

### **Final Evaluation Report**

| Your Details        |   |  |  |  |  |  |
|---------------------|---|--|--|--|--|--|
| Full Name           | Dragana Šnjegota  |  |  |  |  |  |
| Project Title       | Co-Existence of Wolves and Jackals in Bosnia and<br>Herzegovina |  |  |  |  |  |
| Application ID      | 39157-D   |  |  |  |  |  |
| Date of this Report | 13.11.2023.   |  |  |  |  |  |



#### 1. Indicate the level of achievement of the project's original objectives and include any relevant comments on factors affecting this.

| Objective   | Not<br>achieved | Partially<br>achieved | Fully<br>achieved | Comments   |
|---|-----------------|-----------------------|-------------------|--|
| to collect data for the first<br>time on the overlap of<br>wolf and jackal territories<br>throughout BIH using<br>drones.   |                 |                       |                   | While our drones successfully captured<br>paw prints and faeces in the<br>challenging, remote terrain, the elusive<br>species itself remains beyond our visual<br>grasp. Our footage did reveal the<br>presence of wild dogs, prompting us to<br>intensify our monitoring efforts.   |
| to collect information on<br>the presence and activity<br>of wolves and jackals<br>throughout monitored<br>area via surveys.  |                 |                       |                   | The collaboration with diverse<br>segments of the local community has<br>yielded valuable insights into the<br>activities of wolves and jackals. The<br>collected information forms a crucial<br>foundation for our ongoing research<br>and conservation initiatives.  |
| to collect samples of<br>wolves and jackals for<br>genetic (laboratory)<br>analyses.  |                 |                       |                   | After successfully collecting samples,<br>our team has already published one<br>paper, showcasing our initial findings.<br>Simultaneously, we are preparing<br>another paper to get deeper into our<br>research. We also remain committed to<br>the ongoing process of sampling,<br>seeking to broaden our understanding<br>and contribute further to the scientific<br>community. Our dedication to<br>advancing knowledge in this field fuels<br>our ongoing efforts.  |
| to collect information<br>from livestock farmers in<br>monitored area on i) their<br>experience with wolves ii)<br>methods used to prove<br>that wolves attacked<br>livestock iii)<br>compensation they<br>received from relevant<br>ministries when wolves<br>caused damage and iv)<br>concrete measures they<br>propose for benefit of<br>wolves and themselves |                 |                       |                   | One of the most important objectives in<br>this project was to formulate a<br>comprehensive set of measures for<br>effectively managing wolf populations<br>while safeguarding livestock. Engaging<br>with livestock farmers throughout<br>Bosnia and Herzegovina proved<br>instrumental, as we gathered<br>invaluable insights crucial for creating<br>an action plan for wolves. The<br>information obtained from these<br>conversations serves as a keystone in<br>developing sustainable strategies that<br>balance the conservation of wildlife |



|   |  | and the protection of livelihoods.   |
|---|--|--|
| to finalize report<br>containing the<br>summarised data of all<br>projects to be shared<br>with all relevant<br>institutions and individuals<br>involved in the<br>preparation of legislation<br>for the conservation of<br>wolves. |  | Having concluded our research, we<br>have presented the finalised results to<br>key institutions and individuals with the<br>primary responsibility of formulating the<br>conservation action plan for wolves.<br>This dissemination of the results presents<br>a crucial step towards informed<br>decision-making and collaborative<br>efforts in ensuring the coexistence of<br>wolves and local communities. The<br>engagement with these stakeholders<br>underscores our commitment to<br>fostering effective conservation<br>strategies and promoting a harmonious<br>balance between wildlife preservation<br>and human interests. |

#### 2. Describe the three most important outcomes of your project.

- 1. Building on a decade of continuous monitoring, we have successfully organised meetings with relevant institutions in both entities of Bosnia and Herzegovina. Presenting key findings from our field and laboratory work, we have initiated preparation of the country's first ever action plan for managing wolves. This crucial step reflects our commitment to evidence-based conservation and proactive wildlife management.
- 2. Our genetic analyses and morphological assessments have successfully documented hybrids of wolves, jackals, and wild dogs in Bosnia and Herzegovina, a groundbreaking revelation set to be published soon. The identification of hybrids, coupled with insights into the overlapping territories of wolves and jackals, raises concerns about the genetic purity of both species in the future. This pioneering research sheds light on the intricate dynamics of wildlife interactions in our region.
- **3.** Engaging with livestock keepers, we have gathered valuable opinions and insights into their needs regarding the protection of both livestock and wolves. This stakeholder input is integral to our comprehensive action plan for managing species, ensuring a holistic approach that considers the perspectives and concerns of the local community. By incorporating this information, we aim to foster a balanced coexistence between wildlife conservation and the livelihoods of those sharing the landscape with these remarkable species.

## 3. Explain any unforeseen difficulties that arose during the project and how these were tackled.

We did not encounter any unforeseen difficulty during this project.



## 4. Describe the involvement of local communities and how they have benefitted from the project.

The local community has played an integral and ongoing role in our project, actively contributing to the preparation of the management plan for wolves. Their input is not only valued but will be fully incorporated into the final document. This two-fold benefit is evident: on one hand, we have embraced and integrated valuable suggestions from the local communities, ensuring that their perspectives shape the management strategy. On the other hand, we are strategically planning to enhance livestock protection by implementing electric fences, a measure that directly responds to the concerns and needs expressed by the community. This inclusive and cooperative approach underscores our commitment to a holistic and community-driven wildlife management strategy.

#### 5. Are there any plans to continue this work?

Yes, definitely.

- i) The use of drones and photo traps for monitoring will persist as a keystone of our long-term conservation strategy. Continuous surveillance remains imperative for the preservation of species, and we are committed to ensure the sustained monitoring and protection of the wildlife in our region.
- ii) In our effort to mitigate human-wildlife conflicts and provide practical solutions, we are planning to offer electric fences to livestock keepers. We are optimistic about the potential support from The Rufford Foundation, recognising the crucial role such measures play in promoting coexistence and safeguarding both wildlife and livelihoods.
- iii) Our commitment to genetic monitoring remains persistent, and we will continue to collaborate with our partners from other faculties and institutes. This collaborative effort enhances the scope and depth of our genetic studies, contributing valuable insights into the dynamics of local wildlife populations.
- iv) A fundamental step in our ongoing efforts involves the preparation of the first ever management conservation plan for Bosnia and Herzegovina. This groundbreaking document is a testament to our dedication to the long-term preservation of the region's biodiversity. We are fortunate to have the support of various institutions, which will undoubtedly enrich the comprehensive nature of the conservation plan, ensuring a sustainable and well-informed approach to wildlife management in the years to come.

#### 6. How do you plan to share the results of your work with others?

Our commitment to transparency and knowledge sharing is reflected in the continuous dissemination of our results within the scientific community through conferences, meetings, and scientific papers. As we finalise the management plan for wolves in collaboration with relevant institutions, our dedication to accessibility



will continue. The comprehensive plan will be distributed to all relevant institutions, organisations, farmers, and individuals, making it publicly available on the internet. This approach ensures that the knowledge and strategies developed are widely accessible, fostering a collective understanding of and participation in wildlife management.

In recognition of the broader societal impact of our work, we are actively engaging with national media. We have been invited to contribute an article and podcast for national TV, shedding light on our projects, actions, and results. Additionally, we are in the process of preparing an article for a journal focused on nature and biodiversity in Montenegro, amplifying the reach of our actions beyond national borders.

#### 7. Looking ahead, what do you feel are the important next steps?

Addressing and incorporating farmers' suggestions into our wildlife management strategy is paramount. By actively responding to their concerns, we not only acknowledge the importance of their perspectives but also demonstrate our commitment to a collaborative approach. The provision of electric fences stands as a concrete measure, underscoring the seriousness of our plan to safeguard both wolves and livestock. This proactive step not only mitigates potential conflicts but also fosters a harmonious coexistence between wildlife and the agricultural community. In doing so, we aim to ensure the success of our management plan, cultivating a shared responsibility for the preservation of both ecological and economic interests in the region.

Furthermore, recognising the emerging threat of hybridization among wolves, we emphasise the continued importance of field and genetic monitoring. Ongoing surveillance remains critical to understanding and responding to the dynamics of this process.

# 8. Did you use The Rufford Foundation logo in any materials produced in relation to this project? Did the Foundation receive any publicity during the course of your work?

Yes, absolutely.

#### 9. Provide a full list of all the members of your team and their role in the project.

**Dragana Šnjegota** – Team Leader; planned, organized and conducted all project activities.

Tom Thorley – Team Member; support in organizing field activities and providing terrain cars.

Kamila Plis – Team Member; assisted with genetic analyses.



**Richard-Harrison Cripps** – Team Member; contributed significantly to the logistics of field activities and voluntarily assisted in the preparation of official documents and publications in English.

Nikola Živanić and Nemanja Kralj – Team Members; education of the team on drone usage.

Volunteers of the Republic Volunteering Service – assisted with the field monitoring.

**Tanja Šnjegota** – contributed in both, field activities and providing office space, along with necessary equipment for our meetings.

#### 10. Any other comments?

We extend our heartfelt gratitude to The Rufford Foundation for your support throughout these years. Your assistance has been instrumental in enabling us to gather a wealth of information and embark on initiatives such as preparing the action plan for wolf management. This undertaking stands as a testament to the collective dedication and hard work invested over the years in the preservation of wolves. Collaborating with relevant institutions, we are on the brink of finalising a comprehensive document that summarises our long-term efforts. The forthcoming action plan is not only a culmination of our endeavours but also an example of hope for the sustained preservation of wolves in the years to come. We are immensely grateful for The Rufford Foundation's partnership, which has been fundamental in turning our conservation ambitions into concrete and impactful outcomes.

We sincerely thank to all our collaborators who provided additional support, be it through funding, co-authorship in scientific papers, serving as referees, or participating in our questionnaires. Livestock keepers and all those who shared their insights and experiences have played an integral role in our project, making them indispensable members of our extended team. Their collective efforts and support have been instrumental in bringing this project to realisation. Together, as a united team, we have achieved significant milestones, and we are grateful for the collaborative spirit that has defined this journey.







