

Background:

The ultimate goal of our project is to create a world-class wilderness reserve in the Southern Carpathians, large enough to allow natural processes to take place, to benefit biodiversity and local communities, and to serve as a model for a future National Park movement in Romania.

Vegetation survey and monitoring:

1. The habitats restoration (forests, riparian habitats, subalpine dwarf shrubs and meadows) is a long-term process, therefore we are monitoring indicators that are capable of tracking these changes over an extended period of time, while at the same time they can detect responses of our specific measures.

FCC's specialists developed several monitoring protocols focused on vegetation that are sensitive to changes following habitats restoration and feasible to be implemented. For example, 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. Information on the abundance of other understory plant species provides contextual information on the impact of background changes in plant species populations, for example due to weather, or the elimination of the human impact as a consequence of land-use change.

2. The reintroduction of European bison into a mountainous forest area in the Southern Carpathians is likely to increase the ecological integrity and habitat heterogeneity of the area.

Here we will focus upon understanding the effects of reintroducing bison on the vegetation structure. Primarily feeding on grasses and herbs, bison are also known to consume woody plants, browsing on twigs and debarking trees in winter. In addition, their trampling action helps to open up areas and break up the ground such helping to create a more diverse and healthy forest structure.

Our hypothesis is that the presence of bison will increase the vertical stratification and plant species diversity, increase the abundance of woody seedlings, increase the cover of herbaceous species in the areas of bison release compared to untreated reference sites.

Intern Opportunity:

We are now offering 4 volunteer positions (min. 4 weeks) for biology/ecology students at the Foundation Conservation Carpathia during the summer months (June - August). This is a good opportunity to develop graduation thesis, Master thesis or even PhD thesis, as well. The students will gather valuable data in the field, in collaboration with our specialists and rangers

During these months, the students, master students or Phd Students can participate and will get insight into our vegetation and habitats survey and monitoring such as:

- Forest understory vegetation baseline survey and monitoring;
- Riparian habitats baseline survey, evaluation of the conservation status and mapping;
- Identification of alien invasive plant species, mapping and quantifying the invasion;
- Subalpine and alpine meadows vegetation survey and monitoring;
- Vegetation monitoring in the areas of bison release compared to untreated reference sites;
- Plant species identification and data analysis.

Applicants should have the following attitudes:

- Experience and knowledge in mountain and subalpine flora and vegetation;
- Good skills in plant species identification;
- Good physical condition for field work in a mountain area;
- Willingness to work in the field long hours;
- Experience in statistical analysis of vegetation data is a plus.

Applications

If you are interested in an internship at the Foundation Conservation Carpathia, please send your application with a letter of intent by email to o.pop@carpathia.org and a.boghiu@carpathia.org.