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Amur Tiger Conservation in Russia in 2012 FINAL REPORT

Project Summary

The goal of the project was to ensure the long-term protection of the Amur / Siberian tiger population, its prey and habitat in Primorye, Russian Far East. The project was motivated by the urgent need conserve wild tiger population to worldwide. Primorye and Khabarovsky krai in the Russian Far East are the only area in the world where Amur tigers (Panthera tigris altaica), included in Russia's Reed Book and IUCN Red List, still exist in the wild. In addition to poaching and wildlife trade, tigers are being pushed out of their habitat by human encroachment and deforestation. The Phoenix Fund implemented the project activities with focus on four protected areas, core tiger "source" areas, namely:

1)Sikhote-Alin Biosphere Nature Reserve,

2)Zov Tigra National Park,
3)Lazovsky Nature Reserve,
4) and Kedrovaya Pad-Leopardovy (since April 9th 2012 merged into Land of the Leopard National Park).

Taking into consideration the declining trend in Amur tiger numbers during the recent years, these protected areas were chosen as the base for population recovery. The project's objectives were:

- To strengthen capacity of four protected areas by providing funds for fuel, spare and repair parts, and field equipment;

- To improve protection activities in four protected areas through introducing MIST;

- To raise people's awareness about the state of the Amur tiger population through holding nature-oriented events, such as eco-lessons, exhibitions, contests, environmental Tiger Day Festivals and others.



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Amur tiger

Russian people are fortunate to have the Amur tiger, a truly magnificent cat. Sadly, today, this tiger population has dwindled to only about 500 individuals due to poaching and the destruction of their habitat.

The critical initial step in reversing the decline in Amur tigers is to improve antipoaching efforts in protected areas (PAs) that provide core breeding habitat for Amur tigers. Thanks to generosity of the Dreamworld Wildlife Foundation and 21st Century Tiger, we were able to implement two aspects of the project. The first one is called MIST, aimed at increasing the effectiveness of our anti-poaching activities in PAs. These activities could not be achieved without our committed and trained wildlife rangers, and MIST helped them work more efficiently and provide standardized performance indicators. Our second challenge within this project was to enhance eco-education in the region, particularly in remote villages located in the tiger habitat.

Below we are pleased to present our final report to summarize activities conducted from February 1st through December 31st 2012.

Project Progress

Anti-poaching and MIST

Thanks to continuous support from the Dreamworld Conservation Fund and the 21st Century Tiger, we carried on supporting anti-poaching efforts in four PAs, and continued training law enforcement staff to use MIST more effectively.

The idea of promoting of MIST patrolling system in Russia was put into action two

years ago, when the Phoenix Fund, Wildlife Conservation Society and Zoological Society of London agreed that implementation of MIST represents a potentially important tool for monitoring and improving anti-poaching efforts in Amur tiger habitat. After a two-year period of work with MIST in the 4 PAs, we have already seen positive changes; however we recognise that "roll-out" of MIST is not easy and may take a few years before we can be completely satisfied with our achievements and ready to expand the borders of our project to other PAs



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Sergei Bereznuk (right) explains how to work with a GPS unit

During the reported period we held four review and feedback meetings in each of the four PAs in order to discuss antipoaching efforts and results and decide where further improvements needed. During the meetings we discussed patrol routes, coverage, shared our changes and recommendations, compared results achieved in 2011 and 2012, and approved the priorities for 2012 (i.e. increase coverage and penetration of patrols and especially of foot patrols).

The analysis of the anti-poaching results taken from MIST database in the first half of 2012 showed that the patrol intensity and overall performance of the teams was increasing. However, in the second half of the year the inspectors did not follow all our recommendations for some reasons. For example, some of them did not increase the patrol time, patrol days or distance of foot patrols. Also, it is sad to note that not all teams always collected data for MIST during all patrols, and as a result significant fewer law enforcement results (confiscated weapons, protocols, and fines) were stored in the MIST database. There were several reasons for failing to comply with our requirements:

- Technical problems with GPS units which caused a loss of some information gathered during field patrols.
- 2) Shifts in staff sometimes paralyzed



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Igor Kolodin gives a PowerPoint presentation on MIST results patrol work.

3) Repairs of patrol vehicles.

After a heated discussion it was agreed that the teams would always collect data

MIST results in four protected areas 2012				
Items	Lazovsky Nature Reserve	Sikhote- Alin Nature Reserve	Zov Tigra National Park	Land of Leopard Nationa I Park
Patrols	569	488	195	910
Violations	31 (1 –illegal hunting)	11	27	189 (9 – illegal hunting)
Criminal cases	2	-	-	7
Rifles seized	3	-	-	8

for MIST and follow all our recommendations when patrolling the protected areas.

In general, MIST program implementation in 4 PAs was quite successful. PA's inspectors managers and saw the advantages of this program that helped improve anti-poaching analyse and efforts. Although at the first stage regular review and feedback meetings with our participation were an essential part of the operational framework for MIST, we believe that in future PA's administration will run this project on their own. The incentive scheme is a vital component of the MIST patrol model of enhanced law enforcement. However, in future we plan that the incentives will be paid from PA's budget funds.

Phoenix is satisfied with the overall progress. MIST has already showed

visible and stable results in monitoring and improving anti-poaching efforts in 4 PAs, and we heard that the Ministry of Natural Resources and Environment of the Russian Federation has recommended administration of other protected areas to consider the possibilities of adopting MIST as a general practice in their law enforcement work.

In January 2013, a full version of SMART software, a tremendous improvement to MIST, will be released and then we will be able to start changing from MIST to SMART.

Ecological education

1. <u>Eco-education and outreach in</u> <u>Lazo</u>

For over five years Phoenix has been supporting ecological education activities conducted by Ecological Department specialists of Lazovsky Nature Reserve. Staff members fulfil the educational mission by interpreting studies of conservation and environmental protection in both field and classroom environments. Information generated through Lazovsky eco-centre's education programs is shared with a targeted constituency that includes school and kindergarten children, their families, local educators. tourists and other conservation-oriented public groups.

In 2012, the educators organised 452 ecological events, including lectures, film screening, art contests, excursions and outdoor activities, for 8,323 children ranging in age 5-20. Outreach efforts gave

the educators opportunities to pass on information to communities living in the close vicinity of Lazovsky Nature Reserve and outside the district. Outreach and education projects included working with young and adult public to further inculcate the best conservation practices into people's behaviour.



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Nature walk

During the reported period the children attended lessons devoted to eco-system, biodiversity, food chains and the energy pyramid, bird species, bid cats, first spring flowers, fire safety in the forest, protected areas of Primorye and others. Lessons devoted to biodiversity of the Lazovsky Nature Reserve were most popular and well attended classes. During the lessons the educators told about famous legends and myths about plants and animals of Primorsky taiga. The kids also shared some legends with their classmates and even disputed what legend was true and what was false. Also, the children took a tour to the Reserve's Nature Museum and learned much about indigenous people of Primorye and their relationship with wildlife. During the lessons on the theme

Kindergarten children attended "Journey of Fruits and Seeds" lessons. The main goal of the lessons was to inform about different forms of seeds and fruits and foster curiosity in children. During the lessons the kids examined sets of seeds and fruits and found differences among them. They also conducted some experiments to find out how seeds travel.



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Eco-lesson with kindergarten children

The children went on nature walks and observed trees growing in the area. They were challenged with crossword puzzles and riddles themed around the role of plants. During the walks the kids discussed what benefits trees bring to animals and people. They focused their attention on insects and shared their views on the importance of insects.

During "Forest Levels" lessons the kids discussed why people need homes and talked different types of homes. Then, the educator told about four forest levels: floor, canopy, overgrowth, and undergrowth (or understory) and what animals live on each level. The preschool students remained attentive throughout the lessons and were excited to continue the conversation non-stop.

In autumn, children took educator-guided walks in the woods and enjoyed fun fall activities. The educator told them about the fall season with its crisp leaves changing colour and the hues of orange, brown and red dusting the ground as winter approaches. In addition, they attended a series of lessons on the theme "Fall Has Come" and discussed basic rules of human behaviour in the woods.

During lessons devoted to bird species, the educators informed the children about interconnections between all living creatures and fostered careful attitude towards birds.

2. <u>Eco-education and outreach in</u> <u>Terney</u>

Since 2005, we have been closely cooperating with the Uragus ecological club of Terney town, led by Galina Maksimova who devoted the greater of her life to teaching children Biology and Ecology.

During the reported period, Galina Maksimova worked with five groups of children: two groups of 1^{st} -graders, a group of 2^{nd} - 3^{rd} -graders, a group of 5^{th} - 6^{th} -graders, and a group of 7^{th} - 11^{th} -graders. All in all, over 5,053 children and 1,098 adults attended 578 eco-lessons and other events.

In February and March, a puppet show about a tiger cub and its friends was presented for the $1^{st} - 3^{rd}$ graders and kindergarten children. The show was performed by senior school students. The main goals of the show were to tell the



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Planting seedlings

children about an important role coniferous plants play in ecosystem and to foster positive attitude towards tigers. A series of lessons devoted to forest fires was given for junior schoolchildren. Active participants of various ecological events (planting of Korean Pine seedlings, clean-up actions, quizzes and others) were awarded with certificates and memorable gifts.

With participation of 33 volunteers, "Uragus" conducted an action "Raise the Woods to Heavens" in June. A half of the participants were adults who had been planting trees with "Uragus" for several years. More than 600 young outgrown trees were planted.

Also, there was an annual ecological campaign during which Tiger Volodya (a

disguised senior schoolchild) and other wild animals (young artists who are active members of Uragus eco-club) visited local organizations and businesses in Terney in educate local people order to on ecological issues through fun, exciting and memorable concerts and events. This group of young ecological artists-activists focused on bringing positive messages to the audiences through singing, dancing, acting and audience participation. By delivering these important, positive, hopeful life messages through these entertaining methods, they left important impressions and memories that will stay with the audiences. During such visits to local businesses and organizations the group was raising funds for charitable purpose.

In June and July, the educator prepared senior members the Uragus ecological club to hold events for younger children. A number of interactive games about big cats' family were developed.



© Phoenix Eco-lesson on Amur tigers

During outdoor walks around Terney the school students observed seasonal changes, learned to find animal tracks and other signs of animal presence and to distinguish some types of flora and fauna, and fulfilled their ecological skills and knowledge into practice. In August, the children took a trip to the Blagodatnoe (inspectors' station) of the cordon Sikhote-Alin Nature Reserve where they got acquainted with birds and other inhabitants of ecosystems of the Blagodatnoe Lake, the sea coast and the forest.

In August, the educator organized a meeting with Igor Porpura, ichthyologist, author of a series of articles about current state of local rivers and aquatic bioresources of the area. The children enjoyed the meeting and expressed their willingness to study river biodiversity conservation problems and to participate in water conservation projects.

In September-December, there were classes with three age groups of children: 1^{st} graders, $2^{nd}-3^{rd}$ graders and $5^{th}-6^{th}$ graders. Based on the film "Who is the Master in Taiga?" children learned about inhabitants of taiga ecosystem, Amur tigers and other large predators.

3. <u>Environmental Education</u> <u>Evaluation</u>

During the reported period Phoenix conducted two opinion polls among schoolchildren in Lazo and Terney in order to assess changes in their awareness of tiger conservation issues and attitude towards this big cat. The first opinion poll was conducted in February 2012 before giving eco-lessons at schools and ecocentres. The second one took place in December after a series of eco-classes. During the opinion polls the children were asked to answer 10 questions on Amur tigers. Then, the educators started their courses of lessons addressing the following topics: the current state of Amur tiger population, Amur tiger conservation issues, tiger habitat and anthropogenic influence, protection of tiger prey species, and etc. The second opinion poll was carried out with the same schoolchildren from the same settlements after they listened lectures and attended various in-school and outdoor events devoted to Amur tigers. The results were compared with the ones received in February in order to evaluate changes in children's knowledge.



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A teacher asks a boy what he knows about tigers

Comparing the general results of two opinion polls, we saw that the schoolchildren possessed good knowledge on tigers without attending special lessons. About 51% is the average rate of correct answers among these respondents. But the lessons devoted to tigers significantly boosted children's' knowledge – after attending the lessons 65% of the respondents gave correct answers.

Additionally, Phoenix conducted а community opinion poll during Tiger Day celebration where residents were asked to provide input on a variety of topics on Amur tigers. Nearly 300 residents completed the survey, and we are very appreciative of the time they took during their Festival experience to participate in this valuable activity. The opinion poll showed that the community is very supportive of our tiger conservation projects. is well aware of tiger conservation issues and that people are willing to have experience working firsthand with animals. 98% of the respondents demonstrated their awareness of main threats to the survival of Amur tigers. We are glad that 88% of the pollees could list top priority ways to protect tigers and their habitat. Over 75% of the interviewees were ready to take part in eco-events aimed at nature conservation.

In general, the data from the opinion polls helped us understand that our educational programs work very well and that every year more and more people become our adherents.

Tiger Day in Terney and Lazo

In September-October every year, one of the biggest environmental festivals takes

place in Primorye - the Tiger Day Festival. The tradition of dedicating the 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 the about 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



© Phoenix

Tiger Day in Terney

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 usually begins with a carnival procession, and is followed by various theatrical performances. Games and quizzes are essential part of this event.

In 2012, thanks to support from the Dreamworld Wildlife Foundation, 21st Century Tiger and other sponsors, Phoenix organized Tiger Day Festivals in Vladivostok, Luchegorsk, Novopokrovka, Partizansk, Lazo, Kirovka, Arseniev and Terney towns. Tiger Day festivals in Terney and Lazo towns representing the same districts where Zov Tigra NP, Lazovsky NR and Sikhote-Alin NR are located.

Terney

The holiday was celebrated on September 14th and traditionally began with a festive parade consisted of more than 500 participants. Through all the parade units a big "Planet Earth" balloon was rolled with a slogan "The World for a tiger, a tiger for the world". The idea was to hold the Earth in careful hands of people.

After marching along the main town streets, all the parade goers gathered at the stadium. Tiger Volodya (actor) greeted the audience. A new hero of the festival was Dim Dimych Gorynych, a dragon that protects forest from fires. He told the audience about fire safety in the forest. Then, 13 tiger cubs (children dressed in tiger costumes) appeared on the stage carrying the flags of 13 tiger-range countries and greeted the audience in the official language of each country. One of the most important aspects of the festival was the welcome speeches given by the representatives of the Sikhote-Alin Nature Reserve, Phoenix Fund, WCS, and "Uragus" eco-club. A theatrical performance by amateur actors followed. With great enthusiasm and excitement the children participated in an art contest drawing tigers with chalks on asphalt.

The daytime part of the festival was followed by a film screening about Amur tigers that ended with a firework over the river. About 200 people gathered for the evening program, with over 60 adults.

<u>Lazo</u>



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Tiger Day in Preobrazhenye village

In August, the educators organized celebration of the Tiger Day festival twice. First celebration was held on August 8th on the sea shore of Petrov Bay. Specialists of the Educational Department of the Lazovsky Nature Reserve together with young activists entertained the holidaymakers with various contests, quizzes and interactive games. As many as 140 children and adults became active participants of the Tiger Day and demonstrated their good knowledge of

tiger conservation issues. On August 21, Tiger Day Festival was celebrated by the residents of Preobrazhenye village. Over 350 people dressed up in tiger costumes participated in a festive procession and competed in numerous contests. As always, the holiday drew much attention of people in Lazovsky district and proved to be success.

4. Art contest

For seven years the Phoenix Fund has been organizing annual art contests for children with the purpose of promoting careful and respectful attitude towards the Amur tiger and Amur leopard at young age. The topic always concerns these big



© Phoenix

A cover of Amur tiger calendar

cats. We believe that creating art is a healthy way for children to use their imaginations and to express themselves. When participating in art contests devoted to nature conservation, children try with much pleasure and interest to find out about a lifestyle of this and that animal, 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. The children submit a piece of art displaying their idea of how tigers and leopards spend their days in the wild. From year to year more and more children take part in our art contests.

Participants in art contests in 2008-2012

Year	Number of participants		
2012	1389		
2011	840		
2010	802		
2008	484		

In 2012, over 1,389 Amur tiger drawings and 479 Amur leopard drawing were sent by children for the contest. Increase in the number of entries indicates a huge increase in awareness and interest in big cats' conservation among schoolchildren. We hope that it is also indicates positive results of our educational programs.

The best paintings were selected by Phoenix's staff to publish calendars for 2013. Besides children's paintings, the calendars comprise a list of ecological dates and information about big cats. Every contestant received a calendar. The rest calendars were used for awarding young active ecologists and participants of various nature-oriented competitions and actions.

Appendix I

Map of Primorye. Protected areas working with MIST



Amur Tiger Conservation in Russia in 2012 |

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Patrol routes by all teams in four protected areas in 2012



These maps were created based on MIST data. Each map let the management staff to see where the protected area was patrolled well and where the protection efforts should be improved.