Income from these hunts is supposed to be funneled into research and conservation efforts that provide protection for the argali and other endangered species. In reality, most of the cash finds its way into the pockets of high-level bureaucrats.

“The poor zapovednik directors and workers are being forced to lead hunting expeditions for rich people flying in from Saudi Arabia, Oman, the United Arab Emirates, and other countries,” says Andrew Smith. “Most of the money is going to graft at the highest levels of government.”

Smith is a professor of biology at Arizona State University. He studies endangered species, including many animals found in Central Asia. “Biologically, this part of the world is fantastically species rich,” Smith says. It also is in big trouble.

Smith recalls sighting 60 different species of birds in a single day on a northern wetlands zapovednik. But many of the country’s unique species are in danger of extinction. Snow leopards that have roamed the Tian Shan mountains for thousands of years are in trouble. So are the five-foot tall Dalmatian pelicans, and of course, the argali.

“Many of the most endangered creatures do not appear on local lists. That’s because high-level officials can make money on them,” Smith says.

Smith became interested in Kazakhstan and the other Central Asian Republics while working as a volunteer for IUCN, the World Conservation Union. He is a member of the group’s Species Survival Commission. The group develops “red lists” of endangered species.

This region of the world is “largely dysfunctional,” yet mostly overlooked. Smith explains. Someone handles Europe. Someone else handles Asia. The Central Asian Republics just get dropped off the map. “He says.

Smith traveled to Kazakhstan in 1998 on a grant from the National Research Council. His goal to help plan a workshop for listing endangered species on a national level. The workshop would involve representatives from government, non-government organizations, academia, and all five countries of the Central Asian Republics.

If the workshop ever occurs, participants will develop a set of quantitative criteria for determining whether a species is endangered or vulnerable. These criteria, unlike the subjective methods currently used, would lend scientific backing to protective efforts. Although quantitative criteria already exist on a global level, Smith says it is essential for each country to have its own method for listing endangered species.

“The reality is that only countries have the enabling legislation to actually correct for managing endangered species,” he says. Quantitative criteria also would allow local non-government organizations to apply for international funding and get support for their cause. “Right now, local organizations have no legs to stand on.”

But would the Kazakstani government sacrifice its graft income to save endangered animal species?

“Having a list is not necessarily a guarantee that things would get better,” Smith says. “But it could certainly put political heat on those people who are misusing the biological resources.”

To date, however, Smith has not found funding to actually present the workshop, even though the entire event has been planned down to the minute.

The creature descended to Earth to become the keeper of the Sary-Arka, Kazakhstan’s yellow mountains. Killing the sacred argali is said to bring grave misfortune to both the hunter and his family. Legend or no legend, in the late 1990s, killing an argali brings great fortune to particular members of the Kazakstani government. Foreign tourists routinely pay up to $25,000 to hunt a single argali on one of Kazakhstan’s many nature reserves, known as zapovedniks.
The IUCN Red List is an internationally accepted standard to identify endangered species. ASU's Andrew Smith arranged publication for the Russian translation.

A game ranger's summer residence.

(Left) At age two and a half months, a white-tailed sea eagle chick threatens intruders to its nest—in this case, ASU biologist Todd Katzner, who provided most of the photos for this article. © 1999 Todd Katzner

The Naurzum Zapovednik sign was knocked down by a drunken tractor driver a week after this photo was taken.
Four types of eagles live in one region, making for an unusual situation, according to Todd Katzner, a doctoral student of ecology at Arizona State University. “Normally, you might find one or two species of generalist predators. But you don’t have four species with similar biology all living together.” Except in Kazakstan.

Imperial eagles, golden eagles, steppe eagles, and white-tailed sea eagles live together on the grassy steppes of Kazakstan. Katzner wants to know how the four groups share habitat and food resources in the Central Asian country. Katzner has spent the past two summers studying the eagles on the wide open plains of the Naurzum Zapovednik, a nature reserve in Kazakstan. The ASU researcher hopes that his work will build on existing ecological theory. He also wants to provide practical information that will help land management around the zapovednik.

During his summers at the zapovednik, Katzner found about 50 active nests belonging to all four eagle groups. He put high technology to work. Katzner ... geographic location of each nest, then analyzed their distribution with a computer. He found that each species of eagle

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“IT’S ABSOLUTELY FRUSTRATING,” he laments. “People are reluctant because they know the difficulties inherent to that area of the world.”

Problems in the Central Asian Republics are the moldering fruit of communism and its downfall. All graduate student Heather Triplett knows those problems on an up-close-and-personal nature.

Triplett was stationed in a Kazakstani village as a Peace Corps volunteer. She worked as an environmental advisor on a zapovednik. She found that she had to address social, cultural, and economic issues in order to solve ecological problems.

“Many of their management practices are very different from ours,” she says. Most are remnants of life under Soviet control.

For example, during a typical workday, many employees might have put in about two good hours of work. They spent the rest of the day drinking tea and playing cards. Regardless of what they did, they knew they would be paid.

Instead of improving matters, the Soviet breakup brought economic disaster to the Central Asian Republics.

“It’s really hard for them to live,” explains Triplett. “People saved money. Then one day the exchange rate changed and money that was worth $10,000 became worth only $10.” Most people she worked with on the reserve earned only $20 per month.

Triplett spent her first Kazakstani winter in a house without heat, despite the fact that temperatures drop as low as -26 degrees Fahrenheit in that area. The owners just couldn’t afford to work the boiler for the radiator. There often was no electricity to run an electric heater.

Economic problems have taken their toll on the village where she lived. The number of suicides increased. Many people deserted families that they could no longer support.

“The people don’t seem to have a purpose. They have no work. They can’t feed their families,” Triplett says.
Adapted to the space limitations in different ways, “Imperial eagle’s space requirements are very small,” says Katzner. “It needs a lot of space to fly around, and it needs a lot of space to hunt.”

Under such a program, tourists would visit a reserve and learn about its wildlife. Each tour would pay a small fee to the reserve. Trippel says that even $40 per group would make a huge difference to the zapovedniks. The money could be used for research, or to hire guards to protect the wildlife from poachers.

Poachers are a serious threat to many endangered animals. Smith explains. In fact, trade in endangered species is the second largest form of illegal commerce in the world—second only to narcotics.

Unlike licensed hunters on commercial expeditions, poachers pay no attention to the number of animals they kill. And they provide no revenues for research and protection. Trippel believes that ecotourism will offer a double protection against poaching. Besides allowing the reserves to hire more personnel, it would pump money into the local communities. Tourists pay for food, lodging, and handcrafts. Such income might ease the financial problems that tempt people to poach.

Community involvement is a central theme for Trippel’s work. She and Smith share a desire to empower communities to help themselves—not to do the work for them. “I want the people to have a sense of belonging,” Trippel says. “We’re going to teach them how to make a living from nature. They can do it themselves.”

Smith says that his grant proposal, supported by the National Research Council, represents a major step forward. “We’re able to do something that we couldn’t do before,” he says. “It’s not just a matter of getting funding. It’s about changing attitudes.”

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