



Publisher Wildlife Information Liaison Development Society www.wild.zooreach.org

Zoo Outreach Organization www.zooreach.org

Host

No. 12, Thiruvannamalai Nagar, Saravanampatti - Kalapatti Road, Saravanampatti, Coimbatore, Tamil Nadu 641035, India Ph: +91 9385339863 | www.threatenedtaxa.org Email: sanjay@threatenedtaxa.org

EDITORS

Founder & Chief Editor

Dr. Sanjay Molur

Wildlife Information Liaison Development (WILD) Society & Zoo Outreach Organization (ZOO), 12 Thiruvannamalai Nagar, Saravanampatti, Coimbatore, Tamil Nadu 641035, India

Deputy Chief Editor Dr. Neelesh Dahanukai

Noida, Uttar Pradesh, India

Managing Editor

Mr. B. Ravichandran, WILD/ZOO, Coimbatore, India

Dr. Mandar Paingankar, Government Science College Gadchiroli, Maharashtra 442605, India

Dr. Ulrike Streicher, Wildlife Veterinarian, Eugene, Oregon, USA Ms. Privanka Iver. ZOO/WILD. Coimbatore. Tamil Nadu 641035. India Dr. B.A. Daniel, ZOO/WILD, Coimbatore, Tamil Nadu 641035, India

Editorial Board

Dr. Russel Mittermeier

Executive Vice Chair, Conservation International, Arlington, Virginia 22202, USA

Prof. Mewa Singh Ph.D., FASc, FNA, FNASc, FNAPsy

Ramanna Fellow and Life-Long Distinguished Professor, Biopsychology Laboratory, and Institute of Excellence, University of Mysore, Mysuru, Karnataka 570006, India; Honorary Professor, Jawaharlal Nehru Centre for Advanced Scientific Research, Bangalore; and Adjunct Professor, National Institute of Advanced Studies, Bangalore

Stephen D. Nash

Scientific Illustrator, Conservation International, Dept. of Anatomical Sciences, Health Sciences Center, T-8, Room 045, Stony Brook University, Stony Brook, NY 11794-8081, USA

Dr. Fred Pluthero

Dr. Priya Davidar

Sigur Nature Trust, Chadapatti, Mavinhalla PO, Nilgiris, Tamil Nadu 643223, India

Senior Associate Professor, Battcock Centre for Experimental Astrophysics, Cavendish Laboratory, JJ Thomson Avenue, Cambridge CB3 0HE, UK

Dr. John Fellowes

Honorary Assistant Professor, The Kadoorie Institute, 8/F, T.T. Tsui Building, The University of Hong Kong, Pokfulam Road, Hong Kong

Universidade Estadual de Santa Cruz, Departamento de Ciências Biológicas, Vice-coordenador do Programa de Pós-Graduação em Zoologia, Rodovia Ilhéus/Itabuna, Km 16 (45662-000) Salobrinho, Ilhéus - Bahia - Brasil

Dr. Rajeev Raghavan

Professor of Taxonomy, Kerala University of Fisheries & Ocean Studies, Kochi, Kerala, India

English Editors

Mrs. Mira Bhojwani, Pune, India Dr. Fred Pluthero, Toronto, Canada Mr. P. Ilangovan, Chennai, India

Web Development

Mrs. Latha G. Ravikumar, ZOO/WILD, Coimbatore, India

Typesetting

Mr. Arul Jagadish, ZOO, Coimbatore, India Mrs. Radhika, ZOO, Coimbatore, India Mrs. Geetha, ZOO, Coimbatore India

Fundraising/Communications

Mrs. Payal B. Molur, Coimbatore, India

Subject Editors 2019-2021

Fungi

Dr. B. Shivaraju, Bengaluru, Karnataka, India

Dr. R.K. Verma, Tropical Forest Research Institute, Jabalpur, India

Dr. Vatsavaya S. Raju, Kakatiay University, Warangal, Andhra Pradesh, India

Dr. M. Krishnappa, Jnana Sahyadri, Kuvempu University, Shimoga, Karnataka, India Dr. K.R. Sridhar, Mangalore University, Mangalagangotri, Mangalore, Karnataka, India

Dr. Gunjan Biswas, Vidyasagar University, Midnapore, West Bengal, India

Dr. G.P. Sinha, Botanical Survey of India, Allahabad, India

Dr. N.P. Balakrishnan, Ret. Joint Director, BSI, Coimbatore, India

Dr. Shonil Bhagwat, Open University and University of Oxford, UK

Prof. D.J. Bhat, Retd. Professor, Goa University, Goa, India

Dr. Ferdinando Boero, Università del Salento, Lecce, Italy Dr. Dale R. Calder, Royal Ontaro Museum, Toronto, Ontario, Canada

Dr. Cleofas Cervancia, Univ. of Philippines Los Baños College Laguna, Philippines

Dr. F.B. Vincent Florens, University of Mauritius, Mauritius

Dr. Merlin Franco, Curtin University, Malaysia

Dr. V. Irudayaraj, St. Xavier's College, Palayamkottai, Tamil Nadu, India

Dr. B.S. Kholia, Botanical Survey of India, Gangtok, Sikkim, India

Dr. Pankaj Kumar, Kadoorie Farm and Botanic Garden Corporation, Hong Kong S.A.R., China

Dr. V. Sampath Kumar, Botanical Survey of India, Howrah, West Bengal, India

Dr. A.J. Solomon Raju, Andhra University, Visakhapatnam, India

Dr. Vijayasankar Raman, University of Mississippi, USA

Dr. B. Ravi Prasad Rao, Sri Krishnadevaraya University, Anantpur, India

Dr. K. Ravikumar, FRLHT, Bengaluru, Karnataka, India

Dr. Aparna Watve, Pune, Maharashtra, India

Dr. Qiang Liu, Xishuangbanna Tropical Botanical Garden, Yunnan, China

Dr. Noor Azhar Mohamed Shazili, Universiti Malaysia Terengganu, Kuala Terengganu, Malaysia

Dr. M.K. Vasudeva Rao, Shiv Ranjani Housing Society, Pune, Maharashtra, India Prof. A.J. Solomon Raju, Andhra University, Visakhapatnam, India

Dr. Mandar Datar, Agharkar Research Institute, Pune, Maharashtra, India

Dr. M.K. Janarthanam. Goa University. Goa. India

Dr. K. Karthigeyan, Botanical Survey of India, India

Dr. Errol Vela, University of Montpellier, Montpellier, France

Dr. P. Lakshminarasimhan, Botanical Survey of India, Howrah, India

Dr. Larry R. Noblick, Montgomery Botanical Center, Miami, USA

Dr. K. Haridasan, Pallavur, Palakkad District, Kerala, India

Dr. Analinda Manila-Fajard, University of the Philippines Los Banos, Laguna, Philippines

Dr. P.A. Sinu, Central University of Kerala, Kasaragod, Kerala, India

Dr. Afroz Alam, Banasthali Vidyapith (accredited A grade by NAAC), Rajasthan, India

Dr. K.P. Rajesh, Zamorin's Guruvayurappan College, GA College PO, Kozhikode, Kerala, India Dr. David E. Boufford, Harvard University Herbaria, Cambridge, MA 02138-2020, USA

Dr. Ritesh Kumar Choudhary, Agharkar Research Institute, Pune, Maharashtra, India

Dr. Navendu Page, Wildlife Institute of India, Chandrabani, Dehradun, Uttarakhand, India

Dr. R.K. Avasthi, Rohtak University, Haryana, India

Dr. D.B. Bastawade, Maharashtra, India

Dr. Partha Pratim Bhattacharjee, Tripura University, Suryamaninagar, India

Dr. Kailash Chandra, Zoological Survey of India, Jabalpur, Madhya Pradesh, India Dr. Ansie Dippenaar-Schoeman, University of Pretoria, Queenswood, South Africa

Dr. Rory Dow, National Museum of natural History Naturalis, The Netherlands

Dr. Brian Fisher, California Academy of Sciences, USA

Dr. Richard Gallon, llandudno, North Wales, LL30 1UP

Dr. Hemant V. Ghate, Modern College, Pune, India

Dr. M. Monwar Hossain, Jahangirnagar University, Dhaka, Bangladesh

Mr. Jatishwor Singh Irungbam, Biology Centre CAS, Branišovská, Czech Republic. Dr. Ian J. Kitching, Natural History Museum, Cromwell Road, UK

Dr. George Mathew, Kerala Forest Research Institute, Peechi, 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: Geodorum laxiflorum Griff.-inflorescence (Orchidaceae) © Ashish Ravindra Bhoyar.

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

https://doi.org/10.11609/jott.7660.14.2.20677-20679

#7660 | Received 14 September 2021 | Final received 27 January 2022 | Finally accepted 09 February 2022



ACCESS

(1)



First photographic evidence of Asiatic Black Bear *Ursus thibetanus* in Kaziranga Tiger Reserve, India

DANGER DE LA COMPANION DE LA C

Priyanka Borah 10, Jyotish Ranjan Deka 20, Mujahid Ahamad 30, Rabindra Sharma 40, Ruchi Badola 50 & Syed Ainul Hussain 6 (D)

1,2,3,5,6 Wildlife Institute of India, Post box #18, Chandrabani, Dehradun, Uttarakhand 248001, India. ⁴ Kaziranga National Park and Tiger Reserve, Bokakhat, Golaghat, Assam 785612, India. ¹ priyankaborah1996@gmail.com (corresponding author), ² jyotishdeka6@gmail.com, ³ syedmujahidahmad@gmail.com, ⁴ kazirangaresearch@gmail.com, ⁵ ruchi@wii.gov.in, ⁶ ainul.hussain@gmail.com

The Asiatic Black Bear Ursus thibetanus, also commonly known as the Himalayan Black Bear and sometimes known as 'Moon Bear' due to the presence of a characteristic crescent shaped white mark on the upper portion of the chest. It is listed as 'Vulnerable' in the Red Data Book (Garshelis & Steinmetz 2020), in Appendix I of CITES in India since 1990 and in Schedule I of the Indian Wild Life (Protection) Act (as amended in 2006). The Asiatic Black Bear occupies a variety of forested habitats, both broad-leaf and coniferous, from near sea level to an elevation up to 4,300 m (Sathyakumar et al. 2013). It is distributed in southern and eastern Asia from Afghanistan and Baluchistan Province of Iran, east through Indo-China, much of China, Korea, Japan, and Taiwan (Cowan 1972; Servheen 1990). In India, the bear is distributed throughout the Himalaya (Sathyakumar 2001) from the north-west (Jammu and Kashmir,

Himachal Pradesh) to the east (Arunachal Pradesh) and in the hills of the other northeastern states (Assam, Meghalaya, Mizoram, Tripura, Nagaland, and Manipur) (Sathyakumar 2006; Sathyakumar & Choudhury 2007; Choudhury 2013). Literature suggests that its range overlaps with that of the Sloth Bear below 1,200 m, the Himalayan Brown Bear above 3,000 m (Prater 1980), and in northeastern India with the Sun Bear (Choudhury 1997a,b). In India, the bear is reported to occur in 83 protected areas and 93 other localities (Sathyakumar & Choudhury 2007).

Kaziranga Tiger Reserve (KTR) is located in the flood plain of the Brahmaputra River, on the foot hills of Karbi Anglong district, spread across the civil districts of Golaghat, Nagaon, Sonitpur, and Biswanath (Figure 1). The Kaziranga-Karbi Anglong landscape consists of the Karbi plateau of Karbi Anglong to the south and the

Editor: Anwaruddin Choudhury, The Rhino Foundation for Nature in North East India, Guwahati, India. Date of publication: 26 February 2022 (online & print)

Citation: Borah, P., J.R. Deka, M. Ahamad, R. Sharma, R. Badola & S.A. Hussain (2022). First photographic evidence of Asiatic Black Bear Ursus thibetanus in Kaziranga Tiger Reserve, India. Journal of Threatened Taxa 14(2): 20677–20679. https://doi.org/10.11609/jott.7660.14.2.20677-20679

Copyright: © Borah 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: National Tiger Conservation Authority (NTCA), Ministry of Environment Forest and Climate Change, Government of India through the project "Connecting the dots: Finding dispersal corridors for tiger in Kaziranga-Karbi Anglong Landscape, Assam", Grant No. F.No.5-3/2018- NTCA.

Competing interests: The authors declare no competing interests.

Acknowledgements: This study was funded by the National Tiger Conservation Authority (NTCA), Ministry of Environment Forest and Climate Change, Government of India through the project "Connecting the dots: Finding dispersal corridors for tiger in Kaziranga-Karbi Anglong Landscape, Assam", Grant No. F.No.5-3/2018-NTCA. The authors are thankful to the chief wildlife warden, Government of Assam and field director, Kaziranga Tiger Reserve for providing necessary permission and facilities for the research work. The authors are thankful to the director and dean, Wildlife Institute of India, Dehra Dun for logistic support.











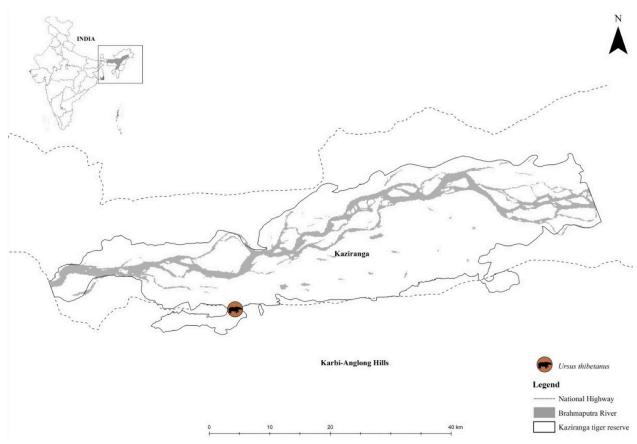


Figure 1. Map showing Kaziranga Tiger Reserve with the location of photo-captured Asiatic Black Bear.

Brahmaputra River to the north in Assam. The hills in Karbi Anglong are part of the Shillong plateau having an average elevation of 300–400 m. The highest peak called 'Singhason Peak' is 1,360 m high located in East Karbi Anglong. The Karbi Anglong forests and grasslands of Kaziranga Tiger Reserve formed one contiguous unit of ideal wildlife habitat.

We carried out camera trap sampling involving several camera traps deployed in a manner so that at least one station falls on each (2 x 2) km² grid, as a part of the study to determine the functionality of corridors present in the Kaziranga-Karbi Anglong Landscape. We used infrared Cuddeback (Model: H1453) camera traps during the study.

In 2018, photographs of two rescued cubs from a village called Dokmoka by Karbi Anglong Forest Department were published in the official website of Wildlife Trust of India. In this study, we report, the first photographic evidence of Asiatic Black Bear in the wild of Kaziranga Tiger Reserve. The first deployment of camera traps was started on February 2021 and subsequently the second deployment of camera traps was carried out on May 2021. During this period a single photograph



Image 1. Camera trap image of Asiatic Black Bear captured on 12 May 2021 in the southern part of Kaziranga Tiger Reserve, India.

of the species was captured on 12 May 2021 at 2124 h (Image 1). The species was photo-captured at an elevation of 75 m and the location falls under the Bagser Reserve Forest (buffer of Kaziranga National Park). The



location also falls in the junction of Amguri-Kanchanjuri corridor. The habitat was moist mixed deciduous with Teak *Tectona grandis* as the dominant species. The location is approximately 275 m away from the National Highway 37. The proximity of human settlement is about 300 m from the point; hence, it has experienced high human intervention in terms of cutting and lopping of fresh timbers and cane sticks in the area.

Literatures on the Asiatic Black Bear from this landscape are very limited. Choudhury (1997a,b) noted the presence of the species in the foothills and hills of Assam, mostly in the Karbi, NC hills and Cachar district. It was very much common in the eastern Karbi Anglong and Barail Range. Lahan & Sonowal (1973) reported a single record from Kaziranga.

Due to hunting and poaching, the population has decreased globally over the years. Hunting/ poaching of all species of bears is going on at different scales in all the states of northeastern India, especially outside the protected areas for meat (Choudhury & Rengma 2005). In the hilly areas of the region such as Nagaland, Mizoram, parts of Assam, Arunachal Pradesh and Manipur, the village hunters/poachers often keep the skulls as display on their walls (Choudhury 2013). Thus, the presence of the Asiatic Black Bear needs more systematic surveys in the tiger reserve along with the southern landscape.

References

- Choudhury, A.U. (2013). Records of Asiatic Black Bear in North East India. Final report to International Association for Bear Research & Management (IBA). The Rhino Foundation for Nature in NE India, Guwahati, Assam, India, 96 pp.
- Choudhury, A.U. (1997a). Checklist of the mammals of Assam. Revised 2nd edition. Gibbon Books & Assam Science Technology & Environment Council, Guwahati, India, 103 pp.
- Choudhury, A.U. (1997b). The status of bears in Assam, India. International Bear News 6(2): 16.
- Choudhury, A.U. & K.T. Rengma (2005). A survey of animal use extraction pattern in some areas of Indian Himalayas: Nagaland and Arunachal Pradesh. WPA-India, Guwahati, 34 pp.
- Cowan, I.M. (1972). The status and conservation of Bears (Ursidae) of the world: 1970. *Bears: Their Biology and Management* 2: 343–367. https://doi.org/10.2307/3872596
- Garshelis, D. & R. Steinmetz (2020). Ursus thibetanus (amended version of 2016 assessment). The IUCN Red List of Threatened Species 2020: e.T22824A166528664. https://doi.org/10.2305/IUCN.UK.2020-3.RLTS.T22824A166528664.en
- Lahan, P. & R.N. Sonowal (1973). Kaziranga Wild Life Sanctuary, Assam: a brief description and report on the census of large animals (March 1972). Journal of the Bombay Natural History Society 70(2): 245–278.
- **Prater, S. (1980).** *The book of Indian animals.* Bombay Natural History Society and Oxford University press, Bombay, India, 324 pp.
- Sathyakumar, S. (2001). Status and management of Asiatic Black Bear and Himalayan Brown Bear in India. *Ursus* 12: 21–29.
- Sathyakumar, S. (2006). The status of Asiatic Black Bears in India. Understanding Asian bears to secure their future. Japan Bear Network, Ibaraki, Japan.
- Sathyakumar, S. & A.U. Choudhury (2007). Distribution and status of the Asiatic Black Bear *Ursus thibetanus* in India. *Journal of the Bombay Natural History Society* 104(3): 316–323.
- Sathyakumar, S., L.K. Sharma & S.A. Charoo (2013). Ecology of Asiatic Black Bear in Dachigam National Park, Kashmir, India. Final project report, Wildlife Institute of India, Dehradun.
- Servheen, C. (1990). The status and conservation of the bears of the world. International Conference on Bear Research and Management Monogram Series No. 2. TD Mock and Associates Inc., Victoria, British Columbia. Victoria.

700REACH

- Dr. John Noyes, Natural History Museum, London, UK
- Dr. Albert G. Orr, Griffith University, Nathan, Australia
- Dr. Sameer Padhye, Katholieke Universiteit Leuven, Belgium
- Dr. Nancy van der Poorten, Toronto, Canada
- Dr. Kareen Schnabel, NIWA, Wellington, New Zealand
- Dr. R.M. Sharma, (Retd.) Scientist, Zoological Survey of India, Pune, India
- Dr. Manju Siliwal, WILD, Coimbatore, Tamil Nadu, India
- Dr. G.P. Sinha, Botanical Survey of India, Allahabad, India
- Dr. K.A. Subramanian, Zoological Survey of India, New Alipore, Kolkata, India
- Dr. P.M. Sureshan, Zoological Survey of India, Kozhikode, Kerala, India
- Dr. R. Varatharajan, Manipur University, Imphal, Manipur, India
- Dr. Eduard Vives, Museu de Ciències Naturals de Barcelona, Terrassa, Spain
- Dr. James Young, Hong Kong Lepidopterists' Society, Hong Kong
- Dr. R. Sundararaj, Institute of Wood Science & Technology, Bengaluru, India
- Dr. M. Nithyanandan, Environmental Department, La Ala Al Kuwait Real Estate. Co. K.S.C.,
- Dr. Himender Bharti, Punjabi University, Punjab, India
- Mr. Purnendu Roy, London, UK
- Dr. Saito Motoki, The Butterfly Society of Japan, Tokyo, Japan Dr. Sanjay Sondhi, TITLI TRUST, Kalpavriksh, Dehradun, India
- Dr. Nguyen Thi Phuong Lien, Vietnam Academy of Science and Technology, Hanoi, Vietnam
- Dr. Nitin Kulkarni, Tropical Research Institute, Jabalpur, India
- Dr. Robin Wen Jiang Ngiam, National Parks Board, Singapore
- Dr. Lional Monod, Natural History Museum of Geneva, Genève, Switzerland.
- Dr. Asheesh Shivam, Nehru Gram Bharti University, Allahabad, India
- Dr. Rosana Moreira da Rocha, Universidade Federal do Paraná, Curitiba, Brasil Dr. Kurt R. Arnold, North Dakota State University, Saxony, Germany
- Dr. James M. Carpenter, American Museum of Natural History, New York, USA
- Dr. David M. Claborn, Missouri State University, Springfield, USA
- Dr. Kareen Schnabel, Marine Biologist, Wellington, New Zealand
- Dr. Amazonas Chagas Júnior, Universidade Federal de Mato Grosso, Cuiabá, Brasil
- Mr. Monsoon Jyoti Gogoi, Assam University, Silchar, Assam, India
- Dr. Heo Chong Chin, Universiti Teknologi MARA (UiTM), Selangor, Malaysia
- Dr. R.J. Shiel, University of Adelaide, SA 5005, Australia
- Dr. Siddharth Kulkarni, The George Washington University, Washington, USA
- Dr. Priyadarsanan Dharma Rajan, ATREE, Bengaluru, India
- Dr. Phil Alderslade, CSIRO Marine And Atmospheric Research, Hobart, Australia
- Dr. John E.N. Veron, Coral Reef Research, Townsville, Australia Dr. Daniel Whitmore, State Museum of Natural History Stuttgart, Rosenstein, Germany.
- Dr. Yu-Feng Hsu, National Taiwan Normal University, Taipei City, Taiwan
- Dr. Keith V. Wolfe, Antioch, California, USA
- Dr. Siddharth Kulkarni, The Hormiga Lab, The George Washington University, Washington,
- Dr. Tomas Ditrich, Faculty of Education, University of South Bohemia in Ceske Budejovice, Czech Republic
- Dr. Mihaly Foldvari, Natural History Museum, University of Oslo, Norway
- Dr. V.P. Unival, Wildlife Institute of India, Dehradun, Uttarakhand 248001, India
- Dr. John T.D. Caleb, Zoological Survey of India, Kolkata, West Bengal, India
- Dr. Priyadarsanan Dharma Rajan, Ashoka Trust for Research in Ecology and the Environment (ATREE), Royal Enclave, Bangalore, Karnataka, India

Fishes

- Dr. Neelesh Dahanukar, IISER, Pune, Maharashtra, India
- Dr. Topiltzin Contreras MacBeath, Universidad Autónoma del estado de Morelos, México
- Dr. Heok Hee Ng, National University of Singapore, Science Drive, Singapore
- Dr. Rajeev Raghavan, St. Albert's College, Kochi, Kerala, India
- Dr. Robert D. Sluka, Chiltern Gateway Project, A Rocha UK, Southall, Middlesex, UK
- Dr. E. Vivekanandan, Central Marine Fisheries Research Institute, Chennai, India
- Dr. Davor Zanella, University of Zagreb, Zagreb, Croatia Dr. A. Biju Kumar, University of Kerala, Thiruvananthapuram, Kerala, India
- Dr. Akhilesh K.V., ICAR-Central Marine Fisheries Research Institute, Mumbai Research
- Centre, Mumbai, Maharashtra, India
- Dr. J.A. Johnson, Wildlife Institute of India, Dehradun, Uttarakhand, India

Amphibians

Dr. Sushil K. Dutta, Indian Institute of Science, Bengaluru, Karnataka, India Dr. Annemarie Ohler, Muséum national d'Histoire naturelle, Paris, France

Reptiles

- Dr. Gernot Vogel, Heidelberg, Germany
- Dr. Raju Vyas, Vadodara, Gujarat, India
- Dr. Pritpal S. Soorae, Environment Agency, Abu Dubai, UAE. Prof. Dr. Wayne J. Fuller, Near East University, Mersin, Turkey
- Prof. Chandrashekher U. Rivonker, Goa University, Taleigao Plateau, Goa. India
- Dr. S.R. Ganesh, Chennai Snake Park, Chennai, Tamil Nadu, India
- Dr. Himansu Sekhar Das, Terrestrial & Marine Biodiversity, Abu Dhabi, UAE

Journal of Threatened Taxa is indexed/abstracted in Bibliography of Systematic Mycology, Biological Abstracts, BIOSIS Previews, CAB Abstracts, EBSCO, Google Scholar, Index Copernicus, Index Fungorum, JournalSeek, National Academy of Agricultural Sciences, NewJour, OCLC WorldCat, SCOPUS, Stanford University Libraries, Virtual Library of Biology, Zoological Records.

NAAS rating (India) 5.64

Birds

- Dr. Hem Sagar Baral, Charles Sturt University, NSW Australia
- Dr. Chris Bowden, Royal Society for the Protection of Birds, Sandy, UK
- Dr. Priya Davidar, Pondicherry University, Kalapet, Puducherry, India
- Dr. J.W. Duckworth, IUCN SSC, Bath, UK
- Dr. Rajah Jayapal, SACON, Coimbatore, Tamil Nadu, India
- Dr. Rajiv S. Kalsi, M.L.N. College, Yamuna Nagar, Haryana, India
- Dr. V. Santharam, Rishi Valley Education Centre, Chittoor Dt., Andhra Pradesh, India
- Dr. S. Balachandran, Bombay Natural History Society, Mumbai, India
- Mr. J. Praveen, Bengaluru, India
- Dr. C. Srinivasulu, Osmania University, Hyderabad, India
- Dr. K.S. Gopi Sundar, International Crane Foundation, Baraboo, USA
- Dr. Gombobaatar Sundev, Professor of Ornithology, Ulaanbaatar, Mongolia Prof. Reuven Yosef, International Birding & Research Centre, Eilat, Israel
- Dr. Taej Mundkur, Wetlands International, Wageningen, The Netherlands
- Dr. Carol Inskipp, Bishop Auckland Co., Durham, UK
- Dr. Tim Inskipp, Bishop Auckland Co., Durham, UK
- Dr. V. Gokula, National College, Tiruchirappalli, Tamil Nadu, India Dr. Arkady Lelej, Russian Academy of Sciences, Vladivostok, Russia
- Dr. Simon Dowell, Science Director, Chester Zoo, UK
- Dr. Mário Gabriel Santiago dos Santos, Universidade de Trás-os-Montes e Alto Douro,
- Quinta de Prados, Vila Real, Portugal
- Dr. Grant Connette, Smithsonian Institution, Royal, VA, USA
- Dr. M. Zafar-ul Islam, Prince Saud Al Faisal Wildlife Research Center, Taif, Saudi Arabia

Mammals

- Dr. Giovanni Amori, CNR Institute of Ecosystem Studies, Rome, Italy
- Dr. Anwaruddin Chowdhury, Guwahati, India
- Dr. David Mallon, Zoological Society of London, UK
- Dr. Shomita Mukherjee, SACON, Coimbatore, Tamil Nadu, India
- Dr. Angie Appel, Wild Cat Network, Germany
- Dr. P.O. Nameer, Kerala Agricultural University, Thrissur, Kerala, India
- Dr. Ian Redmond, UNEP Convention on Migratory Species, Lansdown, UK
- Dr. Heidi S. Riddle, Riddle's Elephant and Wildlife Sanctuary, Arkansas, USA
- Dr. Karin Schwartz, George Mason University, Fairfax, Virginia.
- Dr. Lala A.K. Singh, Bhubaneswar, Orissa, India
- Dr. Mewa Singh, Mysore University, Mysore, India
- Dr. Paul Racey, University of Exeter, Devon, UK
- Dr. Honnavalli N. Kumara, SACON, Anaikatty P.O., Coimbatore, Tamil Nadu, India
- Dr. Nishith Dharaiya, HNG University, Patan, Gujarat, India
- Dr. Spartaco Gippoliti, Socio Onorario Società Italiana per la Storia della Fauna "Giuseppe Altobello", Rome, Italy
- Dr. Justus Joshua, Green Future Foundation, Tiruchirapalli, Tamil Nadu, India
- Dr. H. Raghuram, The American College, Madurai, Tamil Nadu, India
- Dr. Paul Bates, Harison Institute, Kent, UK
- Dr. Jim Sanderson, Small Wild Cat Conservation Foundation, Hartford, USA Dr. Dan Challender, University of Kent, Canterbury, UK
- Dr. David Mallon, Manchester Metropolitan University, Derbyshire, UK
- Dr. Brian L. Cypher, California State University-Stanislaus, Bakersfield, CA
- Dr. S.S. Talmale, Zoological Survey of India, Pune, Maharashtra, India
- Prof. Karan Bahadur Shah, Budhanilakantha Municipality, Kathmandu, Nepal Dr. Susan Cheyne, Borneo Nature Foundation International, Palangkaraja, Indonesia
- Dr. Hemanta Kafley, Wildlife Sciences, Tarleton State University, Texas, USA

Other Disciplines

- Dr. Aniruddha Belsare, Columbia MO 65203, USA (Veterinary)
- Dr. Mandar S. Paingankar, University of Pune, Pune, Maharashtra, India (Molecular)
- Dr. Jack Tordoff, Critical Ecosystem Partnership Fund, Arlington, USA (Communities)
- Dr. Ulrike Streicher, University of Oregon, Eugene, USA (Veterinary)
- Dr. Hari Balasubramanian, EcoAdvisors, Nova Scotia, Canada (Communities)
- Dr. Rayanna Hellem Santos Bezerra, Universidade Federal de Sergipe, São Cristóvão, Brazil
- Dr. Jamie R. Wood, Landcare Research, Canterbury, New Zealand
- Dr. Wendy Collinson-Jonker, Endangered Wildlife Trust, Gauteng, South Africa
- Dr. Rajeshkumar G. Jani, Anand Agricultural University, Anand, Gujarat, India Dr. O.N. Tiwari, Senior Scientist, ICAR-Indian Agricultural Research Institute (IARI), New

Dr. Rupika S. Rajakaruna, University of Peradeniya, Peradeniya, Sri Lanka Dr. Bahar Baviskar, Wild-CER, Nagpur, Maharashtra 440013, India

Dr. L.D. Singla, Guru Angad Dev Veterinary and Animal Sciences University, Ludhiana, India

Reviewers 2019-2021

Due to pausity of space, the list of reviewers for 2018–2020 is available online.

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.

Print copies of the Journal are available at cost. Write to:

The Managing Editor, JoTT,

ravi@threatenedtaxa.org

c/o Wildlife Information Liaison Development Society,

No. 12, Thiruvannamalai Nagar, Saravanampatti - Kalapatti Road, Saravanampatti, Coimbatore, Tamil Nadu 641035, India





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 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)

February 2022 | Vol. 14 | No. 2 | Pages: 20539–20702 Date of Publication: 26 February 2022 (Online & Print) DOI: 10.11609/jott.2022.14.2.20539-20702

www.threatenedtaxa.org

Article

Distribution, diet, and trophic level of *Arvicanthis abyssinicus* and *Tachyoryctes* splendens around the area of recently extinct Ethiopian Wolf *Canis simiensis* on Mount Guna, northwestern Ethiopia

- Hirpasa Teressa, Wondimu Ersino & Tadele Alemayo, Pp. 20539-20549

Communications

Seasonal composition of avian communities in different habitats of Harike Wetland, a Ramsar site in Punjab, India

– Jagdeep Singh & Onkar Singh Brraich, Pp. 20550–20565

Temporal changes in species richness of waterfowl (Anseriformes) community in D'Ering Memorial Wildlife Sanctuary, Arunachal Pradesh, India

– Tapak Tamir & Daniel Mize, Pp. 20566–20575

Reptilian assemblages in the wetlands of Amboli hill complex, northern Western Ghats, Maharashtra, India during the monsoon season

- Sachinkumar R. Patil & Kiran Choudaj, Pp. 20576-20583

Butterfly diversity and composition at Chemerong Amenity Forest, Terengganu, Malaysia

 – Muhammad Hafiz Sulaiman, Abdul Munir Mohd Zaki, Geok Chin Yap, Nur Atiqa Aniruddin & Ju Lian Chong, Pp. 20584–20596

Ecological niche modeling for reintroduction and conservation of *Aristolochia* cathcartii Hook.f. & Thomson (Aristolochiaceae), a threatened endemic plant in Assam. India

– Bhaskar Sarma & Bhaben Tanti, Pp. 20597–20605

New host plant records of Fig Wax Scale *Ceroplastes rusci* (Linnaeus, 1758 (Hemiptera: Coccomorpha: Coccidae) from India

– Arvind Kumar & Renu Pandey, Pp. 20606–20614

Seasonal variations influencing the abundance and diversity of plankton in the Swarnamukhi River Estuary, Nellore, India

– Krupa Ratnam, V.P. Limna Mol, S. Venkatnarayanan, Dilip Kumar Jha, G. Dharani & M. Prashanthi Devi, Pp. 20615–20624

Short Communications

First record of *Prosoponoides* Millidge & Russell-Smith, 1992 (Araneae: Linyphiidae) from India, with the description of a new species

– Anusmitha Domichan & K. Sunil Jose, Pp. 20625–20630

Rediscovery of *Platerus pilcheri* Distant (Hemiptera: Reduviidae), a forgotten assassin bug from India, with comments on its range extension

– H. Sankararaman, Anubhav Agarwal, Valérie A. Lemaître & Hemant V. Ghate, Pp. 20631–20636

First Indian DNA barcode record for the moth species *Pygospila tyres* (Cramer, 1780) (Lepidoptera: Crambidae: Spilomelinae) distributed in Asia and Australia

- Aparna S. Kalawate, A. Shabnam & K.P. Dinesh, Pp. 20637-20642

First record and description of female *Onomarchus leuconotus* (Serville, 1838) (Insect: Orthoptera: Tettigoniidae) from peninsular India

- Sunil M. Gaikwad, Yogesh J. Koli & Gopal A. Raut, Pp. 20643-20647

New records of odonates (Insecta: Odonata), *Archibasis oscillans* Selys, 1877 and *Merogomphus tamaracherriensis* Fraser, 1931 from Maharashtra, India

- Akshay Dalvi & Yogesh Koli, Pp. 20648-20653

A checklist of dragonflies & damselflies (Insecta: Odonata) of Kerala, India

– Sujith V. Gopalan, Muhamed Sherif & A. Vivek Chandran, Pp. 20654–20665

Aldama macbridei (Heliantheae: Compositae): notes on its distribution and vulnerable habitats in central Peru

- Daniel B. Montesinos-Tubée & Federico García-Yanes, Pp. 20666-20671

Lichens and animal camouflage: some observations from central Asian ecoregions – Mahmood Soofi, Sandeep Sharma, Barbod Safaei-Mahroo, Mohammad Sohrabi, Moosa Ghorbani Organli & Matthias Waltert, Pp. 20672–20676

Notes

First photographic evidence of Asiatic Black Bear *Ursus thibetanus* in Kaziranga Tiger Reserve. India

– Priyanka Borah, Jyotish Ranjan Deka, Mujahid Ahamad, Rabindra Sharma, Ruchi Badola & Syed Ainul Hussain, Pp. 20677–20679

First record of Small Minivet *Pericrocotus cinnamomeus* (Aves: Passeriformes: Campephagidae) from Kashmir, India

– Zakir Hussain Najar, Bilal A. Bhat & Riyaz Ahmad, Pp. 20680–20682

Cotesia anthelae (Wilkinson, 1928) (Hymenoptera: Braconidae) a natural parasitoid of Cirrochroa thais (Fabricius, 1787) (Lepidoptera: Nymphalidae), first report from the Oriental region

- Ankita Gupta & P. Manoj, Pp. 20683-20685

Melastoma imbricatum Wall. ex Triana (Melastomataceae): a new addition to the flora of Manipur, India

 Rajkumari Jashmi Devi, Deepashree Khuraijam, Peimichon Langkan & Biseshwori Thongam, Pp. 20686–20688

Geodorum laxiflorum Griff. (Orchidaceae), a new distribution record for Maharashtra state of India

Ashish Ravindra Bhoyar, Swapnil Nandgawe, Syed Abrar Ahmed & Saduram Madavi,
Pp. 20689–20691

Photographic record of *Armillaria mellea* a bioluminescent fungi from Lonavala in Western Ghats, India

– Swanand R. Patil & Shubham V. Yadav, Pp. 20692–20694

Response & Reply

Correction to Catalogue of herpetological specimens from Meghalaya, India at the Sálim Ali Centre for Ornithology and Natural History (SACON)

- Pandi Karthik, Pp. 20695-20697

Reply to the "Correction to Catalogue of herpetological specimens from Meghalaya, India at the Sálim Ali Centre for Ornithology and Natural History (SACON)" by P. Karthik

– S.R. Chandramouli, R.S. Naveen, S. Sureshmarimuthu, S. Babu, P.V. Karunakaran & Honnavalli N. Kumara, Pp. 20698–20700

Book Review

Conservation Kaleidoscope: People, Protected Areas and Wildlife in Contemporary India

– L.A.K. Singh, Pp. 20701–20702

Publisher & Host

