

Foundation Conservation Carpathia (FCC) is an NGO founded in 2009 with a goal of creating the “Yellowstone of Europe.” FCC works with local partners to secure the forests of the Fagaras Mountains in Carpathians as wilderness areas in perpetuity and thus protect them from deforestation. This involves purchasing privately owned land, supporting a well-trained ranger force to monitor the land, and implementing reforestation on formerly cleared areas. The ultimate goal is to return FCC landholdings to the public domain for permanent protection in the form of a National Park. The Carpathians are the largest mountain range in Europe, with peaks of over 8202 feet. This area is increasingly under threat with virgin forests being logged, overgrazing of the alpine grasslands, a lack of good wildlife management in place, and destructive development projects under discussion. More than half of the Carpathian arc is forested and the Carpathians constitute one of the most important wilderness regions in Europe. The mountains are home to the largest population of European bears, as well as significant populations of wolves and lynx. There are still virgin beech and spruce forests extending over long valleys and wide ridges, but the area is severely threatened by clearcutting and illegal logging.

Challenge

This area is increasingly under threat with virgin forests being logged, overgrazing of the alpine grasslands, a lack of good wildlife management in place, and destructive development projects under discussion,

Historically, farming communities from the surrounding villages have used the area as a source of timber, hunting, and grazing. Despite forestry and logging during communist times, ecosystems have remained functional and forests on many steep mountain slopes remained untouched. With the end of communism in 1990, pressure increased significantly:

- The Romanian government has restituted land, which has been nationalised during communism. Most of these properties are below 20 hectares and an owner can make money only a few times per century; most of the time these forests are rather a financial burden and, as a consequence, many of these owners sell their forests, usually to logging companies, which execute large scale logging. Such, close to 15,000 ha of forests have been clear-felled in the Fagaras Mts since forest restitution - most of it illegally.
- Plans for the development of ski centres endanger valuable forests and pristine mountain areas.
- Trophy hunting has developed into big business and hunters make no attempts to decrease the level of human-wildlife conflicts, as the elimination of nuisance carnivores would decrease the quota for trophy hunting. Poaching by local people attempting to defend their interests has become the inevitable result. Given the lack of a reliable wildlife monitoring system, hunters report an unrealistic number of wildlife present in order to achieve higher hunting quotas, and the resulting overhunting, combined with poaching, has significantly decreased wildlife numbers throughout the past 20 years.

The underlying cause of this conservation problem is the lack of economic perspective for the local communities. Forestry, trophy hunting, and livestock grazing have remained the only economically profitable activities in the area, however provide significant profits only for a very small part of the society. Romania is an emerging country, and a wealthy middle and upper class has formed over the last two decades. With the

exception of a few timber barons, who have profited from the massive logging following the forest restitution in 2004, people in rural communities have not benefitted much from the recent economic development. Obviously, they also want to improve their standard of living, and the possibilities of short-term gain have often overruled issues of sustainability and responsible land management.

Organizational Objectives

A. To save at least 2,000 ha of natural forests in the Fagaras Mountains (habitats 9410 and 9110) by purchasing or through land conservation easements and to stipulate their complete protection in the National Catalogue of Virgin Forests or the Management Plan of the Natura 2000 sites. This will also enhance habitat conditions for species strongly depending on natural forests such as *Tetrao urogallus*, *Ficedula parva*, or *Rosalia alpina*,

B. To accelerate re-wilding processes by purchasing and restoring 500 ha clear-felled areas through replanting the original tree species, by purchasing and initiating the conversion of 500 ha spruce monocultures into natural forests, by purchasing and restoring 300 ha alpine habitats, and by reintroducing missing mammal key species (*Bison bonasus*, *Castor fiber*). Habitats conditions for a variety of bird species (*Strix uralensis*, *Dendrocopos leucotos*, or *Bonasa bonasia*, will consequently improve.

C. To create a model of human-wildlife coexistence on ca. 80,000 ha by replacing trophy hunting with a system of damage prevention, rapid intervention for direct conflict mitigation, and innovative compensation measures. This model should restore and secure healthy populations of *Ursus arctos*, *Canis lupus*, *Lynx lynx*, and their prey species.

D. To foster the ecological integrity of the Fagaras Mts by removing at least 50% of all riparian invasive species from two mountain valleys, and by executing active conservation measures for listed species such as *Aquila chrysaetos* and their prey species *Marmota marmota* and *Tetrao urogallus*.

E. To develop a new economy based on conservation, which combines local economic development and creation of jobs with the long-term conservation goals of the Fagaras Mts.

F. To raise public awareness for conservation and protected areas and to engage local communities in achieving conservation objectives of the Natura 2000 sites by promoting natural and cultural values of the area through events and education programmes, on social media, through print and video material, and by developing through participatory management mechanisms and education programmes.

Actions and means involved

A. We will secure the full protection of 2,000 ha remaining virgin and natural forests by means of purchase **or**, in the case of ownership by land owners' associations or communes, signing conservation land easement contracts (B.1.1). We will identify the most valuable areas in the Fagaras Mts. (A.1), with a special focus on forests important to capercaillies (A.8) and achieve conservation status for these forests by stipulating their complete protection in the National Catalogue of Virgin Forests or the non-intervention area in the Management Plan of the Natura 2000 sites (C.1).

B. We will restore ecosystem processes for forest and grassland habitats in the Fagaras Mts by purchasing degraded habitats (B.1.2, B.1.3), which allows us to take all the measurements necessary to initiate a transformation of degraded habitats back to original ecosystems. This will be achieved by replanting the natural tree composition with saplings from our own tree nurseries or purchased from certified sources (A.5, C.2.1), establishing the forest floor on skidding tracks by filling them with timber leftovers and soil from the ramparts of the tractor tracks (C.2.2), cutting holes into the stands of spruce monocultures and planting them with missing species (C.2.3), and restoring alpine habitats with *Pinus mugo*, *Rhododendron myrtifolium* and *Juniperus comunis*, and distributing seeds of *Vaccinium myrtillus* or *V. vitis-idaea* from (C.2.4). We will complement rewilding of the area by re-introducing European bison and beavers in each three different sites (A.7, C.5) and intensively monitor their development and impact on habitat quality (D.4).

C. We will implement efficient methods to decrease human-wildlife conflicts in an area of ca. 80,000 ha with non-hunting policy, giving highest attention to prevent conflicts through best practice measures such as the provision of electric fences to livestock camps, the aversive conditioning of wildlife, or the provisioning of Carpatin livestock guarding dog pups to local livestock camps (A.9, C.4). We will also implement a joint livestock operation as an innovative in-kind compensation system to help sheep and cattle owners in case of losses to carnivores (C.4.3) and establish anti-poaching and rapid intervention teams (A9, C.4,1, C.4.2). A modern, non-invasive wildlife population and conflict monitoring will complement the evidence-based wildlife management model area (D.3, **D.X.2**). We will explore attitudes and beliefs of community residents toward controversial wildlife (A.10, D.6) and use this in targeted awareness and education campaigns to improve acceptance levels (E.2, E.3, E.4). The development of wildlife watching tourism will create the underlying economic basis for such a model of wildlife management (A.13, C.7).

D. We will work toward securing the **integrity of the Fagaras ecosystems**, which are facing threats due to past and present human activities and resource management. We will assess the current ecological status of selected listed species, key ecological corridors, socio-economic data, and needs for visitor management (A.3, A.6, A.11, A.12, E.1), to prioritise conservation or restoration areas, and to contribute to land use planning and improve current practices. We will directly target and promote the natural expansion of golden eagles (*Aquila chrysaetos*), prone to anthropogenic disturbances, by protecting the habitat of their main prey species, marmot (*Marmota marmota*) and capercaillie (*Tetrao urogallus*) (A.8, B.1, C.6, **D.X**). We will take steps to remove at least 50% of all invasive alien species in the riparian areas of two mountain valleys (C.3), and will monitor the effectivity of the implemented measures throughout the project period (D.2).

E. We will improve people's economic situation through the **development of a conservation enterprise programme** with investments in 10 enterprises in the field of eco-tourism, local food production, services, and small-scale processing of non-timber products to create economic advantages from conservation (C.7). We will set up the CARPATHIA fund, a regional conservation trust, offer training, and evaluate changes in sustainable livelihood activities and the socio-economic impact of project activities (A.13, A.16, D.3), which will be communicated to a wider public and used in the promotion of nature-based enterprises (E.2, E.5, E.6).

F. We will **engage local communities** through participatory management mechanisms and developing a stakeholder platform toward zoning and land-use planning for the conservation area (A.15, A.16, E.1). We will promote the non-extractive use of natural resources by common events, developing strong online media presence, and visits for journalists. Involving the civil society by producing dissemination material, developing

and ambassador, volunteer and education programmes (E.2, E.3, E4, E.6) will help to change perceptions of protected areas and will be assessed through human dimensions research (A.10, D.6).

Expected results

A. At least 2,000 ha of natural forests (with at least 1,000 ha 9410 and at least 600 ha 9110 habitat) have been purchased or are under an agreement for conservation with compensation payment and have obtained a full protection status.

B. Two large and at least 5 small natural tree nurseries have been established to grow a minimum of 500,000 saplings. At least 1,300 ha of degraded forest habitats and alpine areas have been purchased and restored: at least 200 ha of clear-cuts have been restored to 9110 habitat, at least 200 ha clear-cuts to 9410 habitat, and at least 50 ha clear-cuts to 91E0* habitat. On further 500 ha spruce monocultures the process to converted them into natural habitat has been initiated (at least 400 ha toward 9110 habitat; some 91E0*), and on 300 ha alpine areas, 4060 or 4070 habitats have been reinstalled with alpine shrub species. A total of 75 bison and 90 beavers have been released into three distinct valleys and have started to reproduce in the wild.

C. A model wildlife monitoring and management system with a non-hunting policy has been established on 80,000 ha and conflict mitigation measures have decreased wildlife-human conflicts by at least 20%, livestock depredation by large carnivores has decreased at least by 25%, and acceptance levels toward bison and beavers have increased by 20%.

D. An analysis of the current ecological status of selected listed species and the presence of ecological corridors has identified conservation and restoration areas on about 200,000 ha and this knowledge is available for conservation friendly land-use planning. At least 50% of the invasive alien plant species have been removed from two mountain valleys. The situation of golden eagles and their prey species (capercaillie and marmot) is understood and conservation measures for them have improved habitat conditions on at least 1,000 ha.

E. A conservation enterprise programme has created a minimum of 10 nature-based enterprises, employing over 50 people as their primary source of income. Consolidated, these businesses will be generating in excess of €2 million of gross income per annum by 2023 and contributing at least €20,000 in conservation payments per year to pre-determined conservation activities within the programme.

F. Local communities have been engaged in the process of developing the Fagaras National Park and at least 50% of the local communities, which have been invited to a stakeholder platform about zoning of the future national park have participated in the process. Five annual events took place in the villages, and at least 50 decision makers of the local communities participated in study trips to model conservation areas. Disseminated print material, volunteer and education programme, and information published on social and traditional media has increased public knowledge about conservation in the Fagaras Mountains and has improved acceptance levels for a wilderness reserve by at least 20%.