World's rarest big cat gets a check-up

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The world's rarest big cat is alive and well. At least one of them, that is, according to researchers from the Wildlife Conservation Society (WCS) who captured and released a female Far Eastern leopard in Russia last week.

The capture was made in Primorsky Krai along the Russian-Chinese border by a team of scientists from WCS and the Russian Academy of Sciences Institute of Biology and Soils (IBS). The team is evaluating the health and potential effects of inbreeding for this tiny population, which experts believe contains no more than 10-15 females. Other collaborators include: Wildlife Vets International, National Cancer Institute, and the Zoological Society of London.

The Far Eastern leopard is perhaps the world's most endangered big cat, with an estimated 25-40 individuals inhabiting a narrow strip of land in the far southeastern corner of the Russian Federation.

The leopardess, nicknamed "Alyona" by the researchers who captured her, was in good physical condition, weighing a healthy 85 pounds (39 kilograms). A preliminary health analysis revealed that she is he is believed to be between 8-10 years old. The animal has since been released unharmed.

Specialists are continuing to analyze blood samples as well as an electrocardiogram, which will reveal genetic information to assess levels of inbreeding. Three leopards captured previously (2 males and 1 female) in 2006 and 2007 all exhibited significant heart murmurs, which

may reflect genetic disorders.

"We are excited by the capture, and are hopeful that ongoing analysis of biomedical information will confirm that this individual is in good health," said Alexey Kostyria, Ph.D., senior scientist at IBS and manager for the WCS-IBS project. "This research is critical for conservation of the Far Eastern leopard, as it will help us to determine the risks posed by inbreeding and what we can do to mitigate them."

One of the options scientists are considering is trans-locating leopards from other areas to increase genetic diversity -- similar to what happened with Florida panthers when animals from Texas were brought in to supplement the remaining population. Today, Florida panthers have risen from less than ten individuals to a population of approximately 100.

The leopard capture and release was overseen by representatives of the Russian federal agency "Inspection Tiger," a special department of the Ministry of Natural Resources.

"This project has been ongoing for just over two years, and scientific work to capture Amur tigers and Far Eastern leopards in this part of Primorsky Krai has always been distinguished by the participation of world-class specialists and use of the best equipment and methodologies," said Sergei Zubtsov, the head of Inspection Tiger. "I want to note that the leopard captured for medical analysis and released represents another achievement for this highly-qualified team, and that one of the most important things is that she was not harmed at any point in the capture process. I hope that such fruitful collaboration will continue in the future."

Over the last 100 years, Far Eastern leopard numbers have been reduced by poaching combined with habitat loss. However, both camera-trapping and snow-tracking surveys indicate that the population has been stable

for the last 30 years, but with a high rate of turnover of individuals. If inbreeding or disease can be kept in check, WCS and its partners believe there is great potential for increasing survival rates and habitat recovery in both Russia and Northeast China.

The Wildlife Conservation Society's work to protect Far Eastern leopards receives funding by the following U.S. government agencies: U.S. Fish & Wildlife Service's Rhinoceros and Tiger Conservation Fund, National Fish and Wildlife Foundation's Save the Tiger Fund, and U.S. Forest Service International Program. The Far Eastern leopard is listed under CITES (Convention on International Trade in Endangered Species), which protects it against illegal trade for fur and medicinal purposes.

Around the world, large carnivores are faced with a variety of threats including habitat loss, depletion of prey, conflicts with people, poaching, and disease. The U.S. Congress is currently considering legislation called the Great Cats and Rare Canids Act, which would directly benefit the Far Eastern leopard and over a dozen big cat and rare dog species by creating a fund for research and monitoring, law enforcement training, and other conservation efforts. This bill has received support from several leaders in the U.S. Congress – notably Senators Joe Lieberman (CT-I), Barbara Boxer (CA-D) and Sam Brownback (KS-R) and Representatives Tom Udall (NM-D), John Tanner (TN-D), Hal Rogers (KY-R) and Ed Royce (CA-R). Timely action by the U.S. Senate would ensure passage of this important legislation.

Source: Wildlife Conservation Society