

Compensation for livestock kills by tigers and leopards in Russia

by

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In the Summer of 1999 a compensation project was started in Khasanski Rayon in the Russian Far East. The compensation project is part of a comprehensive conservation program for the Amur leopard that includes anti-poaching, education, land use planning, forest fire-fighting and monitoring. Approximately 40 of the remaining wild population of less than 70 leopards live in Khasan. The present distribution of the Amur leopard in the Russian Far East is several times smaller than its distribution 30 years ago. Khasan also holds a small population of approximately 20 Siberian tigers (also named Amur tiger). The Siberian tiger numbers in Russia have increased since the Second World War from an estimated 50 individuals to 400 at present. The population has stabilized in the Russian Far East as a whole, but there are indications that numbers in Khasan have continued to increase.

Some experts believe that the main reason why Amur leopards disappeared elsewhere, but remained in Khasan, is the availability of several thousand deer at the deer farms in Khasan (raised for their antlers which are used in Traditional Asian Medicines). We are convinced that compensation helps to prevent retaliations by the farm staff when tigers or leopards kill livestock. The compensation project also increases the support from the local population for nature conservation in Khasan. Therefore, we have implemented this project mainly to prevent retaliation from farmers when tigers and leopards kill livestock and to secure a sufficient food supply for the critically endangered Amur leopard.

Goals of the project

1. Prevent killing of tigers and leopards by farm staff
2. Secure an important food base for the Amur leopard
3. Increase support for conservation
4. Collect data on ecology of tigers and leopards
5. Create fairness

Carnivore depredation prevention is not an aim of this project! In other words: we do not promote

measures at the deer farms to limit the number of livestock kills by leopards and tigers. An exception is the case of deer fawns. We support measures to protect fawns, but not mature deer. The reason for this policy is that the Amur leopards is critically endangered and that the availability of deer is important for its conservation. Therefore, we do not want to deprive the leopards from this important additional food supply, because it would increase the risk of extinction. However, it is possible that in the future selective measures will be taken to limit the number of deer killed by tigers.

All farmers in Khasan can receive compensation when livestock are killed by leopards or tigers. However, the project focuses on a few large deer farms in Khasan where most of the livestock kills occur. The compensation project creates an element of fairness by ensuring that the burden of conservation is not carried entirely by the local people that live in the vicinity of tigers and leopards.

Data collections

The compensation project provides also useful data about leopards and tigers, such as:

1. places where leopards and tigers occur
2. hunting methods used by leopards and tigers on deer farms
3. prey preferences of leopards and tigers at farms (age, sex of deer killed)
4. the importance of livestock as a food supply in comparison to wild prey

The presence of leopards and tigers is established during counts in winter when there is a snow cover. The presence of these leopards was established during a leopard and tiger count that was held in Khasan in February 2000.

Type of compensations

We provide different types of compensations:

1. farms receive financial compensation for livestock kills;
2. deer farms receive additional financial compensation for the presence of tigers and leopards on or near the farm;
3. deer farms receive practical assistance, such as: deer fodder in case deer cannot eat grass due to a thick or hard snow cover; petrol and repairs for a truck that transports deer fodder;

payment for building a shed to protect deer fawns.

Paying for the presence of tigers and leopards creates a further incentive for local farmers to tolerate these large predators. We also think it is fair to pay for the presence of leopards and tigers, because many deer killed by leopards and tigers are not detected. Deer fawns (including their skeleton) can be eaten without leaving a trace. In winter black vultures, white tailed sea eagles and Steller's sea eagles eat the carcass of a dead deer within an hour, leaving only bones. In many cases this makes it impossible to establish the cause of death.

Organizational aspects

The project operates as follows. Farm staff contact the local Inspection Tiger anti-poaching team when they discover the remains of livestock that have been killed by a leopard or tiger. The team can be reached for this purpose 24 hours a day by telephone. The reported kill is checked by an inspector from the team within 24 hours. In most cases it is possible to establish if livestock have indeed been killed by a tiger or leopard by examining signs such as tracks, hair and wounds on the body of the killed animal. When it is established that the animal was killed by a tiger or leopard, the inspector and farm staff agree on the value of the animal that has been killed. They then draw up and sign a statement that describes details of the livestock kill such as the date, place and circumstances and the compensation that was agreed. Copies of the statement are sent to Inspection Tiger and to Phoenix Fund. Occasionally, Inspection Tiger inspectors who work outside Khasan will travel to Khasan to check the information that is provided in a statement. When Phoenix receives a statement, they pay the compensation with funds that are provided by Tigris Foundation.

Deer farms that want to become eligible for compensation have to sign an agreement with Phoenix. This agreement states, among other things, that the farm staff will not take actions that can harm tigers or leopards, that they will report all available information about activities of tigers, leopards and poachers, that inspectors of the anti-poaching team are allowed free access to the farm grounds, and that the staff will leave livestock kills undisturbed after they have found them.

The compensation project is advertised in Khasan with articles in local newspapers and an-

nouncements on boards in public buildings. This is done in order to make farmers aware of the possibility to receive compensations and also to increase the positive effect of the project on the popularity of our conservation activities.

Preliminary results

Surveys

In 1998 and 2000 surveys of the leopard and tiger populations have been conducted during winter in fresh snow. Where tiger tracks were found, leopard tracks were absent. This is an indication that leopards avoid areas where tigers are present. Inter-species competition between Siberian tigers and Amur leopards is poorly understood, but we assume that a further increase in tiger numbers would have a negative effect on the leopard population.

Actual kills and compensations

Investigations of the kills at deer farms indicate that tigers kill more deer than leopards. We hope that further investigations of the kills will give more insight in the differences in hunting techniques of tigers and leopards. This may make it possible to take measures that prevent kills by tigers, but not kills made by leopards. Based on the investigations of kills so far, we are under the impression that tigers often chase a deer along the fence and kill it in a corner. Therefore it may be possible to limit the number of kills by tigers by removing corners and replace them with more curved fences.

Between September 1999 and November 2000 a total of 24 deer, 1 horse and 1 cow calf were reported killed by leopards and tigers in Khasan. All kills, except the horse, occurred on deer farms. Compensation payments of US\$ 1360,- were made for the livestock kills. A total of US\$ 1120,- was paid between May and November 2000 for the presence of 2 leopards near a deer farm (US\$ 80,- per month per leopard). The number of deer killed at the deer farms during the first 18 months of the compensation project suggest that domestic deer are indeed an important food supply for both Siberian tigers and Amur leopards.

Please contact Tigris Foundation if you have comments and suggestions concerning our project

More information on the web:
www.inter.nl.net/users/tiger