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# **Journal of Threatened Taxa**

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# **SHORT COMMUNICATION**

**RECORDS OF THE MARBLED CAT PARDOFELIS MARMORATA AND THE** ASIATIC GOLDEN CAT CATOPUMA TEMMINCKII (MAMMALIA: **CARNIVORA: FELIDAE) FROM THE COMMUNITY FORESTS SURROUND-**ING THE DZÜKOU VALLEY IN NAGALAND, INDIA

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# RECORDS OF THE MARBLED CAT *PARDOFELIS MARMORATA* AND THE ASIATIC GOLDEN CAT *CATOPUMA TEMMINCKII* (MAMMALIA: CARNIVORA: FELIDAE) FROM THE COMMUNITY FORESTS SURROUNDING THE DZÜKOU VALLEY IN NAGALAND, INDIA

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Abstract: Northeastern India, situated within the Indo-Burma and eastern Himalaya biodiversity hotspot complex, is known for its high diversity of wild felid species. For most of these species, however, data on distribution and population trends are limited. Here, we present photographic records of the Marbled Cat *Pardofelis marmorata* and Asiatic Golden Cat *Catopuma temminckii* from outside protected areas in the state of Nagaland. These records are from community forests around the Dzükou Valley in Nagaland and are some of the few records of the species from the state. The confirmed presence of the two species highlights the pivotal role of community-managed forests in the conservation of endangered species in the region.

**Keywords:** Community-based conservation, distribution, felids, northeastern India.

The region of northeastern India has historically been known to harbour a rich community of wild felids numbering up to 11 species (Menon 2014). There is a paucity of information on the current distribution of most of these species within the region. Two species for which information on distribution and population parameters is unavailable are the Marbled Cat *Pardofelis marmorata* and the Asiatic Golden Cat *Catopuma temminckii* (McCarthy et al. 2015; Ross et al. 2016). Both species are elusive and are known to inhabit remote forest areas (Sunquist & Sunquist 2017). They are listed as Near Threatened under criteria A and C of the IUCN Red List (McCarthy et al. 2015; Ross et al. 2016) and are

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also CITES Appendix I species, fully protected over their range by national legislation. Within India, both species are protected under Schedule I of the Wildlife Protection Act, 1972 (Anonymous 1972).

Confirmed records of the Marbled Cat within northeastern India have been from the states of Assam (Kakati 2009), Arunachal Pradesh (Datta et al. 2008; Lyngdoh et al. 2011a; Selvan et al. 2013), Mizoram (Sethy et al. 2017; Singh & Macdonald 2017), and Nagaland (Grewal et al. 2011; Longchar 2013) (Table 1). In addition, the Marbled Cat has been reported from the adjoining state of West Bengal (Biswas et al. 1999). The Asiatic Golden Cat has been recorded in Assam (Kakati 2009), Arunachal Pradesh (Datta et al. 2008; Lyngdoh et al. 2011a,b), Mizoram (Gouda et al. 2016; Singh & Macdonald 2017), Sikkim (Bashir et al. 2011), and recently, for the first time, in Nagaland (Longchar et al. 2017). The species has been recorded in the neighbouring region of Neora Valley and in other locations in West Bengal as well (Chatterjee et al. 2018). A majority of these records are from within or near government-managed protected areas (PAs; Table 1).

In the hill states of northeastern India, communityowned lands hold a sizeable proportion of the region's forests and likely play a significant role in the persistence of endangered species. For instance, FSI (2017) reports 78% geographical cover of forests in the state of Nagaland, while government-owned PAs constitute less than 2% of the state. Similarly, nearly 80% of Meghalaya is covered by forests (FSI 2017), while less than 2% of the state falls under PAs (ENVIS 2018). Data on the status of endangered wildlife from community-owned forests, however, are critically limited. The northeastern Indian state of Nagaland, with large tracts of community-owned forests, has also faced problems of data paucity. Here, we report live records of the Marbled Cat and the Asiatic Golden Cat from community forests in Nagaland.

#### METHODS

We undertook camera trap surveys in five villages surrounding Dzükou Valley (Fig. 1); these surveys were part of a larger ongoing effort aimed at understanding the distribution of different mammal species in community forests across Nagaland. Dzükou Valley is an ecologically important high-elevation grassland ecosystem surrounded by semi-evergreen and evergreen forests (Grewal et al. 2011). The forests of Dzükou Valley are contiguous with the Puliebadze Wildlife Sanctuary,

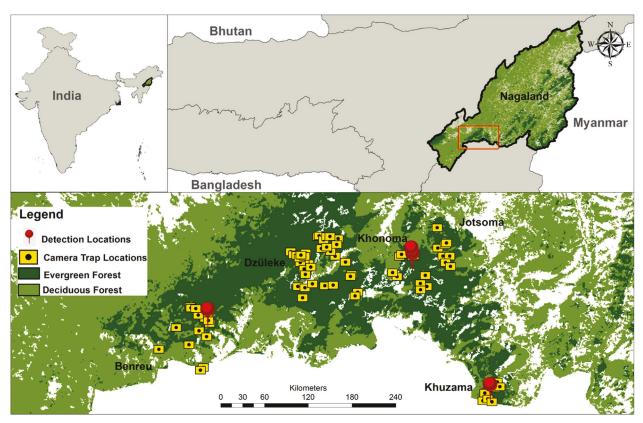


Figure 1. Villages in Nagaland State in India where the Marbled Cat and the Asiatic Golden Cat were recorded.

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Khonoma Nature Conservation and Tragopan Sanctuary, and several other community-managed forests. Preliminary research indicated high biodiversity in the landscape (Grewal et al. 2011).

From January to May 2018, we conducted surveys in the villages of Jotsoma, Khonoma, Dzüleke, Benreu, and Khuzama. We set up camera traps—20 each in Khonoma and Dzüleke, 15 in Jotsoma and Benreu, and eight in Khuzama Village, for 10 days, totalling an effort of 78 trap days. The traps were placed at locations where initial reconnaissance surveys provided evidence of wildlife use through animal signs such as pug marks, hoof prints, scat, and droppings. We separated traps by at least 300m to maximize spatial coverage of the community forests.

## RESULTS

Our surveys yielded four detections of the two species at four different camera trap locations, all at an average elevation of approximately 2,000m (Table 1; Fig. 1). The Marbled Cat was photographed at two locations, on 01 and 21 April 2018, in the forests of Benreu and Khuzama villages, respectively (Images 1, 2). The Asiatic Golden Cat was photographed at two locations, on 29 January and 01 February 2018, both in the forests of Jotsoma Village (Images 3, 4). These images of the Asiatic Golden Cat were obtained along the same ridge in two neighbouring camera trap locations. All four detections were obtained between 07.00h and 08.30h.

In addition to the sighting of these two species, our camera traps detected the presence of other mammal species such as Dhole *Cuon alpinus*, Clouded Leopard *Neofelis nebulosa*, Leopard Cat *Prionailurus bengalensis*, Asian Black Bear *Ursus thibetanus*, Red Serow *Capricornis rubidus*, and Indian Muntjac *Muntiacus muntjak*.

## DISCUSSION

Previous live records of the Marbled Cat in Nagaland have only been from a PA—Intanki National Park (Longchar 2013). In addition, a Marbled Cat skin has been documented from Khonoma Village (Grewal et al. 2011), one of the villages covered in our survey. The Asiatic Golden Cat was recently documented in eastern Nagaland for the first time at the Indo-Myanmar border (Longchar et al. 2017). Our findings, to the best of our knowledge, are the first confirmed live records of the Marbled Cat and the Asiatic Golden Cat from the predominantly community-managed forested landscape within which Dzükou Valley is situated and provides valuable information to a data-sparse map of

Species	Type of evidence	Location	State	Type of forest	Source
Marbled Cat	Skin	Khonoma Village	Nagaland	Community-owned forests	Grewal et al. 2011
	Camera trap	Intanki National Park	Nagaland	Protected area	Longchar 2013
	Camera trap	Namdapha National Park	Arunachal Pradesh	Protected area	Datta et al. 2008
	Camera trap	Pakke Tiger Reserve	Arunachal Pradesh	Protected area	Lyngdoh et al. 2011a
	Skin	Ziro	Arunachal Pradesh	Community-owned forests	Selvan et al. 2013
	Camera trap	Dampha Tiger Reserve	Mizoram	Protected area	Sethy et al. 2017; Singh & Macdonald 2017
	Camera trap	Jeypore-Dehing Landscape	Assam	Protected area	Kakati 2009
	Camera trap	Dzükou Valley	Nagaland	Community-owned forests	Our study
Asiatic Golden Cat	Camera trap	Namdapha National Park	Arunachal Pradesh	Protected area	Datta et al. 2008
	Direct sighting	Pakke Tiger Reserve	Arunachal Pradesh	Protected area	Lyngdoh et al. 2011a,b
	Camera trap	Prek Chu Catchment, Khangchendzonga Biosphere Reserve	Sikkim	Protected area	Bashir et al. 2011
	Camera trap	Dampha Tiger Reserve	Mizoram	Protected area	Gouda et al. 2016; Singh & Macdonald 2017
	Camera trap	Jeypore-Dehing Landscape	Assam	Protected area	Kakati, 2009
	Camera trap	Choklangan Village	Nagaland	Community-owned forests	Longchar et al. 2017
	Camera trap	Dzükou Valley	Nagaland	Community-owned forests	Our study

loshi et al.



Image 1. Camera trap image of the Marbled Cat *Pardofelis marmorata* from Benreu Village in Nagaland, India.



Image 2. Camera trap image of the Marbled Cat *Pardofelis marmorata* from Khuzama Village from Nagaland, India.



Image 3. Camera trap image of the Asiatic Golden Cat Catopuma temminckii from Jotsoma Village in Nagaland, India.

felid presence in northeastern India, particularly in the community-owned forests of the region.

Habitat loss, degradation, and hunting pose major threats to these species throughout their range (McCarthy et al. 2015; Ross et al. 2016). In Nagaland, these threats are prevalent in most parts of the state. Thus, safeguarding areas with known potential for conservation of these species is of utmost importance. Our findings emphasize that the community forests surrounding Dzükou Valley can become a nodal point for conservation in Nagaland. The forests, together with Dzükou Valley, represent one of the largest landscapes in the state with contiguous habitat for wildlife.

Multiple villages in the landscape have realized the importance of protecting their forests and have initiated their own efforts to conserve them. These efforts vary among villages. In some villages, the village council, an apex governing body for the village, has issued complete or seasonal bans on hunting. In some cases, resource extraction from the forests for commercial purposes is regulated by the council. Sections of the village-owned forest in Khonoma, Dzüleke, Benreu, and other villages



Image 4. Camera trap image of the Asiatic Golden Cat Catopuma temminckii from Jotsoma Village in Nagaland, India.

in the region are identified as village forest reserves to be preserved in the long term. Village councils in these villages have additionally created committees to manage and monitor community reserves and promote eco-tourism as an alternative livelihood source. These efforts are critical to ensure long-term ecosystem health and have the potential to protect the forests from land diversion, degradation due to unsustainable resource extraction, and extinction of species due to hunting. Notwithstanding these efforts, threats of habitat loss, degradation, and hunting are still present. Monitoring is still based on traditional and cultural knowledge and decision-making on regulations is uninformed by scientific information on the conservation status of forests or its inhabitant species. Strengthening existing conservation efforts with data and knowledge accrued from scientific surveys can further aid in ensuring the persistence of the Marbled Cat and the Asiatic Golden Cat and in sustaining the community forests in this region.

Thus, more concerted efforts from various agencies, including community leaders, scientists,

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non-governmental organizations, and government departments, are required for effective long-term conservation in these forests. This is especially true as these forests lack the financial support of PAs. This, however, can be mitigated by wildlife-friendly alternative livelihoods and support from the government in ways that recognize and respect traditional community rights and decision-making authority vis-à-vis these forests and the resources therein. Further, scientific monitoring of the distribution and abundance of threatened species such as the Marbled Cat and the Asiatic Golden Cat in this landscape and others can greatly add to the ongoing conservation efforts that help ensure the survival of these species in the region.

#### REFERENCES

- Anonymous (2011). The Wildlife (Protection) Act, 1972. Universal Law Publishing Co. Pvt. Ltd, New Delhi, India, 153pp.
- Bashir, T., T. Bhattacharya, K. Poudyal & S. Sathyakumar (2011). Notable observations on the melanistic Asiatic Golden Cat (*Pardofelis temminckii*) of Sikkim, India. *NeBIO* 2(1): 2–4.
- Biswas, G.G., D. Das & A. Mukhopadhyay (1999). Richness of mammalian species in the higher elevations of Neora Valley National Park. Zoos' Print Journal 14(4): 10–12. https://doi.org/10.11609/ JoTT.ZPJ.14.4.10-2
- Chatterjee, P., K. Mondal, K. Chandra & B. Tripathy (2018). First photographic evidence of Asian Golden Cat Catopuma temminckii (Vigors & Horsfield, 1827) from Neora valley National Park, central Himalayas, India. Records of the Zoological Survey of India 118(2): 128–132. https://doi.org/10.26515/rzsi/v118/i2/2018/121437
- Datta, A., M.O. Anand & R. Naniwadekar (2008). Empty forests: large carnivore and prey abundance in Namdapha National Park, northeast India. *Biological Conservation* 141(5): 1429–1435. https://doi. org/10.1016/j.biocon.2008.02.022
- ENVIS (2018). ENVIS Centre on Wildlife & Protected Areas. National Parks and Wildlife Sanctuaries. Ministry of Environment & Forests, India. Accessed on 15 April 2019. http://www.wiienvis.nic.in/ Database/Protected\_Area\_854.aspx
- FSI (2017). Forest Survey of India. State of Forest Report 2017. Ministry of Environment & Forests, India, 364pp.

- Grewal, B., R. Sreenivasan & B. Haralu (2011). Nagaland Biodiversity and Conservation Programme: An Action Document. Nagaland Biodiversity Conservation Project, Dimapur, India, 55pp.
- Kakati, K. (2009). Camera-trapping Survey of Carnivores in the Jeypore-Upper Dehing forests, Assam, India. Technical Report submitted to the Rufford Small Grant, 1–6pp. https://www.rufford. org/ files/05.10.07%20Final%20Report.pdf. Accessed on 20 December 2018
- Lyngdoh, S., K.M. Selvan, G.V. Gopi & B. Habib (2011a). First photographic evidences of two rare cats from Pakke Tiger Reserve, western Arunachal Pradesh. *Current Science* 101: 1284–1286.
- Lyngdoh, S., K.M. Selvan, G.V. Gopi, B. Habib & M. Hazarika (2011b). Sighting and first photograph of Asiatic Golden Cat in western Arunachal Pradesh. *Cat News* 54: 17–18.
- Longchar, S. (2013). Study on the trends of bushmeat consumption and traditional hunting on wild fauna by indigenous community living near protected area in Nagaland. Msc Thesis. Saurashtra University, Rajkot, India.
- Longchar, S., K. Yhoshu & R. Pandit (2017). First photographic record of Asiatic Golden Cat in eastern Nagaland, India. *Cat News* 65. http://www.catsg.org/index.php?id=634
- McCarthy, J., S. Dahal, T. Dhendup, T.N.E. Gray, S. Mukherjee, H. Rahman, P. Riordan, N. Boontua & D. Wilcox (2015). Catopuma temminckii. In: IUCN Red List of Threatened Species. https://doi. org/10.2305/IUCN.UK.2015-4.RLTS.T4038A50651004.en
- Menon, V. (2014). Indian Mammals: A Field Guide. Hachette Book Publishing Indian Pvt. Ltd., Gurgaon, India, 528pp.
- Ross, J., J. Brodie, S. Cheyne, A. Datta, A. Hearn, B. Loken, A. Lynam, J. McCarthy, C. Phan, A. Rasphone, P. Singh & A. Wilting (2016). *Pardofelis marmorata*. In: IUCN Red List of Threatened Species. https://doi.org/10.2305/IUCN.UK.2016-1.RLTS.T16218A97164299. en
- Selvan, K.M., G.V. Gopi, B. Habib & S. Lyngdoh (2013). Hunting record of Endangered Marbled Cat Pardofelis marmorata in the Ziro Valley of Lower Subansiri, Arunachal Pradesh, India. Journal of Threatened Taxa 5(1): 3583–3584. https://doi.org/10.11609/JoTT.03208.100
- Sethy, J., S. Gouda & N.S. Chauhan (2017). Photographic evidence of Marbled Cat from Dampa Tiger Reserve, Mizoram, India. *Cat News* 65: 26–27.
- Gouda, J., J. Sethy & N.P.S. Chauhan (2016). First photo capture of Asiatic Golden Cat in Dampa Tiger Reserve, Mizoram, India. Cat News 64: 26–27.
- Singh, P. & D.W. Macdonald (2017). Populations and activity patterns of Clouded Leopards and Marbled Cats in Dampa Tiger Reserve, India. *Journal of Mammalogy* 98(5): 1453–1462. https://doi. org/10.1093/jmammal/gyx104
- Sunquist, M. & F. Sunquist (2017). Wild Cats of the World. University of Chicago Press, Chicago and London, 452pp.







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