

## Sighting of an Indochinese Tiger (*Panthera tigris corbetti*) Cub at Phu Khieo Wildlife Sanctuary, Northeast Thailand

This note reports the sighting of an Indochinese tiger (*Panthera tigris corbetti*) cub at Phu Khieo Wildlife Sanctuary, Chaiyaphum Province, Northeast Thailand. The sighting is of particular importance, because this population has been judged to be virtually extinct. It reinforces the great national importance of this sanctuary in the further protection of tigers in Thailand.

Thailand's forests provide approximately 15 distinct areas with potential for supporting populations of Indochinese tigers (SMITH *ET AL.*, 1999). With 1,573 km<sup>2</sup> of protected mostly hill and dry evergreen forest, and contiguous with other protected areas, Phu Khieo Wildlife Sanctuary (PKWS) comprises such an area (KHON KAEN UNIVERSITY & PHU KHIEO WILDLIFE SANCTUARY, 1995; KRETIYUTANONT & KUMSUK, 1999). Several potential prey species are found in PKWS including Gaur (*Bos gaurus*), Wild boar (*Sus scrofa*), Common muntjac (*Muntiacus muntjak*), Sambar (*Cervus unicolor*), Hog deer (*Axis porcinus*), and macaques (*Macaca* spp.; RABINOWITZ, 1989), with some species (Sambar, Hog deer) being more confined to grassland and clearings (LYNAM *ET AL.*, 2001). Moreover, PKWS is part of the Western Isaan Forest Complex, a conservation area of approximately 5,948 km<sup>2</sup>. An area of such a size may support a viable population of the Indochinese tiger if appropriate management interventions are made (LYNAM *ET AL.*, 2001). Previous research at PKWS has demonstrated the presence of tigers. However, the population size is unclear, with estimates varying from one to 38 tigers. The breeding status is also uncertain, without sightings of adult female tigers or cubs (RABINOWITZ, 1993; HOWRATA & KRETIYUTANONT, 1997; KRETIYUTANONT & KUMSUK, 1999; LYNAM *ET AL.*, 2001; GRASSMAN, 2004). Here we report on a chance observation of an immature tiger.

As part of research on Phayre's leaf monkeys (*Trachypithecus phayrei*; supported by National Science Foundation, USA), A.K. and S.S. were driving from Huai Mai Sot to the headquarters at Thung Kha Mang on February 24, 2004. At 19:05 at km 19.8 (UTM 7-76000 18-16000, UTM Zone 47Q, Indian-Thailand map datum) they saw a tiger on the left (southern) side of the road. The individual (sex unknown) was estimated to measure approximately 1.1 m in head-body length plus ca. 0.75 m tail. The tiger stood and looked at the car for a few seconds, leaped once and then disappeared into the forest towards the south. A.K. and S.S. stopped at the place where the tiger had been standing before, but could not see the individual again. The sighting occurred in the same area where an adult male has been located by camera trapping previously (KRETIYUTANONT & KUMSUK, 1999; LYNAM *ET AL.*, 2001; GRASSMAN 2004). The size of the animal suggests a cub perhaps 6–9 months old (GRASSMAN, personal communication; SUNQUIST & SUNQUIST, 2002).

Previous research confirmed the presence of one or two adult male tigers at PKWS via camera trapping, but did not present any evidence for breeding of the tiger population (KRETIYUTANONT & KUMSUK, 1999; LYNAM *ET AL.*, 2001; GRASSMAN, 2004). RABINOWITZ (1993) suggested a population of 12 tigers for PKWS and HOWRATA & KRETIYUTANONT (1997) of at least 6 individuals. SMITH *ET AL.* (1999) concluded from interviews that the

population might consist of up to 38 individuals, although a camera-trapping study suggested the number might be well below this figure (LYNAM *ET AL.*, 2001). GRASSMAN (2004) confirmed the presence of the same adult male as in LYNAM'S *ET AL.* (2001) study. He suggested that the overall tiger density might be low, based on camera trapping, live-trapping and sign presence (GRASSMAN, 2004). The latest evidence for the presence of an adult tiger comes from a camera trap photo from a location in the northwest of PKWS (photo taken on: 14 March 2003, at ca. UTM 7-66500 18-21600; K. KREETIYUTANONT, unpublished). So far we know of no recent reports of cubs or juveniles in the area. The sighting of this tiger cub confirms the presence of a breeding population, and reinforces the national importance of PKWS in protecting this endangered species.

## REFERENCES

- GRASSMAN, L. I. JR. 2004. *Comparative Ecology of Sympatric Felids in Phu Khieo Wildlife Sanctuary, Thailand*. Ph. Dissertation, Texas A&M University Kingsville and Texas A&M University, College Station, TX, USA.
- HOWRATA, T., AND K. KREETIYUTANONT. 1997. *Diversity, Habitat, and Status of Mammals of Phu Khieo Wildlife Sanctuary*. Phu Khieo Wildlife Sanctuary, Wildlife Conservation Division, Natural Resources Conservation Office, Royal Forest Department. 49 pp.
- KHON KAEN UNIVERSITY, AND PHU KHIEO WILDLIFE SANCTUARY. 1995. *Integrated Information System for the Management of Phu Khieo Wildlife Sanctuary*. Khon Kaen University, Khon Kaen. 80 pp.
- KREETIYUTANONT, K., AND M. KUMSUK. 1999. *The Study of Tiger (Panthera tigris corbetti Mazak, 1968) Population and Habitat in Phu Khieo Wildlife Sanctuary*. Natural Resource Management Section, Phu Khieo Wildlife Sanctuary, Wildlife Conservation Division, Natural Resources Conservation Office, Royal Forest Department. 63 p.
- LYNAM, A. J., K. KREETIYUTANONT, AND R. MATHER. 2001. Conservation status and distribution of the Indochinese tiger (*Panthera tigris corbetti*) and other large mammals in a forest complex in northeastern Thailand. *Nat. Hist. Bull. Siam Soc.* 49: 61–75.
- RABINOWITZ, A. 1989. The density and behavior of large cats in the tropical mosaic in Huai Kha Khaeng Wildlife Sanctuary, Thailand. *Nat. Hist. Bull. Siam Soc.* 37: 235–251.
- RABINOWITZ, A. 1993. Estimating the Indochinese tiger, *Panthera tigris corbetti*, population of Thailand. *Biological Conservation* 65: 213–217.
- SMITH, J. L. D., S. TUNHIKORN, S. TANHAN, S. SIMCHAROEN, AND B. KANCHANASAKA. 1999. Mapping the metapopulation structure of Thailand's tigers. Pages 166–175 in *Riding the Tiger: Tiger Conservation in Human Dominated Landscapes*. Eds J. Seidensticker, S. Christie, and P. Jackson. Cambridge University Press, Cambridge.
- SUNQUIST, M., AND F. SUNQUIST. 2002. *Wild Cats of the World*. University of Chicago Press, Chicago. 452 pp.

**Andreas Koenig**

**Scott Suarez**

Department of Anthropology  
Stony Brook University  
Stony Brook, NY 11794-4364  
USA

**Kiti Kreetiyutanont**

**Jarupol Prabnasuk**

Phu Khieo Wildlife Sanctuary  
PO Box 3  
Amphoe Chum Phae  
Khon Kaen 40130  
Thailand