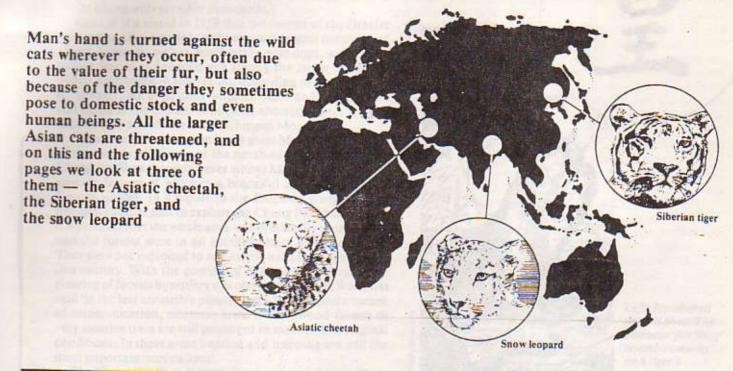
Darehshuri BF. 1978. Threatened cats of Asia.

Keywords: 45Asia/Acinonyx jubatus/Asiatic cheetah/cheetah/siberian tiger/snow leopard

Abstract: Man's hand is turned against the wild cats wherever they occur, often due to the value of their fur, but also because of the danger they sometimes pose to domestic stock and even human beings. All the larger Asian cats are threatened, and on this and the following pages we look at three of them - the Asiatic cheetah, the Siberian tiger, and the snow leopard.

## Threatened Cats of Asia



## Asiatic Cheetah

by B. F. Darehshuri

Practically extinct throughout its range, but making a gradual come-back in Iran

Because of the great diversity of habitats in Iran the cat family is well represented, with nine species recorded for the country. Unfortunately, the intensification of agriculture and destruction of forest during this century has caused the Persian lion (Panthera leo) and Caspian tiger (Panthera tigris) to disappear. These changes in land use have also threatened other cat species, most notably the Asiatic cheetah (Acinonyx jubatus) which differs from the African cheetah by its slightly larger body size, longer fur and darker coloration.

Due to the destruction of habitat and reduction of wildlife populations, concern for protection of the wildlife resource began to emerge in the 1950s. This concern has gradually increased over the past 20 years, and at the present time there are numerous national parks, protected areas and wildlife refuges where wildlife species and their habitats are maintained. In three of these reserves cheetah have been seen in the past five years, and it is thought the cheetah population is gradually increasing in these areas. Thus the cheetah is no longer considered to be endangered in Iran.

The former distribution of the cheetah included almost the entire country with the exception of the forest and mountain areas. The destruction of rangelands and the subsequent reduction of prey species such as gazelle and wild sheep has greatly reduced the quality and quantity of habitat and food for the cheetah. At present the distribution of cheetah is mainly restricted to reserves established by the Department of the Environment. Even within the reserves the chances of seeing cheetah are very slight, with the best possibility being in Khosh-Yeilagh Wildlife Refuge.

Khosh-Yeilagh Wildlife Refuge is located in north-eastern Iran, and is 170,000 hectares in size. There are several

habitat types ranging from forested mountains in the north to semi-arid steppe in the south. The cheetah is found primarily from the foothills to the semi-arid plains. The major prey species in Khosh-Yeilagh is the wild sheep which inhabits the foothills of the refuge. Every year for the past several years females with two to four full grown cubs have been observed in the refuge, and from these observations the population of the refuge is estimated to be from 20 to 25.

In Bahram-e-Gour Protected Area near Shiraz, the populations of wild sheep and gazelle are low, but hare populations are extremely high. Although there is no conclusive evidence, the major prey species in this reserve is likely to be hare. During the past five years only two cheetahs have been observed in the protected area, which is more likely a reflection of the limited period of observation rather than the cheetah population. As the habitat of this 385,000-hectare protected area has been gradually improving, with a subsequent increase in prey populations, hopefully the cheetah population will also increase.

Mooteh Wildlife Refuge is located near the city of Esfahan, and comprises an area of 280,000 hectares. This wildlife refuge has the highest population (5,000 to 6,000) of goitered gazelle in the country. Until four years ago there had been no sightings of cheetah in this area for many years. Four years ago a female with one cub was observed in the refuge, and it is thought a small population is now established within

There have been several scattered sightings of cheetah along the perimeter of the central deserts during the past five years. These sightings have been in remote areas little influenced by man. As this area is vast it encompasses portions of several national parks and wildlife refuges where habitat has been protected. Most of the sightings have been in or near these reserves, where the density of prey has increased due to habitat protection.

li delife 20 (4) 394-87 1778

B. F. Darehshuri works for Iran's Department of the Environment in Tehran.

i kmen from the tigers, and that the predators even emerce huts of Chinese and Russian settlers to carry off the tes. (It may be noted, here, however, that in the Soviet East there have been no recorded cases of attacks by rs on humans for more than 50 years and they seem to fer killing wolves rather than cattle.)

Kuo Lai Hsi stated in 1959 that the forests of the Greater ningan can be regarded as 'the nation's largest natural zoo'. igers, leopards, wolves, black bears, wild dogs, wolverines, moose, wapiti and roedeer are among the larger mammals widely distributed in this region, according to the author. It is, however, not at all clear whether tigers and leopards are still extant in the Greater Khingans, although tigers are still captured for zoos in the Lesser Khingan Mountains.

Tigers were also common in the great Manchurian forests of the eastern highlands of the north-east especially in the Chang Pai Shan (meaning ever white) Mountains, the most striking feature of which is a beautiful crater lake on the Korean border. In a report to the Emperor Kang-si by an imperial courtier sent to explore the Chang Pai Shan in 1677, it was stated that the whole area was practically uninhabited and the forests were in an excellent state of preservation. They were not exploited to any extent until the beginning of this century. With the coming of the railways, large scale clearing of forests by settlers was carried out, but as Wang has said 'in the less accessible places, away from modern means of communication, extensive areas of hardwood forests of very massive trees are still preserved in more or less original conditions. In these areas hunting and trapping are still the most important occupations'.

The Chang Pai Shan is noted for the great richness, diver-



Left: Handscroll tiger. Above: The character for 'king' resembles marks forehead



sity and age of its forests with enormous Korean pines, Mongolian oaks, Manchurian walnut, elms, willows and many other species at lower altitudes, with pine, spruce, fir, and larch and birch forests higher up. These magnificent forests are the home of the wapiti, sika deer, goral, wild boar, brown and black bears, lynx, leopard, eastern forest cat, wild dog and many other species, as well as the tiger, and were the setting for Baikov's fascinating study of the life of the Siberian tiger. 'In the clear, cold January nights tiger duets and trios may often be heard in the dense cedar forests of Lao-e-lin. Calls of tigers replying to one another are heard clearly through the mountain air ... Usually the call of the tiger has a frightening effect in the great, wild, primordial forest. At night it inevitably arouses visions of the terrible might of the colossal cat!

Tigers are still found in the Chang Pai Shan Natural Preserve and in a few other remote regions of the north-east, for example in the rich forests growing in volcanic craters in Ningan county in southern Heilungkiang province (reported in China Pictorial, 1974).

In Manchuria tigers have long been hunted for their fur.

In earlier times the Manchus crossed the sea to Japan in junks to exchange tiger skins and wild ginseng for silks and brocades, H.E.M. James in his classic Journey to the Long White Mountain of 1888 wrote that the Chang Pai Shan and Khingans 'yield an abundant supply of sables, and Manchurian tiger skins are far handsomer than Indian, with long silky hair'. They were, earlier this century, the most valuable single pieces on the Manchurian fur market (where they were brought in a frozen condition), and were very precious by the 1930s. Only three Manchurian pelts (and seven from the Ussuri) were traded in the year 1932-3.

But the Siberian tiger was not only valued for its fine coat. Sowerby has emphasised that it has always played an important part in Chinese mythology and art as a symbol of courage and as Ta-Sheng, a great spirit that protects man from evil. In the north-east of China and in the Ussuri region, Arseniev describes how shrines were set up in the lonely taiga 'to the Lord tiger who dwelleth in the Forest and the Mountains...his spirit brings happiness to Man'. Similarly the Tungus tribes of the region, the Nanai and Udege believed that tigers were gods who protected the ginseng, the medicinal ociated with many legends and believed to be 'the ife'.

hinese art the tiger, lao hu, appears in the work of s, sculptors and workers in bronze, stone, ivory and the presence of the character Wang or 'king' on the ead of the tiger must have had a special significance for thinese and has contributed to its part in myth and nd. It was no doubt partly because of the reverence for animal that preparations made from its bones (especially kneecaps), blood, flesh and other parts were (and tree) egarded as medicines of exceptional potency giving those who partake of them rejuvenation and strength.

The great value of tiger products in traditional medicine and its splendid pelt were the main reasons for its intensive hunting in the past; various methods were employed. According to Sowerby the Russian hunters chiefly tracked the animal in the snow, often using dogs, and then shot it when brought to bay. The Chinese preferred to use traps, large wooden cages baited with pigs, pitfalls, poison, and a small 'bomb' which they also used for bears.

With the high profits to be made from securing tigers and unrestricted hunting, the great cat was becoming very rare by the 1930s. As the north-east was opened up for further settlement and economic development after the 1949 Revolution, the tiger suffered further persecution. According to Sludsky, a Russian expert on tigers who visited China in 1958, there were at that time about 200 tigers left in the north-east. In the following years they became very rare (perhaps fewerthan 50 surviving according to James Fisher's

The Red Book of 1969).

Al Oeming made a tour of Chinese zoos in 1964, and reported that there are now strict laws protecting the Siberian tiger. Caroline Jarvis, who visited China in 1965, found that 'all the zoos have good big cat collections. Nanking, Peking and Shanghai have magnificent breeding groups of the Manchurian tiger, the largest, most thick set and heavily furred of all the tiger subspecies. Today it is found in the north-east province of Heilungkiang where it is strictly protected'.

Chinese official government policy is that 'rare animals such as giant pandas, golden haired monkeys, Northeast

Below: Ink and colour scroll from the 13th century



tigers and musk deer which are of historic value to the Chinese cultural heritage must be protected from extinction. These should be caught alive for either scientific research purposes, cultural exchange and raising'. Wang Meng-Hu of the Department of Wildlife in the Ministry of Forestry (China Reconstructs, 1965), has said that the Chinese government 'follows a policy of active preservation of wild life resources, breeding, rational hunting and utilisation'. This is carried out through special departments in local governments and through associations which have been organised among the hunters. A number of rare animals, including the Siberian tiger, are on the prohibited list. 'In regions where rare animals live a total of 8.4 million hectares have been set aside for game sanctuaries where the hunting of all or certain kinds of game is forbidden for a number of years, or nature reserves where scientific research is carried out. Some of the most important reserves are in the Chang Pai Shan which have many kinds of cold climate wildlife'.

Jen Chung writing on 'A Visit to a Natural Preserve' (China Reconstructs, 1975), said 'the Changpai Mountains Natural Preserve is one of a number of nature preserves demarcated in various parts of China since liberation in 1949...Their existence has already done much to protect nature's heritage, make rational use of natural resources and improve the environment. They have also been a stimulus to scientific research and the development of agriculture and industry...Before liberation this...beautiful area was plundered and devastated. Felling was indiscriminate and large tracts of forest were destroyed. Animals such as the sable, sika deer and Northeast China tiger were rapidly approaching extermination through unrestricted hunting ... After the founding of New China ... strict prohibitions were put on the trapping of valuable and rare animals... The Preserve was formally established in 1960. In its 15 years' history there has...been a marked increase in the wildlife, including an increase in the numbers of those animals formerly on the verge of extinction'.

According to *The Times* Special Correspondent in 1976, national regulations 'cover the establishment of nature reserves and their management (for example 'poaching, deforestation, grazing and reclamation are strictly forbidden'). At least ten provinces have reserves'. Norman Myers, who visited China in 1974, was very impressed by the efforts being made to protect the environment. He writes that the last few remaining Siberian tigers are strictly protected and forests are being replanted in the north-east which will provide suitable habitats for the prey species of the tiger.

This seems very encouraging, but despite the concern shown by the Chinese authorities for the protection of rare species, and the beneficial results for wildlife of re-afforestation schemes, it is difficult to know how effective their policies are in practice. A good deal has been written recently concerning the huge export of animal products from China through Hong Kong, which seems to conflict with national wildlife regulations in many respects. As far as the tiger is concerned it seems to have been protected only when hunting has seemed no longer worthwhile, because it has become so rare, or to ensure products for the traditional medicine market (which may involve conservation measures). Apart from this, rapid economic development and the utilisation of natural resources are high priorities in China and the future of all large predators must be threatened.

Nevertheless, it is an encouraging sign that official policy in China has changed to the tiger's advantage — and it is being regarded now less as a dangerous nuisance, and more as part of China's rich natural heritage.

The Siberian or Manchurian tiger is now confined to the remotest parts of the Soviet Far East, North Korea, and north-east China. It is the largest of the various tiger subspecies (eight different forms are generally recognised, ranging over much of Asia, from the Caspian region in the west to Bali in the south, though some of these are extinct or virtually so). The Siberian tiger is also lighter in colour than the others, and is noted for its full and long winter coat. It is in a way the original tiger, for the species probably originated in Siberia where skeletal remains have been found well within the Arctic Circle, It is endangered because of past over-hunting for its fur (and also its bones, flesh, and blood for so-called medicinal purposes), and because of destruction of its forest habitat. The Siberian tiger's habitat is mixed primary forest in steep, rocky, mountainous areas. It is rarely reported from coniferous forest. It is totally protected throughout its range. Illustrations by Michael Woods



The Asiatic cheetah was formerly found across North Africa, the Middle East, Afghanistan, Pakistan, and parts of India and the USSR (the African cheetah is found south of the Sahara). It is now extinct through most of this area, and probably exists today only in arid areas of Turkmeniya (USSR), the north-western part of Afghanistan, and in Iran. Its preferred habitat consists mainly of desert steppes and low hills, providing there are sufficient prey species such as gazelles. Destruction of habitat, and the consequent loss of prey species, has been a major factor in the animal's disappearance from many areas. Egyptian tombs and rocktemples contain excellent representations of tame cheetahs and indeed it is just possible that cheetahs still survive in Egypt, for in 1967 a cheetah was shot while stalking sheep. The Asiatic cheetah is legally protected in the USSR and Iran.

The snow leopard occurs in high altitude ranges in the Himalayas. Pamirs, Hindu Kush, Tian Shan, and Altai mountains. It is found between the tree line and the permanent snow, but descends into upper valley bottoms in the winter months. Though it is sometimes encountered in woodland, it does not normally occupy a true forest habitat. It is still sometimes referred to us the 'ounce' in English ('once' in French), which is confusing because similar words in Spanish, Portuguese, and German all refer to the jaguar of South America. Disuppearance of its prey species has contributed to the snow leopard's decline, but it largely owes its endangered status to severe and uncontrolled hunting for its valuable fur, and because it takes domestic stock; in some places the mere existence of a large cat constitutes a challenge to the hunting instincts of hill people. It is legally protected in parts of its range, and occurs in a number of reserves.

