



**Snow Leopard Conservation Foundation
People's Trust for Endangered Species Interim Report
February 16, 2015**

**Project title: Reducing mass depredation events to increase tolerance for snow leopards
(aka Corral Study)**

- **Project head:** Bayarjargal Agvaantseren
- **Institute:** Snow Leopard Conservation Foundation
- **Country project is based in:** Mongolia
- **Project start and end date:**
 - Start date: September 2013
 - End date: August 2016
- **Date of report: February 9, 2015**
- **Species/ habitat:** Snow leopard/Altay Mountains
- **IUCN conservation action/ research action being undertaken AND/ OR UK BAP target addressing**
 - Conservation action: 6.5 Livelihood, economic & other incentives- Non-monetary value
 - Research action: 7.5 Threats; 7.6 ActionsSpecifically this project seeks to address snow leopard conflicts with local people over livestock depredation.
- **What activities have you undertaken to date**

Background

Devastating livestock losses occur when a snow leopard enters a corral. These events affect families economically and emotionally and generate negative attitudes towards predators and predator conservation that can directly or indirectly lead to snow leopard persecution. To address this problem, we aim to develop cost effective preventative measures that will help herders in Mongolia reduce mass loss of livestock to snow leopard predation, and to increase tolerance for snow leopards among herder families.

Our objectives are to:

- 1) Identify site-scale correlates of livestock predation by snow leopards at night-time corrals
- 2) Evaluate effectiveness of three types (physical barriers, warning and response deterrence, and passive deterrence) of preventative measures in reducing livestock depredation by snow leopards in night-time corrals
- 3) Understand herder behavior during predator attacks, and examine the influence of the above preventive measures in changing the attitudes of local herders towards the snow leopard
- 4) Examine herders' perceptions of different preventative measures

This project is taking place in the Tost Mountains, South Gobi, which is the site of our long-term ecological study. While we use the word 'corral' regularly in order to have an easily understandable point of reference, herders often keep livestock in loose pens or holding areas that are not fortified structures; through this project, we are experimenting to test fences as a method to reduce losses at corrals.

Activities to date

Prior to this report, we successfully completed a survey of livestock losses and physical characteristics of current livestock holding areas, and a survey of herder attitudes towards snow leopards and wolves. We also held a workshop to introduce the fencing experiment to herders. As of our last report, in July 2014, we had selected 10 participating families to take part in the study, finalized the fence design, sourced materials, and built two fences.

Since then, another meeting was held on 16 October 2014 in Tost Mountains with Tost herders and local government in attendance. The purpose of the meeting was to connect with the final eight families involved in the study. We updated herders about our project activities between April and October 2014 and distributed conservation awareness materials. A few people expressed concern that the size of the corral fences might be too small and we assured them that lessons learned through the study would be considered for the future. Another question raised and discussed was the possibility of corral fence mobility. Herders wondered if they could move around their corrals as the seasons change; we explained that the purpose of the project is to test improving protection during the night in winter. Otherwise they all like the corral fences and recommended SLCF to provide for all herders in Tost.

Following the meeting we spent 4 days preparing the material for the fences (largely cutting and preparing of poles for the fences) and constructing the fences at the camps of the participants (Gantogtokh, Mydag, Narantuya, Tumenbayar, Tsogtsaikhan, Semjid, Delgerdalai and Baatar families).

The field team reports 'Building of the fences was lots of fun and it was great to hear that the all family were happy with the fences and think that they will be good for reducing livestock losses.'

Following construction, data collection sheets were developed and translated into Mongolian to track information about incidences of livestock predation. Data sheets ask them to report data such as # of livestock at their settlement, # of livestock lost, suspected predator with rationale, # of livestock inside vs. outside of corral. The sheets were distributed to the 10 herder families in the study, and to our 'control group' that does not have fences. Herders signed a contract with our lead field researcher, Sumbee, which outlines requirements and responsibilities of both parties during the testing period.

○ **Are you on target – e.g. achieving sample size, reaching target audience**

We are on target towards our sample size, which is 10 families with newly-constructed fences.

As mentioned previously, we originally planned to build 15 fences, but revised our goal to 10 fences. We had planned to make the fences round and build them very tight to any existing fences, but it turned out that making them round causes them to be significantly weaker (the corners are important structures, which therefore had to be reinforced with additional crossbars). We also learned that quite a few of the herders have increased their stock so that not all of them fit inside the corrals as originally estimated. For this project it is important that 100% of livestock fit within the corrals. We therefore adjusted to build larger corrals than anticipated and reduced the numbers of corrals we will build from 15 to 10. We believe these shifts will not affect the outcomes of the study.

○ **Have you achieved any outcomes to date? What are they? E.g. produced survey booklet, radio-tagged six animals, arranged three community workshops**

- Baseline attitude and predation surveys completed, data analysed
- Launch/introduction workshop held, study participants and control group selected
- 10 fence/deterrent systems installed

○ **Is your project on target to achieve the sustainable measures outlined in your application?**

We believe the sustainability of this project and its results rests on the understanding and expectations of the community. We continue to ensure that the herders (especially those who will not receive deterrent support during this study) understand that this is only the pilot phase of the program and that, ultimately, we will be working with all of them to apply the results from this study to help reduce livestock losses. During our initial community workshops in April 2014, we also discussed that depredation instances can be managed and reduced but not eliminated which is important to stress not to set herder expectations too high or promise too much. Over the long-term, we will also need to devise ways to work with herders to install deterrents in a cost-effective—and potentially cost-sharing—way. We are currently discussing these issues internally and hope to discuss further with the community.

○ **Have you started disseminating any results – e.g. giving talks, preparing papers, producing management guidelines, submitting evidence to change government policy, getting media interest?**

We have not disseminated results since last reporting period.

○ **Have you encountered any difficulties or setbacks and how have you overcome them?**

We continue to encounter small delays with shipping. During this last reporting period, we had minor setbacks shipping the solar panels needed to power the live wires on the fences; this caused minor delays on construction. Otherwise, there have been no other difficulties or setbacks during this period.

○ **Please indicate if the income or expenditure for your project differs significantly from that stated in your original application.**

Most of our equipment and supplies have been purchased. Our project continues its trend of requiring less expenditure for equipment (due to cost savings from purchasing fencing in Mongolia) and more expenditure for travel and subsistence (to accommodate our larger international team). Currently our travel and subsistence expenditure is around £4,900 and we project that will continue to increase during the second phase of our project as we continue to meet with and survey herders. Our equipment and supplies expenditure is between £7,000-8,000 and we believe that will increase more slowly, if at all, since we anticipate minimal repairs and replacements during the next year. We have also incurred a little over £2,100 in shipping expenses to ship supplies into Mongolia, and intra-country from Ulaanbaatar to our field site. These were not originally included in our PTES project budget.

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