See discussions, stats, and author profiles for this publication at: https://www.researchgate.net/publication/316159185

Rusty-spotted cat in Kalesar National Park and Sanctuary, Haryana, India

Article · April 2016

CITATION 1		READS 1,063	
9 authors, including:			
	Pallavi Ghaskadbi Wildlife Institute of India 12 PUBLICATIONS 34 CITATIONS SEE PROFILE	se an	Bilal Habib Wildlife Institute of India 144 PUBLICATIONS 908 CITATIONS SEE PROFILE
P	Zaffar Rais Mir Central University of Kashmir 16 PUBLICATIONS 82 CITATIONS SEE PROFILE	1	Salvador Lyngdoh Wildlife Institute of India 54 PUBLICATIONS 463 CITATIONS SEE PROFILE
Some of the authors of this publication are also working on these related projects:			

Predator Prey Preferences - how predators choose what to eat View project

Recovery of Dugongs and their habitats in India View project



ISSN 1027-2992

N° 63 I Spring 2016



CATnews is the newsletter of the Cat Specialist Group, a component of the Species Survival Commission SSC of the International Union for Conservation of Nature (IUCN). It is published twice a year, and is available to members and the Friends of the Cat Group.

For joining the Friends of the Cat Group please contact Christine Breitenmoser at ch.breitenmoser@kora.ch

Original contributions and short notes about wild cats are welcome Send contributions and observations to ch.breitenmoser@kora.ch.

Guidelines for authors are available at www.catsg.org/catnews

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



Editors: Christine & Urs Breitenmoser Co-chairs IUCN/SSC Cat Specialist Group KORA, Thunstrasse 31, 3074 Muri, Switzerland Tel ++41(31) 951 90 20 Fax ++41(31) 951 90 40 <u.breitenmoser@vetsuisse.unibe.ch> <ch.breitenmoser@kora.ch>

Associate Editors: Keith Richmond Brian Bertram Sultana Bashir Javier Pereira

> **Cover Photo**: Chinese mountain cat near Rouergai, Sichuan, China Photo Alain Guillemont

The designation of the geographical entities in this publication, and the representation of the material, do not imply the expression of any opinion whatsoever on the part of the IUCN concerning the legal status of any country, territory, or area, or its authorities, or concerning the delimitation of its frontiers or boundaries.

PALLAVI GHASKADBI¹, BILAL HABIB^{1*}, ZAFFAR MIR¹, RAJORSHI RAY¹, GAUTAM TALUKDAR¹, SALVADOR LYNGDOH¹, BIVASH PANDAV¹, PARAG NIGAM¹ AND AMARINDER KAUR²

Rusty-spotted cat in Kalesar National Park and Sanctuary, Haryana, India

The rusty-spotted cat *Prionailurus rubiginosus*, endemic to India and Sri Lanka, is one of the world's smallest cats. Listed as Vulnerable in the IUCN Red List since 2002 (Khan & Mukherjee 2008), this species has only been moderately studied, and increasingly new distribution records are a testimony to how little is known about these small cats. We would like to report a new distribution record for the rusty-spotted cat from the Kalesar National Park and Sanctuary KNPS in the state of Haryana in northern India (Fig. 1). This forest is primarily a sal and khair forest interspersed with grasslands and is also the westernmost limit of naturally occurring sal forest in the country. KNPS is situated in the foothills of Himalayas in the Shivalik Hill Range, which runs along the eastern side of the forest.

The rusty-spotted cat is a small felid which is about half the size of a domestic cat but differentiates itself from it by a characteristic fawn coat and rusty-brown spots. In India it is protected under the Schedule I of the Wildlife Protection Act, 1972. For a long time the distribution of this felid was thought to be restricted to the southern part of the country, but increasing numbers of records of the cat from the north have been reported in the recent past. The last confirmed records of the northernmost limit for this species are from the foothills of Himalayas in Jammu and Kashmir (Chakraborty 1978), and there are recent records from Katerniaghat Wildlife Sanctuary (Anwar et al. 2012) in the state of Uttar Pradesh. Our record from the state of

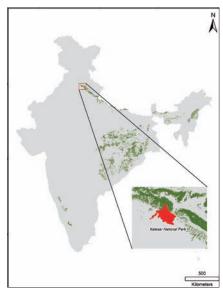


Fig. 1. Location of Kalear National Park in India and in relation to the distribution of sal forest in the country.

Haryana is a missing piece in the puzzle of the distribution of this small felid which might be, after all, found throughout the country from the south to the north.

An intensive camera-trapping exercise was carried out in the KNPS from December 2014 to April 2015. A total of 2,142 trap nights yielded 15,326 captures of a wide range of mammals. Although the camera-trapping exercise was primarily aimed at studying the leopard Panthera pardus population, it was also aimed at investigating the overall mammalian diversity of the National Park. A total of 18 mammalian species were reported from the survey which was carried out for the first time in this lesser known protected area. Leopard, elephant Elephas maximus, goral Naemorhedus goral, sambar Cervus unicolor, chital Axis axis were a few of the species that were commonly captured through the camera-trapping exercise. The rusty- spotted cat was captured on three occasions out of the total trapping effort. This apparently nocturnal cat was photographed on 12 December 2014, 22:56 h, and on 26 December 2014, 05:19 h, both at 30° 22" 24.25'N/ 77° 31" 57.50'E, and on 23 April 2015, 23:45 h, at 30° 21" 10.6'N/77° 33" 00'E (Figs 2, 3). The characteristic rusty coat with brown spots, the streaking on the neck and the pattern on the flanks (Menon 2014) confirm the identity of this cat (Figs 2, 3). A tail that averages about 50% of the head- to-body length and is unmarked is also a characteristic feature of the species (Prater 1998).

Found throughout a wide habitat range from moist and dry deciduous forest types



Fig. 2. Rusty-spotted cat in Kalesar National Park pictured on 12 December 2014.

to scrub and grassland and also crop fields near human habitation (Nowell & Jackson 1996, Mukherjee 1998, Nekaris 2003, Athreya 2010, Patel 2011). The rusty-spotted cat is thought to be arboreal in habit. One of the camera traps that recorded the cat was deployed in scrub grassland near human habitation and another was in dry deciduous forest away from human habitation, which suggests that the cat may be adaptable to a certain degree of human disturbance. The photographs clearly suggest that the cats are not wild-cat hybrids, which look similar but have more closely-spaced spots on the back, terminal rings on the tail and longer legs.

KNPS is located in the eastern district of Yamunanagar, Haryana, at the juncture of four state boundaries: Uttar Pradesh, Uttarakhand, Haryana and Himachal Pradesh (Fig. 1). The river Yamuna flows through the eastern part of the forest, whereas the southern part has human settlements that put immense pressure and disturbance around



Fig. 3. Rusty-spotted cat in Kalesar National Park pictured on 23 April 2015.

the major river. Records of tigers using the dry river bed to cross over from forests in Uttarakhand and Uttar Pradesh suggest that this forest might have been an important tiger habitat as well. In the north the forest is contiguous with the Simbalwada Wildlife Sanctuary in Himachal Pradesh. In this setting KNPS is an important habitat island at the extreme end of the Terai Arc Landscape that needs urgent conservation efforts.

An interesting finding from this study is that the forest of Kalesar supports three small cats: jungle cat, leopard cat and the rusty-spotted cat. It would be interesting to investigate further the niche segregation and the level of competetion among these felids in a small forest like Kalesar. Niche segregation has been a popular topic in studying the big cats like the tiger and leopard in Indian forests, but there is almost no data available on the resource use and partitiononing in small cats. KNPS provides an excellent location to study small cats and their intraguild interactions which are little known.

Acknowledgements

We would like to thank the Haryana Forest Department for the necessary permits and support throughout the period of this study. We are also grateful to the Director and Dean of the Wildlife Institute of India for aiding this study.

References

- Anwar M., Kumar H. & Vattakavan J. 2012. Rusty-spotted cat in Katerniaghat Wildlife Sanctuary, Uttar Pradesh State, India. Cat News 56, 12-13.
- Athreya V. 2010. Rusty-spotted cat more common than we think? Cat News 53, 27.
- Chakraborty S. 1978. The rusty-spotted cat, *Felis rubiginosa*. I. Geoffroy, in Jammu and Kashmir. J. Bombay Nat. Hist. Soc. 75, 478-479.
- Khan, J.A. & Mukherjee, S. 2008. Prionailurus rubiginosus. The IUCN Red List of Threatened Species 2008: e.T18149A7673082. http://dx.doi.org/10.2305/IUCN.UK.2008. RLTS.T18149A7673082.en. Downloaded on 1 June 2016
- Menon V. 2014. Indian Mammals: A Field Guide. Hachette India, New Delhi. 528 pp.

- Mukherjee S. K. 1998. Small Cats of India. Envis - Wildlife and Protected Areas. Wildlife Institute of India.
- Nekaris K. A. I. 2003. Distribution and Behaviour of Three Small Wild Cats in Sri Lanka. Cat News 38, 30-32.
- Nowell K. & Jackson P. 1996. Wild Cats. Status Survey and Conservation Action Plan. IUCN/ SSC Cat Specialist Group, Gland, Switzerland.
- Patel K. 2011. Preliminary survey of small cats in Eastern Gujarat, India. Cat News 54, 8-11.
- Prater S. H. 1998. The Book of Indian Animals. Bombay Natural History Society, Bombay. (New edition, Oxford University Press). 324 pages
- ¹ Wildlife Institute of India
 - *<bh@wii.gov.in>
- ² Forest Department, Government of Haryana, India