



Tigris Foundation

Amur leopard conservation update

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Tigris Foundation is co-ordinating activities of the Amur Leopard and Tiger Alliance (ALTA)

For more information: www.tigrisfoundation.nl

Amur leopard population monitoring

During the winter 2002/2003 a camera-trapping survey was conducted by the Wildlife Conservation Society in the Amur leopard range in Southwest Primorye. This was the first time camera-traps were



Amur leopard inspecting camera-trap

used for this purpose in Russia. With 24 pairs of cameras 16 different leopards were photographed a total of 112 times in the central and northern part of the leopard range. The survey was held simultaneously with a “traditional” track count survey by WCS and the Vladivostok based Institute of Geography. The track count covered the whole Russian Amur leopard range. Both surveys, conducted independently, provided remarkably similar results and estimated the total population at approximately 30 mature leopards. Tigris Foundation provided the majority of funds for these surveys. Coming winter camera trapping is planned for the southern part of the range that was not covered during the first survey.

New anti-poaching activities

The count results indicate the Amur leopard population is stable. This is good news. A decline was feared, because no less than 6 leopard skins were confiscated in Russia in 2002 and the first half of 2003. The large number of confiscated skins are proof that Amur leopards still have much to fear from poachers. We therefore modified and intensified our anti-poaching efforts.

Villages involved in poaching and illegal wildlife trade are now targeted by a large team of anti-poaching staff. Especially villages where a leopard skin is confiscated are selected. The prosecutor arranges warrants for searches of houses of known poachers (in some villages more than half of the houses are searched!). A total of 15 searches were organised since August 2002. They resulted in 8 confiscated rifles and 3 suspended jail sentences. Unfortunately, recently the searches have become less effective, because villagers have created secret hiding places for their illegal weapons and “bush meat”.

The case of a poacher named Arrestov (!) shows how difficult effective law enforcement in Russia is and how committed our anti-poaching teams are. In August 2002 a skin was confiscated from Arrestov in a small forest settlement in the leopard range. It could not be proven that he had killed the leopard himself, and unfortunately the punishment for illegal possession and trading of body parts of endangered wildlife is extremely low in Russia (a typical fine for trading a leopard or tiger skin is \$30!). His house was targeted during a subsequent search led by the prosecutor. Two illegal rifles were found, although Arrestov had stated there were no weapons in his house. As a result of his initial denial, the possession of illegal weapons became a criminal offense. Arrestov received a suspended two-year jail sentence. As soon as the sentence was official, one of our anti-poaching teams started a surveillance of the village where Arrestov lives. After two weeks he was spotted as he left into the forest on foot. He did not carry a gun, so the team suspected that he had a hiding place inside the forest. They searched the area the next day and indeed found a large oak tree with rifles hanging from the branches. The team started to carefully check the oak tree every day. One day the rifles were gone. The team withdrew to a sheltered spot with a good view on the oak tree. At night Arrestov and his friends returned with their rifles and a deer that they had killed. A citation was drawn up for poaching in a protected area with illegal arms. This poaching incident occurred within the probation period and this meant that Arrestov would have to serve the suspended sentence if he would be found guilty on this new account. The local police however, refused to draw up a document needed to get the case to court (the local police are acquainted with Arrestov and his friends). Fortunately, the anti-poaching team found a police officer in the capital of the district with appropriate authority willing to draw up the needed document. The case appeared in court on 17 December 2003. Instead of going to jail, Arrestov received again a 2-year probation sentence! The reason for this unexpected sentence was that the day before (!) illegal possession of shotguns had become a misdemeanor, whereas it was still a criminal offense at the time when the 2 illegal shotguns were found in Arrestov's home.

We also introduced a new, friendlier anti-poaching activity that is very effective in combination with the searches. Since May 2003 we offer a financial compensation (between \$25 and \$200) for illegal rifles that are handed in voluntarily by villagers living in leopard habitat. Villagers started to fear the searches by the prosecutor and many became eager to hand in their illegal rifles. The new project proved very successful (in fact it is making us poor!). A total of 31 weapons were handed in since we started this project in May 2003. The project is co-financed by WWF Russian Far East.



A few of the 31 illegal rifles that were handed in voluntarily.

With funds provided by the Rhinoceros and Tiger Fund of the US Fish and Wildlife Service, we provided wireless communication equipment that allows our anti-poaching teams to communicate with the staff of protected areas at a mutual frequency. The resulting possibilities to coordinate activities have already provided results. Recently, a member of a volunteer team that assists professional anti-poaching teams spotted poachers killing a deer in the leopard reserve “Kedrovaja Pad”. They called in assistance from the reserve using his recently received radio equipment. The poachers were arrested and received suspended jail sentences of 2 and 3 years and total fines of \$400 (more than a very good monthly salary in Russia).

Since January 1st, 2003, payments to anti-poaching teams supported by Tigris Foundation and its ALTA partners depend on results. We hope this will help to further increase the quality of their work.

Amur leopard conservation in China

In October 2003 I made a trip to the Hunchun reserve in China that was established in 2001 adjacent to Amur leopard habitat on the Russian side of the border. I travelled by jeep together with staff of Wildlife Conservation Society China and a reserve staff member.



Schoolchildren participating in a “Green Summer Camp” distribute flyers about the Hunchun reserve to villagers

The potential for Amur leopard conservation in China is encouraging. Although the Hunchun reserve itself is no more than a narrow band between the border and a road that connects a string of villages, outside the reserve very large tracts of suitable forests remain. China has many “conservation advantages” over Russia. Wages are much lower, and many “Russian” problems are absent, including fires, high density of illegal guns and over-hunting.

We therefore decided to become more active in China and we hope to develop the following activities in 2004:

1. A visit to Russia by WCS China and reserve staff in order to exchange ideas about conservation
2. Expansion of the education activities in villages bordering on the Hunchun reserve (In 2002 Tigris provided \$3000 support for education activities)
3. Monitoring of the impact of education
4. Financial rewards for information on (tracks of) leopards and tigers in and around the Hunchun reserve
5. Compensation of livestock kills
6. Creation of a protection network in villages along the border of the Hunchun reserve

The reserve documented all livestock kills since it was established two years ago (the staff made pictures of the kills and of the tiger tracks near the kills, and they determined the location with use of GPS). A total of 32 animals were killed or mortally wounded. All cases concerned horses, mules or cows and all kills were attributed to tigers (none to leopards). The average value of livestock killed was \$400. Very few families have more than 5 horses or cows and families seldom succeed to sell more than one animal annually. A single livestock kill therefore causes a very substantial loss. We would like to compensate 70% of the value of livestock kills in the future. In addition we will provide a compensation for the kills that occurred during the two years since the reserve was established.

The compensation payments will create goodwill among villagers towards the newly established reserve, which is needed to successfully engage them in conservation. We will use this goodwill to develop a

network of villagers (preferably former poachers) to remove snares, which play an important role in suppressing deer populations in and around the reserve. The salary of the villagers will depend on the quality of their work, which will be evaluated by WCS China staff involved in ungulate, leopard and tiger monitoring in co-operation with the reserve staff. Especially leopards will benefit from the recovery of deer populations that we hope to achieve, because leopards are too small to kill livestock, which consists mainly of large animals such as cows and horses in this part of China.

Breeding success in European zoos (by Sarah Christie (ZSL) and Tanya Arzhanova (Moscow Zoo))

The Amur leopard breeding programme of the European zoo association EAZA is focusing on increasing the numbers of healthy cubs in the European and Russian zoo population, which currently numbers 95 leopards in 40 zoos. Breeding pairs are carefully selected in accordance with agreed principles to reduce inbreeding and to maximise the total retention of genetic diversity in the population, while also minimising the genetic contribution from "Founder 2" (for more detailed information on the genetics please contact Sarah.Christie@zsl.org).

Since January 2002 a total of 23 cubs have been born, of which 16 have survived. Six of the seven deaths were within a few days of birth, giving a neonatal mortality rate of 26 percent - below average for big cats in general. Two of the 16 surviving cubs have a congenital defect and another two were not a recommended litter (their parents were not genetically suitable); none of these four will be bred from in the future. Steps are being taken to identify the carriers of the damaging genes in order to eliminate them, as far as possible, from the breeding population.



Amur leopard cub at Olomouc Zoo, Czech Republic (picture by M. Korinek)

The programme, therefore, produced twelve healthy cubs of good genetic lines during this period; five males, five females and two of so far unknown sex. All twelve have low inbreeding coefficients, and their founder 2 levels are all below 29 percent with seven of them below 20 percent. This is an excellent result for a population which only a few years ago had virtually no genetically useful breeding pairs in a position to produce cubs. All of the young leopards will be paired with suitable mates and should begin to produce offspring themselves during 2004 or 2005, while at the same time most of their parents are continuing to breed. We can, therefore, cautiously look forward to a population expansion over the next few years, in accordance with the programme goals.

Reintroduction

Plans for re-introduction of captive-bred Amur leopards are at present being developed. An exact release site has not yet been selected, but most experts of the international Amur Leopard Steering Committee (LSC) agree that releases should take place in south Sikhote Alin in the Russian Far East, an area where leopards disappeared approximately 30 years ago. A main advantage of this area is that the two populations can be managed separately: it is unlikely that leopards released here will mix with the present population. It will still take several years before the first releases will take place.

Forest-fire fighting

Tigris Foundation initiated and financed an analysis of forest fires with use of satellite images from 7 different years between 1992 and 2002. The analysis was conducted by WCS and Russian scientists of TiGis of the Russian Academy of Science. It was determined which parts of the Amur leopard habitat were damaged by fires in each of the 7 years, what factors influence fires and how habitat is affected. Based on the analysis we have developed a map with priority areas for fire-fighting. In the future, the salaries paid to the members of the fire-fighting teams will depend on their results in protecting the priority areas against fires. We hope that this will improve the results. The analysis showed that the impact of fire-fighting has so far been lower than we expected.

Education

With additional support provided by ALTA partner AMUR, a number of Russian publications were printed:

1. A reprint (8.000 copies) of a children's leopard book
2. A leaflet about the Amur leopard that is illustrated with leopard paintings made by children from schools in the leopard range
3. A series of two educational posters about the Amur leopard (with corresponding instructions for teachers for a lesson about the Amur leopard)



Small girl draws big leopard at "Land of the Leopard" Festival

In August the "Land of the Leopard" festival was organised for the first time. The festival took place on the beach of Slavyanka, the capital of the main district in Southwest Primorye. Thousands of tourists and local citizens visit this popular beach in summer and the festival that took place on a sunny Saturday in August attracted a large crowd. It was a success and both the public and conservationists had a good time. A group of actors in animal costumes performed sketches on stage and organised various games and competitions in which the public could participate. Many prizes were

handed out, including framed pictures of leopards, booklets and cups with a leopard image. The festival was organised by WWF and Phoenix Fund and financed by Tigris and WWF.

Please continue to support us!

Tigris Foundation was established in January 1996, but it took more than a year to secure our first grant! Our first project, an anti-poaching team, started in January 1998. Fortunately, the team was (and still is) very successful and this gave an impulse to fundraising. Up to date Tigris raised more than \$500,000. Approximately \$430,000 was spent on Amur leopard projects and \$30,000 on projects for the Amur tiger. ALTA partners AMUR (Moscow/UK), Zoological Society of London and Alertis (Holland) provided funds (not included in the \$500,000 mentioned earlier) that were used to provide a salary for myself.

Almost half of the support was received from zoos. EAZA zoos have provided more than \$200,000 and Helsinki Zoo is leading the sponsor list with a total of \$75,000! We have received approximately \$25,000 in total from AZA zoos. Sponsors that have provided more than \$5,000 are listed in the table.

1.	Helsinki Zoo (Finland)	\$75,000
2.	Ministry for Nature Conservation, PIN-MATRA program (Holland)	\$74,000
3.	DOEN Foundation (Holland)	\$74,000
4.	Van Tienhoven Foundation (Holland)	\$43,000
5.	Foundation "Zoos Help" (Holland)	\$39,000
6.	US Fish and Wildlife Foundation (USA)	\$26,000
7.	Zoological Society of London (UK)	\$24,000
8.	Zoological Society La Torbiera (Italy)	\$22,000
9.	Rotterdam Zoo (Holland)	\$19,000
10.	Prince Bernhard Nature Fund (Holland)	\$17,000
11.	Charlie Knowles / Wild About Cats (USA)	\$15,000
12.	Gay Smith, private donation (USA)	\$10,000
13.	Beekse Bergen Safari Park (Holland)	\$8,000
14.	CEPA (support from zoos in France)	\$9,000
15.	Alliance for Conservation of Species and Populations (Germany)	\$6,000
16.	Alertis / Ouwehand Zoo (Rhenen, Holland)	\$5,000
17.	Zurich Zoo (Switzerland)	\$5,000

This is what we can do with your help:

• Reward a deer farm for tolerating a leopard for 1 month	\$ 80
• Compensation for 1 domestic deer killed by a leopard or tiger in Russia	\$120
• Compensation for a cow or horse killed in China	\$280
• One month salary for an anti-poaching team member	\$425
• One month fuel for the vehicles of an anti-poaching team	\$500
• Purchase a high pressure air-blower for our fire-fighting team	\$900
• Purchase a set of two camera-traps for leopard and tiger monitoring	\$950
• 4.000 brochures about Amur leopard conservation	\$1,100
• Purchase a jeep for an anti-poaching team	\$15,000
• Purchase deer farm land to start our own 20 square kilometre reserve	\$95,000

Details:

Name of bank: ABN/AMRO

Address of Bank: Post Box 21030, 1000 JN Amsterdam, Holland

swift code: ABNANL2A

Tigris account: 620376902

Payable to: Stichting Tigris, laagtekadijk 135, 1018 ZD Amsterdam, Holland

Citizens from the USA can support our work by sending a check to our ALTA partner WildAid mentioning "Tigris/Phoenix Amur leopard program". WildAid forwards the funds to Russia free of charge.

WildAid Inc.

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