

On Protection and Survey of Snow Leopards in Mongolia

Full Text:

I am not an independent researcher on snow leopards; I collect facts and information about snow leopards and can provide some knowledge and suggestions regarding characteristics of snow leopards in Mongolia. The distribution of snow leopard is very wide in Mongolia, including large areas in the western, southern and even in the eastern parts. We call snow leopard *irbis* and I can cite such locations as *Irvest* or the "valley of snow leopard" and others including the "mountain of snow leopard" and the "waterhole of snow leopard" and many others. The *Secret History of Mongolia* written in the 13th century includes references to snow leopards, and legends and stories about snow leopards are widespread, especially among local people and herdsmen in the Altay mountain range. According to these legends snow leopards will not forget an offence against them and they are able to stand up for themselves. Local people of the Altay believe in these legends and stories; they have tried to live harmoniously with the snow leopard and they do not pasture their herds in areas of snow leopards. In the 19th century a local nobleman presented as a gift to Bogd Zhabzandamba, theological ruler of Mongolia, a *gher* made of 156 snow leopard skins, illustrating that snow leopards have been common and widespread in Mongolia.

The snow leopard is the largest wild cat in Mongolia. It is especially known for its great ability to hide and to be camouflaged. On meeting a snow leopard at close distance it may dare to attack, but in other cases it prefers to disappear. After killing animals snow leopards are not shy. The habits of snow leopards were largely unknown to local people and during the last 30 years the territories of herders and snow leopards have begun to overlap. With the introduction of technology such as guns and cars in the life of local people, they began to invade in the area of snow leopard. The result is that wild animals in a given area are leaving, so snow leopards begin to kill unguarded livestock. After some killings of livestock snow leopards dare to kill livestock in the presence of herders or even to kill livestock in their enclosures. After excessive sport hunting on argali sheep or ibexes which reduce their numbers, snow leopards begin to kill livestock. All these factors have affected the relationship between herders and snow leopards, and herders have begun to hunt snow leopards. Snow leopards are easy to hunt and especially after killing livestock they are easy to find and kill, actions by herders that are easily understood as reactions to livestock losses. Herdsmen would prefer to live without the problem of snow leopard predation on their livestock and they have no problem killing them for that reason. Also, some people are interested in earning money from the sale of snow leopard skins.

SURVEY OF SNOW LEOPARDS

The survey of snow leopards can be divided into studies by researchers and observations of local herdsmen, with results that both agree and disagree.

Coincidence of Survey and Observation

a) The snow leopard is a nocturnal animal and in warm calm weather it sleeps all day long on the sunny sides of mountains, with short breaks of 30 minutes at which time it will observe the surrounding terrain for intervals of 30-40 seconds. When observing they recognize only things that move as they are sleepy, and when a snow leopard is sleeping it is possible to get close by staying upwind. They change their place within intervals of 0.5-1.5 hour. If they sleep deeply they usually keep their nose warm with their tail. In the evening coolness snow leopards waken and look around, and after some observing they choose a direction where it may be possible to get near to their prey. Often after dawn they get near to herds of argali or ibexes.

b) Snow leopards have several methods of killing. They usually get near to their prey slowly and then jump on its back. They eat their prey usually from hind parts first. Adult snow leopards can eat 46 kg meat at once. After eating 5 kg of meat they can go 5 days without food. Sometimes they chase their prey for small distances or they kill them by pushing them into rough rocky areas and forcing them to fall down. They prefer to bring their prey to low and flat places to eat.

c) Every snow leopard has a number of areas of intensive use which it patrols for 7-10 days at a time, depending on food and characteristics of the area. Snow leopards mark the borders of their areas, usually on trails or cliff bases where they leaves scrapes. Scrapes consisting of urine or droppings are covered by soil for keeping its smell. It seems scrapes have several functions and I think scrapes can

express such meanings as border marking, characteristics of the snow leopard (age, sex, and from which family). By their scrapes it can be determined when a snow leopard visited that area and thus their next expected arrival. Ravines or narrow valleys which separate territories of different snow leopards can be places where snow leopards congregate during the mating season.

d) Snow leopards like to gather near woods or forest, waterholes and springs and they are usually very tolerant of each other at these places. During this time they are usually friendly but they do not like to share their prey even at this time.

e) Our hunters and herdsman say that all the strength of the snow leopard is in their legs or tail and their forelegs are powerful making scraping or slapping actions very dangerous.

f) People also say that snow leopard saliva is poisonous. On domestic animals bitten by snow leopards blisters full of poison appear which cause their death. Some livestock have big scars from the bites of snow leopards. Usually wolves, foxes and birds do not touch the remains of prey killed by snow leopards.

Uncertain Information

a) Calling to each other, snow leopards congregate during the month of January, which is apparently the mating season. Local people say that snow leopards are born in March and April and that 23 young are usually born. Females feed their cubs and males have no part in feeding the young. Males and females do not live together. Young are lost to accidents such as falls from rocks and getting lost from dens where they are killed by other mammals or birds during their absence. People say that as a result of such accidents every female snow leopard has one young. Snow leopard cubs are very small just after being born, about the size of manul (wild cat) kittens. Local herdsman and hunters also say that snow leopard young grow very slowly and they live together with their mother nearly two years. Thus, Mongols say that snow leopards give birth once every two years.

b) Our people say that snow leopards suck the blood of their prey. On observation of livestock killed by snow leopards we usually see four little holes on their shoulders and two pair of holes on their throats. These holes do not usually bleed and they are not very deep. Hunters say that canines of snow leopards have canals for blood sucking they have observed little holes in the canines. Apparently snow leopards sometimes become careless and sleep deeply all day long after sucking blood.

c) Information about the population of snow leopard varies greatly, with total numbers estimated at anywhere between 1500 and 8000. However, these figures are not the result of scientific surveys of their tracks during winter season and they are derived from approximate average densities and areas of snow leopard distribution. I personally use the lower figure.

We consider that the survey of snow leopards made in Mongolia is unfinished and its results are on the level of rough notes. Based on the above-mentioned situation and requests by the world public regarding nature conservation I make the following suggestion:

1. The Mongolian Association for the Conservation of Nature and Environment (MACNE) invited Dr. George B. Schaller, well-known scientist from the USA, for the survey of snow leopards in 1989. He has made observations in most parts of snow leopard range within Mongolia and has conducted studies in the Altay mountain range using radio-collared snow leopard. Mongolia is experiencing economical difficulties and lacks specialists and new methods and equipment for survey. We will be happy if we can discuss the possibilities for training young biologists during the next 23 years. One Mongolian biologist will work with an American biologist from Alaska, Tom McCarthy, whom we have invited to conduct studies as part of the initial work of Dr. Schaller. This work will begin in October, 1992 and will continue for several years, thus becoming the first long-term extensive study of snow leopard in our country using advanced radiotelemetry technology. We will be happy if you can help solve the problems connected with financing the training of 12 Mongolian persons during the 23 years of this project. The Mongolian side will provide a person who will work on the study not less than 5 years and this person can be trained in language as well as the survey of snow leopard.

2) Connected with the above suggestion I propose to complete a separate project of snow leopard survey in Mongolia. It is possible to make an independent survey of snow leopard simultaneously throughout Mongolia during a 11.5 month period using groups of experienced and hardened persons.

Results can be reported at a special symposium in Mongolia, and if you are interested in a draft of this project it can be made available to you.

3) With the aim of reducing conflict between herdsman and snow leopards, we in cooperation with a citizen of the USA, Joel Bennett (his wife Lisa Stoughton and Graham Creelman, a producer of Survival Anglia Co. Ltd), are proposing the establishment of a *snow leopard compensation fund* "MonIrbis (Snow leopard)" for the purpose of covering a percentage of the damages of snow leopard to animal husbandry and for awards to persons who make accomplishments in the protection of snow leopard or in education about snow leopards. I hope you will express your comments and lend support to this fund concept, which is currently in a draft stage. Copies of the draft Snow Leopard Compensation Fund are available for review and comment.

4) I would like to express our thanks to you for giving Mongolian representatives a chance to participate in an international activity such as this symposium. We invite everyone to share with us their ideas and suggestions for supporting the coexistence of people and snow leopards.

5) Today Mongolia is in deep crisis politically and economically with regard to its transition to a market economy. The economy of the country has a small potential. In one word, the government does not have the possibility to share funding for this problem in near future. So we hope that your collaboration with us, with the MACNE, an independent nongovernmental organization, will be fruitful and we wish all of you the best of good fortune in establishing meaningful protection for snow leopards in your respective countries.

Abstract:

In this report I briefly describe the current status of snow leopards in Mongolia and the recent changes in their habits. Regarding livestock protection, the actions of local people toward snow leopards tend to be in retaliation for losses. Some results of scientific research work and observations of herders and hunters on snow leopards are compared. Several concrete suggestions are advanced for the protection and study of snow leopards in Mongolia.