

Project Update: October 2023

Based on the Rufford Foundation grant for the project entitled "Monitoring and Assessment of the Serpentine Floristic Diversity with the Focus on the Endemic Species and *Paraceterach marantae* (L.) R. M. Tryon (Pteridaceae)", we present the project update for the period June through October 2023.

The previous fieldwork was carried out during six field trips to determine the floristic composition of the Brdjanska Gorge area from the foot to the summit, as well as the abundance of *Paraceterach marantae* species. The second part of fieldwork was carried out during four field trips. The seventh field was conducted on July 20, 2023, to list species characteristic of the summer aspect. The eighth field was conducted on August 24, 2023, to list species characteristic of the late summer aspect. The ninth and tenth field were conducted on September 24, and October 23, 2023, to list species characteristic of the autumn aspect.

During the initial months of this study, our primary emphasis was directed toward an exhaustive investigation of the target species. This entailed the execution of field surveys aimed at the identification of ecological niches and the demarcation of the species' spatial distribution. A meticulous observation log was maintained, facilitating the documentation of pertinent information concerning the quantitative representation of the species. Concurrently, on each trip to the field, photographic documentation was made of the various plant species encountered, and specific spatial locations of select specimens were geographically mapped. Upon the completion of these fieldwork sessions, comprehensive taxonomic classification procedures were applied to accurately identify the collected species.

To date, more than 100 plant species have been identified, belonging to different families, such as Poaceae, Caryophyllaceae, Fabaceae, Asteraceae, Lamiaceae etc., there are also species with a certain degree of endangerment and protection categories.

The following species have been identified so far: *Allium moschatum* (Fig. 1), *Asplenium adiantum-nigrum*, *Cotinus coggygria*, *Artemisia alba*, *Teucrium montanum* (Fig. 2), *Sedum acre* (Fig. 3), *Sedum album*, *Euphorbia cyparissias*, *Cytisus nigricans*, *Robinia pseudacacia*, *Hypericum barbatum*, *Fraxinus ornus*, *Festuca valesiaca*, *Potentilla tommasiniana*, *Acer tataricum*, *Viola tricolor*, *Minuartia verna* (Fig. 4), etc.



Figure 1. *Allium moschatum* (Amaryllidaceae) Figure 2. *Teucrium montanum* (Lamiaceae)



Figure 3. *Sedum acre* (Crassulaceae) Figure 4. *Minuartia verna* (Caryophyllaceae)

Installing information boards (Figure 1-5) in Brdjanska Gorge is a pivotal step in raising awareness and engaging the local community in the protection of endangered species in this precious habitat. These boards serve as educational tools, offering essential information on the unique serpentinite flora. They will not only inform residents and visitors about the fragile balance of this environment but also provide guidance on how to contribute to its preservation. Through captivating visuals and informative text, the information boards will convey the significance of conserving endangered species, emphasising their roles in maintaining the ecosystem. By fostering a sense of responsibility and understanding among the local community, these boards will empower individuals to make informed choices and take action to safeguard the biodiversity of Brdjanska Gorge for generations to come.

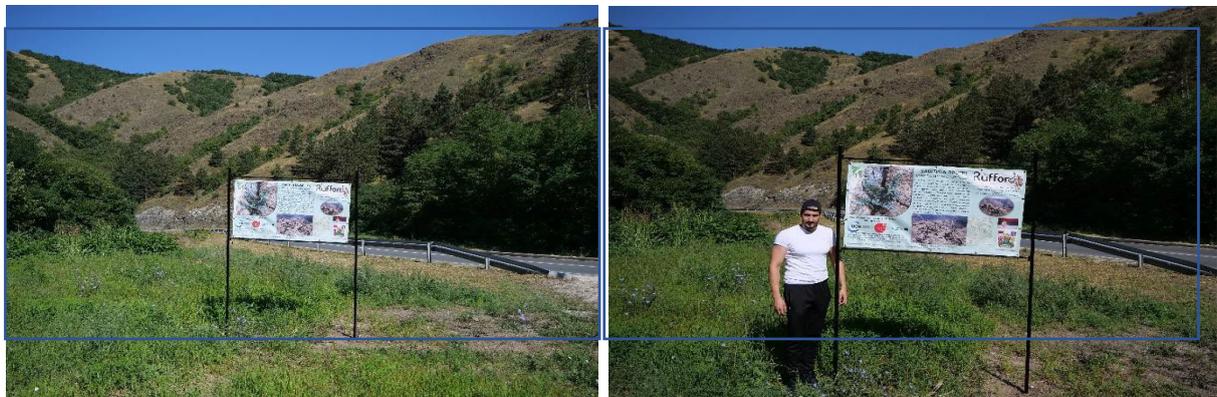


Figure 1. Information board No. 1

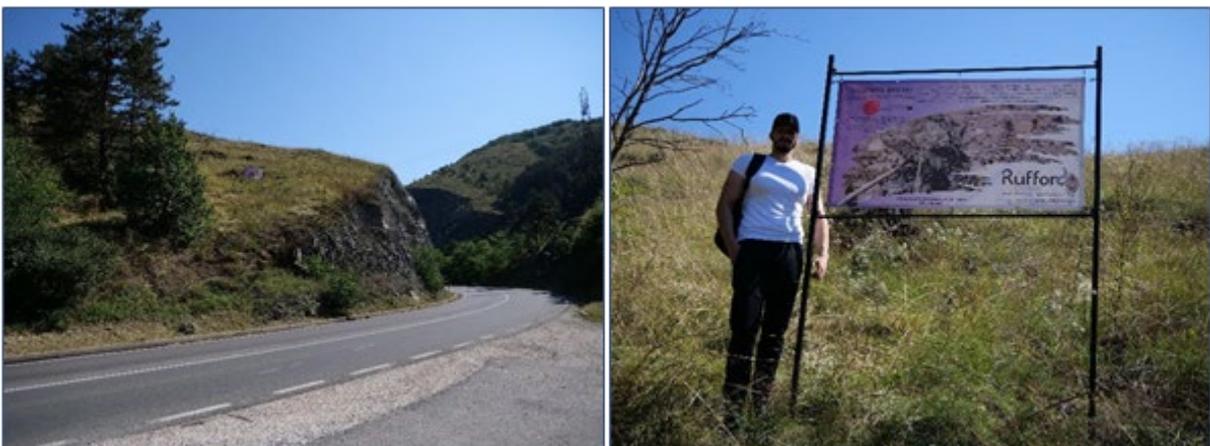


Figure 2 Information board No. 2



Figure 3. Information board No. 3



Figure 4. Information board No. 4



Figure 5. Information board No. 5

During the latter quartile of the project's second phase, an array of initiatives was undertaken with the objective of investigating and propagating awareness regarding the preservation of the investigated species. These undertakings have significantly augmented our comprehension of both the population distribution and the perils confronting the species. In the forthcoming months, a series of lectures are envisaged as an integral facet of the project, with a specific emphasis on serpentinite floristic diversity, centering on the endemic species and *Paraceterach marantae*.