

Countering Poaching of Russia's Amur Tigers in Protected Areas

The Russian Far East is home to the world's largest remaining population of wild Amur tigers, estimated at 430 to 500 individuals (2005). Recent data from the Amur Tiger Monitoring Program, a 13-year collaboration between the Wildlife Conservation Society (WCS) and Russian partners, provides strong evidence that both tiger and prey numbers are in decline. An increase in poaching, compounded by habitat loss, are the key drivers of this downward trend. The increased level of poaching can be linked to cuts in federal budget allocations to wildlife and forest management agencies over the last decade. Findings of the Amur Tiger Monitoring Program also highlight the importance of protected areas as core breeding habitat or 'source sites'. Despite their protected status, protected areas have experienced greater losses of tigers in the past five years than unprotected areas. Improving the effectiveness of law enforcement within protected areas is therefore a priority for the conservation of tigers and other wildlife in the Russian Far East.



WCS has achieved considerable success in improving anti-poaching efforts in other tiger range countries through a comprehensive program that includes:

1. Introduction of the patrol monitoring system MIST, which enables managers of protected areas to assess both effort and results of anti-poaching patrols.
2. Increased support for effective anti-poaching patrols, such as training and the provision of equipment, vehicle fuel, and spare parts.
3. A bonus system that rewards anti-poaching teams who perform well.
4. Biological monitoring to demonstrate increases/decreases of tigers and their prey in relation to improved anti-poaching effort.

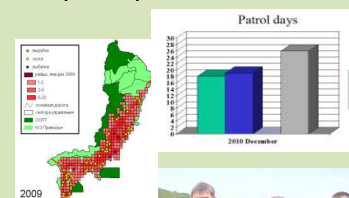
What is MIST?

MIST (Management Information SysTem) has been designed for monitoring anti-poaching patrol efforts and results. MIST is a GIS (Geographic Information System) database, which means that all data are linked spatially and information can be presented in a highly visual form, using maps and graphics. Using standardized performance indicators, MIST makes it possible to assess and compare patrol efforts and results over time and across teams and sites.

Application of MIST:

The implementation of MIST along with additional support for anti-poaching patrols, has achieved the following results across a number of tiger conservation sites in Asia:

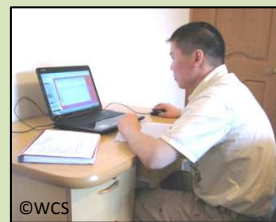
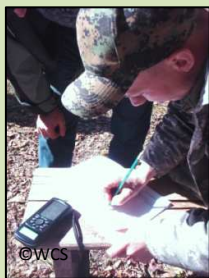
- Better planning of anti-poaching efforts
- A means of adaptively responding to newly emerging or changing threats
- A standard means of assessing success across sites and over time
- Improved morale of rangers
- Higher densities of tigers and their prey



Reducing tiger and prey poaching through improved law enforcement is one of the key strategies for tiger conservation identified at the St. Petersburg International Tiger Summit 2010.

How does MIST work?

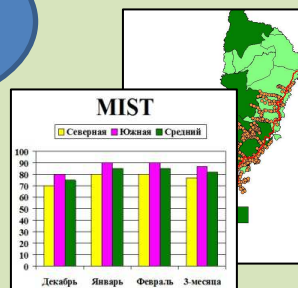
1. Data Collection: Anti-poaching teams record their patrol routes with GPS units. Data on anti-poaching (e.g. arrests, fines, confiscation of weapons) and evidence of tiger/leopard presence are entered on specially designed forms.



2. Data storage: Data from the forms and GPS waypoints are stored in a MIST database.



3. Analysis, Evaluation & Reporting: Data are processed into highly visual tables, charts and maps showing patrol effort, coverage and results.



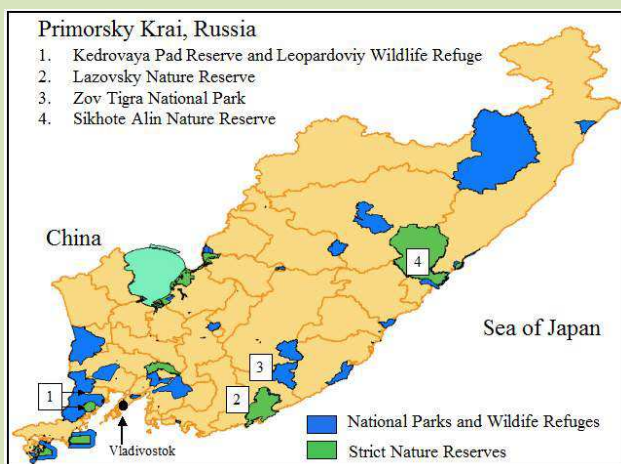
4. Feedback: Regular meetings with rangers are held to discuss patrol efforts and results and set new patrol targets.



Russia Anti-Poaching Initiative

WCS ran a two year pilot project in Southwest Primorye to develop the database structure and collection procedures before launching MIST at Lazovsky and Kedrovaya Pad Nature Reserves in December 2010. With the continued support of the Ministry of Natural Resources and USAID, the MIST project will be rolled out to two more protected areas in Primorsky Krai - Zov Tigra National Park and Sikhote Alin Nature Reserve - in 2011.

In addition to training and ongoing technical support, WCS Russia and partner organizations Phoenix Fund and Zoological Society of London are providing essential equipment for data collection, processing and storage (GPS units, computers, software, cameras), patrol support (fuel, vehicle maintenance, ranger clothing) and the funds for a performance-based incentive scheme for each protected area.



At the same time, biological monitoring protocols are being assessed and improved at each site, in order to measure the impact of improved patrol effort on tiger, leopard and prey populations.



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