

STRATEGY OF SNOW LEOPARD CONSERVATION IN RUSSIA (and in Boundary Territories of Mongolia, China, and Kazakhstan)

MODEL PROJECT 2002: ALTAI-KHENTEI

By

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Draft for discussion

Background of the Project

The model project is part of the general project KHENTEI-HIMALAYA and developed especially for Russia and the boundary territories of neighboring states – Mongolia, China, and Kazakhstan. For a decade after the break-up of the Soviet Union, the situation of the snow leopard's survival, even in the best habitat, became critical. It was caused by: 1) liquidation of the main nature conservation structures of Russia, 2) economic disorganization of the country, 3) general misery of the countryside people (and, as a consequence, the highest level of poaching for the past 100 years), 4) unprecedented scales of plunder of the natural resources, 5) further threat of growth in the snow leopard's range, in particular due to plans for two roads and a gas-pipe construction from Russia to China in Altai and Eastern Sayan Mountains. The threat of a worsening of the situation is sharply strengthened by market expansion in China, who is buying up so many animal resources and thereby stimulating poaching in the extreme natural conditions of the snow leopard. In Russia, irbis inhabits marginal areas of their northern range, where the risk of its extermination is very high.

To decide a question about irbis conservation only in Russia is strategically wrong. If a species is distributed and at risk for extermination in more than one country, it is possible to save it only by common efforts. Russia must develop a strong collaboration with Mongolia, which shares 90% of a common boundary in the snow leopard's range. Animals migrate all distances here across borders. The other reason to collaborate is illegal trade. Since the 1990s, skins of Mongolian irbises periodically come onto the Russian market. Through just the boundary post Tashanta in the Altai Mountains, at least ten skins come every winter (data of Boundary and Custom Services). The prices of them are 4-5 times lower (\$50) than cheap ones from Russia (\$200-250), which shows the terrible poverty of Mongolian people. Part of irbis resources, used in eastern medicine, come from Mongolia to China. Mongolian's also sell deer horn in China. In Russia, the Chinese buy deer horn and musk deer musk for medicine, but the sale of irbis bones is unknown.

Rare Species of Russia That Share A Territory with the Snow Leopard:

Ursus arctos isabellinus-?	Ovis nivicol lydekkeri	Capra sibirica
U.a.pruinosus-?	Rangifer tarandus fennicus	Ovis ammon ammon
Cuon alpinus	Marmota camtschatica	Procapra picticaudata
F. manul	Panthera tigris*	Panthera pardus*

*Shares the snow leopard range in Transbaikal (PS: Has been added to list)

Opportunity of Realization of Model Project

On the boundaries of Russia, Mongolia, China and Kazakhstan, there exists a net of protected areas and World Heritage Areas, which readily allowed the start of the project on. Seven reserves are located in the Altai Mountains around Belukha Massive, with 2 in the Eastern Sayan Mountains around Munkhu-Sardykh, and 2 more in the ridges of Khamar-Daban and Khentei on the boundary with Mongolia. Inside of Russia, on boundaries of Altai, Touva, Khakassia, Krasnoyarsky region, Tofalaria, Buryatia, Irkutsky and Chitinsky regions, there are 8 protected areas. In all regional centers, Universities, Scientific-Research Institutes, and ecological NGOs function as potential partners of the project.

New information about the structure of snow leopard range, collected in Russia (Zavatsky, 1988; Shurygin, 1988; Smirnov et al., 1990; Sobansky, 1992; Koshkarev, 1994, 1997a, 1998; Medvedev, 1990; Loukarevsky, 1997, 1998, personal comm.) and on boundary territories (Matyushkin, 1992, personal comm.; Zinchenko, 1995; Koshkarev, 1997b; McCarthy, 2000; Yurchenkov, 2001, in letter) in past decades, was important for the realization of the project. They added greatly to the previous picture of the distribution of the species (Heptner, Sludsky, 1972; Sludsky, 1973), and provide the main key for the development of a conservation strategy.

Geographical Specific of Snow Leopard Range in Russia, and Conservation Strategy

The ridges of Southern Siberia, where the main population of the snow leopards exist in Russia, creates a huge triangle. Its base rests in the south on the boundaries with Mongolia, China and Kazakhstan; the apex is in the north in Tofalariya. A southern branch of ridges is interrupted, and in the north almost entirely an island. It rounds Touva and separates it with Altai, Khakassiya, the Krasnoyarsky region, Tofalariya, the Irkutsky region, and Buryatia. This is a main corridor of population exchange, and the survival of Russian groups of irbis depends completely on its protection.

South and north chains of ridges intersect at Belukha (4506 m) in Altai, and Munkhu-Sardykh (3492m) in the Eastern Sayan Mountains. The largest core of snow leopard population in Russia is concentrated near Belukha – in the basin of the Argut River. Potentially it can support about 100 irbises. In 2000, due to poaching, the number of snow leopards was not more than 30 individuals (Koshkarev, 2001), but based on field research in 2002, I would reduce that number by 2-3 times. In February in the lower part of the Argut River was taken 40 loops for snow leopard, and 30 in March.

The potential of irbis population near Munkhu-Sardykh is lower than near Belukha. But this core has a space connection with northern groups and creates a main migration impulse for the settling of animals in Mongolia and Transbaikal. All along the boundary with Mongolia snow leopards migrate from the Russian side (Zinchenko, 1995; Koshkarev, 1997, 2001; Yurchenkov, 2001, in letter), but not inside, as was erroneously supposed earlier (Heptner, Sludsky, 1972; Shvetsov et al., 1984; Medvedev, 1990; Smirnov et al., 1990; Strategy...WWF-Moscow, 2001). It is very important fact, that the Russian population of the snow leopard is isolated from neighboring groups in most of its range. The opportunity for its survival depends almost exclusively from an interior reserve.

The depth of movement of irbis from Russia to Mongolia (Western Hovsgol) and in the Kazakhstan part of the Altai Mountains is limited by 60-80 km (Zinchenko, 1995; Koshkarev, 1997; E.&A.Yurchenkov, 2001, in letter). For the Mongolian and Chinese parts of the Altai, we have no data. Population exchange is possible here in the western Uvs-Noor depression, where there have been observations of fresh snow leopard tracks up until now (N.Mikhailov, 1992, 2001, personal comm.; McCarthy, 2000; Matyushkin, Kuleshova, 2001; personal comm. of military Boundary Service, 2002). From the Eastern Sayan Mountains, irbis penetrates into the Ulan-Burgasy and Khentey ridges, the most marginal northeastern points of the range, located at eastern Baikal Lake.

Data that has not been confirmed shows the snow leopard can migrate further to the Ikatski and Kodar ridges (Bologov et al., 1996). In my opinion, the only way of settling of irbis to the east is possibly just along the boundary with Mongolia – in the ridges Khamar-Daban and Dzhidinsky, but there has never been special research over there. In past years, evidence has been collected (D.Medvedev, 2001, personal comm.) about the distribution of irbis even in most untypical areas for irbis in Transbaikal near Khilok and Mogson. It forms the impression that near the northeastern boundaries the range of species widens. A similar picture occurs currently in the Transbaikal in the range of the Amur Tiger (Matyuskin et al., 1996; Koshkarev, 1998).

Snow leopard conservation strategy, suggested by the project, comes from the structure of its range. Its specific distribution in Russia of the main seats and ecological corridors of irbis is along two lines of the Southern Siberia ridges: in the north around Touva, and in the south along the border with Mongolia, China, and Kazakhstan. For the protection of these rare faction island populations, it is important to create an exclusive contour of both of lines and to provide a free population exchange. Ecological corridors must connect the main seats in all perimeters of the described triangle. Decisive conservation of a Russian population includes the Altai seat (Smirnov et al., 1991; Sobansky, 1992; Koshkarev, 2001), which is at present not simply weakened, but almost completely exterminated by poaching. Without the organization of a large international reserve around Belukha Peak with the participation of Russia, Mongolia, China, and Kazakhstan, it is impossible to save the Altai seat. The other large seats in Touva, Western, Central, and Eastern Sayan Mountains have in relation to the Altai a subordinate position (Zavatsky, 1988, 1992; Shurygin, 1988; Medvedev, 1990; Koshkarev, 1997, 1998).

Goals of the Project

- 1 Combine the efforts of Russia, Mongolia, China, and Kazakhstan for conservation of the most northern population of the snow leopard
- 2 Make the lane of higher biodiversity of Mountains of Southern Siberia a protected area
- 3 Restore numbers of the snow leopard and other rare species until optimal level is reached
- 4 Create the Center of Snow Leopard Conservation in Russia with two education basis – in the Altai and Eastern Sayan
- 5 Reduce the risk of destroying two seats of the snow leopard in the Altai and Eastern Sayan Mountains – in areas where gas pipe lines from Russia to China are planned

Ways to Reach Goals

- 1 Organize a referendum for the creation of a special regime of conservation in Boundary Lane of Higher Biodiversity (BLHB):
 - On the international boundaries of Russia with Mongolia, China, and Kazakhstan;

- In inner boundaries with Altai, Touva, Khakassia, Krasnoyarsky region, Tofalariya, Irkutsky region, Buryatiya, and Chininsky region
- 2 Find effective methods of reducing human pressure in BLHB:
 - Create legal basis for conservation of endangered species in BLHB
 - Create economic basis for the limitation of use of natural resources and stimulation of interests of BLHB residents for nature conservation
- 3 Create Coordination Center of project from representatives of Russia, Mongolia, China, and Kazakhstan
- 4 Create Snow Leopard Conservation Center in Russia with two education basis – in Altai and Eastern Sayan
- 5 Create Data Bank of the number of snow leopards and other endangered species for monitoring in Russia and the boundary territories of Mongolia, China, and Kazakhstan
- 6 Create Bank 4 States for the decision of economic and environmental problems in BLHB
- 7 Create the Bulletin “Boundary Lane” for the publication of project information
- 8 Start collaboration with organizations in the US and Canada, working for similar project “Yukon to Yellowstone” in Northern America
- 9 Organize meeting with Gas Companies for discussion of gas pipe line problems in snow leopard area in Altai and Eastern Sayan

Expected Results of Project

- 1 Collaboration of government and non-government organizations of Asia and America for conservation of the snow leopard
- 2 Reduction of poaching in Boundary Lane of Russia, Mongolia, China, and Kazakhstan until it reaches a minimum level
- 3 Effective protection of 70% of snow leopard population in Russia, as well as other endangered species
- 4 Creation of an economic mechanism for the protection of biodiversity centers of Asia Mountains by example of Russia and neighboring states
- 5 Creation of the Snow Leopard Conservation Center in Russia
- 6 Make an optimum decision on the gas pipeline project in snow leopard habitat in Altai and Eastern Sayan
- 7 Use of model project experience in other countries of the snow leopard’s range

Budget of Project (\$ US)

General - ?

For the beginning of the project in 2002-2003:

1. Hiring of experts in economy and international law for development of parts in final variant of the project: \$10,000-15,000
2. Send the project to other partners: \$100
3. Revision for monitoring literature and field data about number of the snow leopard in Russia, and in boundary territories of Mongolia, China, and Kazakhstan: \$5,000

4. Organize meeting with partners and main executors of the project: \$20,000 (hotel cost, per diem, transport, translators)
 5. Building two education centers in Altai and Eastern Sayan for Snow Leopard Conservation Center in Russia: $\$100,000 \times 2 = \$200,000$
 6. Equipment for two education centers in Altai and Eastern Sayan (4 cars, computers, furniture, tents, sleeping bags, etc.): $\$100,000 \times 2 = \$200,000$
- Total: \$435,000 – 440,000

APPENDIX 1

Snow leopard seats:

A. Inside of Boundary Lane:

1. Altaisky (Russia-Mongolia-China-Kazakhstan)
2. Touvinsky (Russia-Mongolia)
3. East-Sayan (Russia-Mongolia)
4. Khenteysky (Russia-Mongolia)

B. 6) Out of Boundary Lane:

1. West-Sayansky (Krasnoyarsky region-Touva)
2. Center-Sayansky (Tofalariya-Touva-Buryatia)

APPENDIX 2

Mechanism of biodiversity conservation in Boundary Lane

BLHB 100 km wide and 3000 km length becomes payment for visitors and business companies. Finances become the common property of 4 States: Russia, Mongolia, China, and Kazakhstan. Around 30% of it is assigned to States, and 60% assigned for Special Fund of Boundary Lane Residents. It is the main economical stimulus for support of their interests in biodiversity protection, and compensation of losses connected with the limitation of economic activity in BLHB. Another 10% comes to the Reserve Fund of Biodiversity Conservation of four States, which they can use for decision of immediate problems in the most critical regions.

APPENDIX 3

Role of Coordination Council

1. Control and coordinate the general situation in BLHB and surrounding territories
2. Inventory of flora and fauna, monitoring of key species: snow leopard, ibex, mountain sheep, etc.
3. Improvement of endangered species conditions by widening of special protected areas and ecological corridors inside of BLHB, and in surrounding territories
4. Issue special information bulletin “Boundary Lane”

APPENDIX 4

Responsibility of States and BLHB residents for status of endangered species in Boundary Lane

1. Due to the worsening of the status of endangered species due to the States faults, they must pay high fines into the Reserve Fund of Biodiversity Conservation
2. Guilty residents of BLHB also must pay fines. For a first offense, they will lose their privilege to have support from the Special Fund of Boundary Lane Residents for one year; a second time, forever. If a resident has very serious mistake, they can be evicted from BLHB