

Building evidence for conservation globally

Journal of Threatened Taxa

10.11609/jott.2025.17.8.27323-27406

www.threatenedtaxa.org

26 August 2025 (Online & Print)

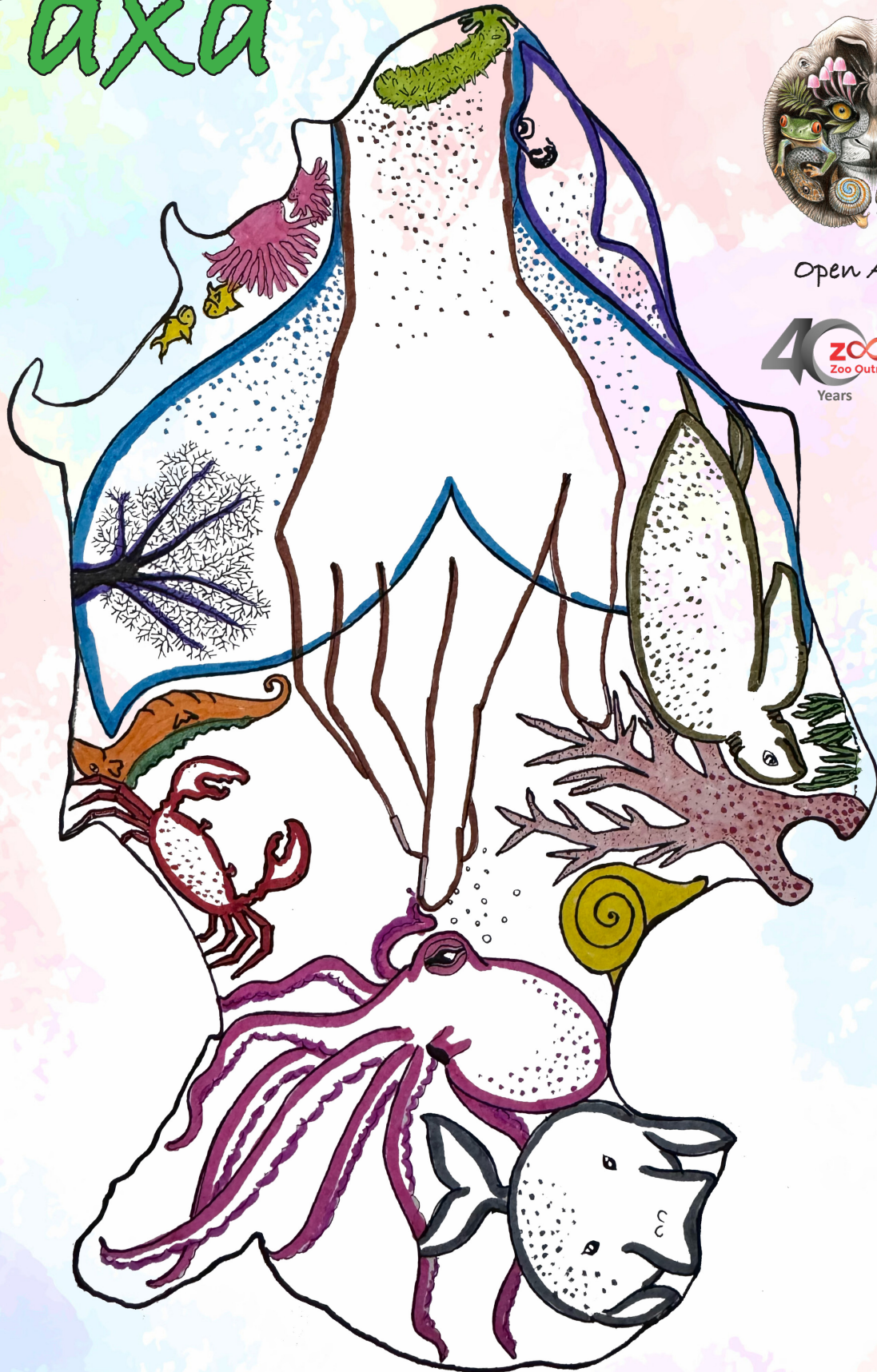
17(8): 27323-27406

ISSN 0974-7907 (Online)

ISSN 0974-7893 (Print)



Open Access





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

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

Host
Zoo Outreach Organization
www.zooreach.org

Srivari Illam, No. 61, Karthik Nagar, 10th Street, Saravanampatti, Coimbatore, Tamil Nadu 641035, India
Registered Office: 3A2 Varadarajulu Nagar, FCI Road, Ganapathy, Coimbatore, Tamil Nadu 641006, 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),
Coimbatore, Tamil Nadu 641006, India

Assistant Editor

Dr. Chaithra Shree J., WILD/ZOO, Coimbatore, Tamil Nadu 641006, India

Managing Editor

Mr. B. Ravichandran, WILD/ZOO, Coimbatore, Tamil Nadu 641006, India

Associate Editors

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

Dr. Ulrike Streicher, Wildlife Veterinarian, Eugene, Oregon, USA

Ms. Priyanka Iyer, ZOO/WILD, Coimbatore, Tamil Nadu 641006, India

Board of Editors

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

Toronto, Canada

Dr. Priya Davidar

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

Dr. John Fellowes

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

Prof. Dr. Mirco Solé

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

Copy Editors

Ms. Usha Madgunaki, Zooreach, Coimbatore, India

Ms. Trisa Bhattacharjee, Zooreach, Coimbatore, India

Ms. Paloma Noronha, Daman & Diu, India

Web Development

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

Typesetting

Mrs. Radhika, Zooreach, Coimbatore, India

Mrs. Geetha, Zooreach, Coimbatore, India

Fundraising/Communications

Mrs. Payal B. Molur, Coimbatore, India

Subject Editors 2021–2023

Fungi

Dr. B. Shivaraju, Bengaluru, Karnataka, India

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

Dr. Vatsavaya S. Raju, Kakatiya 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

Dr. Kiran Ramchandra Ranadive, Annasaheb Magar Mahavidyalaya, Maharashtra, India

Plants

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 Ontario 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, Department of Plant and Soil Science, Texas Tech University, Lubbock, Texas, USA.

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. Karthikeyan, 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. A.G. Pandurangan, Thiruvananthapuram, Kerala, India

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

Dr. Kannan C.S. Warriar, Institute of Forest Genetics and Tree Breeding, Tamil Nadu, 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. 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

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: Little Andaman is part of the island chain with incredible biodiversity, but these amazing species are threatened by development projects, and need our support.
Pen and ink artwork by Priyanka Iyer.



In Uttarakhand, otters are present in Bhagirathi basin (Pal et al. 2021), upper Ganga basin (Nawab & Hussain 2012a,b; Khan et al. 2014) Kosi, Ramganga, and Khoh (Gupta et al. 2020). In addition to that, otters are also found in Rajaji, Corbett Tiger Reserve, and Lansdowne Forest Division (Nawab & Hussain 2012a; Joshi 2014; Basak et al. 2021). However, there is limited information regarding presence of Smooth-coated Otters in Kumaon region of Uttarakhand, particularly beyond Corbett Tiger Reserve. This situation is also evident in the Nandhaur Wildlife Sanctuary (NWS), where suitable habitat for otters exists, yet no studies have reported their presence. We present the first photographic record of Smooth-coated Otter from Nandhaur Wildlife Sanctuary.

METHODS

Nandhaur Wildlife Sanctuary was created in 2012 and lies in Uttarakhand state of India. Its geographical extent is 79.675 E, 29.184 N & 80.009 E, 29.138 N (Mehra 2015). It is bounded by Gola River in the west and Sharda River in the east, providing connectivity with Shuklaphanta National Park of Nepal. NWS is an integral part of the

Terai Arc Landscape (TAL), which is spread across India (Uttarakhand, Uttar Pradesh, and Bihar) and Nepal. The major forest type is tropical moist-deciduous forest dominated by *Sal Shorea robusta* and associated species such as *Terminalia tomentosa* and *Adina cordifolia* (Champion & Seth 1968). Among the mammals, Bengal Tiger *Panthera tigris*, Indian Elephant *Elephas maximus*, Sambar *Rusa unicolor*, Chital *Axis axis*, and Barking Deer *Muntiacus vaginalis* are found. NWS comprises of four ranges, namely, Nandhaur, Jaulasal, Danda, and Sharda with an area of approximately 270 km² (Figure 1). Nandhaur and Kalaunia are the major rivers which are perennial in nature. Apart from that several seasonal streams crisscross the Nandhaur landscape.

On 6 March 2024, we saw an otter while we were deploying camera traps for the estimation of tiger density in NWS. However, there was some doubt regarding the identity of the species. To further confirm the identity of otter species found in NWS, we deployed five IR camera traps (OT1, OT2, OT3, OT4, and OT5) (Cuddeback Inc, USA) for a period of 10 days in the Nandhaur range of NWS. The placement of camera traps was based on

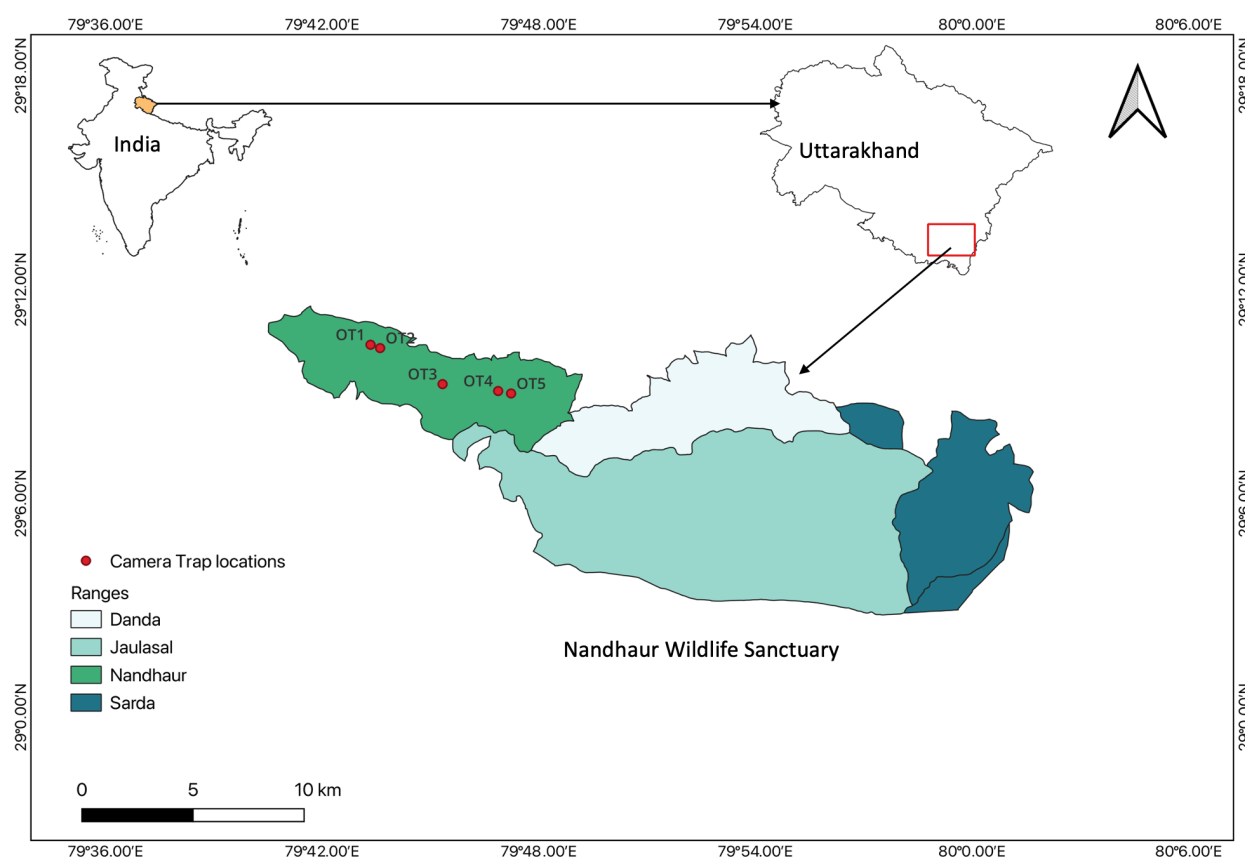


Figure 1. The geographical location and map outlining the ranges within Nandhaur Wildlife Sanctuary (NWS), Uttarakhand, India. The red dots show the location of camera traps deployed in Nandhaur range of NWS.



Image 1. Photographs of Smooth-coated Otters captured in Nandhaur range, Nandhaur Wildlife Sanctuary, Uttarakhand, India.

the presence of otter signs, such as tracks or scat. The geographical coordinates of the camera traps were recorded using a Garmin GPSMAP 64s device. The resultant data was then used to create a map using QGIS version 3.34.4 Prizren (QGIS Development Team 2024).

RESULTS

Otter photographs were captured at two locations in the Nandhaur range, i.e., OT4 and OT5 on separate days (Image 1). They were identified as Smooth-coated Otter based on tail characteristics, smooth fur, and overall stature in consultation with members of IUCN Otter Specialist Group (Atul Borker & Nicole Duplaix, pers. comm. July 2024).

DISCUSSION

This study establishes the presence of Smooth-coated Otter in Nandhaur Wildlife Sanctuary and future management plans must take it into consideration. Forest department should focus on minimising disturbance to riverine habitat, reducing soil erosion, and conserving fish population which will allow otters to thrive in NWS.

There are no reliable estimates of Smooth-coated Otter population, and it is suspected to decline by more than 30% over the next three decades (Khoo et al. 2021). Lack of information on population estimates

and distribution of species could hinder our ability to make informed decisions, potentially undermining conservation efforts. Therefore, it is imperative to conduct systematic surveys for otters in Nandhaur landscape to determine their population and distribution patterns, thus ensuring their long-term survival.

REFERENCES

- Anoop, K.R. & S.A. Hussain (2004). Factors affecting habitat selection by smooth-coated otters (*Lutrogale perspicillata*) in Kerala, India. *Journal of Zoology* 263(4): 417–423. <https://doi.org/10.1017/S0952836904005461>
- Anoop, K.R. & S.A. Hussain (2005). Food and feeding habitat of smooth-coated otters and their significance to fish population of Kerala. *Journal of Zoology* 266: 15–23. <https://doi.org/10.1017/S0952836905006540>
- Basak, S., B. Pandav, J.A. Johnson & S.A. Hussain (2021). Resource utilisation by smooth-coated otter in the rivers of Himalayan foothills in Uttarakhand, India. *Global Ecology and Conservation* 32: e01896. <https://doi.org/10.1016/j.gecco.2021.e01896>
- Champion, H.G. & S.K. Seth (1968). *A revised survey of the forest types of India*. Manager of Publications, Government of India, New Delhi.
- Dias, S.J. (2023). Factors influencing latrine site selection of smooth-coated otters (*Lutrogale perspicillata*) in traditional estuarine agroecosystems of Goa, India. *Mammalian Biology* 103(6): 603–611. <https://doi.org/10.1007/s42991-023-00379-y>
- Dias, S.J., P.J.C. White, A.S. Borker & N.V. Fernandes (2022). Habitat selection of smooth-coated otters (*Lutrogale perspicillata*) in the peri-coastal, urbanised landscape of Goa, India. *Mammalian Research* 67(3): 299–309. <https://doi.org/10.1007/s13364-022-00639-1>

- Duke, A.C. & C.S. Goldberg (2022). Investigating the distribution of the smooth-coated otter (*Lutrogale perspicillata*) using environmental DNA: preliminary results. *IUCN Otter Specialist Group Bulletin* 39(2): 110–120. https://www.iucnosgbull.org/Volume39/Duke_Goldberg_2022.html
- Gupta, N., V. Tiwari, M. Everard, M. Savage, S.A. Hussain, M.A. Chadwick & V.K. Belwal (2020). Assessing the distribution pattern of otters in four rivers of the Indian Himalayan biodiversity hotspot. *Aquatic Conservation* 30(3): 601–610. <https://doi.org/10.1002/aqc.3284>
- Hussain, S.A. (1993). Aspects of the ecology of smooth-coated otters *Lutra perspicillata* in National Chambal Sanctuary. Unpublished Ph.D Thesis. Centre for Wildlife and Ornithology. Aligarh Muslim University. Aligarh, India.
- Hussain, S.A. (1996). Group size, group structure and breeding in smooth-coated otter *Lutra perspicillata* Geoffroy in National Chambal Sanctuary. *Mammalia* 60(2): 289–297. <https://doi.org/10.1515/mamm.1996.60.2.289>
- Hussain, S.A. (1999). Status of otter conservation in India. *Envis Bulletin: Wildlife and Protected Areas* 2(2): 92–97.
- Hussain, S.A. (2013a). Activity Pattern, Behavioural Activity and Interspecific Interaction of Smooth-Coated Otter (*Lutrogale perspicillata*) in National Chambal Sanctuary, India. *IUCN Otter Specialist Group Bulletin* 30(1): 5–17. https://www.iucnosgbull.org/Volume30/Hussain_2013.html
- Hussain, S.A. (2013b). Otters, pp. 499–521. In: Johnsingh, A.J.T. & N. Manjrekar (eds.). *Mammals of South Asia*. Vol. 1. Universities Press, India.
- Hussain, S.A. & B.C. Choudhury (1995). Seasonal movement, home range and habitat utilization by smooth-coated otter in National Chambal Sanctuary. *Proceedings of the VI International Otter Symposium*, September 6–10, 1993, Pietermaritzburg, South Africa. Habitat No.11, Germany.
- Hussain, S.A. & B.C. Choudhury (1997). Distribution and status of smooth-coated otter *Lutra perspicillata* in National Chambal Sanctuary. *Biological Conservation* 80: 199–206. [https://doi.org/10.1016/S0006-3207\(96\)00033-X](https://doi.org/10.1016/S0006-3207(96)00033-X)
- Joshi, R. (2014). Recent confirmed record of existence of smooth-coated otter (*Lutrogale perspicillata*) in Rajaji National Park, north-west India. *Tigerpaper* 41(2): 25–29. <http://www.fao.org/3/a-i4227e.pdf>
- Khan, M.S., N.K. Dimri, A. Nawab, O. Ilyas & P. Gautam (2014). Habitat use pattern and conservation status of smooth-coated otters *Lutrogale perspicillata* in the Upper Ganges Basin, India. *Animal Biodiversity and Conservation* 37(1): 69–76. <https://doi.org/10.32800/abc.2014.37.0069>
- Khoo, M., S. Basak, N. Sivasothi, P.K. de Silva & I.R. Lubis (2021). *Lutrogale perspicillata*. The IUCN Red List of Threatened Species 2021: e.T12427A164579961. <https://doi.org/10.2305/IUCN.UK.2021-3.RLTS.T12427A164579961.en>. Accessed on 16.v.2024.
- Krupa, H., A. Borker & A. Gopal (2017). Photographic record of sympatry between Asian small-clawed otter and smooth-coated otter in the Northern Western Ghats, India. *IUCN Otter Specialist Group Bulletin* 34(1): 51–57. https://www.iucnosgbull.org/Volume34/Krupa_et_al_2017.html
- Mammal Diversity Database. (2025). Mammal Diversity Database (Version 2.2) [Data set]. Zenodo. <https://doi.org/10.5281/zenodo.15007505>
- Medway, L. (1969). *The Wild Mammals of Malaya and Offshore Islands Including Singapore*. Oxford University Press, London, UK and Oxford, UK.
- Mehra, S. (2015). Management plan of Nandhaur Wildlife Sanctuary (2015–2016 to 2024–2025). Haldwani, Uttarakhand, Western Circle Office, Forest Dept.
- Mishra, S.R., M. Mohan & J.D. Pati (2018). First photographic documentation and distribution of the Smooth-Coated Otter *Lutrogale perspicillata* in Similipal Tiger Reserve, Odisha, India. *IUCN Otter Specialist Group Bulletin* 35(4): 186–192. https://www.iucnosgbull.org/Volume35/Mishra_et_al_2018.html
- Nawab, A. (2013). Conservation prospects of Smooth-coated Otter *Lutrogale perspicillata* (Geoffroy Saint-Hilaire, 1826) in Rajasthan. In *Faunal Heritage of Rajasthan, India: Conservation and Management of Vertebrates* (pp. 273–283). Springer International Publishing.
- Nawab, A. & S.A. Hussain (2012a). Prey selection by smooth-coated otter (*Lutrogale perspicillata*) in response to the variation in fish abundance in Upper Gangetic Plains, India. *Mammalia* 76(1): 57–67. <https://doi.org/10.1515/mamm.2011.105>
- Nawab, A. & S.A. Hussain (2012b). Factors affecting the occurrence of smooth-coated otter in aquatic systems of the Upper Gangetic Plains, India. *Aquatic Conservation* 22(5): 616–625. <https://doi.org/10.1002/aqc.2253>
- Palei, N.C., B.P. Rath, H.S. Palei & B.P. Acharya (2020). Population status and activity pattern of smooth-coated Otter (*Lutrogale perspicillata*) in Bhitarkanika National Park, Odisha, Eastern India. *IUCN Otter Specialist Group Bulletin* 37(4): 205–211. https://www.iucnosgbull.org/Volume37/Palei_et_al_2020.html
- Palei, N.C., B.P. Rath, L.K. Patra & B. Ghosh (2023). First Photographic Records of Smooth-Coated Otter (*Lutrogale perspicillata*) in Jharsuguda Forest Division, Odisha, India. *IUCN Otter Specialist Group Bulletin* 40(4): 176–182. https://iucnosgbull.org/Volume40/Palei_et_al_2023.html
- Pal, R., A. Sharma, V.K. Dubey, T. Bhattacharya, J.A. Johnson, K. Sivakumar & S. Sathyakumar (2021). A rare photographic record of Eurasian Otter *Lutra lutra* with a note on its habitat from the Bhagirathi Basin, western Himalaya, India. *Journal of Threatened Taxa* 13(13): 20072–20077. <https://doi.org/10.11609/jott.6937.13.13.20072-20077>
- Pocock, R.I. (1941). *The Fauna of British India, including Ceylon and Burma*. Taylor and Francis, London.
- QGIS Development team (2024). *QGIS Geographic Information System*. QGIS Association. <http://www.qgis.org>
- Raha, A & S.A. Hussain (2016). Factors affecting habitat selection by three sympatric otter species in the southern Western Ghats, India. *Acta Ecologica Sinica* 36(1): 45–49. <https://doi.org/10.1016/j.chnaes.2015.12.002>
- Rath, L.P., K. Ashaharaza & S.K. Dash (2023). A Rare Sighting of Smooth-Coated Otter (*Lutrogale perspicillata*) in the Mahanadi River, Odisha, India. *IUCN Otter Specialist Group Bulletin* 40(2): 90–95. https://www.iucnosgbull.org/Volume40/Rath_et_al_2023.pdf
- Sreehari, R. & P.O. Nameer (2016). Small carnivores of Parambikulam Tiger Reserve, southern Western Ghats, India. *Journal of Threatened Taxa* 8(11): 9306–9315. <https://doi.org/10.11609/jott.2311.8.11.9306-9315>

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
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., Kuwait
Dr. Himender Bharti, Punjabi University, Punjab, India
Mr. Purnendu Roy, London, UK
Mr. 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. Lionel 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, D.C., USA
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. Uniyal, Wildlife Institute of India, Dehradun, Uttarakhand 248001, India
Dr. John D.L. 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. 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
Dr. R. Ravinesh, Gujarat Institute of Desert Ecology, Gujarat, 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 Dhabi, UAE.
Prof. Dr. Wayne J. Fuller, Near East University, Mersin, Turkey
Prof. Chandrashekhar 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

Birds

Dr. Hem Sagar Baral, Charles Sturt University, NSW Australia
Mr. H. Byju, Coimbatore, Tamil Nadu, India
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, SAGON, 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 Sunde, 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. P.A. Azeez, Coimbatore, Tamil Nadu, India

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, SAGON, 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, SAGON, 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, Tiruchirappalli, 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 Delhi, India
Dr. L.D. Singla, Guru Angad Dev Veterinary and Animal Sciences University, Ludhiana, India
Dr. Rupika S. Rajakaruna, University of Peradeniya, Peradeniya, Sri Lanka
Dr. Bahar Baviskar, Wild-CER, Nagpur, Maharashtra 440013, India

Reviewers 2021–2023

Due to pausity of space, the list of reviewers for 2021–2023 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,
c/o Wildlife Information Liaison Development Society,
3A2 Varadarajulu Nagar, FCI Road, Ganapathy, Coimbatore,
Tamil Nadu 641006, India
ravi@threatenedtaxa.org & ravi@zooreach.org

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



www.threatenedtaxa.org

OPEN ACCESS



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](https://creativecommons.org/licenses/by/4.0/) 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)

August 2025 | Vol. 17 | No. 8 | Pages: 27323–27406

Date of Publication: 26 August 2025 (Online & Print)

DOI: 10.11609/jott.2025.17.8.27323-27406

Articles

Taxonomic studies and breaking seed dormancy of *Hibiscus lobatus* (Murray) Kuntze, 1898 (Magnoliopsida: Malvales: Malvaceae) — a native plant of the central Western Ghats

– T.D. Karthik, V. Krishna, B.U. Sourabh Giri, K. Raagavalli & A.S. Syeda, Pp.27323–27332

Environmental drivers of zooplankton diversity and composition of Pargwal Wetland, Jammu & Kashmir, India

– Neha Jamwal & Arti Sharma, Pp. 27333–27345

***Cypris decaryi* Gauthier, 1933 (Crustacea: Ostracoda: Cyprididae): a new record for Maharashtra, India, with a note on its distribution**

– Shruti Milind Yeola, Renuka Rajendra Khairnar & Yugandhar Satish Shinde, Pp. 27346–27354

Tectonic turmoil: consequences of violent earthquake-2025 on biodiversity collapse in Myanmar

– Hsu Htoo, Imon Abedin, Sang Van Vu, Hyun-Woo Kim & Shantanu Kundu, Pp. 27355–27362

Communications

First record of the *Coelicia svihleri* Asahina, 1970 (Odonata: Platycnemididae) in Arunachal Pradesh, India

– R. Mahesh, Rajesh Gopinath, Gaurav Joshi & Roshan Upadhaya, Pp. 27363–27370

Spider (Araneae) fauna in paddy ecosystem of Kangra Valley, Himachal Pradesh, India

– Manoj Bhaurao Salunkhe, Muthusamy Sampathkumar & Ajay Kumar Sood, Pp. 27371–27377

Short Communications

A new variety of *Chara corallina* Willd. (Charophyta: Characeae) from Kamrup District, Assam, India

– Partha Pratim Baruah, Shaswatee Bhattacharjee, Nilamjyoti Kalita & Bishmita Boruah, Pp. 27378–27383

Re-collection of two climbing asclepiads: *Cynanchum corymbosum* and *Oxystelma esculentum* (Apocynaceae: Asclepiadoideae) from Assam, India

– Gitartha Saikia, Saurav Kumar Boruah, Trishna Roy Prodhani & Nilakshee Devi, Pp. 27384–27390

New distribution record of two jumping spider species of the genus *Pellenes* Simon, 1876 and *Thyene* Simon, 1885 (Araneae: Salticidae) from Gujarat, India

– Subhash I. Parmar, Heena Prajapati, Pranav J. Pandya & Dhruv A. Prajapati, Pp. 27391–27395

***Sympetrum orientale* (Selys, 1883) (Odonata: Libellulidae): a new addition to the Odonata fauna of Kashmir Himalaya, India**

– Altaf Hussain Mir, Sahiba Khan, Beenish Bashir, Mohd Hussain & Tanveer Ahmad Dar, Pp. 27396–27399

First confirmed sighting of the elusive Eurasian Otter in Goa, India

– Abhijeet Patil, Shricharan Desai, Swanand Patil & Mirjoy Mathew, Pp. 27400–27402

First photographic record of Smooth-coated Otter *Lutra perspicillata* (Carnivora: Mustelidae) from Nandhaur Wildlife Sanctuary, Uttarakhand, India

– Nishant Bhardwaj, Hritik Nautiyal, Harish Guleria & Bilal Habib, Pp. 27403–27406

Publisher & Host



Threatened Taxa