

WRAP UP THE TRADE

AN INTERNATIONAL CAMPAIGN TO SAVE THE ENDANGERED TIBETAN ANTELOPE



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Wildlife Trust of India

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IFAW/Wild Yak Patrol

Young chiru



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Tibet



Executive Summary

In its remote home high in the mountain plateaus of central Asia the endangered Tibetan antelope (*Pantholops hodgsonii*), also known as the chiru, is among the world's most protected species.



Feng Gang

Chiru running in the Arjinshah Reserve

For 22 years this diminutive, yet magnificent antelope with distinctive lyre-shaped horns has been classified under Appendix 1 of the Convention on International Trade in Endangered Species (CITES); the highest legal protection for any species. Killing, harming or trading in it is illegal worldwide. Domestic laws in both China and India have also given the Tibetan antelope the highest protection, banning poaching, killing and trading of this species and its body parts.

Despite all this the Tibetan antelope is being blasted into extinction.

The chiru endures one of the harshest environments on earth where severe blizzards can rage and extreme temperatures can fall as low as -40° C. By way of adapting to the cold climate and barren landscape, evolution has equipped the chiru with a unique dense under-fleece called shahtoosh. The antelope is being slaughtered indiscriminately by poachers for its ultra fine under fleece wool, which is woven into luxury shawls. Most of these end up in the wardrobes of wealthy Westerners.

Anti-poaching patrols battle hard to protect the



antelopes from the ruthless well-armed poachers, but it is a fight they are losing: their numbers are too few to cover the chiru's 600,000 square kilometre territory on the inhospitable Tibetan plateau.

The chiru population for the entire Tibetan plateau during the early 1990s was between 65,000 and 72,500 – just 10 percent of the population 100 years ago. China estimates that as many as 20,000 Tibetan antelope are killed annually to supply the trade. Unless action is taken now to kill the demand for shahtoosh the Tibetan antelope will be extinct within five years.

In India pure shahtoosh shawls cost between US \$800 and \$5,280. Internationally prices are far higher. Some shawls seized during a police raid in London in 1997 were priced at up to US\$17,600.

For several hundred years shahtoosh shawls have been prized by northern Indian families and passed on from mother to daughter. During the late 1980s the shawls became a fashion 'must-have' among wealthy trendsetters. Demand grew within the USA, Mexico, UK, France, Italy, Belgium, Switzerland, Middle Eastern countries, Hong Kong and Australia.



IFAW/Stevens

Western woman in white shahtoosh shawl

The Shawl

Shahtoosh is Persian for "the king of wool". It is exceptionally soft, feather light and just one-fifth the width of a human hair.

Shawls are typically made in three sizes. A woman's measures 1 x 2 metres and weighs about 100 grams, requiring 300 to 400 grams of raw wool: this represents the lives of about three chiru. Men's shawls are approximately 3 metres by 1.5 metres, entailing the killing of five chiru.

The price of a shawl depends on size, colour, the extent and quality of any embroidery and wool

The Crime

Until the 1970s few humans braved the bitter cold of the chiru's home range. The demand for shahtoosh was minimal and hunting had little impact on the vast antelope herds. But the 1980s saw a dramatic growth in demand from the world's fashion industry triggering a rapid and sharp increase in the price of shahtoosh wool.

Historically poachers have killed Tibetan antelope only in winter when they had their thick winter coats. Now they also kill females in their summer calving grounds, while they are pregnant or just given birth. The poachers dazzle the chiru with vehicle headlights and shoot them en masse, often with automatic weapons.

In 1998 and 1999 a Chinese research team discovered for the first time that calving females were being targeted. Scientist Dr. William Bleisch reports: "In the summer of 1998 only one team of poachers, who had killed fewer than 100 female chiru during the week before our arrival, were found. During the same period in 1999 at least four teams of poachers were operating in this area and they had killed more than 900 animals in just the few days before we arrived and drove them away."

Since 2000 the Chinese government has allocated more funding for anti-poaching operations and issued more vehicles and equipment for protection patrols. In March 2001, 39 kilograms of raw shahtoosh was confiscated on the Tibet-Nepal border, an amount that represents the death of more than 300 Tibetan antelope. By the end of April 2001 Chinese Forestry Police had confiscated over 20,756 antelope pelts.

The Manufacture and The Myth

Shahtoosh shawls are woven only in the Indian state of Jammu and Kashmir (J&K). The trade and manufacture of shahtoosh has always been controlled by a handful of wealthy, influential local traders who farm out consignments of the raw wool to a select few of the most skilled and experienced hair removers, spinners and weavers.

Fifty years ago 20 – 30 kg of shahtoosh per annum was processed in Kashmir: by 1997 this had risen to 3,000 kg according to one wholesaler.

For generations the shahtoosh industry has hidden the unsavoury origin of its wool, claiming it came from the Ibex, wild goats, or “Siberian geese”, and that wisps of moulted wool were gathered from bushes and rocks.

Today, many shahtoosh shawl buyers still believe these myths. But the fact is that shahtoosh comes only from the Tibetan antelope that must be killed before the wool can be removed.

The IFAW/WTI Investigation

A new joint investigation by the International Fund for Animal Welfare (IFAW) and the Wildlife Trust of India (WTI) has revealed the extent of the illegal trade in shahtoosh: investigators were offered Tibetan antelope skins and raw shahtoosh wool in Tibet, and finished shawls in Delhi and London. They also visited the Indian state of Jammu and Kashmir – the only place where shahtoosh is woven and which supplies the entire global market with shawls.

Kashmir – International efforts to save the Tibetan antelope have been thwarted by the fact that J&K has permitted the shahtoosh trade in defiance of CITES. In May 2000 the J&K High Court ordered the state government to enforce CITES. This prompted the birth of shahtoosh traders’ associations and worker’s unions, which demanded alternative employment or compensation if the J&K Government enforces the global shahtoosh ban. Shahtoosh weaving is among the world’s most clandestine cottage industries, with weavers working the wool informally within their homes.

An IFAW-WTI team went to the Kashmir valley to research the impacts of a ban on shahtoosh production. Preliminary results of a survey of 1,200 people were that the valley has around 70 shahtoosh

manufacturers, employing an estimated 30,000 people. Faced with a ban on shahtoosh, 60 per cent of the survey respondents prefer to weave pashmina shawls as an alternative. Pashmina is the fine hair of pashmina goats that, unlike shahtoosh, is produced by combing the animals without harm.

Dongba – A Khampa nomad confirms that chiru are being killed in the nearby areas: “Today you can get a kilogram of shahtoosh for 1,500 yuan. Chinese traders and Khampas come from Lhasa and Shigatse in cars to buy it. The poaching months are usually May-June and the traders come around September-October.”

Pharyang – A Dokpa reports that two years ago, a kilo of shahtoosh fetched around 8,000 to 9,000 Nepali rupees. If necessary he can get any amount of shahtoosh to Zangmu with the help of tradesmen from Lhasa and Shigatse. “How you take it out is your business,” he says.

Taglakot (Burang) – Contact was made with traders who claimed to have “substantial stocks,” and agreed to supply 200 kilograms of raw shahtoosh wool in Delhi. Investigators were shown half of a kilogram of shahtoosh. The trader had 15 kilograms ready and wanted the investigators to buy it right away: he asked for 6,000 yuan per kilogram and a transportation charge of 4,000 Indian currency per kilogram from Taklakot to Delhi.

He said, “We have consignments going every month (to Delhi). We have regular buyers there. We normally take it by foot across the border to Pithoragarh and then by bus to Delhi. We have many couriers, who keep changing buses and routes. Shahtoosh is compressible and large amounts can be taken in small bundles. No one notices.”

Gertse – At their first stop the investigators asked for shahtoosh. Unfazed, a shopkeeper replied “Oh yes, one of my friends has 15-16 kilogram ready wool for sale. But if you need it with skin, I can give you some of that too.” He showed the team a bag containing 30 skins, each priced at 450 yuan and plastic bags containing 1.5 kg of shahtoosh wool. He could supply skins or wool to Lhasa or Taglakot.

Delhi – March 2001 – Investigators were offered superior quality shahtoosh shawls for sale. One such offer was by traders based in a Delhi Government bazaar: the salesmen asked for 26,000 rupees (US \$650) for each shawl. Another shop



owner in a 5-star hotel in Delhi offered a shahtoosh shawl delivery service to London, claiming he took shawls there every year.

London – May 2001 – IFAW investigators were offered a shahtoosh shawl in a prominent shopping district. The incident has been reported to the police.

The Solution

IFAW/WTI believes three things must happen if the Tibetan antelope is to be saved:

- **Shahtoosh weaving in J&K must stop**

Kashmir's shahtoosh workforce should switch to pashmina. However, being thicker and stronger pashmina can be processed mechanically, requiring far fewer workers. It can also be cheaply machine woven, making redundant the shahtoosh workers' hand-weaving skills. And poor quality pashmina is already being mass-produced outside Kashmir, forcing down the cost of the hand-made variety. IFAW/WTI propose that the future lies in harnessing the unique, traditional hand-weaving skills of Kashmir to produce 'Kashmina': the finest pashmina in the world.

If Kashmir's shahtoosh industry sourced the best Mongolian pashmina which is virtually as fine as shahtoosh – or bred the goat in India, providing appropriate animal welfare standards. Kashmir could produce exclusive shahtoosh shawls to rival shahtoosh, each bearing an accredited certificate of authenticity. The fashion world could play a vital role in promoting this product.

In this way both the Kashmir weaving industry and the Tibetan antelope would have a future.

- **The anti-poaching patrols must be coordinated to become more effective**

A National Tibetan Antelope Conservation Plan should be developed by China through a multi-agency approach. International support and cooperation must be given. Although the Chinese government has seriously addressed the Tibetan antelope protection issue, there remain tremendous inadequacies in the existing regulatory structure, which needs to be more coordinated and less bureaucratic. Lack of funds and inadequate equipment are characteristic of all of the anti-

poaching efforts in the Tibetan Antelope range. This must change.

IFAW's China office has been working in close cooperation with the Chinese government agencies in Beijing and the Tibetan antelope range. IFAW directly funds anti-poaching in China and has supplied communication equipment including radios, generators, fax machines, binoculars, tents and GPS equipment to 15 Forestry Police Stations and 5 anti-poaching forces, including all of the three nature reserves in the Tibetan antelope range. This equipment played an important part in the anti-poaching activities during the chiru calving season in 1999 and 2000.

- **The fashion demand for shahtoosh must be ended.**

Whilst there is demand for shahtoosh, poachers will continue their ruthless slaughter. Shahtoosh consuming countries need to have tougher laws – with stricter penalties – on parties who are put on trial following seizures of illegal shahtoosh shawls. Also, Customs and enforcement authorities in range, processing and consuming countries all need to be trained to identify shahtoosh shawls.

IFAW and WTI have launched awareness campaigns in Europe and India to enlist the support of fashion designers and others in the fashion world. The response has been excellent but more support is needed to spread the message that a shahtoosh is not a shawl but a shroud. Pledges for people in the fashion world to sign and leaflets to be distributed at fashion shows are available from both IFAW and WTI.

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Preface

Just eleven years ago, if someone had asked me why the Tibetan antelope (*Pantholops hodgsonii*), also known as the chiru, is being killed on the Qinghai-Tibet plateaus of China, I would not have known the answer. Moreover, if someone had suggested that the wool from these animals was finding its way through the tortuous mountain passes of the Himalayas, all the way into Kashmir, and that the most expensive of Indian shawls were woven from it, it would have sounded sensationalist. It was not until 1993 that my senior colleague Ashok Kumar and I woke up to the 'shahtoosh massacres'. An innocuous query from Dr. George B. Schaller of New York's Wildlife Conservation Society set the ball rolling. He had seen a large number of antelope carcasses on the plateau, and bales of wool which he believed were destined for India to make shahtoosh shawls.

For the past few hundred years, shahtoosh shawls have been prized in northern Indian families as an heirloom passed on from mother to daughter. The fact that they were made from wool of the endangered chiru was largely unknown.

Since 1979, the Tibetan antelope has been recognised as a threatened species and protected under the Wildlife (Protection) Act of India. It has also been classified as Appendix I in CITES, the Convention on the International Trade in Endangered Species of Wild Fauna and Flora (March 3, 1973), which means that any trade of the animal and its product is banned. Since 1989, the animal has been listed as a Class I protected animal in China's Wildlife Protection Law. Most countries have enshrined the CITES ban in their own laws: it is a criminal offence to buy, sell or import shahtoosh, or even attempt to do so. The maximum penalty can be several years' imprisonment, a heavy fine, or both.

Despite these domestic and international laws, until recently, there has been nothing to suggest that the animal and the shawl were connected. Even the most ardent conservationists were unaware of the link between the chiru and the shahtoosh trade. It was unthinkable that a woman inheriting a shawl from her mother would have been aware of its

bloody past. Generations of Kashmiri traders had claimed that the wool had either come from shorn domestic goats, feathers from a mythical bird or by collecting tufts of wool caught on bushes. In fact, a Kashmir government brochure published in the 1980s had a photo of the animal that they claimed the wool came from – the Ibex (*Capra ibex*) – a wild mountain goat. The trade has thrived on the perpetuation of such myths.



Remains of skinned chiru



The evidence, however, was irrefutable. There were horrifying images from China, both photographs and film footage, of hundreds of animals being killed. There were covert operations that proved that the wool was indeed being smuggled into India, sometimes using Nepal as a conduit, other times more directly, with the trail of blood leading to the doorstep of Kashmiri shahtoosh traders. There was now no doubt as to the use of the wool. Shahtoosh – the king of Indian shawls, was in fact the bloody legacy of the Tibetan antelope. Not surprisingly, the chiru population, which numbered at least a million at the beginning of the last century, has fallen steadily because of the shahtoosh shawl trade.

The plight of the endangered chiru was quickly recognised within the conservation world, followed by widespread calls for its protection amongst both Governments and Non-Governmental Organisations (NGOs). As a global organisation, the International Fund for Animal Welfare (IFAW), supports anti-poaching efforts in China, and has called for increased enforcement of CITES, as well as targeting fashion weeks and glamour models in consumer countries to highlight the grim plight of the chiru. Moreover, NGOs have lobbied hard with the U.S. Government for the chiru to be declared an endangered species under US domestic laws. Whilst widespread seizures of shahtoosh shawls have increased, with the UK Metropolitan Police Service making an unprecedented seizure of 138 shawls in London in 1997.

Further, in India, two NGOs – TRAFFIC-India and the Wildlife Protection Society of India – campaigned to promote awareness for the cause and pushed actively for enforcement. In addition, after its inception in 1998, the Wildlife Trust of India (WTI) launched the Tibetan antelope project as one of its key species conservation efforts. In China, the Wildlife Conservation Society continued its long-term scientific study and support towards the creation of the Chang Tang Reserve. Some of these NGOs have pooled resources through informal and formal partnerships to help save the chiru.

IFAW/WTI Shahtoosh campaign

In 2000, IFAW entered into a unique partnership with WTI that was aimed at ending the illegal trade

in shahtoosh. The great advantage of this partnership was geographical coverage: IFAW has its headquarters in the US, and has a strong presence in Europe, thereby allowing it to focus on consumer demand on these two continents with a targeted campaign. IFAW also has an office in China and has been working in close co-operation with various Chinese government agencies in Beijing and the Tibetan antelope range, including three nature reserves.

The role of the WTI has been to focus on the second dimension: the smuggling of wool into the Indian state of Jammu and Kashmir; the manufacture of chiru wool into shawls, the sale of shahtoosh shawls to wealthy Indian clientele; and the illegal export of chiru wool and shawls.

In partnership, IFAW and WTI tackled this complex issue, by organising an in depth investigation. This task was rendered even more complex by certain constitutional privileges that the state of Jammu and Kashmir has in the Indian Union. But, despite, these potential political barriers, IFAW/WTI developed and implemented a three-pronged strategy:

- **Investigation and survey**
- **Policy intervention and litigation**
- **Awareness campaign: education and outreach**

The investigation, (funded by IFAW) was unique in that it probed the poaching of the chiru from calving grounds, to shahtoosh shawl manufacture, to the eventual smuggling and sale within international fashion markets, exposing difficult challenges from the outset. IFAW and WTI clearly understood that it was almost impossible to stop the shahtoosh trade overnight. Having an impact on a significant family tradition that spans many generations requires the wisdom and patience of a longer time-frame. In light of these challenges, IFAW and WTI established smaller, more tangible targets to implement this project in its first year.

Thus far, the investigation has provided visual evidence from the towns through which Tibetan antelope wool is smuggled. Concrete evidence of smuggling operations into India was also gathered as a result of covert operations. In New Delhi, policy initiatives were set in motion to convince the Indian Union government of the need to issue directions regarding the registration of old, heirloom shawls.

The drive clearly was to be one against the illegal poacher, smuggler and trader and was not subverted to target ordinary citizens who possessed shawls out of ignorance or as a result of being misled by the trade.

However, a subsidiary outcome of this investigation has been, and will continue to be, the outreach and education of ordinary citizens, to affect personal decisions regarding fashion trends. For instance, in August 2000, IFAW/WTI used the Lakme Indian Fashion week in Delhi, one of the most prestigious of fashion shows in India, as a high-profile campaign platform to educate people, especially the fashion fraternity's most glamorous personalities about the shahtoosh issue.

Meanwhile, IFAW and WTI initiated a socio-economic survey in Kashmir that will identify the sections of the shahtoosh manufacture and trade that really require support, their numbers and their

economic situation. In the political cauldron that is Kashmir, such a study is crucial to ensure that conservation of the chiru goes hand in hand with the development of the state.

This report is the first comprehensive written account of the Tibetan antelope that describes its biology, the history of its exploitation, the laws that are supposed to protect it, and the results of the IFAW-WTI investigation. It is our hope that the findings of this investigation and subsequent policy recommendations will provide the impetus for action among governments and NGOs to work together more strategically to save the chiru. IFAW and WTI believe that ending the shahtoosh shawl trade is an achievable proposition in the short term. Government – NGO partnerships are crucial in reaching this end goal.

Vivek Menon



George Schaller

Male and female chiru





George Schaller

Male chiru



The Species

Description

The Tibetan antelope, or chiru, may look like an antelope, but genetically it is more closely related to the sheep and goat family (Schaller, 1998). The chiru are chunky animals with slender legs, and a delicate, dense under fleece. Well-adapted to living in extremely cold areas, the chiru are largely migratory and can endure temperatures as low as -40°C . The most distinctive features of this species are the horns, sported by the males. These are laterally flattened, black and long with sword-like tips that point forward. They rise straight up from the head and curve only slightly forwards towards the upper half. The average length of the horn is about 57cm and the average circumference at the base is about 12cm.

The average body weight of adult males is approximately 40kg and they stand 83cm tall as measured from the tip of the hooves to the shoulder. The body colour of male chirus changes from summer to winter. In summer, males appear reddish fawn in colour, fading to white on their stomach. The tail, which is approximately 13-14cm long, partially conceals a whitish rump patch. The face and front legs of the male chiru are a shade of dark grey. The males change their coat prior to the winter rutting period. The dull summer fleece is replaced by an impressive winter one that is a lighter shade of grey and tan with a white undercoat running from the chin to the belly region. In contrast to the body, the face and the front of the legs are black. From a distance some males appear white in colour (Schaller, 1998).

Female chirus do not have horns. They are shorter and lighter than the males, standing 74 cm at the shoulder and weighing about 26kg. Female chirus are almost pink in colour with a rust brown

nape that fades into white on the underside. The muzzle and the front of the legs are grey in colour. Young chirus have the same colour as the females.

Both sexes of chiru have a small air sac on each side of their nostrils, which give the muzzle tip a bulbous appearance. Interestingly, this bulge that is the external region of the air sac, is white and conspicuous on chirus in the region of Xingjiang, and greyish brown in the population in Tibet and Qinghai.

Distribution and Population

Chiru are endemic to the Qinghai-Tibet plateau of China, but their range also extends into a small region of Ladakh in north-western India. Their eastern limit lies around Ngoring Hu in Qinghai. It is the small population of the chiru in Ladakh (around 200-250) that migrates seasonally to the region of Xinjiang. This migration makes *Panthalops hodgsonii* an Indian species, and therefore its protection is regulated under Indian law. In eastern India, the chiru has been reported from Sikkim and Arunachal Pradesh, although field reports are yet to be confirmed (Unpublished, WTI field investigation, 2000). The largest populations survive in Chang Tang ('Northern Plain' in Tibetan) of northwest Tibet and southwest Qinghai. In 1998, Schaller estimated that there was a population of between 35,000 and 40,000 in the Chang Tang Reserve. The other populations exist in Xinjiang (approximately 10,000-15,000), mostly in the Arjinshan Reserve, Ladakh and to the south of the Chang Tang Reserve in Tibet (Schaller 1998, Nita Shah pers comm). The total chiru population for the entire Tibetan plateau during the early 1990's was possibly between 65,000 and 72,500 (Schaller, 1998). The total chiru population in Tibet in 1998 was estimated at 45,000 (Schaller, 1998).



Habitat

The chiru prefer cold, alpine steppe and similar semi-arid vegetation types, with precipitation of less than 400mm per year, and flat to undulating terrain, though they will readily climb high hills and cross mountain passes (Schaller, 1998). They are mostly found at elevations above 4500m and have been recorded up to 5500m, although a lower elevation range of chirus has also been recorded at 3250m (Schaller 1998, Nita Shah pers. comm). Frost and harsh, cold winds are a common feature of the chiru habitat (Lowe et. al. 1999).

The habitat is sparsely vegetated with only 15% cover (Lowe et. al.1999). The dominant vegetative cover (66%) is comprised of grasses including species such as *Stipa purpurea*, *S. glaresa*, *S. subsessilifolia*, *Kobresia prainii*, *K. robusta*, *K. persica*, *Poa poiphagorum*, *P. pagophila*, *Poa calliopsis*, *Poa litwinowiana*, *Elymus sibiricus* and *Carex moorcroftii* (Lowe et. al. 1999).

According to Schaller (1998) two ranges exist for the chiru: a northern one encompassing about 490,000km², and a central range covering about 115,000km². As compared to the range that the chiru had a century ago, the present range in Tibet and eastern Qinghai has shrunk.

General Ecology

Diet:

Lowe et. al. (1999), while referring to other studies, have mentioned the chiru diet as being dominated by graminoids such as *Carex moorcroftii*, *Kobresia sp.*, *Poa sp.* and *Stipa sp.* and forbs such as *Oxytropis sp.*, *Potentilla bifurca* and *Leotopodium pusillum*. The percentage of plants in the chiru diet changes seasonally, although another study mentioned in Lowe et. al. recorded a complete avoidance of grasses and sedges by chiru in the summer (Lowe et. al. 1999).

Migration:

A typical behavioural feature of the chiru is migration. However, not all populations of chiru do this. Certain populations migrate over large distances in summer (May to July) while others either migrate locally or remain in their wintering areas. Therefore, population densities in an area fluctuate constantly, making accurate censuses difficult to conduct. No census of the species as a whole has been attempted. Another peculiar behavioural feature is that the antelope are segregated by sex for part of the year and many are migratory. Male and female populations follow completely different

Chiru on Tibetan Plateau





Bill Bleisch, CERS

Baby chiru

routes during migration (*Schaller 1998*).

From May to July the females, including yearling females and a few yearling males of the previous year, migrate north to calving areas where they give birth to single calves. These calving areas are sometimes up to 300km away from the wintering areas. Migratory populations contain many more animals than resident ones, with very few females remaining close to their wintering sites – usually the ones that are not pregnant. Although a relatively large amount of information is available on the wintering sites of chirus, very little was known of the summer calving areas, until 1998 when calving grounds were reached simultaneously by exploration and anti-poaching teams from Xinjiang and Qinghai.

Schaller (1998) mentions several unsuccessful attempts to trace the migration of females up to their calving grounds. He does, however, give a detailed description of the number of migrating females and the routes taken by different populations during migration. Soon after calving, the females return with their new young to the wintering areas. The long trek to the summer areas is made apparently just to give birth.

By contrast, the males remain scattered near the wintering grounds and travel only part of the way to the north. The males may not migrate at all, with the result that they are widely distributed, even in the hills. Both sexes co-mingle on the wintering grounds for the rut. Here, during late November and December, they concentrate at certain sites in numbers of between 100 to 1,000 (*Schaller 1998*).





IFAW/Wild Yak Patrol

The reasons for migration are possibly different for each sex. Males ascend to higher areas in search of greener pastures and the emergence of fresh new vegetation rich in nutrients, where it has been noted that certain plants increase their protein levels at this stage (Schaller 1998). Females usually finish calving and start their return journeys at this time and therefore miss this peak nutrient phase in plants. Hence the reason for female migrations could be to protect their calves from predators such as wolves, which do not venture to these high regions. However, despite this, almost half the young die in the first few months of their lives (Schaller 1998).

Mortality:

Chiru mortality is caused by predation, disease, competition with other ungulates, inclement weather, human induced habitat degradation, and poaching (Schaller 1998).

The natural predators inhabiting the same habitat as that of the chiru are wolves (*Canis lupus*), snow leopards (*Uncia uncia*), lynx (*Felis lynx*) and

Chiru babies

brown bear (*Ursus arctos*), although the number of these predators is too low to have much of an impact on the chiru population. Predators introduced by humans are domestic dogs. Domestic dogs are more likely to kill chiru when the climate is particularly harsh and food is not readily available (Schaller 1998). Schaller noted that diseases such as pneumonia, and endoparasites such as warble flies (family *Oestridae*) could also be potentially dangerous to chiru populations.

Another source of human interference in chiru habitat is domestic livestock kept by pastoralists. In harsh winter months the livestock decimate the sparse vegetation, leaving nothing for the antelope (Schaller 1998). There is also a potential risk of disease transfer from the livestock to the chiru. Gold mining and oil drilling are other potential threats to the habitat of this barren plateau (Lowe et al. 1999).



The Wool

Central to the debate on the conservation of the chiru is the identification of shahtoosh from wool like pashmina or materials of similar quality. Although Kashmiri traders have long maintained that shahtoosh does not come from the Tibetan antelope, forensic laboratories and the courts of law have succeeded in proving that shahtoosh does indeed come from the chiru and that this wool is 'plucked out' and not shorn. This indicates that the species is killed before the wool is procured.

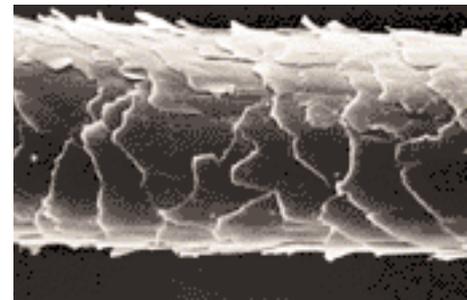
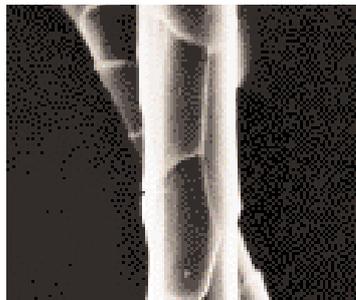
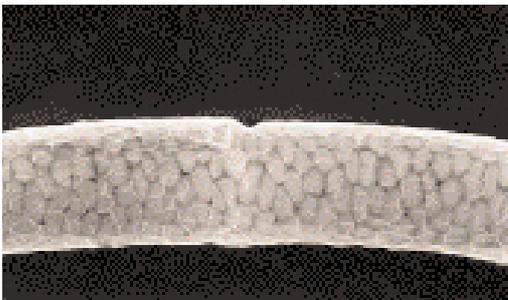
For many years, Kashmiri traders and manufacturers deliberately perpetuated the myth that the raw wool came from the ibex, wild goats, or even "Siberian geese." They even claimed that their people also collected wisps of moulted wool from bushes and rocks. The endangered status of the chiru and therefore the scarcity of shahtoosh has prompted manufacturers and exporters to even commercially rename a sub-species of the *Capra ibex* as the "shahtoosh goat." This has led the traders to pass off the fibre as authentic shahtoosh and maintain the exclusivity and high price commanded by the fabric. By using pictures of an ibex in shahtoosh promotional brochures, attempts were made to divert suspicion away from its original species source.

It was not until 1993 that Dr. George Schaller, after extensive field research in the Tibetan plateau, established the fact that the animal is always killed in

order to collect its wool. It was only when Dr Schaller wrote to Indian wildlife conservationists, informing them of his findings, that they came to know of the chirus plight. It was at this point that the connection with the trade in shahtoosh shawls was established, and subsequently the Indian and international wildlife community began a battle to save the chiru from almost certain extinction.

The use of the term "shahtoosh" has been extended in commercial circles to include fabrics manufactured as blends of cashmere, sheep's wool, silk and shahtoosh, although shahtoosh commands the highest prices. The manufacture of woollen blends has complicated the mandate of a country's wildlife authorities to intercept shipments of products made from endangered species. Therefore, differentiating the wool of the Tibetan antelope from all other species has become necessary.

Archana Bahuguna, Wildlife Institute of India



Left to right photos through scanning Electron Microscope: shahtoosh guard hair ; shahtoosh wool (cuticular); pashmina guard hair.



The hair and wool of every species of animal are structurally different from one another. Microscopic examination reveals a pattern that can be seen not only on the surface, but also in the core of the hair (Yates, 1997). Any hair has three internal structures – the cuticle, which is made of scales; the cortex, which is made up of cells and the medulla, which is the innermost structure with air cells. Different arrangements, shapes and types of these structures give characteristics to the hair of each species. The surface cuticle pattern, medulla characteristics and cross-section together indicate the characteristic feature of the species. Hair samples are thus frequently used in wildlife forensic studies to identify a species. Such is the case for the Tibetan antelope, where hair samples taken from shahtoosh shawls have been tested under the microscope, and confirmed to have patterns that are unique to the Tibetan antelope.

There is also evidence to prove that it is necessary to kill the chiru to obtain its wool. The animal lives on the Tibetan plateau and without its wool to protect it from the sub-zero temperatures typical of the region, it could not survive. The samples of wool taken from shahtoosh shawls have pointed ends called ‘apical points’, suggesting that the wool was never shorn, but plucked out of already dead antelopes. It is impossible that the wild chiru, characterised by an extremely nervous disposition, could be kept as a domestic goat for its fleece. It is absurd to argue that this creature, inhabiting the icy cold wastes of the Tibetan plateau is caught, shorn, and released into the wild.

The claim by shahtoosh traders that the wool is collected from rocks and bushes, that the antelope rubs against, is a myth. The Tibetan antelope does indeed moult its wool slowly over a period of time in spring, but on the icy wind-swept plains of Tibet there are no rocks and bushes to which wool could possibly cling and be collected. Shahtoosh traders were unable to give evidence of such collection either to a committee appointed by the Indian Government in 1995 to investigate the trade, or to the J&K High Court, which heard a public interest litigation filed by the Delhi-based Wildlife Protection Society of India in May 1998. The court’s judgement, delivered on May 1st 2000, upheld the view that the claim that shahtoosh wool was collected from rocks

and bushes had no evidence to support it.

There is also published information pointing to the origin of shahtoosh wool as being Tibetan. The book *Islam in Tibet* (Henry, 1997) has a detailed account of the life of Abdul Wahid Radhu, a Ladakhi living in Tibet. He immigrated to India in the early 1950s and set up a company named Ladakh Pashmina and Wool Syndicate in Srinagar. Radhu is quoted as saying, “Our trade involved the famous so-called *pashmina* and *shahtush* (*sic*) which have given Kashmir a worldwide reputation.” Radhu notes that the fine material and shawls which are usually called ‘Kashmiri’ are made of a material not native to Kashmir, strictly speaking, but to Ladakh, and are sometimes found in Sinkiang (in China) although found mainly in western Tibet. Radhu notes that “*Shahtush* (*sic*), the highest quality and a product of great luxury which no other wool can equal in both light weight and warmth, comes from wild goats (*sic*), types of gazelles of high plateaus that live only in Tibet”.

The suppliers of this product, “which was destined for a rich clientele,” are described as being extremely poor and belonging to a social class which was scorned by the Buddhists. It was a class that hunted and killed the animals whose wool they sold and meat they ate. Moreover, Radhu notes shahtoosh was only found in relatively small quantities on the market.

In Ladakh two communities specialised in the gathering of and trading in pashmina (Henry, 1997). There is a degree of overlap in both the people involved in the pashmina and shahtoosh trades, and in the routes and methods used to transport the raw wool to the weaving centres.

The first, the Arghons, who are usually Muslim descendants of immigrants from Sinkiang, carried on trade with merchants from Srinagar, and in exchange for their precious wool, obtained various textiles, shawls, soap, and utensils. They distributed this merchandise amongst both sedentary and nomadic Tibetans who obtained for them the raw pashmina and even sometimes shahtoosh.

The second supply source of raw wool, the more prosperous Shammapas or Buddhists of lower Ladakh, were involved in both the pashmina trade and agriculture. They usually loaded their bales on donkeys and traveled at night, resting during the

day. All the raw material supplied by the Arghons and the Shammaipas was classified according to origin, length of the wool, and the presence of goat hairs.

On the basis of quality, the wool was grouped into three categories. The first two were comprised exclusively of wool from Tibet, with the exception of some imports from Karakoram and Sinkiang. The third category came exclusively from Ladakh, particularly Rupshu and the neighbouring regions of Tibet.

In 1959, due to political instability in Tibet, Ladakhis and Kashmiris were deprived of good quality wool, but this began to reappear several years later in small quantities, and therefore at high prices. Much of this, of course, was pashmina and not shahtoosh. Some merchants did however manage to obtain shahtoosh, which from then on has been worth more than its weight in gold.

The immense Himalayan mountain wastes made it virtually impossible to police and completely block the borders, and as a result, shahtoosh wool began to be smuggled into Indian territories.

Smuggling of the wool

The shahtoosh trade still remains underground, and according to the joint IFAW-WTI survey, Lhasa and Shigatse in Tibet are believed to be the main hub of

bulk transactions. The wool is collected from points on the 1,000km stretch between Gar and Amdo and brought to Shigatse. Shahtoosh also comes from Qinghai and Xinjiang via the highway connecting Tibet to Qinghai. Though shahtoosh is still carried over remote passes by Tibetan nomads using yaks as a means of transport, modern-minded traders using more ingenious methods have increasingly moved in. The wool is often concealed in trucks transporting sheep wool that move southward from the Qinghai-Tibet plateau. It also travels with pashmina or sheep wool or sandwiched in Chinese light foam mattresses via the Zangmu-Kodari border into Nepal. Zangmu is a border town prone to corruption and well suited to smuggling. The wool is then repackaged in and around Kathmandu and sent through individual couriers by buses into India where the main centre is Delhi. Raw wool also arrives in Delhi by other routes.

According to one Nepali supplier based in Taglakot, the wool first moves to Simikot in Nepal by porters. Thereafter it is transported by air to Kathmandu or by land to Nepalgunj. From here it goes onwards to Delhi by bus or trucks, or through individual couriers.

The wool also moves by foot from Dongba to

Yak carrying raw shahtoosh wool



George Schaller

Mustang and Manang in Nepal and then, to Delhi by bus. Another trade route is from Pharyang in Tibet via Dolpa, Jumla, Mugu in Nepal and then again by bus to Delhi. A foot trail exists via Demchok in Ladakh and onwards by road via Leh to Srinagar in Kashmir. Some amount of wool is also carried by herders and nomads who travel with goats and sheep across the border.

An Indian supplier said that he moves the wool by porters from Taglakot (Burang) in Tibet, to Dharchula in India. From Dharchula it moves via Pithoragarh to Tanakpur and onwards by bus to Delhi. From here a different set of suppliers and couriers take over who take it further to Srinagar. In fact, almost all Tibet and Nepal based suppliers spoken to said that they could deliver the material only up to Delhi and that they were unable to move further. One Indian supplier claimed that he could move the wool through porters even when the passes are frozen in winter, although he would charge more for this facility.

It should be noted that communications facilities are well developed in Tibet. Most large towns have long distance telephone facilities. Towns like Singikabah (Gar) have mobile phones and taxis. IFAW/WTI investigators assume that suppliers in Tibet are in touch with buyers in India on a regular basis.

The IFAW/WTI investigation has shown that before and during the boom, Kashmiri shahtoosh raw wool wholesalers called *Poijwanis* would travel to Delhi to collect the consignments and then themselves carry the goods to Srinagar. However, large manufacturers would also source the raw wool themselves. The wool would then travel compressed in small polythene sacks of five to ten kilograms each either by road or by air to Srinagar. The boom ended in 1998 and as enforcement outside the state of Jammu and Kashmir started getting stricter the *Poijwanis* and manufacturers stopped coming to Delhi. Instead, Tibetan, Ladakhi and Nepalese traders started taking the wool directly to Srinagar. To hoodwink enforcement the raw wool would move through a large number of couriers who constantly changed buses and trains. Shahtoosh would also travel inside pillows, bedrolls and similar or smaller inconspicuous packages.

Nepal's borders are relatively porous. Combined with efficient communication facilities, heavy tourist

traffic and international airline connections, Nepal has the potential to be a large conduit of wildlife trade. Much of the contraband from Tibet enters India through Nepal, while a part of it is also shipped to markets in East Asia. A series of raw shahtoosh wool seizures in Nepal (see list of seizures) has clearly established that this trade route is very active. The director general of the Department of National Parks and Wildlife Conservation, Tirath Man Maskey has observed that due to the remoteness of the trade routes there is a lack of infrastructure and therefore ineffective enforcement (*For the future of the Tibetan antelope, 1999*).

Although several investigators have reported the availability of shahtoosh shawls with Kashmiri traders in Kathmandu, there is no confirmation of the reports that it is actually being manufactured in Nepal. However, there is evidence that there are small settlements of Kashmiri people near Pokhara and it would not be difficult to lure skilled craftspeople from Kashmir and start the business there. Proximity to the source of the raw material would be an added advantage.

The investigation results show that the unprocessed wool is available for as much as 1,000 yuan (US \$125) per kilogram in Taglakot, but can go up to US \$150. By the time it reaches Delhi the prices go up to about US \$200-250 and ultimately in Kashmir it is sold for between US \$300-350 per kilogram. This differs from earlier findings (*Wright and Kumar 1997*) which reported that in 1992, raw shahtoosh wool reaching India cost the equivalent of US \$1,115 per kilogram. The same source reported that in 1996 the price was between US \$970 and US \$1,715 per kilogram. The survey team found that chiru hides were available in Tibet for US \$ 50.

Fifty years ago only 20 – 30 kilograms of shahtoosh were being processed in Kashmir and sold at a price of rupees 60 – 70 per kilogram, but the quality was apparently much better (*Gh. Mohidin Hasfiz, pers comm March 2001*).

In 1977, when the export of shahtoosh shawls started and the demand for raw wool increased, the prices rose steadily. In late 1980's and early 1990's almost 8 – 10 quintals (800 – 1000 kilograms) of shahtoosh was reaching Srinagar. According to one wholesaler this crossed the 30 quintals mark in 1997 (*Mohd Maqbool Shah, pers comm 2000*).



The Shawl

The English word 'shawl' is derived from 'shal', which in Persian refers to a finely woven woollen fabric. Shahtoosh shawls are woven only in the Indian state of Jammu and Kashmir, where it is largely based in Srinagar and a few places in the Kashmir valley. The entire global market is supplied by this single source, and all attempts at shifting the manufacture elsewhere have so far failed. There have been suggestions that the shawl is being woven in Nepal but there is no conclusive evidence. What then, is the story behind the success of Kashmiri artisans in weaving the shahtoosh shawl?

The origin of shawl weaving in Kashmir dates back at least to the 15th century, when the ruler Zain-ul-Abidin (AD 1420-70) is said to have brought weavers from Turkestan to the Valley (*Irwin, 1952 in Das, 1992*). The view that the original weavers of the Kashmir shawl were immigrants comes from the fact that certain unique features distinguish Central Asian weaving techniques from traditional Indian weaving. The most significant feature is that the twill-tapestry technique used in Kashmir is also prevalent in Persia and Central Asia, but nowhere else in India or Pakistan. In this technique, the wefts are inserted through floating wooden bobbins on a simple loom, without the use of a shuttle. The weft threads alone form the patterns and do not run the full width of the cloth. They are woven back and forth round the warp threads only where each particular colour is needed in the pattern.

Literary sources reveal, however, that Kashmir's shawl industry is of greater antiquity than the 15th century. Kshemendra (AD 990-1065), a versatile writer of medieval Kashmir, who appears to have been well acquainted with the country's shawl weaving industry, describes it as a cottage industry in 11th century Kashmir. One of his treatises mentions the *tus* shawl as being of the highest quality.

Five centuries later, the *Ain-i-Akbari* (an account of the reign of the Mughal Emperor Akbar [AD 1542-1605] by the court historian, Abul Fazl) states

that the *tus* shawl is made from the wool of the same animal that Kshemendra names. Later historical accounts written at the courts of both Hindu and Muslim rulers prove the existence of the shawl-weaving industry in Kashmir in the 13th and 14th centuries.

What is clear from Irwin's 1952 account is that during the reign of Zain-ul-Abidin's the art of textile weaving in Kashmir, and especially the manufacture of silk, received a tremendous boost as a result of increased royal patronage. A large number of artisans came to Kashmir from India and abroad to exhibit their art and seek the patronage of the ruler. It was also during Zain-ul-Abidin's reign that certain woollen goods that had formerly been imported were beginning to be manufactured in Kashmir.

This is possibly the origin of the belief that Zain-ul-Abidin had invited Turkish weavers to start a shawl weaving industry in Kashmir, though Akbar also brought in weavers from Central Asia to rejuvenate the shawl industry. Turkestan might merely have been one of the foreign lands from which artisans came to Kashmir to be part of the 15th century shawl-weaving boom.

A mid-seventeenth century manuscript of the *Ain-i-Akbari* exhibited in the Prince of Wales Museum in Mumbai offers a detailed account of how the shawl manufacturing industry benefited greatly from royal patronage, which even extended



to the establishment of “thousands” of imperial workshops. The following quote from the manuscript gives a full idea of Akbar’s contribution to the shawl-weaving industry.

“His Majesty improved the (shawl) department in four ways. The first is visible in *tus* shawls, which are made of the wool of an animal whose natural colours are black, white, and red, but chiefly black. Sometimes the colour is pure white. This kind of shawl is unrivalled for its lightness, warmth, and softness. People generally wear it without altering its natural colour: His Majesty has had it dyed. It is curious that it will not take a red dye”.

“Secondly, in the *safid alchas* (any kind of coloured fabric) or *tarahadars* in their natural colours, the wool is either white, black, or mixed. The first white kind was formerly dyed in three or four ways: His Majesty has given orders to dye it in various ways. Fourthly, he improved the smaller size of the shawls and enlarged them so as to make complete suits out of them”.

“His Majesty encourages in every possible way the manufacture in Kashmir. In Lahore alone (in Punjab, then wholly in India, but part of which is in Pakistan after it was formed in 1947) there are more than a thousand workshops. A kind of shawl named *mayan* is chiefly woven there; it consists of silk and wool mixed. These are of standard size. Both are used for *chirahs* (turbans) and *fautahs* (loin bands).”

The *Ain-i-Akbari* also makes two points clear. First, the *tus* shawl was made from the hair of the *tus* goat, which is presumably the same wild goat that the traveller Moorcroft referred to as the source of *asli tus*. When William Moorcroft visited Kashmir in the 1820s, there were two kinds of goat wool: *pashm shal* obtained from the hair of domestic goats, and *asli tus*, obtained from the hair of wild goats, which was chiefly black, white, or reddish in colour (*Moorcroft and Trebnech, 1841*).

Secondly, the manuscript records that corded and patterned shawls (*tarah* shawls) were made of either white, black, or mixed wool; the white kind was formerly dyed in three or four colours, but during Akbar’s period the number of colours increased.

At least four other accounts of Kashmir’s shawl-weaving industry, two from the 17th century, and one each from the 18th and the 19th centuries, yield

a comprehensive and fascinating picture of how the industry was organised and managed. Jahangir, Akbar’s son and successor as India’s ruler, has this to say in his 17th century memoirs: “*The shawls of Kashmir to which my father gave the name of paramnaram (the softest) are very famous: there is no need to praise them. Another kind is taharma (naharma are printed versions); it is thicker than a shawl and soft*”.

“Another is *darn*. It is like a *jul-i-khirasak* and is put on a carpet. With the exception of shawls, they make other woollen material better in Tibet. Though they bring the wool for the shawls from Tibet, they do not make them there. The wool for the shawls comes from a goat that is peculiar to Tibet”.

The French traveller Bernier (1891) penned another illuminating account after his visit to Kashmir in 1665: “Large quantities of shawls were manufactured which gave employment even to children. These shawls (were) ornamented at both ends with a sort of embroidery, made in the loom, a foot in width. The Mughal and Indian men and women wore them in winter round their heads, passing them over the shoulders as a mantle”.

“One sort was manufactured with the wool of the country and the other with the shawl goat of Tibet. The price of the *tus* shawl ranged from 50 to 150 Rupees. Great pains were taken to manufacture similar shawls at Patna, Agra, and Lahore, but they lacked the delicate texture of Kashmir shawls.”

By the end of the 17th century Kashmir shawls were being exported to other countries. According to Irwin, the shawls imported by the East India Company between 1685 and 1704, were almost certainly intended for use as tablecloths or counterpanes. The joint IFAW-WTI investigation in Tibet has learned that medieval travellers from Tibet and Central Asia merely used the raw shahtoosh wool to line their jackets and boots to keep out the cold. They made no attempt to exploit the abundance of raw material on the Tibetan Plateau and start a shawl-weaving industry. Even Jahangir commented in his memoirs: “Though they bring the wool for the shawls from Tibet, they do not make them there.” However, in later years, the demand for Kashmir shawls grew and even dictated contemporary fashion.

Other reports from European travellers suggest

that the shawls exported from Kashmir were packed in oblong bales, with an outer covering made from the hide of buffaloes or oxen, and strongly sewn with leather thongs (Forster, 1798). They were opened only in the markets for which they were destined where the shawl wool, which was originally a dark colour when brought in from Tibet, was bleached with rice flour. Once the yarn had been dyed as desired, the shawls were washed and richly patterned borders were neatly attached to the shawls so as to avoid any joints.

Whether for shahtoosh or for pashmina, in a tradition lasting well over half a millennium, a handful of Kashmiri families developed spinning and weaving skills that are still unmatched outside Kashmir. It takes several years to master the art, and the actual spinning and weaving processes are both laborious and tedious, even for the most experienced artisans. This may explain why no comparable shawl-weaving industry developed in and around the areas northwards from where the raw shahtoosh wool has always been sourced.

Traditionally, the removal of the raw wool and spinning has been the role of women (and the weaving that of men), with the skill being passed on from generation to generation (Jaitley 1990, Sautman 1996 *pers comm*). The trade and manufacture of shahtoosh has always been controlled by a handful of wealthy, influential local traders. They typically farmed out consignments of the raw wool to a select few of the most skilled and experienced de-hairers, spinners, and weavers.

Price and Selling Techniques

The price of a shahtoosh shawl depends largely on size, colour, the extent and quality of the embroidery, and the purity of the wool. The manufacturer sells a pure plain dark shahtoosh shawl without embroidery to the traders at US \$ 260 and a light coloured shawl which is a mix of dark and white wool sells at this stage at US \$ 330. A pure white shawl commands a price of US \$ 540. At the retail level the traders will sell the same shawls for US \$ 570, 650 and 1000 respectively (Ghulam Hussain, *pers comm* 2001). Since the trade is not organised, retail prices in India are based on the seller's assessment of the paying capacity of the buyers. Old shawls made by master craftsmen or embroiderers command a special price.

Family heirlooms from Calcutta are known to have been sold privately for as much as US \$ 5000.

The demand for shahtoosh shawls is low at the time of going to press with this report, and there is currently a glut in the market for the shawls. Large manufacturers usually take payments up from traders for the shawl, who are then free to sell it at any price they like. However, in 2000, a number of manufacturers had given shawls to traders on credit



Andy Fisher

Seized shawl showing price and weaving marks

and expected payments only after the shawls were sold (Hillal Ahmed, *pers comm*, March 2001). The manufacturers did not expect a guaranteed price for these shawls, which is usually the norm.

On the international market, prices are far higher. For example, some shawls seized during the raids in London in February 1997, had price tags of between US \$1,280-US \$17,600.

Traditionally, pre-winter was when the shawl seller would descend from the Kashmir hills into north India, going from house to house on foot and carrying his load of shahtoosh and pashmina shawls on his back tied in a neat cloth bundle. Most of these vendors had a fixed clientele with whom they developed a personal rapport over the years and advertisement was purely word of mouth.

Marketing shahtoosh became marginally organised only after 1985. Shawls started appearing

in a limited number of shops, especially in Delhi after the fabric became fashionable in the West. Western tourists who did not have access to Kashmir due to unsuitable political conditions in the valley, started asking for the shawl in Delhi. Shops that stocked other woollen shawls started stocking shahtoosh, and some even started specialising in pashmina and shahtoosh. However, by this time the consumer was becoming aware of the illegality of shahtoosh and the government was getting stricter. The boom lasted until 1998 and the prices in this period soared to over US \$ 850 for plain dark shawls, which are available for less than half the price today.

The rarity and rising price of shahtoosh wool also triggered a new trend: the production of shahtoosh/pashmina blended shawls. In Kashmir they use terms like 50%, 60% and 75% shawls, which refers to the quantity of shahtoosh in the shawl. The prices also vary according to the percentage of shahtoosh. Although heavier, the shawls still retain their softness and consequent saleability.

A part of the colourful sales technique Kashmiri merchants use with prospective buyers is a unique demonstration that has acquired the sanctity of tradition. The merchant squeezes the shawl into a little ball, and tosses it up into the air. Within moments, it billows out to its full dimension. Another ancient custom, also aimed at impressing potential customers, is to slip the entire shawl through a finger ring – perhaps the reason why the shawl is known among merchants as the ‘ring shawl’ (*Moorcroft and Trebnech, 1841*). This however, is far from the test for a real shahtoosh (see chapter on Wool). Any fine shawl can pass through a normal index finger ring, such as pashminas.

Burning shahtoosh is another method to prove the genuineness of the wool. The seller plucks a thread out of the shawl with a flourish and rolls it into a small ball. Alongside he puts a similar ball of pashmina and burns both. The shahtoosh fibre should burn without leaving a residue while the pashmina fibre leaves a black residue. This is of course not a genuine test, but it does impress a prospective buyer.

The Market

The market for Shahtoosh is found primarily in the

northern part of the Indian subcontinent. One reason for this could be that the shawl is manufactured in the state of Jammu and Kashmir, the northernmost state of the Indian union. The surrounding areas became exposed to the shawl and the wealthy in northern India began a tradition of making it a family heirloom. Also, northern India experiences bitterly cold winter months and as a result, the soft, warm shahtoosh became a part of the royal wardrobes.

However, such opulence was not exclusive to royalty as ministers and others of the upper social elite also began to wear this fabric. As kings, emperors, rajas, maharajas, nizams and other rulers spread their empires, shahtoosh traveled to parts where the winters were warmer – where there is no need for such a warm wrap. Apart from shawls worn by both men and women, shahtoosh sarees, tunics, kurta pyjama sets were common clothing for the ruling class. Shahtoosh shawls have been owned by the royalty of Hyderabad, Bhopal, and Mysore for many centuries.

With world travellers of old carrying the fame of shahtoosh across the seas, shawls were presented as gifts to European royalty. Along with other Kashmiri shawls, the demand for shahtoosh grew in Europe, and manufacture in Kashmir was at an all time high during the mid-nineteenth century. The Franco-Prussian war of 1870-71 caused a decline in the European demands for shawls from Kashmir. Exports collapsed in the subsequent famine in Kashmir in 1877-79. By the time the industry revived, India and Pakistan had become the primary markets. In these two countries a shahtoosh has long been sought after as a heirloom and an exclusive wedding gift. A shahtoosh is particularly prized in the State of Punjab, in northern India. A family will often spend years saving up to include a shawl in their daughter's wedding dowry; for such families it is a once-in-a-lifetime purchase.

Naturally, the demand for shahtoosh grew not only from the traditional markets in India and Pakistan, but also within the USA, Mexico, UK, France, Italy, Belgium, Switzerland, Middle Eastern countries, Hong Kong and Australia. Shahtoosh is now in demand in all five continents with this contraband product being smuggled to outlets worldwide.



The Law

The trade in shahtoosh raw wool as well shawls is prohibited or regulated by a number of legislations and treaties, which govern hunting and trade in wild species and their derivatives.

The Tibetan antelope is protected under Appendix I of the Convention on International Trade of Endangered Species of Wild Fauna and Flora (CITES), and therefore international trade in its body parts is prohibited. There are presently 153 countries that are signatories to this convention. In 1979, the Tibetan antelope was transferred from CITES Appendix II to Appendix I, which effected a total prohibition on international trade of the species and its derivatives, rather than permitting regulated trade. China, Nepal and India are all signatories to CITES, and therefore any trans-regional movement of raw shahtoosh wool into India through its northern border with Tibet or Nepal is illegal.

The domestic laws of China, Nepal and India also give protection to the Tibetan antelope, and prohibit trade in its body parts, including its wool (see box for laws, p. 29). In India, national law protects wild species through the Wildlife (Protection) Act of 1972. Five years after its enactment, the chiru was placed in Schedule-I of the Act, providing 'regulated' protection, which permitted trade under licence from the government. However, there were no applications for licences, therefore none have been issued. In any case, an amendment of the Act in 1986 completely banned hunting of and trading in derivatives of Schedule I species. The maximum penalty for such illegal trade could be as high as seven years imprisonment and a fine.

The law is difficult to enforce as it does not extend to the state of Jammu and Kashmir (J&K) though it is applicable to all the other states of India. J&K has its own wildlife law – the Jammu and

Kashmir (Wildlife) Protection Act, but has a category termed as 'special game', which permits hunting and regulated trade in its derivatives, providing a licence is granted by the government of Jammu and Kashmir.

As noted earlier in this report, it was not until 1993 that the link between shahtoosh shawls and the slaughter of the Tibetan antelope was made. It then took a further two years to convince the Indian government of this connection.

However, a piquant situation developed, where the law banning shahtoosh was in place in most parts of the world, except in the state of J&K where the manufacture of shahtoosh continued unchecked. A series of seizures (see list of seizures in Appendices) of raw shahtoosh wool and shawls began in 1994 in many countries, and prosecutions were launched. These seizures and court cases did not stop raw shahtoosh wool from reaching Srinagar. The weaving of shahtoosh shawls and their sale remained unaffected, and the J&K government remained unmoved.

The question arose that since the state of J&K permitted hunting of chiru under licence and a regulated trade, what legal action could be taken to stop the trade in shahtoosh? The state government had already ignored directions from the Central Government to ban weaving and trade in shahtoosh shawls and due to the constitutional relationship between J&K and the rest of India, it was not immediately apparent how the law should be applied. What if the state of Jammu and Kashmir had not properly 'regulated' the trade in shahtoosh



and was in violation of its own law? There was no way of finding out.

A study of both the Indian and J&K constitutions showed that international treaties entered into by the Federal Government would apply to J&K, and where a state law differed from the Central law, the latter would prevail. Yet none of this had been tested in a court of law.

It was in 1998 that a Public Interest Litigation was filed by the Wildlife Protection Society of India in the High Court of J&K seeking a ban on the trade in shahtoosh.

The lawyers for the traders argued that if an animal had shed its hair voluntarily, the hair would cease to be an animal article as defined by the Act, and therefore anyone could collect it and use it. They claimed that the shahtoosh wool had been collected from rocks and bushes, though they failed to provide any evidence. In response, the plaintiff provided irrefutable evidence of the slaughter of the Tibetan antelope and the smuggling of raw wool from Tibet to India.

Finally, in May 2000, the High Court ruling upheld that: *"CITES is a treaty or an agreement with foreign countries and the Union Government alone is competent to enter into such agreements with foreign countries and it has the obligation to enforce it throughout India including the State of Jammu & Kashmir"*. The obligation of the state towards the implementation of CITES would depend upon whether shahtoosh is an animal article defined under the State Act and whether it is a property of the Government. The judgement observed that the underwool or hair of the chiru is a part of the animal and it falls under the definition of an animal article as defined under the State Act, and that hair is also included in the definition of trophy by a provision of the State act.

The court ruled that the possession of "animal article", including "trophy" or "uncured trophy", is illegal under the State Act and consequently possession of shahtoosh is illegal and therefore so is its trade. It was also held that shahtoosh cannot be obtained without killing the animal and is hence the property of the government. It was recorded that underwool or shahtoosh, irrespective of how it is obtained by a dealer or manufacturer, is government property under the State Act. The court judgement

declared that shahtoosh wool should be included in the definition of animal article as well as trophy, as defined by the State Act, and it is thus the obligation of the State to render all assistance to the Central Government to implement the provision of CITES.

Since the import and export of animal articles is prohibited under India's export-import policy, the officials of the state government have the obligation to enforce the ban. It is therefore the Union Government who is empowered to give direction to the State to ensure compliance with the provision of CITES in exercise of its executive power.

The judgement said that the prohibition against carrying on business or occupation in animal articles was absolute, except in accordance with a licence issued under the provision of Section 43 of the State Act. The court felt that it was unacceptable that the trade should continue after the State Act had been enacted and enforced. It added that the State Government had failed to implement the Act, and this defeated its purpose.

The court ordered the state government to regulate the trade in shahtoosh and shahtoosh shawls and enforce the law against those who were carrying on trade in contravention of the provisions of section 43 of the State Wildlife Act and the provisions of CITES.

A clear judgement of this nature was a significant victory for conservation, but it was only the first step on a long road. To be effective, a court order has to be implemented. Prior to the judgement a senior leader of the government had been reported by the press to have made a statement that *"shahtoosh will be banned in Kashmir over my dead body"*. With this judgement in hand, the State government had two options, one to appeal to a higher Court, the other, a reappraisal of their strongly held belief in the myth of the source of shahtoosh wool. They chose the second path.

Soon thereafter, there was an announcement in the State Legislative Assembly by the Chief Minister that shahtoosh shawls would be banned. Reports then appeared in the press in Kashmir that hundreds of thousands of poor artisans would starve to death in a State already hit by militancy. Another viewpoint was that these newspaper stories were planted by big shahtoosh traders, a handful of whom control

this trade. On the contrary, it was known in trade circles that the craftsmen who worked on shahtoosh also wove pashmina shawls. The State government in the meantime asked the Central Government for a large grant of money to rehabilitate shahtoosh traders. At the time of writing this report, this

dialogue was ongoing, with the outcome not known. Shahtoosh shawl weaving in J&K was still going on, since a formal government notification to ban weaving and trade had not been issued.

The last word on banning shahtoosh is yet to be announced.

Legislations and Treaties relating to the Tibetan Antelope

International Treaty

Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) came into force on 1st July 1975. The Tibetan antelope was included in Appendix – I in July 1979 whereby international trade in derivatives of this species is prohibited.

Domestic Legislations

CHINA: Listed as class I protected Animal in the Wild Animal Protection Law of 1989.

UNITED STATES: Under the Endangered Species Act (16 U.S.C. 1538(c)(1)), it is unlawful for anyone subject to the jurisdiction of the United States to import or export wildlife contrary to the provisions of CITES, or to possess animals or products traded in violation of the treaty.

UNITED KINGDOM AND THE EU: The chiru is protected from trade in the United Kingdom by The Control of Trade in Endangered Species (Enforcement) Regulations 1997. This implements the EU Councils Regulation 338/97, which in turn, implements the provisions of CITES within the EU.

NEPAL: Listed in schedule I as an endangered species in the Nepal National Parks and Wildlife Conservation Act.

INDIA:

- Constitution of India. Article 51A reads, "The state shall endeavour to protect and improve the environment and to safe guard the forests and wildlife of the country". Article 51A(g) reads, "It

shall be the duty of every citizen to protect and improve natural environment, including forests, lakes, rivers and wildlife and to have compassion for living creatures".

- Tibetan antelope is listed in schedule I of the Wildlife (Protection) Act of 1972, which extends to all of India except state of J&K. Hunting and trade in derivatives is a punishable offence.

- Listed in Part I of Schedule II (Special game) in J&K Wildlife (Protection) Act of 1978. A 'regulated' trade is permissible and since no 'regulation' had taken place, the High Court of J&K held on 1 May 2000 that Shahtoosh trade was in violation of the state law, CITES and India's Export-Import Policy.

- Import and Export of all species of wild fauna and derivatives is prohibited (except for specimens which carry CITES certification) under Export-Import Policy of India for the period 1997-2002. India fulfills its obligations under CITES by this notification under the Foreign Trade (Development and Regulation) Act of 1992. Penalties for violation are dealt under the Customs Act of 1962.

International Union for Conservation of Nature (IUCN) classifies Tibetan antelope as Endangered (EN2d) in its Red Data Book, which implies that the species is Endangered and though not critically endangered, it is facing a very high risk of extinction in the wild in the near future.





IFAW/Wild Yak Patrol

Poachers caught by Wild Yak Patrol



The Crime – Poaching

Today, the chiru, gazelles and other wild species that inhabit Tibet Autonomous Region (TAR), Qinghai and Xinjiang Autonomous Region (XAR) were there long before man. Nomadic hunters may have existed in the Chang Tang as many as 30,000 years ago, judging by the tools that have been found. Humans probably set foot in the region as farming nomads during the last thousand years and began killing local species to supplement their diet. They also killed carnivores to protect their flocks. The first Europeans did not penetrate the region until 100 years ago and found only a few seasonal nomads hunting and grazing livestock in the same areas that are now permanent settlements: an influx that began in the 1950s when roads were built. Currently, at least 22,000 farmers occupy the Chang Tang reserve and other reserves also have resident human populations (Schaller, 1998).

Biologists believe that it was during this latter period of the Twentieth century that the trouble began and the killing acquired a commercial dimension (Schaller, 1998). Meat was an item for barter and the wool of the chiru became a prized item for export to India. In 1989 the China Wildlife Protection Law listed Tibetan antelope as a Class I protected species. In response to this legal protection, all forms of hunting became organised, professional poaching.

Since 1992, in Qinghai province alone, the local forestry police rangers have cracked 120 cases of wildlife crime, confiscated over 15,000 Tibetan antelope pelts along with 178 vehicles, and arrested 428 poachers according to the Qinghai Forestry Police Bureau. Some of the most heart wrenching pictures of orphaned Tibetan antelope facing certain starvation came from Qinghai and Xinjiang where known calving grounds are found both by scientists and unfortunately, also by the poachers. It is evident that indiscriminate poaching of Tibetan antelope during the calving season has a detrimental impact on the population. Fewer pregnant females are observed and smaller groups are returning each year to the calving grounds (Li, W.D. pers.comm. to IFAW, 2001).



IFAW/Wild Yak Patrol

Chiru pelts, horns, and poachers' guns confiscated by an anti-poaching patrol

Among the anti poaching forces, Wild Yak Patrol is the most famous one. In 1992, in order to utilize the natural resources in Kekexili area, the Communist Party Committee and government of Zhiduo County of Qinghai Province set up a West Working Committee in the area, which later became the Wild Yak Patrol (WYP). In the course of managing the natural resources, the group gradually became actively involved in wildlife protection and conservation. In January 1994, Jiesang Suonandajie, Party Secretary of the Western Working Committee was killed by poachers during a battle on patrol in



IFAW/Kang Yongjun



Above: Monument of Jiesang Suonandajie, who was killed by poachers during a battle on patrol in January 1994.



Left: Qica Zhabaduojie, the late leader of the Wild Yak Patrol

Friends of Nature

Kekexili. Qica Zhabaduojie, his brother-in-law took over the directorship. He proudly proclaimed the new name for his group of 5 paid forest police officers and a dozen voluntary staff, "Wild Yak Patrol", hoping that they could be as strong and brave as the wild yaks in the protection of wildlife in Kekexili.

Under the directorship of Zhabaduojie, since 1994, the WYP, a group almost entirely made up of ethnic Tibetans, organized year-round patrols of the Kekexili area and routinely cracked poaching and smuggling operations. In the summer of 1998, the WYP encountered poaching and witnessed for the first time, the large-scale massacre of Tibetan antelope at the calving grounds in Qinghai. In a funding proposal to IFAW, Zhabaduojie described the horrific scenes that moved him, a brave and tough ethnic Tibetan, to tears; *"slaughtered Tibetan antelope bodies everywhere, pregnant females, babies starved to death and half eaten by vultures. Some new born baby chiru were still suckling on their mother's dead bodies..."*

Despite extremely harsh climatic conditions and financial difficulties, the Wild Yak Patrol became an

effective anti-poaching force in the Kekexili area, particularly at the time when the Kekexili Nature Reserve was still being formed. There have been individual indiscretions and mistakes. Faced with lack of funding and lack of support for anti poaching activities, some members of the group have secretly sold confiscated pelts. At the time, Zhabaduojie harshly dealt with these direct violations of the public trust and made the violators repay the money from their wages. In the fall of 1998, he publicly pledged to IFAW and Friends of Nature, a local Chinese conservation NGO and an early supporter of the WYP, that the Wild Yak Patrol would never make this type of mistake again.

In November 1998, Zhabaduojie was shot dead at his home. Until today, the case is still a mystery. Under the leadership of the only ethnic Han in the group, Liang Yinquan, the Wild Yak Patrol carried on with fulfilling their wildlife protection duties and won respect and support nationwide. In early 1999, the Wild Yak Patrol participated in the Kekexili Number 1 Action, an anti poaching operation organized by the State Forestry Police Administration and in May that year publicly burned over 700 confiscated chiru pelts in front of the protection station named after Suonandajie at the edge of the Kekexili Nature Reserve. From 1993 to March 2000, Wild Yak Patrol have captured 214 poachers, confiscated over 8000 pelts and over 121 guns. At the end of 2000, the Wild Yak Patrol as a local government organization was dissolved. Twenty-four

Hundreds of chiru pelts confiscated by anti-poaching patrols, and publicly burnt by the Chinese Government in 1999

Kang Yongjun



of its members are absorbed by the Kekexili Nature Reserve under the State Forestry Administration.

From 1993 to 1999, scientific expeditions and enforcement patrols in the Arjinshan Nature Reserve encountered poaching of Tibetan antelope on a yearly basis. During this time, over 4,500 Tibetan antelope pelts have been confiscated. Dr William Bleisch, a scientist working on the chiru in Xinjiang personally documented that chiru are killed to supply shahtoosh. "Working with the staff of the Arjinshan Nature Reserve, I have personally taken many photographs of the carcasses of animals stripped of their hides, neat cuts slicing off the skin at the head and the lower legs. We have chosen not to publish these photographs simply because they are too shocking".



IFAW/Wild Yak Patrol

Slaughtered chiru found by Wild Yak Patrol

When a team from the China Exploration and Research Society and the Arjinshan Nature Reserve travelled to the remote summer calving grounds of the chiru in the summer of 1998, it discovered the first known cases of poaching of calving females in a calving ground in Xinjiang. Previously, chiru had mainly been slaughtered on the winter rutting grounds, which are much more accessible. When the team returned to the calving grounds in 1999, it discovered that both the number of poachers and the number of animals killed had risen to several times that of the year before. "In the summer of 1998 only one team of poachers who had killed fewer than 100 female chiru during the week before our arrival, were found. During the same period in 1999, at least four teams of poachers were operating in this area, and they had killed more than 900 animals in just the few days before we arrived and drove them away" (*Bleisch pers comm to JVG, 2000*).

During the IFAW-WTI survey one team was primarily following a trade route and did not cover



George Schaller

Above: Chiru females with young.



IFAW/Wild Yak Patrol

Right: Slaughtered chiru found by Wild Yak Patrol

any of the areas where poaching is at its highest concentration. Consequently, the team did not collect any primary evidence of organised poaching. However, there was an abundance of secondary evidence to suggest that large-scale poaching operations were going on in Chang Tang, close to Gertse, where the stockpile of just one supplier was a clear indicator of the magnitude of the slaughter. Tibetan officer, Laba, the director of TAR Forestry Police Bureau informed IFAW that poaching happened mostly in northern Tibet. However, pelts stripped off dead Tibetan antelope bodies are usually taken to Lhasa for preliminary processing, i.e. plucking of the wool.

The IFAW-WTI team did find widespread awareness that killing chiru is illegal in the TAR. In conversations with the IFAW-WTI team many of the pastoralists said that they regularly hunted for food, but killing the chiru was banned. They said they knew of some people who sometimes killed the chiru because the meat was delicious and had later bartered the skin for other goods in larger towns.

Although they did not remember when it took place, they also confirmed that the police had



conducted house to house raids a few years earlier, and confiscated all chiru meat, skins and wool. Many of their guns had also been taken away. In the 1990s, several high profile poaching cases involving the armed police and government officials resulted in the replacement of some key government positions in the Tibet Autonomous Region. In 1998, a Weapons Regulation came into effect in TAR and over 10,000 guns were confiscated in one area alone in the year 2000. However, a weapons ban may not have much effect on army personnel involved in poaching and wildlife transporting activities due to their easy access to weapons and check-point exits. The level of awareness about the law was high, as people spoke about chiru only in hushed voices and others flatly refused to comment. At Nun Khani of Yanhu, about 150km east of Singikabah in western Tibet region, a wool trader advised the team translator not to even mention the word for fear of imprisonment.

IFAW/Wild Yak Patrol



Confiscated pelts

Although there have been cases of incidental hunting of Tibetan antelope for meat by the local herdsmen and for sport by military personnel who have easier access to weapons, the only large scale slaughtering of Tibetan antelope left today is by organized poaching groups usually consisting of outsiders. The poaching is solely to supply pelts for the trade of shahtoosh.

Up until the 1970s, nomadic herdsmen rarely braved the sub-zero temperatures of the chiru's inhospitable home range. Hunting of Tibetan antelope, and the demand for shahtoosh, were minimal and had little impact on the vast antelope herds (*Kumar and Wright, 1997*). However, in the 1980s, more open borders between China and its neighbouring countries have increased the volume of trade, legal and illegal, including wildlife trade. At



Labu, the director of Tibet Forest Police, inspects confiscated chiru fur concealed in mattresses.

TAR Forest Police

the same time, the growing demand from the world's fashion industry triggered a rapid and sharp increase in the price of shahtoosh wool. This inevitably attracted vast numbers of new people into this illegal trade, among which are people indigenous to the Qinghai-Tibet Plateau and outsiders from neighbouring regions in China.

In winter, the tyre tracks of the poachers' vehicles lead up into the mountains in search of wildlife, including the Tibetan antelope. Although there is danger of flash floods in the area and the roads are less accessible in the summer, poachers have a better chance of finding Tibetan antelope because the pregnant females are easier targets and they do not change their calving grounds. It is evident that indiscriminate poaching of Tibetan antelope during the calving season is having an adverse impact on the population. Poaching usually takes place at night when the poachers dazzle the antelope with their vehicle headlights and gun them down en masse.

The Tibetan antelope range area, though desolate and uninhabitable, is rich in mineral resources. In the past 20 years, tens of thousands of gold, mineral and brine shrimp diggers and extractors have poured into both the protected and unprotected areas on the Qinghai-Tibet Plateau. Some of them obtained natural resource extraction permits, though thousands more work there illegally.

Primitive gold prospecting destroyed the fragile vegetation; human inhabitation cut the migratory routes of wildlife species and hunting of wildlife supply the extractors' main food source. Many of these mineral extractors later turned into Tibetan antelope poachers when they realized that the price of chiru pelts can be higher than gold (*Ding, P. 1999*).

Since 1989, several gold rushes occurred in the Arjinshan Nature Reserve, which was established in 1985. Between 1990 and 1993, up to 35,000 illegal gold prospectors from the neighboring Qinghai and Gansu provinces poured into the nature reserve, forcing the China State Council to issue emergency notices to dissuade the massive migration. In 1994, the Arjinshan Nature Reserve banned all mineral extraction in the region and turned away over 13,000 prospectors in that year alone (*Zhang, Liu and Xu, 2000*). In October 2000, a total ban of natural resource extraction was enforced inside the Kekexili Nature Reserve by the Qinghai Forestry Bureau.

The vast range in which the antelope roam (approximately 600,000 km²), the harsh climate conditions, treacherous terrain and lack of equipment and funding all pose tremendous difficulties to any enforcement efforts against poaching. All of the nature reserves and forestry

officers and nature reserve managers went into the Qinghai Tibet plateau, arrested 66 poachers, confiscated 1,658 Tibetan antelope pelts, 545 skulls, 18 vehicles and over 12,000 rounds of ammunition. Although there have been successes in anti-poaching efforts, enforcement officials feel that they have only been able to stop a fraction of the actual slaughter.

Although the Chinese government has seriously addressed the Tibetan antelope protection issue, there remain tremendous inadequacies in the existing regulatory structure. Different nature reserves fall under the management of different central government departments. The Arjinshan NR is under the management of the State Environmental Protection Administration and the Qiang Tang and KekeXili are under the State Forestry Administration. This creates departmental frictions that make protection measures very difficult. In addition, law enforcement powers are unevenly distributed. Some nature reserves do not have any policing power to enforce the Wildlife Protection Law. Funding shortage also hampers effective conservation efforts. Government funding to nature reserves is usually earmarked for administrative and infrastructure cost with little consideration for programmes. Hence, funding and equipment shortage are characteristic

IFAW/Wild Yak Patrol



Patrol vehicle stuck in a lake – one of the difficulties encountered during patrolling Antelope terrain

police stations in the Tibetan antelope range have carried out enforcement and public awareness activities. Some nature reserves have set up year round protection stations in the area. Kekexili No. 1 Action, a joint-wildlife crime fighting operation by authorities in TAR, Qinghai, and XAR was carried out from April 11 to May 10, 1999. 170 forestry police



IFAW/Wild Yak Patrol

Confiscated guns

of all of the anti poaching efforts in the Tibetan Antelope range.

Reports from 1992 to 1999 indicate that poaching of Tibetan antelope has been heavy in all areas of China where species occur, especially in western Qinghai bordering with southern Xinjiang and some areas in Tibet. Dr Schaller has warned that if current trends continue, "the species will survive as mere scattered remnants." Based on the limited



number of seizure cases from the chiru range, it has been estimated that at least 10,000 to 20,000 animals are killed every year. Biologists first concluded that most of the hunting occurs during winter months when the Tibetan antelope undercoat is at its thickest. However since 1998, evidence of indiscriminate poaching in the calving season in summer accelerated the demise of the Tibetan antelope population. Dr George B. Schaller, Director for Science at New York's Wildlife Conservation

Society, and recognised as the world's foremost field biologist on the Tibetan antelope, wrote nearly four years ago that, from a population of a million a century ago, there may now be a total of just 75,000 chiru left, about 50,000 in Tibet and 25,000 in Qinghai and Xinjiang. This is only 10 percent of the population 100 years ago (*Schaller, 1997*). If poaching continues at the rate of 20,000 a year, this species will become extinct in no more than five years.

Spinning a Yarn: Myths about Shahtoosh

A 500 year old tradition will gather many myths around itself. There are many in India regarding the shahtoosh shawl trade. Unfortunately, these myths stand in the way of Tibetan antelope conservation, and must be dispelled. The following dialogue provides responses to the most prominent myths about shahtoosh.

Myth: No animal is killed for making shahtoosh shawls.

Truth: Tibetan Antelopes are killed by the thousands (between 10,000 – 20,000 animals each year). The wool is plucked from skins to obtain raw shahtoosh wool. This has been documented and photographed.

Myth: Shahtoosh traders claim that the wool is collected from a 'mountain goat' that sheds its wool that becomes entangled in rocks and bushes.

Truth: Shahtoosh shawl weavers and traders of Kashmir do not go to Tibet. They buy the raw wool from Tibetan and Nepalese traders. What they call a 'mountain goat' has been shown in a Kashmir government brochure to be an Ibex (*Capra ibex*). However, shahtoosh shawls are made from the underwool of the Tibetan antelope and not that of the Ibex. There is no evidence of the collection of shahtoosh raw wool from rocks and bushes in Tibet. In the windswept, barren plains of Tibet, this would not be possible.

Myth: Shahtoosh wool cannot be obtained from a dead animal because it would lose its luster and softness.

Truth: There is photographic evidence of wool

being plucked from dead chiru. Forensic laboratories and the courts of law have succeeded in proving that shahtoosh does indeed come from the chiru and that this wool is 'plucked out' and not shorn. This indicates that the species is killed before the wool is procured.

Myth: The Kashmiris will not kill an animal that gives them such superior quality wool.

Truth: It is true that Kashmiris do not kill the chiru. The killing is done by poachers in China.

Myth: Increasing harvests of Tibetan antelope hides suggest that the species is in no danger of extinction.

Truth: Historically, chiru were killed by primitive wooden leg traps. The demand for shahtoosh shawls was limited largely to Northern India. In recent years 4-wheel drive vehicles and automatic weapons have replaced the traditional methods of exploitation, and have increased the magnitude of the poaching. The demand for shahtoosh shawls from the West and the Far East has fuelled this killing. It appears that the quantity of wool coming in from Tibet has increased, but the rate of decline of the chiru population has also increased.

Myth: Shahtoosh shawls are the finest quality wool, as demonstrated by their ability to pass through a finger ring.

Truth: High quality pashmina shawls will also pass through a finger ring. Pashmina wool comes from domesticated high altitude goats, which are not killed for the wool but combed.



Trade Investigation: Tibet, Delhi, London

This chapter presents a personal diary account of the IFAW-WTI shahtoosh investigation and recording of conversations with local Tibetan residents as transcribed from the field investigators' journals. This investigation was conducted in September 2000. The trade in raw shahtoosh fibre and finished shawls clearly continues across borders.

Day 1 (September 09, 2000)

It is a long and arduous drive from Kathmandu to Zangmu, the first stop in Tibet, where the road follows a swollen Bhote-Kosi river through deep gorges. The conditions are incredibly hostile with overcast skies, persistent niggling rain, and knee-deep mudslides. Boarding buses that have more luggage than people, the team travels to the "Friendship Bridge" between Nepal and China to

cross on foot. A quick passport check is followed by a climb up an 80 degree landslide, through a fast flowing stream and onto the road ahead. Porters laden like mini-trucks with vegetables, wool, Chinese synthetic mattresses, and many more unidentifiable things run down this vertical stretch with apparent ease.

Then, packed like sardines inside a canvas-covered Dong Feng truck with 50 sedate tourists



Joanna Van Gruisen

A large amount of shahtoosh is carried by such caravans



from Germany, Switzerland, Japan and USA, we are tossed around, clinging for our lives, for about 15 kilometres before reaching the town of Zangmu. It is dark, damp and bitterly cold as the heavy rain persists. Although there are signs for immigration and customs hanging from a large gate, no one checks our luggage, the vehicles, or anything else for that matter. It is too late to stamp our passports, so they keep it for the next morning.

Zangmu (the locals call it Khasa), reminds you of a frontier trading post, bustling with money and sleaze. The hotels are dirty and expensive with no hot water and very little choice, some of which are designated for tourists. A steep road ascends through the city to a high mountain pass. Dozens of shops with cans of Coke, Pepsi and Budweiser made in China along with Lhasa beer line the shelves. Small dark restaurants with dimly lit curtained compartments snuggle between shops. It is a place for deals and intrigue, and we decide to spend a little more time here on our return.

Day 2

The conditions are still overcast and cold and our guide, cars and the truck, which are supposed to arrive from Lhasa, have still not arrived. The guide also holds our visas, so we are completely at his mercy. While we wait for our guide to return, we see a lot of sheep wool travelling to Nepal through this border and it would not have been surprising if some shahtoosh passes this way too. Our sources suggest that Khasa is one of the largest trading routes through which shahtoosh passes.

Eight fully laden ten tonne trucks go by as the border guards just wave them through. The people travelling with the driver have to get off the truck and walk through the gate, as is the case with those travelling in cars. Irrespective of rank, officials get off their flagged vehicles and walk through the checkpoint. In the next lot of five, only one truck is cursorily checked. One guard lifts the canvas off the back, peeks in and waves it on. Either there is some understanding here or they are just not bothered.

A little after midday, we find the guides. Apparently they have been in Zangmu since yesterday waiting for us to find them. Immigration is by then closed for lunch and will not re-open until 4 pm in the afternoon. While we wait, we sit and

observe the movement around the border checkpoint.

Finally, our passports are stamped and we leave around 4.30 pm. It starts raining as we drive 35 kilometres to Nyalam. On our arrival we check into a hotel and discover that the town has excellent communication facilities with international subscriber dialling.

Day 3

Nyalam is a prosperous town with evidence of widespread cement and stone development taking place. There are a number of government offices, as well as shops selling food and alcohol, including a large, privately owned supermarket-like shop and a few dirty hotels. Since there is no industry here, trade and livestock rearing is the main occupation.

This is not chiru country, but Nyalam is an important transit or storage point before shahtoosh wool moves out to Nepal. We drive ahead to Tingri, past the sage Mila-Repa's cave. The landscape gradually becomes yellow and dry and is finally beginning to look a bit like the Tibet we are familiar

Tibet



Aniruddha Mookerjee/WTI

with. We are now at about 4,300 metres and begin to feel woozy, with headaches starting to bother us. We camp ahead of Old Tingri.

Day 4/5

We awake feeling immobile with severe headaches, fever and nausea. Two days pass in a haze. An old man guarding the nearby potato fields drops into the camp one evening to chat. He claims that he had seen the chiru (he calls it chou), and that it can be found “far, far away” from here. “Its wool is very expensive, but you can get arrested if you kill it,” he says. “Yes, people take the wool to Nepal through passes here,” as he points in the general direction of Nepal towards Mount Everest. Danu, our Sherpa, says there are passes from here, which will lead us to Namche Bazar, beyond Mt Everest, and that they are not so inaccessible either. By now, we are mildly acclimatised, so decide to move the next day.

Day 6

We leave for an eight-hour drive through the most incredible landscape and arduous roads with trucks stranded on both sides. Mayum La is so slushy that



tyre grooves are sometimes a few feet deep as we traverse at an elevation of almost 19,000 feet. Fortunately, our two cars survive the pass, though the truck breaks down. We do not reach Lhotse, a wealthy town, rich in agriculture, trading and sheep farming, until the evening. It is surrounded by a beautiful valley with lush green barley fields. Communications are excellent – you can dial direct to anywhere in the world. There are some wool shops, but they sell only sheep wool.

Day 7/8/9/10

We continue our drive passing through Sang Sang, Saga and Dongba. It is at the camp before Dongba, that we see the first signs of poaching. When we ask a Khampa nomad about chiru meat and skins he replies, “it is the tastiest meat, but I have none. I can sell you a horn,” he said, returning with a single horn. “I use it for digging,” he adds. The older Khampa confirms that chiru are indeed being killed in the nearby areas. “There are lots of restrictions now and there has been a crackdown by the army. Earlier it was an open market. Today you can get a kilogram for 1,500 yuan. Chinese traders and Khampas come from Lhasa and Shigatse in cars to buy it. There are no large-scale contracts given here. They come and spread the word and sellers come to do business with whatever they have. The poaching months are usually May-June and the traders come around September-October.” He does not know if any one has come this year.

There are no signs of large-scale killings here and it all seems very amateur and on a subsistence basis. The Khampa claims that, “there is a full skin with head and horns at the nearby government road building station. You can go and have a look”. We decide not to go to a government office.

Day 11

Pharyang is the only town we have so far encountered that immediately transports us to a dry, dusty, barren Tibet, with not a single blade of grass. People are not friendly, with even the kids seeming rough. Next to the temple, is a gory heap of yak heads with inscriptions on their skulls. Pharyang, we are told, is one of the main points from where shahtoosh moves.

The town was full of wool godowns, but no one





Aniruddha Mookerjee/WTI

Nomad with chiru horn

is willing to talk about chou kholu (chiru wool). “We don’t keep that,” they claim. We sense they are hiding something, but there is no way of gaining their confidence in a day and coaxing them to open up. It is here that we saw the first Lynx skin for sale. It is well cured and stuffed and I am told it is used as a pillow.

In the evening, a multi-lingual Dokpa comes to visit us. He speaks fluent Nepali and Hindi and has spent seven years working as a tourist guide in Lhasa and Nepal. He says that two years ago, a kilo of shahtoosh fetched around 8,000 to 9,000 Nepali rupees. He does not know or want to talk about the current price. However, he adds that if necessary he can get any amount of shahtoosh to Zangmu with the help of tradesmen from Lhasa and Shigatse. “How you take it out is your business,” he says. He then takes one of the team members home to show him an Argali skull. In Pharyang, we met many Tibetans who confirmed that expensive wool is indeed moving across the border.

Day 15

We cross from Mansarovar to Darchen, a dingy and expensive government settlement for pilgrims doing the Mount Kailash parikrama (a walk around the mountain – Hindus and Buddhists consider it auspicious). Next to this is a huge tented colony of traders who primarily sell souvenirs to pilgrims and tourists. Apart from selling freshly slaughtered yak

and sheep meat, they also stock food and alcohol.

Walking along this market is a revelation. Every shop has fox skins mounted on pieces of foam, each selling between 250-300 yuan. These are worn as caps along with the foam, with the tail hanging at the back like a raccoon cap. It is possible to haggle the price down to about 200 yuan. The skins have been professionally removed, well-cured and are soft. Well-cured and neatly trimmed otter skins are also available at 650 yuan at one shop. All of them have a signature on the back and seem to be picked from a larger lot. The seller ignores us when we ask him from where they came.

At another larger shop, a colleague notices



Joanna Van Gruisen

Freshly slaughtered Tibetan Gazelle skin



Joanna Van Gruisen

A Drokpa wearing a fox cap

something fluffy lying at the back. We enter on the pretext of buying beer and ask what it is. "Oh that, that is a skin. You want to see it?" the woman replied, and invites us to drink the beer in the adjacent room. She casually picks up the skin lying at the back and dangles it. It turns out to be a snow leopard skin without a tail, stitched together like a pillowcase.

The skin is brought over and offered to us at 3,000 yuan. Friendly haggling then follows as we drink. When they learn that we are from India the atmosphere becomes much more relaxed. The

shopkeepers, as a friendly gesture, bring the price down to 1500 yuan. I am not sure that it is true, but they claim the skin has come from a nearby mountain and that the animal had been caught in a wire trap. They have only one at that time, but if we are able to stay a few days, they can get us more skins. By this time they are almost insistent that we buy the skin and bring the price down further. We escape by saying that it has no value without the tail.

Day 16/17/18

Taglakot or Burang, as the Tibetans call it, is at the tri-junction of India, Nepal and China. A river flows through the town and another tributary joins it from one side. The three streams cut gorges and divide the town neatly into three parts: the Chinese quarter, where all the officials live; the Tibetan quarter, where the market, restaurants and the cheaper hotels are; and the combined Nepalese and Indian corner, well away from the main town, where all the trade takes place.

The Nepalese and Indians seem to live a life of their own. Chinese officials do not seem to venture that side. A steep and dusty climb takes you to a corner where, from the top it looks like a mix of tented ghettos and concrete barracks. Thanka is an area earmarked by the Chinese government as a limited trading place for Indian and Nepali tradesmen. There are rows of tents and permanent warehouses where Nepalis and Indians pay 300-400 yuan annually to the Chinese government as rent. Last year when we visited Taglakot from the Nepali side of the border, I had the feeling that this must have been the biggest centre for the shahtoosh trade, which was later confirmed by other sources. At that point, I only had suspicions but no evidence. This time we at least knew where to look.

As we climb up the path to the Indo-Nepalese settlement we met a group of people coming down. They seemed to be Nepali and indeed they turn out to be from the neighbouring Humla district. They stop to chat. "Are you Indian pilgrims?" they ask. "Yes", we reply, "but we are also looking for wool."

"There is a lot of wool in the market. But this year the harvest isn't too good and prices are a little higher," they state. They are obviously talking about sheep wool.

"But that is not what we want. We want the



best quality, very expensive wool," we explain subtly.

"Pashmina is no good this year – not too much has come," one of them replies.

"We are looking for something even better than pashmina", I say, dropping further hints.

They look interested. There is a short man with them who seems to be older than the rest and it is obvious that the others respect him. He introduces himself as Bharat, and says that he is from India. "Why don't you go and meet Lalaji, he may have something lying in his godown and I am sure he will be able to help you" he says.

A person is sent along to guide us to Lalaji, who turns out to be the most influential trader in that settlement. Lalaji's shop is a permanent building: Barrack No 1. He retains it through the year and has been doing that for the last five years or more. A Nepali by origin, he comes in with his goods when the snow melts and the passes are open. Long pony and mule caravans cross over with textiles, cosmetics, salt, rice, metal utensils and hundreds of other things and hence the shop is set up. He sends back wool and any other produce that is in demand in Nepal.

Lalaji measures us up with a practiced eye. He is sharp, suspicious and exceedingly polite. "The shahtoosh business is finished," he explains, shaking his head sadly. "The slide began last year when the Chinese government raided lots of places and arrested the traders. Now it is too risky to supply shahtoosh in Delhi. Indian police and customs stationed at Dharchula and Pithoragarh are getting very tough. I used to do this when it was legal, but I don't do it any longer. I know the supply situation in India, and I would like to help you, but I can't." He claims to know businessmen from Lhasa and some Khampas of Taglakot who are still in the trade, but ignores our inquiries about names and phone numbers.

While we talk with Lalaji, trying to probe, Dip Bohora (pseudonym) enters, who is the owner of the adjacent shop. "If there is a demand, goods can still be supplied to Kathmandu, but the times are not too good. The situation is very tense. The administration is very strong." It is surprising that he is unable to continue the trade even though he knows others who are still doing it. But he has a ready answer: "I do not do anything illegal."

We finish the conversation and move on. Our guide introduces us to another man from Jumla who claims that he can supply any quantity of shahtoosh at any place and promises to meet us with samples the next day. However, he never turns up.

On the way down, the old man we had met earlier is climbing up. "Any luck?" he asks. We tell him that we have had no success. He listens sympathetically and walks away saying that if he has the time tomorrow, he will meet us in the morning. We are not optimistic and continue down to the market and start to check all the shops.

As we sit down to dinner, a man on the next table turns around and starts speaking in chaste Hindi. The man belongs to Humla in Nepal and has visited India often, even working in Delhi at one point. We talk for a while and then he gets up to change the music. It sounds slightly different.

"What is this music?" we ask.

"This is Kashmiri," he replies, attracting our attention. Why would a man from Humla travel from Taglakot, spend time in India and even go to Kashmir? He gets up to fill a glass of water. "Can you get us some shahtoosh," we ask, shooting an arrow in the dark. He stiffens as he joins us at our table.

"You want shahtoosh?" he enquires. "Yes, we have been looking for a reliable source for some time now," we explain, spinning our usual tale. He listens to us patiently and says that he can get us any amount we need. His usual route is via Humla, Nepalgunj and Rupadiya to Delhi. "We take it by buses through a number of couriers in small quantities, so that even if the person gets caught there is not too much damage," he says, whilst claiming to be a regular supplier to Delhi and Kashmir. We arrange to meet the next evening with samples, but that is the last we see of him.

We have to travel back in another day and we have made no headway as yet. We wake up early to go to the guesthouse roof. As we decide what we should do next, Bharat appears with a friend. We talk about the weather, the market prices of wool, about our families, and the vagaries of travelling.

"This year not so many pilgrims came from India. I wonder why?" he asks. "Is it because of that accident? Even the trade is not too good this year," his voice trails. He leans back against the wall, looks at the jagged peaks in the distance and then softly,

as if talking to the mountains, asks: "So, how much do you want to buy?"

Suddenly, everyone is on full alert, but everything remains deliberately casual. Bharat does an elaborate ritual of lighting a cigarette as a cloud of snow pigeons fly overhead. I lift my binoculars to follow them. Answers to questions have been prepared in advance, but form is obviously very important here.

"Can you give us 200 kilograms by December?" I ask. Bharat screws his eyes and lapses into deep thought. "It is a lot of wool, but it can be done. Where do you want it?"

"Delhi," I reply. "You will have to give an advance and pay extra for transport," he replies. "We can talk about that, but have you supplied anything to Delhi as yet?"

"Yes, of course. We have consignments going every month. We have regular buyers there," he professes. "Which way do you take it?" I ask.

"We normally take it by foot across the border to Pithoragarh and then by bus to Delhi."

"If you take such large quantities by bus, don't people notice," I enquire?

"No, no. We have many couriers, who keep changing buses and routes. Shahtoosh is compressible and large amounts can be taken in small bundles. No one notices. In any case," he smiles, "it is only people like us who know the wool".

"By the end of November all the passes will get snowed in, how will you get it across?"

"Look, that is my problem. If you give me an advance and a date, I will get it across to you even if I have to wade through waist deep snow." We look surprised and he emphasises, "It is nothing new. We keep doing it all the time."

I want to see samples. He promises to bring them in the afternoon and goes away. He returns at 3pm again with a Tibetan friend, who he introduces as his partner. While the partner stands guard outside the door, Bharat takes out half a kilogram of shahtoosh in a dirty polythene bag. This is our first glimpse of shahtoosh in Tibet. The sample is of good quality although it was a mix of guard hair and shahtoosh, there was enough of the long usable fibre. He has 15 kilograms ready and wants us to buy it right away. "We can't," I say. "How can we cross

the border with so much wool?" "You will have to get it across to us in Delhi," we explain.

He asks for 6,000 yuan per kilogram and a transportation charge of 4,000 Indian currency per kilogram from Taklakot to Delhi. I haggle and ultimately agreed to an overall price of 6000 yuan per kilogram. He, however, wants an advance, which we refuse. I ask him to get it to us in Delhi and say that we would pay him there.

"How do I know you will pay me there?" he asks suspiciously. "What is the guarantee that if I give you an advance here, you will get me the wool in Delhi?" I reply. "You will have to trust me."

"Well, you will have to trust us too."

We have obviously reached a dead-end. "Look, since you keep sending consignments to Delhi, why don't you just get us a kilogram of wool for which we will pay you a higher price. In this way there is no problem on either side. It will be a test run for both of us, since we do not know each other," I suggest.

Bharat stops to think over my suggestion and replies: "Okay, I will take a risk. I will get you 15 kilograms, but you will meet me where I want you to and take delivery with full payment on a higher price."

"That is fine, but you will have to deliver the goods in Delhi."

"Okay, you meet me at a place outside Delhi, where I want you to come, make full payment there and we will travel to Delhi together. You must understand that I do not know you at all."

"Fine, we will meet you anywhere you want, but will give you only half the payment there. Only after the goods have reached our godown safely, will you get rest of the payment. You must also understand that even we do not know you at all."

We agree on that.

The atmosphere thereafter becomes more congenial. Bharat starts to talk about himself. He claims to be the top wildlife trader in the area. He is an Indian citizen and owns a house in Garbyang and Darchula. He is fluent in Nepali, Hindi, Tibetan and several local languages. He travels to Kathmandu and Delhi for trading and also deals in other wildlife produce. Once, while carrying musk from Bhairahawa to Kathmandu, he was arrested at Bhairahawa and imprisoned for 11 days, but he bribed his way out by paying rupees 48,000. We give



both Bharat and his partner presents of a bottle of whiskey each and packets of 555 cigarettes, and bid them good-bye.

"But, how will we get in touch," I ask as they leave, "do you have a phone number?" There is immediate suspicion in Bharat's eyes. To allay suspicions we give them our telephone numbers. "You call us when you are ready, but, remember you will never get long term customers like us." At this point the hidden video camera which is recording this meeting ran out of tape with a loud electronic beep. Bharat looks around for the source of this sound, but obviously he is not familiar with it and loses interest. I heave an inaudible sigh of relief.

I lie awake going over the events of the last two days. Taglakote is obviously a major transit point for shahtoosh. But, two days is too short a time to find out more. There is another man who promises to take us to his go-down, but never turns up. There are the obvious suspicions and I go to sleep wondering if the deal with Bharat will work out.

As we are getting ready to leave, Bharat appears. "I thought I would come and see you off. Will you give me a note saying that you will buy 15 kilograms of shahtoosh in India at the agreed price?" We give him one and he gives us two phone numbers in return: one in Taglakote and another of a contact in India.

Day 22/23

Gertse is the closest we get to the Qiang Tang National Park, the wintering ground of the chiru. It is not on the usual tourist route and the people are friendlier.

According to biologist George Schaller, who pioneered the research on the chiru, Gertse was one of the hubs of the trade in shahtoosh. During his visit in 1988, when Gertse was a small village, he had found a cottage industry of women plucking shahtoosh from chiru skins. He "saw herdsman plucking wool from antelope hides to sell to local dealers. In the courtyard of one such dealer were sacks of wool ready for smuggling into western Nepal and from there to Kashmir, where the wool is woven into scarves and shawls" (Schaller, 1993).

Gertse is no longer a village. There are pucca cement houses along the main street that run through the town. The usual shops line the street.

There is a school with a swimming pool. There is even a public bath with a huge boiler for hot water, but our guide will not allow us to go anywhere near.

We arrive late in the afternoon and force our reluctant guide to tag along with us for a walk in the Khampa settlement. In quick succession we find fox, blue sheep, lynx and Tibetan gazelle skins. There are bales of sheep wool lying around, but no signs of shahtoosh. As it starts to get colder we go back to the hotel. This is almost the end of the trip. We are closest to the source of shahtoosh, but we have seen nothing in the market. Tomorrow we decide that we will start asking around.

Two of us leave early to start our inquiries. Almost immediately we have some success. At the first stop we bluntly ask, "We want cho kholu, do you have some?"

As if it was the most natural thing in the world, the shopkeeper says, "Oh yes, one of my friends has 15-16 kilogram ready wool for sale. But if you need it with skin, I can give you some of that too."

"Do you have it here?" I ask.

"Not here, but I can get it, if you wait," he replies.

"How much do you have?"

"Well, a few hundred, how much do you need?" he says quickly before leaving the shop, asking us to wait.

After a short while, he returns with a big bag. Before opening it, he closes the door and windows, and draws the curtains: "No one should know about this." He gently opens the bag and takes out a skin. One may have seen a shawl, handled a lot of wool, but it is quite shocking to see the first chiru skin. It is light reddish brown in colour, which is most likely a winter pelt. He turns it around to show the white stomach, where the most expensive shahtoosh is found. There are at least 30 skins in that bag, each priced at 450 yuan.

This definitely needs to be recorded on film. Another member of our team is called, who enters twenty minutes later posing as a senior buyer. Meanwhile, the seller packs the skins back into the bag. A few people have gathered in the shop – curious bystanders wondering what tourists are doing closed in a shop for so long. They refuse to go away. Irritated, the shopkeeper mutters to himself and takes us to another shop, where the doors are

locked and the curtains drawn in similar fashion. He brings another bag from the courtyard in the back.

These skins are about a year old. He could supply skins or wool to Lhasa or Taglakot. As we haggle over the price of plucked wool, he brings it down from 2,000 yuan, to 1,500 yuan. He can supply 200 kilograms by December. "If you want these skins, I can have them plucked for you right now," he says.

"Look, we are here as tourists, we cannot carry wool back with us. We would like to buy a sample of wool from you to show it to our weavers. If they approve, we will let you know and then we can make arrangements to ship 200 kilograms by December." The man is all smiles. We leave after fixing up to meet in the afternoon. He says he will give us a telephone number for further contact in the afternoon.

We go back to his shop around 4 pm. He is not there but another man at the shop tells us to wait. After a while our man comes with three plastic bags containing shahtoosh wool. Once he enters the shop the other man leaves, shutting the door behind him.

This wool is purer, with less guard hair and softer to touch. He opens another bag of white pashmina, saying this is sometimes sold as fake shahtoosh. He then starts weighing the contents of the three plastic bags, which are about 1.5 kilograms.

He wants us to buy the entire lot. Reminding him of the conversation in the morning, we say we will buy half a kilogram. This seems to shock him. "I have paid money and brought this for you, you have to take it."

"We can't. I told you in the morning that we can only take a sample at the moment."

This goes on for a while. The argument gets very heated. He either does not understand us or does not want to understand.

We finally offer him 800 yuan for half a kilogram to compensate for the trouble he has taken, but for him it is either everything or nothing. So we leave saying: "Look we are talking in terms of a few hundred kilograms. If just 1.5 kilograms gets you so worried, how will you deal with larger quantities. We don't like dealing with small time traders." I am afraid of a scene, but he seems to take this quietly. It is not an end we had foreseen.



IFAW

Shahtoosh shawl being offered for sale in New Delhi, March 2001

Investigation into the illegal sale of shahtoosh shawls in Delhi – March 2001

A number of early studies have recorded that shahtoosh shawls are easily available in shops in Delhi (*CITES Tiger Mission Report*). Since then, a number of seizures have taken place in Delhi, many as a result of sting operations. In order to understand how easily shahtoosh shawls could be bought in Delhi, IFAW-WTI undertook a study in Delhi in March 2001. The study team had a list of about seven shops that were known to have a stock of shawls with them. The idea was to go into these shops, with a hidden camera, and obtain evidence of illegal shahtoosh shawls being traded.

The team comprised of an Indian woman based in London and another Indian woman who spoke fluent Kashmiri – that way she could clearly understand what the traders were saying to each other.

The first place that the team visited was 'Dilli Haat' – a Delhi Government handicraft bazaar. There the team met two young Kashmiri men, with their usual pile of woollen and pashmina shawls. Once they were convinced that the team did indeed include a rich Asian woman living in London, and that with her English partner she made huge profits selling these shawls to both rich Asian and Western women – they got pretty excited about the 'dollars'



they would get. They called the team back later that afternoon (obviously they didn't keep the shawls with them, for fear of the authorities).

When the team returned at 5 P.M, they showed them two shawls, which were double the size of an average ladies shawl (a total of 4 shawls). They were of superior quality, and they wanted rupees 26, 000 (US \$ 650) for each shawl. It was a very good rate for the quality shown, and they were evidently desperate to make a sale. They also said they could arrange for more shawls in a few weeks time. What struck the team was that this took place in a bazaar funded and organized by the Government of Delhi –



IFAW

Shahtoosh shawl being offered for sale in London, May 2001

an illegal sale right under the nose of the authorities.

The team then visited a very well-know trader's shop in a 5 star Hotel in New Delhi. The Kashmiri speaking lady was known to the family that owned the business. She spoke to them in Kashmiri, and within a couple of minutes, the team was readily shown two shawls that they had concealed on the shop premises. These shawls were of incredible quality. The price quoted was Rs. 27,000 (US \$ 675) each – a very good price, and again, showed their desperation to make a sale. In this instance, the only reason these shawls were brought out was that the Kashmiri speaking lady said they could be trusted.

The team recorded this on camera. This particular trader has been watched by the Indian authorities for years, and the ease with which he showed the shawls was astounding.

One of the team members did go back to this same shop the next day without the camera and spoke about the trade. The trader said that his father made a trip to the UK every year to sell shahtoosh shawls. He said it was becoming more and more difficult to sell shahtoosh in Delhi, especially since the seizure of 70 shawls by the authorities, from a wealthy Delhi colony in February 2001. Therefore it made more sense for them to try and sell shahtoosh in the foreign markets, where there was still a demand. He said that the team could contact him, and his father could do the transaction in the UK. He said that the 'Chinese' were spreading 'untrue' stories about the antelope being the source of the shawls, because they wanted to promote pashmina.

One person from the team visited five other places in Delhi, including various markets and hotels – but the shopkeepers refused to show any shawls. None of them denied dealing in shahtoosh. Instead, they just said it was too dangerous to do any sales now. Two of them asked the team members to return in a week – saying that it was too dangerous for them to keep the shawls on their person.

On 14th March, the team members met with a contact in Delhi. He claimed he 'used to' deal in shahtoosh, but had stopped recently due to enforcement pressure. He talked about the shop owners in the hotel who had earlier shown the two shawls, and said they were regularly making sales both in and outside India. Obviously, there was personal enmity involved here.

Note: This investigation was conducted in March 2001. It is obvious that shahtoosh shawls are not available to a new customer for the asking in Delhi, unless a process of confidence building is gone through.

Availability of shahtoosh shawls in London

In May 2001, IFAW investigators were shown a good quality shahtoosh shawl in a well-known shopping district in Central London. It was a single, superior quality shawl, and the price asked for was £650 (US \$ 910). (Again, this was recorded on film.)



The Crime – Shahtoosh Trade Routes





The Crime – Known Seizures

S.No.	Date of Seizure	Place of Seizure	Goods Seized	Qty/No.s
1	1992	Arjinshan Nature Reserve, China	Chiru Hides	168 No.s
2	1992	Italy	Shahtoosh Wool	500 Kg.
3	1992	Near Arjinshan Nature Reserve, China	Chiru Hides	1300 No.s
4	April 1992	Germu, China	Chiru Hides	21 No.s
5	April 1993	Arjinshan Nature Reserve, China	Chiru Hides	1200 No.s
6	June 1993	Raxaul, Indo-Nepal border	Shahtoosh Wool	100 Kg
7	May, 1993	Germu, China	Chiru Hides	369 No.s
8	18.01.1994	IGI Airport, Delhi	Shahtoosh Wool	107 Kg
9	18.01.1994	Kekexili Nature Reserve, China	Chiru Hides	1600 No.s
10	28.01.1994	Lawrence Road, Delhi	Shahtoosh Wool	400 + Kg
11	19.02.1994	East Moti Bagh, Delhi	Shahtoosh Wool	.05 Kg
12	25.02.1994	Calcutta Airport	Shahtoosh Shawl	7 No.s
13	11.05.1994	Majnoo Ka Tila, Delhi	Shahtoosh Wool	-
14	15.07.1994	Karol Bagh, Delhi	Shahtoosh Wool	16 Kg
15	5.12 1994	Darjeeling, West Bengal	Shahtoosh Wool	185 Kg
16	1994	Shops in France	Shahtoosh Shawl	283 No.s
17	1994	Shops in France	Shahtoosh Shawl	121 No.s
18	1994	Shops in France	Shahtoosh Shawl	213 No.s
19	December, 1994	Indo-Nepal Border, Nepal	Shahtoosh Wool	33 kg
20	1995	Pashupati Nagar, Nepal	Raw Wool	190 kg
21	1995	Tatopani Custom, Nepal	Raw Wool	115 kg
22	1994/1995	Belgium	Shahtoosh Shawl	31 No.s
23	1994/1995	UK	Shahtoosh Shawl	34 No.s
24	1994/95	Hongkong	Shahtoosh Shawl	100 No.s
25	February, 1995	Milan, Italy	Shahtoosh Shawl	42 No.s
26	23.12.1995	Lajpat Nagar, Delhi	Shahtoosh Shawl	172 No.s
27	January – April, 1996	Arjinshan Nature Reserve, China	Chiru Hides	1100 No.s
28	01.05.1996	MangAi, China	Chiru Hides	400 No.s
29	May 1996	Kekexili Nature Reserve, China	Chiru Hides	100 No.s
30	07.07.1996	Kekexili Nature Reserve, China	Chiru Hides	540 No.s
31	08.11.1996	Oberoi Hotel, Delhi	Shahtoosh Shawl	10 No.s
32	12.11.1996	IGI Airport, Delhi	Shahtoosh Shawl	12 No.s
33	15.11.1996	Dilli Haat, Delhi	Shahtoosh Shawl	5 No.s
34	15.11.1996	J&K Govt. Emporium, Calcutta	Shahtoosh Shawl	3 No.s
35	21.02.1997	London, UK	Shahtoosh Shawl	138 No.s

36	Summer 1997	Ali Custom Post, Tibet	Raw Wool	684.5 kg *
37	July 1997	Tibet, China	Shahtoosh Wool	400 kg *
38	July – August 1997	Arjinshan Nature Reserve, China	Chiru Hides	300 No.s
39	29.11.1997	Kekexili Nature Reserve, China	Chiru Hides	469 No.s
40	18.12.1997	Furama Hotel, Hongkong	Shahtoosh Shawl	186 No.s
41	1998	Tatopani customs, Nepal	Raw Wool	218 kg
42	11.2.1998	Bangalore, Karnataka, India	Shahtoosh Shawl	4 No.s
43	21.2.1998	Kekexili Nature Reserve, China	Chiru Hides	44 No.s
44	April 1998	Kekexili Nature Reserve, China	Chiru Hides	100 No.s
45	27.4.1998	IGI Airport, New Delhi	Shawls	7
46	29.5.1998	Hauz Khas, New Delhi	Shawls	46
47	June 1998	Kekexili Nature Reserve, China	Chiru Hides	259 No.s
48	29.7.1998	Santushti Shopping Complex, New Delhi	Shawls	17
49	13.12.1998	Kekexili Nature Reserve, China	Chiru Hides	273 No.s
50	1999	Tatopani customs, Nepal	Raw Wool	20 kg
51	1999	Unknown location on Tibet-Nepal border	Raw Wool	150 kg
52	26.2.1999	IGI Airport, New Delhi	Shawls	9
53	6.3.1999	Chandni Chowk, New Delhi	Shawls	159
54	14.3.1999	IGI Airport, New Delhi	Shawls	13
55	17.3.1999	Chandini Chowk, New Delhi	Shawls	96
56	17.3.1999	Greater Kailash I, New Delhi	Shawls	13
57	April 1999	Near Arjinshan Nature Reserve, China	Chiru Hides	426 No.s
58	10.4.1999	Kekexili Nature Reserve, China	Chiru Hides	105 No.s
59	19.4.1999	Kekexili Nature Reserve, China	Chiru Hides	44 No.s
60	June-July 1999	Arjinshan Nature Reserve, China	Chiru Hides	956 No.s
61	June-July 1999	Kekexili Nature Reserve, China	Chiru Hides	320 No.s
62	13.8.1999	Kekexili Nature Reserve, China	Chiru Hides	1061 No.s
63.	31.10.1999	South Delhi	Shawls	10
64	28.11.1999	South Delhi	Border of antique shawl	1
65	23.12.1999	Delingha, China	Chiru Hides	110 No.s
66	30.12.1999	Germu, China	Chiru Hides	341 No.s
67	5.1.2000	Gonghe, China	Chiru Hides	155 No.s
68	11.1.2000	Kekexili Nature Reserve, China	Chiru Hides	99 No.s
69	4.2.2000	Kekexili Nature Reserve, China	Chiru Hides	73 No.s
70	19.2.2000	Kekexili Nature Reserve, China	Chiru Hides	828 No.s
71	23.3.2000	Aurangzeb Road, New Delhi	Shawls	7
72	27.3.2000	Lajpat Nagar, New Delhi	Shawls	7
73	16.5.2000	Kekexili Nature Reserve, China	Chiru Hides	544 No.s
74	November 2000	Minfeng County XAR, China	Chiru Hides	105 No.s
75	26.12.2000	Hualong, Qinghai, China	Chiru Hides	941 No.s
76	6.2.2001	South Extn, New Delhi	Shawls	65
77	27.3.2001	Tibet-Nepal border, Nepal	Raw wool	39 kg

* It is not clear if these two seizures are the same – quantities reported by two different sources. The 684.5 kg seizure is the largest single seizure of raw wool reported by Zhang in *Illegal Wildlife Trade in the Himalayan Region of China* (2000 Ming et. al.)





Socio Economic Survey

In summer 2000, IFAW and WTI assembled a team of seven investigators who divided into three pairs and assigned themselves to specific localities in the Kashmir Valley. Their primary objective was to identify and speak with shahtoosh weavers. In each locality they identified a senior shahtoosh worker, who then took them to others involved in the shahtoosh trade. Being a small place, this technique, though time consuming, was very productive in revealing the mechanics of the shahtoosh shawl production process. The investigators then went from house to house collecting data. A written survey of 1,210 interviews were conducted in order to determine the impact, if any at all, of a ban on shahtoosh weaving in the Indian state of Jammu and Kashmir. This chapter discusses what the investigators found during their travels.



Aniruddha Mookerjee, WTI

IFAW-WTI investigators collecting data from shahtoosh workers

Shahtoosh weaving is one of the world's most clandestine cottage industries. The skill of working the wool on an informal basis, within the homes of the weavers, has survived as a family tradition for many generations.

The Jammu and Kashmir's Department of Handicrafts has no data on the shahtoosh industry, and refers to it as 'unorganised'. The wildlife authorities of Jammu and Kashmir have never issued a single license for dealing in Tibetan antelope derivatives and do not include shahtoosh processing as a category. Until recently, there were no

manufacturers', traders' or workers' organisations to promote or safeguard their interests and rights, and shahtoosh weaving did not exist on any official document except in tourism or state emporia literature.

The impact of the global ban on shahtoosh was not felt in Kashmir until after 1998. This prompted the birth of the shahtoosh traders' associations and worker's unions who demanded an immediate end to the ban. Failing this, they demanded the provision of alternative employment or compensation. However, they could not produce any accurate figures of the number of people involved. According to the Garib Mazdoor Pashmina and Shahtoosh Handloom Workers Union, which claims to represent 30% of the weavers, there are "lakhs and lakhs" (1 lakh = 100,000) people involved (*Ghulam Mohideen Rather, General Secretary, pers comm March 2001*).

The Kashmir Handicrafts Traders' and Weavers' Association put the figure at over 100,000 (*press reports, 2000*). Kashmir Valley Weavers and Manufacturers Association put the number between 25-30,000 people (*Ghulam Rasool, pers comm March 2001*). The Chief Minister of Jammu and Kashmir, Dr. Farooq Abdullah declared the number to be 20,000 at a public meeting in Srinagar (*press*



reports, 2000).

None of these statements were based on surveys or records. Therefore, to understand and quantify the impact of the ban, if any at all, it was important to survey the number of people involved in the manufacture of shahtoosh along with their incomes.

Methodology

In the absence of baseline data IFAW-WTI worked to:

- Produce a complete list of the stages of shahtoosh shawl making.
- Record the complete account of those involved in various stages through a questionnaire survey. This questionnaire sought information on the interviewee's name; age; address; manufacturing stage involved in; number of people in the family; involvement of others and at which stage in the manufacturing; individual incomes from shahtoosh manufacture and other professions; comparison of incomes over the last three years; and the person's suggestions regarding what he or she would like to do as work once they moved away from shahtoosh.
- Compile and chart the localities in the Kashmir Valley where shahtoosh was being woven.

Economic & Political Conditions in the Kashmir Valley

The Kashmir valley, which is a part of the state of Jammu and Kashmir, has been in turmoil for over a decade due to civil conflict that has resulted in a loss of over 25,000 lives. The valley remains in a state of siege from persistent pressure by the militants which has resulted in curfews and strikes, along with constant search operations, regular gunfights with the armed forces and suicide bombings.

The valley's economy derives its income from the following sources: tourism, handicrafts (shahtoosh, pashmina and sheep wool shawls, carpets, woodcarvings and papier-mache among others), agriculture, horticulture (growing walnuts, figs, saffron and apples among others) and animal husbandry. All of these are primarily or secondarily dependent on tourism. The valley had no industries except some fruit processing units.

As a result of the volatile political situation in the valley, tourism, the mainstay of the economy, has all but disappeared. Local businesses that depended

largely on the tourist trade, have been badly hit and unemployment is increasing. Therefore, the artisans of the area have looked to export their handicraft. However, the gains from this market have largely benefited the traders, with the artisans remaining on existing or slightly higher wage levels (*Gulam Hussain, manufacturer, pers comm March 2001*).

It was in the midst of these economic and political conditions that the Jammu and Kashmir High Court passed a judgment declaring the manufacture and trade of shahtoosh illegal.

Manufacturing Processes Involved in the Shahtoosh Industry

Shahtoosh shawls are typically made in two sizes. A ladies shawl is generally 1x2 metres and weighs up to 130 grams. Men's shawls are larger, measuring approximately 3x1.5 metres and can weigh up to 180 grams. Longer pieces are sometimes also sold as fabric lengths in the European markets, but this is rare and only by special order.

The first step in shahtoosh weaving in Kashmir is to obtain the raw wool. Kashmiri dealers served this



Aniruddha Mookerjee

Manufacturer weighing shahtoosh wool

function up until 1998. They would go to Delhi, which was the main centre for the trade, and pick up the supplies from Tibetan or Nepalese traders (*Hillaal Ahmed, manufacturer, pers comm, 2001*). However, with the fall in demand and a crackdown by the Indian government outside Kashmir, the Kashmiri dealers did not find it cost effective to travel to Delhi. The Tibetan and Nepalese traders were therefore forced to bring the wool to Srinagar.

Raw shahtoosh comes in three natural colours:

Aniruddha Mookerjee, WTI



Wide angle of separation of shahtoosh from guard hair.

Aniruddha Mookerjee, WTI



Close up of shahtoosh being graded according to size on a comb for spinning.

Aniruddha Mookerjee, WTI



Shahtoosh yarn being spun on a traditional hand driven wheel.

Aniruddha Mookerjee, WTI



Yarn being sorted according to strength.

light brown, dark brown and white. The colours depend upon which part of the chiru's body it is from. The demand for natural colours is high. Pure white shawls (generally worn by men) are the most expensive, because only a small percentage of the chiru's coat is white, down from the underbelly and throat. Recent years have seen a change in the demand from the traditional natural shawls to dyed ones and those with coloured woven designs.

The second stage in shawl making is separation of the wool by its colour. The raw wool dealer normally separates the white from the rest of the wool as it commands a higher price. But today the raw wool trader does not find separating the colours worth his while. Rather, this is performed manually by the dealer or the manufacturer (*Hillal Ahmed, manufacturer, pers comm, March 2001*).

The Kashmiri wholesalers of raw shahtoosh, also called *poiyanis*, are very few in number. They are different from manufacturers, who may themselves be involved in one or two processes, but their output is always a shawl and they have nothing to do with the marketing.

Most big manufacturers buy raw wool directly from the Nepalese or Tibetan raw wool traders bypassing the Kashmiri raw wool wholesaler. Once the colours have been separated the wool goes for de-hairing or separation. The raw wool plucked from chiru hides consists of the thick upper guard hair (which is not amenable to weaving) and the light and wispy toosh, which is found close to the skin.

Separation, called *charun*, in the Kashmiri language, is a step done exclusively by women who are called *charun wajen*. Earlier, this job was time consuming, where the women painstakingly separated the thick hair from the toosh with their nimble fingers.

During interviews with separators, the IFAW-WTI investigators found that about five years ago, a simple instrument was devised that made the job easier and faster. Two sturdy nails are fixed at a distance of 30 inches on a piece of wood which is approximately 3" x 4" x 6". A nylon fishing line about the thickness of a guitar wire is stretched tightly across the nails so that it vibrates with a twang if plucked with a rough plastic plectrum. The raw shahtoosh is held on the string with the left hand, while the right hand plucks it. When it



vibrates, the thin shahtoosh hair sticks to the wire, while the heavy guard hair falls off.

The women usually take a day to separate 50 grams of raw wool and are paid Rupees 45-50, according to the weight. Early each morning, 50 grams of raw wool is collected from the manufacturer's house. When it is brought back the following morning, the manufacturer weighs both the waste and the shahtoosh to ensure that it adds up.

This cleaned wool is now ready for spinning. This operation, known as *katai*, is also carried out exclusively by women, called *katun wajen*. The women are usually given 10 grams of shahtoosh and are paid according to the number of threads they produce. Using traditional, manual spinning wheels these women spin nearly 150, nine-inch threads out of the 10 grams. More skilled *katun wajen* can spin up to 200 threads or more. It is believed that master spinners can make yarn that is invisible to the human eye without magnification. The threads are rolled into knots with each knot containing 10 threads. The women are paid at the rate of 1 rupee per knot (US \$ 1 = Rupees 45). These two stages were earlier handled by the *poiyywanis* who then sold the yarn to weavers, but now the manufacturers do this directly. Both these skills are passed within the family from mothers to daughters.

The yarn then goes to the weavers who are exclusively men. The weaver first strengthens the yarn. He washes it with an herbal soap-like substance called *ritha* and then applies a special starch. After drying, the threads are divided into stronger and weaker categories and wound on holders made of thick cotton threads stretched on a wooden frame called a *presch*. The thread is wound and unwound several times to test the yarn strength. The family members of the weaver, including children usually help in this process called *pherai*.

The stronger thread is strengthened further by the application of a special type of resin called *sarrash*. The stronger yarn is now ready for *Yen yaren* or the preparation of the warp.

Warp makers, who are again mostly men, are hired directly by weavers. Iron rods are fixed on the ground at predetermined intervals in a straight line according to the required length of the warp. Men then guide the thread around the rods working in



Aniruddha Mookerjee, WTI

Wide angle of shahtoosh being washed with a herbal soap called *ritha*



Aniruddha Mookerjee, WTI

Close up of the *ritha* soap berries and the black starch biscuits



Aniruddha Mookerjee, WTI

First stage in making the warp



Aniruddha Mookerjee, WTI

Warp being stretched

Aniruddha Mookerjee, WTI



Warp being stretched outdoors

Aniruddha Mookerjee, WTI



Ends of the warp being inserted into thread guides before going to the loom:

Aniruddha Mookerjee, WTI



A shawl straight out of the loom being cleaned with a gourd loofah

Aniruddha Mookerjee, WTI



Shahtoosh shawl being woven

tandem. Once the number of threads required to create the desired breadth are put on the wrap, it is lifted and stretched. The threads are then spread evenly across the breadth and wrapped on a wooden roller called *dolle*.

This wooden roller is sent to the *barangar*. To be woven on the loom, the thread has to pass through two sets of thread-guides, one made of thicker cotton threads and the other made of wood and bamboo shaped like a long comb. Two different sets of people, women or men, work these stages and are paid according to the number of threads they insert into the guides. It is usually Rupees 10 per 100 threads. The weaver winds the weaker threads on the bobbin to create the weft.

Weaving or *wonun* is done exclusively by men who are called *voer* or *sade voal*. The weaving is done manually by sliding the bobbin carrying the weft into the wraps and setting it with a comb. Weavers get the thread from manufacturers by weight and get paid by the number of shawls they weave. Payment differs according to the design and the size of the shawl. There are two accepted designs: the plain and the intricate *chashme bulbul* (or the eye of the bulbul bird) weave. A weaver gets Rupees 1,000 to 1,300 for weaving a 1 x 2 metre shawl and can produce approximately three shawls per month.

From the weaver, the rough shawl goes for its first wash or *chalun*, to remove the starch and resin. This is the only hot water wash the shawl is subjected to and is not ironed at this stage. From here it moves to the clipper or the *puruzgar* who scrubs the shawls with gourd *loofahs* (sometimes the corn of a husked corncob is also used) and broad metal pincers to clean the fluff and any loose strands sticking out from the fabric. This is again a man's job, and who is paid Rupees 70 per shawl. The shawl now goes back for another wash. This can be the final wash with a steam iron if the shawl is not dyed or embroidered. A washer-man gets Rupees 50-70 for doing one shawl inclusive of all the washes.

Sometimes the weave is not perfect or a few threads are lost or holes appear. In such a case, the shawl goes to a specialised darning, called *raffugar*, who is paid according to the size and number of holes that he darns and is paid an average Rupees 50-70 per shawl.



If the manufacturer wants to dye the shawl, he sends it to the dyer before the final wash. The dyer charges Rupees 50 per shawl.

A significant added value to the shawl is embroidery. The first step to embroidering a shawl is the design. For an original design the manufacturer hires a *naqqash* or a designer and briefs him about his requirements. After the design is approved, the drawing goes to a *chapawal*, who makes a wooden block out of it and stamps the design on the shawl. Traditional design blocks are always available with the *chapawal*. In such cases the *naqqash* is not needed. The shawl now goes to the embroiderer, who depending on the intricacy of the design can take up to a year to finish it. This process could cost anything from a few hundred to a hundred thousand rupees. After its embroidery, the shawl goes back for a final wash and steam press.

Once the shawl is ready it is sold to traders who then market it in India or smuggle it out of the country.

Estimates of Numbers

A complete census of the shahtoosh workers by the IFAW-WTI investigators is currently in progress. Up until the time of writing this report, a total of 1,210 interviews had been completed. The interviews reveal a set of quantitative and qualitative information that points to a trend, which can be confirmed only after the survey is complete.

All the manufacturers with whom the team investigators spoke to agree that at the height of the shahtoosh boom, the Kashmir valley had approximately 120 manufacturers. Today, after the fall in demand, according to the manufacturers the number seems to have stabilised at around 70. On average, each manufacturer keeps 75 separators and around 300 spinners on his payrolls. This puts the approximate number of separators and spinners at around 26,250. This is the largest segment of the workforce involved in shahtoosh and is exclusively female. Separating and spinning is looked at as an additional income in the family. However, many of the spinners are widows with children, whose husbands have been killed in the ongoing civil conflict in Kashmir. Shahtoosh shawl manufacturing is their only source of income. The following list reveals the approximate number of individuals who



Close up of chasme bulbul weave



Clipping loose threads off the shawl with a broad metal clip



Rafugar darning the shawl



Chapawal printing a traditional border design on the shawl for the embroiderer

Aniruddha Mookerjee, WTI



Master embroiderer working on a shawl which will be fully embroidered

Aniruddha Mookerjee, WTI



Shahtoosh Shawl being given a final wash

Aniruddha Mookerjee, WTI



Shahtoosh Shawl being steam ironed

Aniruddha Mookerjee, WTI



Shahtoosh Shawl being pulled through a ring

comprise the shahtoosh shawl manufacturing industry:

Dealers	10
Manufacturers	70
Separators	5250
Spinners	21000
Weavers, inclusive of warp makers and other processes	5000
Washer-men	20
Finishers	40
Dyers	10
Darners	45
Designers	No estimates, small numbers
Block makers and design printers	No estimates, small numbers
Embroiderers	600
Shuttle makers	5

We are therefore looking at a total number of at least 30,000 people involved at all stages of shahtoosh manufacture. For the first time we have a reliable estimate of numbers which is actually higher than what the Chief Minister of the state of Jammu and Kashmir declared in a public meeting.

Alternatives

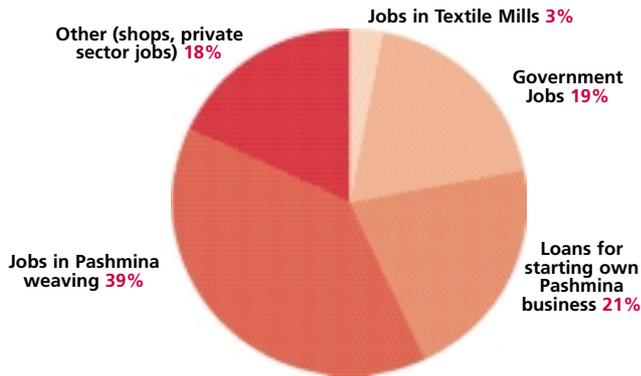
The illegality of the trade in Tibetan antelope products begs the question as to what economical alternatives exist for subsistence, especially amongst the older generation who have been doing this for years, and know no other skills.

The questionnaire asked the interviewees what they wanted to do once they stopped shahtoosh manufacture. The following responses are in order of preference as indicated by the interviewees:

- Pashmina weaving as piece rate workers
- Loans to start other businesses
- Government jobs
- Others
- Jobs in textile mills

Thirty-nine per cent of those interviewed said they wanted to move to weaving pashmina. Some of them always did weave pashmina as an additional activity or had gradually moved to it, knowing that the long term continuance of shahtoosh weaving was threatened by a ban. Even the 21 per cent who





Alternative options suggested by the shahtoosh workers

wanted loans indicated a desire to set up a pashmina weaving business. This means that an overwhelming 60 per cent of shahtoosh workers indicated a preference to shift to pashmina.

However, the respondents point out that the earnings from pashmina were about a third of shahtoosh even though it took less time to make a shawl. A weaver can easily make two shahtoosh shawls a month, and with extra effort, three. On the other hand, three to four pashmina shawls can easily be made every month.

Pashmina, being a thicker and stronger wool is also amenable to mechanised sorting and spinning with the result that the manufacturer can do away with the stages of hand separation and spinning and go directly to weaving. This would make hand separators and spinners redundant. Moreover, pashmina is also amenable to being mixed with other yarn and machine woven. As a result many pashmina shawls from Punjab are passed off as Kashmiri and sold at one quarter the rates, which kills the traditional market for hand woven shawls. Thus, for pashmina to be an alternative to shahtoosh, it will have to be pashmina with a difference.

A Case for Kashmina

Weavers from the Kashmir valley have a unique, traditional style. This is opposed to machine made products that are cheaper and downmarket. For those who understand its worth, a genuine Kashmir hand woven pashmina can command a far higher price. However, the demand for genuine pashmina is greater than can be supplied. This has led to the mass production of machine made shawls outside of Kashmir, which are of a much poorer quality, though they are sold as genuine Kashmir shawls. This is in

turn driving down the cost of these luxury items and confusing potential buyers.

Pashmina wool comes in many grades – from coarse to superfine. The finest is produced in a limited quantity in Mongolia. It can be as fine as 13 to 13.5 microns in mean fibre diameter (MFD) and compares well with shahtoosh, which has a MFD of 10 to 12 microns.

Traditionally, pashmina was sorted by hand in Kashmir, which involved the separation of different grades of fiber. Today, the supply of raw pashmina is being cornered by traders in Ladakh and Punjab, who are now supplying machine spun yarn to Kashmir instead. Punjab is also producing machine woven shawls for the lower end of the market. There is stiff competition from China for this end of the market and a hand made product will not be able to compete with a machine made one on price, if both are being sold for the mass market.

The largest segment of shahtoosh workers is comprised of the separators (graders) and spinners, who are exclusively women. As pashmina is currently machine separated and spun, this segment will traditionally have nothing to fall back on once they stop working on shahtoosh. Their future lies in the traditional style of pashmina weaving.

The way ahead, as suggested by experts in this field, is to give Kashmiri pashmina a special place, a niche as the best-woven pashmina. To do this the manufacturers will require direct sourcing of super fine pashmina from Mongolia or to breed the goat in Kashmir, providing appropriate animal welfare standards.

A superfine pashmina in the hands of the finest craftsmen will create a product for the ultimate upper end of the market. Such a shawl or a stole will have to be marketed for that niche of the market, certified as a genuine Kashmiri hand spun and hand woven product made in the traditional way. Each shawl should be accompanied by a certificate of authenticity which could be granted by an accredited body, appointed by the government of Kashmir. Thus an exclusive product will reach the upper end niche market, and will bring corresponding profits to traders and weavers alike (equal distribution of profits must be ensured), with embroidery adding to its exclusivity. IFAW/WTI suggest this finished product be branded a Kashmina.



The Campaign

During the late 1980s shahtoosh shawls became a fashion ‘must-have’ among wealthy trend setting Westerners, particularly in the UK, USA, France, Italy and Japan. In 1992 Richard Gere bought a shawl in India for his wife Cindy Crawford. Valentino used them on the catwalk and Donna Karan was reported as saying she would never travel without hers, although now says she no longer uses her shawl. Leading international fashion magazines featured shahtoosh, including British Vogue in summer 1999 in an article entitled “Survival Tactics – What do you need to get through parties and holidays that fill the summer months?” The magazine later said it had no idea of the “controversy about shahtoosh” and indicated it would stop promoting use of the shawl.

Fashion Victims

This chapter discusses efforts undertaken by IFAW and WTI to target the fashion industry as a means to halting demand of shahtoosh. Clearly, the international fashion world and its celebrity role models have a key part to play in the campaign to stamp out the illegal trade in shahtoosh shawls.

This fashion demand has led to the poaching and slaughter of Tibetan antelope, escalating to an estimated 20,000 per annum. While IFAW is working with Chinese anti-poaching patrols to protect the animals on the ground, the demand for shahtoosh must also be addressed. The Chinese authorities recognise that the only way to halt the killing is to tackle the demand for shahtoosh. They have called on the international community for help in achieving this. This is why both IFAW and the Wildlife Trust of India have launched campaigns aimed at the heart of the fashion industry, detailed below:

Support from the Fashion Fraternity:

Although the Indian fashion industry does not use shahtoosh in its designs, it is a peer group for shahtoosh users. Shahtoosh is an extremely expensive commodity, worn only by the social elite in India and abroad. As shahtoosh wool is still considered fashionable in these parts of society, it is



India’s leading fashion designers show solidarity to the shahtoosh campaign, at the IFAW-WTI stall in Delhi, 2000

necessary to therefore target consumers within the fashion industry with a public awareness campaign. As a result, in India, the fashion fraternity came out in full strength to denounce the use of shahtoosh and urged the public to do so as well. This was done as part of a highly publicised, week-long event, at the Lakme India Fashion Week, held in New Delhi in August 2000. At this event WTI obtained the support



Designers who have pledged to help save the Tibetan antelope from the illegal shahtoosh trade include:

Bill Amberg
 Audrey Ang
 Manish Arora
 Rohit Bal
 Tracey Boyd
 Donald Campbell Ltd
 Lindka Cierach
 Tania Chisholm
 Suzanne Clements (Clements & Ribiero)
 Helen David
 Rina Dhaka
 Karl Donoghue
 Elizabeth Emanuel
 Maya Fiennes
 David Fielden
 Shelley Fox
 Future Classics
 Rohit Gandhi
 Lezley George
 Elspeth Gibson
 Ranna Gill
 Wayne Hemingway
 Lainey Keogh
 Itanjali Kashyap
 Rahul Khanna
 Sandeep Khosla
 Angeline Kingsley
 Ritu Kumar
 Chloe Lui
 Krishna Mehta
 Sumeet Nair
 Puja Nayyar
 Sonja Nuttall
 Justin Oh
 Paloma Penez on behalf of Jade Inc & 1927 Ltd
 Cassandra Postema
 Edina Ronay
 Anne-Louise Roswald
 Neerja Shah
 Anthony Symonds
 JJ Valaya
 Mark Whitaker, Omnia
 Ken White, Herald and Heart Matters
 Zowie Broach, Boudicca



WTI

Gitanjali Kashyap, designer at the seminar held at Lakme Week 2000

of the Fashion Design Council of India to halt trade in shahtoosh shawls.

A first of its kind, the Lakme Indian Fashion Week is expected to become an annual, high profile spectacle. The inaugural fashion event saw India's top designers, both established and upcoming, showcase their best designs at 27 fashion shows, held over seven days.

About 5,000 couples were invited to the fashion shows, all of them potential buyers of shahtoosh. In addition there were at least another thousand persons by way of designers, their staff, models, hairdressers, make-up artists and their families.

All of India's leading fashion designers and models, including Rohit Gandhi, JJ Vallya, Kiran Uttam Ghosh, Anshu Arora Sen and Rohit Bal, actively supported the cause. Ritu Kumar, a leading figure within the Indian fashion world has led WTI's fashion campaign in her own inimitable style. Gitanjali Kashyap, a reputable designer of great talent used every opportunity to highlight the need for giving up the shahtoosh tradition through television talk shows and by promoting the unique "Tag-a-garment" scheme.

All these designers spoke up against the use of shahtoosh wool and the need to save the endangered Tibetan antelope, and endorsed the

campaign to 'Say No To Shahtoosh'. WTI was also given an opportunity to organise seminars at which slide presentations were delivered. These seminars were held on separate days through the week, where WTI representatives and the designers jointly answered questions about shahtoosh.

In addition, an IFAW-WTI display stall, the only non-fashion stall at the Fashion Week, highlighted the need to save the Tibetan antelope. At this stall, IFAW's China office presented a graphic collage of the chiru's killing ground, conducted press seminars, and ran a short film of the animal in its natural habitat made by the Chinese government. Not one person who viewed these events and displays left unaffected by the gruesome trade.

As a result of IFAW and WTI's close work with the fashion design industry, there was universal applause for their stand against the shahtoosh trade. Apart from highlighting the key role of the fashion world in the campaign the event underlined the urgency for publicity about shahtoosh: alarmingly, only a handful of the many people who attended the fashion event knew that the Tibetan antelope has to be killed to obtain its wool.

At the fashion week, a WTI representative spoke with each visitor personally and attempted to educate them about the source of shahtoosh, or the methods used to procure the raw wool. Each visitor was given a colour brochure and a fact sheet.

The interest shown by leading daily press is a positive reflection of how important the shahtoosh issue is to public perception.

During London Fashion Week in September 2000, designers Boudicca and Clements and Ribiero helped with publicity by placing IFAW's 'Save the Tibetan Antelope' leaflet on chairs at their shows, taking the message to the international fashion media.

Last year, IFAW's London office mass-mailed an information leaflet, pledge and appeal to 'Help Us Save a Species' to international fashion designers, celebrities, models, fashion stylists, photographers and consultancies. The purpose of this mailing was to raise awareness about shahtoosh as an illegal trade and that its purchase drives the Tibetan antelope ever nearer the brink of extinction. This mailing also promoted alternative luxury wraps, such as cashmere and silk pashmina.

The response was heartening. Celebrities including Kate Winslet, Minnie Driver, Joanna Lumley, Tara Palmer Tomkinson, Normandie Keith, Yasmin le Bon and Laura Bailey pledged their support along with leading fashion designers.



Press interest in shahtoosh



Top models support IFAW's 'Wrap up the Trade' campaign at the China White nightclub, London 2000

IFAW/Stevens

In December 2000, leading designers and celebrities gathered at Chinawhite – a prestigious London venue – for a fashion show hosted by Felicity Gain and Lisa Barbuscia, and an auction by Nick Bonham of garments donated by designers. This event raised funds for IFAW's campaign, including its funding of the anti-poaching patrols in China. Designers who donated items in support of the event included Anne-Louise Roswald, Audrey Ang,



Amanda Wakeley, Calver and Wilson, David Fielden, Elizabeth Emanuel, Elspeth Gibson, Issey Miyake, Jenny Packham, Joe Bloggs, Karl Donoghue, Lezley George, Matthew Williamson, Mulberry, N Peal, Patty Schelabarger, Rebecca Davies, and Tracey Boyd. Maya Fiennes designed and modelled a unique shawl created for the show and Lindka Cierach donated a beautiful hand-dyed, hand-beaded, pale blue glass silk, organza evening wrap that she created especially to epitomise an alternative to a shahtoosh.

Models included Lisa Barbuscia, Felicity Gain, Normandie Keith and Lady Victoria Hervey. The event was organised by Alon Shulman in support of the campaign to save the Tibetan antelope.

Media Efforts

In India, IFAW and WTI made concerted and direct efforts to get the message across to consumers through advertising.

The campaign started by using two striking advertisements designed by Denis Joseph, one of India's leading creative advertising persons, who has been associated with Hindustan Thomson Associates, among other leading agencies. Denis readily agreed to provide support to the shahtoosh campaign by helping in the design and execution of advertisements and other collaterals. These advertisements were effective, clearly tying the shahtoosh to its bloody source. Most of these advertisements were offered free of charge, as the media was sympathetic to the issue.

Various up-market magazines were targeted – magazines picked up by wealthy Indian women – including magazines such as *Outlook*, *Elle*, *Bride & Home*, *A Wedding Affair*, *Reader's Digest* and *The Oberoi Magazine* (which is an in-house production of the Oberoi Group of Hotels).

IFAW and WTI also designed a special poster to target a wider audience that may not have been exposed to such media. 1,500 adverts were placed with the help of volunteer college students at a hundred prime points of sale in New Delhi, which proved critical to the success of the campaign.

10,000 small and attractive single fold tags were designed, with the young chiru, and the message "Say No to Shahtoosh." Since the fashion fraternity is supporting the cause, it was felt that if the tags were attached to the collections of various designers,



Anti-shahtoosh poster put up in an up-market boutique



Anti-shahtoosh tag on a designer outfit

our message would spread to a larger target audience in India as well as abroad. The method was simple. A single tag was attached to every garment in the shop or were given away with every purchase. Customers then carried the tag along with the purchase. 5,500 tags were utilised in more than a dozen fashion boutiques in Delhi.

Tags were also displayed in prominent positions in the rooms of a leading Five Star hotel in New Delhi.

Influencing Policy

It was brought to the attention of IFAW and WTI, that although shahtoosh shawls have been banned in most countries, including India, many women attached to the various embassies in the capital were openly seen draped in shahtoosh shawls.

Hence, IFAW and WTI brought this to the

attention of the External Affairs Ministry in India and requested their help in tackling the issue. The External Affairs Minister, Mr. Jaswant Singh, showing great sympathy for the cause, instructed his ministry to issue letters to all the embassies, informing them of the illegality of the shawl. The true story of shahtoosh is now relatively well-known in the corridors of power in New Delhi.

IFAW China has produced numerous education materials to raised public awareness about the protection of the species and its habitat. In January 2000, 30,000 public awareness posters in the local language, designed and supplied by IFAW, were distributed by nature reserves and forestry police in Qinghai province. Special public awareness events and distribution of the posters on the main Qinghai-Tibet Highway were organized. Yet again, in January 2001, 130,000 of IFAW's new Tibetan antelope education posters were distributed to nature reserves, forestry police stations and local NGOs, in the entire Tibetan antelope range and the surrounding regions, targeting in particular the areas where many of the mineral extractors and poachers have come from.

Leaflet produced by IFAW China informing potential poachers of the highly endangered status of the chiru, and the penalties for poaching under Chinese wildlife protection law.



IFAW

This awareness campaign is even more vital now, especially since high profile confiscations and prosecutions for shahtoosh traders have forced the trade further underground. During 2001, IFAW has started to target the fashion capitals of Paris, Milan and New York, and WTI will be playing a prominent role during the Lakme Indian Fashion Week in Mumbai.

In China, IFAW directly funds anti poaching groups and provides equipment for patrols. Since the end of 1998, IFAW has provided grants and equipment to the Wild Yak Patrol in Qinghai Province. At the invitation of the group, in May 1999 IFAW representatives participated in an event at the edge of the Kekexili Nature Reserve, where 700 confiscated shahtoosh pelts were burnt. In the same year, IFAW donated anti poaching equipment and supplies to 5 anti poaching units, including Qiang Tang, Arjinshan and Kekexili nature reserves in the Tibetan antelope range in China. The donated equipment was put in use immediately and played an important part in the patrols of the Tibetan antelope calving grounds during the birthing season in 1999. In 2000, another donation of communication equipment including radios, generators, fax machines, binoculars and global positioning systems was made to 15 forestry police stations in Tibet Autonomous Region, Qinghai and Xinjiang Autonomous Region.

To facilitate dialogue between the species range countries and market countries, IFAW co-hosted with the CITES Secretariat, CITES China and other NGOs, the International Workshop on Conservation and Control of Trade in Tibetan Antelope, also called the Xining Workshop. In April 2000, at the CITES Conference of the Parties 11 (the CITES party nations meet every two to two-and-a-half years to review the status of the convention and resolve policy issues), IFAW helped draft Resolution 11.5, the Conservation and Control of Trade in Tibetan antelope, and which was adopted by the parties. From May 8-14, 2001, IFAW and the Chinese Forestry Police Administration co-hosted a training programme and workshop in Nanjing Forest Police Academy to promote a joint-enforcement mechanism throughout the whole Tibetan antelope range in China.

The IFAW-WTI campaign will continue to target the threat of poaching inside China and will seek to raise international public awareness on the plight of the Tibetan Antelope in order to reduce the market demand, and to eventually stamp out this illegal trade. The conservation of Tibetan antelope can play a key role in the protection of other wildlife species and the ecosystem of the Qinghai-Tibet plateau as a whole.





IFAW/Grace Ge Gabriel

Shahtoosh provided by CITES China office for China policemen to identify in training.



The Way Ahead

A joint investigation conducted by the International Fund for Animal Welfare (IFAW) and the Wildlife Trust of India (WTI) in 2000 has revealed highly secretive and horrific details of the illegal trade in shahtoosh shawls from India and China. This report documents the findings from this investigation and makes clear the grim plight of the Tibetan antelope, or chiru.

Despite international and range state legal protection, the chiru is still imminently threatened with extinction due to ongoing poaching in China for its under fleece – the exquisite shahtoosh wool. Fashion demand for shahtoosh has led to the poaching of an estimated 20,000 chiru per annum.

The IFAW/WTI investigation revealed that the shahtoosh wool is smuggled into India, where in the northern state of Jammu and Kashmir it is woven into shawls. The traditional markets for shahtoosh still exist within India, but the biggest allure for the illegal shahtoosh traders, and also the largest demand for the shawls, comes from the wealthy western fashion circuits.

The way toward ending the shahtoosh trade rests not only on the shoulders of the fashion elite, but in the hands of governments empowered to influence enforcement measures and develop economic programmes that may serve as incentives to stop the shahtoosh trade. These responsibilities and reforms will not come easily, and must be nurtured through effective partnerships among NGOs and government agencies and ministries.

To this end, the following recommendations are presented as prompts for relevant governments to find ways to work together and with NGOs, towards ending the illegal shahtoosh trade. It is the hope of IFAW and WTI that these recommendations and the findings from the shahtoosh investigation will enlighten and empower governments and other

decision makers to take decisive action towards saving the chiru.

Recommendations: where do we go from here?

- As part of an ongoing publicity campaign, relevant NGOs and government entities should target all fashion centres where shahtoosh shawls are in demand, whether it be India, U.S., Europe, Japan, and other Far Eastern countries, to get the fashion-conscious elite to stop buying the shawls. Awareness campaigns are even more vital now, since high-profile confiscations of shawls in India and the fashion centres of the West, as well as prosecutions for shahtoosh trading, have forced the trade further underground.

The fashion industry has shown great interest, and in fact has taken an active stand during the first Lakme Indian Fashion Week, held in London in August 2000. Through the impetus of IFAW and WTI, popular designers and other fashion elite spoke out against the shahtoosh trade. This exciting initiative must continue within these influential fashion circuits to play a significant role in raising awareness about the illegal trade and purchase of shahtoosh, and the subsequent deleterious effects on the chiru population. The fashion industry must also participate through promoting alternative luxury wraps such as cashmere and silk pashmina.

Many of those who still buy shahtoosh are equally ignorant of its source and of its illegality.



With the fashion industry's backing, IFAW and WTI can help change this and make shahtoosh a fashion 'no'.

- As the main range country, China has taken the lead in chiru protection. However, there remain many areas for improvement and collaboration with the international community, i.e. anti poaching, product identification, anti smuggling, internal law and CITES enforcement, public awareness and habitat conservation, etc. Besides the continuous funding of anti-poaching patrols, the Chinese government should strengthen enforcement by coordinating and training all authorities including CITES, customs, forestry police and nature reserve management. Since poaching of Tibetan antelope occur in its range in Tibet, Qinghai and Xinjiang in China, communication and joint enforcement efforts among the three regions urgently need to be enhanced.

- There needs to be greater vigilance and stricter enforcement of the relevant wildlife protection rules that have already been enacted by India, China and Nepal. Since the raw shahtoosh wool smuggling routes are close to the tri-junction of the borders of these three countries, the quality and degree of training of Customs and other enforcement officers posted in this region would have to be intensified. The Nepal government should enhance enforcement measures to stop the illegal transfer of raw wool and shawls through their territories. Customs and enforcement authorities in China, Nepal, India, Europe and the US need to be trained on shahtoosh identification procedures, monitoring techniques, and enforcement.

- If the manufacture of shahtoosh shawls is successfully phased out, the artisans of Kashmir – those who separate out the pure raw wool, spin it, weave it into shawls – all by hand – will need to be rehabilitated by giving them alternative, legitimate sources of income. Fortunately, the artisans also make high grade hand sorted and woven pashmina shawls. These, if branded as unique to Kashmir and authenticated by a certifying body, can give them a viable alternative to shahtoosh.

The Indian government should work with the states of Jammu and Kashmir (J & K) to develop Kashmina or other local alternatives to shahtoosh, and the means to market such products effectively. The way ahead is to give alternatives like Kashmir pashmina a special place, a niche as the best-woven pashmina. To do this, the manufacturers will require direct sourcing of super fine pashmina from Mongolia or breed similar livestock in Kashmir, providing appropriate animal welfare standards.

A superfine pashmina in the hands of the finest craftsmen will create a product for the ultimate upper-end of the market. Such a shawl or stole will have to be marketed for that specific niche, and certified as a genuine Kashmiri hand spun and hand woven product made in the traditional way. Each shawl should be accompanied by a certificate of authenticity that could be granted by an accredited body, appointed by the government of Kashmir. An exclusive product will bring corresponding profits to traders and weavers alike (equal distribution of profits must be ensured), with embroidery adding to its exclusivity. IFAW and WTI suggest this finished product be branded a Kashmina.

- Effective legislation must be developed and implemented in J & K, to stop the production of shahtoosh shawls. The supply side would have to be addressed through greater legal recourse aimed at a higher degree of compliance with the law banning the shahtoosh trade in India, with special emphasis on lobbying with the government of Jammu & Kashmir state to strictly enforce the J&K High Court's May 2000 judgment, which held that the state government is legally bound to enforce the Indian law banning the shahtoosh trade.

- In Europe and the US, the judicial system must impose tougher penalties on parties who have been convicted of trading and/or purchasing shahtoosh shawls.

The illegal shahtoosh trade is an enforcement problem in the west. These shawls are light, and easily smuggled through country borders. In the UK, IFAW supports the work being done by 'Operation Charm' – the initiative set up by the Wildlife Crime Unit of the Metropolitan Police. Together with Operation Charm, IFAW is sending out 'Shahtoosh Identification Kits' to Customs officials and other



IFAW/FON

Confiscated pelts being examined in China.

enforcement agencies in countries where this illegal trade has proved to be an enforcement issue.

- A National Tibetan Antelope Conservation Plan should be developed through a multi-agency approach. This plan would develop:

- draft conservation policies that would focus on habitat protection and anti-poaching strategies;
- training templates for customs officials, forestry police, and other authorities responsible for enforcing state and international laws; and



IFAW/FON

Piles of seized pelts ready to be burned.

- anti-shahtoosh campaign guidelines; and a market plan for kashmina and/or other alternative wool products.

Conservation of Tibetan antelope can also play a role in the protection of other wildlife species and the ecosystem of Qinghai-Tibet plateau as a whole.





Global Perspectives on Shahtoosh

Meng Xianlin

CITES, People's Republic of China

Tibetan antelope inhabits the Qinghai Tibet Plateau of China, is an important part of the global biodiversity and a natural treasure of the world. To protect this precious species, the Chinese government has established multiple nature reserves to preserve its habitat; enhance legislation and enforcement; organized anti poaching and anti smuggling campaigns to curb illegal activities; increase education and public awareness efforts through international workshops and multi country collaboration. We sincerely hope that relevant governments and organizations coordinate and increase collaboration, enforce CITES Resolution, jointly protect our mutual friend—Tibetan Antelope

Andy Fisher

Metropolitan Police, Wildlife Crime Unit, London

London is one of the main points of entry to the European Union. It is also a major trading centre with a very cosmopolitan population with a diversity of traditions. London has, therefore, all of the features necessary to play an active part in the illegal trade in endangered species, and it does exactly that.

Since the Metropolitan Police launched Operation Charm, our initiative against the illegal trade in endangered species in London, we have found that virtually anything, from anywhere in the world can be found for sale here, and this includes shahtoosh. Operation Charm works by a combination of law enforcement, and initiatives to form partnerships with traders, and increase public awareness of the endangered species trade. We have applied this formula to the shahtoosh trade in the same way as we have to the trade in traditional



Metropolitan Police

Metropolitan Police shahtoosh leaflet

Chinese medicines made from endangered species, and other items. This has had an impact upon the illegal trade, but the UK continues to provide a market place for shahtoosh, and this is something we are anxious to stop.

The trade in shahtoosh has probably existed within the Indian community for many years, but during the 1990s shahtoosh shawls became highly prized fashion items in the West, and a vast new market opened which threatens the survival of the Tibetan Antelope.

Seizures of shahtoosh shawls were made by customs officers in France, Italy and the UK, and coincided with reports from the People's Republic of



Andy Fisher

Shahtoosh shawl and shahtoosh skull.

China describing a big upsurge in poaching. In 1997, acting on information received from the Wildlife Protection Society of India, officers of the Metropolitan Police Wildlife Crime Unit executed a search warrant at the premises of an Indian company in Mayfair, and seized 138 shahtoosh shawls with a retail value of £353,000. In April 2000, in the first successful prosecution against the shahtoosh trade in the UK, the company concerned, the Renaissance Corporation, pleaded guilty to keeping an endangered species for sale, and was fined £1,500.

This was the first major seizure of shahtoosh in the UK, and was one of the largest in the world. Shahtoosh shawls are expensive items. Individual prices of the shawls seized in Mayfair ranged from £2,000 to £15,000, but those who shop in Mayfair can afford to pay top prices for the best items, and from our research, it was clear that there was a strong demand for shahtoosh here in London.

This was encouraged by deliberately misleading information on how shahtoosh is obtained, which was published by some of those in the trade. In the West they know that they are dealing with a sophisticated market where consumers want to know where things come from, so a number of "myths" have been circulated.

Some say that shahtoosh comes from the Ibex

goat, a different species altogether, whilst others say that the local people obtain shahtoosh by following the Tibetan Antelope and collecting the strands of wool from the bushes that the animals rub against. Of course, neither of these is true. The only way to obtain shahtoosh is by killing an endangered species, and plucking the wool from its skin, and, of course, there are no bushes at the very high altitudes where these animals live!

It has been our experience, in Operation Charm, that most people in the UK will not buy products that they know are made from endangered species, but they may do if they are not told the truth.

We thought it was important, therefore, to put the record straight about shahtoosh, and make sure that people here knew the true nature of the illegal trade. In 1999 we published an advice leaflet "The Illegal Trade in Shahtoosh", which has been distributed to both retailers and the general public. We also produced an Information Pack, which we offered to retailers of high quality woollen goods and department stores, which they can use to train their staff to explain the facts to customers enquiring about shahtoosh. This received a very positive response, and demand for copies of the pack far exceeded our expectations. We have also been helped by the very active interest that the media have taken in the subject, and all of this has helped us to increase public awareness of the shahtoosh trade, and reduce demand in the UK.

We now find that shahtoosh is not sold openly in shops, the way that it was three or four years ago, because the message is getting across to consumers and retailers. The demand for shahtoosh in London is not what it was, and this is good news for the Tibetan Antelope. However, there are still people in London who are prepared to pay very high prices for shahtoosh shawls, and as long as this continues, so will the poaching.

In China, the anti-poaching patrols are quite literally risking their lives to protect the Tibetan Antelope. The only reason that the poaching happens at all is because people in countries like ours want to buy shawls.

In the UK there is a tendency to think that the endangered species trade is something that happens somewhere else, but it goes on here in our country. One of our main tasks is to make the public aware of



this, and by doing so make things as difficult as possible for those who continue the illegal trade, but we will also take further enforcement action when necessary.

In every sense it is a very long way from the streets of London to the remote mountain home of the Tibetan Antelope, but the action of people here can influence what happens there, for good or bad. If people in countries like ours did not buy shahtoosh, there would be no poaching of Tibetan Antelope in China.

In the UK it is illegal to buy, as well as to sell any item made from an endangered species, but stopping the illegal trade in shahtoosh here will not be easy. Wherever a demand exists, and a profit can be made by meeting that demand, the illegal trade will continue. This is as true of shahtoosh as it is of drugs or any other commodity, but we can all play a part in stopping this, and helping to save the Tibetan Antelope.

The Metropolitan Police is committed to stopping the shahtoosh trade in London, and the work, which we are doing in Operation Charm, will continue.

Maneka Gandhi
Minister of State for Social Justice and Empowerment, Government of India

Many people who do not hesitate to wear a pig's tail around their necks or a horse's hoof around their waist, will not think twice about wearing eight dead antelopes around their shoulders. That is what a shahtoosh shawl is.

Do not be misled by traders and chattering society women who insist that the shahtoosh shawl is obtained from some mythical chin hair rubbed on bushes by the chiru. There is only one way to get shahtoosh hair and that is by killing the antelope.

When you wear this mousy shawl you are not proclaiming how rich and privileged you are, you are merely making a statement about your insensitivity and willingness to cause death.

Elizabeth Emanuel
Fashion Designer, London

Those who wear or aspire to wear a shahtoosh demonstrate to all around their vanity, lack of intelligence and complete disdain for other living

creatures. Not only is killing the Tibetan Antelope for fashion unnecessary and cruel, it is unfashionable. With the wide spread publicity concerning the demise of this endangered species ignorance is no longer an excuse.

Even the most ardent follower of fashion will know that there are sufficient alternative fabrics to follow every new trend without resorting to driving this beautiful creature to extinction. As fellow inhabitants of this fragile planet we have a moral duty to nurture not plunder our environment.

Ritu Kumar
Fashion Designer, India

The Indian sub-continent is home to the chiru. The wool from the animal has always been considered rare and unique due to its light quality, natural colouring, and warmth. This wool is painstakingly hand spun in Kashmir, largely by women, and then woven on hand looms to produce shawls of outstanding luxury, which few can appreciate or afford. The shahtoosh shawl industry has existed for centuries in India. The quantities produced were small, woven by an indigenous cottage industry. Fashion is the kiss of death for the chiru. The interest in any hand-crafted product comes in like a tidal wave. It is followed by demands, which the craft cannot meet. In trying to cash in on trade, a large number of middlemen come into the picture, who are not sensitized to the situation. When the wave subsides and begins to ebb it leaves behind desolation as people have lost their traditional balance of demand and supply, and flooded the market to a point where their craft is not required by anyone. In the last few years the shahtoosh shawl has become fashion's latest victim. The desire to own a shawl by the fashion conscious in India was always there. What has changed the equilibrium is the overwhelming demand from around the world. In the last few years fashion demands have led to the rapid decimation of the chiru population, as the animals are wiped out for their wool. This fashion demand will pass. In this case it would not only put weavers out of work, but will also wipe out the entire species. We must create an awareness in the fashion world, if the chiru is to be saved. We must pledge not to use or glamorize the wool from this endangered animal.



Appendices

APPENDIX A

Cuticular features: The angora guard hair shows parallel wavy scale patterns with a smooth margin from tip to Chevron scales. The distance between the scales is small. Towards the base of hair the scale pattern changes to parallel wavy with a scalloped margin. Pashmina guard hair displays irregular wavy scale pattern and crenate margin and the scales are distant. These characteristics are same at different regions of tip, mid and base. Ibex hair exhibits irregular scale pattern with crenate margin. The Tibetan antelope guard hair, however, displays an entirely different scale pattern. The scale characteristics are regular mosaic with a smooth scale margin. Scales are placed distant to each other. Grooves can be seen at regular intervals representing the bending of the wavy pattern. Wool fibers of the species also display scale pattern which are characteristics of the species studied and can be used for identification purposes. However, only the cuticular features are useful. In case of angora wool fibers the scale pattern varies from parallel wavy chevron to parallel wavy with a smooth margin. Pashmina wool hair shows irregular wavy scale pattern and at the base the margins are highly rippled compared to the middle and tip of hair. The scale pattern of wool hair of ibex is irregular wavy with smooth margin and distance between scale is large. The wool hair of shahtoosh has a scale shape similar to guard hair but the pattern looks irregular and wavy with a smooth margin.

There is also considerable difference in the medulla of the hair. Angora has a multi-serial ladder while Pashmina guard hair has simple medulla. The ibex and shahtoosh guard hair has a medulla of wide lattice type. The cross section of the hair of ibex is oval shaped, concavo-convex with a large medulla.

The hair shape of angora rabbit is dumb-bell shaped with a bi-lobed medulla. Pashmina hair has a circular shape with a medium size medulla. The shape of shahtoosh hair is circular with a large medulla.

Optical microscopy was also conducted by the National Fish & Wildlife Forensics Laboratory of the US Fish & Wildlife Service (Yates, 1997). For visual or macroscopic examination, four parameters were used: the weight of the shawl, the gross appearance of the kemp fibres, and the distinctive diamond pattern (commercially called chashme-bulbul or the eye of a bulbul bird) incorporated into the weave of an authentic shahtoosh shawl. The unknown fibres were compared directly to standards of the cashmere goat, wild ibex, domestic sheep, musk oxen, and the Tibetan antelope. The US Fish & Wildlife Service concluded after its forensic examination that the fine woolly fibres of cashmere goats were not reliably differentiated from the fine fibres of the endangered Tibetan antelope by Standard Electron Microscopy. Nevertheless, it observed that kemp fibres are readily found incorporated into the weave of shahtoosh shawls and may be identified under transmitted light microscopy by the configuration of the medulla. The medulla of the kemp fibres of the *Pantholops* provide the most distinctive species identification feature. The continuous lattice medulla that completely fills the diameter of the shaft and the rounded shape of the large medullar cells are characteristics of *Pantholops*.

APPENDIX B

Wildlife Observations

Our journey took us along the valleys of the main Tsangpo and Indus river systems in south-west Tibet and along areas south of the Chang Tang Reserve. Throughout the journey, valleys and slopes were well-populated by nomadic pastoralists and their large



herds of domestic livestock – mainly sheep, goats and yak. Nevertheless a number of wildlife species co-exist there and were visible from the road. The air was clear, valleys often wide and flat, and vegetation sparse and short and therefore the visibility was good. However the wildlife survey was not a main objective of the journey and thus the observations were taken while on the move rather than with any more scientific method or diligence. The figures therefore give little more than an indication of relative abundance for the areas we passed through. The main interest and biggest thrill was meeting with a population of the endangered Tibetan antelope.

**Chiru: Tibetan Antelope
(*Pantholops hodgsoni*)**

Habitat:

The Tibetan antelope occur only on the Qinghai-Tibetan plateau and outside China are found only in the Ladakh region of India to where an estimated 200-220 animals (mostly males) migrate during summer (Fox, Nurbu and Chundawat 1991; Talwar and Chundawat 1995). Tibetan antelope prefer flat to rolling terrain although can penetrate mountain range by following valleys and ascending high rounded hills. They favour alpine steppe or similar semi-arid habitats. Most of the chiru range lies above 4000m and rarely they are reported as high as 5500m (Schaller 1998).

We sighted chiru only on day 26 of the expedition – 4 October 2000. We found them 152 km beyond Tsochen (Coqen) on the road going south. We had six sightings of chiru within a 22 km stretch at heights between 5045m and 5345m (16,550-17,500ft) and saw a total of 101 individuals. The pelage of many of the chiru had the strong red tinge of their summer coat although some of them, males particularly, were already taking on their winter colours.

Our first sighting occurred at around 16.30 hrs, three kilometres after we crossed a 5420m pass. We had stopped to count some kiang that we had spotted several kilometres away when we saw four animals behind them on the slope that looked very reddish and quite the wrong colour for gazelle. We strongly suspected they were chiru and approached closer on foot to verify this. We confirmed that they were four female chiru although we found they were

disturbed by our presence at approximately 1,000 metres. We saw three more female chiru 2 to 3 km along the slope to the south and watched the seven animals until 17.50 hrs. The GPS reading from our viewing position is N 30° 06'19.6" E 085° 28'20.2" and the elevation is 5295m (the chiru were approximately 50m higher). Seven kilometres on we sighted 4 male chiru on the far (east) side of the stream running not far from the road and close by them 5 more males. On the other side of the road were 5 females and young and 3 male chiru (17 chiru in total). We approached the male group for photography and found they were not very shy and allowed us to come within 100-150m. The fact that they neither run from us on foot or were bothered by the close presence of the vehicle indicated that this population may be more used to the activities on the road. We spotted the 17 chiru at 18.15 hrs and watched them until 19.05 hrs. We recorded their elevation as 5215m and GPS reading is N 30° 05'26.2" E 085° 32'30.7". After driving a further eight kilometres we saw 12 more chiru at 19.25 hrs – N 30° 04'33.4" E 085° 36'40.7", a little above our then elevation of 5125m. Five kilometres further, at 19.40 hrs, in the last of the sun's rays, we spotted 65 chiru along an approximately 3 km stretch of the valley at the base of a ridge. N 30° 03'16. 6" E 085° 38'48.7" at 5045m elevation.

**Chiru information based on interview
(conducted through Tibetan/English
speaking interpreters):**

15 September 2000, Sangsang N 29° 26'44.5" E 086° 41' 51.5", 4530m elevation:

Dokpas (nomadic pastoralists) reported seeing chiru in areas to the north. One woman, Pemba, camping just beyond Sangsang with her 200 sheep and 100 yaks, said that chiru were found to the North/Northwest about 3-4 days walk from here (8 to 9 days if travelling with livestock, she said). Other Dokpas also pointed northwards and one mentioned an area near a road repair station about 100 kms west.

Pemba – as several other people met during the expedition – mentioned how delicious chiru meat tasted – more so even than yak meat, they said. She told us that they were usually shot in the autumn but only by particular people who were considered to be of a lower status. The horns and/or skull were used

or sold, but amongst the group we conversed with, there seemed to be little knowledge of the fur/skin use. Pemba remarks that they were sometimes used by rich people.

20 September 2000, Nari Busum

N 30° 16'06.9" E 082° 57'15.6", 4510m elevation:

At a stop approximately 62 kms after Pharyang we talked to a Dokpa who pointed towards a nearby ridge to the south and told of seeing 1000 chiru this time last year – male, females and young. He said this year he had not gone to the area as it was now restricted and he would need to obtain a permit. (Our Tibetan guide, and interpreter on this occasion, Yukai informed us that in the last year or so the authorities had restricted movement to increase chiru protection and also that police and army patrols had been alerted to protect the chiru and to catch poachers). The Dokpa also told us that he had seen around 200 chiru in the area in May. He reported that all the chiru went elsewhere in the winter.

3 October 2000, Tsochen

N 31° 01'08.3" E 085° 09'22.8" 4595m elevation.

Dokpas said that chiru were in the hills to the Southwest, about a day's walk away. One said that they were seen near his village, Sagma one month back. Groups of around six or seven were mentioned and both sexes were seen with calves being observed in March. They also said they eat gazelle and chiru meat and that the latter is the most tasty.

4 October 2000. One kilometre before a pass N 30° 06'38.2" E 085° 25' 58.5", 5420m elevation (approx. 150 km after Tsochen)

We met a Tibetan road worker, Gyaltsen, who told us that he had seen 3-4 female chiru over the hill to the west a few days ago (This was the same general area of our first chiru sightings 3km over the same pass shortly after the conversation).

Tibetan Gazelle (*Procapra picticaudata*)

Gazelle are animals of open landscapes, of plains, hills and even mountains. Their principal habitat is alpine meadow and alpine steppe. They avoid much of the desert steppe and other arid areas which have few of the small forbs that are their main forage (Schaller 1998). Outside China small gazelle populations occur in north Sikkim (Shah 1994) and in

Ladakh where they are now close to extinction with fewer than 50 individuals believed to survive (Fox, Nurbu and Chundawat 1991).

A total of 539 gazelle were encountered in 2660 km during this survey; many of these sightings were in the vicinity of domestic livestock and sometimes close to human habitation. A majority of the sightings were concentrated in basins or valleys. Over 48% of the gazelle were sighted between Tsochen and Raga and 22% between Mayum La and the pass beyond Moincer (Table 2). The highest daily count was on day 26 (the 'chiru day') when 219 gazelles were recorded – an encounter rate of 1.27 gazelle/km. The group size varied from 1 to a congregation of 49 gazelle but most (70%) of the groups seen were comprised of between two and nine animals. The Tibetan gazelle in N. Sikkim India had a group size, which varied from 1 to 13 (Shah 1997).

Tibetan gazelle were regularly reported to be eaten and we came across direct evidence of this. On day 26, at around 14.25 hrs, having just enjoyed a beautiful sight of 19 female gazelles and two males peacefully grazing along the banks of a roadside stream, we crossed a small pass (5090m) and stopped by a Chinese roadworkers camp. The carcass of a recently killed female gazelle was hanging outside their tent while the well-skinned hide was lying over a rock to dry in the sun.

Tibetan Wild Ass (*Equus kiang*)

The kiang is an animal of open terrain of plains, basins, broad valleys and hills, wherever suitable forage especially grass and sedge is abundant (Shah 1994, 1996, 1997, Schaller 1998). In Tibet, kiang persist in fragmented populations along the foothills of the Himalayas. Those in the eastern part are separated from the northern populations by agriculture and many villages in the valley of the Yarlung Tsangpo (Schaller 1998). Jammu and Kashmir census figures suggest that over 1500 survive in the Ladakh region of north-west India (Fox, Nurbu and Chundawat 1991, Shah 1996). Kiang also enter north Sikkim from Tibet, in low numbers ranging from 10 to 120 (Shah 1994). It is listed as 'vulnerable' in the IUCN Red Data book.

A total of 421 kiang were sighted in 2,660 kms of travel (Table 1.2). 45% of the kiang were sighted between the Mayum La (pass) and the pass beyond Moincer in the Mansarovar/Kailash/Sutlej catchment



areas (Table 2). The group size of kiang varied from 1 to 69. Approximately 2.4% were solitary animals and the average of groups less than 2 was 18. The highest count for one day, of 132 animals, was on day 13 between Mayum La and Lake Manasarovar – an encounter rate of 1.4 kiang/km.

Bharal (blue sheep) (*Pseudois nayaur*) and Argali (great Tibetan sheep) (*Ovis ammon hodgsoni*)

Bharal occur in a variety of environmental and climatic conditions above the tree-line, between 3300m and 5400m. They avoid forest cover and prefer to remain in the vicinity of rocky cliffs which provide good escape terrain (Schaller 1977). As for most of the journey the roads ran along valley bottoms or over open rolling saddles far from appropriate cliff habitat, it was not surprising that bharal were not sighted during travelling. However a total of 112 bharal were seen during the expedition, in three areas – 20 high on an eastern slope above the town of Nyalam, 80 on the first day's trek around Mt. Kailash, including one group of around 50 males, and 12 feeding and resting on a broken steep slope above the hot geysers from our camp on the morning of 27 October 2000. Bharal horns and skulls were also seen above doorways and on Lhathos and local people were generally familiar with the species, confirming their presence.

Argali prefer very open, smooth, rolling slopes, the kind of habitat we had traveled through much of the time. We had therefore hoped for some sightings of this animal – the largest of all wild sheep – but were disappointed to see none. Local people appeared familiar with the species and reported seeing (and eating) argali and one of the team were shown a male argali skull that had been kept buried in Paryang.

Other wildlife sighted:

Voles (*Alticola sp.*) and mouse hare (*Ochotona sp.*) were seen abundantly from day 3 onwards (Tingri and beyond). Himalayan marmots (*Marmota himalayana*) were also seen most days from day 7 (Lhatse-Sangsang) and a few hare were also spotted. Five foxes (*Vulpes vulpes*) were encountered en route and one Himalayan weasel (*Mustela sibirica*) was sighted near Paiku Tso. (A local Dokpa who was passing

picked up a rock and appeared to be about to throw it at the weasel but we requested him to abstain; he obliged). Snow leopards, lynx and/or wolf were reported from many areas and wild dogs were known in a few.

We were excited to count approximately 105 black-necked crane adults and 19 chicks (in 15 families) in the riverine wetland tracts and lakeside marshes along the road sides at elevations between 4170m and 4700m. A further four adults were seen during the stationary day in Paryang and five on day 20 from the camp before Gakyi but neither of these sightings have been included in the total tally so as to avoid the possibility of double counting. At a wetland near Sangsang locals said they had seen 20-30 cranes; we saw only one pair in the area. Four cranes were also reported by the locals at Paiku Tso but they were not sighted by the team. Only cranes sighted by team members have been included in the total.

Only 33% of the 45 recognised pairs were observed to have chicks with them (some were too far to distinguish adult/chick with certainty). Fifteen pairs were seen with young and four of these had two chicks. All of these were fledged and of similar size – close to that of the adults – except for two chicks seen between Saga and Old Dongpa which were small (around half the size of the adults) and still buff coloured. As these were seen in mid September, it is speculated that this may have been a case of re-nesting as the primary egg-laying period for the region is reported to be from the end of April to the end of June, with mid to late May being the peak period (Li and Bishop 1999).

The highest number of cranes were seen in the area between the pass beyond Raga (along Highway 219) and Mayum La (39% of the adults and 37% of the chicks) (Table 2). Much of this route runs along the Tachok Tsangpo (Brahmaputra) valley. The highest count in a single day (26 adults and 3 chicks) was on day 10 between our camp before Old Dongpa (Zhangba) and Paryang, giving an encounter rate of 0.22 cranes/km. 68.5% of the black-necked cranes were sighted between Sangsang and Darchan, a distance of 702 kms (Table 1.2).

There was clearly little to no direct persecution of the cranes in the areas we passed through as they were frequently seen close to domestic livestock, human habitation and even people. They also did not appear unduly shy when approached by us on foot.

Daily movements and details

Day	Date	Journey from:	To:	Km.	m. ASL at halt	Dep. time	Arr. time	Travel hours
1	9/9/00	Kathmandu	Zhangmu			6	17	11
2	10/9/00	Zhangmu	Nyalam	34	3800	16.25	18.45	2.2
3	11/9/00	Nyalam	nr. Old Tingri	156	4275	10.25	17.3	7.05
4	12/9/00	acclimatise nr. Old Tingri		0	4275			
5	13/9/00	ditto		0	4275			
6	14/9/00	Old Tingri	Lhatse	150	3975	10.3	18.3	8
7	15/9/00	Lhatse	Sangsang	126	4530	12.3	19	6.7
8	16/9/00	Sangsang	20kms before Saga	161	4470	10.4	19.1	8.7
9	17/9/00	Camp (Saga less 20 kms)	Old Dongba less 37kms	129	4480	10.23	19	8.77
10	18/9/00	Camp Old Dongba less 37kms	Pharyang	130	4550	11.2	18	6.8
11	19/9/00	Pharyang		0	4550			
12	20/9/00	Pharyang	Mayum La base	123	4865	9.4	18.45	9.05
13	21/9/00	Mayum La base	Lake Manasarovar	106	4530	10.3	17.15	6.85
14	22/9/00	Lake Manasarovar	Darchen	53	4575	11.07	14.3	3.23
15	23/9/00	Kailash parikrama			5025	10.2	18.38	
16	24/9/00	ditto			4940	9	15.3	
17	25/9/00	(Kailash camp -)Darchen	Moincer (Misar)	63	4435	16.25	18.5	2.25
18	26/9/00	Moincer	Gar	196	4315	10.05	18.45	8.4
19	27/9/00	Gar	Gakyi (Ge'gyai) less 18km	99	4495	15.4	19.2	3.8
20	28/9/00	Camp (truck breakdown)		0	4495			



Daily number of species recorded

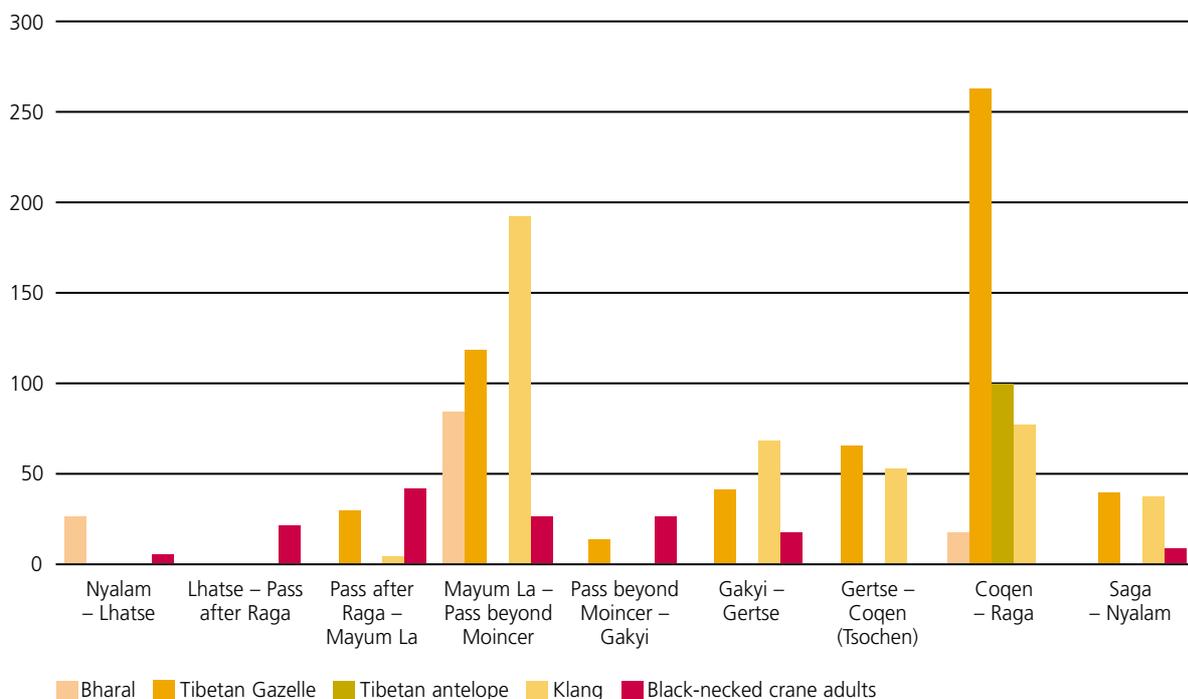
Day	Date	Journey from:	To:	Bharal	Tibetan Gazelle	Tibetan Antelope	Kiang	Black-necked crane	Fox
1	9/9/00	Kathmandu	Zhangmu						
2	10/9/00	Zhangmu	Nyelam						
3	11/9/00	Nyalam	nr. Old Tingri	20					
4	12/9/00	acclimatise							
5	13/9/00	ditto							
6	14/9/00	Old Tingri	Lhatse					2	
7	15/9/00	Lhatse	Sangsang						
8	16/9/00	Sangsang	20kms before Saga		8		3	14	
9	17/9/00	Camp	Old Dongba -37 km					5+2	
10	18/9/00	Camp O.D.-37km	Paryang					26+3	1
11	19/9/00	Paryang							(4)
12	20/9/00	Paryang	Mayum La base		2			10+2	
13	21/9/00	Mayum La base	Manasarovar		37		132	4+2	1
14	22/9/00	Manasarovar	Darchen		18			12+5	1
15	23/9/00	Kailash parikrama		80					
16	24/9/00	ditto							
17	25/9/00	Darchen	Moincer		63		58		
18	26/9/00	Moincer	Gar		7			10+1	
19	27/9/00	Gar	18km before Gakyi					4	
20	28/9/00	Camp (breakdown)						(5)	
21	29/9/00	Camp before Gakyi	Yanhu		15		4	6+1	
22	30/9/00	Yanhu	Gertse		19		64	6	
23	01/10/00	Gertse							
24	02/10/00	Gertse	Tsochen less 66kms		64		52		1
25	03/10/00	Camp	Coqen + 49 kms						
26	04/10/00	Camp	Geysers		219	101	77		1
27	05/10/00	Geysers	Paiku Tso (via Saga)	12	87		29	4+3	
28	06/10/00	Paiku Tso							
29	07/10/00	Paiku Tso	Zhangmu				2	2	

Species recorded by area

The 2,660 kms of the journey from Nyalam to Nyalam were divided into nine areas by prominent geographical features and the distanced travelled in each are listed. The number and percentage of wild species recorded in each area is given below:

Journey stage	Height in metres	Distance travelled	Bharal	Tibetan Gazelle	Tibetan Antelope	Kiang	Black-necked crane
Nyalam – Lhatse	3755 – 3975	306kms	20 18%				2 1.9%
Lhatse – pass beyond Raga (Raka Tsangpo)	3975 – 5005	263kms + 59kms					14 13.3%
Pass (Saga 173353) - Mayum La (Tachok/Yarlung Tsangpo)	5005 – Saga 4390 – 5150	418kms		22 4%		3 0.7%	41+7 chicks 39%(5 fams.)
Mayum La – pass after Moincer (Mansarovar/Kailash/Sutlej)	5150 – Lake M. 4530 – 4750	237kms 71%	80 22%	118		190 45%	16+7 chicks 15.2% (6 fams.)
Pass (after Moincer) - Gakyi (Gar Zangbo/Seng-Ge Tsangpo)	4750 – 4415	286kms		7 1.3%			16+1 chick 15.2%
Gakyi – Gertse (Changthang)	4415 – 4400	361kms		34 6.3%		68 16%	10+1 chick 9.5%
Gertse - Tsochen (Coqen) (Changthang)	4400 – 4595	257kms		64 12%		52 12.4%	
Tsochen – Raga	4595 – 4850	240kms	12 11%	261 48.4%	101 100%	77 18.3%	
Saga – Paiku Tso – Nyalam	4390 – 4525 – 3720	233kms		33 6.1%		31 7.4%	6+3 chicks 5.7% (2 fams.)
Totals:		2660kms	112	539	101	421	105+19 ch.

Wildlife sightings in different areas of the journey





IFAW/Wild Yak Patrol

Skins and weapons seized by the Wild Yak Patrol.



Bibliography

- Das, Shukla. 1992. *Fabric Art: Heritage of India*.
- Ding, Pin. 1999. *China Environment News*.
- Forster, G. London 1798. *A Journey from Bengal to England*
- Fox, J., C., Nurbu and R. S. Chundawat 1991. *The mountain ungulates of Ladakh, India*. Biol. Cons. 58: 167-190
- Henry, Gray. 1997. *Islam in Tibet*.
- Irwin, John. 1952. *The Shawls of Kashmir*
- Jaitley, J. 1990. *Crafts of Jammu, Kashmir and Ladakh*.
- Kumar, Ashok, and Wright Belinda. 1997. *Fashioned for Extinction: An Expose of the Shahtoosh Trade*. Wildlife Protection Society of India.
- Li, F. and M. A. Bishop, 1999. *Ecology and conservation of black-necked cranes (Grus nigricollis)* in Adams, N. J. & Slowtow, R. H. (eds) Proc. 22 Int. Ornithol. Congr., Durban: 2533-2543. Johannesburg: Birdlife in South Africa.
- Lowe, J., Ginsberg, J.R., and Schaller, G.B. 1999. *A Petition to list the Tibetan antelope as an endangered species pursuant to the US Endangered Species Act of 1973*. Submitted by Earth Island Institute, San Francisco, CA, and Wildlife Conservation Society, Bronx, New York, USA.
- Moorcroft and Trebnech. London, 1841. *Travels in the Himalayan Provinces*.
- Schaller, G.B. 1998. *Wildlife of the Tibetan Steppe*. The University of Chicago Press. Pp 373.
- Shah, Nita V. 1994. *Status survey of Southern kiang (Equus kiang polyodon) in North Sikkim, India*. Report, M.S. University of Baroda, Baroda, Gujarat.
- Shah, Nita V. 1996. *Status Survey of Western kiang (Equus kiang kiang) in Chang Thang Plateau, Ladakh, India*. Report, M.S. University of Baroda, Baroda, Gujarat.
- Shah, Nita V. 1997. *Status Survey of Southern kiang (Equus kiang polyodon) in North Sikkim, India Phase-II*. Report, M.S. University of Baroda, Baroda, Gujarat.
- Talwar, R. and R.S. Chundawat. 1995. *A report on the survey of Tibetan Antelope (Pantholops hodgsoni), in the Ladakh region of Jammu and Kashmir*. Supply Centres for Shahtoosh Trade in West Tibet.
- Yates, Bonnie C. 1997. *Microscopic Distinctions in the Kemp Fibers of the Tibetan Antelope*.
- Zhang, H.B, Liu, Z.H. and Xu, D.H. 2000. *Twenty-first Century Environment*.



