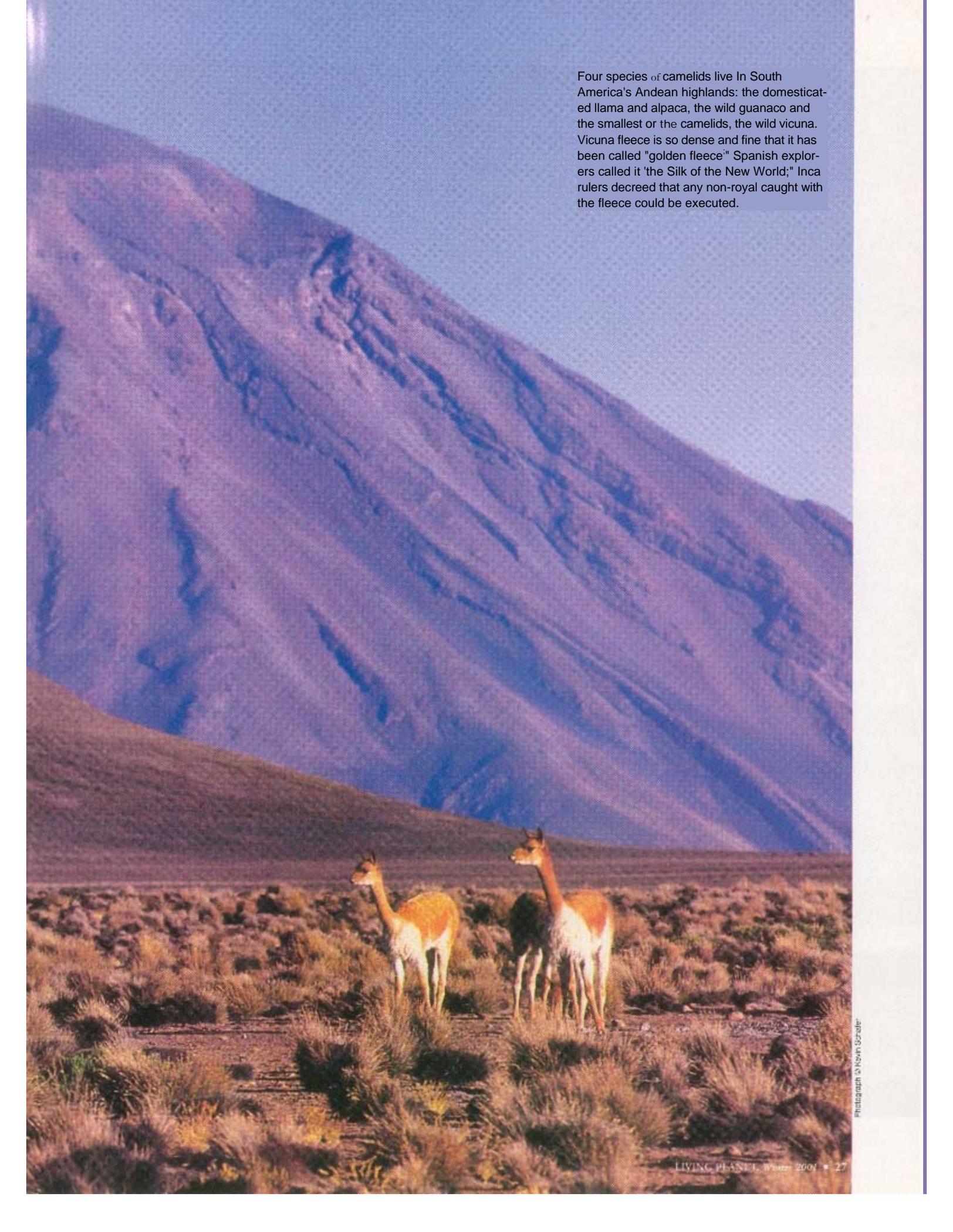


# Chaku

*Capturing the golden fleece*

traditional methods are helping conserve vicunas,  
soiree of a

A photograph of two vicuñas standing in a high-altitude Andean landscape. The animals are in the foreground, facing left. The background features a large, rugged mountain with distinct horizontal ridges under a clear blue sky. The ground is covered with sparse, dry vegetation.

Four species of camelids live in South America's Andean highlands: the domesticated llama and alpaca, the wild guanaco and the smallest of the camelids, the wild vicuña. Vicuña fleece is so dense and fine that it has been called "golden fleece." Spanish explorers called it "the Silk of the New World;" Inca rulers decreed that any non-royal caught with the fleece could be executed.

Photograph © Kevin S. Greller

The sun is intense at an altitude of 14,000 feet in Peru's Andean highlands. The vista is a shimmering, great, grey expanse of dry scrub and far-off towering peaks capped with snow. There are no trees, no cover, and nowhere to hide. Some of the villagers begin pointing at a dust cloud moving rapidly down a distant slope. At breakneck speed, vicunas (*vicugna vicugna*) emerge from the dust, their outstretched necks thrust ahead of their long-legged, lithe bodies.

Vicunas race with giant strides over the rough, rocky surface, parallel to a mile-long guide rope held by 250 Tucare villagers. As the vicunas race past, the villagers sing, yell and wave their arms. It's as if a choreographer has assigned the roles to people and animals alike, and they are well rehearsed.

But the vicunas have been tricked into their performance, and they sense that they have been "had." Instead of what they knew to be an immense valley and an often-used path, they have been greeted with a meandering line of humanity wielding a brightly ribboned rope stretched across the entirety of their escape route. The herd spins this way and that, probing the line for a place to slip through to freedom.

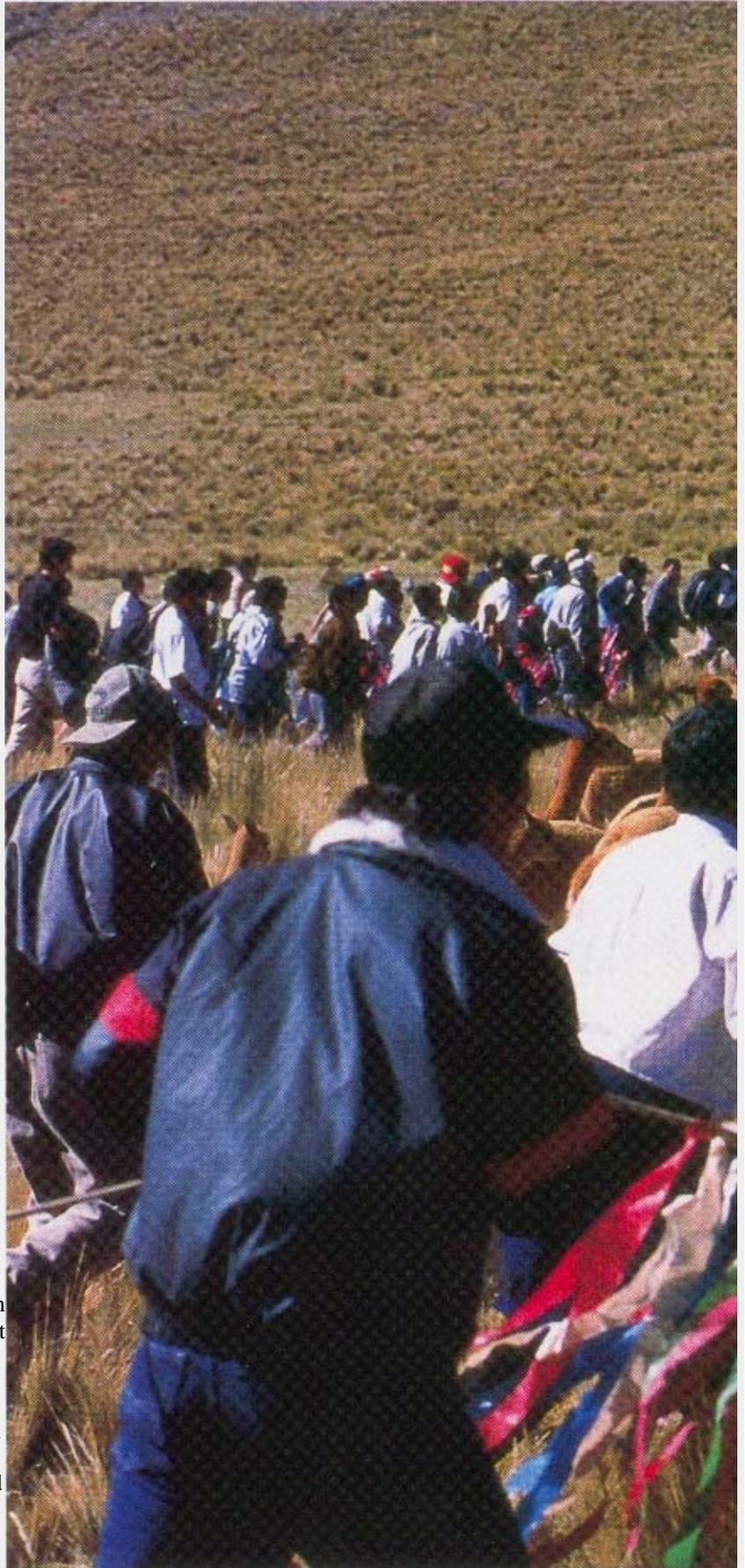
In a split-second the entire endeavor hangs in the balance. The herd, running at full speed in a magnificent display of white under-bellies, tawny gold fleeces, and outstretched necks, turns directly toward the rope. It appears the lead animal has found an opening.

The boldest vicuna breaks from the herd and runs straight toward a gap, but the alert villagers scramble to fill the empty space, yelling and swinging clothing above their heads. The animal loses its nerve and stops, nostrils flared and large eyes telegraphing panic and fear. Letting out a high-pitched alarm call, it spins and races through the confused herd, and leads them off in the only direction in which people are not evident.

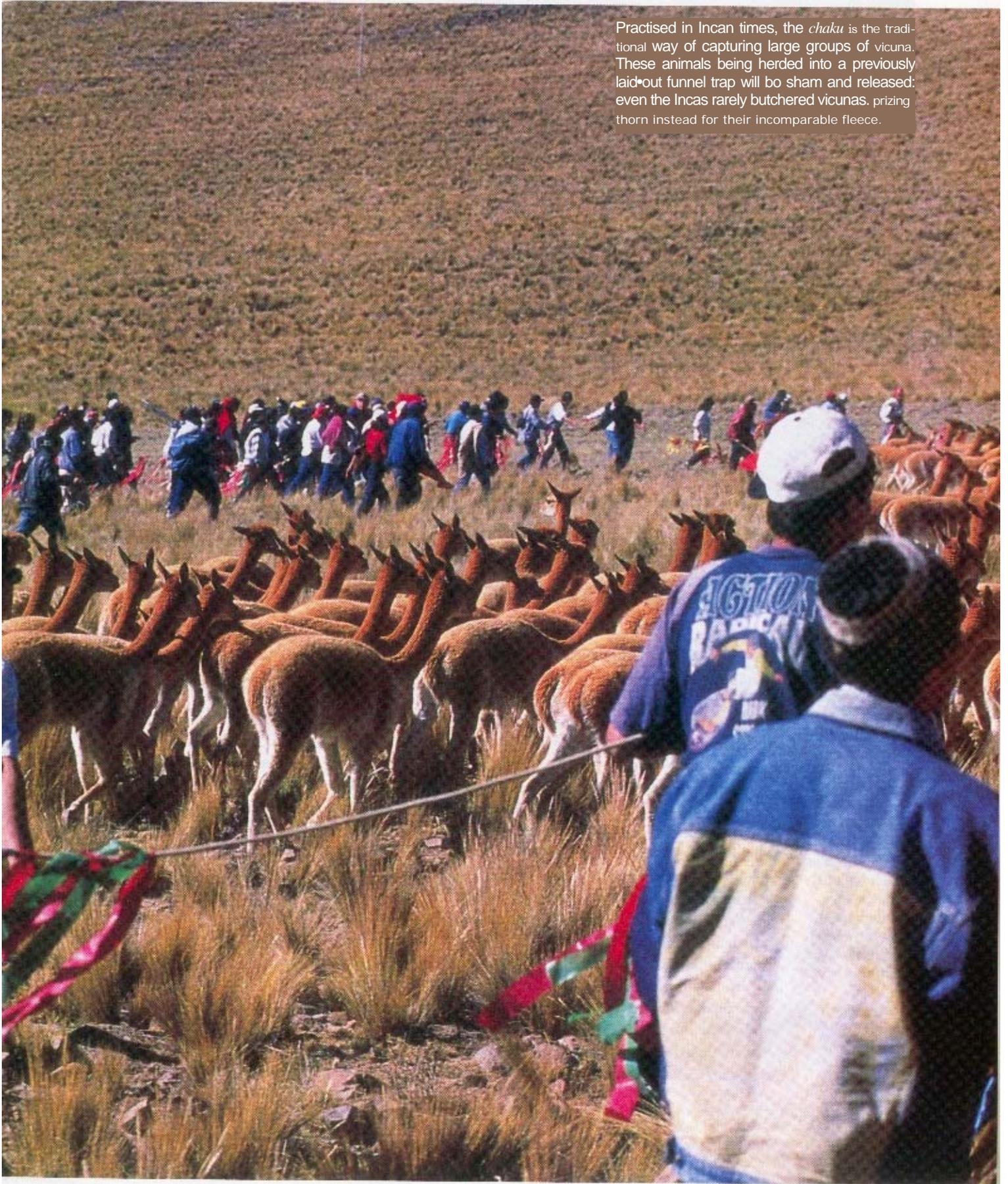
They cannot know that this will lead them into the funnel trap that was laid out the night before.

### Ancient traditions

The communal "arc form" of catching large groups of vicunas is known as a *chaku*. This method dates back to the Incas, who had annual *chaku* involving hundreds of thousands.



Practised in Incan times, the *chaku* is the traditional way of capturing large groups of vicuna. These animals being herded into a previously laid-out funnel trap will be shorn and released: even the Incas rarely butchered vicunas, prizing their wool instead for their incomparable fleece.





Photograph © Julie Day / AP/WIDEWORLD

In one of the most dramatic success stories of endangered species legislation, vicuna populations in the Andes have increased from 8,000 at the time they were declared endangered in 1974 to about 200,000 today. In Peru,

an estimated 1 million people live in the vicuña's traditional habitat and their cooperation is crucial to any management program.

of people and animals. the Incas conserved vicuñas, rarely butchering them but instead capturing them primarily to shear their amazingly fine, soft fleece.

Vicuña fleece was so prized that only the Inca ruler and his court were allowed to wear garments spun from it. Any commoner caught with vicuña fleece was executed. The value of the fiber has endured. The last Inca ruler was killed by the Spanish in 1532; but the allure and value of vicuña fleece have not diminished over the centuries. In today's market, raw vicuña fleece sells for around \$272 per pound, which makes vicuña the most valuable natural fiber in the world today.

In a bold plan that addressed conservation and protection, the Peruvian government embraced the past to combat the future. The vicuna was declared an endangered species in

1971 because poachers, in pursuit of the fleece, shot whole family groups with such deadly efficiency that fewer than 8,000 existed in all of the Andes. With extinction of the species a real possibility for this, the most diminutive and graceful member of the camelid family, conservationists in Peru and the international community responded.

Garnering full protection from IUCN - the World Conservation Union, the vicuna was assigned to Appendix I of the Convention on International Trade in Endangered Species (CITES). Appendix I includes species that are threatened with extinction, for which international commercial trade is prohibited. Listing led to a series of international laws forbidding trade in vicuñas and their by-products. These trade laws, along with anti-poaching efforts in Peru, Chile, Argentina and, to a lesser extent, Bolivia, have resulted in perhaps the most dramatic comeback of any threatened (camelid in the world.)

---

*Erica Hoffman* wrote this article for *Living Planet*, a magazine for children and young people. She has been researching South American camelids for 20 years, and co-authored the book *South American Camelids*. Professor Hoffman is a conservation biologist and author of *South American Camelids*.

Moreover, the program succeeded in an impoverished environment, where villagers are often hand pressed to put a meal on the table for



their families, let alone worry about supporting a conservation program for local wildlife.

By the late 1980s, the Peruvian vicuña head count stood at more than 120,100 animals. There were around 35,000 in Argentina, 20,000 in Chile, perhaps 6,000 in Bolivia, and a small transplanted herd in Ecuador. Vicuñas are fairly common throughout much of their historic range.

Consequently, by 1993, the argument that they **must** be protected at all costs because the animals' numbers were dangerously low had lost its clout. Clearly, new ideas were needed. The vicuña's fiber offered hope in the cash-poor highlands of Peru, where well over a million nutritionally, educationally, and medically deprived people live in small, remote communities

### The finest fleece

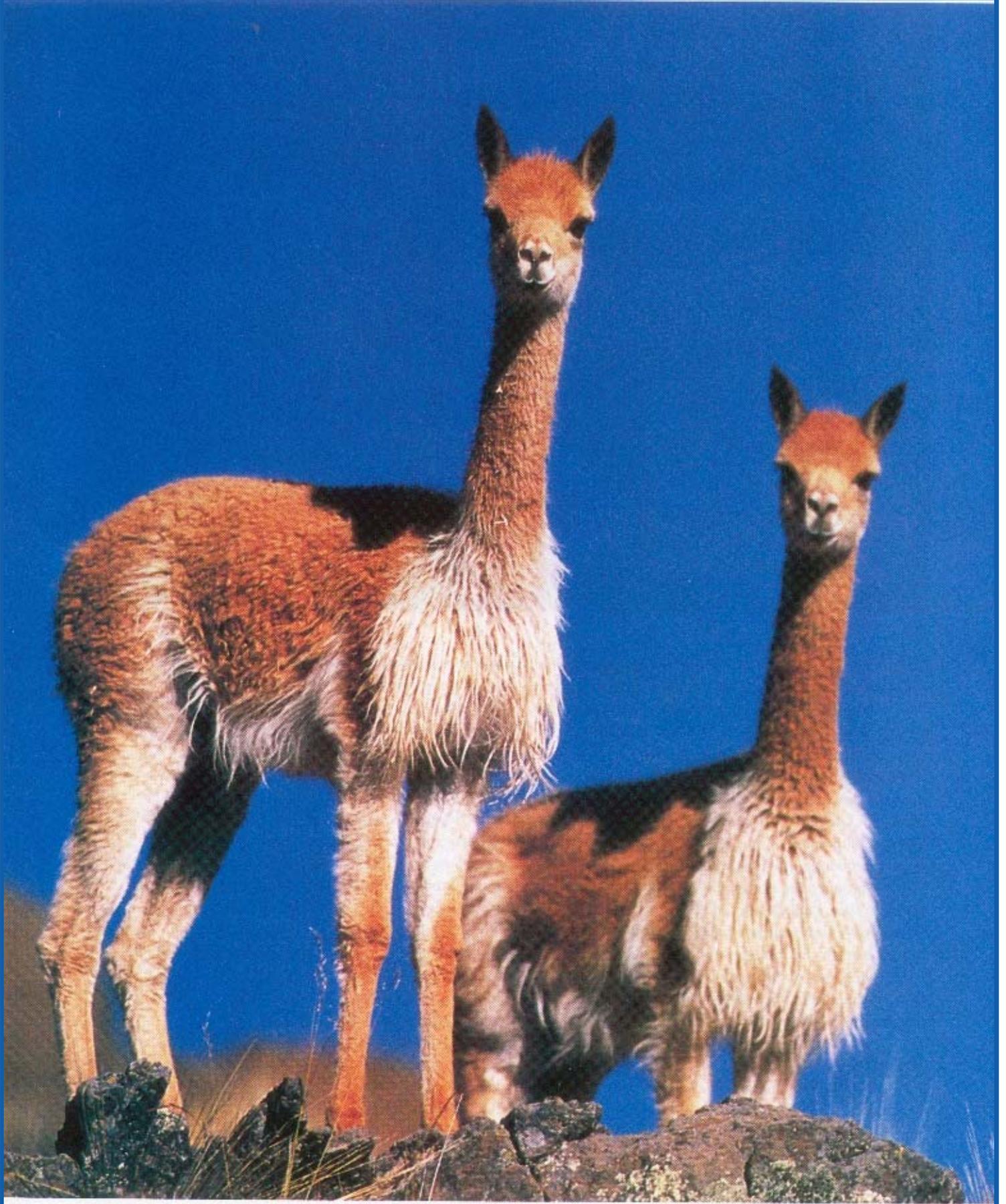
There is no doubt that vicuña fleece is a ready, high-value cash crop. As one of the rarest, softest and finest fleeces in the world, it is sought by premium-fiber processors in South America, Europe and Asia. The challenge is to manage

vicuñas without unwittingly playing into the hands of commercial poachers, who nearly caused the animal's demise in the first place.

The vicuña's tightly controlled Appendix I status has been relaxed to Appendix II in most parts of Peru, Chile, Argentina and Bolivia, where the animals are found in family groups in the stark highlands, usually above 4,700 feet. The change in status allows commercial harvesting of vicuña fiber but still forbids international export of vicuñas, or hunting of them. The question facing vicuña policy makers in all four countries is how to allow commercial harvesting in a way that includes indigenous villagers while discouraging illegal poaching.

Unlike *poachers* who kill vicuñas to obtain the precious fiber, villagers who catch vicuñas in *chakus* shoo the animals and then release them, otherwise unharmed, back into the wild.

In Peru, the person at the center of management decisions from 1990 to 2000 was Dr. Alfonso Martínez, president of Consejo Nacional de Camelidos Sud American (CONACS). Appointed in 1991, at age 34, to this prestigious ministry position by Peru's then-president, Alberto Fujimori, Martínez was responsible for recommending policies



affecting the management of alpacas. llamas, guanacos and vicuñas – the four South American camel family species found in Peru and other Andean countries.

Martinez, a graduate of Peru's San Marcos Law School, grew up in a region long known for its vicuña herds. He understood the harsh realities of living in rural Peru and the local attitudes toward wildlife. Reviving the ancient *chaku*, and involving locals in the capture, shearing, and marketing of vicuna fleece, Martinez believed, offered the best chance to link rural communities to the animal's management and protection.

"People have a financial incentive to protect vicuñas for their valuable fleeces, which are shorn every two years," explains Martinez.

He organized the first "new age" *chaku* in 1993 and invited President Fujimori to watch. Fujimori went home convinced. Each year there have been more and more *chakus*.

200 there were nearly 200, and around 40,000 vicuñas, or a third of the population throughout Peru, were captured and sheared.

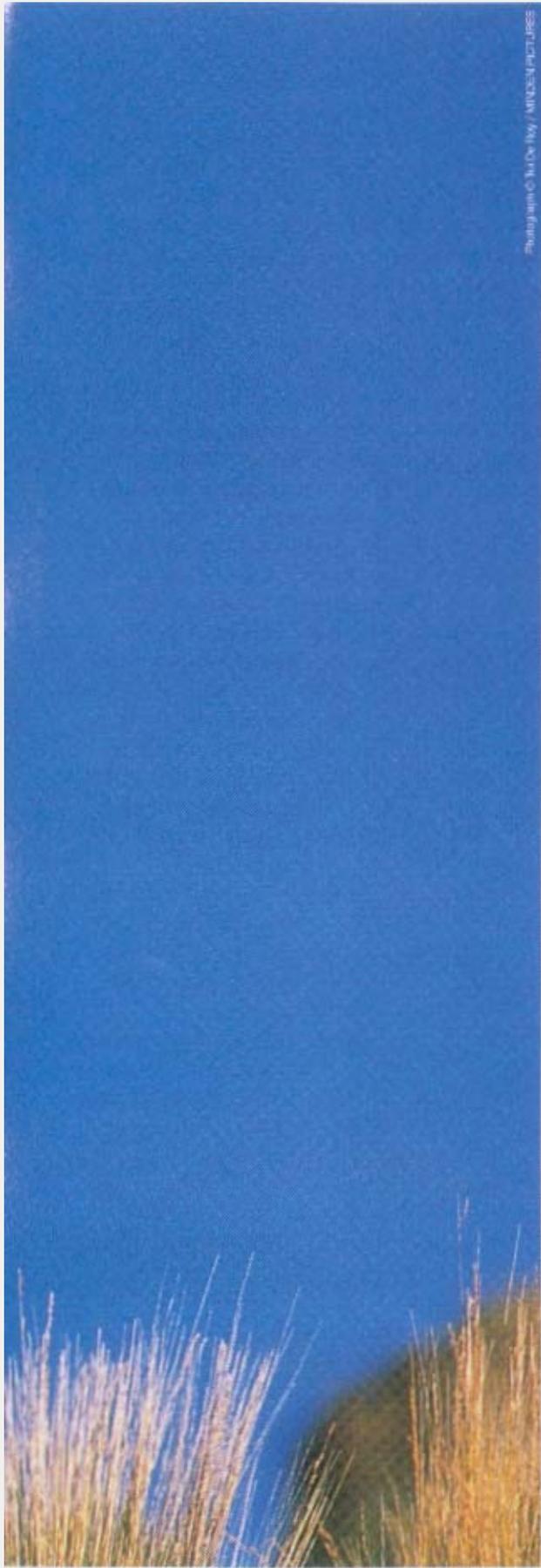
Martinez organized legislation which allowed fiber collected by villagers to be purchased in a public auction attracting the large fiber mills and fashion houses from around the world. Collaborating with an Italian business, Peru's prestigious Grupo Inca, a large Peruvian fiber-processing mill, became the first to turn vicuña fleece into high-priced garments in conjunction with the *chaku* program. The auction was structured to give the villagers the lion's share of the \$272-per-pound price.

### Extending the benefits

In 2000, the Fujimori government collapsed (due to a scandal unrelated to vicuna policies). The collapse created uncertainty for vicuña management when Fujimori's cabinet, including Martinez, was also sacked. For a time it looked as though the programs Martinez put into place might be abandoned. However, after the recent election of President Alejandro Toledo, Enrique Moya was appointed to head CONACS and, after reviewing the program, endorsed *chakus* and wants to expand the program.

"There are more than 200,000 families living in vicuña habitat. This amounts to a million people. This creates a significant challenge to see how people and vicuñas can best coexist. There is potential to include all these people in a *chaku* program," Moya says.

Like their Middle Eastern and Asian relatives the dromedary and Bactrian camels, vicuñas and other South American camelids have padded, rather than hooved, feet and travel quickly with a natural, pacing gait. They have excellent eyesight and, despite their fragile appearance, are well-adapted to surviving at high altitudes, through droughts and freezing nights.





Photograph © Eric Hillman

Not all countries treat vicunas the same. Argentina and Chile in sustaining a ban on poached vicuna products. The author found this shop in La Paz, Bolivia, selling rugs, once of thorn made from 26 vicuna skins.

To bolster the rights of the villagers the Peruvian government passed laws that designate communities as owners of vicuña herds, as well as the fleeces harvested from the herds. Vicuñas were formerly state owned. Local involvement and ownership are coupled with the deployment of hard-nosed military anti-poacher units that track down poachers when losses occur.

### Can it be sustained?

There is no doubt Martinez created one of the most innovative wildlife management programs in the world. What is not entirely clear is how well the program will work in the future. Alonso Burgos, a conservationist and senior executive with Grupo Inca, endorses the chaku program but worries about the resurgence of poaching and the inconsistencies in enforcement and safeguards from one country to another.

"Poaching has been reduced because the fleece couldn't be traded legally, but a black market is possible. now that harvesting fiber is legal again," he says. Burgos believes the money to eliminate poaching can be found in the private sector, which he represents. "Integration of private enterprise into government programs to help run a tightly controlled vicuña registry will make poaching difficult. We need to maintain a program that clearly identifies where a fleece came from, and labels end-products as being manufactured from legally harvested fleeces?"

Currently the only check on poachers is from the cash-poor communities in vicuña territory. With these communities benefiting from the vicuña fleece harvest, it is hoped this vested interest will condemn and curtail poaching activities. And, to track vicuña fleece origins. Peru has developed a labeling system that identifies all garments created through a government-sanctioned *chaku*. In other countries, which do not have fiber-processing plants, the ability to follow fiber from animal to end-product becomes more difficult. For fiber collection and processing to have integrity the clip and end-product should occur in the country of origin." When raw fiber is moved across borders, problems may occur," says Burgos.

There is no doubt that Peru has embarked on an ambitious and well-meant program. Its success remains to be seen as it attempts to generate cooperation among people from diverse interests and backgrounds.

For example, in [3o1 ivia Burgos's worst fears have been realized. Poaching is widespread (there are no resources assigned to enforce antipoaching laws) and there is no government-supervised fiber-harvesting program. Although it is illegal to sell them, vicuña skins can be found on sale in La Paz, Bolivia's capital.

Burgos explains, "Vicuñas run like the wind and are creatures of God. Their fiber produces a light garment with exceptional insulating qualities. It has the best luster of all fibers and is the most radiant cloth at any fashion festival. Vicuñas represent the Andes, the ancient cultures and grace of all wild creatures. The world would not be the same without the beauty of the vicuñas in our highland pastures."