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Abstract: In an effort to locate free-ranging *Felis bieti*, the so-called Chinese mountain cat, we undertook an expedition to Ganzi Prefecture in western Sichuan Province, China. We searched skin shops, interviewed former hunters, and local pastoralists to determine the existence of this little-known small felid. We found five skins of *F. bieti* for sale in three towns along our route. Former hunters and townspeople we interviewed were either unfamiliar or confused regarding the cat's existence. Local pastoralists provided excellent information however. *F. bieti* is restricted to high elevation steppe grassland and does not occur in true desert or heavily forested mountains. Perhaps *F. bieti* should henceforth be commonly referred to as the Chinese steppe cat. A better understanding of the ecology, behavior, and threats to *F. bieti* is needed.

Status of the Chinese Mountain Cat in Sichuan Province (China)

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n an effort to locate free-ranging Felis bieti, the so-called Chinese mountain cat, we undertook an expedition to Ganzi Prefecture in western Sichuan Province, China. We searched skin shops, interviewed former hunters, and local pastoralists to determine the existence of this little-known small felid. We found five skins of F. bieti for sale in three towns along our route. Former hunters and townspeople we interviewed were either unfamiliar or confused regarding the cat's existence. Local pastoralists provided excellent information however. F. bieti is restricted to high elevation steppe grassland and does not occur in true desert or heavily forested mountains. Perhaps F. bieti should henceforth be commonly referred to as the Chinese steppe cat. A better understanding of the ecology, behavior, and threats to F. bieti is needed.

Introduction

In an effort to locate free-ranging *Felis bieti*, the so-called Chinese mountain cat, we undertook a ten-day expedition from 10 - 21 April 2005 to Ganzi Prefecture in western Sichuan Province, China. Beginning in Kangding, western Sichuan province, we visited small villages, towns, and forest guard posts to interview former hunters, villagers, and local pastoralists in an effort to determine existence of this little known small felid. We were particularly interested in local shops that might sell animal skins.

We traveled as far as Bangda village on Route 317, 30 km west of Luhuo in the northwest of Sichuan Province. The most valuable source of information was provided by local Tibetan traditional pastoralists whose knowledge of local wildlife was readily apparent.

Though most shops did not display the skins of *F. bieti* we used pictures of the cat and its skin to persuade shopkeepers to show us the skins. Our request was usually fulfilled (Fig. 1). We found five skins of *F. bieti* for sale in three towns: Kangding, Tagong and Luhuo. Skins are bought by the shop keepers for about 80 Yuan (US\$10) and then sold at a profit to tourists. We were offered skins at 400 Yuan, but after bargaining an agreeable price of 120 - 200 Yuan was reached.

Using Peng (2002) we asked interviewees to select the pictures of the cats that occurred in the region. Their choices were snow leopard, clouded leopard, jungle cat, lynx, golden cat, Chinese mountain cat, and Pallas cat. Though hunters and townspeople were either unfamiliar or confused regarding the cat's existence, local pastoralists provided excellent information.

Results and Discussion

Most local Tibetan pastoralists quickly confirmed *F. bieti*'s presence. In one instance, a villager in Daofu suggested that the Pallas cat and the Chinese mountain cat were the same species. A local Tibetan female pastoralist soundly rejected this suggestion, insisting the Pallas cat was not present and that, in



Fig. 1. Two Chinese mountain cat skins obtained from small shops in western Sichuan (Photo Nima Chen).



Fig. 2. The habitat of the Chinese mountain cat above Banda village (31° 32' 25.3" N, 00° 30' 47.6" E, elevation 3833 m) is typical of high elevation grasslands used for grazing domestic yaks (Photo J. Sanderson).



Fig. 3. Several characters can be used to identify the skin such as ear tufts, dark brown fur on the backs of the lower legs and paws, striped tail, and stripes across the back (Photo J. Sanderson).



Fig. 4. A close-up of the skin shows gray hair turning to light brown (Photo J. Sanderson).

fact, the Chinese mountain cat occurred near her village. Like others, she pointed out the tufts on the ears, dark bands on the tail and blond/brown coat as distinctive features. All pastoralists that confirmed the existence of *F. bieti* told us that the cat was restricted to high elevation steppe grassland, did not occur in mountain forests, and was nocturnal. Some people said the cat feeds on rodents. In towns and villages west of Kangding local pastoralists could identify the Chinese mountain cat and skins were found for sale in local markets.

The winter fur of *F. bieti* is used to make traditional hats. The cat is taken in winter for two reasons: the cat is in its rich winter coat, and track following is easiest in snow. Tracks of the cat are followed to its day den in caves or in holes such as beneath trees. Poison meat is placed at the den entrance. In the morning the tracks are followed to the ailing or dead cat. Snare traps are also set at the den entrance.

One local pastoralist, Drola, took us to his home on the mountain above Bangda village where he grazed his yak herd. From Peng (2002) his wife quikkly confirmed the presence of *F. bieti*. She then offered to sell us a hat made from *F. bieti* fur. Drola offered to show us the habitat of *F. bieti* so we hiked the trail up the mountain slopes to 3833m where he apparently had taken the cat near a large rock outcrop. He suggested that rock outcrops were often present where the cat was found (Fig. 2).

At least three lines of reasoning suggest that the F. bieti's common name should more accurately be the Chinese alpine steppe cat, or Chinese steppe cat. Though the geographic distribution of F. bieti was given by He et al. (2004), it is widely appreciated that the cat does not occur everywhere throughout this range. The heart of the geographic range, the region around Qinghai Lake, elevation 3200m, in Qinghai Province, is Central Tibetan Plateau Alpine Steppe, one of World Wildlife Fund's 867 ecoregions. Second, every herdsperson that confirmed the existence of F. bieti said that the cat occurred in grasslands and not in heavily forested habitats. Thirdly, the Chinese name for the cat, "huang mo mao" means "cat that occurs in wilderness of little vegetation." Two common names have been used:

Chinese desert cat, a reference to little vegetation, and Chinese mountain cat, referring appropriately to its high elevation occurrence. High elevation grasslands are in fact alpine steppe.

As we traveled west from Kangding the rugged topography of the greater Hengduan Mountains gave way to increasing expanses of steppe suggesting that the *F. bieti* is more common in western Ganzi Prefecture than near Kangding, at the eastern margin of the Tibetan Plateau.

Physical description

There are five shared characteristics in the skins we saw, three of which have been accurately portrayed in drawings. All skins we saw had hair that was gray closest to the skin, turning abruptly to brown, and ending with blond tips. The ear tufts are distinctive and ob-

Table 1. Towns and villages where skins were found for sale and where local pastoralists could identify the Chinese mountain cat

Village	Skins for sale	Identification by local people	Latitude	Longitude	Elevation (m)
Kangding	yes	no	30.05° N	101.96° E	2530
Tagong	yes	yes	30.32° N	101.53° E	3700
Daofu	no	yes	30.98° N	101.12° E	2900
Luhuo	yes	yes	31.40° N	100.68° E	3200
Bangda	no	yes	31.53° N	100.52° E	3833

vious. All skins showed stripes across the back. The tail is fairly bushy with broad dark circular bands. Lastly, the fur on the back of the lower legs and bottom of the paws is black or very dark brown (Fig. 3 and 4).

We do not include measurements because the unusual skinning process causes the skin to stretch lengthwise. The belly is not cut but instead the skin is rolled off the carcass from one end to the other. This process causes excessive stretching so that the cat appears to be longer than it is in life.

Threats

Poisoning of lagomorph (Ochotona) and rodent (zokor) colonies has previously been cited as a threat to *F. bieti* (He *et al.* 2004). We believe these poisoning programs are continuing in Qinghai Province in the range of *F. bieti* (Andrew Smith personal communication). *F. bieti* poses no threat to humans or their live stock, however, the cat's fur is valued for traditional hats. Local pastoralists are also a threat of unknown proportions. Live stock grazing does not require great expenditure of work and the pastoralists can with patience and time extirpate a local population one individual at a time.

Conclusion

Several lines of evidence suggest that the geographic range of Felis bieti is restricted in its southern border to high elevation steppe grasslands. Thus, neither Chinese mountain cat nor Chinese desert cat are appropriate common names. Perhaps the common name Chinese steppe cat more appropriately describes F. bieti. However, further work on the presence of F. bieti in other habitats closer to Xinghai Lake must be completed. Previous depictions of the cat would be more accurate if the lower back legs and all feet were dark brown. A better understanding of the ecology, behavior, and threats to F. bieti is needed and we are in pursuit of these goals.

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Spatial Ecology of Geoffroy's Cat in the Pampas

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he Geoffroy's cat Oncifelis geoffroyi is a small-sized fe-- lid found from sea level up to 3,300 m in the Andes and from southern Bolivia, northwestern Argentina, southern of Brazil, Paraguay and Uruguay to southern Patagonia and Chile (Sunquist & Sunquist, 2002). It has recently been updated to the Near Threatened category (Nowell, 2002), because of lack of knowledge and concerns for the impact of human-related habitat changes upon its populations. While cat research has increased in Argentina in the last decade (Lucherini et al. 2004), the only published information on the spatial behaviour of this cat comes from the southernmost portion of its distribution in Chile (Johnson & Franklin, 1991).

We report here a summary of the first results of two radiotelemetry studies initiated in 2000 in the Pampas grasslands of Buenos Aires province, Argentina.

In early 2000 (Lucherini *et al.* 2000), five Geoffroy's cats (Table 1) were captured and radiocollared at Campos del Tuyú Wildlife Reserve – CdT – (a protected area created by Fundación Vida Silvestre Argentina). From 1999 to 2004, we captured 11 individuals at Ernesto Tornquist Provincial Park – PPET – (Table 1, Fig. 1), but only tagged five of them and collected a total of almost 550 radio-locations until the moment.

In both areas, Geoffroy's cats were strictly nocturnal, with an activity peak in the middle of the night (Luengos Vidal *et al.* 2003, for PPET). At CdT, both sexes most frequently used natural grasslands, both during nocturnal activity and for resting in the day, while small woodland patches were important as marking sites. At PPET, cats used both natural and highly modified farmland areas, but they appeared to use patches with high and dense vegetative cover more than expected. Home ranges (estimated through the 100% Minimum Convex Polygon) ranged from 1.3 to 6.4 km^2 (mean = 4 km^2 , n = 8) and tended to be smaller at PPET than CdT. At both sites, male home ranges tended to be larger than those of females and each male's range overlapped the smaller ranges of one or more females. Surprisingly, at CdT, home range overlap was more extensive between males than females.

These preliminary results suggest that the socio-spatial system of