



Tigris Foundation

Amur leopard conservation update

August 2004

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For more information: www.tigrisfoundation.nl

Encouraging results Amur leopard population monitoring

During the 2003/2004 winter season the Wildlife Conservation Society and the Institute for Sustainable Use of Natural Resources carried out a second camera-trapping survey in the Amur leopard range in Southwest Primorye in the Russian Far East. Although the area covered this time was smaller than during the previous survey, the results were very encouraging; a total of 13 different individual leopards appeared on the photographs, whereas only 10 different individuals were identified in the same area the previous year. Eight of the leopards photographed last year were “recaptured” this year. Among them was “Leo”; a male leopard who was radio-collared in 1995 and is estimated to be at least 12 years old now! The 2003 camera-trapping resulted in a population estimate of 30 leopards for the entire range in SW Primorye. This



*Amur leopard camera-trap photograph
Early spring 2004 (courtesy WCS and ISUNR)*

year’s results indicate that leopard numbers may have increased within the study area, but it is also possible that the difference is simply associated with sampling variability (e.g. it may be related to a change in travel patterns associated with snow depth). The previous two snow track counts resulted in population estimates of 22-28 leopards (in 2000) and 28-30 (in 2003). These results also indicate that numbers may be rising, but again additional data are needed before we can draw firm conclusions. Perhaps the most important result is evidence that recruitment and “turnover” is occurring within the population, whereas previously it was feared that reproduction may have been extremely rare.

Leopard and tiger poaching

Poaching of leopards continues to be a very serious problem. In 2002 and 2003 a total of six Amur leopard skins were confiscated by various law enforcement agencies in this part of Russia. In January 2004 two dead leopards were found in the forests; one in the wildlife refuge Barsovy and one in a hunting lease. In the first case damaged bones found during autopsy indicated that the leopard had probably died from bullet wounds. In the second case there was no doubt that the immature female leopard had been shot. Two Inspection Tiger inspectors found it after they had received a tip from a hunter that a leopard was wounded by a gunshot in a hunting lease. Tracks near the dead leopard showed it had not died quickly. The poachers of the two leopards were not caught in spite of a reward Tigris Foundation offered for information leading to their arrest.

In the 1970s Russia erected a fence along the Chinese border in SW Primorye. The fence is over 200 km long and was not built on the border itself, but at varying distances (in places up to 12 km) from the border inside Russian territory. Officially only border guards may enter the border zone where no hunting is allowed. However, in practice the officers in charge invite friends and influential people to hunt illegally in the zone. In the night of 23 May 2004 a group of at least 3 poachers went out on a hunting trip. Investigations by the Inspection Tiger team led by Andrei Yurchenko suggest that the group hunted at night from a tractor using torches. Animals caught in the light of the torch are blinded and stop moving, allowing the poacher a relatively easy shot. The poacher can usually only see the animal's eye reflection and often



*Young female leopard killed in January 2004
(photo courtesy Inspection Tiger)*



*The buried tiger killed by poachers in the border zone
(Photo Andrei Yurchenko. Inspection Tiger)*

doesn't know what animal he is aiming at. In this case a hunter happened to shoot at a full-grown, male tiger. The wounded tiger charged and inflicted mortal injuries to one of the hunters before his companions managed to kill it. The wounded poacher was brought to a nearby hospital and later transported to Vladivostok where he succumbed to his 38 wounds. Andrei Yurchenko and his anti-poaching staff wanted to investigate the case behind the border fence after receiving an anonymous tip. However, the commander refused access. Fortunately, Andrei found tracks of a tractor leading from the border fence to a spot outside the border zone where the tiger was buried. The case shows that corruption is still a considerable problem in this part of Russia.

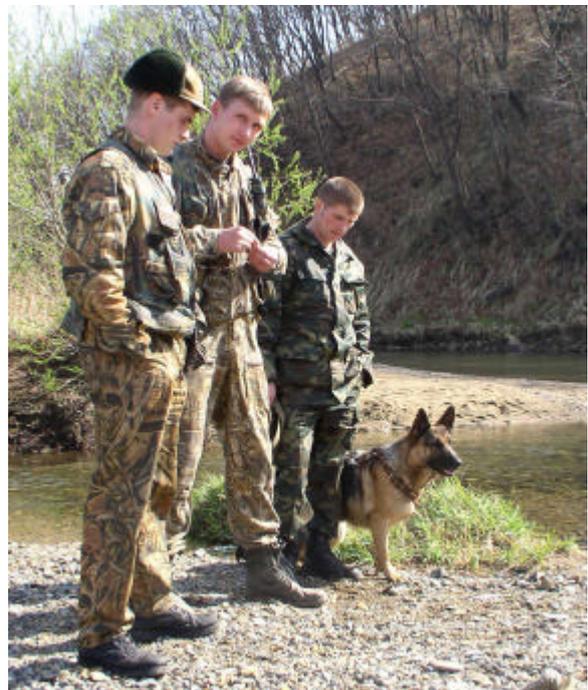
A new anti-poaching weapon!

On March 20th 2004 the Inspection Tiger anti-poaching team operating in Southwest Primorye, the last refuge of the remaining 30 Amur leopards, purchased a German shepherd dog. Nadezjda ("Hope"), aged three, is the first dog to assist in anti-poaching efforts in the Amur tiger and leopard range. Nadezjda has worked with the police force. She was initially trained to track down people, but later made a "career change" and searched for narcotics.

Nadezjda's new master has trained dogs and worked for years as a border guard. His experience will be a tremendous asset in our fight against Chinese and Russian poachers in and around the border zone. We expected it would take 6 months to prepare Nadezjda for anti-poaching work, but she turned out to be a very smart dog. Within a month she was ready and joined the anti-poaching team on their patrols in the forest. On April 28th she "caught" her first two poachers!

The arrest of the poachers was an example of excellent anti-poaching skills and teamwork. One inspector

was patrolling in the wildlife reserve Barsovy when he heard a shot. He contacted two other inspectors of whom one was with Nadezjda in the leopard reserve Kedrovaja Pad. When they arrived at the location, they started to search the area. After ten minutes Nadezjda caught a scent and she directed the inspectors to the fresh remains of a roe deer that had been killed and skinned by a poacher. Near the remains Nadezjda picked up a scent trail that she and the inspectors started to follow. After 2 kilometres they caught up with what turned out to be a group of 5 poachers.... The poachers fired into the air and ran off. One of the inspectors fired a warning shot and two of the five poachers decided to break off their escape attempt. They confronted the inspectors, who managed to disarm them after a short struggle. The two poachers have paid a fine of \$300 for killing a roe deer in a protected area.



Our new team members: Stepan (on the right) with Nadezjda

IFAW Moscow has provided funds to cover a number of expenses, including the purchase of a new jeep in 2005. Wildlifeline from the UK has offered to cover a substantial part of the team's expenses in 2004 and 2005.

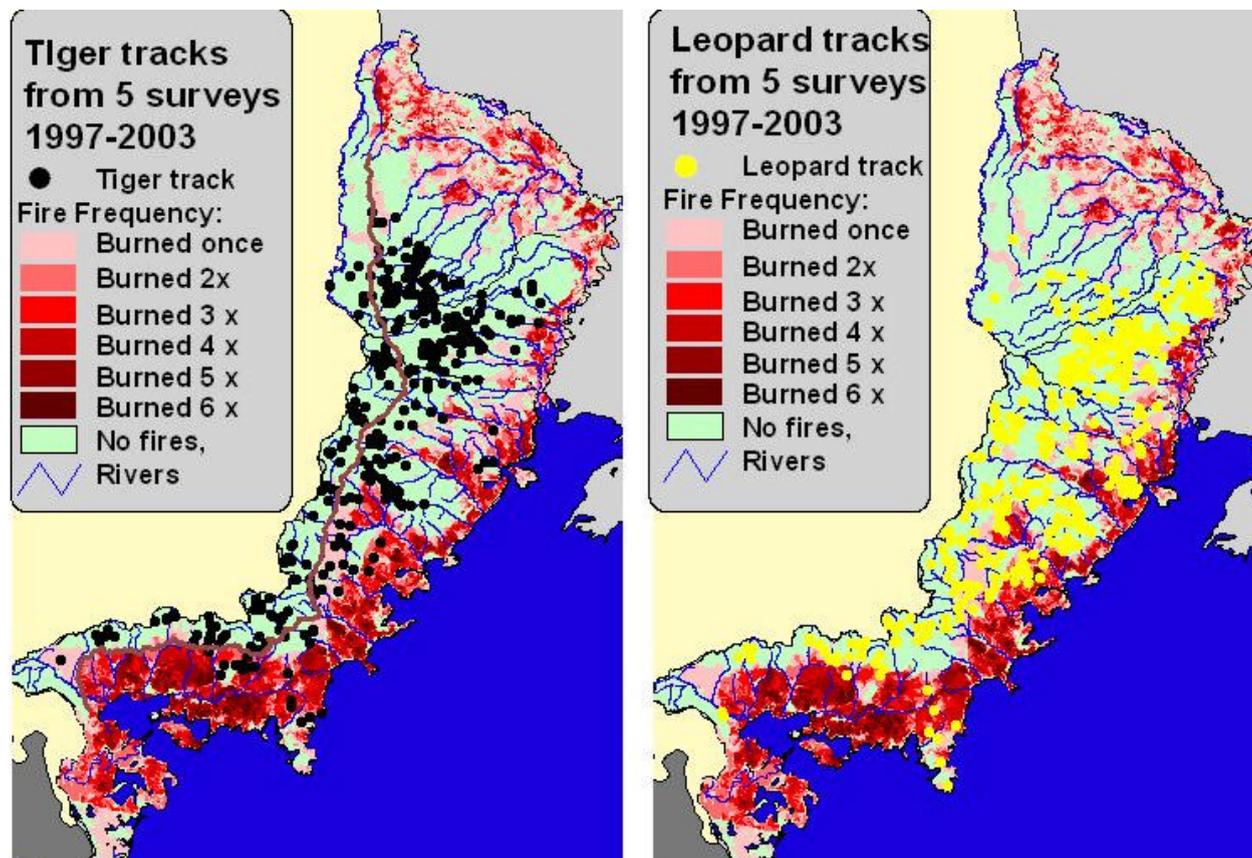
New approaches to fire fighting with promising first results

The biological wealth of SW Primorye is in its forests, which unfortunately are slowly being destroyed by man-caused fires. For the past century, since Russian settlers first arrived in this region, fire has been used as a tool for clearing the land and improving hayfields and agricultural lands. Because SW Primorye has one of the highest annual rainfalls in all of Russia, if the land is left alone a luxuriant forest of mixed coniferous and deciduous trees develops, with lush understory and many lianas. However, due to fires, much of the forestlands have been converted to grasslands. Today, only approximately 57% of SW Primorye remains as forested land. Burning appears to have become a "habit", and despite the fact that most farms have closed and many of the agricultural fields are not in use, burning continues.

WCS, TIGIS and Tigris Foundation recently conducted a thorough analysis of fires in SW Primorye with funds provided by Tigris Foundation (the fire analysis report can be downloaded from the Tigris website). For six of the eight years between 1996 to 2003 where suitable satellite imagery was available, the GIS laboratory TIGIS determined the extent of burning. Using images taken in late April or early May before the habitat greens-up, burns from both the previous fall and recent spring (the two primary burning seasons) can be distinguished and mapped.

This analysis revealed that a total of 46% (!) of SW Primorye burned at least once during the six years for which good images are available. The ground fires that are a common feature of the SW Primorye landscape seldom kill large overstory trees directly, but repeated fires dry soils, and damage to bark of trees provides access for a variety of pests and diseases. As the fires occur over many years, they prevent understory trees from growing, creating a “park-like” forest with a mature overstory, and only grasses and herbaceous plants in the understory. With no replacement by understory trees, forestland is slowly converted to grassland. Once meadows and shrublands are created, fires prevent recovery into forest stands.

Analyses of tiger and leopard habitat preferences have clearly demonstrated that both prefer mature forest types, and avoid open grasslands and areas that suffer regular burning (see figure below).



Distribution of tiger tracks (black dots) and leopard tracks (yellow dots) in SW Primorye, based on 5 surveys conducted between 1997 and 2003, in comparison to the distribution of fires in 6 of those years.

We believe that five major steps need to be taken to reverse the present situation fundamentally:

1. Conduct a survey among the local population in SW Primorye to determine more precisely who sets fires and why, and to determine public opinion towards fires (Tigris Foundation conducted the survey in June 2004 and the report will be published on the Tigris website shortly).
2. Based on the results of the public survey, initiate an education and mass media campaign to increase public awareness and reduce the number of fires that are started.
3. Improve fire-fighting capacity in the region by improving co-operation between Forest Service, Hunting Department, border guards, hunting lease managers, deer farms and district officials. Development of a strategic approach to fire fighting that increases effectiveness of efforts will be vital.
4. Enlist assistance of local administrations, police and judicial branches to arrest and prosecute arsonists.
5. Initiate intensive fire suppression and forest restoration efforts in 2 to 3 “priority areas”. These areas will act as “model restoration sites” and demonstrate that it is possible to restore healthy forests.

These plans are very ambitious, and will take considerable time and effort to develop and implement.

Recent fire fighting results prove that effective fire fighting is possible. Our 5-member fire fighting team reduced the burns in a 100 square km priority area by more than 65%! We expect that development of a system of firebreaks in this area will help to reduce fires in this area even further.

WWF Amur leopard television advertisement

WWF has developed a high-quality conservation 'commercial' that is frequently shown on local television in the Primorski Krai in Russia. It shows a woman with a young child in her arms being hunted by a man with a gun. An Amur leopard appears in view and comments that the scene is familiar to him. A voice-over then mentions that only 30 Amur leopards remain and calls on the viewers to support Amur leopard conservation.

New administrative arrangements

The Zoological Society of London (ZSL), AMUR and Tigris Foundation have formed a partnership to make all three organisations more efficient in Amur leopard conservation. ZSL is now responsible for administration of funds, which enables Michiel Hötte of Tigris and Sharon Miller of AMUR to spend more time on their respective work areas. Michiel is now a ZSL employee as well as Director of Tigris and is spending most of his time in the Russian Far East, acting as ALTA Coordinator, implementing field projects, liaising with other relevant groups, and collecting information on the current situation. Sharon Miller of AMUR is concentrating on public relations, political lobbying in Moscow and fundraising from corporate contacts in Russia and the UK. Financial support for Amur leopard conservation can now also be channeled to the field via ZSL (for bank details please contact Naomi McClure Naomi.McClure@zsl.org).

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
- Creating 5 kilometres of fire breaks with use of bulldozers \$700
- 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
- Food for German Shepherd dog and salary for her master for one year \$7,000
- Purchase a jeep for an anti-poaching team \$15,000
- Purchase deer farm land to start our own 20 square km reserve \$95,000

Donation details :

Bank name: ABN-AMRO

Bank address: Post Box 21030, 1000 JN Amsterdam, Holland

Account: 620376902

Swift code: ABNANL2A

IBAN: NL41ABNA0620376902

Payable to: Stichting Tigris, laagtekadijk 135, Amsterdam

Citizens from the USA can support our work by sending a check to our ALTA partner WildAid. Please contact Michiel Hötte for further details (mhotte@inter.nl.net).

For credit card donations, please follow the instructions on our website (www.tigrisfoundation.nl, go to “sponsors”)



“Amur leopard; only 30 remain...let’s protect them!”

This 4 by 4 m banner was put up by Phoenix Fund in the main street of the largest city in the Amur leopard’s range. WWF and Wildlife Conservation Network (WCN) provided funds for the banner.