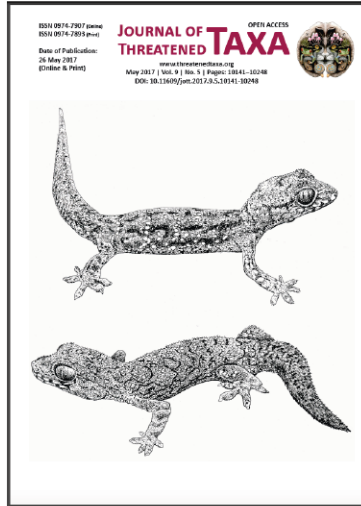


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### NOTE

**A PHOTOGRAPHIC RECORD OF THE RUSTY-SPOTTED CAT  
*PRIONAILURUS RUBIGINOSUS* (MAMMALIA: CARNIVORA:  
FELIDAE) IN A FOREST PLANTATION ON THE EAST COAST OF  
TAMIL NADU, INDIA**

M. Bubesh Guptha & M. Eric Ramanujam

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Geoffroy Saint-Hilaire (1831) mentions the type locality of the Rusty-spotted Cat *Prionailurus rubiginosus* as Pondicherry (“bois de lataniers qui couvrent une hauteur voisine de Pondicherry”) and this finding was corroborated by Pocock (1939) and at the time of writing there were three skins in the British Museum - from Madras (now Chennai, on the East Coast), Nellore and Khandala. After that the species has been sighted over most of the Indian subcontinent (e.g., Mali & Srinivasulu 2015) but uniquely there have been no recent records of the species from coastal Tamil Nadu-Puducherry area. All records of the occurrence of the species are from the Western Ghats in Tamil Nadu (Jayson & Christopher 1996; Pillay 2008; Srinivas et al. 2013; Mukherjee & Koparde 2014) though there is a single sighting along the coast from Andhra Pradesh (Manakandan & Srinivasulu 2006).

Here we present a photographic record of the Rusty-spotted Cat *Prionailurus rubiginosus* in a revegetated tract of land 10km north of Puducherry (formerly Pondicherry) along the coast of Tamil Nadu.

Study area: Pitchandikulam (11°59'N & 79°49'E) in the Auroville International Township, Tamil Nadu, is a centre for reforestation programmes on a deeply eroded plateau. At that time, before planting started, the land was hardly a welcome scene. It was a barren dry landscape stretching away in every direction and one could view the sea about 3km away. Very few tree species were present along water courses, mostly a few Palmyra *Borassus flabblifer* and some thorny bushes dotted the landscape. Revegetation programmes began

## A PHOTOGRAPHIC RECORD OF THE RUSTY-SPOTTED CAT *PRIONAILURUS RUBIGINOSUS* (MAMMALIA: CARNIVORA: FELIDAE) IN A FOREST PLANTATION ON THE EAST COAST OF TAMIL NADU, INDIA

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in 1973 with trips to local scrub jungles and sacred groves to gather seeds that were then germinated and planted. A few exotics like Eucalyptus *Eucalyptus* spp. and *Khaya senegalensis* as well as a few native species from inland regions like Teak *Tectona grandis* and Red Sanders *Pterocarpus santalinus* were planted in the first years; however, the most effort was on the autochthonous coastal vegetation, referred to as the 'tropical dry evergreen forest' (Champion & Seth 1968), '*Albizia amara* - *Acacia* Boiv. community' (Mehr-Homji 1973; Puri et al. 1989), 'mixed dry deciduous scrub jungle' (Menon 1986) and 'East Deccan dry evergreen forest' <[www.worldwildlife.org/ecoregions/im0204](http://www.worldwildlife.org/ecoregions/im0204)>. Whatever term one prefers to use, this forest remains an endangered forest type, which historically existed only as a narrow belt along the East Coast from Vishakapatnam to Point Calimere (Blasco & Legris 1972), which has been systematically eradicated over much of its range due to anthropogenic influences over millenniums. In fact, estimates are that only 4% of the original forest cover remained in the form of sacred groves and reserve forests and its conservation status

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PITCHANDIKULAM FOREST CONSULTANTS  
(A Unit Under Auroville Foundation, a statutory body of the Govt. of India)



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was assessed as critical (Wikramanayake et. al. 2002). Today secondary succession is well advanced over the 65 acre reforestation site of Pitchandikulam where woody species dominate after the tenth year (Kinhil & Parthasarathy 2008).

**Methods:** The present study was carried out from 5 August 2016 to 10 September 2016 to estimate the presence and abundance of mammal species in Pitchandikulam. Before starting the camera trap survey, we did a sign survey along all the paths for the presence of indirect evidence like scats, pellets, and footprints. Three camera trap locations were selected based on the frequency of presence of indirect evidence. All camera traps (Spy Point, FL-7) were operational 24 hours, recorded date and time for each camera, and had a 15 second delay between photographs. We placed camera traps on trees 50cm above the ground and aimed the sensors to be parallel to the ground to monitor a conical area approximately 1m in diameter at 5m distance. The total sampling effort accounted for 111 trap nights for 37days.

**Results and Discussion:** Both *Prionailurus rubiginosus* (Image 1) and *Felis chaus* were recorded at the reforestation site. *P. rubiginosus* was recorded once but *F. chaus* was captured on 11 occasions. The species is the world's smallest cat with males weighing 1.6kg and females 1.1kg (Nowell & Jackson 1996).

It was very heartening to record the presence of *P. rubiginosus* in a man-made forest plantation and this shows the success of reforestation efforts of Auroville in general and the site in particular. 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 (Kahn & Mukherjee 2008; Nayak et al. 2017). Though the species has been recorded sporadically all over India in recent times (Image 2), this is the only recent record from this region after a gap of 185 years and is only the third record along the East Coast of India—the two earlier records was a skin from Madras (Chennai) in the British Museum reported 77 years ago (Pocock 1939) and a recent record in coastal Andhra Pradesh (Manakandan & Srinivasulu 2006).

Another interesting feature is that *P. rubiginosus* shares its habitat with *Felis chaus* and in future it would be interesting to investigate niche patterns of the two felids. Though both species are nocturnal, *P. rubiginosus* seems to be more arboreal in habits (Nowell & Jackson 1996) and is probably the reason camera traps recorded it only once. Another factor may be that the two species prey on different food sources. Though the diet of *P.*



Image 1. Rusty-spotted Cat *Prionailurus rubiginosus* captured by camera trap on 10 August 2016

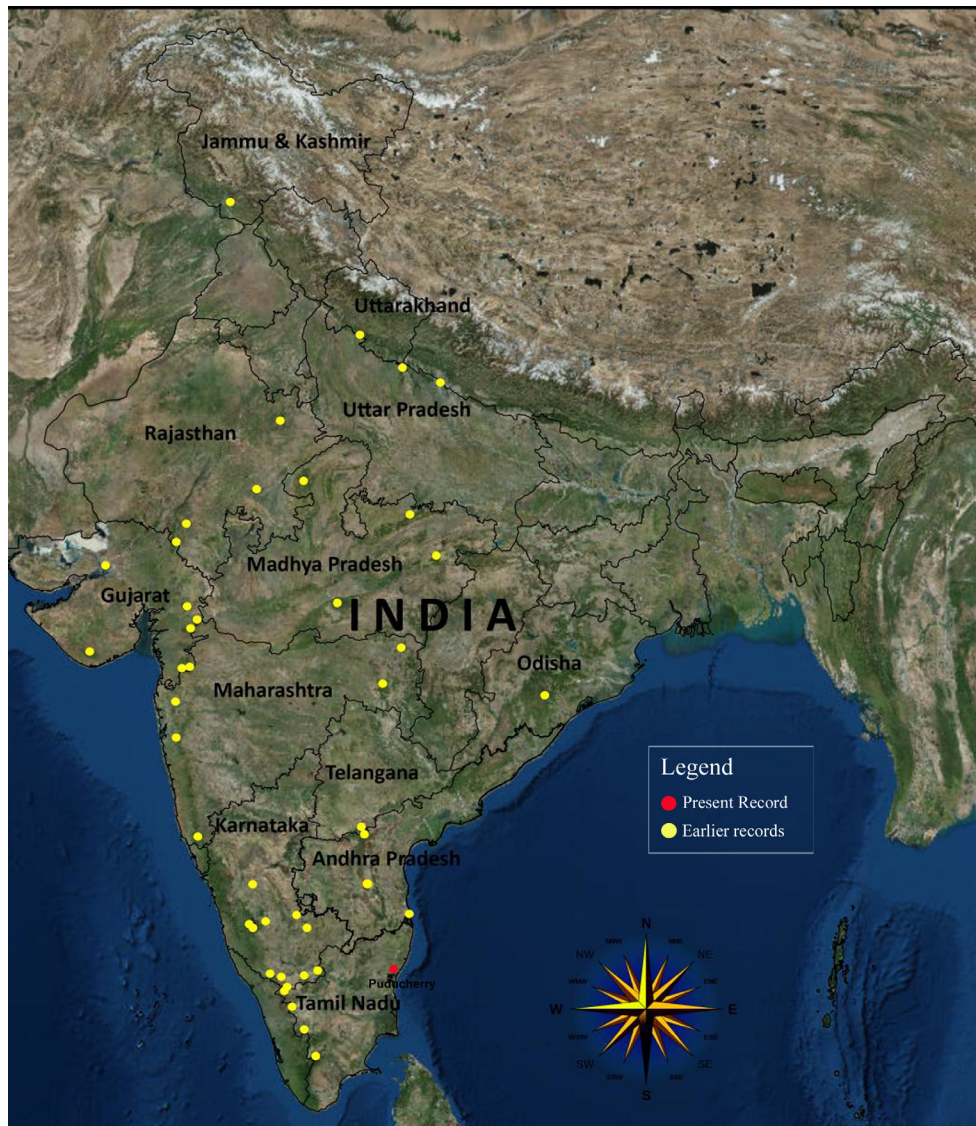
*rubiginosus* has not been properly documented, Phillips (1935) reported without elaboration that it feeds upon small mammals and birds. Local people in both Sri Lanka and India have reported that it is most visible after heavy rain when it emerges to feed on rodents and frogs (deAlwis 1973; Worah 1991). *F. chaus* is much larger than *P. rubiginosus* with males weighing 6.1kg and females 4.2kg (Pocock 1939) and hence able to tackle larger prey. They feed primarily on rodents (Johnsingh et al. 1991), including large species weighing up to 7kg (Dal 1954). *F. chaus* also takes hares, birds, reptiles, amphibians, insects and the young of large ungulates like deer (Rathore & Thapar 1984). In Sariska 73% of scats had rodent remains and wild ungulates, birds, reptiles, invertebrates and even vegetable matter were also evident (Mukherjee et. al. 2004).

More work is needed to better understand the distribution, abundance, and threats of Rusty-spotted Cats in what remains of this endangered forest type.

## References

- Blasco, F. & P. Legris (1972). Dry evergreen forest of Point Calimere and Marakanam. *Journal of the Bombay Natural History Society* 70: 279–294.
- Champion, H.G. & V.K. Seth (1968). *A Revised Survey of the Forest Types of India*. Manager of Publications, New Delhi, India, xxvii+404pp.
- Dal, S.K. (1954). *Animal World of The Armenian Soviet Socialist Republic. Vol. 1: Vertebrate Animals*. Academy of Sciences of the Armenian SSR, Yerevan.
- deAlwis, W.I.F. (1973). Status of Southeast Asia's small cats, pp. 198–208. In: Eaton, R.A. (ed.). *The World's Cats*. World Wildlife Safari, Portland, Oregon.
- Jayson, E.A. & G. Christopher (1996). Sighting of two cat species from Western Ghats, South India. *Journal of the Bombay Natural History Society* 93: 582.
- Johnsingh, A.J.T., H.S. Panwar & W.A. Rodgers (1991). Ecology and conservation of large felids in India, pp. 15–54. In: *Wildlife Conservation and Perspectives for the 21<sup>st</sup> Century*. Proceedings of the Fifth International Congress of Ecology, Yokohama, Japan.
- Kahn, J.A. & S. Mukherjee (2008). *Prionailurus rubiginosus*, Rusty-





**Image 2. Sightings of *Prionailurus rubiginosus* in India (Adapted from Mali & Srinivasulu 2015) and the present record.**

- spotted Cat. The IUCN Red List of Threatened Species <http://dx.doi.org/10.2305/IUCN.UK.2008.RLTS.T18149A76783082.en>
- Kinhal, V. & N. Parthasarathy (2008).** Secondary succession and resource use in tropical fallows: a case study from the Coromandel coast of south India. *Land Degradation & Development* 19: 649–662.
- Mali, S. & C. Srinivasulu (2015).** Records of Rusty-spotted Cat from Sri Lankamalleshwara Wildlife Sanctuary, Andhra Pradesh, India. *Cat News* 62: 20–21.
- Manakandan, R. & S. Sivakumar (2006).** Rusty-spotted Cat on India's east coast. *Cat News* 45: 26.
- Mehr-Homji, V.M. (1973).** A phytosociological study of the *Albizia amara* Boiv. Community in India. *Phytocoenologia* 1: 114–129.
- Menon, R.K. (1986).** The Guindy National Park: its history and physiogeography. *Blackbuck* 2: 14–21.
- Mukherjee, S., S. Goyal, A.J.T. Johnsingh & M.R.P.L. Pitman (2004).** The importance of rodents in the diet of Jungle Cat (*Felis chaus*), Caracal (*Caracal caracal*) and Golden Jackal (*Canis aureus*) in Sariska Tiger Reserve, Rajasthan, India. *Journal of the Zoological Society of London* 262: 405–411.
- Mukherjee, A. & P. Koparde (2014).** Sighting of Rusty-spotted Cat in Anaikatty Reserve Forest, Tamil Nadu, India. *Cat News* 60: 32.
- 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>
- Nowell, K. & P. Jackson (1996).** *Wild Cats: Status Survey and Conservation Action Plan*. IUCN, Gland. 382pp.
- Phillips, W.W.A. (1935).** *Manual of mammals of Sri Lanka*. 2<sup>nd</sup> Revised Edition: Part 3. Wildlife and Nature Protection Society of Sri Lanka, Colombo.
- Pillay, R. (2008).** Sighting of a Rusty-spotted Cat in the Varushand Valley, India. *Cat News* 49: 26–27.
- Pocock, R.I. (1939).** *The Fauna of British India including Ceylon and Burma. Mammalia - Vol. 1 (Primates and Carnivora). Families Felidae and Viverridae*. Taylor and Francis, London. 463pp.
- Puri, G.S., R.K. Gupta, V.M. Meher-Homji & S. Puri (1989).** *Forest Ecology. Vol. 2. Plant form, Diversity, Communities and Succession*. Oxford & IBH Publishing Co Pvt Ltd., 582pp+36pl.
- Rathore, F.S. & V. Thapar (1984).** Behavioral observations of leopard and jungle cat in Ranthambhor National Park and Tiger Reserve, pp. 136–139. In: *The Plight of Cats: Proceedings of Meeting and*

Workshop of the IUCN / SSC Cat Specialist Group of Kanha National Park, Madhya Pradesh, India.

**Saint-Hilaire, I.G. (1831).** In: Belanger (ed.). *Voyages Indes Orientales*. Vol. 3 (*Zoologie*).

**Srinivas, G., S. Babu, H.N. Kumara & S. Molur (2013).** Assessing the status and distribution of large mammals in Highway and its environs, Southern Western Ghats. Technical Report submitted to CEPF - ATREE Small Grants and Rufford Small Grants. Coimbatore, India, 62pp.

**Wikramanayake, E., E. Dinerstein & C.J. Loucks (2002).** *Terrestrial Ecosystems of the Indo-Pacific - A Conservation Assessment*. Island Press, Washington DC., 824pp.

**Worah, S. (1991).** The Ecology and Management of a Fragmented forest in South Gujarat, India: The Dangs. PhD Thesis, University of Pune, Pune.





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#### Article

**Dna barcoding, population genetics, and phylogenetics of the illegally hunted Philippine Duck *Anas luzonica* (Aves: Anseriformes: Anatidae)**

-- Ardea Mingoa Licuanan, Mariano Roy Martin Duya, Perry Sim Ong & Ian Kendrick Carandang Fontanilla, Pp. 10141–10150

#### Communications

**Population dynamics of medium and large mammals in a West African gallery forest area and the potential effects of poaching**

-- Emmanuel M. Hema, Yaya Ouattara, Mamadou Karama, Fabio Petrozzi, Massimiliano Di Vittorio, Wendengoudi Guenda & Luca Luiselli, Pp. 10151–10157

**A comparative study of avian diversity in Teknaf Wildlife Sanctuary, Inani Reserve Forest and Chittagong University campus in Bangladesh**

-- M. Farid Ahsan & Ibrahim Khalil Al Haidar, Pp. 10158–10170

**On two little-known terrestrial South Asian geckoes *Hemidactylus reticulatus* and *Hemidactylus scabriceps* (Reptilia: Gekkonidae)**

-- S.R. Ganesh, M. Rameshwaran, Naveen A. Joseph & Ahamed M. Jerith, Pp. 10171–10177

**Freshwater fish fauna of Hiranyakeshi River, the northern Western Ghats, India**

-- Pradeep Kumkar, Sanjay S. Kharat, Nitin S. Sawant, Umesh Katwate & Neelesh Dahanukar, Pp. 10178–10186

#### Short Communications

**A new species of sea squirt *Rhopalaea bilobata* (Ascidiacea: Diazonidae) from the Andaman Islands, India**

-- Jhimli Mondal, C. Raghunathan & Tamal Mondal, Pp. 10187–10193

**Observations on the association of *Scaphula deltae* Blanford (Mollusca: Bivalvia) in Garanga Wetland of Pobitora Wildlife Sanctuary, Assam, India**

-- Girindra Kalita, Pp. 10194–10197

**Butterfly fauna of Baghmundi, Purulia, West Bengal, India: a preliminary checklist**

-- Supriya Samanta, Dipanwita Das & Sudipta Mandal, Pp. 10198–10207

**Butterflies of the Kole Wetlands, a Ramsar Site in Kerala, India**

-- S. Sarath, E.R. Sreekumar & P.O. Nameer, Pp. 10208–10215

**A first record of three hitherto unreported species of bats from Kerala, India with a note on *Myotis peytoni* (Mammalia: Chiroptera: Vespertilionidae)**

-- Bhargavi Srinivasulu & Chelmala Srinivasulu, Pp. 10216–10222

#### Notes

**New distribution records of some wild crop relatives from India**

-- K. Pradheep, R.S. Rathi, K. Joseph John, S.M. Sultan, B. Abraham, Anjula Pandey, E. Roshini Nayar, S.P. Ahlawat & Rita Gupta, Pp. 10223–10228

***Ixora polyantha* Wight (Rubiaceae) a new record for northeastern India**

-- Deiji Narah, Nazir Ahmad Bhat & Yogendra Kumar, Pp. 10229–10232

***Euphorbia royleana* Boiss., (Euphorbiaceae) a new record for the Eastern Ghats, India**

-- N. Sarojinidevi & Rudraraju Reddi Venkataraju, Pp. 10233–10235

**Notes on the extended distribution of two threatened species of *Strobilanthes* Blume (Acanthaceae) in Kerala, India**

-- E.J. Josekutty, P. Biju & Jomy Augustine, Pp. 10236–10239

**A first report of the Broad-Tail Royal *Creon cleobis* Godart, 1824 (Insecta: Lepidoptera: Lycaenidae) and its host plant from Agasthyamalai Biosphere Reserve of the southern Western Ghats, India**

-- Raveendran Lekshmi, Pp. 10240–10241

**A photographic record of the Rusty-spotted Cat *Prionailurus rubiginosus* (Mammalia: Carnivora: Felidae) in a forest plantation on the east coast of Tamil Nadu, India**

-- M. Bubesh Guptha & M. Eric Ramanujam, Pp. 10242–10245

**Stomach contents of the Indian Pangolin *Manis crassicaudata* (Mammalia: Pholidota: Manidae) in tropical forests of southern India**

-- Mohanarangan Ashokkumar, Dipika Valsarajan, M. Arjun Suresh, Anuraj R. Kaimal & George Chandy, Pp. 10246–10248