

## The Rufford Foundation

### Final Report

Congratulations on the completion of your project that was supported by The Rufford Foundation.

We ask all grant recipients to complete a Final Report Form that helps us to gauge the success of our grant giving. The Final Report must be sent in **word format** and not PDF format or any other format. We understand that projects often do not follow the predicted course but knowledge of your experiences is valuable to us and others who may be undertaking similar work. Please be as honest as you can in answering the questions – remember that negative experiences are just as valuable as positive ones if they help others to learn from them.

Please complete the form in English and be as clear and concise as you can. Please note that the information may be edited for clarity. We will ask for further information if required. If you have any other materials produced by the project, particularly a few relevant photographs, please send these to us separately.

Please submit your final report to [jane@rufford.org](mailto:jane@rufford.org).

Thank you for your help.

Josh Cole, Grants Director

Grant Recipient Details	
Your name	Tamar Khardziani
Project title	Research and Conservation of Tur species ( <i>Capra caucasica</i> and <i>Capra cylindricornis</i> ) in Georgia
RSG reference	13689-2
Reporting period	January 2014 – July 2015
Amount of grant	£ 5990
Your email address	ycgroup@ymail.com
Date of this report	17 <sup>th</sup> August 2015

**1. Please 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
1. Estimate number of animals and evaluate current threats in Svaneti region and Lagodekhi Protected Areas			√	<p>Hunting is the main threat for tur population in Svaneti.</p> <p>Development of tourism and especially new ski resort in Svaneti has negative influence on tur range.</p> <p>The population size in these areas is considerably smaller than might be expected.</p> <p>420-460 individuals of West Caucasian tur are in Svaneti; Lagodekhi inhabits about 400 individuals of East Caucasian Tur.</p> <p>According to our data, tur population in Svaneti has trend of decline. On the other hand, in Lagodekhi from year to year number of individuals in tur groups are rapidly increasing.</p>
2. Strengthen anti-poaching activities and initiate tur monitoring in Lagodekhi protected Areas and promote establishment of new protected areas in Svaneti		√		<p>Anti poaching activities are quite affective in Lagodekhi. Online cameras are used on main trails here. Photo and video with sound is immediately sent to smart phone. It allowed administration of protected areas to combat poaching more effectively.</p> <p>Local population in Svaneti is ready and open to establish protected area. Locals understand that proper management and conservation is needed in parallel of development of various sectors of economy.</p>
3. Establish a basis for community involvement in conservation activities.			√	<p>During all fieldwork, biodiversity awareness activities were held with locals to share information about uniqueness of their native region and about the West Caucasian tur. Presentations and workshops with secondary school students in various villages of Svaneti and Lagodekhi were held. Informational meetings with local government concerning tur current situation also has taken place.</p>

**2. Please explain any unforeseen difficulties that arose during the project and how these were tackled (if relevant).**

We didn't encounter any serious problem during the implementation of the project.

**3. Briefly describe the three most important outcomes of your project.**

**3.1 Current status**

With assistance of local guides and hunters, areas for detailed studies were chosen and stratified in Svaneti. Direct observations were used to estimate Tur population numbers and to study group structure. Standardised observations had been conducted from observation points located 2 km from each other. All observations within a sampled section had been completed in 2-3 days to minimise chances of counting same individuals more than once. From each of the observation points animals were counted on the opposite slopes of the gorge in the morning (during 5:00-9:00 hrs.). During direct count binoculars and telescope was used.

Youth Conservationists Group is working in Svaneti for many years, collecting information on tur population and status. Based on our results, tur numbers are declining in Svaneti. This could be caused by poaching and habitat destruction. According to locals, due to climate change, areas covered with snow and glaciers have been reduced in most of gorges. In summer, these areas are intensively used by tur.

Also, development of tourism and especially new ski resort in Svaneti has negative influence on tur range. Unfortunately, Tur groups were only found in Upper part of Svaneti and according to locals some small groups are in lower part of Svaneti. The population size in these areas is considerably smaller than might be expected.

With big support from Administration of Lagodekhi protected areas online camera traps were installed. Using this method, seasonal movement of tur groups were possible to observe. So, we have found out, that in winter, most of the groups are coming down into the forest, some of them about 600-800 m above sea level. Camera traps are in addition used as an effective tool for anti-poaching activities. In Lagodekhi also direct observations were used to obtain information on tur numbers.

Using GIS, tur habitat was mapped. Tur habitat model was elaborated using Arc GIS. It is based on observations of Tur in alpine and subalpine habitats at elevations of approximately 2000-3,500 m, including several sub summits of approximately 4,000 m. We have used field observations to locate areas that tur appear to use as escape terrain, and after we have determined the slope of these areas. We used other five variables (elevation, slope, aspect, vegetation, and distance to escape terrain) and assign a suitability index to habitat pixels (cell size - 40m x 40m). The model was tested during the fieldworks in summer. All available information was analysed with Geographic Information System and thematic maps were produced.

Status report, the document summarising all collected data had been prepared. Based on our survey data first draft of scientific article was prepared. According to our observations and habitat

modelling, 420-460 West Caucasian tur inhabits Svaneti and about 400 East Caucasian tur are spread in Lagodekhi.

### **3.2 Main threats**

In the light of recent rapid economic growth (e.g. in transport, energy, mining, industry, infrastructure development, timber production, commercial fishing and other sectors), the easing of environmental impact assessments, as well as ineffective law enforcement, have had inevitable negative impacts on species and habitats.

Threat and habitat assessment were done during fieldworks. Main threats affecting large mammals have been outlined and assessed in the field.

There are numerous peaks in Svaneti that attract alpinists from all over the world. Those peaks and their neighbourhoods comprise the main habitat of West Caucasian tur. So, the extensity of the threat from the tourists/climbers is quite high. In recent years many infrastructural projects have been made around Tur habitat. New highway was built and now Svaneti is open all year round for visitors and local population. Villages have enlarged and many projects were initiated by the government to attract as many visitors as they can in Svaneti.

As a result of habitat destruction and fragmentation over the past few decades, caused primarily by large-scale, unregulated timber extraction, as well as a long-established culture of hunting and a more recent failure of game species management, large mammal populations, have suffered dramatic declines in numbers, particularly amongst ungulates. There is no progress in this regard and, in particular, no conservation measures focusing on game species have been implemented.

Given the restrictions imposed by current legislation, the clustering of large mammal populations in protected areas and the red listing of most species favored by hunters, there has been no legal basis or motivation for private hunting reserves to manage them. The majority of hunting reserves are located in the eastern part of Georgia and so hunters from the west have very limited options. In parallel, high levels of poaching have resulted in dramatic declines in game populations. Tur is a main game species in high mountain regions of Georgia.

As it is clear tur hunting is still very popular and unfortunately presents the most serious danger as for the strength so for the territorial layout of the threat. It should be mentioned that the local population in some villages preserve the gorges near their place: only the local hunters can hunt there (Tsaneri and Tviberi gorges are the good examples). That underlines the importance of involvement of locals in conservational activities. These gorges are located nearby the village Mulakhi and the villagers do not let hunters from other places to hunt on their territory. May be this is the reason why we observed the greatest number of tur in those two gorges.

It must also be taken into account that the highlanders have a long-standing tradition of tur hunting, which has become part of their cultural life. Therefore, one of the ways to control it is to allow trophy hunting in specially organised community-based hunting farms. This will allow free hunting to the local population according to the established quotas. But the quotas should be very carefully elaborated on the scientific basis.

Another way to attract animals back to their habitats and retain there is preparation of food and

mineral supplements where possible. Tur like all other ungulates need mineral salts that they obtain by licking rocks, soil, or mineral waters. In places where there is a lack of natural sources of mineral salts it is recommended to provide artificial sources, but these places should be under a special protection after that.

### **3.3 Public awareness**

Public awareness activities and community mobilization involves local stakeholders in the conservation activities. Informal workshops with local stakeholder and secondary school students to show the role of tur in whole ecosystem, the threats that influence on its number, the significance of this species to attract tourists' attention toward Svaneti were done. Leaflets and stickers were donated to children. Informational meetings with local government concerning tur current situation has also taken place.

#### **4. Briefly describe the involvement of local communities and how they have benefitted from the project.**

A field survey team was established, which included students and local young stakeholders. Nine local stakeholders and eight rangers were involved in the project and helped us during fieldwork. They know well the study area, local hunters and farmers. They received a series of training sessions and helped us during data collecting.

New members of our project team have obtained experience working in team, communicating with local community and governmental institutions. Volunteers now have experience in animal track identification, habitat analysis, GPS data and in a range of biological survey techniques.

All equipment purchased in scope of the project will be delivered to Lagodekhi Protected Areas. After finishing of this project administration is able to lead tur monitoring independently.

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

Among the two species of tur (*Capra caucasica* and *C. cylindricornis*) found in Georgia, West Caucasus tur has the smallest population size, occurring only in very limited areas of Georgia. Our team in close cooperation with local stakeholders will continue tur population monitoring in Georgia. We hope that monitoring of endangered wild ungulates will be started on national level. We will promote establishment of protected areas in Svaneti, while this could be real tool for tur conservation in Georgia.

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

Status report, the document summarising all collected data was prepared. This document will be provided to local authorities and Ministry of Environment and Natural Resources Protection of Georgia.

Based on survey data scientific article will be prepared. In close cooperation with regional journalists two articles were published in local newspapers and special radio program was organised, where tur current status and threats were discussed.

**7. Time scale: Over what period was The Rufford Foundation grant used? How does this compare to the anticipated or actual length of the project?**

We started implementing of our project in January 2014. Last session of Fieldwork was done in July 2015. All existing data was analysed in July and August and final report was prepared.

Initial plan was to finish project at the end of 2014 year, but due to unusual spring and summer (with many rainy days), was not possible to collect enough data using direct observation method. However, we have prolonged our fieldworks in summer 2015.

**8. Budget: Please provide a breakdown of budgeted versus actual expenditure and the reasons for any differences. All figures should be in £ sterling, indicating the local exchange rate used.**

Item	Budgeted Amount	Actual Amount	Difference	Comments
Binoculars	690	712	-22	Transportation expenses have risen
Camera traps	870	894	-24	Transportation expenses have risen
Telescope	300	580	-280	Different model with wider range were chosen
Horse rent	600	145	455	Administration of Lagodekhi protected Areas has provided horses for free
Transportation	510	738	-228	Price for fuel has risen as well as more site visits have been undertaken
Per Diem/Lodging	2482	2630	-148	More days were spent in the field
Seminars and meetings	500	240	260	Administration of Lagodekhi protected Areas has provided conference hall for free
Bank charge	38	51	-13	Due to fluctuations in exchange rates
Total	5990	5990	0	Exchange rate: 2014 year - 1 GBP – 2,75 GEL; 2015 year - 1 GBP – 3,51 GEL.

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

Some steps in the direction of wildlife conservation that can be taken are as follows:

- To develop and implement large mammal monitoring programme.
- To develop game sanctuaries for specific wild animals or for general wildlife.
- To make special arrangements to protect those species whose number is very limited.
- To develop general awareness at national level regarding protection of wildlife.
- In 2006 the new national Red List of threatened species was adopted based on IUCN categories. However due to the lack of research and monitoring since the break-up of the Soviet Union the statuses of many species were on old data. This is particularly the case for mammals and there is a clear need for further review of the red list, based on new and rigorous inventorying.

The process of establishing new protected areas, as well as the expansion of existing ones, over recent years has contributed greatly to the conservation of species and habitats in Georgia. However Georgian population of West Caucasian tur is still out of protection.

It should be mentioned that there are several protected areas and hunting reserves on the Russian territory of West Caucasian tur distribution and because of this the species is in the better situation there nowadays. But more than a third (2000 km<sup>2</sup>) of its habitat is on the Georgian territory so as it seems creation of National Parks in Central Caucasus (Svaneti, Racha) is an urgent task.

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

Several Power Point presentations were prepared for local stakeholders and government institutions. The Rufford Foundation logo was used with agreed standards.