

Project Update: December 2016

1.1) Procurement of equipment

Most of the equipment necessary for the fieldwork is already procured in the first project stage. Procurement of the electronic equipment (laptop) is underway.

1.2) Field investigations

In this project period field investigations of Martinos Snow vole were conducted on eight mountains: Bjelašnica (6 -7 August), Treskavica (9 – 11 September), Jahorina (27 – 28 August), Prenj (27- 28 September), Crvanj (23- 24 July), Zelengora (10 – 12 August), Velež (25 – 27 September), and Čvrstica (13 – 15 August).

In total, on each field visit, 50 Sherman LFG traps were fragmentally set on rocky limestone ground, accumulations of rocks and boulders and similar habitats. All traps were set above 1300 m asl, on average height of 1500 m asl. In addition, the habitat of the species was also investigated and so far trapping was done on these habitats:

- Alpine and boreal heaths.
- Alpine and subalpine calcareous grasslands.
- Calcareous and calchist scree of the montane to alpine levels and limestone pavements.
- Karstic sinkholes.

During the field investigation, attention has been given to cover as many different microhabitats close to the rocky parts in order to gain more knowledge about the ecology of species which is so far quite unknown. During trapping set of minimum 10 traps were set on different habitats in one area to cover as much different microhabitats of location as possible. During the trapping on other eight mountains only one specimen of Martinos vole was caught on Mt. Zelengora on Orlovac locality (1800 m asl). Additional to this the abundant of other small mammal species were caught on Mt. Čvrstica and Mt. Prenj. These species include *Myodes glareolus* (Schreber, 1780.), *Apodemus sylvaticus* (Linnaeus, 1758) and *Apodemus flavicollis* (Melchior, 1834).

1.3) Project difficulties

During the field trapping on Mt. Treskavica, we could not cover the desired area because of the possible minefields in the area. Safety of the team is priority so we found a nearby area that was free from the mine threat. During the trapping on Mt. Crvanj, Mt. Zelengora and Mt. Velež there was a lot of rainfall in all trapping days and nights except one (the first) night on Mt. Zelengora. During the trapping on Mt. Prenj average temperature during the nights was 0°C. The planned Facebook group “small mammals of Bosnia and Herzegovina” was put on hold during some permissions needed for using the Bosnia and Herzegovina name.

1.4) Media and other coverage (Project dissemination)

The project was covered by the electronic media (web portals and radio). The first media cover was done by web portal and radio “Foča” during the field trapping on Mt. Zelengora (<https://1drv.ms/b/s!AgPZYB2Ok99IgpVEaYgY-5QWNQBquw>).

The Society of Biology Students in Bosnia and Herzegovina found out about the small mammal research so they invited me to their 2016 Biology Camp held in Stolac to be in the mentors in mammal section and to held a presentation about the small mammals and to done a field trapping demonstrations. The pictures from the camp are on the following link: <https://1drv.ms/f/s!AgPZYB2Ok99IgpVF9NgNyBS59cGYYg>.

The Hydro-Engineering Institute Sarajevo organised the series of presentations for a managers and staff of Protected Areas in Bosnia and Herzegovina and governmental sector (Ministry of Environment). One of the theme was monitoring of life in protected areas. I was invited to hold a presentation on mammal monitoring which include the monitoring of small mammals and this current project. The pictures from this presentation is on the flowing link: <https://1drv.ms/f/s!AgPZYB2Ok99IgpVWAbfoEZ8sPBj6A>.

The project video, recorded on Mt Trebević with trapped individual of Martinos vole was placed at YouTube after the montage. The video is available on following link: <https://www.youtube.com/watch?v=0JO5NWxlQBI>.

In December 2016 the scientific paper about the project was done and sent for printing. The paper name is: “Preliminary research results on the Martinos vole species (*Dinaromys bogdanovi* (Martino, 1922)) in Bosnia and Herzegovina” with the so far obtained project results and conclusions. The paper will be printed in publication “Our karst” (“Naš krš”).

We also prepared the text for the ecological magazine “Fondeko” about the Martinos vole species and current research. The publication is currently waiting for printing approval.

1.5) First year project preliminary conclusions

Most of the preliminary conclusion are as follows:

1. The species is not active on surface during the rainy days/nights.
2. The species is absent on any other habitat type except the medium – sized rock boulders.
3. The species habitat is largely fragmented.
4. The species main diet are mountainous succulent plant species.
5. The population of the species are endangered due to the small population size, human interventions in nature and competition with other, more adaptable species.

1.6) Planes for the next investigation period (January-June 2017)

During the winter months it is planned to obtain the necessary permissions for the research in 2017 from the Ministry of Environment in the Republic of Srpska Entity. Also the team needed to finish the dynamics of research plan for 2017. The finalization of procurement for electronic equipment (laptop) should also be done. The minimum of four mountains needs to be finish in spring period, but that depends on the weather conditions on high mountains.

1.7) Pictures



Trapping on multiple sinkholes on Bjelašnica Mountain (6th and 7th of August 2016.).



Settings of traps in a sinkhole on Bjelašnica Mountain (6th and 7th of August 2016.).



Placed traps on medium-sized rock boulders) on Mt. Jahorina (27th and 28th of August 2016.) – position of the traps were marked with orange mark.



Setting the traps on large to medium – sized limestone rock boulders (Prenj 27th and 28th of September 2016)

1.8) Other

The best time to trap these species is apparently during the spring season, when they gathering food at surface after the winter hibernation. So, we will try to done the majority of the field visits during this season in 2017. Trapping during two or more nights also showed better results in small mammal trapping, so we will try to stay on field as many possible nights as the weather conditions allow.