



21ST CENTURY TIGER
giving wild tigers a future

ANTI-POACHING ACTIVITIES IN NORTHERN PRIMORYE, RUSSIAN FAR EAST

Interim report



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PROJECT SUMMARY

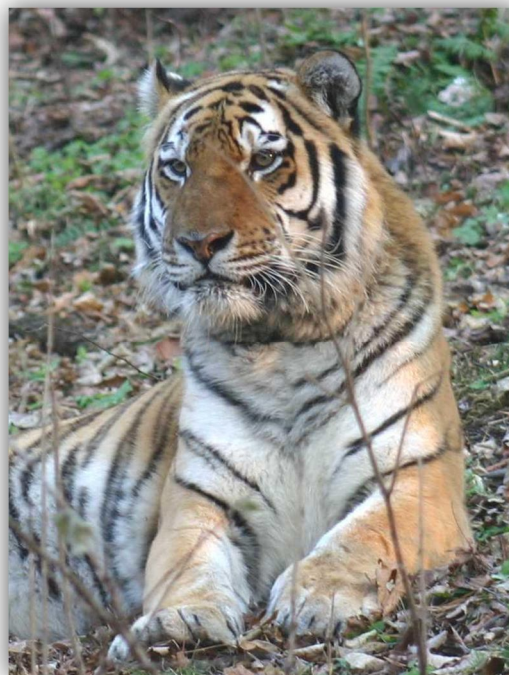
The goal of the project is to ensure the long-term protection of the Amur / Siberian tiger population, its prey and habitat in Northern Primorye¹, Russian Far East. The project's objectives are:

- To strengthen capacity of four protected areas (PAs) by providing funds for fuel, spare and repair parts, and field equipment;
- To improve protection activities in four PAs through introducing MIST;
- To raise people's awareness about the state of Amur tiger population through holding nature-oriented events, such as eco-lessons, exhibitions, contests, environmental Tiger Day Festivals and other.

Support from the Dreamworld Conservation Fund and 21st Century Tiger is helping us implement the project activities in four protected areas of Primorye.

Primorye includes the most biologically diverse and unique

ecosystems in all of Russia, retaining the last populations of wild Amur (Siberian) tigers and Amur leopards (only approximately 30 remain in the wild). Tiger census in 2005 revealed that tiger numbers crept back up to between 431-529, but recent survey data show that the formerly stable Amur tiger population is now declining



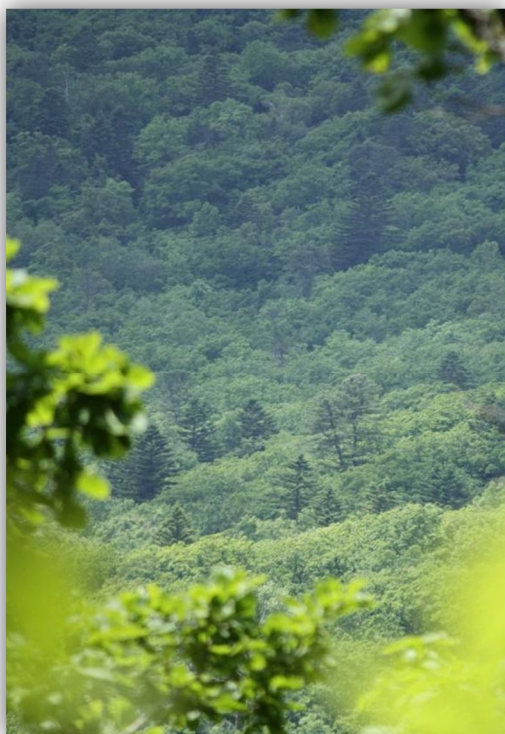
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Amur tiger

as a result of increased poaching of both tigers and its prey species. Given that tigers reflect the health of the ecosystems in which they live and on which people depend, we must take immediate and urgent actions, otherwise wild tigers will disappear forever causing irreversible process in ecosystem. In November 2010, during

¹ Primorsky Krai, informally known as Primorye, is a federal subject of Russia. Primorsky means "maritime" in Russian, hence the region is sometimes referred to as Maritime Province or Maritime Territory. Primorsky Krai, bordered by China, North Korea, and waters of the Sea of Japan, is the southeasternmost region of Russia, located between 42° and 48° north latitude and 130° and 139° east longitude.

an International Tiger Forum the leaders of 13 tiger-range countries signed a Declaration to double tiger population worldwide by 2022. The Phoenix Fund strives to assist the Russian Government in keeping the number of Amur tigers stable.



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Amur tiger habitat

This year we continued supporting anti-poaching (AP) activities in four protected areas (PAs) of Primorye, namely Kedrovaya Pad Nature Reserve, Lazovsky Nature Reserve, Zov Tigra (Roar of Tiger) National Park and Sikhote-Alin Biosphere Nature Reserve. PAs in the Russian Far East are “source sites” for tigers (places with breeding females are concentrated), and therefore protection of such areas is vital for tiger conservation in Russia. To improve anti-poaching efforts in these PAs, the

Phoenix Fund, Wildlife Conservation Society (WCS) and Zoological Society of London (ZSL) have developed a joint project. We proposed an integrated approach that includes increased support to AP teams, training to improve effectiveness and the law enforcement monitoring system MIST (Management Information System) that can be used to assess effectiveness and adapt to changing threats. Effective monitoring of AP patrols requires comparing AP efforts with results. MIST is a GIS (Geographic Information System) database that makes it possible to compare standardized performance indicators between patrol teams, conservation sites and time periods and to view patrol efforts and results on conservation site maps. Although such law enforcement monitoring has become a standard practice in many parts of the world, these systems have not yet been used in Russia.

Another integral component of the project is environmental education. Saving the Amur tiger depends mostly on the Russian people, especially those living within the tiger habitat. This requires involvement of the public, which can be achieved through continuous ecological education and outreach activities in the region. To our thinking, it is not possible to conserve tigers only by reinforcing anti-poaching efforts. It is necessary to cover the whole spectrum of activities and address people of various ages.

To disseminate ecological ideas to the wide public – especially to young people – every year Phoenix organizes

ecological festivals. It is a particularly powerful tool in transmitting messages for the values of environment and thoughts about the environmental problems, in forming a different, more ecological, type of consciousness and inspiring an alternative way of life in harmony with the environment through a festive atmosphere. Annual Tiger Day festival in Vladivostok and other regional centres has become a popular event devoted to the Amur tiger and other natural treasures of the Russian Far East.

In addition to Tiger Days, Phoenix continues supporting experienced educators who work in tiger-range districts, hold regular eco-classes devoted to tigers and endangered wildlife and habitat at schools, organize film screenings, show slide presentations, and arrange various outdoor activities focused on Amur tiger conservation issue. Moreover, every year Phoenix announces an art contest devoted to the Amur tiger and leopard. The idea of publishing such calendars aimed at involving the young generation in conservation of rare and endangered species of flora and fauna.

Below we are pleased to present our interim report to summarize activities conducted during the reporting period (from January 1 through June 30, 2011).

PROGRESS

Anti-poaching and MIST

With the support from the Dreamworld Conservation Fund and the 21st

Century Tiger, in 2011 the Phoenix Fund has continued introducing MIST in four protected areas of Primorye. Since January 2011, two PAs (Kedrovaya Pad-Leopardovy and Lazovsky NR) have been implementing MIST. Then, in June, the first training was held for the other two PAs - Zov Tigra NP and Sikhote-Alin NR.



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Inspector records a waypoint using a GPS unit

During the reported period the inspectors of the Kedrovaya Pad – Leopardoviy Protected Area (KPL) and Lazovsky NR used three specially designed for Russia MIST forms for collecting data:

- A “Patrol Movement Form” for recording basic data such as patrol team members, their transport means and the location of patrol routes;
- A “Violation Form” for data on poaching and other violations;
- A “Tiger and Leopard” form for data on sign of these two cat species.

For each reserve, the data from GPS units and the three data collection forms are downloaded and stored in a computerized MIST database. Created using MIST software, this database makes it possible to easily produce patrol reports with tables, charts and maps showing routes and results. Entering data into a MIST database does not require sophisticated computer skills.

Anti-poaching teams not only filled out the three data collection forms, but also used hand-held GPS (Global Positioning) units to record their patrol routes, violations and other information in the GPS. Thanks to support from the Dreamworld Conservation Fund and the 21st Century Tiger, the Phoenix Fund purchased additional GPS units, batteries and battery chargers, printer with cartridges and scanner in order to



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**Tony Lynam teaches how to use GPS units.
Training session at Sikhote-Alin Nature
Reserve**

facilitate the work of the protected area staff with MIST. In addition, the funds were spent for fuel, spare and repair parts for AP patrols in these PAs.

It is worth mentioning that it will probably take more than 12 months

before the inspectors have gained the confidence and skills to work with MIST. However, we are glad to report that the KPL and Lazovsky NR have



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**Discussion of MIST results during refresher
training at Kedrovaya Pad – Leopardovy
Protected Area**

made impressive progress with the implementation of MIST. The system already operates well and has produced good quality data. The overall quality of data collection by inspectors was satisfactory. Although, some inspectors had problems producing any data at all. The quality of the data entry by the protected area staff has been excellent. The data entry persons very quickly learned how to work with the MIST software (see examples of maps and tables based on MIST database in the attachment).

To encourage good performance in the ranger teams, an incentive system linked to MIST was developed. The point is that many inspectors in PAs lack motivation due to extremely low salaries, and it is hard to ensure them to work with MIST without incentives. However, some of them are interested in improving protection, but hesitant to use new procedures that substantially

increase the workload of inspectors. We agreed with the protected area management to finance an incentive system that will be based on quality of MIST work, patrol efforts and patrol results. After the first incentive payments being paid, we noticed more enthusiasm and willingness among the inspectors to carry on the work with MIST.

As part of an initial training effort, the inspectors of Sikhote-Alin NR and Zov Tigra NP received instruction in law enforcement monitoring techniques at Sikhote-Alin NR on 9 – 13th June. The training covered practical field navigation techniques that inspectors



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Meeting with Sergei Khokhryakov (right),
KPL director

need for implementing law enforcement monitoring, use of GPS, MIST patrol data collection methods, patrol strategy and techniques. Each involved 2 – 3 days of lectures, practical demonstrations and interactive discussion sessions, and a half-day practical field exercise and debrief that tested skills learned in a simulated patrol situation with a

defined mission. Participants from Sikhote-Alin NR and Zov Tigra NP readily grasped GPS and MIST patrol reporting.

Additionally, refresher training for the inspectors at Lazovsky and KPL was held in June to ensure correct and accurate data entry by the protected area staff. During the meeting at Lazovsky NR and KPL, their managers were satisfied with the MIST database collected the inspectors and found it very useful to analyse anti-poaching efforts, results and to plan further activities. Such regular meeting with the inspectors provide the opportunity to discuss results and set new patrol targets.

During the second half of 2011, Phoenix, WCS and ZSL will continue assisting the protected area staff in implementing MIST, providing essential equipment for data collection, processing and storage (GPS units, computers, software, cameras), providing patrol support (fuel, vehicle maintenance, ranger clothing) and the funds for a performance based incentive scheme for each protected area.

Ecological education

During the reported period the educators visited remote villages in Lazovsky and Terneisky districts to give lectures, showed slide-presentations and video on animals and organized various ecological contests, games, quizzes, and exhibitions. Below, we present brief description of their activities.

1. Lazovsky district

Since 2007 Phoenix has been supporting ecological education at Lazovsky Nature Reserve. Specialists of the Ecological Education Department established systematic work with schools, kindergartens, and people of the district. Among their innovations are binary lessons, where teachers of two adjoining disciplines lead the lesson together. Educators Galina Dikalyuk and Olga Degtyarenko developed a large number of ecological games, holiday scenarios, training programs for pre-schoolers and children of primary school.



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A child attaches images of wildlife to a map of Lazovsky Nature Reserve

From January to June 2011, the educators gave 100 lessons on the following themes: “Wintering Birds”, “Protected Areas of Primorye”, “Cats of Our Forest”, “Feed Birds!”, “Who Are Awake in Forest?”, “Diversity of Animals”, “Who Lives in Reserve?”,

“Who Is the Master in Taiga?”, “What Is Zapovednik?”, “Spring in Forest”, “Safety Rules in Forest”, etc. All in all, 2,255 children attended the lessons and other nature-oriented events during the reported period.

A lesson ‘Wintering Birds’ was aimed to educate the children about interdependence of bird migration and food resources, inform about bird categories (nonmigratory, wintering, and nesting birds), and foster positive attitude towards wild creatures.

A lesson devoted to the protected areas of Primorye was aimed to inform the schoolchildren about goals and objectives of the nature reserves, their geographical location and biological diversity. At the beginning of the lesson the children played a game “Animals and Human”, during which they learned about the history of the relationship between animals and people. After playing the game, the children were told about main goals of the protected areas and were given a task to outline the protected areas on the map of Primorye.

A lesson ‘Cats of Our Forest’ was given to introduce wild cats living in Primorye to the children. The lesson began with a visit by a Tiger Cub (disguised senior student) who talked with the children to find out the level of children’s knowledge about the Amur tiger. Then, the Cub introduced its ‘relatives’ by asking riddles. The children should find a correct answer to a riddle by choosing a card with an image of an animal. After guessing the riddles, the children were told about the Amur leopard, rare and endangered

animal, and about Russia's Red Book. At the end of the lesson they played a game "A Lucky Hunter".



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A lesson on Amur tiger

The main goal of a lesson "Who Are Awake in the Forest?" was to show the children how it is difficult for animals to survive winter. During the lesson, the kids guessed riddles and examined images of wild animals that do not hibernate, such as hare, fox, tiger, lynx, deer and others. The educators drew children's attention to the way how wild animals prepare for winter and told about food sources they use to survive tough winter. At the end of the lesson the children played an interactive game "Tiger's Hunt".

The aim of a lesson "Diversity of Animals" was to extend children's knowledge of wild animals. The lesson was carried out in the Reserve's Nature Museum. During an excursion an interpreter told the kids what animals live in forest, on the seashore or in the sea, drew their attention to animal coloration and size. At the end of the lesson the children watched several video episodes about Lazovsky Nature Reserve.

A lesson on the topic "Who Lives in the Reserve?" has become one of the favourite lessons among the children. The aim of the lesson was to develop an understanding that there is a rich diversity of flora and fauna species on the planet. The lesson was carried out at the Reserve's Nature Museum. During an excursion to the museum, the children learned much about animals living in the reserve.

A lesson on a topic "What Is Zapovednik?" was given to the children to define zapovednik (nature reserve) and inform the kindergarteners about fauna and flora species inhabiting Lazovsky Nature Reserve.



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Planting Korean pine

A lesson "Safety Rules in Forest" was given to introduce safety rules in the forest in case of any serious, unexpected, and dangerous situation requiring immediate action. During the lesson the children watched a slide presentation and learned about such emergencies in the forest, like physical injuries, poisoning, bites of insects, ticks and snakes, forest fire, disorientation, encounters with predators, and etc. and the ways to

prevent such dangerous situations or minimize the aftermath of them.

Besides attending lessons, the children watched various films about wildlife, visited the Reserve's eco-centre and arboretum. Also, the educators of the Ecological Education Department of Lazovsky Nature Reserve organized planting of 250 young plants of Korean pine.

2. Terneisky district

In 2005, Phoenix established ties with the "Uragus" ecological NGO of Terney town, led by Galina Maksimova who devoted the greater of her life to teaching children Biology and Ecology. Terney is a strategically important place for tiger education. Sikhote-Alin Biosphere Nature Reserve is located in the district.



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"Tiger" and children pay visits to residents of Terney town

During the reported period the educator carried out 123 events, including eco-lessons, contests and outdoor activities, for 1,025 children ranging in age 7-18. The educator carried on working with three age groups at Uragus eco-centre (Ages 7-9, Ages 10-12, Ages 13-17) and gave lessons on rare and

endangered species of local flora and fauna. For second year in succession, the educator conducted regular lessons "World Around Us" with 2nd-graders.

Lessons about tigers were given for kindergarten children. The most favourite lesson among the children



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Kindergarten children watch a puppet show about wild animals

was a lesson based on a well-known Russian cartoon "Tiger Cub on Sunflower". After viewing the cartoon, the kids discussed the plot and main cartoon characters. They imitated dialogues and movements of the cartoon characters which was a very good proof that they easily enjoyed watching the cartoon and learnt a lot of new things.

Senior schoolchildren performed a puppet show to juniors in order to educate them about the necessity to protect and conserve nature, plant trees, and keep forest and water bodies clean.

After a massive 9.0-magnitude earthquake occurred near the northeastern coast of Japan and destructive tsunami in March 2011, the educator held two lessons on this topic.

The children were very scared with the disaster and asked many questions, including those about protection against radiation.

Four senior schoolchildren were working on their own projects, two of which were presented at a conference “Man and Biosphere”. A project about a water body in Zamanikha Park was awarded for the best design. An author of another project on coniferous species in Zamanikha Park won a third place and a free voucher to Okean, a year-round children’s camp considered to be an honourable award for children.

Tiger Day

Phoenix has been very successful at holding wildlife festivals. In September-October every year, one of the biggest environmental festivals takes place in Primorye - the Tiger Day Festival. The tradition of dedicating the



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Tiger Day-2010 in Terney

day in honour of the Amur tiger began in Vladivostok in 2000 when the Phoenix Fund, WWF-Russia, WCS and the City Administration brought local poet and photographer Vladimir Troinin’s idea to life by creating a city-wide holiday. The holiday reminds

people about the uniqueness and beauty of the territory they live in. The Amur tiger is a symbol of Vladivostok and Primorsky krai; it is the most respected animal in the Russian Far East. The main goal of the holiday is to help save the Amur tiger in the wild for future generations - not just on logos and coats of arms - and to draw international attention to the plight of this endangered species. Gradually the festival gained popularity, its status was elevated to a “regional holiday” which means that it may be celebrated officially in every corner of Primorsky krai, and today Tiger Day is enthusiastically celebrated in many countries.

The festival is a particularly powerful tool in transmitting messages for the values of environment and thoughts about the environmental problems, in forming a different, more ecological, type of consciousness and inspiring to live in harmony with the environment through a festive atmosphere. Annual Tiger Day festival in Vladivostok and other regional centres has become a popular event devoted to the Amur tiger and other natural treasures of the Russian Far East. The festival usually begins with a carnival procession, and is followed by various theatrical performances. Games and quizzes are essential part of this event. Phoenix organizes Tiger Day Festivals in Vladivostok, Luchegorsk, Novopokrovka, Partizansk, Lazo, Kirovka and Terney towns. In 2010, the Dreamworld Conservation Fund generously provided funds for Tiger Day in Luchegorsk town (northern Primorye).

In May 2011, thanks to support from the Dreamworld Conservation Fund, 21st Century Tiger and other sponsors, Phoenix began preparations for the festivals in Primorye. At the moment, Phoenix staff members together with the educators and tutors of the eco-centres are discussing a scenario of the holiday and making a list of contests that will be organized during the feast. The educators of Lazo and Terney are actively preparing for Tiger Day, drawing a budget estimate for Phoenix consideration, ordering costumes and starting information campaigns to attract as many people as possible. In September 2011 we will organize Tiger Day festivals in Terney and Lazo towns representing the same districts where Zov Tigra NP, Lazovsky NR and Sikhote-Alin NR are located.

Art contest

In December 2010, the Phoenix Fund announced an art contest devoted to the Amur tiger for the fifth year in succession. The main goal of such contests is to attract more children and adults towards tiger conservation issue. The point is that when participating in such contests, children often try with much pleasure and interest to find out about a lifestyle of animals, what problems animals face to survive in the wild and how people affect animals' state. Moreover, often parents join their kids during their preparations for the contest, and together they learn more interesting and unknown facts about wildlife.

From January to March 2011 Phoenix staff received many parcels with children's entries. In March the best

paintings were chosen to be published in a wall calendar, and in May, 2,000 copies were published.

We are pleased to report that more children compared to previous years took part in art contests and other quizzes and competitions devoted to big cats. Amur tiger and leopard conservation has become a popular topic nowadays in Primorye. For



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Cover of the 2012 calendar

example, in 2010, over 802 children from Khabarovsk and Primorsky regions of Russian and Hunchun town of China sent their entries. In 2011, as many as 840 Amur tiger drawings were received by Phoenix from 11 districts of Primorye and Novosibirskaya Oblast. Increase in the number of entries indicates a huge increase in awareness and interest in big cat conservation issues among schoolchildren. We hope that it is also indicates positive results of our educational programs.

Every contestant will receive a calendar. Also, our educators will use the calendars as small gifts/awards for winners or participants of other quizzes, contests and ecological events.

Attachment

Patrol efforts by AP teams of KPL (December-February 2011)

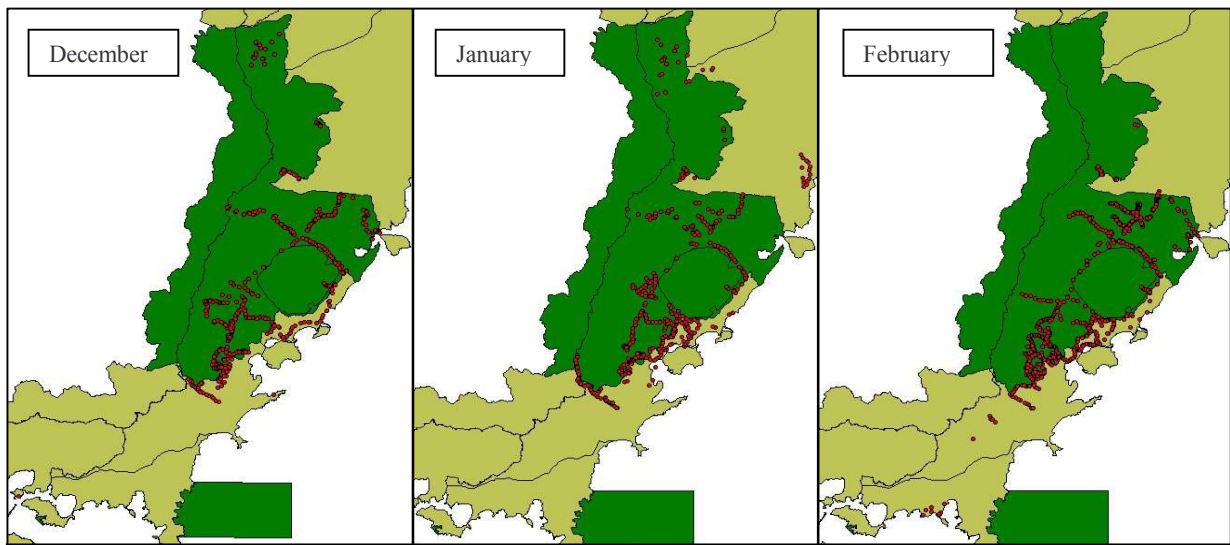


Figure 1. All patrol routes (all teams and all transport types).

Patrol days in KPL (December-February 2011)

