OPEN ACCESS



The Journal of Threatened Taxa is dedicated to building evidence for conservation globally by publishing peer-reviewed articles online every month at a reasonably rapid rate at www.threatenedtaxa.org. All articles published in JoTT are registered under Creative Commons Attribution 4.0 International License unless otherwise mentioned. JoTT allows unrestricted use of articles in any medium, reproduction, and distribution by providing adequate credit to the authors and the source of publication.



Journal of Threatened Taxa

Building evidence for conservation globally

www.threatenedtaxa.org

ISSN 0974-7907 (Online) | ISSN 0974-7893 (Print)

Note

FIRST RECORD OF RUSTY-SPOTTED CAT *PRIONAILURUS RUBIGINOSUS* (MAMMALIA: CARNIVORA: FELIDAE) FROM RAMGARH-VISHDHARI WILDLIFE SANCTUARY IN SEMI-ARID LANDSCAPE OF RAJASTHAN, INDIA

Sailaja Nayak, Sunny Shah & Jimmy Borah

26 January 2017 | Vol. 9 | No. 1 | Pp. 9761–9763 10.11609/jott.3303.9.1.9761-9763



For Focus, Scope, Aims, Policies and Guidelines visit http://threatenedtaxa.org/About_JoTT.asp
For Article Submission Guidelines visit http://threatenedtaxa.org/Submission_Guidelines.asp
For Policies against Scientific Misconduct visit http://threatenedtaxa.org/JoTT_Policy_against_Scientific_Misconduct.asp
For reprints contact <info@threatenedtaxa.org>

Partner



Publisher/Host



FIRST RECORD OF RUSTY-SPOTTED CAT PRIONAILURUS RUBIGINOSUS (MAMMALIA: CARNIVORA: FELIDAE) FROM RAMGARH VISHDHARI WILDLIFE SANCTUARY IN SEMI-ARID LANDSCAPE OF RAJASTHAN, INDIA

Sailaja Nayak¹, Sunny Shah² & Jimmy Borah³

- ^{1,2} WWF-India, Western India Tiger Landscape, Hotel Park Resort Street, Vigyan Nagar, Ranthambhore Road, Sawai Madhopur, Rajasthan 322001, India
- ³ WWF-India, 172-B, Lodhi Estate, Lodi Road, Institutional Area, New Delhi 110003, India
- ¹ nayak.sailaja@gmail.com, ² sshah@wwfindia.net,
- ³ jimmyborah@gmail.com (corresponding author)

The Rusty-spotted Cat Prionailurus rubiginosus is the world's smallest cat, found only in India, Nepal and Sri Lanka. It occurs in moist and dry deciduous forest types as well as in scrub and grassland. Rustyspotted cats prefer dense vegetation and rocky areas (Worah 1991; Patel 2006) but have been found amidst agricultural areas and human settlements (Nowell & Jackson 1996; Mukherjee 1998; Kettle & Watson 2004). The Rusty-spotted Cat is listed as a Schedule I species under the Wildlife (Protection) Act, 1972 of India and is classified as 'Near Threatened' under the IUCN Red List of Threatened Species. Past studies and historic records have shown that the Rusty-spotted Cat ranges from Tamil Nadu in the south to Jammu & Kashmir in north, through Madhya Pradesh in central India to Gujarat in the west and Odisha in the east (Chakraborty 1978; Digveerendrasinh 1995; Patel 2006; Acharjyo et al. 1997; Mali et al. 2015). Though it has been recorded from

most parts of India, the distribution is yet to be documented clearly (Mukherjee et al. 2016). To date, the Sariska Tiger Reserve held the northernmost confirmed record of the cat (Mukherjee 1998) from Rajasthan. Down further south, there are records of Rusty-spotted Cats from Ranthambhore Tiger Reserve and Udaipur (Dharmendra



ISSN 0974-7907 (Online) ISSN 0974-7893 (Print)

OPEN ACCESS



Khandal in litt. 2013; Bhatnagar et al. 2000). We report a recent record of this species, based on a roadkill and photographic evidence, from the Ramgarh-Vishdhari Wildlife Sanctuary, just south of the Ranthambhore Tiger Reserve, in Rajasthan, India.

We photographed a carcass of a Rusty-spotted Cat during a roadkill survey on 22 June 2014 at 06:31hr at 25°31′6.5" & 75°53′14.6"E (Fig. 1). This location was on our survey route to Lakheri-Khatkad-Bundi, on State Highway 29, on the boundary of the Ramgarh-Vishdhari Wildlife Sanctuary. We assumed that the roadkill incident took place the night before we found the carcass. The cat's coat was brownish-grey and had rusty spots arranged longitudinally over the body except on the forehead, which had four dorsal dark brown stripes running up to the shoulder. The cat's eyes were large and round. While the legs were short and dark brown in color, the tail was long, uniformly colored with a black tip (Image 1). The site of the kill was located on a gentle slope, surrounded by densely covered scrub land (mainly Prosopis juliflora) on both sides of the road and human habitations nearby. The cat looked like an adult. This incidence along with aforementioned records from Ranthambhore possibly indicates the

DOI: http://doi.org/10.11609/jott.3303.9.1.9761-9763 | **ZooBank:** urn:lsid:zoobank.org:pub:5A59C9CF-C23A-4ED2-A0C9-B7690BDD329C

Editor: Ashwin Naidu, University of Arizona, Tucson, USA.

Date of publication: 26 January 2017 (online & print)

Manuscript details: Ms # 3303 | Received 13 December 2016 | Final received 30 December 2016 | Finally accepted 13 January 2017

Citation: Nayak, S., S. Shah & J. Borah (2017). First record of Rusty-spotted Cat *Prionailurus rubiginosus* (Mammalia: Carnivora: Felidae) from Ramgarh-Vishdhari Wildlife Sanctuary in semi-arid landscape of Rajasthan, India. *Journal of Threatened Taxa* 9(1): 9761–9763; http://doi.org/10.11609/jott.3303.9.1.9761-9763

Copyright: © Nayak et al. 2017. Creative Commons Attribution 4.0 International License. JoTT allows unrestricted use of this article in any medium, reproduction and distribution by providing adequate credit to the authors and the source of publication.

Funding: WWF-Sweden.

Competing interests: The authors declare no competing interests.

Acknowledgements: We are grateful to the Rajasthan Forest Department for permitting this study and staffs of Ramgarh Vishdhari Wildlife Sanctuary for their full support. We also thank Deepankar (Volunteer) and Akhtar for their active participation and constant support during the study. In addition, we would also like to thank WWF-India Secretariat for encouragement and timely backing.

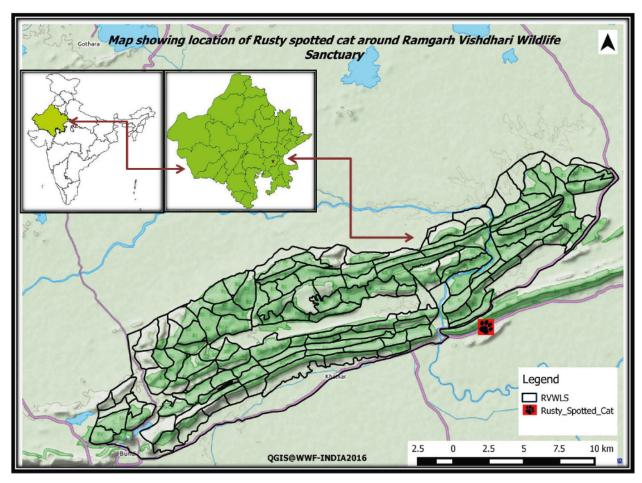


Figure 1. Location of the road kill (Rusty-spotted Cat) and Ramgarh-Visdhari Wildlife Sanctuary in Rajasthan, India



Image 1. Photograph of Rusty-spotted Cat *Prionailurus rubiginosus* roadkill

presence of a breeding population in this region. We assume that the species might be using different forest patches connected with each other as "stepping-stone" corridors from Ranthambhore Tiger Reserve through

the Ramgarh-Vishdhari Wildlife Sanctuary via Bundi Territorial Forest to the Mukundra Hills Tiger Reserve in Kota and the Kumbalgarh Sanctuary of Udaipur.

Over the past decade, rusty-spotted cats have potentially gone through severe population declines because of habitat alterations, road kills and possible hybridization with domestic cats (van Gruisen & Sinclair 1992; Menon 2003; Khan & Mukherjee 2008). There are previous reports of these cats being found dead near roads and human settlements (Tehsin 1994; Digveerendrasinh 1995; Dubey 1999), which indicate that vast road networks are a major threat to their survival. The expansion of a cement factory in Lakheri along the road SH29 in the near future will likely lead to an increase in traffic, especially in the after hours that might result in more such roadkill incidences. There is very little information available about the Rusty-spotted Cat's ecology, and this could be attributed to its elusive and nocturnal behavior and activity. There is a need to develop management plans that look into and beyond protected areas since large populations

of this small cat could be surviving outside protected areas (Patel 2011). There is also a need for monitoring studies on their status, population density, ecology, connectivity, and threats. Such studies can help further investigate their distribution and develop strategies for conservation of the species regardless of its presence in various land regimes

References

- Acharjyo, M., K.L. Purohit & S.K. Patnaik (1997). Occurrence of the rusty-spotted cat in Orissa. *Journal of the Bombay Natural History Society* 94: 554–555.
- Anwar, M., H. Kumar & J. Vattakavan (2010). Range extension of rusty-spotted cat to the Indian Terai. Cat News 53: 25–26.
- Bhatnagar, R., V.S. Rana & S.K. Sharma (2000). The occurrence of Rusty-spotted Cat (*Prionailurus rubiginosus*) near Thur-Magra Forest Block in Udaipur City, Rajasthan. *Zoos' Print* 15(12): 8.
- Chakraborty, S. (1978). The Rusty-spotted Cat, Felis rubiginosa I. Geoffroy, in Jammu and Kashmir. Journal of the Bombay Natural History Society 75: 478.
- Digveerendrasinh (1995). Occurrence of the rusty spotted cat (Felis rubiginosa) in Madhya Pradesh. Journal of Bombay Natural History Society 92: 407–408.
- Dubey, Y. (1999). Sighting of Rusty spotted Cat in Tadoba Andhari Tiger Reserve, Maharashtra. *Journal of the Bombay Natural History Society* 96: 310.
- Kettle, A. & A. Watson (2004). Rusty-Spotted Cat in Sri Lanka: Observations of an arid zone population. Cat News 40: 17–19.

- Khan, J.A. & S. Mukherjee (2008). Prionailurus rubiginosus. The IUCN Red List of Threatened Species. Version 2014.2. <www.iucnredlist. org>. Downloaded on 7 July 2014.
- Mali, S. & C. Srinivaslu (2006). Rusty-spotted Cat, Sri Lanka Malleshwara Wildlife Sanctuary India. *Cat News* 40: 17–19.
- Menon, V. (2003). A field Guide to Indian Mammals. Penguin Book India (P) Ltd., 208pp.
- Mukherjee, S. (1998). Habitat use in sympatric small carnivores in Sariska Tiger Reserve, Rajasthan, India. PhD Thesis. University of Saurashtra, Bioscience Department, India.
- Mukherjee, S. (1998). Cats: some large many small. In Small Cats of India. Mukherjee S. (ed.). Envis Bulletin. Wildlife Institute of India. http://www.wii.gov.in/envis/cat/catindex.htm
- Mukherjee, S., J.W. Duckwoth, A. Silwa, A. Appel & A. Kittle (2016).

 Prionailurus rubiginosus. The IUCN Red List of Threatened Species
 2016: e.T18149A50662471. http://dx.doi.org/10.2305/IUCN.

 UK.2016-1.RLTS.T18149A50662471.en Downloaded on 17 January
 2017.
- Nowell, K. & P. Jackson (1996). Wild Cats, Status Survey and Conservation Action Plan. IUCN, Gland, Switzerland, 382pp.
- Patel, K. (2006). Observation on Rusty-Spotted Cat in eastern Gujarat. Cat News 45: 27–28.
- Patel, K. (2011). Preliminary survey of small cats in Eastern Gujarat, India. *Cat News* 54: 8–11.
- **Tehsin, R. (1994)**. Rusty-spotted Cat sighted near Udaipur. *Journal of the Bombay Natural History Society* 91: 136.
- van Gruisen, J. & T. Sinclair (1992). Fur trade in Kathmandu: implications for India. TRAFFIC India, New Delhi.
- Worah, S. (1991). The Ecology and Management of a Fragmented Forest in south Gujarat, India: The Dangs. PhD Thesis. University of Pune.





OPEN ACCESS The Journal of Threatened Taxa is dedicated to building evidence for conservation globally by publishing peer-reviewed articles online every month at a reasonably rapid rate at www.threatenedtaxa.org. All articles published in JoTT are registered under Creative Commons Attribution 4.0 International License unless otherwise mentioned. JoTT allows unrestricted use of articles in any medium, reproduction, and distribution by providing adequate credit to the authors and the source of publication.

ISSN 0974-7907 (Online); ISSN 0974-7893 (Print)

January 2017 | Vol. 9 | No. 1 | Pages: 9689-9776 Date of Publication: 26 January 2017 (Online & Print) DOI: 10.11609/jott.2017.9.1.9689-9776

www.threatenedtaxa.org

Article

Influence of substrate features on distribution of polypores (Fungi: Basidiomycota) in central part of Peechi Vazhani Wildlife Sanctuary, Kerala, India

-- Muhammed Iqbal, Kattany Vidyasagaran & Narayan Ganesh, Pp. 9689-9699

Reviews

Nepal's National Red List of Birds

-- Carol Inskipp, Hem Sagar Baral, Tim Inskipp, Ambika Prasad Khatiwada, Monsoon Pokharel Khatiwada, Laxman Prasad Poudyal & Rajan Amin, Pp. 9700-9722

Current status, distribution and conservation status of Algerian bats (Mammalia: Chiroptera)

-- Mourad Ahmim, Pp. 9723-9733

Short Communications

Incipient loss of a rainforest mutualism?

-- Johannes H. Fischer, Heiko U. Wittmer, Endro Setiawan, Sarah Jaffe & Andrew J. Marshall, Pp. 9734-9737

First record of the Woolly-necked Stork Ciconia episcopus Boddaert, 1783 (Aves: Ciconiiformes: Ciconiidae) breeding in the lowland wet zone of Sri Lanka

-- Hemachandra Kularatne & Susantha Udagedara, Pp. 9738-9742

Bibliography and checklist of the dragonflies and damselflies of Bhutan

-- T. Gyeltshen, T. Nidup, P. Dorji, T. Dorji & V.J. Kalkman, Pp. 9743-9747

Checklist of terebrantian thrips (Insecta: Thysanoptera) recorded from India

-- R.R. Rachana & R. Varatharajan, Pp. 9748-9755

Notes

Two jasmine (Oleaceae: Jasminum L.) taxa newly recorded in Vietnam

-- Bui Hong Quang, Vu Tien Chinh, Le Thi Mai Linh & Ritesh Kumar Choudhary, Pp. 9756-9760

First record of Rusty-spotted Cat Prionailurus rubiginosus (Mammalia: Carnivora: Felidae) from Ramgarh-Vishdhari Wildlife Sanctuary in semi-arid landscape of Rajasthan, India -- Sailaja Nayak, Sunny Shah & Jimmy Borah, Pp. 9761-9763

Re-sighting record of Fulvous Leaf-nosed Bat Hipposideros fulvus Gray, 1838 (Mammalia: Chiroptera: Hipposideridae) from Thar Desert, Rajasthan, India

-- Sumit Dookia, Gajendra Singh & Rajlakshmi Mishra, Pp. 9764-9767

Record number of Yellow-billed Oxpeckers Buphagus africanus Linnaeus, 1766 (Aves: Passeriformes: Buphagidae) foraging on a single host

-- Diogo Veríssimo, Jean-Christophe Cugnière, Suzanne Cugnière, Julien Cugnière, Géraldine Cugnière & Laure Cugnière, Pp. 9768-9770

First record of the Two-striped Box Crab Calappa bilineata Ng, Lai & Aungtonya, 2002 (Brachyura: Calappidae) from St. Martin's Island, Bangladesh

-- Muntasir Akash & Mostafa A.R. Hossain, Pp. 9771–9773

A record of Limenitis rileyi Tytler, 1940 (Lepidoptera, Nymphalidae, Limenitidinae) from Arunachal Pradesh, India

-- Purnendu Roy, Pp. 9774-9776



