

ENDANGERED SPECIES PROTECTION

AND

ECONOMIC CHANGE IN THE FORMER USSR

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The change from a centrally planned economy to a market-oriented economic system in the newly independent republics of the former USSR indicates that an improvement should occur in terms of successful biodiversity maintenance. The author suggests that on the contrary, endangered species management has deteriorated in the former USSR. Evidence for the decline is presented, along with possible reasons for the lack of improvement, notably failure to establish ownership rights and a legal structure to support economic change. The paper presentation will include slides of reserves in Central Asia and the Russian Far East.

INTRODUCTION

Until December 1991, one-sixth of the land surface of the earth was under the management of a single state, the Union of Soviet Socialist Republics, directed ostensibly by a centrally planned economic system. The International Union for the Conservation of Nature and Natural Resources (IUCN) in Switzerland noted a total of 463 species of fauna under varying classes of endangered status in the USSR in the mid-1980's. ([Table 1](#))

With the USSR now dissolved into fifteen independent states, the important question in terms of biodiversity maintenance appears to be; are endangered fauna species better or worse off than under the former system? A corollary question is: are current economic circumstances more or less conducive to maintenance of biodiversity and protection of endangered species?

ISSUE BIODIVERSITY PROTECTION UNDER FORMER SYSTEM

Western academia produced a wealth of critics who documented the shortcomings of environmental protection under the USSR system of central planning and monopolized control (Goldman, Komarov, Feshbach and Friendly). Only with the opening up of information associated with the devolution of the Soviet system is information emerging about the true extent of environmental damage under the USSR government in terms of toxic waste, nuclear and chemical accidents, air and water pollution, and public health standards. Yet in terms of commitment to conserving biodiversity of endangered fauna and flora, the USSR did maintain an attempt to establish a system of nature reserves and laws related to species protection which may have been underestimated in its value. For example, the Soviet government was a signatory to CITES (convention on Trade in Endangered Species), maintained a system of approximately

160 reserves throughout the USSR totaling 22.5 Trillion hectares of preserved lands, and established a legal structure forbidding exploitation of endangered species.

Under this system, the Soviet central government in Moscow (with the cooperation of local governments in the republics) did attain some successes with respect to biodiversity maintenance, but also experienced failures. In terms of the good news, the USSR was able to reestablish species on the brink of extinction, such as the European bison and Przewalski Horse and publish a series of Red Books of endangered species for most union republics. Attempts were made to control poaching and stop trade in illegal wildlife parts exports. On the other hand, failures also were prominent: the reserve network was unevenly created throughout the country ([Table3](#)) ([Graph](#)) and broke down (i.e., was contracted) during several periods of Soviet history; favoritism was rampant as high officials of the Communist Party and other influential individuals were allowed hunting access into protected reserves, poaching fines were at times insufficient to stop exploitation of wildlife, and exigencies of economic development often took precedence over protection of wild species.

Critics of the soviet system charged that two deficiencies in particular impaired the USSR from creating a valid system of biodiversity maintenance: (1) lack of access to public funds, information, and political power for grassroots environmental movements and (2) a flawed economic system in which private ownership rights for resources and land were not established. Western scholars argued that failure to establish property rights and maintenance of a centrally planned economic system resulted in poor environmental practices, while lack of open oversight caused shortcomings to be hidden from the public.

CHARACTERISTICS OF POST-USSR SYSTEM

While regional variations exist (the Baltic republics for example are probably more advanced with respect to endangered species protection while the Central Asia republics are probably furthest behind), the break-up of the USSR has not yet resulted in an improved circumstance for biodiversity maintenance, and in fact, evidence abounds that endangered fauna of the former USSR are probably more at risk in 1995 than during the Soviet period.

What accounts for the deteriorating situation, given that the structure which presumably created the problem in the first place has now been Set aside? The current situation suggests that the following events or trends are occurring throughout much of the former USSR, particularly Asian regions:

1. increasing poaching of wildlife against legal norms
2. breakdown of reserved lands system established under the USSR
3. decline in scientific establishment to argue for wildlife protection
4. lack of new law structure to emerge in the independent states
5. failure of many republics to sign independently international Conventions supported under the USSR system
6. increasing economic hardships to offer incentives for illegal exploitation of Endangered species

This extremely negative scenario is occurring against a backdrop of social political, and economic changes which earlier would have been predicted to result in beneficial impacts on biodiversity maintenance in the USSR. What accounts, therefore, for the discrepancy in outcomes? While documentation exists to support the notion that endangered species are under increasing threat since 1991, the following Trends are presumed to be taking place in many of the former USSR republics:

1. change from Moscow based to local based control over resources
2. privatization of economic resources and land

3. increasing access of press and public interest groups to information
4. emergence of markets and entrepreneurship
5. liberalization of borders
6. increasing foreign investment and influence

Why have those changes not resulted therefore in improvements in the situation for endangered species management within the former USSR republics? TABLE 2 shows examples of endangered animals in the former USSR. ([Click Here](#))

DETERIORATION OF SPECIES PROTECTION SINCE 1991

In the past, agencies working out of Moscow, such as Goskompriroda (state Committee on the Environment) provided some attempt at inter-republic coordination, with implementation and enforcement left to local jurisdictions. Republic-level ministries, academic and research organizations, and environmental organizations do therefore exist in the republics of the former USSR. Protection of endangered species against poachers was uneven, with Communist Party officials often allowed access to reserves (see B. Komarov), but serious attempts appear to have been made to limit illegal hunting.

The breakdown of the legal structure after devolution and the increasing impoverishment of local peoples seems to have results in an alarming increase in poaching. Dr. Evgeniy Koshkarev, of the Biology Institute of Irkutsk University, for example, surveyed the status of snow leopards in Kyrgyzstan in late 1993 and found that there were much more serious pressures on wild populations from illegal trappers and hunters. In the past, a snow leopard skin was traded for the equivalent of one horse or five domestic sheep, but in 1993 skins were worth 30 to 150 times more. Depending on location, snow leopard skins could be obtained during the winter of 1993-94 for a price equal to \$500-2000 (U.S. dollars) or 1-4 million rubles, 7-27 thousand somas (local currency). Lynx skins were selling for \$200-500; arkhari (*ovis ammon karelini*) horn, \$100-200. Good examples of horns for hunting displays could be ten times higher. Mountain goat horns were selling two to three times cheaper than arkhari, (E. Koshkarev, Snow Line, 1994, p. 6) He estimated that the total number of snow leopard and lynx trapped in this area of northern Kyrgyzstan during the winter of 1993-94 may represent up to half the wild population.

In the opinion of Dr. Koshkarev, who worked in the field ten years in Kyrgyzstan researching endangered species' status, the current scale of poaching may be 3 to 4 times greater than in previous times. He argued that before the break-up of the USSR, snow leopards were caught especially by hunter-shepherds who lived in remote regions of the Tien Shan, but now novice hunters are also participating in the destruction. In winter of 1993-94 the value of a snow leopard skins for sale was more than 60 times higher than the minimum yearly wage in Kyrgyzstan. Meanwhile, fines for poachers caught with snow leopard skins were only the equivalent of the cost of three bottles of vodka. Thus, it is hard to believe that there will be a decrease in poaching in the near future.

While the high cost of fuel may be inhibiting some local sports hunting, there has been an upswing in foreign groups ready to enter the former USSR and spend large sums on hunting parties. For example, in 1993, arkhari (*ovis ammon*), an endangered ungulate of the Central Asian mountains, was available for hunting in Turkmenistan, along with leopard and Asian bustard birds (Ecostan News, Vol. 2, No. 10, October 1994), Personal interviews with game wardens at the Aksu-Dzhabaglyy, Almatinskiy, and Kapchagai reserves of Kazakhstan. from September-December, 1993 also revealed dismay on the part of local workers that the Kazakh government was allowing foreign hunting groups in to hunt species (in this case not listed as endangered) at the cost of up to \$5000 per trophy. In Fall of 1993, a scandal was broken in the local press in Almaty, Kazakhstan over a party from Persian Gulf emirates who were in Kazakhstan to collect endangered falcons for falconry sport.

Turkestan has perhaps been the Central Asian government most criticized for failure to maintain nature reserves, since almost all the country's preserved hectareage was declared open to development in 1993. Most governments of independent states formed from the break-up of the USSR have not signed separately the CITES agreement (Convention on Trade in Endangered Species).

In Russia itself, poaching has apparently increased, often from wealthy foreign hunters or due to pressures from demand sources in China. In October, 1993, the independent newspaper Caravan reported on a bear hunt in the Kamchatka peninsula which involved the shooting of more than twenty bears from helicopters. Tigers have been threatened after years of making a comeback in reserves of the Russian Far East along the Pacific coast. Today, less than two-hundred Siberian tigers are believed to survive in the wild, thanks in large part to the value of tiger bones in China coupled with an increasingly affluent Chinese population and wide-open borders.

WHY HAS THE SITUATION FOR ENDANGERED SPECIES DETERIORATED?

It would have been simplistic to assume that an elimination of the Soviet system would result in an immediate improvement for endangered wildlife, yet it is sadly amazing that the rate of deterioration has been so rapid. A major problem for endangered fauna of the former USSR may be that the pace of decline is so rapid that there is not sufficient time to establish an improved socioeconomic system before many species are totally eliminated from their home ranges.

A combination of Problems has emerged since the devolution of the USSR, but perhaps most problems can be traced to two economic facts of life:

- (a) increasing economic hardships which creates incentives for negative exploitation of endangered species
- (b) a very high discount rate for fauna resource exploitation

Against a backdrop of increasing impoverishment for the majority of population in the former USSR, other factors have emerged which make management of endangered species highly problematical over the near term.

Ownership rights have not been properly specified as yet under post-Soviet legal structures. In fact, the law seems to have reverted to a "whoever has possession has rights" chaotic and almost feudal system. In addition, organized crime control of many resources and land areas has resulted in a contract law and land ownership system in which legal rights have yet to be established.

Inconsistent legal structure-the land laws and resource ownership laws vary widely among the former union republics, and even within regions of republics. III the absence of a clear sense of who actually own resources, foreign investors, for example, are unaware of with whom they are dealing and who has control over resources.

Lack of incentives - the high discount rate currently in operation throughout much of the former USSR (associated with both lack of certainty about the future and a high inflation rate) creates little incentive for a long-term preservationist outlook on fauna resources.

Economic hardship - current declines in incomes and loss of savings incentives means that poaching laws (when enforced) are insufficient to serve as deterrents for criminal activities - profits just outweigh fines.

Deterioration of scientific infrastructure- Many of the researchers with whom the international Snow Leopard Trust has contacts in Kazakhstan and Kyrgyzstan are of Russian ethnicity. At the same time, the Trust has enjoyed working with many ethnic nationals at zoos and reserves in central Asia. One issue to watch is that of out-migration of Russian nationals from the Central Asian republics. Should this happen on a large scale due to perceived or actual discrimination, much of the human talent and experience needed to preserve a species such as the snow leopard may be lost. Green Party movements in the former USSR were often linked to anti-Russian, pro-nationalist fervor, and it remains to be seen whether a true environmental Consciousness, particularly under a revival of Islam, will take flower in the new states.

Low salaries for reserve workers- As of 1993 and 1994, reserve workers in Kazakhstan and Kyrgyzstan, for example, were earning less than \$20 per month equivalent. In Russia in 1994, rangers along Lake Baikal were earning less than \$20 a month wages.

Lack of interrepublican coordination- the break-up of the USSR resulted in loss of a centralized system for reserved lands and endangered species management. Zoos, for example, have felt this loss as trading of animals for breeding loans now is within the purview of sending animals across international borders, and acquisition of animals or medicines often involves hard currency demands.

Breakdown of Law Enforcement- while economic hardships may have resulted in decreased poaching by locals due to high cost of fuel and ammunition, increased poaching appears to be occurring from foreign hunters willing to pay very high fees to shoot wildlife classified as endangered.

WHAT ACTIONS MIGHT IMPROVE THE OUTLOOK FOR ENDANGERED SPECIES?

Thus far, economic change has apparently not improved the outlook for endangered species preservation in many areas of the former USSR. The pace of wildlife destruction may be moving faster than the ability of the newly independent states to move into modern management techniques. However, some hopeful signs are developing, especially due to increasing availability of information to people of the former USSR. The following considerations may also help ameliorate the problem for endangered species:

- (1) reinforce a local constituency with decision making authority for protection of endangered species. With responsibility and power devolving to the local governmental level, indigenous and regional leaders have yet to honor an environmental ethic for their areas. Signing and honoring international conventions on endangered animals and land reserves would be a helpful start, as well as properly funding salaries of reserve workers and game wardens and ceasing to allow permits to foreign hunters who seek to shoot threatened species.
- (2) improve land laws, private ownership rights, and contract laws within the former USSR republics. A preservation ethic associated with privatization has not yet emerged, in part because land laws are vague or not honored in many regions. A legal structure to specify public and private land controls is absent from many areas, as well as a system for collectives and local land owners when land is withdrawn for protected status.
- (3) publicize the negative effects of endangered species hunts by wealthy foreigners and encourage responsible hunting as a source of foreign investment over the long term.
- (4) provide information, education, and pilot management programs about economic incentives for development of benign forms of ecotourism.
- (5) strengthen outside support for indigenous NGO's (non-governmental organizations) associated with

environmental protection and education and for local scientific establishments and individuals who are attempting to preserve endangered species.

(6) increase economic and political pressure on China to diminish Chinese demand for wildlife parts.

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