

Tiger Conservation in China

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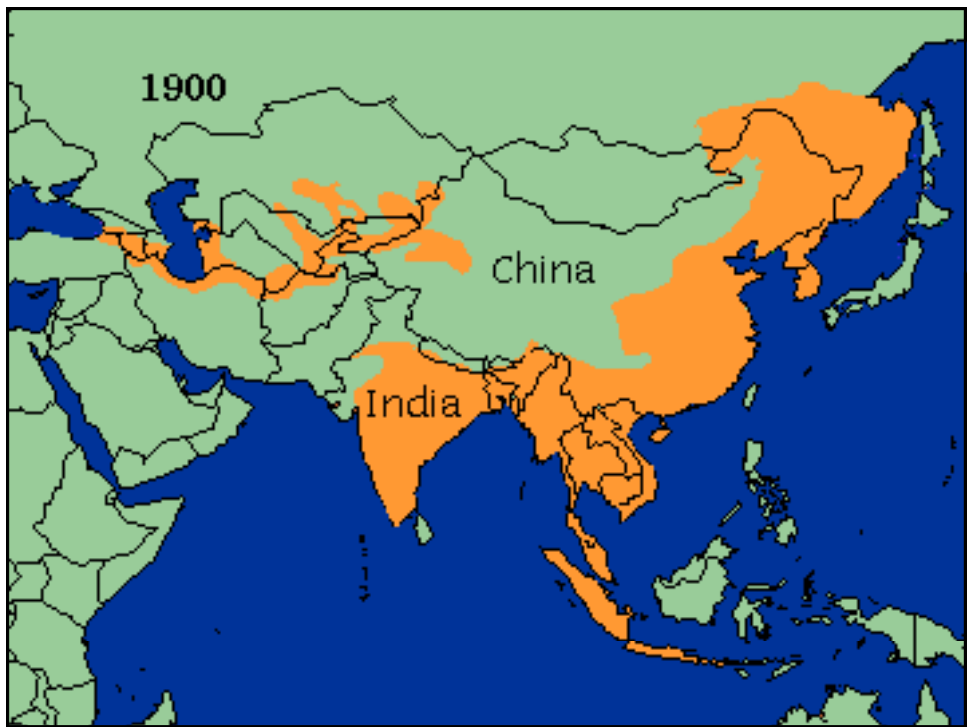
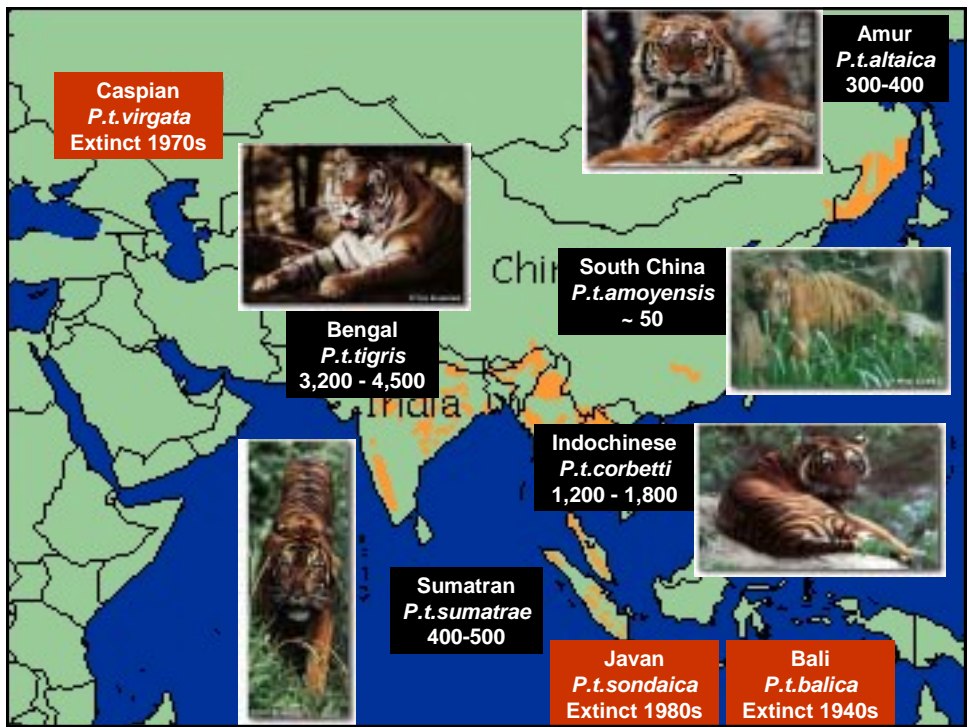
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TIGER
Panthera tigris
(Linnaeus, 1758)

- Largest cat in the world
- Solitary, secretive behavior
- Long-distance dispersal
- Various habitats, highly adaptive
- Charismatic and endangered



Threats to Tiger Survival

- Poaching
- Habitat loss and population fragmentation
- Loss of prey



Amur Tiger Habitat in Russia





Measures Taken by Chinese Government to Protect Tigers

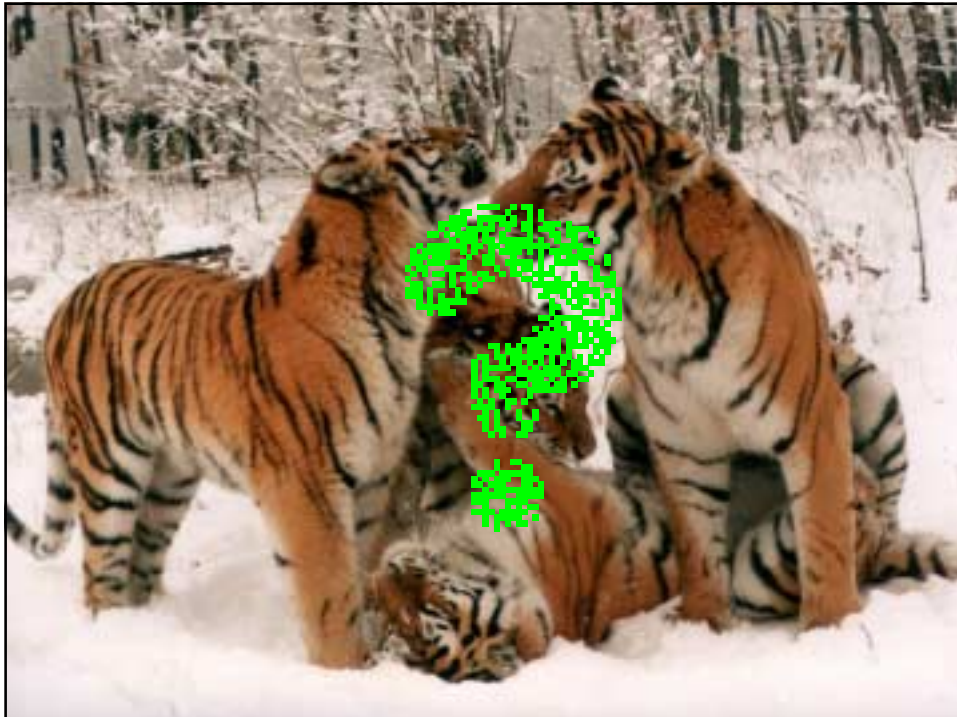
- 1959 , Tiger was listed into the rarity species list by Ministry of Forestry**
- 1962 , The first tiger reserve was established in China**
- 1977 , Amur tiger was listed as first class protected species, Bengal tiger and South China was listed as second class protected species**
- 1988 , The People's Congress passed the National Wildlife Protection Law, and all tiger sub species were listed as first class protected species.**
- 1990 , Ministry of Forestry issued a legislation to strictly control the trade of tiger parts for TCM utilization in China**
- 1993 , China banned all kinds of utilization of tiger bone and rhino horn in TCM, and any international trade of tiger parts was prohibited.**
- 1998 , Wild Tiger Recovery Action Plan was issued by SFA**

Recommendations:

- 1) Establish ecological corridors to link the fragmented tiger habitat**
- 2) Strengthen the anti-poaching patrolling**
- 3) Promote international collaboration and establish cross-border nature reserve to protect the transboundary population**
- 4) Take measures to manage and control the logging activities in the tiger range area**
- 5) Monitor the wild tiger population as well as their prey**
- 6) Establish a national compensation mechanism**

Acknowledgement

- State Environmental Protection Administration, China
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- Phoenix, Russia.
- Wildlife Conservation Society, China
- Beijing Normal University, China



Wild Amur Tiger Conservation in China

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Tigers (*Panthera tigris*):

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By far, three nature reserves have been set up for Amur tigers in China:

1. The Changbai Mountain Nature Reserve was established in 1960, though no tiger occurred in the area after 1994.
2. The Qixinglazi Nature Reserve for Amur tiger in Heilongjiang province was established in 1980. No evidence shows that there are still wild tigers in the area. It seems the existence of the nature reserve already lost its meaning.
3. The Huichun Nature Reserve for Amur tiger and Amur leopard. There are still wild tigers in the nature reserve.

1. Population and distribution of Amur tigers in Heilongjiang province

Research was conducted during the period from 1988 to 1992. The result suggests that around 12(10-14) tigers were present in Heilongjiang(Fig 1).



图 1 黑龙江省境内东北虎数量分布示意图 (1981)

Fig. 1 The distribution of wild Amur tigers in Heilongjiang province

A survey developed during the period from October 1998 to November 1999 showed that only 5-7 tigers were present in Heilongjiang.

The latest investigation indicates that the remaining range of Amur tigers is along the China-Russia borders. Three isolated tiger ranges are Southern Laoyeling region, Eastern Wandashan region and Southern Zhangguangcailing region. No evidence showed that tiger exists in Western Wangdashaan region and Northern Zhangguangcailing forest region. More investigation is needed to verify the existence of tiger in Northern Laoyeling region. It is believed that two male tigers live in Southern Laoyeling region. In Eastern Wangdashaan region, there are at least one female tiger and one subadult tiger. The other two tigers could be female. The gender of the tiger in Southern Zhangguangcailing remains unknown.

Few sightings of wild Amur tigers in Heilongjiang were reported ever since. Some people think the existence of the nature reserves in Heilongjiang province already lost its meaning.

2. Population and distribution of Amur tigers in Jilin province

2.1 The Changbai Mountain Nature Reserve was established in 1994. No evidence shows there is wild Amur tiger left in the area.

2.2 The Huichun Nature Reserve was established in 2001 for protection and conservation of Amur tiger and Korean (Amur) leopard (Fig 2).

Due to short history of the Nature Reserve and lack of specialized techniques, communications and scientific research equipments, also the difficulties to monitor Amur tigers, a total of 55 confirmed tiger tracks were reported from January 2002 to October 2004 in Huichun Nature Reserve. Tigers were found in the following districts:

2.2.1. Qinglongtai Region. Qinglongtai situated in furthest east of Huichun nature reserve, covers 30,000 hectares (including some areas inside Heilongjiang province). No permanent residents live in the area. The highest density of wildlife and the highest concentration of Amur tiger tracks were found here. In recent three years, it was recorded that 11 people spotted tigers and the remains of wild boar and deer were found for four times. The fresh tracks can be found all over the region.

2.2.2. Fenshuiling Region. Fenshuiling covers 20 kilometers in the north-south direction and 6 kilometers in the east-west direction. Human activities are concentrated in respect that there are 3 villages, 3 stock farms and large area agriculture lands in the region. A total of 10 tiger tracks were reported in 3 years (not including some unreported activities), 18 cows/horses were killed by wild Amur tigers. Evidences showed that tigers occurred during 2002 and 2003 in Xiacaomao Village stock farm. In each incident, 4 cows were killed during a 10-day period.

A 9.3-kilometer long and 2.5-meter high wire netting fence was build to restrict the wildlife to cross the international border. Though existing evidence shows that one tiger cross the China/Russia boundary frequently.

2.2.3 Lishugou Region. Lishugou covers less than 20,000 hectares. Only 7 tiger tracks were reported, 8 cows/horses were killed. On September 5th and 6th 2002, it was reported both in Lishugou and Fenshuiling that cows/horses were killed by tiger. On June 27th 2004, a horse belonging to Lishugou resident Liu Chengfu was reported missing, and the rotten bones of the horse were found on July 4th. A cow and a calf belonging to Fenshuiling resident Shang Shaoyu were killed at the same day (the distance between two locations is about 13 kilometers). Evidences show that those are two different individual tigers.

There exists evidence that tigers cross the international boundary from Russia into China.

2.2.4 Xibeigou region. A Amur tiger accidentally died in January 2002 in the area. Tigers were present again at the end of this year. A total of 18 tiger tracks were

discovered. 14 cows/horses and 3 dogs were killed by tigers. During the period of December 2004, Liu Yu, East China Normal University graduates, conducted an investigation to track down Amur tigers in the area. The outcome of the investigation was the report of a tiger entering Southern Xibeigou from Russia, heading north for around 7 kilometers, and then moving towards the west. It is believed that the habitat of this tiger is mainly in Russia. Almost at the same period, another Amur tiger occurred at the north-east side, run around most of Xibeigou, Huangshugou regions, and Sidaogou, Shuguang, Yangjingou in Jixi city, Heilongjiang province. On January 24th 2004, this tiger killed a mule in Naozhigou. The prey process was recorded by nature reserve management bureau by a far infrared automatic camera.

The occurrences of tigers were discovered in Xibeigou and Fenshuiling respectively on January 24th 2003, and in Xibeigou and Lishugou respectively on April 21st 2004. It shows that those are different individual tigers.

2.2.5. Taipinggou Region. Taipinggou situated in north-west of the nature reserve, covers more than 100,000 hectares with large area forest but few residents. The traditional tiger range is from Eastern Taipinggou to Lanjiatangzi. A total of 5 tiger tracks were reported, 7 cows/horses were killed. Cows were killed in Taipinggou and Fenshuiling respectively on April 21st 2003, the distance between two locations is 7.5 kilometers far. A photo of wild Amur tiger was taken for the second time by nature reserve management bureau on January 16th 2004. It is believed that it is a subadult female tiger as footprints are only 8 centimeters wide.

Footprints of a male tiger were found in west Taipinggou and foot of Shenlin mountain, and indicates that this area appears to be a tiger range.

Tiger tracks were also found occasionally in Western Huichun nature reserve, Southern Yangpao monitoring and protecting station.

Because no enough monitoring information was collected, and because the technique data is still rough, the accurate range, activities and relations of individual tiger is still uncertain. Though based on the habit of the Amur tiger, and the spot, time, frequency of the tiger occurred, it was concluded that tiger range in Huichun nature reserve has extended to twice as big as before and the population size increased to 4-7. (Li Zhixing, The Huichun Nature Reserve Management Bureau, October 20th, 2004)

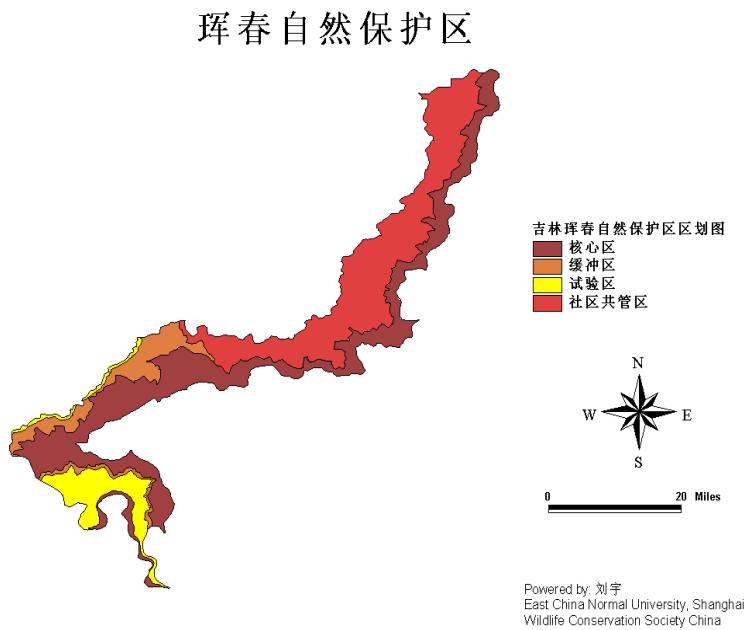


Fig 2. The distribution map of Huichun nature reserve

Poaching and smuggling

According to the historical data, Emperor Kangxi in the Qing Dynasty held “Autumn Hunting” every year and countless tigers were killed in the hunting. Ma Yiqing shows in the textual research that the biggest slaughter of Amur Tiger happened in the first 30 years in this Century and during the time, about 1300 to 1500 Amur tigers were killed.

This long-duration and large-scale hunting brought the fatal affect to the whole Amur Tiger Species.

In 1956, the total tiger skin purchasing amount in China is 1750 and there were over 10,000 of tigers in China in the early 50s. From the late 50s to 60s, for eliminate the “harmful” tigers, the government award the tiger hunting hero. As recorded, from 1955 to 1956, there are totally 171 tigers had been killed in Jiangxi Province. Jiangxi Province has the total area of 160,000 square kilometers, which is to say, a tiger was killed in every 940 square kilometers. After that, tigers have been greatly reduced and even disappeared. Tigers were extinct from Qinling area in 60s. As estimated, 30 years before the tiger hunting ban in 1977, there were about 3,000 tigers being killed. A survey, in the east mountain area of Heilongjiang Province in 1990s, shows that there are totally 12 tigers in the forests of Wanda Mountain(7), Laoyeling(3) and Zhangguangcailing(2). Comparing with the total of 81(from 1975 Survey), it has been reduced 86.2% in the 15 years and the annual reduce rate is 11.2%. The tigers in Changbai Mountain were extinct.

On November 14th 1989, a male Amur tiger was shot by three brothers. The tiger fought back desperately and hurt the poachers heavily before it died with 6 bullet holes. The night the skeleton of the dismembered tiger was driven away, his buddies (a female tiger and a tiger cub) found the bloody fighting site and wailing towards the truck. The helpless wailing from these two tigers lasted for several days in the chilly wind. Forests and mountains were sobbing for this. How about the people? Where are their conscience? What is even more miserable is that after killed the tiger, 6 forest wardens ate the tiger limbs immediately, the police knocked off the teeth of the tiger and took away the gallbladder, and some authorities even indicated to take the tiger away and asked for the bones... then for the next several days investigators keep coming down and having big feast with public fund.

In the end of 1993, a cross-border smuggling was uncovered in Tieling, Liaoning province. Authentication shows that this is a 5-year-old female wild Amur tiger. The bullet holes on its skin and bones shows that she was killed by gun and died in the year of 1993.

During the Spring Festival in the year of 1995, near the Wangjia mountain of Jiangqing county, Jilin Province, a 1.5 meter, 90 kilogram Amur tiger was trapped and hung on a tree branch to die right after it run out from the forest. The night the tiger was driven down the mountain, its two tiger buddies went to where it was killed and kept wailing...

In late June 1999, Kunming Custom uncovered a smuggling of wildlife products, which is the biggest smuggling after 1949. After a week sorting and classifying, custom officers tracked down over 2000 wildlife skins, among which 11 of tiger and over 100 of leopard. The yard was full of countless snake skin and the wildlife bones.

In the end of January 2002, in Xibeigou of the Huichun Nature Reserve, Jilin Province, a male Amur tiger was hurt by the steel wire trap, illegally set by the poacher. After 8 day and night rescuing and curing, it was died in the end. After this tragedy, the staffs of the Nature Reserve management bureau work jointly with the forest police bureau to take a wide-range and large-scale action to fight against the poaching. This action uncovered 9 criminal cases, confiscated 5 guns, 200 bullets, 24 exploders, 5 tubes of dynamites, 5 grenades and over 3000 poaching tools, such as steel wire traps, clinchers and stylets, and tracked down 1 leopard skin, 3.7 kilogram leopard bones, 1 deer tail, 2 deer's penis, 21 roe deers, 1 boar, 1 muskiness, 1 bear gallbladder, wide geese, widgeons, vultures and hawks, totally over 60 wildlife and their products.

From January 2002 to March 2004, sponsored by The Wildlife Conservation Society (WCS), the Huichun Nature Reserve management bureau launched the "Mountain Cleaning" Project twice (each lasted for 2 months) to clean away the poaching traps, clamps and over 4000 of them has been cleaned away from the mountain.

On March 1st 2003, according to the clue provide by the detective, the police bureau of Chanbai Mountain Nature Reserve arrested 4 suspects, who are trading the tiger skin and bones, in the home of Luobaoxiang at the residential area of Baihe grain depot. 1 tiger skin, 1 pair of tiger bones was found there and another suspect was arrested near his home. After examination, they confessed the crimes of trading tiger skin and bones. Suspect Cui Enhe bought a tiger skin and a pair of tiger bones at the price of RMB 10,000 yuan from a foreigner in 1992 and tried to sell at a profit in vain. On February 26th 2003, Cui Enhe, Gao Yuyin and Cuitao planed to smuggle the Amur tiger skin and bones to Erdao Baihe county, Jilin province and sell them there at the price of RMB 500,000 yuan.

At noon on October 8th 2003, a blue truck from Ali was stopped by the high way checkpoint on 219 national road in Rikashi, Tibet for Epidemic Disease Inspection. Bundles of bags are full of the truck which was told are woolen cloth, but when the 50 cloth bags were opened, all the people was shocked: there are 31 Bengal tiger skins, 581 leopard skins, 778 otter skins and 2 lynx skins (Bengal tiger and Leopard are listed as Class I protected animals in China's Wildlife Protection Law, and otter and lynx are Class II protected animals). It is the first time allover the world to smuggle wildlife skins in such a high standard and large amount.

In February 2004, a tiger in Xinbin, Liaoning province hurt a man and that tiger was found died near the place where it hurt human in the snow mountain. The cause of its death cannot be identified, but there was a circle around the tiger's neck. According to the witness, half of the tiger neck had been "tied off". In the dissection of this Amur tiger, officials found that there was a bullet left in the tiger's skull and it took more than half a month from tying its neck tightly to strangling it to die.