

CAT

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news





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Original contributions and short notes about wild cats are welcome

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Nepal's first Pallas's cat

We report the first record of Pallas's cat *Otocolobus manul*, from Nepal. The discovery occurred in Manang valley of Annapurna Conservation Area in Midwestern Nepal during the course of snow leopard *Panthera uncia* monitoring using remote camera traps. This is the first documented record in the country and produced 14 images (11 full and 3 partial images) in three capture events at two camera locations, Thorkya (4,200 m) and Angumila Lapche (4,650 m). The chance discovery of this small cat has sparked a wave of interest among Nepalese conservationists to undertake status survey and conservation initiatives in the entire Annapurna Conservation Area, the largest community-based conservation undertaking of the National Trust for Nature Conservation.

Pallas's cat, a small cat, is known to occur throughout northern and central Asia, inhabiting a wide variety of grassland, semi desert, and desert habitats (Allen 1938, Ognev 1935, Heptner & Sludskii 1972, Heptner & Naumov 1992, Nowell & Jackson 1996). Despite its widespread range, little is known about the species ecology, behaviour, and conservation status. The IUCN classifies it as Near Threatened (NT) due to its decreasing population trend and increasing threats from hunting and habitat loss (Ross et al. 2008). The Convention on International Trade of Endangered Species (CITES) lists reports of trade in Pallas's cat skins (UNEP-WCMC 2004). Pallas's cats have been recorded at elevations ranging from 1,500 m in open steppes and shrub lands of northwest Iran (Aghili et al. 2008) and up to 5,050 m on the northwest Tibetan Plateau, China (Fox & Dorji 2007).

No record of Pallas's cat existed in Nepal until several images were captured as non-target species in one of the camera traps in the upper Marsyangdi valley of Manang district within the Annapurna Conservation Area ACA, Midwest Nepal (28°30'N-28°50'N/83°50'E-84°55'E). Here we formally report the first record of Pallas's cat from the high altitude alpine pasture of Thorkya (4,200 m) and Angumila Lapche (4,650 m) in Manang district of the ACA. The first image of the species was captured in one of the remote camera traps installed as part of the "community-based snow leopard monitoring project" in ACA. With the support of the Snow Leopard Conservancy SLC (a non-profit organisation based in California, a host of Snow Leopard Scouts), a high school youth-forum organized to monitor and conserve the region's snow leopards *Panthera uncia*, and have been monitoring the local snow leopard population

since 2012 in ACA. In three areas, Manang, Lower Mustang and Upper Mustang of ACA, every year, a group of eleven students from grades 6 to 8 representing several local schools are trained on snow leopard ecology, observing prey, characterizing alpine habitat, and installing and monitoring camera traps. The training is done as part of a snow leopard environmental awareness camp and camera traps are installed on alpine slopes and monitored by Snow Leopard Scout during a pre-determined period.

The discovery of Pallas's cat

The discovery of Pallas's cat during the course of snow leopard monitoring through camera traps was a surprise. For snow leopard monitoring, we deployed remotely triggered camera traps (Bushnell camera, passive infrared detector Trophy Camera Camo Model 119447), along well-defined, narrow ridgelines or valleys or immediately adjacent to frequently scent-sprayed rocks and scrapes (Jackson et al. 2006). We installed five cam-

era traps from 20 October to 25 December 2012 (140 trap nights) and eleven cameras from 12 October to 22 January 2013 (636 trap nights). The study area covered elevations between 3,750 m and 4,740 m over ca. 131 km² in the upper reaches of Manang (Fig. 1), and five camera traps were placed in different watersheds. In each location, we deployed one camera trap at a distance of 2-3 metres from the anticipated travel path of snow leopard. These camera traps were checked approximately every 12 to 15 days, and batteries were changed if necessary. Photographs of Pallas's cat (Fig. 1) were obtained at two out of the eleven camera-trap locations: Aangumie Lapche (4,650 m; 28°41.028'N/84°01.776' E) and Thorkya (4,200 m; 28°40.889'N/84°01.365'E), both locations lie above the main settlement Manang village (Fig. 2). We obtained a total of 14 pictures of Pallas's cat over three capture events (along with 209 pictures of snow leopard during 39 capture events of 766 trap nights in 2012 and 2013). In 2012, six photos of Pallas's cat were obtained in Aangumie Lapche and two photos in Thorkya. The camera trap in Aangumie Lapche revealed six more images in 2013, while there was none captured in Thorkya (Supporting Online Material SOM Tables T1-T3).

Pallas's cat habitat and prey species in Manang

Although a detailed survey is currently being planned to study the habitat utilization of Pallas's cat in Manang and adjoining areas, the general habitat can be described based on our knowledge of the area and the studies done by early researchers (Oli 1991, Ale 1993, Gurung 2014). The upper Manang is a dry alpine valley which falls in the rain-

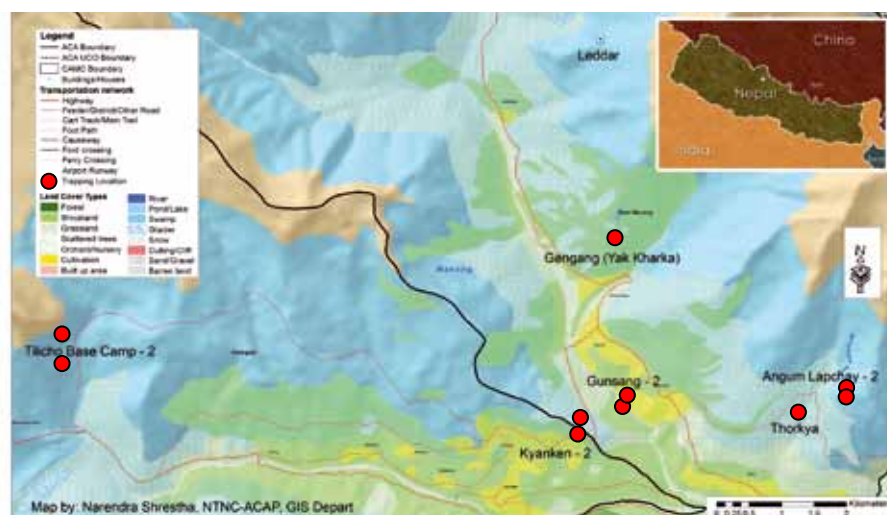


Fig. 1. Location of camera traps in Manang, Annapurna Conservation Area.



Fig. 2. Pallas's cat captured on 26 December 2013 in Angumila Lapche, Manang, ACA.

shadow of the Annapurna Mountain Range, with a dry and cold climate. It is a transition zone between the moist southern Himalayan slopes and the high deserts of Tibet. The upper watershed of Marsyangdi River, the largest river of Manang district (1,950 km²) consists primarily of alpine grasslands (approximately between 4,500 m to 5,000 m) and subalpine scrublands (from 4,000 m to 4,500 m). Gurung (2014), while studying blue sheep *Pseudois nayaur* population dynamics, described in detail the habitat and topography of the area: When taking account of only grazing zone of ungulates, the rolling and hilly terrain comprised over 70% the rest being cliffs and broken slopes the rest, with east and south facing slopes more abundant than north-facing terrains.

In this area snow leopard and red fox *Vulpes vulpes* are the only large mammalian predators, and blue sheep and musk deer the only wild ungulates found in the study area. Small mammals in the study area include Royle's pika *Ochotona roylei*, least weasel *Mustela nivalis*, stone marten *Martes foina*, and the Sikkim vole *Alticola sikkimensis*, all of which may be potential prey of snow leopards and Pallas's cats (see Oli 1991).

Conclusions

With this paper, we confirm the presence of Pallas's cat in Upper Manang. The Pallas's cat shares its habitat with the snow leopard. Along with other small predators and prey, the cat also coexists with thousands of livestock including yaks, dzo, cattle, sheep and goats. While the trekking and tourism business has been on the rise recently, it may not

be the main occupation for most inhabitants in Manang, so livestock herding will remain significant in this part of Nepal for many years to come. What is the current practice of livestock husbandry and how does this, along with other land use practices, impact the prey of Pallas's cat and eventually the cat? What are the long-term conservation strategies the concerned authorities should devise that ensure Pallas's cat continued survival? These may be important questions that need to be addressed with future studies.

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References

- Aghili A., Masoud R., Murdoch J. D., & Mallon D. P. 2008. First Record of Pallas's Cat in Northwest Iran. *Catnews* 49, 8-9.
- Ale S.B. 1993. The effects of grazing in the Khangsar region of the Manang district in Annapurna Conservation Area. MSc. Thesis, Tribhuvan University, Kathmandu, Nepal, 120 pp.

- Allen G. M. 1938. The mammals of China and Mongolia. Vol. XI, part 1. American Museum of Natural History New York.
- Fox J. L. & Dorji T. 2007. High elevation record for occurrence of the Manul or Pallas cat on the northwest Tibetan Plateau, China. *Cat News* 46, 35.
- Gurung M. K. 2014. Ecology of fear: A case of study of blue sheep and snow leopards in the Nepal Himalayas. PhD Thesis. The University of Illinois at Chicago, Chicago, 163 pp.
- Heptner V. G. & Naumov N. P. (Eds). 1992. Mammals of the Soviet Union. E.J. Brill, New York.
- Heptner V. G. & Sludskii A. A. 1972. Mammals of the Soviet Union. Vol II, Part 2. Carnivora (Hyenas and Cats). Vysshaya Shkola, Moscow, Russia (in Russian).
- Jackson R., Roe J. D., Wangchuk R. & Hunter D. O. 2006. Estimating Snow Leopard Population Abundance Using Photography and Capture-Recapture Techniques. *Wildlife Society Bulletin* 34, 772-781.
- Nowell K. and Jackson P. 1996. Wild cats: status survey and conservation action plan. IUCN, Gland, Switzerland.
- Ognev S. I. 1935. Mammals of USSR and adjacent countries. Vol. 3 Carnivora (Fissipedia and Pinipedia). English translation 1962. Program for Scientific Translations, Jerusalem, Israel.
- Oli M. K. 1991. The ecology and conservation of the snow leopard (*Panthera uncia*) in the Annapurna Conservation Area, Nepal. PhD thesis, University of Edinburgh, Edinburgh, United Kingdom, 155 pp.
- Ross S., Murdoch J., Mallon D., Sanderson J. & Barashkova A. 2008. *Otocolobus manul*. In: IUCN 2013. IUCN Red List of Threatened Species. Version 2013.2. <www.iucnredlist.org>. Downloaded on 24 May 2014.
- UNEP-WCMC. 2004. Checklist of CITES Species. Convention on International Trade of Endangered Species.

Supporting Online Material SOM T1-T3 are available at www.catsg.org/catnews

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