

1 of 4 {16243}

THE ENVIRONMENTAL STATUS OF THE SOUTH CHINA TIGER

IN GUANGDONG PROVINCE

Guangdong Forestry Bureau, Office for Conservation of Wildlife and Plants;  
Institute for Research into Endangered Animals in South China.

June 1987

Researchers: Yu Si-mian, Wang Lili, Wu ?ying, Deng Shi-fang, Deng Shi-song

Writer: Xu Long- Hui

The task of investigating the environmental status of the South China tiger in Guangdong Province was delegated to the Office for Conservation of Endangered Wildlife and Plants of the Guangdong Forestry Bureau in 1985 by the Department of Science and Technology of the Ministry of Forestry. A special research group was established which carried out field work from mid-1985 to May 1987 in 24 mountainous counties in northern, eastern and western Guangdong. Visits were made to 41 administrative districts and villages, and searches were carried out in 14 mountainous areas for sign of tiger. The following is the report:

Biological features of the South China tiger

Habitat

The South China tiger is chiefly found in sparsely populated forests on the Guangdong mountains bordering Hunan and Jiangxi. In this region there are dense forests, thickets and grassy slopes, and wildlife is relatively plentiful (mainly ungulates) as tiger prey. In a world where relentless hunting prevails this is a particularly inaccessible region which is difficult for hunters to penetrate, and where hunting is banned, as in wildlife parks.

Fifty years ago the South China tiger was widespread throughout Guangdong Province, except for Hainan Island and the plains region, such as the delta of the Pearl River. Most of the mountain areas were occupied by tigers, but they were concentrated mainly in the fast forests of northern Guangdong, where it is relatively cold.

According to Comrade Lin Wen-Feng of the Forestry Bureau of Ru Yuan County, there have been 17 recorded killings of tigers in the county since the liberation in 1949. In Yan Suan County two brothers, Deng Shi-Fang and Deng Shi-Song, killed over 30 tigers. In the early years of the liberation, the tiger's range extended as far as the Lei Zou peninsula, where, despite the lowlying terrain and the heat, there were dense forests in which tigers could live.

Although water is a necessity for the tiger, they are not often seen in water unless patrolling their range, hunting or fording the river. In such cases they are strong swimmers with considerable stamina and speed in the water. People say that prey that takes to water is more easily captured by the tiger.

The South China tiger is king of the wild animals and has no natural enemies. It fears only man. According to legend the tiger dislikes bird-droppings, and so it never lies up in the forest. But this is wrong, since most tigers prefer to lie up in thick grass, and often wander along bare

mountain ridges, sharpening their claws and leaving their droppings. They have left numerous signs for people to see in such places. In fact, most of their movements are in the forest because their main prey - wild pig, muntjac, deer, and antelope feed and rest in the forest.

The South China does not have a fixed den or place of rest. It is a solitary animal. This is closely related to their method of hunting, because the adult tiger has enough strength in itself to kill various large mammals. Normally it lies in ambush, bringing down its prey in one lightning movement with a single blow and a single bite.

Every tiger has its own territory and a relatively fixed route for patrolling it, but the range within which it moves is by no means territory which cannot be invaded by another tiger. According to the Deng brothers, there can be several tigers operating in the same region, including more than two males. But these tigers are never on the same mountain at the same time - there is usually a gap of 6-10 days. Only females on heat can move on the same mountain at the same time as a male.

The author Tong Liao Zeng saw a male, a female and a cub together in Ru Yuan Country in the Tian Jing Shan in 1972.

Tigers usually stay at most only two or three days at a particular spot. If it stays longer than 4-5 days it is because prey animals have detected it and fled so that the tiger needs to move frequently in search of prey. However, its movements are not unbroken by stops, nor are its travels random and purposeless. They follow a particular boundary along a relatively beaten track in a cyclical pattern of hunting, each cycle lasting about 60-90 days.

The range of the South China tiger is smaller than that of the Northeast China tiger, being on average 100-200 km<sup>2</sup>. Most South China tigers do not move during the day and prefer to be active under cover of darkness. But on cloudy, rainy days they often make an exception and are out hunting. They like to travel along small man-made tracks on the hillsides, and often leave scratches sprayed with urine by the roadside. They usually leave their droppings on high ridges. The droppings contain animal hairs, hoofs and bones etc and often have a tail of some green grass or leaves. Tigers which move in high areas frequently roll around in the grass, leaving a den or nest. The tiger lies down to eat, its tail waving and breaking the grass in an uneven pattern.

In areas where both male and female tigers are operating the two follow a circuit about 5-10 days apart. When the male discovers that there is a female in the area he catches up with her. But there are cases when the female is behind the male.

SECTION SKIPPED

Results

The investigation was mainly in the northern forests, but was also carried out in the mountain areas of the east and west. Places where tigers were reported by local people were always visited. In most cases the animal was a clouded leopard, because people could not distinguish the different species, such as tiger, clouded leopard and leopard cat, all of which they called tiger. Tigers were reported in 17 counties (named).

1. In Yangshan County there is a reserve called Chengjia, where in September 1986 we found 3-4 tigers - one adult male, one adult female and 1-2 cubs. Fresh droppings were found containing hair and hoofs of wild pig. The region was the Shengrenyao on the periphery of the reserve.
2. On the mountainside of Shengrenyao we found scrapes twice of 22 cms (12/10/86).
3. In the reserve area called Yangjia Yao Taozidun we found scrapes at seven places of 22 cms in half a km. In five places there were 19.5 cm scrapes (13/10/86).
4. In April 1986 a peasant collecting resin from a pinetree reported seeing a female tiger with two cubs.

We believe the 22 cm scrape was made by a male tiger weighing about 130 kg. The scrape of 19.5 cm was thought to be made by a female of 100 kg. This tigress made the scrapes with her right front leg, and it was assumed that her left front leg was injured. We called it a three-legged tiger. The range is thought to be Chiangjia in Yungshan County and Dadongshan in Jianxiang County. In Tiangmenzhang of Luyan County, Hekou of Lungxi County, Daqinbei and some of the forests of the mountains in Hunan Province. We think that in the Tianjingshan and Ba Bao Shan Reserves there are also tigers.

2. In the Niujiaolong mountains of Dashiba village in Chengkou District of Renhua County we found one tiger. There were five scrapes of 10-10.5 cms width (15/05/86) on Daruanyao slope of Niujiaolong mountain.

A peasant, Gui Chunlin, from the village of Maxicun in Chengkou District said that in October 1985 he went to the mountains to shoot a deer. In his torch beam he saw two tigers with yellow spots. He tried to shoot one, but did not know whether it was hit. Ten days later another man, Wang Hesheng, from the police station of Renchung Forest Farm met a tiger with yellow spots while riding his motorcycle on the road near Maxiacun village

The scrape was not very deep and so it was not thought to be a male tiger, but a female. The footprints were not very clear and not deep. We estimated the weight at about 70 kg. This tiger moved in the following places - Hekou, Hongshang, Hongcheng, Changkou/Changjiang, Fuxi, and Rucheng County of Hunan Province.

3. In the east of Baling reserve in Shixin County, in the mountain of Tianpingjia we found one tiger. There were scrapes and a footprint (ph.6&7). The footprint pad was seven cm long. The scrapes were rather old and not clear. (4/6/86) on the mountain slope of Taipingsongcun village near Tianpingjia.

In Meiziwo mine one Tang, a leader of Kengkou, said that in 1984 a father and son working in his mine who went to find medicines in the mountains saw a tiger and a cub. In May 1986 a group of workers from the mine trying to find minerals in Tianpinjia saw a serow of over 50 kg which had been eaten by a tiger. Only the head and feet were left.

An old tiger dropping was kept in Chebaling Research Station. The tiger's pad was only 7 cm wide and probably weighed 80-90 kg.

As a cub was seen it was thought to be a female tiger.

The area in which the tiger moved in Guangdong was Tianpingjia mountains. Also moving in Longnan County of Jiangxi Province.

4. In March 1986 in Dengshefang/Dengshisong two hunters in Baoshijieshan of Xiaosanjiang in Lianshan County found two scrapes, though to have been made by a male tiger of 90-100 kg.

The footprint was photographed, but it was not very clear. The head of the Forest Station of Xiaosanjian District said that in March 1985 a pig was stolen by a tiger.

Because the photo is not clear the pugmark is not very strong. In October 1986 the team went to the Xiaosanjian District mountains to investigate, but no scrapes or pugmarks were found. People in the area said that they had not seen any sign of tiger activity for over a year. Therefore, this tiger has not been counted in the total of tigers now existing.

Altogether in Guangdong Province there are 3-5 South China tigers, one with one or two cubs.

Recommended protection measures

The South China tiger is found in a belt 2,000x1500kms. Only about 40-50 South China tigers survive, including in zoos, according to Liu Zhenhe 1983. This is only a rough estimation, but even if it is doubled the number cannot be more than 100 and the number is very small. In April 1986 a tiger symposium (in Minneapolis) the South China tiger was said to be the most endangered and most in need of protection.

The paper suggests that new reserves in northern Guangdong Province should be made into a South China tiger reserve. This area covers 805,400 ha. including Dadongshan Reserve, Tianjinshang Forest Farm, Wuzhishan Forest Farm, Ba Bao Shan Reserve, Qinxidong Precious Animal Reserve Station, Longnan District and Luoyang District of Luyun County. Reserve stations should be established.

Hunting should be banned in the reserve area and peasants should not be permitted to put out poisoned baits in the mountains so that the tigers can reproduce naturally.

A new law should be passed to protect the tiger and punish hunters severely while rewarding protectors. Education should be carried to stop people fearing the tiger and to make them understand the importance of protection.

Every 3-5 years an investigation should be made of the number of tigers, as well as research carried out into the habits of the tiger, the sex ratio and reproduction. The reasons for the decline should be studied.