



Amur tiger conservation in 2010

Final report January-December 2010



Vladivostok Russian Far East 2010

PROJECT OVERVIEW

The goal of the project is to ensure Amur tiger population survival in Primorsky region, including:

- Saving injured, orphaned or sick wild tigers by providing food, housing and medical care;
- Gaining in support from the local people though ecological education and outreach activities for children and adults as well as Tiger Day festivals in Terney, Lazo and Kirovka towns.

To ensure long-term survival of Amur Phoenix proposed a program tiger comprising tiger rescue operations and educational activities in Primorye, Russian Far East. Primorye represents the only area in the world where the Amur/Siberian tiger still exists in the wild. The species is listed Endangered by the IUCN and is on CITES Appendix I for protection status. Protected under the Russian and international laws and regulations, the Amur tiger population is still threatened by poaching, habitat destruction, prey depletion and conflicts with people. Till nowadays the incessant and insatiable demand for tiger parts in



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Landscape in Primorye

the South - East Asia appears to be the main driving force behind poaching and traffic.



Amur tiger

Official estimates of Amur tiger numbers in Russia come from full range surveys conducted only once every 10 years. The last survey conducted in 2005 revealed that 431-529 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. However, in October 2009. the Siberian Tiger Monitoring Program released results indicating that Amur tiger numbers were

© Phoenix falling in the Russian Far East, primarily due to poaching and habitat degradation.

According to their data, there is a 40% decrease. In view of the foregoing, the antipoaching brigades had to strengthen their efforts to suppress poaching.

In 2010, Phoenix supported anti-poaching efforts in Primorye, keeping in mind that saving the Amur tiger depends mostly on 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. The main long-term objective of our education and outreach efforts in Primorsky krai is to reduce poaching, habitat destruction and human-induced fires in the Amur tiger range. Our main target groups are local villagers and especially schoolchildren, because it is easier to influence children's mentality than that of adults. Since 1998 Phoenix has been supporting a number of eco-centres in the region and initiated their creation in some cities. Experienced educators conduct ecological classes and lectures, give slide presentations and organize other activities for children and adults.

Below we present our results achieved from January through December 2010 in terms of the Amur tiger conservation project that combines conservation-oriented ecological education and outreach activities for children and adults of the region. We are glad to report that the project has met its objectives. Upon completion of the project the awareness of local people, including children and adults, about the state of Amur tigers and importance of wildlife and habitat conservation significantly increased. In 2010, as many as13,538 children attended 685 eco-lessons, excursions, clean-up actions and other events. Phoenix, according to its proposal, was also responsible for financing stable care for injured, orphaned or sick wild tigers, however Severtsov's Ecology and Evolution Institute of the Russian Academy of Sciences backed by Russian Prime Minister Vladimir Putin voluntarily covered all costs to rehabilitate tiger cubs and release them back in the wild.

PROJECT ACTIVITIES

I. Rehabilitation of rescued tigers

The four Amur tigers were rehabilitated during the reported period. We are glad to report that the Russian Government, namely Severtsov's Ecology and Evolution Institute of the Russian Academy of Sciences, covered the costs of rehabilitation of those tigers. The Institute is running an Amur tiger research program in the Ussuriisky Nature Reserve and has a support from Russian Prime Minister Vladimir Putin. Thus, we reserved the funds allocated by the 21st Century Tiger for the second half of the 2010, in case some financial assistance from NGOs would be required for medical treatment, care, feeding or transportation of rescued tigers. Luckily, there were no such cases, and we spent this amount for additional ecological education and outreach activities in Primorye.

II. Ecological Education and Outreach Activities

Environmental education in the North of Primorye

Education forms an essential component of the conservation programmes of the Phoenix Fund. The main threats to the survival of the Amur tiger are poaching of the big cats themselves, poaching of their prey species, illegal logging and very frequent humaninduced forest fires that reduce both quality and quantity of the habitat. These threats can be reduced with education as they are directly related to attitudes and behaviour of local people, and especially of villagers living in forest settlements and small towns in -or close to- tiger and leopard habitat. The ultimate and long-term objectives of Phoenix's education projects is to diminish the threats to Amur tigers and their forest habitat.

During the reported period the experienced educators conducted regular classes devoted to the Amur tiger and other wildlife at local schools. These classes included videos, slide presentations, lectures, games, quizzes and contests. All in all, as many as 685 ecological events, including lessons, excursions, and contests, were held in three northern districts of Primorye for 13, 538 children and 786 adults.

a) Eco-classes in Terney



Watching larga seals

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 Reserve is located in the district. The Russian-American Amur tiger conservation project has been running

© Phoenix there for 15 years. Since very beginning, Uragus started collaborating with scientists in education and outreach among

the youth, inviting them to lessons and holidays, such as Tiger Day. Schoolchildren take care of a wonderful garden in the club's yard, go hiking to picturesque corners and have visits with performances by their peers from villages, at times very remote ones. A tiger poster on the wall of Terney school appeals for people to save it.

During the reported period the educator carried out 334 eco-lessons and other events of the Amur tiger and nature-related topics. All in all, over 5,035 children and 701 adults attended the events.

In January the educator held 21 classes and an excursion for 115 children aged 6-17.



In early January the educator worked to prepare six children for the regional Biology competition. Six classes were devoted to larga seal, also known as spotted seal (*phoca largha*). Using fieldguides and videos the children learned about sea mammals of the Sea of Japan and ecological and biological peculiarities of that group of animals. Then, the children made a day-long excursion to Blagodatnoye lodgement of the Sikhote-Alin Biosphere Nature Reserve where they watched larga seals on the reefs for several hours. During two following classes the

© Phoenix Paper folding craft lesson devoted to Amur tiger

pupils were encouraged to express their

feelings towards sea mammals with the help of drawings, photos and modelling. The children were much excited about the excursion because they had never seen live larga seals before though they lived at the seaside. On the way back to the reserve they saw many tracks of ungulates, raccoon dog, and fox in the snow and saw a cormorant, sea eagle and harlequin ducks.

In January, the educator also gave two classes to the first-graders (7 years old) explaining how animals and plants live.

In February – March the educator held 21 lessons for 130 children of Terney town, aged 6-17.

On February 4 and 5, the educator gave a lesson to two groups of children aged 7 about wild and domestic animals. On February 6, Galina Maksimova organized two seminars for high school students "Driving Forces Behind Poaching" and "How Is It Going, Tiger?" At the first seminar the participants



© Phoenix Children have a good look at posters about tigers

discussed legal and moral aspects of poaching. At the second one they talked about factors that accounted for the current tiger numbers.

On March 15, the educator gave a lesson "Making Acquaintance with Tiger" for pupils of the first grade (7 years old).

On March 24, there was a conference on comparison of different methods of tiger count in Terney, and *Uragus* members were invited to attend it. Despite complicated style of speakers, they were able to follow the reports and even asked questions.



© Phoenix Clean-up action

In April the educator and her helpers gave four classes for 280 children of Serzhantovo school. First, the children were tested on tiger topics. Then, they saw a slide presentation about the Russian-American Amur tiger project in Primorsky region of Russia and the history of Terney town. The lessons ended with a theatrical performance about the Tigress and her cub.

For the middle classes the educator organized a game-competition "Following Tiger Tracks". For senior pupils (16-17 years old) she organized a film screening of "Tigers of the Third Millennium" and follow-up discussion of it.

On May 16, ten members of *Uragus* and three educators went to Serzhantovo village for three days for a meeting with their peers from a local tourist club and a discussion of Amur tiger issues. The

hosts showed them a master class on rock climbing and took on an excursion to Nikolaevsky cave in the vicinity of the town of Dalnegorsk. Heaps of garbage hampered the participants from admiring the scenery, so they decided spontaneously to clean it. As they had no space in their bus to take the garbage, they left 20 bags fully laden with garbage on the roadside in the hope that some conscientious person would bring it to the dump. In August-November the educator carried out 144 events for 2,176 aged 5 - 18 and 120 adults.

In August-September the teenagers were busy working in Zamanikha arboretum, namely they killed weeds, replanted young trees, mowed lawns etc to beautify it. Every month at least 3-5 excursions are organized in the garden for residents of Terneisky district and guests. Besides, local people, mostly parents with children, visit the arboretum every day. In August the educator arrange excursions for children around Terney town during which the kids observed wild animals and plants. On August 24, nine young members of *Uragus* participated in an international workshop devoted to research study and conservation of bears.

In September, the educator conducted regular classes for children of three age groups. The first group consisted of 23 second-graders who visited the eco-centre for the second year. The second one was represented by forth-graders who started attend classes in September 2010. And the third one was made of 22 children (7-11 grades) who visited the eco-centre to gain more knowledge in biology or to conduct some research work or project. Some of them took part in various ecological actions and events.

In October, there were special classes for kindergarten children (drawing, modeling, application) in the eco-centre. In October Galina Maksimova with support from the Phoenix Fund and Wildlife Conservation Society organized Tiger Day in Terney. In late October an intellectual game "*What? Where? When?*", a prototype of a TV-game show well-known in Russia, was held in the eco-centre. During the game the young players asked questions about historic events, ecological problems, and others.

In November, 14 children from Plastun village visited the eco-centre and took a stroll to Lake Blagodatnoye where they observed swimming birds and learned historic facts about Terney. Then, they larga seals and visited saw the arboretum. After joint games and lessons, the children from Plastun and Terney became friends and decided to meet again in Plastun this time. On 22-30 November the members of Uragus participated in regional contests in biology and ecology.



In December, the educator carried out 40

Meeting with Tiger Volodya

events for 533 schoolchildren aged 7-17 and 250 adults. The Uragus eco-club members and Galina Maksimova visited 14 local companies in order to raise adults' awareness of ecological issues. During the visits the children recited poetry about wild animals, asked riddles, performed stunts, told about ecological projects and handed our calendars with children's paintings to the audience. From December 20 to December 28 Tiger Volodya, a disguised actor, with a group of children dressed as wild animals walked along Terney streets, met passers-by and talked about tiger conservation issues. Many people were pleased to meet the "animals", took pictures of them and discuss local ecological problems.

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b) Eco-classes in Lazo



"Amur Tiger" lesson

Since 2007 Phoenix has been supporting ecological education in Lazo town. The Ecological specialists of Education Department of Lazovsky Nature Reserve 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 preschoolers and children of primary school. "Ecological teams" consisting of teachers and club

© Phoenix members are sent to district schools. With the help of traveling exhibitions.

discussions, theatrical performances, film screenings and games, schoolchildren and teaching staff of village schools become familiar with ecological issues. Not only theoretical knowledge is involved; pupils also plant trees, make and set up birdfeeders, and collect rubbish. There is a Nature Museum at the Reserve, where thematic excursions are organized.

In 2010, as many as 7,905 people, including children and adults, attended 324 ecological events organized by the specialists of the Lazovsky Nature Reserve.

For comparison, in 2009, there were 314 ecological events with 7,988 participants. Thematic excursions to the Reserve's Nature Museum were popular in 2010. All in all, the educators organized 310 excursions for 2,919 visitors. During the Year of the Tiger the educators elaborated and gave lessons devoted to tiger, namely "Amur Tiger", "Cats of Our Forest", "Following Tiger Tracks", and "Tigers of Our District", etc. For adults there was a

number of events, including a quiz "What



© Phoenix "Animals Are Roaming in the Forest" lesson

Do I Know about Amur Tiger?", meetings and discussions of Amur tiger conservation issues.

Below, we represent description of ecological education activities from January through December 2010.

In January, the educators gave 13 eco-classes for 268 children.



© Phoenix "Distinguished Specialists of Nature Reserves" lesson

On January 15 and 22, the specialists of Ecological Education Department of Lazovsky Nature Reserve carried out an ecological class "Feed Birds" for 39 firstgraders to familiarize the children with wintering birds of the region and tell about methods used to help birds survive through the winter. During the lesson the children learned to determine bullfinch, redpoll, waxwing, tomtit, nutcracker and others, understood relation between bird food supply and starting time for migration, learned how to make bird feeders and types of bird food. Some of

the children could identify bird species that frequently visited their backyard bird

feeders.

On January 11 and 18, thirty-one kindergarten children attended a lesson "Amur Tiger". The teachers told about Red Data Book and rules of human behavior in the forest. Most of all the children liked playing a game "A Tiger and a Hunter".

On January 12 and 22, the educators visited a local kindergarten to conduct a lesson "Cats of Our Forest" for 28 children aged 5-6 to familiarize the kids with tigers, leopards, lynxes and explain the notion of Red Data Book.

On January 14, the educators visited a local kindergarten and gave a lesson "Tigers and Leopards" for 71 children aged 4-6 to show the beauty and dexterity of wild cats. The children were divided into two groups "Tigers" and "Leopards" to compete in various tasks. They jumped as wild cats, 'hunted' prey species, and followed cat tracks, etc. During the breaks between tasks they read poems and sang song about tigers and leopards.



"Deer and Tiger" game

In February, the educators held 26 events for 812 children 5-17 years old.

On February 1, the educators gave a lesson on biodiversity for twenty-six children. They visited Nature Museum of the Lazovsky Nature Reserve, watched video episodes from life of various animals and answered the educator's questions. On February 15, the educators showed a slide presentation "Let's Feed Birds" for 14 children.

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© Phoenix Eco-lesson for kindergarten children

On February 19, the educator with the ecoclub members organized a mini-quiz "What Do I Know about Amur Tiger?" for 160 children and adults of Lazo town. They stopped people in the streets to ask them some questions. The respondents showed good knowledge on the current state of Amur tiger, but were surprised to know some facts, e.g. that many young tigers died before reaching adult age, that tiger density was low in the reserve etc.

In March, the specialists of Lazovsky Nature Reserve gave 38 lessons for 942 children aged 4-14 from kindergartens and secondary schools of Lazo town and

villages of Lazovsky district.

On March 23, twelve children attended a lesson "Who Woke up in the Forest?", at which they broadened their knowledge on life of wild animals, especially on their behaviour in spring. They discussed magpies, crows, bears and tigers, learned which animals went into hibernation and which not.

On March 25, the educators gave a lesson "Spring in the Forest" for twelve children. During the lesson the children guessed riddles about animals, described first spring flowers, reasoned why it was not good to pick them and to ruin birds' nests.

On March 10, twenty-four children participated in a lesson "Protected Areas of Russia", in the course of which they got general information about nature reserves, learned in more detail about local ones, and compared nature reserves and national parks.

On March 15, 17, 18 and 19, the educators gave a series of lessons "Following Tiger Path" for 154 children. First, they told them about tiger characteristics, habitat and density, then about organizations that worked to protect tigers. At the end of the lesson the children played a game, the winner of which had a right to make a phone call "to a tiger".

On March 18 and 26, the educator showed a slide presentation "Tigers of Our District" and held a discussion with 102 children. She spoke about methods used to study tigers in Lazovsky Nature Reserve, showed pictures made by



© Phoenix Visit to Reserve's Nature Museum

photo-traps and discussed numerous factors that influenced tiger numbers. On March 19, sixteen children had a lesson "Visit to a Tiger", at which 16 children participated. The main character – a tiger cub – told about his life, his mother, and neighbors.

In April the educators held 25 classes for 632 pupils 4-17 years old. On April 15, they gave a lesson on first spring flowers for 13 kindergarten children, during which they guesses riddles, described a picture of a fading flower, learned why it was bad to pick up wild flowers, used images of dandelions and of a meadow to "make" a flowered and flowerless landscapes and told kind words to the flowers.

On April 23, twenty-five children attended a lesson "How Do Trees Wake Up?", at which they learned such notions as flow of sap and played a game "Me, a tree" on imitation of changes in trees in spring. On April 5 and 7, the educator gave a lesson on first spring flowers for 38 children.

On April 21 and 26, the educator showed a slide presentation "Safety in the Forest" to 32 children. They learned what to do in case of a snakes or insects bite, fire, loss of orientation, and encounters with predators. The educator explained to them how to minimize risks in those situations. The children shared their own experience. On April 16 and 23, the educator gave a lesson on the protected areas of Primorye, in the course of which they played a game "Animals – Man", dramatized the history of relationship between animals and men and came to a conclusion about the important role of nature reserves.

In May, the educators held 11 classes for 742 pupils 5-16 years old. On May 18, the educator gave a lesson "Why Lives on Our Territory?", the purpose of which was to acquaint the children with different living organisms and show their interconnection with the surrounding world, to foster careful attitude, respect and care about nature. In May, two groups of the eco-club planted 1,200 Korean pine seedlings around the Nature Reserve and removed garbage from the recreation area in Lazo.

In June, the educators conducted 9 classes for 238 pupils 7-10 years old.

On June 7, a lesson on the Indian marten gathered 54 children. They watched a film on that animal, searched for it and its relatives in the Nature Museum of the Lazovsky Nature Reserve, and described the animals with their own words.

On June 18, the educator gave a lesson on sable. The participants watched a video "13 minutes from a sable life", took part in a quiz "Recognize me" and studied food chains (what animals ate).

On June 21, the educator gave a lesson on plants, which represented a competition of



© Phoenix Planting Korean pine in the vicinity of Lazovsky Nature Reserve

four teams. The pupils tried to recognize a certain tree with their eyes shut, corrected mistakes in the information on some trees, worked a crossword puzzle, named as many leaved/coniferous trees as they knew, and searched live trees outdoors taking their herbaria as an example.



During a lesson about tigers

On June 28, the educators conducted a game "All about Him", the purpose of which was to enlarge the schoochildren's knowledge on the Amur tiger. Different tasks were prepared, related to mathematics, geography, ethnology, cookery and rules of behavior in the forest.

On June 23-25, the educators of the Lazovsky Nature Rereseve hosted a seminar for educators of the Lazovsky district, devoted to succession in ecological education between kindergartens and secondary schools. Twenty teachers took part in it. The

participants worked to find a way to avoid a gap between those two stages, discussed how to make the process coherent and not sporadic, watched films that could be used at the lessons and presented their self-written ecological fairy-tales in groups.

In September, the educators organized 23 ecological events for 501 people in Lazovsky district.

On September 9 and 16, the educators gave a lesson Science About Life, Science For Life the main objectives of which were to refresh and solidify children's knowledge of Ecology. stimulate logical thinking and analysis of information, increase the level of ecological culture and responsibility for the environment state. During the lesson the children were asked to answer the following questions: What is Ecology?, Why do we need Ecology?, What role does human play in the environment? What is Ecology consisted of? What other sciences is Ecology connected with?



© Phoenix Kindergarten children study forest products

On September 13, over twenty-one seventh-graders attended a lesson focused on ecological laws. The lesson was given to familiarize the children with such notions as ecological laws and their principals, system of ecological laws in Russia and basic international ecological regulations. Also, the pupils learned about punishment for ecological violations. The theme turned out to be of big interest to the children. On September 13 and 19 the educators gave a *Man's Nature* lesson for 31 pupils of the 8th grade. During the lesson the children discussed the following questions: *Do you believe that man originated from ape? What is man's nature? Does man depend on the rules of ecology completely? What are differences and similarity between man and animals? What changes have occurred in relations between man and nature during human evolution? Is man continue evolving now?*

On September 24, about twenty-three fifth-graders attended an "Introductory to Ecology" lesson. The main objectives of the lesson were to give basic knowledge about Ecology, explain notions such as *ecosystem* and *ecological issues*, inform about the difference between local and global ecological issues, and promote formation of ecological culture by explaining the role of human in nature conservation. Lazovsky district was taken as an example, and the children discussed local ecological issues, ways to solve the problems and level of children's involvement in their solution. Then, they solidify the obtained knowledge through playing an active ball game. The teacher was glad to notice that the children displayed a keen interest in studying Ecology and expressed their willingness to help solve local ecological issues.

On September 28, the teacher conducted a lesson for twenty-one schoolchildren to increase their knowledge about professions in protected areas. During the lesson the teachers told about goals and objectives of the protected areas system in Russia, showed video and photo-materials illustrating professional activities by specialists of protected areas.



Who is the Master of Taiga?

In October, the educators organized nine ecological lessons for 159 children aged 4-10. On October 21 and 25 as many as forty children of elementary school attended a lesson "How Do Wild Animals Prepare for Winter?" The main objective of the lesson was to familiarize the kids with various ways the animals use to prepare for winter. During the lesson the children learned about migratory wintering birds. and hibernating animals and other forest dwellers.

On October 13 and 22, the educator gave a lesson "We Are Different" for

forty-one second-graders with the purpose to show the children diversity of creatures on the example of forest dwellers. During the lesson the children played a game and learned similarities and differences among animals.

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On October 15 eighteen children aged 9-10 attended a lesson "Who Is the Master of Taiga?" The main goal of the lesson was to inform about the forest ecosystem and explain its interconnections.

On October 4 and 11, the educator delivered a lesson "A Trip of Fruits and Seeds" for 30 kindergarten children. In the beginning of the lesson a Tiger Cub (disguised teenager) entered the class and asked the children to explain why so many new plants appeared on his favorite clearing. Then, the children and the educator study what seeds can travel by air or in birds' stomach, or hanging on animals' fur and man's clothing, etc.

On October 5, thirteen kindergarten children attended a lesson "Forest Apartments". During the lesson the children learned where animals live: nest, burrow, hole, den etc. and that their houses can be on or under the ground. A Tiger Cub (disguised teenager) took the children in the forest and gave the right names of animals' houses.

In November, the educators carried out 31 ecological events for 529 children aged 5-18.

On November 1, twenty-five kindergarten children attended a lesson "Birds Are Our Friends" during which they learned to care about birds. First, the teacher read a text about benefits of birds. Then, the children were asked to imitate birds and show what birds usually do in their gardens. The teacher explained them why birds need bird feeders in winter and gave examples of setting bird feeders in one's yard.

On November 2, the educator gave a lesson "Wintering Birds of Our Forest". Twelve six-year children attended the lesson and gained knowledge about wintering birds and ways to help them survive the winter. During the lesson the children guessed riddles, read verses and viewed photos of birds. Comparing literary description and photos of birds, they noted some distinctive features: ways of traveling, feeding habits and appearance. The teachers explained the reasons of bird migration to the young pupils. Then, the children were taught how to set a bird feeder in one's yard and "golden rules of bird feeding". The teacher assigned the children to make a bird feeder for homework. On the same



Birds Are Our Friends lesson

day a lesson "Northern Jungle" was given to 90 pupils of 4-11 grades. During the lesson the children continued getting acquainted with the Ussuri taiga and studying life of rare animals of Lazovsky Nature Reserve on the example of Indian Martin. The same lesson was also given on November 18.

On November 19, a lesson "Who Lives Where?" was given to 18 first-graders to give an idea of wild animal habitat. During the lesson the teacher discussed with the children a diversity of human dwellings and dependence of animals' habitat on their lifestyle, played a game "Find Your Home!" and put animals in "forest apartments". The first-graders learned the lesson fast.

© Phoenix



A Wild Zoo game

On November 10 and 18 the educators gave two lessons "Tiger's Arithmetic" *in* the course of which forty-four secondgraders learned the main features of the Amur tiger. The main objective of the lessons was to foster friendly and respectful attitude towards wild animals.

On 23-24 November, thirty-six 3rd - graders attended a lesson "Invisible Nature's Threads". During the lesson the educators defined *food web* and energy *pyramid* and showed interactions in forest community. The children learned that all living things in the forests are

connected with strong but invisible threads – food webs. Also, the children played a game "Who Am I?" during which they learned the differences between plants and animals in the food habits. On November 12 and 17, the educators gave a lesson about ecosystem to 39 four-graders. During the lesson the children defined *ecosystem* and learned about interactions of living things in the ecosystem. At the end of the lesson they played three games: "A Wild Zoo, Food Web" and "Earth's Gifts".

On November 16-17, 23, 26, 29-30 as many as 73 students attended a lesson "My Totem". The objective of the lesson was to familiarize the young people with traditions of indigenous people of Primorye, define *totemism* and expand knowledge on biodiversity of Lazovsky Nature Reserve.



© Phoenix A lesson for kindergarten children

On November 19, thirty-three 7th graders attended a lesson "Predators and Their Prey. Friends, Enemies, Partners, etc." The objective of the lesson was to carry on studying food chains. On November 22, a special lesson devoted to ecological problems and disasters was given to 19 pupils of the 9th grade. The main goals of the lesson were as follows: to differentiate ecological problems and ecological disasters, to define *local* and *global*, to draw parallels between specific disasters and ecological problems that triggered those collapses, to predict possible ecological disasters in Lazovsky Nature Reserve

taking into account the existing ecological issues. The children turned out very competent in their role of "experts". They could name the most urgent ecological problems in their district and describe colorfully the aftermath. Also, the children offered uncommon, and even radical, ways of their solution. They emphasized that not only local authority and environmental law enforcement agency but also ordinary people are responsible for timely solution of the ecological issues. On the same day the educators gave a lesson "Biodiversity of Lazovsky Nature Reserve" to 19 pupils of 8th grade with the main object to expand their knowledge about biodiversity.

On November 26, the children conducted an excursion for their classmates in the Reserve's Nature Museum and told about rare animals and plants of the Lazovsky Nature Reserve. On November 30, a binary lesson *Ecology Basics* was given to ten 7th -graders. During the lesson the children defined *biocenosis, biogeocenosis, biome, biotope, ecosystem, food web*, and *ecological pyramid*.

In December, the educators organized 15 events for schoolchildren aged 5-7 4 lessons for kindergarten children and two meetings with adults

On December 6 and 13, twenty-nine children aged 6 attended a lesson "Chains in Forest". The main objective of the lesson was to explain the young children interaction between plants and animals. The teacher provided pictures of wild animals and plants so that the children could listen to her lecture and make chains between forest dwellers. The kids were asked to explain what could happen if one chain link disappeared. In the end of the

lesson they played a game "An Owl and an Old Man" which helped develop better understanding of interactions between human and wildlife.

On December 7, the educators conducted a lesson "How Have Animals Prepared for Winter?" for 13 children aged 5 in order to demonstrate how wild animals adapt to winter conditions and inform about difficulties animals face in forest in winter. During the lesson the children discussed why some animals hibernate and others stay active throughout the winter. Then, they played a game during which the teacher asked questions to check for comprehension. On the same day, twenty 1st-graders attended a lesson "Who Lives Where?" and learned about natural habitat of wild animals. The educator explained the children that animal's habitat depends on animal's lifestyle.

On December 8, sixteen 4-year-old children attended a lesson "Winter Has Come" during which the educator told about winter as the most unfavourable season for wild plants and animals. The lessons began with a theatrical performance about a tiger cub. The Cub (a disguised adult) came into classroom and told about his life. He shared his concerns that he could not recognize his favourite clearing because it became white without insects and birds and asked the children to explain the reasons of such transformation. And the kids were happy to tell the Cub everything they knew about winter.

On December 8 and 16, forty-two 2nd-graders attended a lesson about coniferous trees. The main objective of the lesson was to familiarize the children with basic coniferous trees growing in Primorye, touch upon an issue of unabated cutting fir-trees before Christmas and give ideas of alternative New Year's decorations. On December 9, 13 and 21, seventy-two people, including senior schoolchildren, students and adults, attended a lecture devoted to ecology and health. During the lecture the audience watched a PowerPoint presentation and discussed the following questions: *How Are Medicine and Ecology Are Interconnected? What Is Health? What Ecological Problems Do Impact Human Health?* etc.



© Phoenix Excursion in Reserve's Nature Museum

On December 11 and 22, the educator gave a lesson "Methods of Surveying Tigers" for 36 pupils of 4th-grade. During the lesson the educator told about main tiger features and informed about methods used in Lazovsky Nature Reserve to study tigers. The teacher was glad to notice that the children were aware of the tiger features.

On December 14 and 23, a lesson about trees was given to thirty-nine 1st-graders in order to increase their knowledge about parts of tree and explain the differences between deciduous and coniferous trees. During the lesson the

children played two games: *Name a Tree* and *Make a Tree*, discussed functions of tree, and studied slices of tree stumps.

On December 15, 21 and 22, the educator gave a lesson for 62 junior schoolchildren in order to expand their knowledge about interactions between plants and animals. The

lesson began with a PowerPoint presentation about oak and Korean pine which reflected interactions between plants and animals and their important role in ecosystem. Then, the children did crossword puzzles.

On December 11, a lesson "Biosphere" was conducted for 21 pupils of 10th-grade. During the lesson the children watched a PowerPoint presentation, learned how the biosphere is organized and its components, and determined a role of human in biosphere. On December 15, as many as 87 pupils from 5th-10th-grades attended a lesson *Forest People*. The main objective of the lesson was to get the schoolchildren acquainted with culture, beliefs, and traditions of indigenous people in Primorye and explain their attitude towards nature. After listening to the teacher, the attendees expressed their will to learn to treat nature as tribal people do.

On December 21, eight adults gathered to listen to a lecture about Lazovsky Nature Reserve, its history, natural resources and conservation methods. On December 22, the educators organized a theatrical performance for 158 junior schoolchildren in order to thank them for their concern about nature and wiliness to conserve rich biodiversity of their district.

c) Eco-classes in Kirovka

Since 2007 Phoenix has been supporting the educational activity of Galina Goy, a teacher from technical school No. 55 in Kirovsky town. Students of 16-17 years old visit the *Ussury* Eco-club, where under the teacher's guidance, elaborate lessons about the nature of the Primorsky region are created and presented for school and kindergarten children of the town. Such method enables them to accomplish two goals: organize teenagers' leisure and foster respect and love for nature. Schoolchildren are more receptive to information delivered to them by people a little older than themselves. In addition to lessons, students are involved in practical work: they clean their town, plant trees and feed birds in winter.



© Phoenix Galina Goy gives eco-lesson in local kindergarten

All in all, 598 children and 85 adults attended 27 lessons and other educational events organized by the teacher and members of the Ussury eco-club, second*year students.* In comparison with the previous year, it is a good indicator of results. In 2009, the educator held 24 events of different kind, in which 409 children and teenagers (aged 5-19) participated. It is worth noting that when Galina Gov started working in 2007, she visited local kindergarten and schools and asked to allow her to conduct lessons about tiger and other animals. Now, Galina proudly reports that kindergarteners and schoolteachers call

her and invite to give lessons.

In January, the educator held three classes for 55 children aged 4-11 and six adults (teachers). On January 22, the educator gave a lesson "Meeting with Wild Animals of the

Ussuriskaya Taiga" for 39 children aged 4-6. The purpose of the lesson was to acquaint the children with inhabitants of the Ussuri taiga, their role in the eco-system, factors that regulate their density and peculiarities, especially those of tigers and leopards. Senior students of Kirovka technical school, who are active members of the *Ussury* Eco-club, helped the teacher during the lesson.

First, the children guessed riddles about animals, and if somebody guessed right, he/she was to tell a few words about the animal. Then, everybody played a game "Spidery Lace" about interconnections between animals. For example, a squirrel collecting nuts and acorns dropped some of them, which later grew up, became trees and fed other animals. The children understood the idea well and gave a detailed answer to the teacher's question "What will happen to wild animals if Korean pine was cut out completely"?

On January 27, the educator gave two lessons "Flora and Fauna of the Primorsky Region" for 16 children 10-11 years old. The third-graders of Kirovka secondary school come often to the eco-club. First, they watched short videos on nature reserves of Primorye, after which played a game "Wheel of Fortune" with questions on animals and plants.

In February, the educator held two classed for 31 children 10-16 years old. On February 12, she gave a lesson "Primorsky Region Is My Native Home", in which 14 children 10-11 years old took part. At the lesson they learned about the first explorers of the region, typical local animals and birds, and played a "zoological lotto" game. It consisted of such questions as "Which animal of the Ussuri taiga is the biggest feline?" etc.

On February 26, seventeen children 15-16 years old attended a lesson "Hard Times for Wild Animals". They spoke about winter conditions and the thin crust of ice over snow, which made it hard for ungulates (and also birds who fly little, such as pheasant) to walk, and sometimes hurt their feet. This theme was chosen because some time before all local TV channels showed reportings about difficulties wild animals faced. On the educator's question how people could help them, the pupils gave such suggestions: to create teams to make feeding grounds in the forest, to clear roads with vehicles and others. In the course of the discussion the educator concluded that the children cared much about wild animals and were interested in helping them.

In March, the educator held two ecological lessons for 40 children aged 5-11 year-old and four teachers. On March 17, the educator conducted an eco-lesson for 13 children of Kirovka secondary school. The purpose of the class was to continue to make the children acquainted with wild animals of the Ussuri taiga, to develop a sense of responsibility for the living creatures and the nature. These children did not come to the eco-centre for the first time; they do like to be engaged in eco-The children centre's activities. themselves suggested to carry out a lesson in a form of a game called "Miracle Field". In the beginning of the class the children watched a film "Who Is the



© Phoenix "Primorsky Region Is My Native Home" lesson

Master in Taiga?" and then answered questions and solved riddles about tiger, its habitat and other dwellers of Primorsky forests. Then, they played another game called "Dominoes". As a result, the lesson lasted longer than it was supposed to as the children enjoyed playing and learning new facts about the Amur tiger and other wild animals.

On March 25, the lesson "Protect Forest from Fire" was held for 37 kindergarten children. The goal of the class was to teach the children the fire safety rules, identify main causes of forest fires and its impact on wildlife. The members of ecological centre started the lesson with a quiz game. The preschoolers were divided into two teams that had to guess various riddles about nature. A card with a letter was given for each correct answer and when all the riddles were solved the children lined up and formed a phrase "FOREST FIRE". Thereupon the educator asked questions regarding fire safety rules and the children showed satisfactory awareness. At the end of the class the most active participants were awarded with small prizes. The children from senior and preparatory groups handed their tiger drawings and craftworks over to the eco-centre members for a forthcoming exhibition "Long Live the Tiger" that was to be in May 2010.

In April, the educator held two classes for 23 children aged 10-12. On April 7, the educator gave a lesson "Enemies and Friends of the Amur tiger" for 12 children aged 10-11. The purpose of the lesson was to acquaint the children with factors, that limit tiger numbers (enemies) and the system of tiger protection (friends); and to foster in children a sense of responsibility for nature.

The educator led the lesson with several senior members of the Kirovka eco-club. First she gave a short lecture on factors that ruined nature and disturbed forest inhabitants. Then she suggested each children describing some animal on their choice: how it reacted to danger, in what way changed in different seasons etc. They tried to explain how a tiger behaved when it felt a danger. Then each pupil in turn spoke about one of the tiger enemies, and ways to help tigers survive.



On April 21, the educator gave a lesson "The biggest feline on Earth" for 11 children 11-12 years old of Kirovka secondary school. The purpose of the lesson was to summarize and widen children's knowledge on the Amur tiger. As it was not the first time for the children to come to the eco-centre, the educator prepared more difficult questions for them about tigers and their habitat. The lesson was organized as a game "Wheel of Fortune". All the participants were involved in it.

© Phoenix Eco-forum in Kirovka, May 2010

In May, the educator held 2 ecological events for 47 children aged 10-12. On

May 19, she organized an ecological forum "Earth is our home" for 35 children 10-12 years old of the secondary school of Kirovka town. The pupils presented their reports on different animals and plants, and about their project on planting lotus in Lebedinoye lake. The educator Galina Goy told them about the Amur tiger and Amur lepard that live in our region, and why it was hard for them to survive. At the end of the lesson the pupils took

part in a quiz "Proper behavior in the forest" that contained questions on how to start a campfire, what to do in case of a forest fire and encounters with wild animals, especially a tiger. The most active and well-informed children were awarded achievement certificates.



© Phoenix Members of Ussury eco-club give a lesson for junior schoolchildren

On May 27, the educator delivered a lesson "Where do forest dwellers hide?" for 12 children of "Ussuri" eco-club in Kirovka town. They got to know how wild animals chose a right place for them to live. Among the questions discussed there were the following: Where does the Amur tiger live? Why do Amur leopards live only in the south of the region? Why can starlings live in birdhouses, while swallows prefer to make houses of clay? Why do some animals live outdoors, while the others live in dens or holes?

In June, the educator gave two classes for 53 children 10-12 years old. On June 19, there was a lesson "Forest mosaic", aimed at acquainting children with such animals as Amur tiger, Amur leopard and other local species, and to develop in children skills of collective work. The lesson consisted of two parts: a quiz "Forest experts" and a game "Tigers – leopards". One of the teams was tigers, the other was leopards. They found similarities and differences of those animals, showed how they hunted, imitated their voice and describe where they lived. The winning team got small presents: bookmarks and pocket calendars.

On June 23, the educator led a lesson "Clean air – our health". The idea of it detemine the children's was to knowledge on the environment, namely on the air and water, to foster a sense of responsibility personal for environmental protection, and to develop the ability to analyze, that is, to find links between human actions and what happened around in nature. The educator chose the theme on purpose, as practically all the children heard about the problem of air and water pollution. To start a discussion she asked a few questions, such as: Why does air gets dirty? Why does fish



A lesson for kindergarten children

sometimes die in the rivers? etc. The children named reasons for pollution. The lesson continued with outdoors games "Guess who I am", "Chasing prey", and steeplechase. At the end of the lesson the educator asked the participants what should be done to breathe clean air, and the children gave their opinions, such as "remove garbage after themselves, not to cut tress and, which is even better, plant new ones, to feed birds" etc.

© Phoenix

In September, the educator was responsible for organization of two ecological events in Kirovsky village.



© Phoenix Children read a leaflet about tiger

On September 18, Galina Goy with her colleagues organized Tiger Day celebration in Kirovksy.

On September 28, the educator gathered 48 young people aged 16-19 to participate in sports competitions. The idea of the event was to promote healthy lifestyle and make it clear that fresh and clean air means healthy mankind and planet. The boys and girls participated in the 3,000-meter dash and 1,000-meter

dash, respectively. Then, they participated in long jump and put the shot. During the competitions the young

people saw that only those who go in for sports, live without smoking and drinking alcohol, can be winners.

In October, the educator conducted two lessons for 40 kindergarten children. On October 14, eighteen children aged 5-6 attended a lesson "How Do Animals Survive Winter?" The main goal of the lesson was to familiarize the children with inhabitants of Ussuri taiga and inform them how wild animals prepare for winter. In the beginning the educator asked the kids what animals hibernate during the winter. The children named bears but could not name what subspecies live in Ussuri taiga. The educator told about Brown and Asiatic black bears as well as frogs, lizards, badgers, raccoons and squirrels that also hibernate. During the lesson the children also learned about animals who are active in winter, such as Amur tiger. Amur leopard, hoofed animals (deer, wild boar) etc. Then, the children played a game. One child thought of an



Children's paintings

animal and the others had to guess the animal by asking various questions. During the game the children learned many interesting facts about animals, their behavior, food preferences and other. The same lesson was given on October 26 for 22 kindergarten children (5-6 years old).

In November, two lessons were given to 33 children. On November 16, a lesson "Winter Has Come" was given in the kindergarten for 15 children aged 5-6. The main objective of

the lesson was to tell the kids about winter as unfavorable season for plants and animals and to give examples of how they adapt to winter conditions. The lesson was carried out by senior students of the professional lycée №55 under the supervision of experienced educator Galina Goy. In the beginning of the lesson the kindergarten children were asked to name animals that hibernate. Many children named bears and squirrels. Then, they talked with the students about animals that do not hibernate and continue their active life in the forest during winter, namely Amur tiger, Amur leopard, deer, wild boar, etc. Also, the children learned about the difficulties the animals face during severe winter with deep snow. They were told about poachers who killed animals stuck in snowdrifts. The kids were stupefied by such cruelty and expressed their sympathy to wild animals. At the end of the lesson the children played a game "Guess an Animal".

On November 27, eighteen children aged 10-11 attended a lesson "Cats of Our Forest" during which they gained more knowledge about Amur tiger, Amur leopard, lynx and Far-Eastern cat. At the beginning of the lesson the children guessed riddles about animals. When they guessed an animal, its photo appeared on the blackboard. Thus, the photos of four animals (tiger,leopard, lynx and cat) appeared, and the teacher told that all of them live in the Ussuri taiga. The children discussed cat habits, similarities and differences between pet and wild cats. Then, Galina Goy told about Russia's Red Book, its history and role in conservation of plant and animal species of our taiga. At the end of the lesson the children were assigned to make paper tigers. All in all, the kids enjoyed the lesson and learned much about wild cats and their habits.

On December 12, twenty-five children aged 7-14 attended a lesson devoted to the Amur tiger. During the lesson a teacher announced a contest and asked the children to draw a tiger in its natural habitat. The main objective of the contest was to foster positive attitude among children towards tigers. All the participants were awarded memorable gifts. On December 22, the educator visited a local kindergarten and gave a lesson Cats of Our Forest for twenty-seven children aged 4-6. During the lesson the teacher told about wild big cats living in the Ussuriiskaya taiga, namely Amur tiger, Amur leopard, lynx and Far Eastern wild cat, explained for what purpose a Red Book (Russia's List of Endangered Species) was created, and why some plant and animals species need to be protected. The lesson caught children's fancy. They told about cat's habits and similarities between domestic and wild cats, and showed how cats eat, sleep and hunt.

Tiger Day Festivals

Phoenix has been very successful at holding wildlife festivals. In September 2000, the Phoenix Fund organized the first Tiger Day Festival in Vladivostok and within a year it developed into а wonderful autumn festival that is celebrated across the country, from Moscow to Vladivostok. The festival usually begins with a carnival procession, and is followed by various theatrical performances. The festivals attract people's attention to the most burning issues of wildlife conservation in the region, as well as give them an



Tiger Day in Lazo, October 2008

© Phoenix

opportunity to participate in their resolution. Nowadays, Phoenix organizes Tiger Day Festivals in Vladivostok, Luchegorsk, Novopokrovka, Slavyanka, Partizansk, Terney, Kirovka and Lazo towns.

According to the Chinese Zodiac, the Year 2010 is the Year of the Tiger. Thus, many events devoted to tiger conservation were scheduled for 2010. The Global Tiger Initiative, launched by the World Bank and International Tiger Coalition in June 2008, called to convene in 2010 the "Year of the Tiger" Summit where leaders of 13 tiger-range countries and international organizations could announce their specific commitments to save these unique wild animals. The Tiger Summit was to be held in Vladivostok and was planned to coincide with the Tiger Day-2010. Unfortunately, it was decided to hold the summit in St.Petersburg instead of Vladivostok, but it did not lessen the significance of Tiger Day in cities of Primorye. Everywhere in Primorye where Tiger Day was celebrated an increase in participation rates were observed. The traditional holiday received wide coverage in the local mass media.

Tiger Day in Terney



Fancy make-up

In 2010, Tiger Day in Terney celebrated for the fifth time. Initially, it was planned to be hold on October 10, but due to bad weather conditions it was rescheduled for October 13. In the runup of the holiday Galina Maksimova, leader of the Uragus eco-club, sent out information about the holiday to nine local villages of Terneisky district. Also, she mailed small packages with Tiger Day promotional materials and prizes (calendars, CDs, etc.) to Agzu, Svetlaya, Yedinka, Amgu, Malava Kema and other villages. In September, а Photography Contest was announced in

Terneisky district. As many as 12 teams participated in the contest the task of which was to submit no more than three photos illustrating three main reasons why tigers must be protected. The winners were announced during the Tiger Day on October 13.

The holiday started at noon in front of the main entrance of the office of the Sikhote-Alinsky Biosphere Nature Reserve. The hero of the day, Tiger Volodya (a disguised actor) greeted everyone and led a procession along the central street of Terney. This year the holiday attracted more spectators compared to the previous year. Onlookers gathers on the streets, took photos of the children dressed in tiger costumes and waved at the procession. As usual, festive atmosphere pervaded the town. Participants of the procession screamed out various slogans to conserve Amur tigers and taiga. All in all, over 350 people participated in the procession, including schoolchildren from Terney, Amgu, Malaya Kema and Plastun villages, members of Uragus eco-club, teachers, and staff members of Sikhote-Alinsky Biosphere Nature Reserve and specialists of the Wildlife Conservation Society-Russia. The procession ended up in the park where organizers prepared a lot of various events: games, contests, and shows. The winners of various contests, namely "the best tiger costume", "the best tiger make-up", "the best song about tiger" and other, were awarded memorable prizes generally provided by the

Phoenix Fund. Also, there was an exhibit devoted to Amur tiger conservation and organized by the WCS. At the end of the holiday all the participants sang a song "Tiger Day Is a Wonderful Day". Then, Tiger Volodya cut off a cord and bunches of balloons headed skywards. Everyone waved the balloons and promised to protect nature for future generations.

Tiger Day in Lazo

Tiger Day was celebrated in Lazovsky district of Primorye on September 25. Over 250 children and 70 adults gathered to commemorate Amur tigers. During the holiday staff members of Lazovsky Nature Reserve organized 12 various events, such as theatrical performances, eco-games, and contests.

There was a traditional carnival procession, theatrical performances of the art-performing groups on the stage, competitions and quizzes on tiger topic. Teams from a number of rural schools arrived to the holiday, namely from Preobrazhenye and Benevskoye villages.



© Phoenix Festive procession in Lazo

The Phoenix Fund provided the Environmental Education Department staff of the Lazovsky Nature Reserve with small gifts, such as bookmarks with colorful pictures and information on the Amur tiger and leopard, pocket calendars, flags, balloons and magnets with a Tiger Day logo, so that they could award the winners of various contests which took place during the holiday. Children contended in "tiger" race, played "tiger" soccer and drew tigers with chalk on asphalt. Also, one could turn into tigers using water-based theatrical make-up. It was a lot of fun because kids love to be wild animals.

Tiger Day in Kirovka



Festive procession in Kirovsky

On September 18, Galina Goy with her colleagues and members of Ussuri ecoclub organized Tiger Day celebration in Kirovsky. All in all, over 170 children and 40 adults participated in the holiday the main objective of which is to conserve Amur tiger, its prey and habitat. At noon a carnival procession consisted of students, teachers, schoolchildren and their parents dressed in tiger consumes and with tiger make-up, carrying flags, balloons, banners, marched on the main street of Kirovsky. When arrived at the village square, the participants

watched theatrical performance by the students of professional lycée №55. Children and adults took part in various contests and quizzes about tigers and other forest dwellers.

The holiday went very well. The villagers and guests thanked the organizers for such a wonderful tradition to commemorate big cats in September.

Acknowledgments

We would like to express our gratitude to the 21st Century Tiger for continuous support of our projects aimed at Amur tiger/leopard conservation in the Russian Far East. With the 21st CT's funds we attracted more young people as well as adults towards Amur tiger conservation problems, increased their awareness of main threats to tiger's survival and measures to conserve this big cat and its habitat, and involved them in nature conservation activities. Our profound thanks go to the educators for their terrific work, dedication and passion for nature, namely Galina Maksimova, Galina Dikaluk, Olga Degtyarenko and Galina Goy.



Phoenix Final Report

January 1 – December 31, 2010

ATTACHMENT

