FEMALE SNOW LEOPARD WITH OFFSPRING, COLOGNE ZOO, 2003. H. FELLER

The Trade in Leopard and Snow Leopard Skins in Afghanistan

A.R. Manati

Introduction

Afghanistan contains some of the most interesting and diverse habitats in the world—from deserts to high mountains—and supports a rich fauna. Of the 120 species of mammals (Habibi, 2003), there are 29 species of carnivores, among them: Jungle Cat *Felis chaus,* Wild Cat *Felis silvestris,* Leopard Cat *Prionailurus bengalensis,* Pallas's Cat *Otocolobus manul*, Caracal *Caracal caracal,* Himalayan Lynx *Lynx lynx isabellina,* Snow Leopard *Uncia uncia,* Leopard *Panthera pardus* and Cheetah *Acinonyx jubatus venaticus*. Skins of all these CITES species are to be found for sale in the country's markets, including species that have not been seen in the country for several decades, such as the Cheetah (Manati and Nogge, 2008), and in spite of the fact that Afghanistan acceded to CITES in 1985 and has made provision for the implementation of the Convention in its national legislation. The object of this study was investigation of the trade in skins of Leopards and Snow Leopards.

Methods

Over a period of four years—2004 to 2007—surveys were conducted at the bazaars of some of the country's major cities to investigate the sale of furs of spotted wild cats, in particular Leopards and Snow Leopards. During April to December 2004, a total of 11 shops in Kabul, seven of which were located in Chicken Street—the city's principal shopping area for tourists—were visited weekly, or more frequently, to evaluate the trade in furs of wild cats. The number of furs purchased and sold over this period was recorded. These figures are mainly based on information from interviews with traders and much of the information, such as on the origin of the products, prices and clients, was gathered from the shopkeepers. Furs were photographed and measured, and samples of hair taken for later moleculargenetic examination in the frame of a Ph.D. thesis (Manati, 2008). Further surveys were carried out in Kabul in April/May 2006 and in June 2007.

In November 2004, the markets in four major cities in northern Afghanistan—Mazar-e-Sharif, Kunduz, Taloqan and Faizabad—were surveyed. A second trip to northern Afghanistan, in April 2006, included visits to Baharak and Ishkashem in the eastern part of the province of Badakhshan.

To estimate the impact of hunting on the free-ranging population of Snow Leopards in Afghanistan, software called VORTEX, developed by the IUCN/SSC Conservation Breeding Specialist Group (CBSG) for their Population and Habitat Viability Analysis (PHVA) workshops, was applied.

Year	Leopard	Mean Price (USD)	Snow Leopard	Mean Price (USD)
2004	28	825	24	583
2006	44	1037	21	652
2007	13	880	5	860
Total	**85**		**50**	

Table 1. No. of different individual skins of Leopards and Snow Leopards on offer and mean prices in the market of Kabul, over the whole of 2004 and single inspections in 2006 and 2007.

Results

In 2004, a total of 28 Leopard skins and 24 Snow Leopard skins were seen being offered in the shops surveyed in Kabul, for an average price of USD825 and USD583, respectively (Table 1). In addition, 25 skins of Himalayan Lynx and 321 skins of various other wild cat species were recorded. There was no difference in availability in different months of the year.

In 2006, during a single inspection at the market in Kabul, 44 Leopard skins were being offered for sale, almost twice as many different individual skins on offer as in the whole of 2004. Prices had also increased over the two years by 20%, to an average of USD1037 per skin. The number of Snow Leopards recorded at this inspection was 21, approximately corresponding to the figure for the whole of 2004 for different individual skins on offer. The prices of Snow Leopard skins had also increased, to an average of USD652 per skin.

In 2007, the authorities had started to take action to control the trade in endangered species in Kabul and this improvement in enforcement was reflected in the drop in the number of furs being offered for sale at the same market, to 13 Leopards and five Snow Leopards (Table 1). Shopkeepers therefore displayed only samples, but more skins were reported to be concealed and stored in stock rooms. They were also hesitant in giving any more information on the extent of their trade in skins of endangered wild cats. However they confirmed that the demand for these skins by their clients—without exception foreigners looking for exotic souvenirs—was undiminished, with equal interest in skins of Leopards and Snow Leopards. This enduring demand can also be concluded from the prices paid: an average USD880 for a Leopard skin and USD860 for a Snow Leopard skin (Table 1).

The origin of the skins could only be identified by information from the shopkeepers. The 85 Leopards had been collected from nine provinces, from west to east: Herat (29), Badghis (4), Faryab (1), Ghor (1), Bamiyan (1), Balkh (3), Samangan (6), Badakhshan (20) and Laghman (11). Six skins had been imported from Kashmir (Pakistan); three were of uncertain origin, two of which were said to have come from Africa. Among the 50 skins of Snow Leopards, 44 originated from Badakhshan, two from Takhar and four from Laghman.

Table 2 summarizes observations from northern Afghanistan. In 2004, skins of 22 Leopards and 27 Snow Leopards were seen and in 2006, skins of 12 Leopards and 27 Snow Leopards were recorded.

It is difficult to estimate the impact of hunting on the wild populations of Leopards and Snow Leopards. While the number of Leopards present in Afghanistan is unknown, on the basis of their findings from the Afghan Pamir, Khan and Habib (2006) estimate that there are a total of between 100 and 200 Snow Leopards in the country. Their estimated figures have been applied in the VORTEX simulator, with results showing, in the best-case scenario assuming a wild population of 200 animals and an annual harvest for the fur trade of only 20 specimens, that this species will be extinct in Afghanistan within ten years. It is the author's opinion that the wild population of Snow Leopards is likely to be larger and therefore ten years may be an underestimate.

Province	2004		2006	
	Leopard	Snow Leopard	Leopard	Snow Leopard
Balkh	13	7	3	3
Kunduz	2	7	2	2
Takhar	4	6	1	5
Badakhshan	3	7	6	17
Total	**22**	**27**	**12**	**27**

Table 2. No. of different individual skins of Leopards and Snow Leopards on offer in the markets of the northern provinces of Afghanistan, 2004 and 2006.

Discussion

The good news revealed by this investigation is that after almost three decades of war, the Leopard and the Snow Leopard can still be found in Afghanistan and throughout their range of distribution. The bad news is that the trade in furs of endangered species, which had come to a complete halt during this period of war, has revived since the end of 2001 and, moreover, is flourishing on an even larger scale than before the war (Niethammer, 1967; Rodenburg, 1977). It would appear that demand is so high that Leopard skins are imported from both Pakistan and African countries. Imports of Snow Leopard skins were not found. Ironically it is the very people who come to Afghanistan to help rebuild the country who are driving the demand. Afghans never buy these skins. Since there are currently so many foreigners not only in Kabul but all over the country, furs are found for sale today in the bazaars of all the major cities. It is encouraging, however, that the conservation authorities

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SKINS OF A SNOW LEOPARD AND A LEOPARD DISPLAYED IN A FUR SHOP IN KABUL, 2004.

in Afghanistan have realized this development and by 2007 had started to control the market.

A purely scientific question has been concerned with the identification of Leopard subspecies occurring in Afghanistan. According to Kullmann (1968), four subspecies can be found in the country: *Panthera pardus saxicolor, P.p. dathei, P.p. sindica* and *P.p. millardi*. These subspecies were established on morphological and anatomical attributes, sometimes on the basis of one or two specimens. A revision of the species using analysis of DNA, however, concludes that all Leopards in Afghanistan belong to only one subspecies: *P. pardus saxicolor* (Miththapala *et al.,* 1996, Uphyrkina *et al.*, 2001). However, it should be noted that such investigations depended mainly on samples of zoo animals whose origin was uncertain in some cases. By contrast, the author's own investigations (Manati, 2008) were based on analysis of samples collected from wild specimens in the country. Nevertheless, the author has been able to confirm the findings of Miththapala *et al.,* (1996) and Uphyrkina *et al.,* (2001), with the exception of his finding that distribution of the Indian Leopard *P.p. fusca* reaches into east Afghanistan.

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Dr Abdul Razaq Manati *Department of Biology, Faculty of Science, University of Kabul, Afghanistan.*