Associate Editors
Mrs. Latha G. Ravikumar, Web Development

English Editors
Dr. B. Shivaraju, Bengaluru, Karnataka, India
Dr. R.K. Verma, Tropical Forest Research Institute, Jabalpur, India
Dr. Vatsavaya S. Raju, Kakatay University, Warangal, Andhra Pradesh, India
Dr. M. Krishnappa, Jnana Sahyadri, Kuvempu University, Shimoga, Karnataka, India
Dr. K.R. Sridhar, Mangalore University, Mangalagangothri, Mangalore, Karnataka, India
Dr. Gunjan Biswas, Vidyasagar University, Midnapore, West Bengal, India

Fungi
Dr. B. Shivaraju, Bengaluru, Karnataka, India
Dr. R.K. Verma, Tropical Forest Research Institute, Jabalpur, India
Dr. Vatsavaya S. Raju, Kakatay University, Warangal, Andhra Pradesh, India
Dr. M. Krishnappa, Jnana Sahyadri, Kuvempu University, Shimoga, Karnataka, India
Dr. K.R. Sridhar, Mangalore University, Mangalagangothri, Mangalore, Karnataka, India
Dr. Gunjan Biswas, Vidyasagar University, Midnapore, West Bengal, India

Plants
Dr. B. Shivaraju, Bengaluru, Karnataka, India
Dr. R.K. Verma, Tropical Forest Research Institute, Jabalpur, India
Dr. Vatsavaya S. Raju, Kakatay University, Warangal, Andhra Pradesh, India
Dr. M. Krishnappa, Jnana Sahyadri, Kuvempu University, Shimoga, Karnataka, India
Dr. K.R. Sridhar, Mangalore University, Mangalagangothri, Mangalore, Karnataka, India
Dr. Gunjan Biswas, Vidyasagar University, Midnapore, West Bengal, India

Invertebrates
Dr. R.K. Avasthi, Rohtak University, Haryana, India
Dr. D.B. Bastawade, Maharashtra, India
Dr. Partha Pratim Bhattacharjee, Tripura University, Suryamaninagar, India
Dr. Kallash Chandra, Zoological Survey of India, Jabalpur, Madhya Pradesh, India
Dr. Arshin D. Banazad, University of Tehran, Iran
Dr. Ritesh Kumar Choudhary, Agharkar Research Institute, Pune, Maharashtra, India
Dr. Rajeev Bhat, National Museum of Natural History, New Delhi, India
Dr. Ritesh Kumar Choudhary, Agharkar Research Institute, Pune, Maharashtra, India
Dr. D.B. Bastawade, Maharashtra, India

For Focus, Scope, Aims, and Policies, visit https://threatenedtaxa.org/index.php/JoTT/aims_scope
For Article Submission Guidelines, visit https://threatenedtaxa.org/index.php/JoTT/about/submissions
For Policies against Scientific Misconduct, visit https://threatenedtaxa.org/index.php/JoTT/policies_various

continued on the back inside cover

Cover: A female Javan Leopard Panthera pardus melas in rehabilitation phase at Cihanuga Wildlife Center. © Yayasan Cikananga Konservasi Terpadu.
A new southern distribution record for Pacific Marten Martes caurina

Maximilian L. Allen¹, Brianne Kenny², Benjamin Crawford³ & Morgan J. Farmer⁴

¹ Illinois Natural History Survey, University of Illinois, 1816 S. Oak Street, Champaign, IL 61820, USA.
² Department of Natural Resources and Environmental Sciences, University of Illinois, 1102 S. Goodwin, Urbana, Illinois 61801, USA.
³ Unaffiliated Researcher, 15044 N. Scottsdale Rd., Suite 300 Scottsdale, AZ, 85254, USA.
⁴ Department of Forest and Wildlife Ecology, University of Wisconsin, 1630 Linden Drive, Madison, WI 53706, USA.

¹ maxallen@illinois.edu (corresponding author), ² briannekenny@gmail.com, ³ benjamin.p.crawford@gmail.com, ⁴ mjmorales@wisc.edu

Martens in North America are forest-specialist mesocarnivores that are listed by the IUCN with an overall status of Least Concern (Helgen & Reid 2015), but they are often locally a species of conservation concern. Although all martens in North America were previously considered one species, recent advances in genetics show there are two distinct species of martens (Carr & Hicks 1997; Lucid et al. 2020; Schwartz et al. 2020): American Martens Martes americana and Pacific Martens Martes caurina. Pacific Martens inhabit North America from the Rocky Mountains to the West coast of the Pacific Ocean and from the boreal forests of southern British Columbia to the southern terminus of the Rocky Mountains in north-central New Mexico. Martens were historically limited by overharvest from the fur trade, but they are currently more threatened by habitat degradation and fragmentation (Helgen & Reid 2015).

Pacific Martens were likely never common in New Mexico, which is at the southern edge of their range (Image 1), but are now rare and classified as threatened in the state (Threatened and Endangered Species of New Mexico 2020). The New Mexico Department of Fish and Game has completed multiple surveys for martens in New Mexico since 1997. Pacific martens have been consistently found in the North Central mountains near Taos and Chama (Long et al. 2015), with martens seeming to be most abundant in Taos County (Long et al. 2015). It is unclear, however, if the surveys have clearly defined the southern boundary of the population, and individuals at the southern end of their range could be going undetected.

Here we report a recent Pacific Marten detection and explore its implications for the marten population in the Rocky Mountains. On 4 September 2020, during a hike in the Rocky Mountains north-east of Santa Fe, New Mexico, we observed a Pacific Marten at 35.835, -105.750 (Image 2).

This detection is farther south than any confirmed Pacific Marten sighting in the published literature since 1884 (Image 3). In 1884, two specimens were collected by L. Dyche in the Las Vegas Mountains; however, the exact locality information for these specimens is not known, and our observation could be anywhere from 0 to 15 km farther south (Durrant 1952) (Image 3).

It is unknown if this sighting represents the documentation of a population or just a lone individual. There have been unverified scat and tracks, which are notoriously difficult to identify accurately, in the same

---

**Citation:** Allen, M.L., B. Kenny, B. Crawford & M.J. Farmer (2022). A new southern distribution record for Pacific Marten Martes caurina. Journal of Threatened Taxa 14(7): 21470-21472. https://doi.org/10.11609/jott.8058.14.7.21470-21472

**Copyright:** © Allen et al. 2022. Creative Commons Attribution 4.0 International License. JoTT allows unrestricted use, reproduction, and distribution of this article in any medium by providing adequate credit to the author(s) and the source of publication.

**Funding:** None.

**Competing interests:** The authors declare no competing interests.

**Acknowledgements:** We thank the Illinois Natural History Survey and the University of Illinois for their support.
general area (Long 2001; Long et al. 2015). Thus, it is possible Pacific Martens have been present in the area but have gone undetected, or that martens are expanding back into the southern extent of their historic range. It is unlikely that Pacific Martens will be found farther south as potential suitable habitat is limited to high elevation forests that are only found in the Rocky Mountains (Long 2001), which end nearby. In addition, as climate and land use change progresses, species ranges may also shift further north or higher in elevation to track climate,
weather, or structural features (e.g., complex forest) that they are adapted to (Martin et al. 2021). A systematic survey to determine the occupancy and abundance of martens in the southern limit of the population could be a valuable follow up study. Calls for public observations, including posting observations to sites readily available to scientists such as iNaturalist (www.inaturalist.org), could also be beneficial in determining locations in the rugged Rocky Mountains where Pacific Martens are either expanding or may have persisted.

References

Carr, S.M. & S.A. Hicks (1997). Are there two species of Marten in North America? Genetic and evolutionary relationships with Martes, pp. 15–28. In: Proulx, G., H.N. Bryant & P.M. Woodard (eds.). Martes: Taxonomy, Ecology, Techniques, and Management: Proceedings of the Second International Martes Symposium. Provincial Museum of Alberta.

Durrant, S.D. (1952). Mammals of Utah, taxonomy and distribution. University of Kansas. https://catalog.hathitrust.org/Record/001502579

Helgen, K. & F. Reid (2015). Martes americana. The IUCN Red List of Threatened Species 2016: e.T41648A45212861. https://doi.org/10.2305/IUCN.UK.2016-1.RLTS.T41648A45212861.en

Long, B. (2001). The Distribution of American Marten in Northern New Mexico (No. 99-516.18). New Mexico Department of Game and Fish Wildlife.

Long, B., M. East & J. Klingel (2015). Snow-Tracking Surveys and Camera Trapping for American Marten in the Pecos Wilderness and San Pedro Parks Wilderness Areas, in North Central New Mexico, USA (Final Report T-32-P3, 21). New Mexico Department of Game and Fish Wildlife.

Lucid, M., S. Cushman, L. Robinson, A. Kortello, D. Hausleitner, G. Mowat, S. Ehlers, S. Gillespie, L.K. Svancara, J. Sullivan, A. Rankin & D. Paetkau (2020). Carnivore contact: A species fracture zone delineated amongst genetically structured North American marten populations (Martes americana and Martes caurina). Frontiers in Genetics 11: 735. https://doi.org/10.3389/fgene.2020.00735

Martin, M.E., K.M. Moriarty & J.N. Pauli (2021). Landscape seasonality influences the resource selection of a snow-adapted forest carnivore, the Pacific marten. Landscape Ecology 36: 1055–1069. https://doi.org/10.1007/s10980-021-01215-9

Schwartz, M.K., A.D. Walters, K.L. Pilgrim, K.M. Moriarty, K.M. Slauson, W.J. Zielinski, K.B. Aubry, B.N. Sacks, K.E. Zarn, C.B. Quinn & M.K. Young (2020). Pliocene–early pleistocene geological events structure Pacific Martens (Martes caurina). Journal of Heredity 111: 169–181.

Threatened and Endangered Species of New Mexico (2020). New Mexico Department of Game and Fish Wildlife, 163 pp.
The opinions expressed by the authors do not reflect the views of the Journal of Threatened Taxa, Wildlife Information Liaison Development Society, Zoo Outreach Organization, or any of the partners. The journal, the publisher, the host, and the partners are not responsible for the accuracy of the political boundaries shown in the maps by the authors.
The Journal of Threatened Taxa (JoTT) 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, reproduction, and distribution of articles in any medium by providing adequate credit to the author(s) and the source of publication.

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

July 2022 | Vol. 14 | No. 7 | Pages: 21331–21486
Date of Publication: 26 July 2022 (Online & Print)
DOI: 10.11609/jott.2022.14.7.21331-21486

Articles

The Javan Leopard Panthera pardus melas (Cuvier, 1809) (Mammalia: Carnivora: Felidae) in West Java, Indonesia: estimating population density and occupancy
– Anton Ario, Senjaya Mercusiana, Ayi Rustadi, Robi Gumilang, I Gede Geligel

Breeding phenology and population dynamics of the endangered Forest Spiny Reed Frog Acrisylvaticus Schizt, 1974 in Shimba Hills, Kenya
– Alfayo Koskei, George Eshiamwata, Bernard Kirui & Phylus K. Cheruiyot

First record of Proceratium Roger, 1863, Zaspheinctus Wheeler, 1918, and Vollenhovia Mayr, 1865 (Hymenoptera: Fomicidae) from the Western Ghats of peninsular India, description of three new species, and implications for Indian biogeography
– Kalesh Sadasivan & Manoj Kripakaran

Communications

New queen? Evidence of a long-living Jaguar Panthera onca (Mammalia: Carnivora: Felidae) in Tikal National Park, Guatemala
– Carlos A. Gaitán, Manolo J. García, M. André Sandoval-Lemus, Vivian R. González-Castillo, Gerber D. Guzmán-Flores & Cristel M. Pineda

First camera trap record of Striped Hyena Hyaena hyaena (Linnaeus, 1758) in Parsa National Park, Nepal
– Pramod Raj Regmi, Madhu Chetri, Haribhadra Acharya, Prakash Sigdel

First record of Phoebetria palpebrata Foster, 1785 from Rameswaram Island, Tamil Nadu, India
– H. Byju & N. Raveendran

Range extension and new ecoregion records of the Crocodile Monitor Varanus salvadorii Peters & Doria, 1878 (Reptilia: Varanidae) in Papua New Guinea
– Borja Reh & Jim Thomas

A checklist of fish and shellfishes of the Poonthura estuary, southwestern coast of India
– Kiranya Bella, Pramila Sahadevan, Giri Bhavan Sreekantan & Rajeev Raghavan

A new species of Protopicta Selys, 1885 (Odonata: Zygoptera: Platystictidae) from Western Ghats, India
– Kalesh Sadasivan, Vinayan P. Nair & K. Abraham Samuel

A new southern distribution record for Pacific Marten Martes caurina
– Maximilian L. Allen, Brianne Kenny, Benjamin Crawford & Morgan J. Farmer

First Asian record of Light-mantled Albatross Phoebetria palpebrata (Foster, 1785) from Rameswaram Island, Tamil Nadu, India
– Rakesh Gujor, Vinesh Gamit, Ketan Tatu & R.K. Sugoor

Salvia misella Kunth (Lamiaceae) - a new record for Eastern Ghats of India
– Prabhat Kumar Das, Pradeep Kumar Kamila & Pratap Chandra Panda

Salsola oppositifolia Desf. in Great Rann of Kachchh, Gujarat – a new record for India
– T.S. Saravanan, S. Kallamoorthy, M.Y. Kamble & M.U. Sharief

Notes

A first record of Light-mantled Albatross Phoebetria palpebrata (Foster, 1785) from Rameswaram Island, Tamil Nadu, India
– H. Byju & N. Raveendran

First Asian record of Light-mantled Albatross Phoebetria palpebrata (Foster, 1785) from Rameswaram Island, Tamil Nadu, India
– Rakesh Gujor, Vinesh Gamit, Ketan Tatu & R.K. Sugoor

Extended distribution of Impatiens scapiflora (Balsaminaceae) to the flora of Eastern Ghats, India
– T.S. Saravanan, S. Kallamoorthy, M.Y. Kamble & M.U. Sharief

Publisher & Host

WOOLREACH

Threatened Taxa