

# CAT

N° 63 | Spring 2016

# news





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Original contributions and short notes about wild cats are welcome

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**CATnews** is produced with financial assistance from the Friends of the Cat Group.

Design: barbara surber, werk'sdesign gmbh  
Layout: Christine Breitenmoser  
Print: Stämpfli Publikationen AG, Bern, Switzerland

**ISSN 1027-2992** © IUCN/SSC Cat Specialist Group

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# Detection of a snow leopard population in northern Bortala, Xinjiang, China

**We substantiate the presence of snow leopards *Panthera uncia* using camera traps within the Dzungarian Alatau range in Bortala Mongolia Autonomous Prefecture, Xinjiang Province, China. A total of 13 camera trap stations were set up in 2012 and a total of 14 camera trap stations in 2013 within an area of 192 km<sup>2</sup>. A total of 11-15 individual adult snow leopards and two sub adults were identified from photo captures of sufficient quality. A range of human activities were noted within and surrounding the survey area, including livestock herding and mining. We recommend more large scale and intensive camera trap surveys to further assess the population status of the snow leopard within this area.**

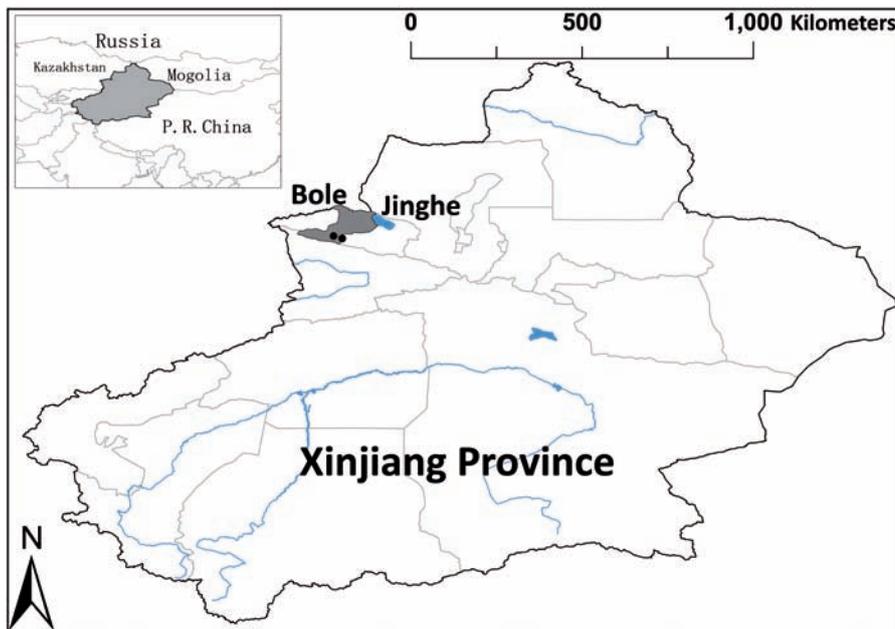
China is believed to host the largest proportion of the world's endangered snow leopard population (Snow Leopard Network 2014). Survey data for this elusive species are however very scarce and more effort is needed to verify its presence in various parts of its expected range (Alexander et al. 2015). We conducted a snow leopard field survey within the Dzungarian Alatau range in Bortala Mongolia Autonomous Prefec-

ture, Xinjiang Province, China between 2012- 2014. To our knowledge the presence of snow leopards has never been formally documented in the prefecture. Schaller et al. (1988) noted that snow leopards were potentially close to extinction or no longer present within this area. The local forestry authorities have however recently received reports of sightings and depredation of wildlife and livestock. Our survey efforts fo-

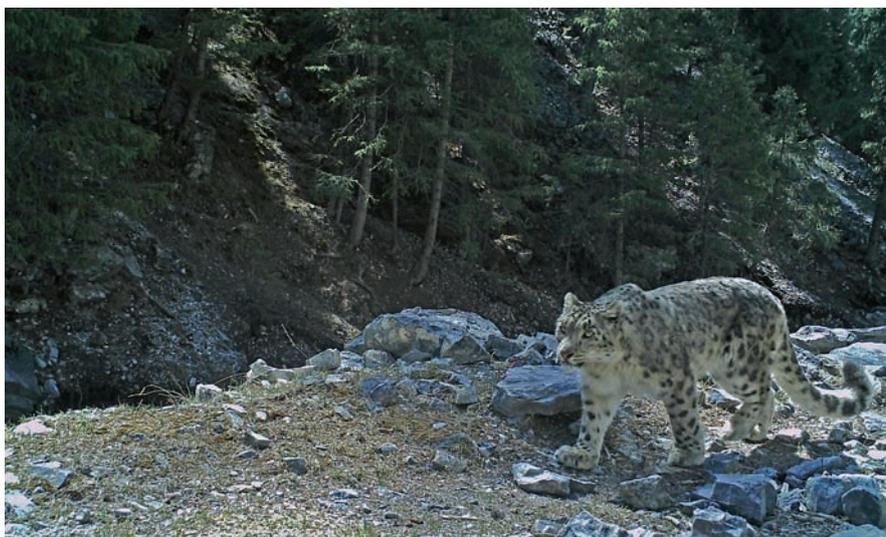
cused on the southern region of the Alatau pass area, namely Santai National Forest, along the boundary of Bole and Jinghe counties (44.32° N / 81.18° E). And we confirm the presence of a breeding snow leopard population.

A total of 13 camera trap stations were set up in 2012 and a total of 14 camera trap stations in 2013 within an area of 192 km<sup>2</sup> (Fig. 1). The location of individual camera trap stations was chosen to maximize the possibility of detecting snow leopards. The average distance between camera traps was 1.1 km (SD=1.08; Range 0.25 -2.6 km). Cameras were left active for 20 days in 2012 from April-May and for 26 days in 2013, from June-July. This resulted in a total of 146 trap days in 2012 and 468 trap days in 2013. Capture incidences were reviewed independently by three separate observers to identify individual snow leopards (Fig. 2 & Fig. 3).

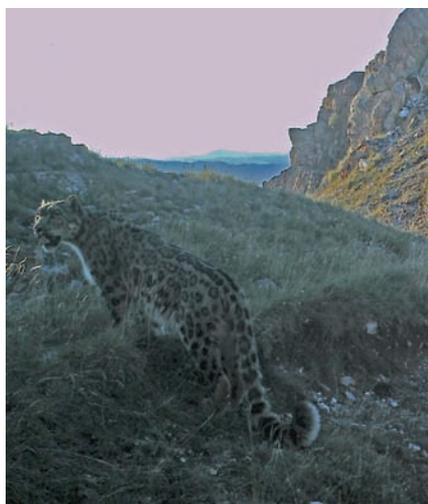
Using photos of sufficient quality from both years 11-15 individual adult snow leopards and two sub adults were identified within the area of 192 km<sup>2</sup>. The precise total was uncertain as on some occasions the frontal or rear features only were captured and we could not therefore be sure that the four



**Fig. 1.** Location of Santai National Forest, along the boundary of Bole and Jinghe counties (44.32° N / 81.18° E). The black dots indicate the camera trap locations of 2012 and 2013.



**Fig. 2.** Snow leopard photographed in Bortala on 24 April 2012 (Photo Wildlife Institute BFU).



**Fig. 3.** Snow leopard photographed in Bortala on 15 June 2013 (Photo Wildlife Institute BFU).

captures were distinct separate individuals. One family group of presumably an adult female and two sub-adults were captured three times together in 2013, confirming that the population is breeding. Snow leopard photographs were taken at elevations of 2,000–2,600 m. In addition a range of different species were captured on camera including potential prey such as Himalaya marmot *Marmota himalayana*, ibex *Capra ibex*, yak *Bos mutus* and red deer *Cervus elaphus*, as well as other carnivore species such as grey wolf *Canis lupus* and red fox *Vulpes vulpes*.

Within the survey area limited human activities are permitted, including livestock herding and tourism. Livestock herders seasonally migrate across pastures with

their families and livestock. Local livestock herders and the local forestry staff have reported that snow leopards are responsible for relatively few livestock predations events. They however raised concerns about the potential threat posed by mining and road building activities within the area to snow leopards and other species.

This new information substantiates the presence of snow leopards in a part of Xinjiang Province China that offers a number of mountain ranges with favourable habitat and that borders with Kazakhstan where monitoring and conservation efforts are currently improving. We are now undertaking more long-term ecological surveys across larger areas together with a social survey in order to build a more detailed understanding of potential human wildlife conflict and snow leopard population dynamics.

#### Acknowledgements

We acknowledge the support of China's State Forestry Administration and Santai Forestry Administration Bureau. We thank all the data compilation staffs, especially Ms. Sydney Greenfield, Mr. Li Deng and Mr. Joseph Lambert, and also our volunteer Mr. Qi Xianfeng.

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