as our theories of growth and development do not take into account the dependence of humans on nature. That a healthy natural environment in fact sustains our economies, livelihoods and well-being, has been demonstrated by the 2021 Dasgupta Report (actually 'The Economics of Biodiversity: The Dasgupta Review'), which calculates the economic damage caused by a global economy that does not pay attention to sustainability.

at over €10 billion. Putting nature at the core of decision-making across all sectors of society will be key to ensure our own prosperity – and this makes our work at FCC more important than ever.

The pandemic – most likely a zoonotic disease (a disease that was able to jump from animal species to humans) due to human encroachment into natural areas – will cost the global economy \$12.5 trillion as estimated by the International Monetary Fund.

According to this, for example, the total global cost of subsidies that damage nature is estimated to be up to \$6 trillion per year. The catastrophic floods in 2021, which hit also highly developed and safe countries such as Germany with a devastating force, left over 200 people dead and damages estimated

Masterplan

The second year of the pandemic was also a good time for us to reflect on what worked and what didn't work in our conservation efforts so far, to reanalyse our strategic approach and to possibly re-prioritize our activities for the coming five years.

Focusing almost exclusively on land acquisition and protection in the first years of the initiative, EU LIFE funding and a variety of other grants and donations allowed us to extend our activities to the restoration of degraded habitats, wildlife conservation and management, and also to start to communicate and reach out to the local communities. We believe we have now come a long way: almost 27,000 ha of forests and alpine grasslands are protected in perpetuity, we have replanted 900 ha of forests, wildlife conservation is secured across 93,000 ha and wildlife numbers are increasing, and we start seeing a positive change in how local communities in those areas where we are active look at our initiative. We have also grown as an organisation, not only in numbers, but also in experience and networking capacity. To elaborate the strategic masterplan for the next, probably most critical, phase and to identify those interventions that are efficient and relevant to overcome the most

challenging obstacles, we started off by asking the core question "Why are the Făgăraș Mountains not adequately protected?". We then identified root causes and immediate and secondary effects. Next we reversed the identified problems into solution statements, discussed those with a variety of strategic thinkers and eventually turned them into clear action plans, timelines and budget allocations for each department.

While the acquisition of land, its protection and the ecological restoration of degraded habitats (which have become routine activities within FCC) will continue to be at the core of our activities, compensation for conservation easements will play an important role in our land conservation strategy to protect forests under the ownership of landowner associations and town halls. We will also continue our attempts to obtain hunting concessions to ensure protection and prevention of wildlife hunting and to elaborate innovative tools to keep human-wildlife conflicts as low as possible. These important 'classical' conservation activities will ensure that natural resources are safeguarded, both for their intrinsic values as well as to provide wider economic benefits to society.

Poverty and a lack of 'green' long-term jobs and perspectives for the younger generation are among the root causes for low local support for protected areas and unsustainable decision-making, and therefore will

be addressed full force within our conservation enterprise programme: from developing local businesses in the domains of tourism, food production and craftsmanship, to the training of local entrepreneurs/start-ups and working in partnerships with banks on the set-up of loan facilities for small local businesses.

As local communities play a central role in the development of any protected area, the next years will see an increase in our efforts to build and strengthen relationships with people and communes, opening the doors for dialogue and collaboration in activities that directly impact the well-being and the daily lives of people in the villages. FCC is committed, in alliance with a variety of other organisations, to invest in education opportunities and social help programmes in the villages around the Făgăraș Mountains, as well as to develop the necessary infrastructure proving that the creation of a National Park is beneficial to everyone.



LIFE and Endangered Landscape Programme

Big visions need big funding. In 2019, we started the implementation of two large complementary conservation funding programmes, the Endangered Landscapes Programme (ELP), funded by Arcadia, a charitable fund of Lisbet Rausing and Peter Baldwin, and the LIFE programme, the funding instrument of the EC for Natura 2000 sites. We were awarded a \$5m grant from ELP and a €9.3m EU contribution to our overall budget of €27.6m for fulfilling our ambitious objectives and are now halfway through the implementation phase – with some great results to report.

We identified and mapped over 26,000 ha of potential old-growth forests consisting of natural composition in the Făgăraș Mountains, of which over 16,000 ha are potentially virgin forests.

The two years' duration of the pandemic made some activities a real challenge and caused delays, but we have been picking up speed again and most of our work to restore degraded habitats is now back on schedule.





Three herds of bison are now roaming the forests in the Făgăraş Mountains

and the first few beavers
have been relocated. We also
started to monitor the impact
of all these conservation
measures, which is an integral
part of both programmes.

Outreach and communication,

accompany the project activities throughout the whole project period and last year allowed for more interactions with local communities again – the Făgăraş Fest being one of the highlights

Expoziție de costume populare
 Brumetie la Cetatea Oratiei
 Purtăm ie
 cu mândrie
 Lumea magică a ieii
 Plino cu produse locale

Magia satului

19 iunie 2021 – Tabăra Oratie
 Dâmbovicioara, jud. Argeș

Sărbătorim ziua ieii!

Eveniment organizat de Tabăra Oratie în parteneriat cu Centrul de Informare
 și Recreare Turistică Dâmbovicioara, Asociația Comunității Dâmbovicioara și
 Fundația Carpathia România





Most of our activities are a part of the overall ELP and LIFE project, and in the following chapters we will go into more detail in all of them.



Land Purchase and Private Compensation Programme

Throughout 2021, we purchased an additional 1,407 ha of forest land and alpine grasslands for restoration and full protection in perpetuity. Out of this, 72 ha were clear-cuts and 283 ha alpine grasslands, which will be restored in the next few years; the vast majority, 1,052 ha, are natural forests of which 374 ha of these are old-growth forests. With this, by the end of 2021, we reached a total of slightly over 27,000 ha of land under protection – a huge area where nature can thrive and recover.

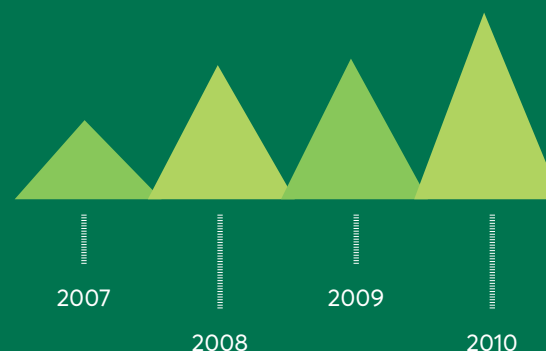
With the generous commitment from the Wyss Foundation for the upcoming years, we will continue to increase the amount of land which we can provide for the future core area of a Făgăraş National Park.

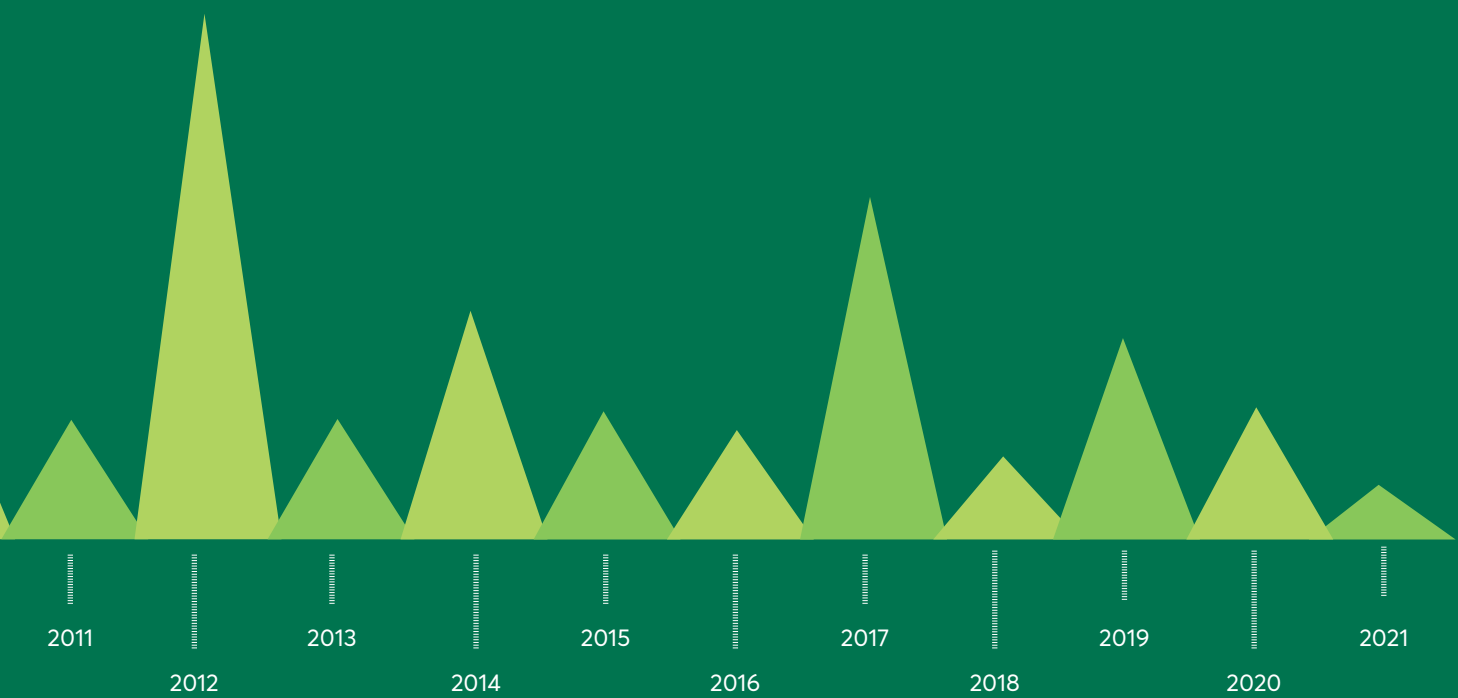
However, we are aware that we will not be able to purchase all the land for a National Park: Some private landowners might not want to sell, rightfully so, while others like communes or landowners' associations cannot sell even if they would wish to. For this reason, we need to create economic incentives for landowners to protect forests for their own benefit and therefore have developed plans for a private compensation programme, especially for natural and old growth forests.

Throughout 2021, we have agreed with two communes to develop partnerships within the framework of this programme and expect to sign these in the first months of 2022.

Total area under permanent protection, saved from cutting:

27,000 ha






**Purchased forests
for permanent protection
2007-2021**
Chart 1

CARPATHIA

Forest Carbon Project

'Proforestation' – allowing forests to grow to their full ecological potential and as such storing carbon – is one of the most immediate and cost-effective nature-based solutions to fighting climate change and the loss of biodiversity. Carbon offsets, a reduction in greenhouse gas (GHG) emissions to compensate for emissions made elsewhere, are traded on carbon markets and as such generate finance for the protection of nature, specifically forests. Globally, carbon markets are growing fast, doubling annually throughout the past few years, which makes the sale of carbon credits a viable alternative income source for providing forest owners with economic incentives to protect valuable forest habitat.

The trading unit, one carbon credit, represents one metric ton of carbon that remains stored because the forests are not being harvested. To obtain such tradeable carbon credits, a project needs to be registered with a programme, a so-called 'standard', that verifies that the emission reductions generated by the projects are actually occurring. Standards have developed a set of rules, requirements, and administrative systems for accounting, quantifying, monitoring, reporting, verifying, certifying, and registering carbon projects. As such, these provide sellers of credits with quality assurance certification and offset buyers with greater transparency and confidence in the credibility and integrity of certified projects.

In 2021, we did a feasibility study, which revealed that the full protection of CARPATHIA's forests are responsible for a total of over 50,000 t CO₂ per year that are stored additionally, compared to a scenario in which the legally allowed annual harvest rate would be logged.

This additional amount of carbon can be accredited and traded to provide conservation funding. We are now in the process of implementing the CARPATHIA Carbon Project and expect to have it completed by the end of 2022.

Undoubtedly, carbon credits have the huge potential to provide income also to private landowners that want to keep their forests for economic use, as well as providing local communities and landowners' associations with economic incentives to protect valuable forest habitat. We are already discussing partnerships and bridging mechanisms for the first years together with interested communes.



Forest watch

Each CARPATHIA district was surveyed twice during 2021 to evaluate losses. The level of wood theft was low, accumulating to a total of 60 m³, out of which 50 m³ were discovered early and led to penal complaints and fines in several cases.

The surface of forests in the Făgăraș, Piatra Craiului and Leaota Mountains that the CARPATHIA Forest District Association (our private Forest Service) is watching over has grown by 1,200 hectares since 2020 and now reached a total of 24,040 hectares. It is a huge area, split into 15 districts, that requires the presence of skilled and dedicated rangers. Accordingly, we have enlarged our team of forest guards to 15 trained people who are coordinated by three senior rangers (who also have multiple other activities). The surface areas each forest guard covers vary depending on the degree of risk of theft, with the most exposed districts consisting of as little as 600 hectares, while the largest ones exceed 3000 hectares.

Compared to previous years, the level of illegal logging is clearly declining, from a maximum of about 250-300 m³ three to four years ago to 88 m³ in 2020 and 60 m³ in 2021 even though the area under our watch has increased.





Involvement of eMAG and community relationships in Leaota

The creation of Leaota National Park is the smaller sister project to the Făgăraş National Park in the framework of CARPATHIA. Leaota Mountain is a rather lesser-known mountain range to the southeast of the Făgăraş, with lower altitudes (up to 2,133 m), but an amazing biodiversity: several studies executed by expert teams show that Leaota is actually by no means inferior from a conservation point of view to neighbouring Piatra Craiului National Park with its abundance of autochthonous (endemic) species. Since 2012, we have purchased, through our partner organisations Wildland and Romfor, 8,600 ha of forests and alpine grasslands for full protection and with the goal of creating Leaota National Park.

Dante International, known in Romania through their brand eMAG, is eastern Europe's largest online retailer and has adopted a sustainability strategy to go net-zero with their whole chain of products throughout the next 10 years. Already to date, eMAG has achieved a net-zero situation with their operations in Romania and has carried out major investments into carbon reduction, use of electric vehicles for urban delivery, and the installation of

40,000 sqm of photovoltaic panels in their new logistics hub close to Bucharest. After intense discussions, eMAG and FCC agreed to become partners for sustainability and conservation, and eMAG began to involve itself in several directions in which CARPATHIA is active. For more details see Chapter 5, Corporate partnerships. Dante's activities also include the purchase of land in Leaota for full protection to support their net-zero goal. Adding Dante International to our other partners Wildland and Romfor will continue to protect forests around the Leaota Mountains and will help to increase the positive input we can have on the local communities.

In general, our relationship with the communities around Leaota have further strengthened and by the end of the year we started to discuss an official partnership between FCC and the town halls of these communities. At the end of the school summer holidays we were contacted by Moroeni town hall, since the local school has now too many pupils for the capacity they have. Their request was for us to support them with the purchase of two large containers with heating and sanitary installations, which could be combined and which

would serve as a classroom for one of the classes. With co-funding of Wildland, we managed to purchase two such containers and have thus created an additional opportunity for 25 school children in Moroeni to attend regular school. After the co-funding of the local medical practice this is now the second time that we were able to help the community in establishing some necessary basic infrastructure.

We also offered the communes around the Leaota Mountains the possibility to send school classes to the new Richita Education Centre and will continue to strengthen our relations throughout 2022.







Ecological restoration

CARPATHIA's ecological restoration programme

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CARPATHIA's ecological restoration programme aims to return natural habitats, forests and alpine meadows affected by human activities to favourable conservation status. Without active support these may return only slowly to their natural state.

Ecological restoration facilitates or mimics natural processes wherever possible and takes into account likely future climate change scenarios. Where forests have been subject to unsustainable levels of logging, their restoration is essential. High-priority areas include around alpine zones, where alder galleries have been affected by human activities, and where natural forests were replaced with spruce monocultures, in the interests of profit.

Our activities range from non-intervention and the exclusion of grazing to intensive replanting with native species. In some pastures near the high alpine zone, natural regeneration of characteristic shrubs, rare spruces and Swiss pines did occur along with the abandonment of grazing. In such places, once grazing is excluded the return of protected bushes is accelerated.

We complement this process by planting juniper and rhododendron.





Results 2021

We almost reached our initial target of replanting 100 ha of clear-cuts in 2021 despite restrictions on certain activities during the pandemic. Following a successful autumn planting period, we achieved 90% of the initial goal (90.3 hectares planted).

These great results were possible during this difficult period thanks to the special efforts of the rangers and seasonal workers, who faced very difficult terrain and remote restoration at over 1,500 meters altitude.

Tree nurseries and greenhouses

In order to increase seedling production to meet our ambitious replanting targets in the LIFE project, we have expanded our nurseries and greenhouses. The newly hired specialist coordinated activities such as the building of a new greenhouse, improved the cultivation system and expanded the cultivation area, added two irrigation systems, enriched the nurseries with fertile organic soil, established two new forest nurseries and supervised the planting of juniper, spruce, beech, and fir. Out of a total of 404,868 seedlings existing in the nursery, 84,500 seedlings were planted in the spring and autumn of 2021. The two existing greenhouses produced 112,000 spruce seedlings (suitable for transplanting in the spring of 2022) in comparison with 90,000 saplings in 2020, 10,000 juniper seedlings and 50,000 dwarf pine seedlings (suitable for transplanting in the spring of 2022).

Restoration of clear-cuts

Restoration of illegally logged areas took place in two stages, in the spring and autumn of 2021. Initially we made an inventory of natural regeneration over the remaining 50 ha area affected by illegal logging, purchased under the LIFE project, by setting up sample plots. We determined the number and proportion of young tree species emerging from natural regeneration and those needed to diversify the existing composition of forest species by cultivation of additional necessary species in the plantations, as well as those needed for protection fences in some areas that were threatened by grazing. Our teams have planted over 367,6200 fir, spruce, beech and sycamore seedlings across 90.3 ha. We worked with the local communities and we hired 220 seasonal workers from the nearby communes. In autumn, 20% of the 2021 planted areas were cleared, (together with previous years' plantations) of tall grasses

around the seedlings to ensure good development and better survival over the winter (86 ha). In addition to reforesting clear-cut areas, we also replanted alder along 6.6 km of the Valea Doamnei area to restore the natural vegetation along the watercourse.

Restoration of logging tracks

As a result of the autumn 2020 preliminary inventory on former illegal logging tracks that had been worst affected by erosion, using high-resolution aerial imagery combined with ground-truthing we identified 32 km of tracks affected by erosion, with ditches on average 0.7 to 2 m in depth. Some areas, like Cumpăna Vidraru had more severe erosion, with ditches 5-7 m deep and 6-7 m wide. Our mini excavators have covered and levelled 4.78 km of erosion tracks and the works will continue in 2022. The worst affected area, Cumpăna Vidraru, was completely restored in the summer 2021









Spruce monocultures conversion

The conversion of spruce monocultures to more natural mixed forests is an important component of our restoration activities. In 2021, we finished the revaluation of the possible spruce monocultures and we began restoration activities in the previously identified and acquired spruce monoculture parcels in the Făgăraș Mountains. Starting from the premise that all pure spruce stands below 1,400 metres are likely to be artificial monocultures, we identified stands below this altitude comprising greater than 50% spruce.

Our interventions, to catalyse the regeneration of natural mixed forest, took place within 126.5 hectares of spruce monoculture in 2021, aged between 15 and 55 years.



Alpine pasture restoration

Following the acquisition of new pastures, we made a plan for the restoration of alpine pastures and identified 219 hectares of previously existing bush habitats in a state of depreciation from poor to very poor, where we will intervene. The species we intend to replant in the degraded alpine areas are not found on the market and it will take a few more years for dwarf pine and juniper seedlings to be produced in our nurseries. In order to restore the 219 hectares mentioned, the effective interventions will cover 76 hectares (fencing, planting spruce, juniper, stone pines and dwarf pines). Due to the growth rate of the juniper and dwarf pine saplings in the greenhouse, it is likely first planting will take place in autumn 2023.



Monitoring the impact of habitat restoration

Landscape restoration, especially when also targeting forest habitats, is a long-term process and most of its effects and benefits are clearly visible only after decades. Therefore, we have chosen monitoring indicators that are capable of tracking these changes over an extended period of time, while at the same time detecting responses to our specific measures: understory vegetation, specialist bird species and terrestrial arthropods. Restoration of degraded patches of forest habitats should lead to the reestablishment of the characteristic understory vegetation followed by a recovery of the associated fauna (invertebrates and vertebrates) and an increased connectivity of different forest types/habitats.

In 2021, we continued the baseline survey of these indicators on permanent transects or in sample plots, mainly in the newly purchased properties: degraded habitats to be restored (clear-cut forests, spruce monocultures, degraded alluvial forests, subalpine dwarf shrubs), in well-preserved forests and on degraded habitats that will remain untouched. The aim of the field survey we conducted up till now, was to identify the characteristic vegetation (for forest habitats only), terrestrial arthropods and bird communities' composition and structure and the indicator species for each of the analysed habitats.

In 2021 we (FCC specialists alongside external professional researchers) conducted the baseline survey in 70 new additional sample plots for vegetation and 43 sample plots for terrestrial arthropods. Based on the relevancy, we will further use some of these sampling plots/points for long term-monitoring of the habitat restoration effects in the future.

Monitoring the impact of European bison on vegetation structure

In 2021, we conducted the first monitoring activity on the impact of reintroduced bison on vegetation at the Bunea and Lerești reintroduction sites. We monitored 20 plots in Bunea and 16 in the Lerești acclimatisation enclosures.

We previously conducted the vegetation baseline survey of these sample plots in 2019 (Bunea) and 2020 (Lerești). In the previous years, in each location, we built fenced areas in each of the identified habitat types (1 ha area) to create bison-free zones as control sites, as enclosures have widely been used as a control to monitor ungulate effects on vegetation.

The first understory vegetation monitoring we conducted in 2021 (following the baseline surveys conducted in 2019 and 2020) showed already some significant changes in vegetation structure. We recorded

the most relevant changes in the clear-cut areas and riparian alder forests/galleries.

In the clear-cut areas, the overall cover of bunch grass (*Calamagrostis arundinacea*) significantly decreased, following bison grazing. *Calamagrostis arundinacea* is one of the early successional species following forest clear-cutting, forming dense tufts (60 to 100% cover). The grazing bison created small open areas in the dense vegetation which promotes the shrubs and tree seedling regeneration. We hope to obtain more data, during the second monitoring, on the benefits of grazing bison for tree species regeneration.

In the riparian habitats, the cover of shrubs (*Alnus incana*, *Rubus idaeus*) decreased following bison grazing. The herbaceous layer is affected by grazing and trampling. The bison seemed to have a less favourable impact on this habitat type up till now. Maybe this situation is because the riparian habitats are located in the most accessible areas of the acclimatization enclosures.

In conclusion, there are already some visible changes in the vegetation, which will be even more visible/apparent after the second monitoring.

The vegetation survey which we conducted early this year outside the acclimatization enclosure, showed only some evidence of understory vegetation browsing and debarked trees. At present, this occurrence is not relevant, because of the small number of individuals using a very large territory.

Removing the invasive alien plant species along river valleys

In 2021, we began to enforce the Action Plan for monitoring, control and eradication of invasive alien plant species (IAS). We designed this plan, back in 2020, based on the results of a detailed survey of invasive alien plant species (IAS), along 160 km of valleys located along the main tributaries of the Dâmbovița and Argeș rivers, within the southern sector of the Făgăraș Mountains.

From May to September, we removed the IAS along 37 km of the main tributaries of the Dâmbovița and Argeș rivers. We removed the IAS manually, or with the help of mechanical tools such as hoes, either by uprooting or by cutting them down. This activity involved a high number of people (FCC employees and volunteers). This year we focused on the upper part of the valleys, invaded by annual or biannual alien species: *Erigeron annuus*, *Conyza canadensis*, *Impatiens parviflora* and *Xanthium orientale ssp. italicum*.

In order to document our control of invasive plants in riparian areas, we used two combined methods: Fixed-point photography (FPP), and in addition, a vegetation survey, focused on invasive alien species cover, at each FPP point. We selected, in each valley, up to 20 monitoring points in restoration areas and five points in IAS-free reference areas. The yearly field monitoring using these combined methods will result in a report on significant changes such as landscape modification, recorded species and distribution of IAS, and the amount of plants destroyed.

Enhance the FCC-owned pastures' biodiversity and economic value

Some of the FCC-owned pastures, located in the high-mountain and subalpine levels will be further used for grazing, for benefit of the local communities. The study we conducted back in 2020 showed a very poor pasture quality, in correlation with the invasion of harmful species, such as matgrass (*Nardus stricta*) and tufted hairgrass (*Deschampsia caespitosa*), following the past overgrazing and soil erosion.

In 2021 we enforced some measures to enhance the pastures' biodiversity and economic value.

The first measure to enhance grasslands' pastoral value, enforced in the field, was to diminish the stocking rate on overgrazed pastures – Dracsin and Găinațu Mare.

From May to July, we mowed a few hectares in the Găinațu Mare and Dracsin pastures. Thus, we reduced the cover of invasive tufted hairgrass (*Deschampsia caespitosa*) and matgrass (*Nardus stricta*) allowing the native grass to grow. This activity involved the FCC's rangers and the coordinating biologist.

The pastures' improvement will lead to a potential increase in livestock of more than double according to the natural biomass production of the well-preserved meadows. The management of pastoral resources towards enhancing the quality and quantity of forage supply from pastures will have a high social value and will lower the grazing pressure on forests, as well.







Wildlife & Fish

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Overall activities and results of the wildlife management concessions

- The current activities of fauna management over the 65,000 hectares of CARPATHIA wildlife management concessions are divided between the traditional legal management and the specific CARPATHIA management.
- Traditional activities include guarding the hunting concession areas, meeting the minimum legal conditions in wildlife management contracts such as implementing traditional methods for monitoring wildlife species, ensuring minimum amounts of food for fauna during the winter, official reports, and so forth.
- CARPATHIA specific activities are those to which wildlife rangers contribute or perform directly: interventions in human-wildlife conflicts, collection of samples for genetic analysis, participation in activities related to the reintroduction of bison, and so on.
- Actions to remove wild boar specimens from wildlife populations that are in peoples' gardens or relocate bears that attack households, actions to chase away bears or protect farms are carried out directly by rangers dealing with game management and are presented in the chapter on Interventions to minimise conflicts between humans and wild fauna.
- During 2021, we did not have specific problems related to the wildlife protection activities, except for one poaching event within the 20 Stoenești hunting concession. Our rangers discovered two young hunted stags immediately after the event and they were able to capture the registration number of the poachers' car. The case was analysed by police, possible suspects were

identified but the official enquiry is still ongoing. Furthermore, there were some alarms raised and ranger patrols took place with support of the Romanian Gendarmerie, but no concrete cases of poaching were confirmed as a result of the actions. Due to our patrolling, we can clearly see wildlife numbers going up, especially when it comes to red deer. The total number of kilometres of patrolling was recorded in the dedicated app (81,812 kilometres driving and walking with nine CARPATHIA rangers and 16 Gendarmerie personnel), with 10 suspect cars verified during the year.

- On two of the wildlife management concessions (18 Râul Târgului and 20 Stoenеşti), the management carried out by CARPATHIA rangers has also had an educational nature for the hunting members officially assigned to these areas. In the last two years, the traditional hunting activities have gone from trophy hunting to hunting mainly wild boar that cause damage to households. These hunters begin to understand that the concept of nature conservation does not completely exclude them from the 'equation'.





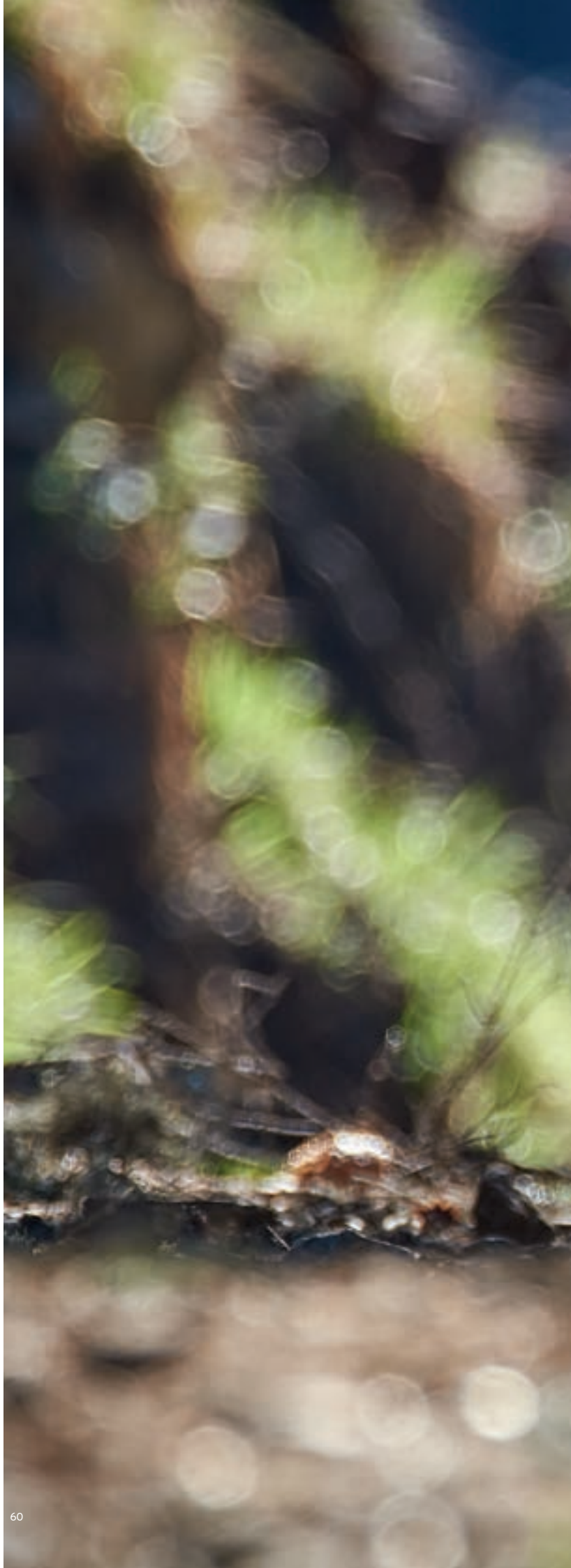


Two new hunting concessions

Our project has leased wildlife management concessions 21 Izvoarele Dâmboviței since 2011 and 22 Rucăr since 2017. In spring 2019, we signed a collaboration agreement with the hunters' association GTS Păpușa Leaota, who are leaseholders of wildlife management concessions 18 Râul Târgului (Lerești Valley) and 20 Stoenești (western Leaota) and took over the responsibility for the management of these two areas.

This enlargement has now resulted in a total of four wildlife management concessions under leasehold of the CARPATHIA project and we can implement a ban on sport and trophy hunting on over 65,000 ha, and, instead, focus on resolution of conflicts between wildlife and humans in the rural villages. Together with neighbouring Piatra Craiului National Park, we have now created across 80,000 ha the largest area in Romania free of any sport and trophy hunting.

Given the measures we will take towards reducing human-livestock conflicts and involving local people in wildlife management, this area could develop into a model area for a new wildlife management system for all of Romania.







Bison reintroduction



© Calin Șerban

We create a world-class wilderness reserve where we can reintroduce native species, re-establish their interactions, restore ecosystem functionality and build valuable ecotourism based on wildlife viewing. We work with species deemed to have large impacts at the ecosystem level, such as bison.

The Făgăraș Mountains became home for the bison in 2020, when we reintroduced the first bison into the area. According to our feasibility study, 100 bison are needed to ensure the success of reintroducing such a vulnerable species, so they can survive and multiply. Thus, in 2021 we continued the reintroduction process and we brought eight bison and released them to complete the

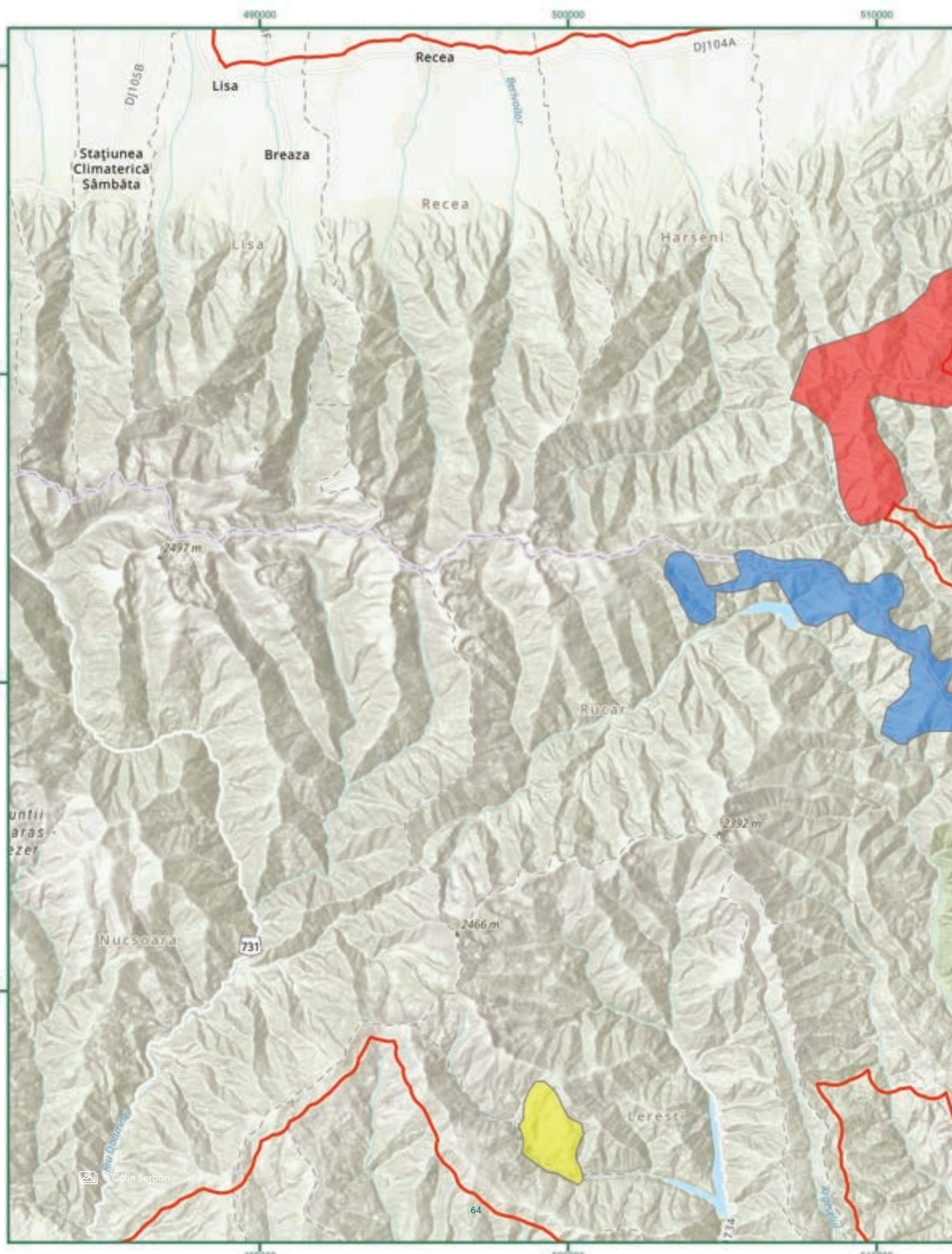
groups in the first two areas already authorized, Bunea and Lerești. We brought bison from different origins, from Leipzig, Germany and from Poieni, Romania. In 2021 two calves were born in the Lerești herd, in the wild, and one calf survived, healthy and skilled enough to keep up with the herd.

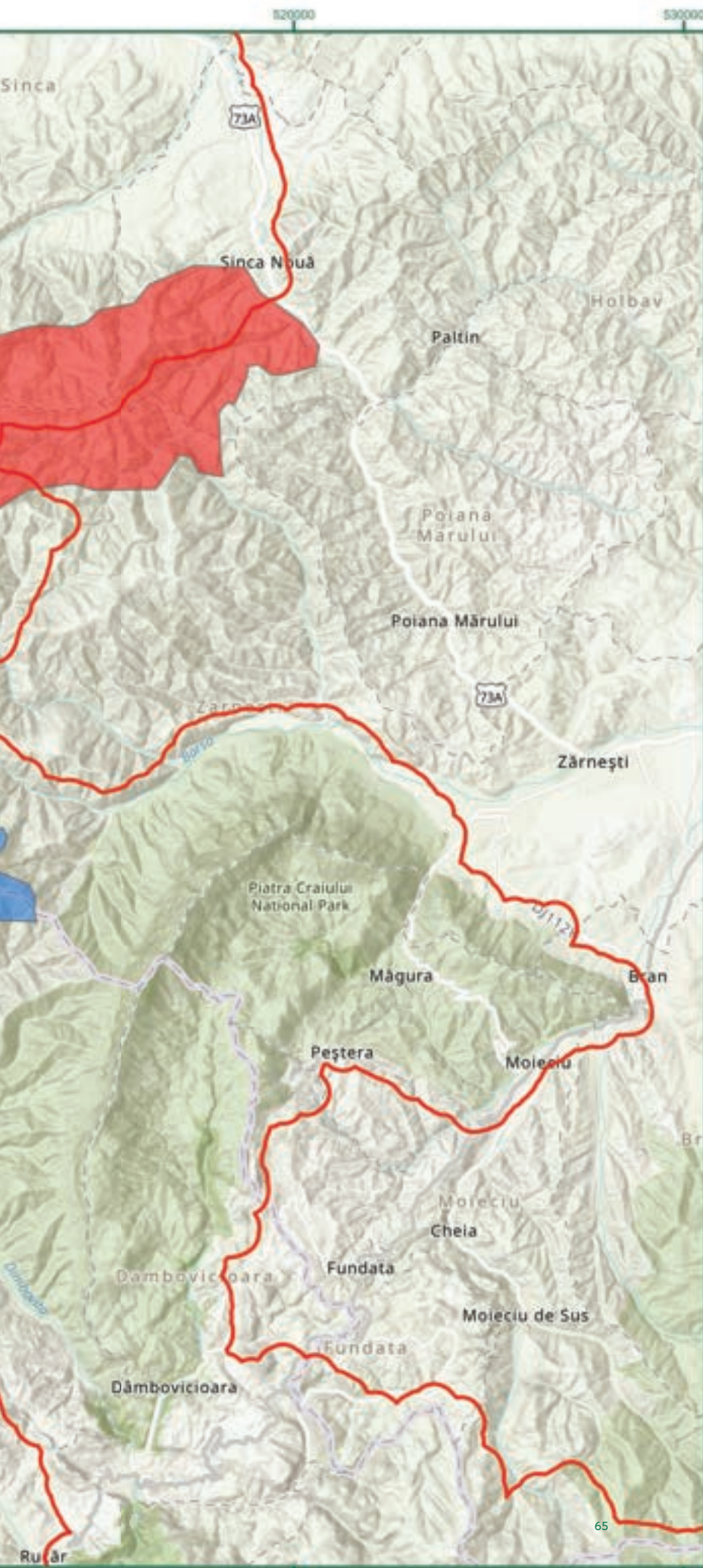
Monitoring the bison herds was a constant activity for our team. For this we used the monitoring equipment (GPS collars, VHF antenna) that regularly provided us with information about the location of the bison, but we also performed direct observations.

Due to some uncertainties concerning the limits of the hunting area, we had to postpone the construction of the third enclosure in Nucșoara. In 2022, we plan to finish the enclosure in Nucșoara, bring the first group of bison here and complete the groups in the first two areas, as well as continuing the permanent monitoring of the bison already released.

CREATION OF A WILDERNESS RESERVE IN THE SOUTHERN CARPATHIANS

Wildlife & Fish





EUROPEAN BISON MOVEMENTS OF FREE RANGING HERDS IN PROJECT AREA - 2021

Legend

Project area

Groups

B1 (5188 Ha)

B2 (1674 Ha)

L1 (447 Ha)

1:150,000



0 1.75 3.5 7 km

Pulkovo 1942 Adj 58 Stereo 70

Map author: Adrian Pătrușescu, Foundation Conservation Carpathia
Map date: 10/2022
Document Name: Bison Presence

Data sources: Foundation Conservation Carpathia (LIFE18 NAT/RO/001082)
Service Layer Credits: World Topographic Map: Esri Romania, Esri, HERE, Garmin, FAO, NOAA, USGS
World Topographic Map: Esri Romania, Esri, HERE, Garmin, Foursquare, METI/NASA, USGS
World Hillshade: Esri, NASA, NOAA, USGS
World Hillshade: Esri, USGS

Beaver reintroduction

The European beaver (*Castor fiber*), a strictly protected species, disappeared at the beginning of the 19th century, not only in Romania, but also in the rest of Europe, mainly because of hunting for their fur, meat and 'castoreum', a secretion used in perfumes, food and medicine. The beaver is known as a 'keystone species' because of its significant positive influence on its environment through its behaviour.

By gnawing on stems, they 'coppice' trees like willow, hazel, poplar. The regrowth provides homes for a variety of insects and birds. The wetlands in which beavers live are valuable for many other species. They provide homes for animals like frogs and birds. Water beetles and dragonflies in turn support breeding fish and insect-eating birds. Woodpeckers, bats and a host of beetles use the standing dead wood. Beavers can also offer a nature-based solution to improving the health and function of river catchments. Beaver-created wetlands can act as sponges, resulting in more constant flows and

retaining water during droughts. A series of leaky beaver dams can reduce the speed of flow and help reduce the chance of flash flooding. Beaver dams can capture organic sediments and reduce the effects of agricultural runoff and harmful chemicals such as pesticides, helping to improve water quality downstream.

We have started founding populations of beavers into the rivers to the south of the Făgăraș Mountains. We assure their reintroduction through well-planned and authorized releases.

In 2021, we obtained all the necessary permits and authorizations to capture 70 beavers from the affluents of the Olt river, Hoghiz – Avrig sector, and their relocation in the upper part of the Dâmbovița, Râul Târgului and Argeșel rivers,

the identified areas with favourable habitats. In October and November, we started trapping the beavers and we managed to relocate the first two beavers into the project area.

The activities will continue in 2022 with the capture and relocation of another 35 beavers. At the same time, we will start reintroducing 20 beavers from the existing population in the Elbe River.

We are reintroducing native species to restore ecosystems and build ecotourism. We think that our work is an instructive example of how active restoration of crucial species, when done responsibly, can benefit both ecosystems and local people.





Golden eagle monitoring programme

Our main purpose in monitoring the golden eagle (*Aquila chrysaetos*) in the Făgăraş Mountains is to collect data from the field about breeding pairs, in order to develop a conservation plan for this species.

The work started in 2020 by setting up the monitoring scheme comprising about 100 observation points located 3-5 km apart. In 2021 we extended the monitoring area, bringing the number of observation points to 130 (98 in higher areas and 32 in lower areas). We managed to cover 118 observation points, the remaining 12 points being inaccessible, due to restricted access or lack of time. Throughout the assessment, 56 observations of the target species were made, both in and away from the observation points. The number of pairs observed (when both birds were seen together) was 8-9. In the western part of the monitoring area a pair with fledged young eagles was observed. From the assessment it can be stated that the majority of pairs use the high, subalpine and alpine area of the massif. No eagles were observed in the low area of the monitored area and neither were they observed in the Iezer-Păpuşa massif. Based on the data collected so far, we estimate the breeding population in the Făgăraş Mountains at 11-13 pairs.

We also carried out an inventory of the capercaillie population (*Tetrao urogallus*) and marmot (*Marmota marmota*), the main prey species of golden eagles.



We conducted the inventory of the capercaillie population across 500 x 500 m squares, over more than half of the species' favourable habitat, actively searching for birds and traces of their presence: feathers, droppings, footprints etc. Field data collection started in autumn 2021, when we covered nine inventory squares. Within these squares we recorded 22 observations of feathers, 22 observations of droppings, and two specimens of capercaillie.

For the marmot population inventory we use 2 x 2 km squares. Transects are made within the burrows to identify the presence of the species, and once the colonies are located, the active burrows are inventoried, individuals are counted, etc. In 2021, we extended the monitoring area by 13 more monitoring sites, bringing the total number to 87. By the end of the monitoring period in 2021, we covered 52 monitoring sites. Of these, we managed to partially cover 17 monitoring sites. We need at least one more visit in 2022 for satisfactory

coverage. At the end of the year, we recorded 174 observations of the presence of the species in the study area.



Fish in the Făgăraș Mountains rivers

Aqua Crisius Association, in partnership with the CARPATHIA Forest District, manages a number of river courses in the Făgăraș Mountains.

In 2021 Aqua Crisius Association successfully reintroduced another 1,500 specimens of grayling (*Thymallus thymallus*), each 11-14 cm long, in the southeast of the Făgăraș Mountains. Grayling is a popular food fish in Romania, but its fishing has been prohibited for over 10 years, due to the major risk of its extinction. They have also repopulated the streams with native trout: 3,500 juvenile fish and 23,000 embryonated eggs were released. The eggs of brown trout (*Salmo trutta*) were placed in four incubation systems. The alevin hatch directly into the river into which they will continue their lifecycle, and the fish, not being accustomed to being fed with granules, have an increased ability to adapt.

Their efforts to restore the aquatic ecosystem is highly appreciated.

Wildlife management

Introduction

The number of human-wildlife conflict situations increased in the project area in 2021, compared to 2020. This was mainly due to a lack of forest fructification, but also due to the improper waste management in the communities and the lack of protection measures for livestock. This increase would have been even greater if preventative measures and the consistent intervention of FCC rangers had not taken place. We continued the programme in providing compensatory measures from the CARPATHIA cattle and sheep farm for the damage caused by large carnivores among domestic livestock.

Meanwhile, in August 2021, the Romanian Government issued legislation allowing, in emergency cases, the chasing, capture, relocation or elimination of the problem bears inside localities using intervention teams established under the local mayor's lead. The participation of rangers and local vets in the intervention teams is based on contracts between the local authorities' hunting concession holders and the local vets. The Gendarmerie representatives are also members of these teams. Naturally, CARPATHIA fitted into this new concept because we had already organised our own intervention teams since 2019.

Interventions

During 2021, the CARPATHIA rapid intervention teams, supported by the Romanian Gendarmerie within the LIFE project, responded to 207 incidents in comparison with 147 incidents in 2020. This year, our teams have installed 22 electric fences around the conflict areas to protect small farmers and to chase away wild animals when they get too close to the village. We undertook actions to prevent damages, actions

to assess and verify damages caused by wildlife, installation of electric fences, driving away the bears and wild boar that cause damage to farms, compensation payments for farmers, night interventions in areas where bears caused attacks, eliminating wild boars that caused damage to farmers' land. We also had a bear eliminated in Rucăr inside one farmer's garden close to the barn where the bear had just killed sheep and goats. There was no other option for this bear because of several attacks carried out by him in Rucăr. After genotype verifications, it was proven that the bear was caught, moved and released in 2019 by the CARPATHIA intervention team, but he returned to the area.

We managed specific events and actions: 16 concern damage to agricultural crops (from pastures to potato crops), 46 attacks on domestic animals, six damages to orchards. A total of 140 specific prevention actions were carried out. Among the compensatory measures applied by the CARPATHIA intervention teams, we mention the replacement of killed livestock suffered by 10 farmers with five cows and 24 sheep from the CARPATHIA farm created for this purpose. The prevention measures also include the procedure of donating Romanian Carpathian shepherd dogs to farmers who raise their animals in the Făgăraş Mountains, to protect against carnivorous attacks but also to encourage the growth of this local breed. In 2021, we donated a total of 15 puppies to eight farmers. August and September were the hardest months for CARPATHIA intervention teams.

Wildlife management board

In 2020, we initiated the creation of a transparent and participatory wildlife management board, in which representatives of the communes

decide with us within the limits of the actual regulations how to approach human-wildlife conflicts. In this regard, we have created a Voluntary Regional Committee for the Prevention and Management of Wildlife Conflicts with the role of identifying existing problems, their causes, proposing and prioritizing solutions in a transparent manner for preventing and mitigating human-large carnivore conflicts. The members of the Committee are designated representatives of local authorities, farmers, forest rangers and environmental authorities, representatives of the Argeş County Gendarmerie Inspectorate, tourism representatives, hunting ground managers, FCC and hunters. Thus, together, considering the complex nature of specific legal provisions regarding hunting, environmental protection, legislation of habitats and protected animal species of wildlife, based on consultation and ensuring full transparency, we aim to reduce human-wildlife conflicts for the benefit of humans, as well as for the benefit of large protected carnivore species. The Regional Committee for the Prevention and Management of Large Carnivorous Conflicts ensures representation for the communes of Rucăr, Valea Mare Pravăț, Lerești, Stoenești and Dragoslavele. It was formed in October 2020 when the following topics were discussed: the rules for the functioning of the committee, the goals of the committee were decided, a review of the main human-carnivore problems as well as their possible causes was presented, the activities carried out by CARPATHIA in this field were explained, further steps for Committee work, next themes and meetings were proposed. We saw how different stakeholders were keen to become part of the decision process in this sensitive field of human-large carnivore conflicts for the first time.

During 2021, the online discussions, information, exchange of ideas and even controversial opinions contributed to a better understanding and involvement of the local stakeholders in management of the conflicts between humans and wild animals.









Wildlife monitoring

We continued to develop our wildlife monitoring scheme in the Southern Carpathians for two reasons: to get objective and solid data for the decision making we do in the game management units we lease, and to influence wildlife management policies at the national level to modernize thinking from a farming philosophy to sustainable decision making based on scientific evidence.

In 2021, our monitoring and research programme had brown bears in its focus. We finished the first [population estimate of brown bears based on genetics in the Romanian Carpathians](#). We obtained important quantitative results for management purposes such as bear population density. We presented a summary of our bear study to the wider public in the form of a story map, a user-

friendly web interface showing [the story of two bears that we tracked with genetics, including one male that is causing trouble in the villages](#).

Besides brown bears, we got the first results back from the genetic lab samples on red deer, a species we studied in the summers of 2019 and 2020. With camera trapping we focused mostly on covering gaps within the monitoring map and identified new lynx locations for the study ahead.

Towards the end of the year, we started the preparations for phase II of our long-term monitoring programme. Phase II refers to a return to the same sampling area after five-six years since the first survey. During phase II we will do the same studies again for bear, wolf, lynx and red deer, with the goal to assess population trends after applying conservation measures such as anti-poaching patrols, intervention and prevention measures for human-wildlife conflicts, and securing forest habitat from intensive logging. We placed our small laboratory in a new location, we purchased the sampling tubes and labelled the sampling kits. We inventorised the camera traps and purchased the consumables for lynx monitoring.



Brown bears

After two years of sampling for DNA material, and two more years doing genetic analyses in the lab, processing the data, modelling, and report writing, in 2021 we finished the first genetic population estimate of brown bear in the Romanian Carpathians. We used one of the most precise methodologies available for this purpose: next generation sequencing that allows us to identify a population down to individual level by reconstructing genetic 'fingerprints' from bear scats and hairs. We identified a total of 283 bears, 137 females and 146 males and estimated the population density at 17-18 bears per 100 square km (10,000 ha). We provide know-how on using genetic monitoring for this species within the specific conditions of the Romanian Carpathians. We provide insights on defining the approximate sampling size for future sampling; we recommend increasing the effective sampling area as much as possible; we recommend an even sampling across the entire study area, rather than focusing on accessible diversionary feeding points; and we suggested a higher proportion of scat samples instead of collecting hairs from the rub trees. For details you can read our study in [English](#) or the summary in [Romanian](#). This insight is particularly important in the context of the Government planning to carry out a nation-wide bear genetic census in 2022-2023.

Our bear study caught the media's attention: in October 2021 we organized a media trip together with 10 journalists. We visited the monitoring area, a conflict hotspot in an agricultural mosaic just above Rucăr, Argeş County, talked about what genetic monitoring means, and about conflict mitigation. Quite often, the debate was channelled around the argument on how big the bear population is and whether the habitat can support such a population. We believe our study is not about how big the population is, or how big the difference is

between our understanding and that of the official data, but about having a robust dataset to guide us in the process of mitigating the conflicts with local farmers. Our study answered questions such as how many bears live in the area, how many males and females we have, how many of them are getting used to attacking in the villages. Our study is valuable because it already assists us in the prevention and intervention measures we carry out at the scale of the game management units.

How is such a study assisting us in management decisions at the game management unit level?

We know all the bears in our population, and we now do forensics on the bear attacks at the local farms and in the long term. In this way we learn about how many of them make recurrent attacks. This monitoring help us to calibrate the efforts of the rapid intervention teams and determine what measures to take in our conflict hotspots: night patrols and electric fences to move the bears away or lethal control of the very problematic bears?

Besides the forensics on the bear attacks, in 2021, for the first time, we sampled bears at the feeding points within the known population. Game managers feed wildlife, including bears, with maize and fruits, for various reasons: diversionary – to keep them away from villages; or commercial – to gain income for game species management or for conservation purposes. We selected 11 feeding points in the monitoring area and with various feeding intensities, and continuously sampled all bears eating there from March to December. We collected 470 DNA samples aiming to identify the bears that are used to supplementary food, to see for how long they rely on it, and see if they also cause trouble in the villages or not.

What is the first species we'll study in 2022 during our phase II monitoring mentioned on the previous page? Brown bears! We have a keen aim to collect 900 samples over the 1200 sq km sampling area. We hope this comeback after six years since the baseline survey will clarify the uncertainties around brown bear population growth, which is always on the front page in the media, as well as on the agenda of the policy makers, although not always with solid data on the table.



Wolves & lynx

In 2021, we got the DNA sequencing results for our last wolf sampling session (winter 2019-2020). With these results we merged a dataset of continuous detections of our studied wolves over three consecutive winters. We developed our modelling and writing capacities on this species by bringing on board a MSc student from Cluj-Napoca, Romania.

This allowed us a rapid statistical exploration of our wolf data and we started to write our first wolf study in late 2021. We show here a summary of the main results we got based on 505 samples from scat and urine on snow, and hairs. Across the three winters we identified a total of 47 wolves, 27 males and 20 females. We identified a wolf-dog first generation hybrid at the border of our sampling area, and we confirmed this anomaly after camera trapping a male wolf hunting with a female dog. Pedigree reconstruction, an analysis that looks at the parental relationships between individuals, grouped our wolves into six packs with pack sizes varying from three to seven. We noticed a high annual dynamic in pack composition and size, with mortality affecting both the reproductive pairs and offspring. We also understood the dispersal of the offspring into new territories/packs. Statistical modelling showed that a maximum

abundance of 31 wolves can inhabit our sampling area in a single season. The estimated sex ratio was balanced, 1:1, an average of one male for every one female. We estimated the local density of wolves at 2.35 per 100 square km (10,000 ha), a density ten times higher than that recorded in Scandinavia and two times lower than the one recorded in a world biodiversity stronghold: Yellowstone National Park in the United States.

On Eurasian lynx we had a much needed break this year. After 2020, when we provided the first density assessment in the Romanian Carpathians for this species, we stopped the systematic camera trapping efforts. In the field, we had to focus on other species such as the ungulates, while in the office we focused on sharing our previous results with the experts and with the wider public. We validated [our findings from 2020 in the Journal of Mammalogy](#), the lead scientific journal of the American Society of Mammalogists. In this way, we hope our work will impact the national strategy of lynx monitoring and hope its management will be based on solid scientific data collected every 5 to 10 years.



Red deer

Red deer is a species poorly understood/ studied in this part of Europe, with a strong debate around being under pressure from both trophy hunting and large carnivore predation. With inadequate scientific evidence there is no established methodology to help us clarify the uncertainties around this species. We now try to calibrate the official annual counts based on snow tracks with genetic sampling. During the baseline survey we carried out in 2019 and 2020, we collected around 600 DNA samples from faecal pellets over an area of 45,000 ha. This year we got the results back from the genetic laboratory. Our lab partners in Slovenia derived a stable genotyping protocol for this species. This is good news as it means the genetic protocol can be replicated in the future in any long-term monitoring effort on this species in Romania. We have a good genotyping success of 76% of the samples, with a 74% effective success rate after we exclude the non-target species samples. The low percentage of non-target species mean that rangers can eventually gain know-how on sampling this poorly known species, and that they did a great job in our case study. We identified 92 females and 89 males with an average recapture rate of about 2.5 per individual (with high variation between individuals however). We proved that genetic sampling is useful for assessing the minimum numbers of animals and the sex ratio with high precision. We have concerns that the high variation in recapturing red deer individuals will impact on the population estimate's robustness. Specifically, the high number of recaptures of the same animal and in the same day is bad for modelling red deer population size. We are now testing the models and will update you with the results once we have them. Depending on the results, we will consider adjusting the monitoring protocol for the phase II that is following. By readjusting, we are thinking of increasing the sampling size whilst keeping the sampling area the same, intensifying the sampling effort at regular intervals and/or on predefined transects. Phase II of monitoring this species is scheduled in summer 2023, three years after the baseline survey.









Chamois

In 2021, we managed to monitor chamois across all three concessions. Numbers are low, and we did not detect an increase. We estimate that the Iezer-Păpușa mountains are home to a population of 50-60 chamois. The lack of suitable rocky, precipitous slopes, and the presence of grazing livestock may be behind the slow increase in numbers. A more detailed evaluation, based on genetics, and of threats and habitats, would help explain it. The hunting of this species is banned in this area.

Wild boar

The wild boar population was affected severely by African Swine Fever over the last years. Our rangers estimated a population of 200 individuals across our concession areas, in late 2021, accounting for observed migration between areas.





A face bine
e molipsitor



CARPATHIA®
European Wilderness Reserve



Casa Bună

Outreach and communication

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Introduction

Sustainable development means balanced growth for people, nature and for the economy. Most of the mountain villages still don't fulfil the definition of a healthy community, with an environment that meets everyone's basic needs, with easy access to education, with job opportunities, harmony, active involvement and all the other characteristics.

People tend to fight for their individual benefits and not for the community. We vote full-heartedly for the latter and we have focused our efforts on providing services and expertise to the locals in our project area, to show them the benefits of working together. Even if the pandemic hasn't allowed us to connect personally every time, we turned to on-line tools and kept in touch with people who needed support.

If we were to describe 2021 for us, our key elements were transparency, community, resources, economic development, dialogue, trust, education, events, volunteering, jobs.

**– support for
documentaries,
our work being
featured in
international
publications, and
so on**

Media work

Within the EU LIFE CARPATHIA project, we have started, together with our partner Rogalski Damaschin Agency, an intensive programme of media trips to show journalists the progress of our activities. We had field trips on ecological restoration, Local Gastronomic Points and the Food Hub, the Richita Educational Centre, Făgăraş Fest and the results of our genetic bear study: National Geographic, Decât o Revistă, Documentaria.ro, Radio Europa FM, Radio Romania Actualitati, StirileProTV, Antena1, TVR1, TVR2, Prima TV, Arges TV, CLAR TV - Muscel, Muscel-Tv, Educație Privată, Adevărul, AgroTv, Arges Expres, Jurnal de Arges, Radio România Antena Satelor, Ziarul DIN Muscel, Buna Ziua, Brasov, Litera 9, Monitorul Expres, Radio România Cultural, Foto Press 24, Digi24, Stiri Pe Scurt and Evenimentul Muscelian have all participated at least once. To them, we add dozens of other publications that wrote about the results of nature-based activities in the Făgăraş Mountains. We will continue in 2022.

We have received a lot of requests from national and international media, as the public feels the need to immerse themselves more in nature.

New projects were filmed, and most of them launched by: 3 op Reis (Dutch TV programme), VPRO crew from the Netherlands, HotNews Romania, republica.ro Romania, Out There Films UK, 3sat Germany, Le Temps Swiss magazine, ARTE Germany/France and Swedish Public Television.



Doing good is contagious in the Făgăraş Mountains

Casa Bună Association had their own 'viruses' before meeting us, but once they started to visit the Făgăraş Mountains, they fell in love with the communities. And imagine what?!

A wise man once said that if you work in an NGO you will catch the virus and you will never find a cure, as doing good is contagious.

With their problems as well, as Casa Bună are one of the best social problem fixers in Romania.

They have continued the project started in 2020, and besides focusing on the online schooling programme and periodic visits to solve technical problems and install more computers, another very important topic was the wellbeing of the children:



 © Georgiana Cațan



 © Casa Bună

In January 400 packages with essential food and vitamins were distributed throughout 15 communities

within the foothills of the Făgăraș Mountains: Lerești, Pojorâta, Câmpulung, Voinești, Sboghițești, Nucșoara, Slatina, Gruiu, Rucăr, Sătic, Dâmbovicioara, Podu Dâmboviței, Ciocanu, Cetățeni, Stoenеști. In addition, included in the packages for children were stationery items and, where necessary, some IT equipment for them to be able to continue their online schooling programme started last summer. Thank you, Tășuleasa Social Association, Alin Ușeriu, Casa Bună Association and Romstal România, for making this possible.

Children's Day (1st June) in Nucșoara was a unique experience:

eye examinations for 30 children, balloon party, cakes and the spectacular visit of motorcyclists from Bikers for Humanity. The vouchers obtained after three days of blood donations were transformed by Bikers for Humanity Romania and Casa Bună Association into sports items and sweets for 70 children from Nucșoara, Argeș.

June came with another surprise for 22 children from Lerești, Argeș,

with whom the volunteers of Casa Bună have been working online for over a year. They were invited on Sunday 13th June, to open the European Championship football match Austria vs North Macedonia in the National Arena in Bucharest. And on 17th June, 22 kids from Nucșoara opened the match Ukraine vs North Macedonia, thanks to the Romanian Football Federation and UEFA EURO 2020.


In July, the team from Casa Bună Association, together with their partners, came to Nucșoara to deliver the first pairs of glasses for the kids.

Another round of eye examinations was performed for more children – a well needed and very much appreciated support for the people in the communities within the foothills of the Făgăraș Mountains.



 © Casa Bună



 © Casa Bună

In August, we hosted a camp for the children that had obtained good results from the online teaching programme and homework

coordinated by Casa Bună Association. Sixteen children from Ferentari (Bucharest) and rural Lerești met for the first time at Richita and spent their first adventure away from home. We would like to be able to offer as many kids as possible from disadvantaged communities this opportunity for education.

170 kids are prepared for winter due to the donation of winter clothing and boots and Christmas gifts in December.

Hopefully, next year we will raise all the money necessary to build a day care centre at Nucșoara. It will be a place where, annually, about 200 children from rural areas will have the opportunity for early years' education.

Doing good continues to be contagious!



© Casa Bună



© Claudiu Joantă





Community outreach

After our Food for Elders programme during the pandemic in 2020, relations with the local communities in the southeastern Făgăraş Mountains, where we have our main activities, have continuously improved. With this, we were able to help the local communities further. Throughout 2021, we worked a great deal directly with the town halls, with local organisations, and with disadvantaged members of the local communities. Our activities included:

- We started planning for local tourist information centres in some of the villages, which will create points of attraction for visitors and a reference point, where local guesthouses and tourism services can give information about themselves.
- We participated in the planning of local sustainable development plans, which are the basis for accessing funds from the EU Recovery and Resilience Fund.
- We set up a team of specialised consultants (so-called Project Factory), which can help the local communities in accessing the funds released through the EU Recovery and Resilience Fund and to develop their communities based on conservation.
- We supported the Lereşti Football Club both financially and with sports equipment. The team is now proudly wearing the bison as its logo and the mascot of their team.
- We continued with our partners from Casa Bună Association to help local Roma communities in after-school online education, and with food and equipment for winter.
- We organised, with our partners from Casa Bună Association, an ophthalmological caravan in all the local communities, where over 600 children were checked for visual problems and 150 children received glasses adapted for their needs.
- We started a project in Nucşoara called 'The ancient trees of Nucşoara', where 2,544 huge ancient trees on the communal pastures will be protected, documented, and, via a special website, will be offered for adoption by way of a donation to Nucşoara town hall.

Due to the increasing opportunities to help local communities, we decided by the end of 2021 to hire a person dedicated only to the work with and in the local communities.

Nature-Based Educators for the future and the joy of non-formal education

The first 14 teachers from the southeastern part of the Făgăraș Mountains became Nature-Based Educators, within an innovative educational five day programme proposed by ProPark Foundation for Protected Areas.

The Nature-Based Educator programme is addressed to teachers in the vicinity of the Făgăraș Mountains who want to learn how to bring nature into their lessons. Through this interdisciplinary conservation and environmental education program they find out how to include in their activities topics and solutions to current environmental problems such as biodiversity loss, climate change or excessive use of natural resources.

The programme is carried out in two stages and is conducted through unique, efficient and attractive activities: Bison Day, Sharing Nature activities, exploring outdoors, play-role and experiments. These activities, as well as the teaching materials and lesson plans developed within this programme are meant to facilitate learning and connect children with nature, in a relaxed, simple and interactive way.

The Nature-Based Educator programme will continue in all the other counties surrounding the Făgăraș Mountains.

Another major activity is based on the development of educational programmes for schools. After

working with 474 children in the schools from Argeș county, ProPark has applied indoor lessons in four schools in Brașov County (213 participants), has organised five outdoor one-day excursions and hosted six wilderness camps (five days each) at the Richita educational centre.

We admit we love the joy that non-formal education brings to the youngsters. And we are impressed by the stories of children that have never stayed in a camp and wished to remain forever at Richita.





A glimpse of events/ visits/initiatives during the past year

COVID-19 has had, and keeps having, a deep impact on global events across different sectors, hitting event organizers and participants. Digitalisation cannot replace in-person interaction and can't generate local benefits. Overall, uncertainty was still high around our events in 2021. Safety was the major priority for us in organizing different events around the Făgăraș Mountains. We've seen a rise in peoples' desire to meet and socialize at live events. So, we had a great time organising again local and national events which involved the local community and aimed to promote fantastic nature experiences, the rural culture of the Făgăraș Mountains communities, and our conservation project.

In February, we rescued a bear cub in one of our hunting concessions. Forest workers were working with fallen trees from a storm on the land owned by Lerești Community, when they noticed in the work area an abandoned bear cub. They stopped their activities, to limit further disturbance. The bear cub was left in the woods to give the mama bear a chance to return to him. When the workers returned to work a couple of days later, they saw the bear cub was still unaccompanied and that his condition was poor. One of our rangers, after consultation with the authorities, caught the cub and brought it to a local vet we work with. Now, Gombotz (as he was baptised) lives in the orphan bear sanctuary in Bălan, Harghita county, until he is old enough to be released into the wild.

In February and March, we organized meetings on the authorization procedure of the Local Gastronomic Points, with the participation of the representatives

of the Argeș County Sanitary Veterinary and Food Safety Directorate (DSVSA) and interested entrepreneurs from Dâmbovicioara. The Local Gastronomic Points are represented by private kitchens, where food is prepared according to culinary recipes specific to the area, which are served directly to the final consumer.

The The Nature-Based Educator training, organised by ProPark Foundation for Protected Areas was completed **in April** by 14 highly motivated teachers from our project area (Rucăr, Lerești, Valea Mare Pravăț, Nucșoara). Education is arguably the most important pillar in all human activities. A study trip for politicians and senior staff from protected areas was held **in May**. We presented the FCC activities and results on the ground and offered first-hand information about the vision and projects initiated for the future Făgăraș National Park.

In June, a stakeholder training concerned the subject of Strategical

Planning in the context of VUCA (Volatility, Uncertainty, Complexity, Ambiguity). Twelve participants discussed the importance of natural values in the process of sustainable planning, providing opportunities for development in the project area (in the context of the Green Deal, the new EU Biodiversity Strategy and the Recovery and Resilience Facility).

Peter Wohlleben is a well-known German forester and author who brought forests closer to people in popular language. He is the author of many books, which have been translated into almost 50 languages, amongst them the New York Times Bestseller 'The Hidden Life of Trees'. We were honoured to have Peter and his team visiting CARPATHIA in June, to experience our work on forest conservation. They came as guests and left as friends.

Twenty field colleagues have participated in the fortnight long Ranger Training, in June 2021.

Under the coordination of the



well-known nature photographer Dan Dinu and after a selection of participants through a viral photo contest on social media, we organised the CARPATHIA Photo Camp in June. Eight professional and amateur photographers spent four days at the Richita Centre and caught the magic of the Făgăraș

with local products, music, an exhibition of costumes from the collection of Ionuț Fintoiu, sewing and weaving workshops, a small fair with folk craftsmen from the Argeș area, weaving wreaths with lady's bedstraw flowers (*Galium verum*) and other wild flowers.

and My Transylvania Association, and aimed to promote the local community, culture and local heritage through the gastronomy specific to this mountain area.

From **July to September**, we invited the local communities around the Făgăraș Mountains to discover the local stories of the Făgăraș Mountains in a unique traveling photo exhibition. The exhibition gathered selected images from the album '2544m – The Stories of the Făgăraș Mountains, the Highest Among the Romanian Carpathians', also released in 2021 and has travelled in: Lerești, Nucșoara, Arefu (Argeș county), Căineni (Vâlcea county), Avrig and Sibiu (Sibiu county) and Făgăraș (Brașov county).

Stunning mountains. Magical villages and a lot of nature. Our mission is to help local communities around the Făgăraș Mountains thrive by conducting sustainable activities and business opportunities that protect and promote the natural wealth here

Mountains through their lenses.

In June, we celebrated the Traditional Costumes at Dâmbovicioara. In this way, we have supported an annual local event celebrating the beauty and the complexity of the traditional hand-sewn costumes. The programme of the day was rich: guided hiking in nature, searching for healing plants, legends and stories about the traditional costume ('ie') and the local landscape, picnic

In July we organised, together with locals, the first brunch in Rucăr, Mușcel. Rucăr is one of the most beautiful and hardworking communes at the foot of the Făgăraș Mountains. The locals prepared a tasty menu and invited lovers of nature, culture and local gastronomy to spend a summer's day at the foot of the Făgăraș Mountains in a traditional Rucăr household. The event was organised together with the Reviving Rucăr Initiative Group,





Richita – the largest environmental Education Centre in Romania, opened its doors **in July**. The event took place in the presence of representatives of local and national authorities, of teachers and students from the area and the vicinity of the Făgăraș Mountains. The Richita activity centre offers fantastic conditions for exploring and learning about the living world: special, hands-on programmes for groups of up to 30 people, for schools, universities, and all organizations interested in nature.

Făgăraș Fest 2021 – Făgăraș Mountains festival, a manifest event for the benefit of people and nature

After a break of one year, Făgăraș Fest, the festival at the foot of the mountains, returned with more good music and interactive activities. At the **beginning of August**, the second edition of the Făgăraș Fest event brought together in Nucșoara, Argeș County, over 1,000 lovers of

nature and local culture. For three days, at the foot of Moldoveanu Peak, the highest massif in Romania, we had concerts, local gastronomy workshops and guided tours for flora and fauna enthusiasts from the Carpathians. This year's edition was rich in activities and workshops for children and adults, lovers of nature, adventure and local culture, admirers of traditional dishes, history and theatre, photography, nature movies and even yoga, at the foot mountains.

In August we organized, at Cobor Biodiversity Farm, the Flavours & Sounds of Transylvania event, in partnership with My Transylvania Association. The event was an invitation to nature and local culture lovers to explore local cuisine, to discover high nature value meadows and the beauty of Cobor village. Guests from all over the country and abroad accepted this invitation and enjoyed a lovely day on the farm in the middle of summer.

In September Conservation Carpathia was once again partner of the Alpin Film Festival, the first and largest event in Romania dedicated to mountain art and culture. The Făgăraș Mountains could not have missed out, so Conservation Carpathia was present at the event with stunning images from our fieldwork, with activities and outdoor nature games for children and parents, with all the results of our activities so far and with a bit of the taste of the Făgăraș Mountains, promoting the products we deliver through our Food Hub.

We were delighted to join 'Brașov Heroes 2021' in September, for a philanthropic sports event. This community initiative is organized annually with much dedication and professionalism by the Brașov Community Foundation. Because we are part of the community, we supported Brașov Heroes 2021 in the role of partner in the family area. At our tent we received important guests: children and parents eager to discover the wild nature of the



Făgăraș Mountains, to venture after large carnivores, to play and enjoy a day spent outdoors. We talked about the future of the Făgăraș Mountains, about the generosity with which nature offers us everything we need and about the importance of preserving it for a life in harmony.

In September we also attended the Bikeathon Țara Făgărașului 2021 competition. Cobor Biodiversity Farm and Foundation Conservation Carpathia proposed the Call of the Oak project to participate in the race for a good cause. Over 30 cyclists cycled for our cause, The Call of the Oak, and supported us and helped us continue to plant oaks on the Cobor pastures.

In October a group of nine representatives (mayors, city managers, forest directors, local managers, tourism managers) from the communes surrounding the Făgăraș Mountains, together with FCC and ProPark staff, attended a study tour to the Bavarian Forest National Park, Germany. This

National Park covers 24,250 ha, attracts 1.4 million visitors/year and generates 52 million euro/year in income from tourism activities for the local communities. We had a lot to learn about its infrastructure, how education programmes are enrolled, how the logistics of such a park function, what employment opportunities it offers, and how people can participate in the park's volunteer programmes. And a lot to envision for the area of the Făgăraș Mountains once it becomes the largest forested National Park in Europe.

In November, colleagues from WWF Europe/Spain were interested in our bear monitoring study. We were glad to share with them the methodology and results.

December was dedicated to the FCC staff: a Christmas festive dinner for the employees.











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Awards

Ambassador Programme

Within the EU LIFE CARPATHIA project, we have started, together with our partner Rogalski Damaschin Agency, the CARPATHIA Ambassador Programme. Our ambassadors are friends and supporters of our project who become the voices of the future Făgăraş National Park, people with public visibility, personalities who strive to influence the general public in support of conservation, and who are willing to fulfil this mission in front of the Romanian civil society.

In 2021:

- **Nico de Transylvania, International DJ and cultural entrepreneur, initiator of the Forest Without Frontiers project (+ photo)**
- **Marius Opreş, partner in Ascendis, trainer & learning designer (+photo)**
- **Sergiu Oprescu, Executive President at Alpha Bank Romania (+photo)**
- **Răzvan Pascu, entrepreneur and travel blogger, Travel Communication Romania founder (+photo)**

Initiated in 2002, the Civil Society Gala is the largest project which promotes and rewards the activity of the associative sector in Romania.

We were happy to be part of it again with our Făgăraş Mountains become home for bisonproject which won the first prize.

have joined our cause and spent time exploring the project area on short field trips, while learning about conservation problems and opportunities in the Făgăraş Mountains. Thank you for being part of our project, dear ambassadors, and for supporting the creation of Europe's most iconic national park!

In 2022 we intend to have at least nine new nature loving personalities as ambassadors speaking about the project and the future national park.

Volunteering

A volunteer adventure as big as a forest

Balkan by bike – cycling for reforestation made it to Romania in September. We were happy to spend a few days with Theresa and Philipp, a cellist and a pianist from Germany, with relatively little previous experience of cycling, but with a desire to spend their summer differently. How many of us would dare, at the age of 18, to travel 3,000 kilometres by bicycle, to sleep in a tent, or to talk to strangers on the road, eager to be impromptu guests? And to do that, both for the pleasure of an adventure and for an important cause? As environmental protection is an important issue for both of them, they chose to volunteer to support our reforestation project in the Făgăraş Mountains and to aim for donations amounting to € 10,000, an amount that covers the costs of planting and post-planting two hectares, in the area Groapele, Nucşoara (Argeş).

They left Munich, Germany on 4th August, and chose a route through Austria, Slovenia, Croatia, touched a little of Bosnia Herzegovina, crossed Serbia and arrived in Romania at the end of September, with great stories on the way, which you can enjoy reading in their blog <https://balkanbybike.com/en/ueber-uns-2-2/>. They only gave up their bicycles during the climb of a few hours on Valea Rea. Then they followed the valley of Văsălatu, where, at the foot of the Iezer-Păpuşa massif, far from the eyes of the people, they found 300 hectares of... nothing, of stumps. The Groapele area is hard to visually

digest. The landscape leaves an emptiness in the pit of your stomach and you wonder how thousands of trucks loaded with logs could go unnoticed in 2010-2012? Theresa and Philipp have raised € 11,529 for a new forest in the Făgăraş Mountains.

The Cobor Biodiversity Farm volunteers did a great job helping with the Carpathian shepherd dogs breeding programme, the horse livery and other farming and hospitality activities: Claudia from Spain, Emma, Lena and Selina from Germany.

The field team also had great help:

- **George spent 11 weeks in our project area, alongside our team and helped with the riparian, subalpine and alpine meadows vegetation survey and monitoring, as well as with the invasive alien plants eradication**

- **The wildlife monitoring team hosted volunteers for between seven to 12 weeks, mainly for bear and beaver monitoring. Thank you, Timothy, Celine, Juliana, Harriet, Eric, Gabriel, Catherine and Sam!**

- **Andra was a big help with the greenhouses and tree nurseries in Leaota.**

- **The teams from Zentiva and Agent Green that came for replanting.**

Our image, English content and events wouldn't be so great without their help:

- **George is a constant, close friend of our project and helps our communication with amazing photos.**

- **Michiel, a Dutch photojournalist specializing in issues encompassing ecology, conservation and natural history. Whilst returning to Romania with a few days to spare, he wanted to catch up with us again and offered to take pro-bono photos of replanting, bear DNA sampling and Food Hub products.**

- **Horia for his help with the logistics of rural events.**

- **Ioana for archiving the photos in Lightroom.**

- **Lori for her time and input on the Fruits of the Mountains Food Hub.**

- **All the volunteers that made Făgăraş Fest and Alpin Film Festival successful events!**

- **And Dr Ruth Rusby for making our writing, including this annual report sound like English, not Romglish.**





Richita Field Education Centre

Richita Cabin was built more than 40 years ago by the Romanian Water Company and taken over by the Forest Administration as a field base for foresters after the nearby Pecineagu Dam was finished. With the restitution of forests starting in 2004, Romsilva lost almost all its forests in the Dâmbovița Valley and consequently, Richita Cabin was sold in November 2013. FCC bought the cabin back then with the idea to convert it into an education centre for local and regional schools. However, since FCC was still a small organisation at that time, we didn't have the capacity to rebuild the cabin and to develop an education plan. In spring 2018, when FCC had grown considerably, we managed to sign two funding contracts for the restoration of the building. Our intention was to develop a building, which would run without fossil energy, and which would be based exclusively on natural materials. Unfortunately, the Romanian construction legislation is not yet adapted to these times, when energy efficiency or building with natural materials should be a priority, so it was extremely difficult to get permission for the modern approach of our architects. The authorities always insisted on the use of concrete or wouldn't approve natural materials, so consequently, it took us more than a year until we had negotiated acceptable compromises to actually get construction permits for what we wanted and start building.

Since Romsilva had totally neglected the building during its last years of ownership, we basically had to demolish the entire building with the exception of a few walls. This, however, also allowed us a totally new concept of the building. The pandemic further slowed down the process of building, but in spring 2021 we had finally finished both the outside and the inside work. In early July, we inaugurated the building with the participation of over 100 guests, amongst them many children. Everybody was blown away by the beauty of the building and even representatives of organisations, which had been anti-CARPATHIA until now, congratulated us. Chief architect Jan Huelsemann had done a fantastic job and artist Valentina Ciolan had brought the interior of the cabin to life.

Together with our colleagues from ProPark Foundation, we developed the education programmes concerning the five major habitats of the area and all the wildlife which lives there: mountain streams and riparian forests, beech forests of the lower altitudes, mixed forests of the middle altitudes, subalpine spruce forests, and the alpine shrub- and grasslands. ProPark staff also organised a course for teachers, who want to become trainers in Richita, which allowed us to start the school programmes right after the inauguration of the centre. Despite a longer break during the autumn wave of Covid-19, which forced us to close the facility for a couple of weeks, we

managed to host 19 groups, with a total of 311 participants, up to the end of the year. All children are keen to come back in 2022 and as the word spread, we have no doubt that we will be absolutely full in 2022. The cabin is administrated by a local company and thus creates a total of seven jobs (without the educators). Richita's policy with respect to food is to supply food wherever possible through our Food Hub from local resources and thus creates further income for local communities. The costs for funding all the courses have been covered by our partners Ascendis Ltd. and the Nouă ne pasă (We Care) Foundation.



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Foreword

However we do it, looking ahead to 2021 there are a few keywords that come to mind: resilience, learning, local products, small community suppliers. If in 2020, due to the pandemic, business in general pulled on the handbrake or was forced to scale back their business substantially, 2021 offered the opportunity to rebuild businesses and adapt to the demands of an economy in the time of a pandemic.

Turbulent times have shown us that local businesses are also connected to the global economy, and major global changes are translating into the revenue of companies in the communities where we operate.

2021 was the year we looked with great confidence at suppliers, local resources and the demands of the market a stone's throw away. If foreign tourists can't come to the wildlife observatories, let's show Romanian tourists the richness of wildlife in the Făgăraș Mountains. If supply chains are endangered

by quarantine, let's strengthen short supply chains and give small producers a real chance.

Adaptation and resilience can be understood as a very intense learning process. This is what we did with the first Conservation Enterprise programme, we learned, we adapted and we planted the seeds for the future. As we write these words, we are facing a new challenge, coming from our neighbouring country and creating a lot of questions. What can I say: that the experience of the pandemic period shows us that through perseverance and creativity solutions can be found.





Wildlife hides

Even though the pandemic had not yet spoken its last word, 2021 was the truest expression of a year of transition, from quarantine and strict travel restrictions to increased travel, both domestically and internationally.

Although the situation was still uncertain, we did our best to constantly adapt to the given circumstances and to ensure as best as possible the safety and comfort needs of our guests.

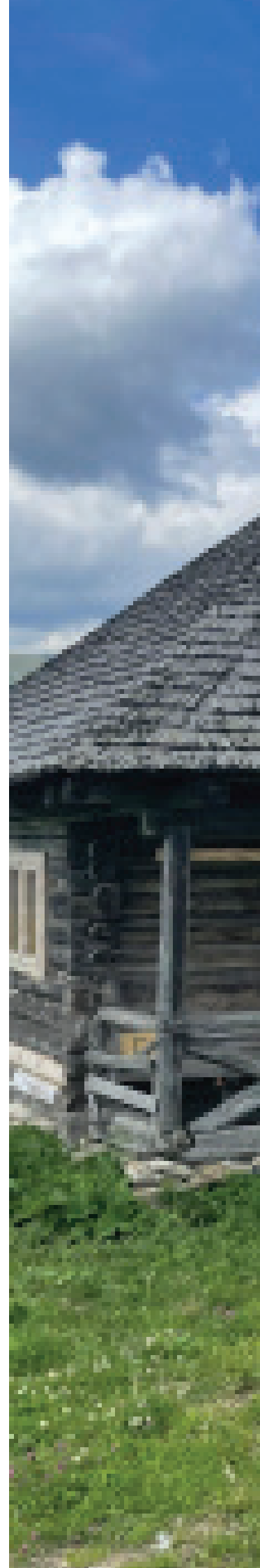
Thus, the wildlife observatories in the Făgăraș Mountains have been welcoming hosts for 260 guests (from Romania and from the rest of Europe: Germany, Austria, Belgium, Denmark, France, Spain), and were occupied for 99 nights of accommodation during the tourist season. Moreover, we enjoyed the visit of TV groups from the Netherlands and Sweden, which increased the interest in Romania in general and in Travel CARPATHIA's trademark conservation trips in particular.

Wilderness Camp

The newest seasonal accommodation project – Wilderness Camp – has taken the concept of staying in a tent to a new level,

bringing a certain degree of comfort, but keeping as close as possible to the surrounding wilderness. Also there, we have restored an old sheepfold, preserving the traditional frame and using natural raw materials, so that guests can enjoy a meal cooked outdoors in a cauldron, as in ancient times.

From the first teambuilding event – organised together with our partner Ascendis – where participants went on hikes and learnt about bears and ecosystems, to nature retreats (like 'Presence in the Wild' - in collaboration with a tour operator from Austria), this place was the perfect escape from the hustle and bustle of the city for a few days.







Challenges and success stories

They say that out of every challenge comes an opportunity. Thus, with the return to basics and the shift towards 'boutique' vs. 'consumer' tourism, we felt the need to reinvent ecotourism experiences based on a healthy balance between the natural environment and local communities. With the help of the newly created food hub within FCC – 'Fruits of the Făgăraș Mountains' – we facilitated the interaction with local producers, as well as the purchase of local natural products, offered or cooked with love for our guests.

We also officially started the Wolftrail project, a collaboration between FCC, Jack Wolfskin and the travel agency Alpinschule Innsbruck.

For a week, a few nature and hiking lovers were taken on a unique adventure, from the wildest areas of the Făgăraș Mountains to the meadows with ancient oaks in the Transylvanian Hills.

Another pilot programme – in collaboration with FRAM Science & Travel from Germany – was successfully carried out last year, in which we combined recreational and scientific tourism, involving several CARPATHIA experts in various activities, such as wildlife monitoring, forest conservation, conservation enterprise creation and biodiversity farm management. The story goes on, with new interesting projects, where we aim to develop the accommodation infrastructure typical of the wild areas in the Făgăraș Mountains, in the framework of wider experiences based on conservation.

Cobor Biodiversity Farm

The land for the Cobor Farm was purchased by Markus Jebesen between 2007 and 2009, donated to FCC in 2016, and FCC established the Cobor Farm in 2017 with the idea of creating a new concept of farming, where biodiversity conservation and enhancement is at the core of the farm. A concept, which would go beyond organic agriculture, but where the number of insects, flowers, habitats or birds actually are the measure and not the outcome in litres of milk or kilogrammes of meat. The conditions for such an endeavour were good, although the area had suffered from 25 years of intensive sheep grazing, many of the old trees on the pastures had been removed, and due to the collective farming during communist times most of the hedgerows had been destroyed. But once we left the meadows ungrazed, an ocean of colours from all the different flowers emerged in June, the air was buzzing with insects, and lesser spotted eagles made their circles in the sky.

In the first phase of the project, we established the necessary infrastructure for the farm, renovated four buildings, including the annex buildings for farm staff and an ecotourism programme, and eventually purchased cattle and machinery. Hedi Wyss, founding member of FCC and president of the Temperatio Foundation, financed a large part of this and pointed us in the right direction by encouraging the use of grey cattle for the farm, which is the autochthonous (native) breed of the Hungarian steppes and the Transylvanian hills. We also offered horse livery for rehab horses as well as young and retired horses, who would rather enjoy the vast pastures than a tight competition calendar in the equestrian sport industry.

The original 40 grey cattle came from the Hungarian Puszta, but the group has grown to over 170 head by the end of 2021, and now form an

impressive herd which doesn't need much attention. The herders really like this herd as they have an easy life with them: at lunchtime or in the evening the bull brings the cows and the calves back to the base right on time by himself when it is time for watering. During the day, the calves form a kindergarten and spend their day playing together with just one or two cows looking after them. In spring 2021, a bear mother with two cubs made the forest next to our pasture her home for a while, in the mornings and the evenings they were seen grazing on the meadows only 200 metres away from our cattle. During the nights, they regularly visited the sheep camps in the wider surroundings, but they tried to approach our cattle only once: the herd immediately formed a semi-circle around the calves (with the bull bravely defending their rear against any possible danger) and the cows with their long, sharp horns clearly indicating to the bears that they might end up as shashlik if they got any closer. After this show-down, our cattle were left in peace by the bears.

However, with over 170 cattle, the size of the herd starts to approach its upper limit and we had to start thinking of culling some of them. Putting them on a truck and exposing them to all the stress of a slaughterhouse isn't something we felt would fit well with our philosophy, therefore we decided to buy a mobile slaughterhouse in order that we can kill them with as little stress as possible and process the meat on-site. Since the meat is of extra high quality (during medieval times, wealthy cities like Nuremberg closed their markets for all other meat if grey cattle meat was available, to avoid meat of a lesser quality being sold as grey cattle meat), we intend to market it to specialised shops, high-end restaurants, and direct buyers who can appreciate its quality and are willing to pay a premium price.

In spring 2021, a Belgian horse owner contacted us and asked whether we had room for two of his horses. Of course we had space, since part of the Cobor farm has been developed into a livery facility, mainly for foals, which are not yet being trained but should enjoy the life on the vast pastures to properly develop their joints, tendons, and muscles, and for old, retired horses. When the two Belgian horses got off the trailer, we first thought we had been mistaken for an elephant sanctuary. These horses were huge and weighed close to a ton each, but it turned out that despite their size, both the mare and the stallion were super sweet. It didn't take long until half of the village came to have a look at these giants. With the high proportion of young horses which are soon leaving for training, and retired horses, which often come with a degraded health status, the population fluctuation is relatively high and by the end of 2021, the farm hosted 22 horses.

Ecotourism is the third component on the farm and at the start of the tourism season in spring 2021, we decided that the demand for staying in Cobor had increased so significantly that it was time to establish our own tourism team and not run it as a by-product under the general farm manager's duties. We had renovated four houses with 12 rooms and a capacity of 22 beds with natural materials and in a traditional style, had converted an old ruin into a seminar building, and had started a marketing campaign with our friend and supporter Razvan Pascu, who is one of the top travel marketing consultants in Romania. And we were right to do so, despite the fact that the pandemic still caused a lot of travel restrictions, our tourism numbers soared up compared to pre-Covid times. We are convinced that the demand for visits to Cobor will continue to grow and we are ready to invest in additional guesthouses.

For the last two years, we have been developing a new field of activity, which goes to the heart of the original farm conservation-landscape concept. The Transylvanian hills are not wilderness, but land which has been cultivated for almost 900 years. The extensive use of hay meadows has led to an incredible diversity of species and habitats (which we have re-established in Cobor), but originally also the pastures were extremely rich in species, since they had been developed as so-called oak pastures interspersed with ancient old oaks, apple and pear trees every 30-50 metres apart. These oak pastures contain many species typical for pastureland and species which depend on old trees, such as the stag or the rhinoceros beetle. In the Transylvanian hills we find some of the last large oak pastures of central Europe, and the five largest oak pastures of Romania (some are over 1,000 ha in size) are all within a 20 km radius around Cobor. A huge problem is that these oaks have not seen any regeneration for the last 300 years and their full ecological value starts only at this age. The oldest documented tree is over 900 years old, and more and more of the old oaks have reached their natural limit and are starting to die. Climate change and increasing amounts of droughts contribute to the problem. This means, that even if we were to rejuvenate these oak pastures today, there would still be a 300-year gap until the next generation of oaks would reach its full ecological function. However, since the oaks are so long-lived, it is not too late to save these very special habitats, and we have joined forces with an organisation called Transylmagica to rebuild an oak pasture in Cobor and such revive these traditional pastoral landscapes.









The Fruits of the Mountains Food Hub – selected products harvested from the Făgăraș Mountains

In March 2021 we launched the 'Fruits of the Mountains' project, a food hub for small producers in the southern area of the Făgăraș Mountains. The food collection and distribution hub is based on the principle of giving small producers direct access to consumers in Romania's large urban centres. The food hub started collecting products from the southern part of the Făgăraș Mountains and ensuring distribution to Brașov, Bucharest and Pitești.

The selection process of local suppliers targeted those producers who were authorized according to the legislation in force, or those who wished to be authorized, thus the Fruits of the Mountains offered the traceability of products according to legal requirements.

Another important element is related to the pricing policy. The food hub aims to contribute to increasing the sales of small producers and therefore does not negotiate preferential prices for intermediate products.

Through an order form, customers were able to order from two pre-set baskets: Selected Products and Weekly Products, or from almost 40 individually listed products. After almost six months of testing, we set up Fruits of the Mountains Carpathia Ltd. through which we managed all

operations of the food hub.

During this period, we identified more than 20 potential producers and we are working with about half of this list on an ongoing basis. We offer a wide variety of products such as mushrooms, wild strawberry jam, blueberries and blackberries in sugar-free syrups, cheeses, honey, juices and compotes, locally produced in various healthy combinations. We also started selling products under the brand 'Fruits of the Mountains' (Roadele Munților) in December 2021. In the first nine months of activity, more than 7000 products have been delivered and the proceeds have reached almost 20,000 euro.

Since November more than 40 products offered through Fruits of the Mountains Carpathia Ltd. have been listed on www.freshful.ro, thus entering an extremely dynamic online grocery market in Romania.

The plans for the coming years are to increase the number of producers and products listed by Fruits of the Mountains Food Hub and to diversify them. The development of partnerships with large retailers is another strategic element to increase sales volumes. Healthy food from the Făgăraș Mountains creates a favourable context for small producers, who can now focus on production, without having to worry about the promotion and marketing of products, which is now completely handled by the food hub.

Conservation enterprise programme for entrepreneurs

The Conservation enterprise programme has set out in 2021 to develop a process of consultancy and technical assistance in choosing and accessing sources of financing for business development tailored to the needs of local entrepreneurs, based on a needs-analysis and identification of expectations from local entrepreneurs. In the first year we wanted to focus on small entrepreneurs by offering technical assistance and consultancy in different areas.

The programme is developed and implemented by the Foundation Conservation Carpathia with the support of our UK partner Conservation Capital.

Some figures of our activities carried out in 2021:

- We provided over 300 hours of consultancy to small local businesses
- We built a partnership with the Food and Veterinary Administration Argeş in order to provide support for the authorisation of local gastronomic points and kitchens in local guesthouses
- We built a partnership with the Agency for Mountain Areas for the certification of local products from the mountains





 © Puncte Gastronomice Locale

- We organised three meetings to promote local gastronomic points and to present the authorisation process
- We organised an info trip on the Conservation Enterprise programme in the southern area of the Făgăraş Mountains
- We provided consultancy for two local producers to receive mountain product certification
- We helped to authorise a kitchen for a local guesthouse in Dâmbovicioara
- We developed, together with Conservation Capital, 10 business plans in the fields of ecotourism, construction, tourism services, setting up a mobile slaughterhouse
- We provided consultancy on barcode implementation for x producers
- We awarded a contract for complementary tourism services (cleaning and servicing) at the Richita Field Education Centre to a local agency



Current infrastructure and future plans

The main objective of any National Park is the protection of nature, regulated via management plans and implemented by a team of rangers.

However, a National Park has importance beyond pure conservation, particularly for research and monitoring, to learn how natural processes develop and function in areas which are not used and impacted by humans. Furthermore, National Parks with a significant number of visitors run nature education programmes and generally, National Parks are open to visitors and have a high recreational value, typically in the form of eco-tourism.

In consequence, all the objectives of a National Park require a specific park infrastructure. However, none of the existing National Parks in Romania has such a sufficient infrastructure and it seems to be important to develop a model of how a modern National Park needs to be set up and equipped. Although the Făgăraş National Park is still a vision, we started to think about the necessary infrastructure several years ago. In 2015, we developed a plan for a CARPATHIA Centre, which was envisioned to be a network of various infrastructure elements for research/education, tourism, and administration of the overall initiative. In the following years, we continued to develop these elements and throughout 2021 elaborated a first concrete infrastructure plan for

the period until the National Park is designated, which goes beyond the pure administration level, and which must be seen as a dynamic process developing over time.

This infrastructure plan is designed for a first phase to create the basis for a future National Park and to give a kick-start to the development of eco-tourism and other conservation enterprises. The plan foresees investments into:

- **general park administration: we purchased land until the end of 2021 and will start building a logistics hub for the southeastern Făgăraş Mountains. Ranger stations, volunteer/researcher accommodation, and administration centres in other parts of the Făgăraş Mountains will be built in the years to come.**
- **research and education infrastructure: next to the Richita Education Centre and the Poiana Tamas Wilderness Camp we are planning already the first visitor information centres to be built in 2022, a forest kindergarten, research stations, and a Centre of Excellence as an international research hub.**
- **infrastructure for eco-tourism and conservation enterprises: we already have our network of hides, which we want to expand in the next few years, we will build large**

wildlife reserves with the native wildlife, campgrounds, tree-top walks, hiking, MTB and horse-riding trails, shelters in the alpine areas, and warehouses for our food hub.

The plan will be reviewed and adapted periodically in parallel to the overall development of the National Park initiative.



Financial Report

Income sources

144

Expenses

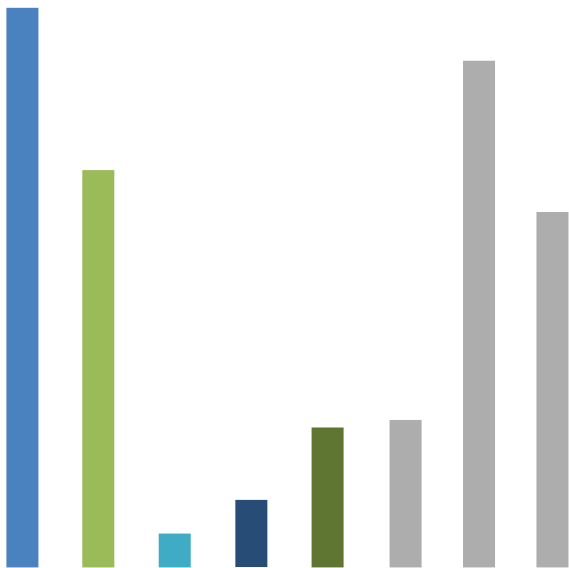
147

Income sources

All income represents funds received as general support or for a specific project, to support CARPATHIA's mission and its activities for nature and people. We continue to have a diversified revenue structure – from grants, philanthropic donations and sponsorships, as well as earned income.

Our public and private donors, foundations, corporations and major donors are not only vital to our work, they also give us the confidence that our work is recognised as essential for environmental conservation.

CARPATHIA's success wouldn't be possible without all these contributions. We are deeply grateful to all our supporters and partners for your involvement.

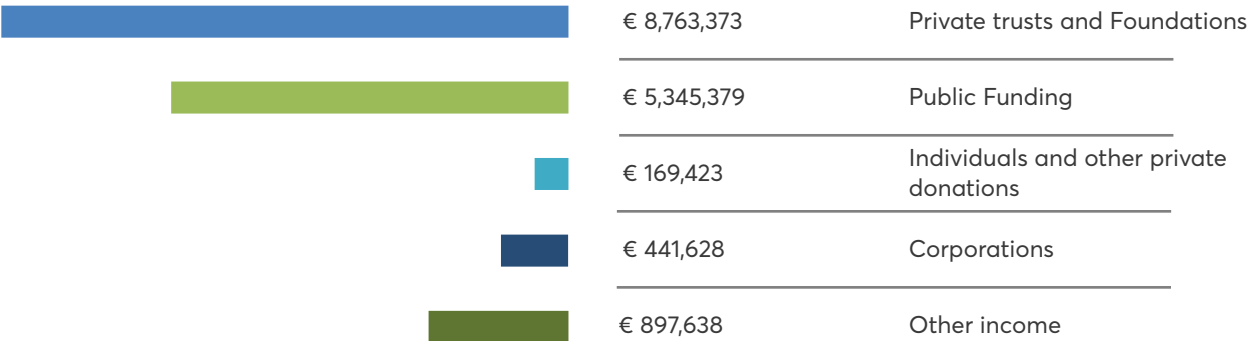
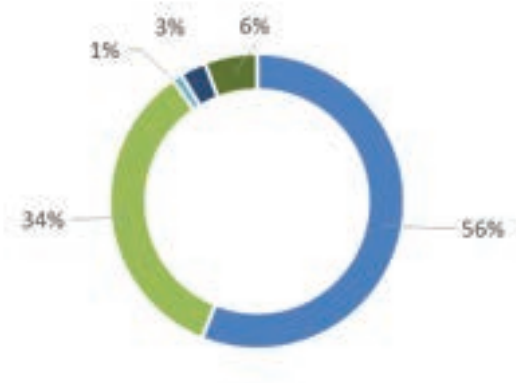


Private trusts and Foundations	€ 8,763,373
Wyss Foundation	
Endangered Landscapes Programme	
Oak Foundation	
Frankfurt Zoological Society	
The European Nature Trust	
One Tree Planted	
Mossy Earth	
Forests Without Frontiers	
National Geographic Society	
Public Funding	€ 5,345,379
EU LIFE18 NAT/RO/001082 (2019-2024)	€ 3,413,307
EU SUPERB H2020 Systematic solutions for the urgent extension of ecosystem restoration for forest-related biodiversity and ecosystem services	€ 228,737
Compensation payments for protected forests	€ 1,703,335
Individuals and other private donations	€ 169,423
Other private donations (online donations, Balkan by bike, Făgăraș National Park, Bikeathon The call of the OAK, Moroieni School)	
Corporations	€ 441,628
Ascendis, Transilvania Bank, eMAG, Ernst&Young SRL, Every Matrix, ING, Social Fashion Company	
Other corporate contributions (Rainforest Concern, Studio 901 Productions UK, Kogainon, Syncro Soft SRL, Proiect Nexus, Lisec Romania, Schneider Electric Romania, Tei Pharmacies, I Wood Be)	
Other income	€ 897,638
Income from pasture rent, agro subsidies, timber sale, land rent, forest guarding fees etc.	
Total income	€ 15,617,441

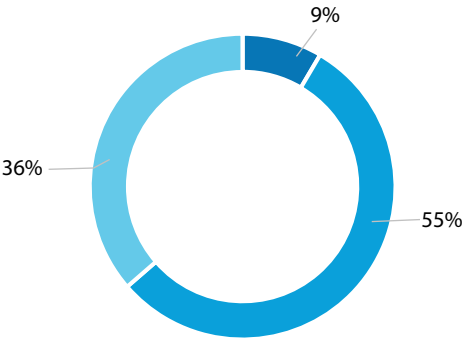
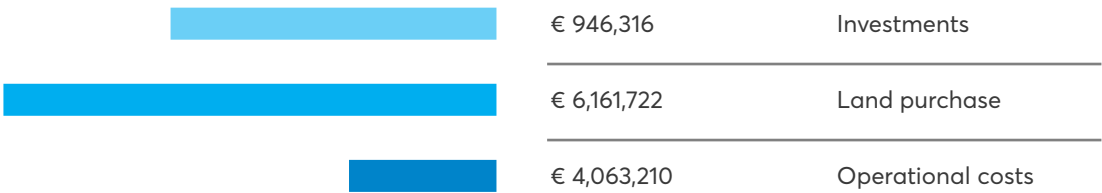


Income vs. Expenses

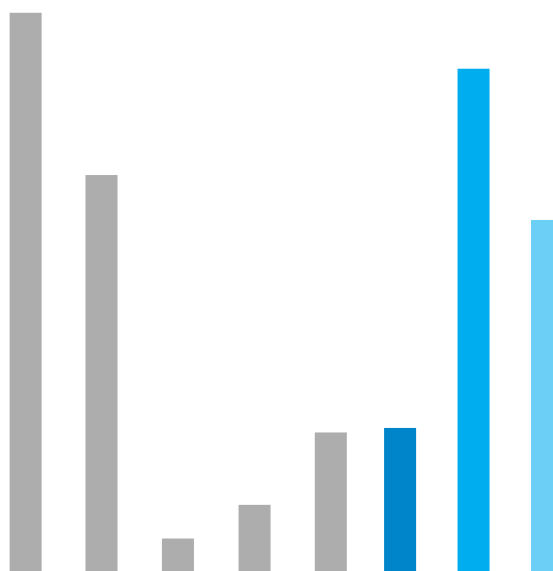
Graficul 4



Income
Expenses



Expenses



Investments	€ 946,316
Renovation of Richita Cabin and development of an educational field centre, Poiana Tămaş, Maintenance of hides	€ 255,151
Field infrastructure and equipment	€ 379,964
Car fleet	€ 311,201
Land purchase	€ 6,161,722
Operational costs	€ 4,063,210
Programme costs (includes funds spent for activities directly linked to our mission (wildlife monitoring, forest restoration, field consumables, sociological research studies etc.)	€ 716.275
Salaries (includes the employer's contribution to the State budget)	€ 1.689.671
General and administrative costs (includes financial, administrative, legal, consulting, IT, HR, audit and other costs needed for organizational development)	€ 1.062.547
Non-operational costs (includes various taxes and fees)	€ 107.251
Total expenses	€ 10,762,150



Ways to become involved and support us

Our work is possible only with the help of our supporters and partners. There are various ways to contribute to fulfilling our mission:

Become a strategic partner

If you are an organisation, public or private institution, foundation or business entity, we invite you to join us as a strategic partner. Our strategic partners believe in our mission, get involved in several of our pillars of activity and their support significantly contributes to the success of our work.

Our pillars of activity:

- Conservation
- Restoration
- Wildlife
- Community outreach
- Conservation enterprise

Become a corporate partner

Companies can engage with us as part of their corporate social responsibility programme or based on the desire to reduce their environmental footprint. We invite companies to contact us and discuss meaningful ways to engage and support us, ranging from in-kind and advisory services, to cause-related marketing and various financial contributions. For Romanian resident companies there is also the possibility of using the 20% income tax reduction facility. Corporate sponsors may donate for general purposes or for a specific

project. These contributions benefit the relevant projects directly and are a dependable factor in planning our work.

Become a major donor

Major donors to CARPATHIA are individuals or private foundations that choose to support us at a more substantial level. Your general contribution can be used where it is most needed, or you can make a dedicated donation to support a specific project. These contributions give us additional planning security, as we know in advance what funds are available to us and our work.

Become a private donor

Individual donations can be one-off or regular financial contributions to support our work in general.

Occasion-related donations are initiated by our committed supporters, in celebration of private events (such as birthdays, anniversaries, garden parties) or epic journeys and/or sports events. Instead of gifts, they ask for donations from their peers, family and friends, often for a project that is particularly close to their heart.

For further information, please contact us at

info@carpathia.org

and together we will find meaningful ways for you to engage in our work.

<https://www.carpathia.org/donations/>

DONATION ACCOUNT

IBAN EUR account:
RO86RNCB0061114278450049



Outlook 2022

With the pandemic being less and less restricting and social life and direct interactions picking up speed again, we were enthusiastically looking forward to the next year. As we write this report however, we are confronted with another sad and disturbing event, the unjustified war in Ukraine, that is absolutely certain to turn the world upside down again. Nothing will be the same as it was before, though what will be is hard to imagine. What is certain though, after two years of global crisis, is that a change in consciousness is taking place, an awareness of interdependencies and the very fragile system on which the prosperity of our society is built upon. It is now more than ever in our hands, and probably just high time, to restore the balance and to build sustainable, resilient and competitive systems to protect our own well-being.

With the CARPATHIA initiative, we will contribute a great deal to this transformation and the targets outlined by the European Union: by protecting forests and restoring degraded land so it can provide its full range of ecosystem services, but also especially by intensifying our efforts to support local communities with social and educational programmes and providing the basis for a regional economic transformation, from an extractive to a conservation-based economy.

The start of our new food hub wasn't

a huge event, but the success of it in the first weeks was one of the things which impressed us most in 2021. A simple idea, which holds all the elements of our project such as health, sustainability, support for local communities, and good quality seems to hit the zeitgeist. We are convinced that the interest in the products of the food hub will be so high, that we will have a hard time keeping up with finding additional producers, who produce sufficient amounts of high-quality products, and delivering them to the consumers. With our new partner Freshful we believe that in 2022 it will be a challenge to fulfil all the requests. But struggling to keep up with opportunities that present themselves is much better than struggling because there aren't any.

In 2022, we will also start to develop an ambitious infrastructure, from visitor information centres, scenic hiking trails, spectacular campgrounds, education centres and other facilities for people to experience the beauty of the area – and with this,

**the heart of the future
park begins to beat.**

**WE THANK ALL PARTNERS, SPONSORS
AND FRIENDS OF THE CARPATHIA
PROJECT WHO SUPPORTED OUR WORK
IN 2021.**



Contributors

CONTENT

Adrian Aldea
Georgiana Andreea Andrei
Cristina Antonescu
Angela Boghiu
Simona Bordea
Daniel Bucur
Marius Drugă
Ruben Iosif
Oliviu Pop
Barbara Promberger
Christoph Promberger
István Szabó
Georgia Tarnea
Liviu Ungureanu
Mihai Zotta

PROOF READING

Ruth Rusby

GIS MAPS

Adrian Pătrulescu

GRAPHIC DESIGN

Tudor Botezatu

Photo cover: © Daniel Mîrlea



**FUNDATION
CONSERVATION CARPATHIA**

Braşov – Romania

info@carpathia.org
www.carpathia.org

**COBOR BIODIVERSITY
FARM**

reservation@cobor-farm.ro
www.cobor-farm.ro

**TRAVEL
CARPATHIA**

reservation@travelcarpathia.com
www.travelcarpathia.com

Follow us on social media:

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