

## Project Update: July 2021

On our second field trip we split into two teams. One team went directly to the island, while the other traveled around major Macedonian cities (Skopje, Prilep, Bitola) to do promotional and educational activities. Although partially off the strict COVID rules, it's still quite difficult to organise any large gatherings. This is partly due to remaining guidelines and because of the general fear in Macedonia about COVID. Nonetheless we managed to obtain useful information. It seems that word about our project has reached some part of the population, but mostly students and activists from different ecological societies. However, we are still missing an efficient way of spreading information toward the older populace. It seems that the majority of people, despite the educational and promotional efforts made by our team and MED, remain unaware of the problems surrounding them.

We also managed to organise a workshop on Mal Grad Island with students from Albania, University of Tirana, Macedonia, University of Skopje, and Serbia, University of Belgrade. Along with students, rangers from National Park Galičica and National Park Ezerani, activist from PPNEA (Protection and Preservation of Natural Environment in Albania) and MED were present there. An immediate outcome of these activities was a decision that the island of Mal Grad is a definite future conservational priority. The island, although smaller than Golem Grad, has almost the same herpetofauna and faces similar threats. Therefore, combining the knowledge gathered in the last 14 years on Golem Grad, along with activities that we performed during our project, will give us adequate tools how to help mitigate threatening factors present here.

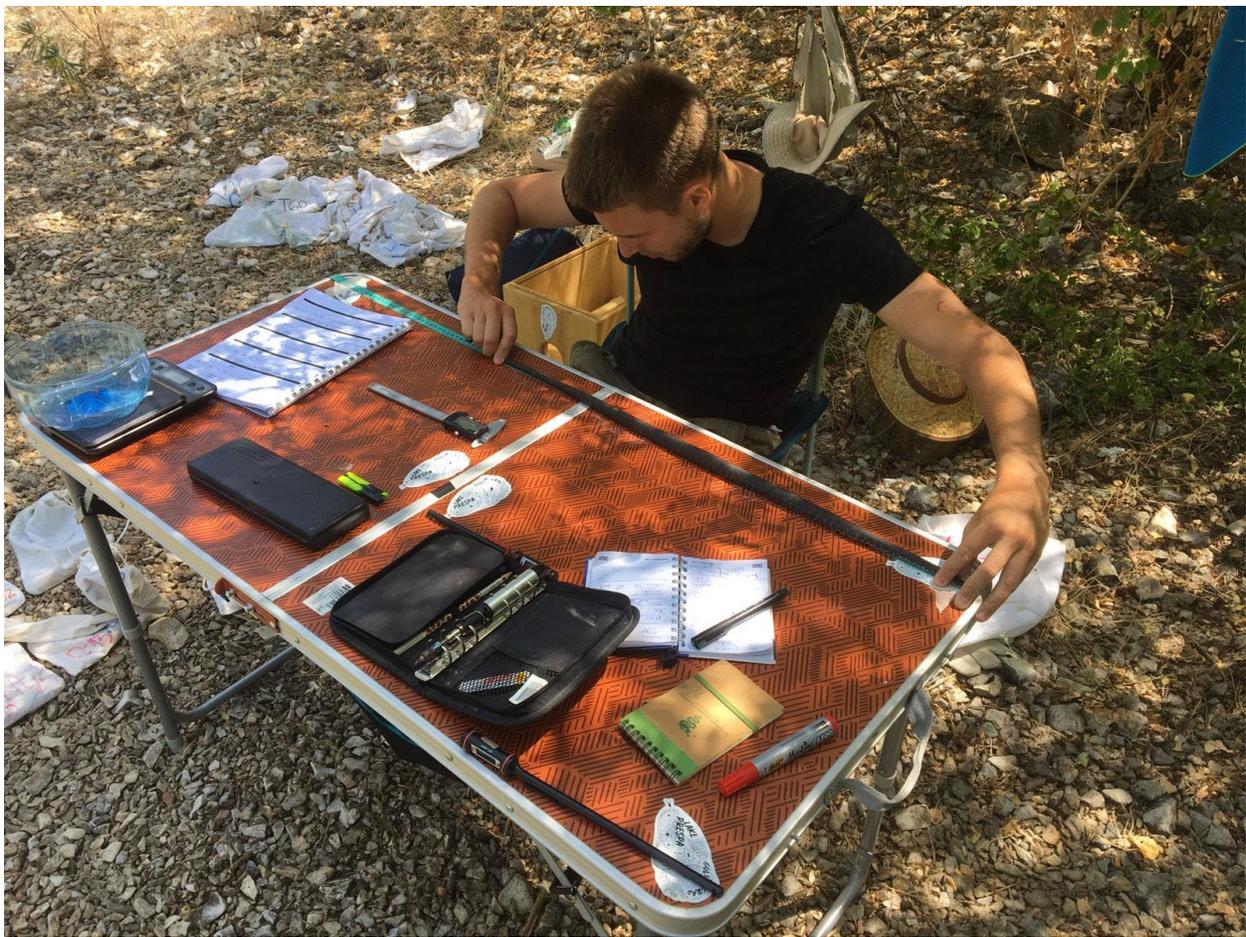


An in-situ workshop with students and rangers

We had the opportunity to talk to the locals of Konjsko and Stenje, who usually organise the tours to the island. It seems that this year the number of tourists has definitely dropped when compared to the years before COVID. Also, tourists are mostly from Macedonia and Serbia, probably the much harsher travel regulations in EU are constraining travel to North Macedonia. Few of the locals actually guide the tourists around the island, while some leave them free to roam the island.

During our stay on the island, we counted four tour ships, averaging approximately four tour boats mostly from NM. Smuggling ships were much more frequent, usually starting around dusk (8/9 pm) and going well past midnight. Illegal fishing activities were also more frequent. In spite of this, all the dice snakes were well fed and had fresh fish in their stomachs. We also spotted several schools of fish around the island which hasn't been spotted for several years.

As far as our field activities, we were quite successful. We again processed around 200 tortoises, while at the same time trying a new methodology to check whether the females have young. A team of veterinaries brought a portable ultrasound machine which was then directly tested on female tortoises of the island.



Our MSc student Stefan working with dice snakes for his thesis

We processed 26 vipers, which were also active and in good state. Ten of those animals were gravid females that had from two to six babies.

The dice snakes were also in good condition. There were plenty of snakes in the water, on land and even in the trees. On the island and for our work with dice snakes we were joined by Xavier Bonnet, a world-renowned herpetologist that actually started ecological studies on Golem Grad exactly 15 years ago. Not only did he immensely help our field activities but is looking forward to spread word about our project further and potentially assist in further projects.

A common cause between our team and the MED is forming. Possibly, further promotional and educational activities in local communities around the island are necessary. Teaching students and allowing them to have the opportunity to participate in projects such as these is of utmost importance and further activities around this route must be taken. At least for now, a simple and practical solution for free roaming tourists would be signs along the beaches and tracks. That along with our posters and brochures should be an effective way of managing this potential threat.

For fishermen that potentially participate in poaching there is no clear method of mitigating those effects. The situation seems more complicated the more information we obtained. For example, the island itself is in the jurisdiction of the National Park Galičica. The Prespa lake that surrounds the island is in the jurisdiction of National Park Ezerani. So, if we were to effectively protect the dice snakes it would have to be a joined effort between these two government bodies that doesn't seem likely. Although efforts are being made it seems that it's completely politically controlled. The station that was supposed to sell tickets, that we mentioned in our previous report, is placed and should begin operations, but it's not known exactly when. An effective solution would be an exclusion zone around the island that would prohibit boats, both for fishing and tourists) to travel around the island and leave just one beach for controlled tours.