

## **DANGER SIGNALS FOR THE SIBERIAN TIGER**

The Siberian Tiger Monitoring Program has released results indicating that Siberian tiger numbers are falling in the Russian Far East, primarily due to poaching and habitat degradation. The results can hopefully be used to improve conditions for tigers in Russia.

Official estimates of Siberian tiger numbers in Russia come from full range surveys conducted only once every 10 years. The last such survey, conducted in 2005, revealed that 428-502 tigers resided in Russia (compared to the 1995 survey, when 415-476 tigers were reported). These results suggested that tiger numbers were stable during that 10-year period.

But lots can happen to a tiger population during these ten-year interludes, so a yearly monitoring program was designed to act as an “early warning device” in case changes in the status of tigers occurred between full range surveys. Since 1998, tigers and their prey are counted on 16 survey units totaling 23,555 km<sup>2</sup> (over 9000 square miles), which represent 15-18% of the existing tiger habitat in Russia. In 2005 a total of 115 adult tigers were counted – significantly higher than the 12-year average of 95 tigers. However, in 2009 only 56 adult tigers were counted on these survey units, representing a 40% decrease from the average.

“We’re deeply concerned,” said Yuri Dunishenko, a scientist at the All-Russia Wildlife Research Institute in Khabarovsk, Russian Far East, and a coordinator of the Siberian Tiger Monitoring Program. “Deep snows this past winter may have forced tigers to reduce the amount they traveled, making them less detectable, but nonetheless, we’ve seen a 4-year trend of decreasing numbers of tigers and this is most likely due to poaching. It’s time to respond.”

Last winter’s extremely low count could be an anomaly in terms of tiger numbers, but trends in red deer and roe deer numbers (key prey for tigers), as well as tiger track counts all suggest that both prey and tiger numbers are falling in the Russian Far East.

“If tiger numbers were responding to the reduced number of prey” said Dimitri Pikunov, one of the coordinators of the monitoring program and a representative of the Russian Academy of Sciences, “we would expect there to be a lag before we saw tigers decrease. The fact that both prey and tigers are falling simultaneously strongly suggests that poaching is the driving force.”

Record snowfalls in the northern portions of tiger range further exacerbated the situation in 2009. At the epicenter – Sikhote-Alin State Reserve, which is the largest reserve protecting tigers in Russia - two meters of snow fell in 3 days, paralyzing ungulates and burying their food resources. Director of the Reserve, Anatoly Astafiev, noted “We were able to minimize the impact of the deep snows by beefing up security along our border to reduce the chance of poachers harassing ungulates, but some animals nonetheless died of starvation.”

The Siberian Tiger Monitoring Program, begun in 1998 through coordination of WCS and a number of Russian governmental organizations including protected area staff and members of the Russian Academy of Sciences, has been largely funded by international sources, but in 2009, for the first time, the Russian Academy of Sciences provided key support.

John Seidensticker, chairman of council of the Save-The-Tiger Fund, which has been the primary sponsor of the monitoring program, said, "We're glad the monitoring program is serving its purpose, which is to warn us of coming dangers, though of course we wish the news were better. We're hopeful that this information can be used to improve conditions."

Both within Russian and across the tiger's range in Asia, poaching is considered one of the primary threats to tigers and appears to be the primary factor driving tigers to extinction. The increase in demand for tiger products within Russia and continuing demand for use in traditional Asian medicines, in concert with inadequate laws, have exacerbated the poaching problem.

The drop in tiger numbers coincides with extended governmental reforms which reduced effectiveness of environmental protection agencies of Russia. Wildlife management government bodies have undergone 3 reforms since 2002, and in 2007-2008 only 10-15 wildlife law enforcement officers were on duty to cover nearly 200,000 km<sup>2</sup> (77,000 square miles) of tiger habitat. In 2009, the situation appears to have improved, but new hunting regulations about to be introduced appear likely to make it even harder for law enforcement agents to control poaching.

Russian scientists and non-government organizations are recommending changes in law enforcement regulations, improvements in habitat protection, and a strengthening of the protected areas network to reverse the downward trend. Presently the fine for possession or transport of tiger skins or derivatives of tigers is minimal, the number of law enforcement inspectors in the forest is insufficient, and the illegal harvest of Korean pine and Mongolian oak (key species providing forage for prey of tigers) must be stopped. A list of these recommendations, along with suggested revisions to the Federal Strategy for Conservation of Siberian Tigers in Russia, will hopefully be considered by the Russian government.