

## Project Update: October 2018

There are a very few data about oligotrophic freshwater habitats in the area of Vranica mountain. Due to global climate change and intense anthropogenic activities, the reduction and threatening of these types of habitats in the area of Vranica are increasing each day. In order to protect these habitat types and high diversity of species, it is necessary to assess their condition.

The main aim of this assessment is to establish a database of abiotic and biotic parameters. The database will enable further action, especially towards their restoration, conservation and long-term monitoring of the biodiversity. A diversity of diatoms were taken as a tool for assessment of the state of oligotrophic freshwater habitats in the area of Vranica Mountain.

Diatoms are a very diverse group of unicellular microalgae universally distributed in all types of aquatic environments. Diatoms can be applied in general aquatic bioassessment, which uses species richness, composition and abundance to assess anthropogenic impacts on aquatic environments, and global changes in biodiversity. Habitat destruction and eutrophication threaten many diatom species with extinction. The most threatened taxa are believed to be those that occur only in restricted habitats and are usually found in low numbers.

Five main practical conservation outputs will be derived from this project:

1. identification and mapping of oligotrophic freshwater habitats in the wider area of Vranica mountain,
2. developing robust field survey protocols for continuous and long-term monitoring of the biodiversity, with special emphasis on diatoms,
3. transfer of knowledge and training of young researchers in the field of restoration and conservation ecology,
4. dissemination of knowledge and raising of ecological awareness about the values and importance of oligotrophic freshwater habitats, and
5. creating plans for the future restoration and conservation activities of oligotrophic freshwater habitats in Bosnia and Herzegovina.



Conservation of Freshwater Oligotrophic Habitats on Vranica Mountain and Establishment of Long-Term Monitoring of Biodiversity Rufford - Photo diary (Day 8)















#### Plans for future

In order to protect these habitat types, in the future it is necessary to establish a long-term monitoring of biodiversity, as well as their condition. The aim of this monitoring is to create a plan for the future restoration and conservation activities of these very unique and sensitive habitat types and to protect high degree of species diversity.

#### Rufford - Photo diary (Day 9)

















Highlights - Tales from the Lab









