

Shahtoosh trading

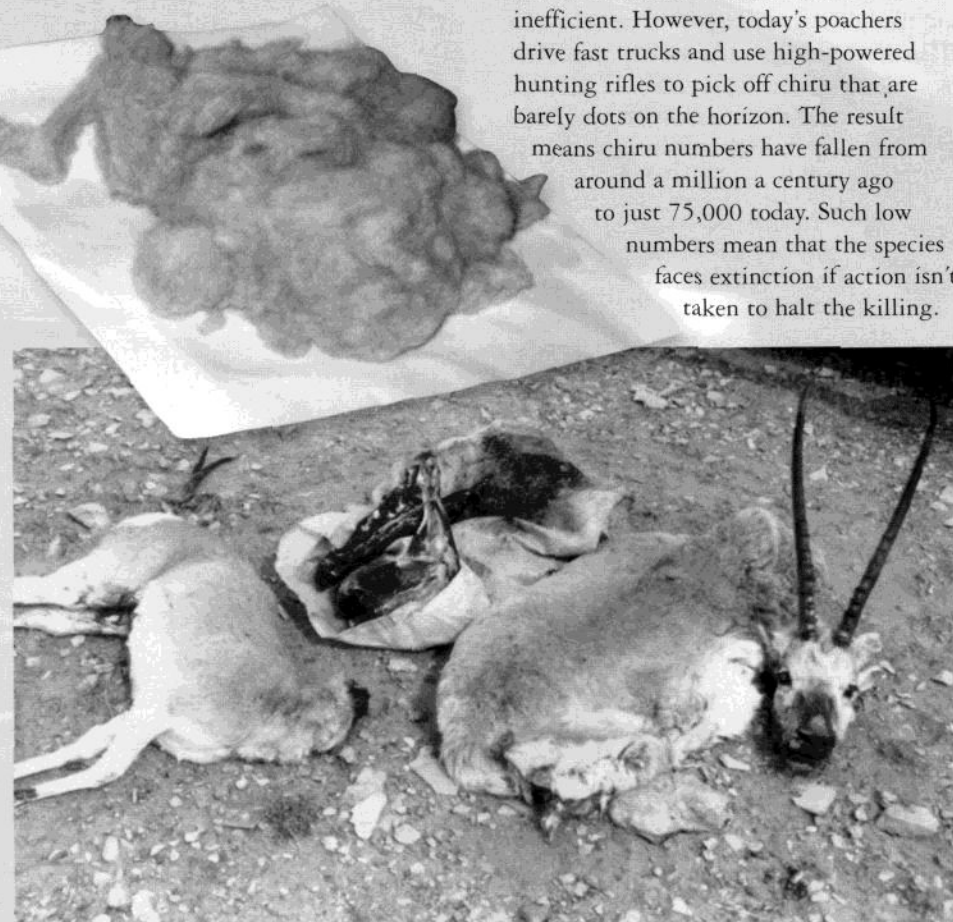
In a Hong Kong apartment, wealthy women meet to buy soft shawls with \$10,000 price tags. It might seem like any other display of conspicuous consumption, but this party is different. To make each of the garments they are buying, four of the world's most endangered mammals are shot and killed by poachers.

The Tibetan plateau is a harsh place. It is high—more than 8,200 ft (2,500 m) above sea level—and dry. Thermometers creep above freezing fewer than 60 days each year, and the barren plateau is swept constantly by gale-force winds. To survive these unforgiving conditions, the animals that live here have evolved their own special defenses against the climate. In the case of the chiru, a species of antelope, this protection takes the form of a coat of the finest, softest wool in the world.

Unfortunately, the qualities that make the wool a good insulator for the chiru also make it highly desirable as a garment textile for fashion-conscious humans.

Fashion victims

Herding and breeding chiru for their wool is out of the question—the beasts are wary, and bolt when they scent humans. The only way to obtain their wool is to kill the antelopes and skin them. In the past, this had little impact on their numbers, because hunters were few and inefficient. However, today's poachers drive fast trucks and use high-powered hunting rifles to pick off chiru that are barely dots on the horizon. The result means chiru numbers have fallen from around a million a century ago to just 75,000 today. Such low numbers mean that the species faces extinction if action isn't taken to halt the killing.



SHAHTOOSH TRADER ▲

In a landmark case for the Hong Kong authorities, shahtoosh trader Bharati Assomull was fined \$40,000 and sentenced to a three-month jail sentence, suspended for a year.

Policing the poachers effectively is impossible—the animals range over an area the size of France. Some 7% of this is inside China's Arjin Shan Reserve, but this offers the chiru little protection, since the reserve's managers have just four vehicles.

15K in HK

Demand drives the poaching trade. Fashionable women—and men—wear and collect the shawls, oblivious to the plight of the chiru. Though the fashion for shahtoosh is international, the trade has been especially flagrant in Hong Kong. There, socialites nicknamed "tai-tais" pay \$3,000–\$5,000 for them, though the largest may fetch \$15,000.

Ending the trade should in theory be straightforward. The animals are listed on Appendix I of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), which ensures that all signatory countries make it illegal to buy or sell products made from chiru.

The Hong Kong authorities had tried repeatedly to stamp out the trade, but a

◀ CARNAGE IN TIBET

Poachers skin the chiru they shoot, and leave the worthless carcasses to rot. Each pelt yields about 3.5 oz (100 g) of wool, and 11–18 oz (300–500 g) are needed to weave a single shawl.

KING OF WOOLS ▶

Shahtoosh is a Persian word meaning "from nature and fit for a king." The fabric, which resembles cashmere, is very soft and light, yet warm.

loophole in the law has, until recently, enabled traders and collectors to escape prosecution. In 1995, for example, 100 shawls were seized from a tai-tai. The owner's lawyer argued that there was no case to answer, because it would be impossible to prove in court that the wool came from an endangered species. Eventually the shawls were returned.

Shawl of blood

However, by the following year, opinion was beginning to change. Informants among Hong Kong's elite began to pass on information about clandestine shahtoosh sales to the environmental organization TRAFFIC, which in turn notified the Hong Kong authorities. But there remained the identification loophole. This was finally closed, not in Hong Kong but in the US, at the government's National Fish and Wildlife Forensics Laboratory (NFWFL). A chemist from the Hong Kong Government Laboratory flew to the NFWFL and helped senior forensic specialist Bonnie Yates there to develop a diagnostic test for chiru hair.

On the merchants' trail

The scientists considered using DNA analysis to identify the source of the wool. However, they discounted this not only due to expense, but also because the shawls rarely contain hair roots, which contain the body tissue needed for analysis. Instead, the scientists looked for morphological clues, studying the shape and size of the hairs.

The chiru's soft, downy wool resembles cashmere, though it is somewhat finer. But the chiru's coat also contains coarser guard hairs, which, though undesirable from the wearer's point of view, are almost impossible to remove. It was these hairs that gave the scientists the landmark they needed. As Bonnie Yates commented, "Guard hairs contain the distinctive microstructure that differentiates hairs of the Tibetan antelope from goat hairs and other closely related ungulates." Best of all, identifying the hairs was easy and quick; the differences showed up even under a conventional optical microscope.

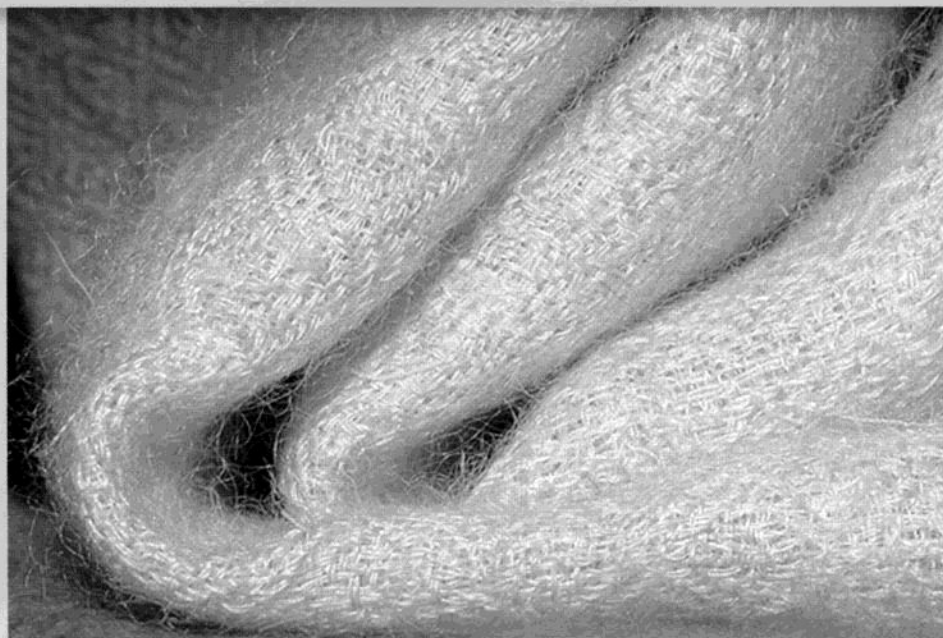
Armed with a test procedure that would stand up to legal scrutiny, Hong Kong police swooped. On December 18, 1997, they raided a private exhibition at the Furama Hotel. They seized 130 shahtoosh shawls and arrested Bharati Assomull. In February 1999, the trader was found guilty of possession of highly

endangered species.

Though more prosecutions have followed, the illicit trade in shahtoosh continues in Hong Kong and elsewhere, particularly Western Europe, North America, and Japan. Though police in these areas continue to impound shawls and prosecute those who traffic in them, the trade will end only when the wearing of a shahtoosh becomes as unacceptable as wearing a coat made of panda or tiger fur.

THE RING TEST ▼

Salesmen demonstrate the fineness of shahtoosh fabric to potential customers by gathering a shawl measuring 3 x 7 ft (1 x 2 m) and drawing it smoothly through a man's wedding ring.

**ANTELOPE AT LARGE ▲**

Chiru can outrun dogs and wolves, but not human hunters. But poachers are not the only threat—a disastrous snowstorm in 1985 decimated the herds.

