

Final Evaluation Report

Your Details	
Full Name	Bedirhan EKER
Project Title	Determination of habitat preference and population status of otter (<i>Lutra lutra</i>) in Antalya province Köprü Stream and Manavgat Stream basin.
Application ID	37364-1
Date of this Report	30.08.2023

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

Objective	Not achieved	Partially achieved	Fully achieved	Comments
<p>Obtaining information about the project area and its immediate surroundings, general fauna, flora, settlement, protected areas. Carrying out surveys with the people of the region where the otters are potentially found and with the trout facility businesses, which are determined on the map with this information.</p>				<p>As a result of the field studies carried out at different times in the project area, all the information and documents about the current information about the area, the state of the vegetation, the changes in the area (construction works, infrastructure and road works, landscaping, fishing activities) were evaluated. Information about the species was obtained through direct and indirect observations, and factors such as the presence of the species, vegetation, water and animal species living in its vicinity were evaluated with the survey studies we carried out from signs, areas with footprints, nest entrances, food residues, faeces and hair samples were plotted on the map.</p>
<p>Monitoring the species by direct and indirect methods. Realization of camera trap studies as a result of these observations.</p>				<p>The study started with 15 camera traps. The coordinates of these camera traps were recorded, the recorded data were mapped in geographic information systems. The locations of the points where the otter image was obtained with the camera traps placed in the field were processed on the maps, the localities used by the species were determined in the study, and the most active points were mapped with the hot spot method. The camera traps are placed in such a way that they cannot be noticed by the users of the area. Motion pictures are also obtained by adjusting the camera traps for video shooting. In order to observe the possible behaviours of otters in the water such as feeding, resting, escaping, courtship, and mating, remote binoculars were</p>

			observed from the dominant points that see the area. Observation studies were carried out in the early morning hours, considering that the daily activity of the species. However, the species could not be observed directly.
Studies carried out with the aim of raising public awareness and raising awareness about otters.			Presentations were made in schools in the region and information was given about the importance of the species. The tradesmen of the region were visited to introduce the project to the public, and the importance of the project for the survival and protection of the species living in the region was explained. Hand posters were prepared to raise the awareness of the people of the surrounding area, and posters were distributed to official institutions and social areas used by the public and hung. In order to convince this species not to kill this species, information was given by talking with the local people who use water bodies and resources, and by visiting the commercial centres engaged in fishing activities in the region, information was conveyed within the scope of the project in order to minimise the conflict with the otter.

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

a). As a result of the surveys and interviews we conducted in the study area, it enabled us to make an accurate analysis of the human-otter conflict level. We have determined with the results of the survey that the people who make their living in the area with ecotourism do not have knowledge about the species and their attitudes towards the species are negative. Our results show that fishermen, especially those who make a living from commercial fishing, tend to have negative opinions about otters. Based on our conversations, the biggest threat to otters in the region appears to be hunting. We think that we will ensure the continuity of the species in this area as a result of the information and awareness studies we have carried out on the importance of the species.

b). It was determined that otter populations prefer areas where there is no human pressure in the results of the analysis made with 15 camera traps set up to obtain basic information about the status and distribution of the otter population in the field. As a result of the direct and indirect observation methods we used, the recorded signs were detected in areas where there was no or less ecotourism. As a result of the survey and interview, the species was more common 10 years ago,

while a decrease in the population of the species was observed as a result of the rafting, trekking and fishing activities carried out in the region during our study. This showed that the otter population in the study area was in a small region contrary to what was thought, and the population density was in decline.

c). We see it as the most important result of our project to change the negative opinion of society on otter populations. During the survey and interviews we conducted, we also gave information about the species to the people of the region, explained the importance of the species and explained the importance of the otter populations in the area for the ecosystem. At the same time, we created an awareness for young people with the conferences we held at different schools in the field. During these studies, we think that we have created a strong foundation for conservation programs and sustainable development programs by providing various information about not only our target species but also other wild animal species in the area.

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

Due to the difficult terrain conditions, we sometimes had difficulties in reaching the areas where we thought to place camera traps. The information we obtained from the local people supported us in this regard, and we provided access to the regions we wanted to reach with different alternatives. The people of the region had negative attitudes towards such research, because they thought that such research would reflect negatively on their ecotourism activities. Since the areas where we placed the camera traps were heavily used by the people of the region, the risk of loss and theft of the camera traps was quite high, however, camera traps were placed along the line to complete our work. We were pleased with the supportive attitude of the leaders in the region in achieving this. Since there were cliffs in certain parts of the land in the area where we installed the camera traps, it required us to install the camera traps close to the water, and with the increasing height of the water, three of our camera traps were submerged. The survey and interview studies carried out were very important for raising awareness, but we sometimes had difficulties in convincing the people of the region to these studies, we persuaded some tradesmen in the region to help us, and we carried out our work in this way.

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

The attitudes of the local people at the beginning of the project were negative due to the idea that it would negatively affect the ecotourism activities they carried out. However, during the interview and survey work, we managed to get their support by explaining the importance of these studies for sustainable ecotourism. The public actively supported our project at every stage of the project. Public support was very important for us from exploratory research to the completion of the project. During our project, while conducting our interview and survey studies, more than 300 people were directly involved in our studies. As a result of the information, we gave to the young people in the region about sustainable development during the

conference study, which is the last stage of our project, we ensured that the local population was informed about the continuity of ecotourism activities.

5. Are there any plans to continue this work?

This project we carried out enabled us to obtain preliminary information about the otter population in the area. However, since it is a one-season research process, we only have a better understanding of the general condition of the population and the factors that threaten the populations. We think that these data are not sufficient to protect the populations in the area for a long time. However, the study we carried out created awareness among the people of the region for the protection of otter populations and other wild animal species in the area and laid the groundwork for other studies to be carried out. In the second stage, we can say that the studies we plan to carry out are the interactions of otter populations in habitats under human influence, examples of changes in habitat use, reducing the conflict between otter populations in ecotourism and commercial fishing, and raising awareness of the local people at a young age and encouraging them to work on protecting wild animal habitats.

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

Firstly, the work we did formed the basis of a master's thesis. The results obtained from our findings will be published in a journal article. The important findings of our study will be used in reports, presentations and various publications. The comprehensive report we have prepared will be submitted to official institutions. Nature conservation and national parks (DKMP). At the same time, our project has been featured in many local newspapers. The findings were disseminated by the students and staff of the Faculty of Forestry through the presentation. At the same time, the results are '11. INTERNATIONAL BLACK SEA CONGRESS OF APPLIED SCIENCES' and '8. It was shared at the INTERNATIONAL CONGRESS OF LIFE, ENGINEERING AND APPLIED SCIENCES IN A CHANGING WORLD.

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

Evidence for the existence of otter populations was collected as a result of our study, and population density is estimated to be low and in decline. For this reason, we think that studies should be continued in order to better protect the otter populations in the region and increase awareness for the continuity of the species, and education programmes should be given priority to sensitise the public about wildlife habitats. At the same time, it is very important that studies on the behavioural dimensions of otters continue. While carrying out the studies, the level of commercial impact of the local people on the environmental dimension should be taken into account. While various investment projects (road, dam, bridge, etc.) are being made, the importance of water quality for otter populations should be taken into account and threats that may arise should be prevented. Official institutions should be contacted in order to present the results of our work in various conferences, to publish them in journals and to protect freshwater resources.

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?

The Rufford Foundation's logo has been used in all awareness and education efforts, presentations, banners, posters, brochures, and printed t-shirts. We will also include the Rufford logo in our future work.

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

Assoc. Dr. Yasin ÜNAL – Consultant

Dr. Ahmet KOCA – Project/Fieldwork Coordinator

Mehmet Şirin YELSİZ – Data Collection, Data entry (6 months)

Aytekin SARIŞAHİN – Field Assistant (12 months)

10. Any other comments?

We thank The Rufford Foundation for trusting and providing us with the opportunities. Without such financial support, the execution of such a project and the completion of its activities would not have been possible. We would like to thank you for supporting us to form the basis of scientific studies in the field.



1. Photograph: (A group photo taken at the end of the conferences held in schools.)



2.Photo: (Otter image obtained as a result of the camera trap.)



3.Photo: (Offer image obtained as a result of the camera trap.)



4.Photograph: (Photo trap placement studies in areas with human influence.)



5.Photo: (Rufford printed t-shirts used in conference and survey studies.)



6.Photo: (Our poster work in awareness-raising meetings held in official institutions.)



7. Photograph: (Our posters are hung at the crossing points frequently used by the people of the region.)