

Building evidence for conservation globally

Journal of Threatened TAXA



10.11609/jott.2025.17.10.27551-27786

www.threatenedtaxa.org

26 October 2025 (Online & Print)

17(10): 27551-27786

ISSN 0974-7907 (Online)

ISSN 0974-7893 (Print)



Open Access





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, Mavinhalla 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 Madgunki, 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, Kuvenpu University, Shimoga, Karnataka, India

Dr. K.R. Sridhar, Mangalore University, Mangalagangotri, Mangalore, Karnataka, India

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

Dr. Kiran Ramchandra Ranadive, Annaheb 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. Ferdinand 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, Anantapur, 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 Ranjan Housing Society, Pune, Maharashtra, India

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

Dr. Manda 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. Lakshminarasiham, 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 Baños, Laguna, Philippines

Dr. P.A. Siru, 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. Warrier, 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, Ilandudno, 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_scopeFor 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 Warty Hammer Orchid *Drakaea livida* gets pollinated by a male thynnine wasp through 'sexual deception' — a colour pencil reproduction of photos by ron_n_beths (flickr.com) and Rod Peakall; Water colour reproduction of Flame Lily *Gloriosa superba* — photo by Passakoran_14; and a bag worm and its architectural genius (source unknown). Art work by Pannagarsri G.



Assessing fish diversity in the Ujani reservoir: an updated overview after one decade

Ganesh Markad¹ , Ranjit More² , Vinod Kakade³  & Jiwan Sarwade⁴ 

^{1,2} Department of Zoology, Modern College of Arts, Science and Commerce College Ganeshkhind, Pune, Maharashtra 411016, India.

^{2,4} Department of Zoology, Arts, Science and Commerce College Indapur, Pune, Maharashtra 413106, India.

³ Department of Zoology, Eknath Sitaram Divekar College of Arts, Science and Commerce College Varwand, Pune, Maharashtra 412215, India.

¹ gmarkad94@gmail.com, ² zoologistranjit@gmail.com (corresponding author), ³ vbkakade15@gmail.com, ⁴ j.sarwade@rediffmail.com

^{1,2} Both of these authors contributed equally and are designated as first authors.

Abstract: The freshwater fish diversity of Ujani Reservoir, Pune District, Maharashtra, India, was assessed from April 2021–March 2023. A total of 56 freshwater fish species belonging to 39 genera and 18 families were documented. Comparative analysis with previous literature suggests a historical record of approximately 60 species in the reservoir. Of the 56 species recorded, 41 are endemic to the Oriental zoogeographical realm, while eight are endemic to the Krishna River system. Notably, two species, *Parambassis lala*, native to the Ganga, and Brahmaputra river basins, and *Nandus nandus* the Gangetic Leaffish, were recorded for the first time in Ujani Reservoir. The ichthyofauna of the reservoir faces significant threats from invasive alien species, industrial, and agricultural pollution, expanding human settlements, and overfishing. Given the presence of eight endemic and six threatened species, conservation measures are imperative to mitigate anthropogenic pressures, and preserve biodiversity. This study provides an updated account of fish diversity and distribution in Ujani Reservoir, serving as a crucial baseline for future conservation, and management initiatives.

Keywords: Anthropogenic impacts, conservation status, freshwater fish fauna, invasive alien species, species distribution, threats, Ujani reservoir.

Editor: Hitesh Kardani, Kamdhenu University, Gujarat, India.

Date of publication: 26 October 2025 (online & print)

Citation: Markad, G., R. More, V. Kakade & J. Sarwade (2025). Assessing fish diversity in the Ujani reservoir: an updated overview after one decade. *Journal of Threatened Taxa* 17(10): 27705–27719. <https://doi.org/10.11609/jott.9673.17.10.27705-27719>

Copyright: © Markad et al. 2025. 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: This study did not receive any specific funding from government, private, or non-profit organizations.

Competing interests: The authors declare no competing interests.

Author details: GANESH MARKAD PhD, research scholar, Department of Zoology, Modern College of Arts, Science and Commerce, Pune (Affiliated to Savitribai Phule Pune University, Pune). His doctoral research focuses on the nutritional and molecular aspects of freshwater fishes, emphasizing biodiversity and conservation. DR. RANJIT M. MORE assistant professor, Department of Zoology, Arts, Science and Commerce College Indapur, Pune, Maharashtra 413106, India, under Savitribai Phule Pune University, Pune, Maharashtra, India. A fisheries biologist specializing in taxonomy, ecology, and conservation of freshwater ichthyofauna.. DR. VINOD KAKADE associate professor, Department of Zoology, Eknath Sitaram Divekar College of Arts, Science and Commerce College Varwand, Pune, Maharashtra, India. He is actively engaged in biodiversity conservation, ecological studies, and academic mentoring in zoological sciences. PROF. DR. JIWAN SARWADE principal, Arts, Science and Commerce College Indapur, Pune, Maharashtra, India. He leads institutional biodiversity initiatives and supports research and conservation activities in the biological sciences.

Author contributions: RM: conceptualization, field survey, specimen collection, photography, visualization, manuscript writing, and finalization of the manuscript; GM: field survey, specimen collection, photography, data curation, and preparation of the initial draft of the manuscript; VK: conceptualization, manuscript drafting, visualization, supervision, and guidance during the study. JS: conceptualization, manuscript drafting, visualization, and overall guidance to the research work.

Acknowledgments: The authors would like to thank the principal and head of the Department of Zoology, Modern College, Ganeshkhind, Pune and Arts, Science and Commerce College, Indapur. Ganesh Markad is thankful to Maharashtra State Biodiversity Board for permission to access the biological resources (No. MSBB/ Desk-5/ Research/839/2022-23) and Mahatma Jyotiba Phule Research & Training Institute (Mahajyoti) for providing research fellowship to carry out the research work. Author also thankful to Mr. Sachin Shelake (Y.C. College, Halkarni, Kolhapur) for help in fieldwork and Photography. Ranjit More and Ganesh Markad are thankful to Dr. Shrikant Jadhav (FBRC, ZSI) for his help in the identification and authentication of fish.

INTRODUCTION

The Western Ghats of India is a global biodiversity hotspot (Myers et al. 2000), known for its high level of endemism among taxonomic groups such as amphibians and freshwater fish. Around 320 fish species belonging to 11 orders, 35 families, and 112 genera are known from this region with more than 60% being endemic (Dahanukar & Raghavan 2013), and this number is certain to increase given the high number of species being discovered each year. The threat status of fishes in the Western Ghats shows that nearly 41% are threatened, being classified either as Vulnerable, Endangered or Critically Endangered. Conservation measures for protection of the fish fauna are thus essential (Dahanukar et al. 2004). Despite numerous studies on the freshwater fish fauna of the Western Ghats, many upstream tributaries of major river systems remain underexplored. One such underexplored region is the Bhima River, a major tributary of the Krishna River, which originates from the Bhimashankar hill region of the Western Ghats. Flowing through the states of Maharashtra, Karnataka, and Telangana, the Bhima River supports diverse aquatic life, although it is increasingly subjected to anthropogenic pressures (Das & Panchal 2018). Several dams have been constructed on the Bhima River, with the Ujani being the terminal dam. The Ujani Reservoir, characterized by its extensive shallow-water habitat, is recognized as one of the most productive freshwater fisheries in the region. Shortly after its construction, Ujani became the largest freshwater fishing cooperative dam in Maharashtra (Karmakar et al. 2012).

Following its construction, the Ujani Reservoir has become a hub for freshwater fisheries, with the first comprehensive ichthyological survey conducted in the 1990s documenting 42 species of fish (Yazdani & Singh 1990). This list was later updated in 2002, with a total of 54 species (Yazdani & Singh 2002). A further study by Sarwade & Khillare in 2010 recorded 60 species across six orders, 15 families, and 36 genera. Despite these valuable contributions, research on the fish fauna of Ujani has been scarce in recent years, with no updated studies published since 2010. In addition to the lack of recent studies, the Ujani Reservoir has undergone substantial changes in the last decade, driven by growing tourism, industrialization, and recreational activities. These alterations, coupled with the increasing human footprint on the landscape, have the potential to affect the delicate balance of the aquatic ecosystems, including fish populations. Given the paucity of information on fish diversity in the Ujani Reservoir, especially in the face

of increasing anthropogenic pressures, it is imperative to revisit, and reassess the ichthyofauna of this critical waterbody.

This study aims to provide a comprehensive overview of the current diversity and distribution of fish species in the Ujani Reservoir, more than a decade after the last substantial survey. Documenting the present status of fish fauna provides baseline data that will aid in identifying key threats to fish populations and informing conservation efforts in the region.

METHODS

The study was conducted to assess the fish diversity of the Ujani Reservoir over the period of two years from April 2021–March 2023. Fish specimens were collected from Bhigwan (18.295° N, 74.773° E), Kumbhargaon (18.273° N, 74.796° E), Palasdeo (18.221° N, 74.869° E), Aagoti No.2 (18.233° N, 74.973° E), Rajewadi (18.166° N, 74.980° E), Shaha (18.114° N, 75.097° E), and Taratgaon (18.094° N, 75.129° E) (Figure 1), with the help of local fishers using different mesh-sized gill nets, and cast nets. Alternatively, fish samples were also procured from local fish markets in Bhigwan and Indapur.

Collected fish were stored in ice-containing thermos boxes and transported to the laboratory. Small-sized fish were preserved in 4% aqueous formalin solution, while larger fish were preserved in 10% aqueous formalin solution. The specimens were stored in airtight plastic bottles to ensure proper preservation. In the laboratory, fish specimens were identified using standard taxonomic literature, including Jayaram (1981) and Talwar & Jhingran (1991). Recent taxonomic literature was also consulted for accurate identification. The online database 'FishBase' was utilized for verification and authentication of scientific names (Froese & Pauly 2024). Collected fish specimens were deposited at the Museum of the Zoological Survey of India, Freshwater Biology Regional Centre Hyderabad (F.No.56.pt/Tech./2022-23/41). Assuming that the fishing effort for a given type of net (gill net or drag net) was constant, the relative abundance of the fish was grossly categorized (for each type of net separately) into four categories, namely: abundant (76–100% of the total catch), common (51–75% of the total catch), moderate (26–50 % of the total catch), and rare (1–25% of the total catch). Representative photographs were provided (Images 1–7).

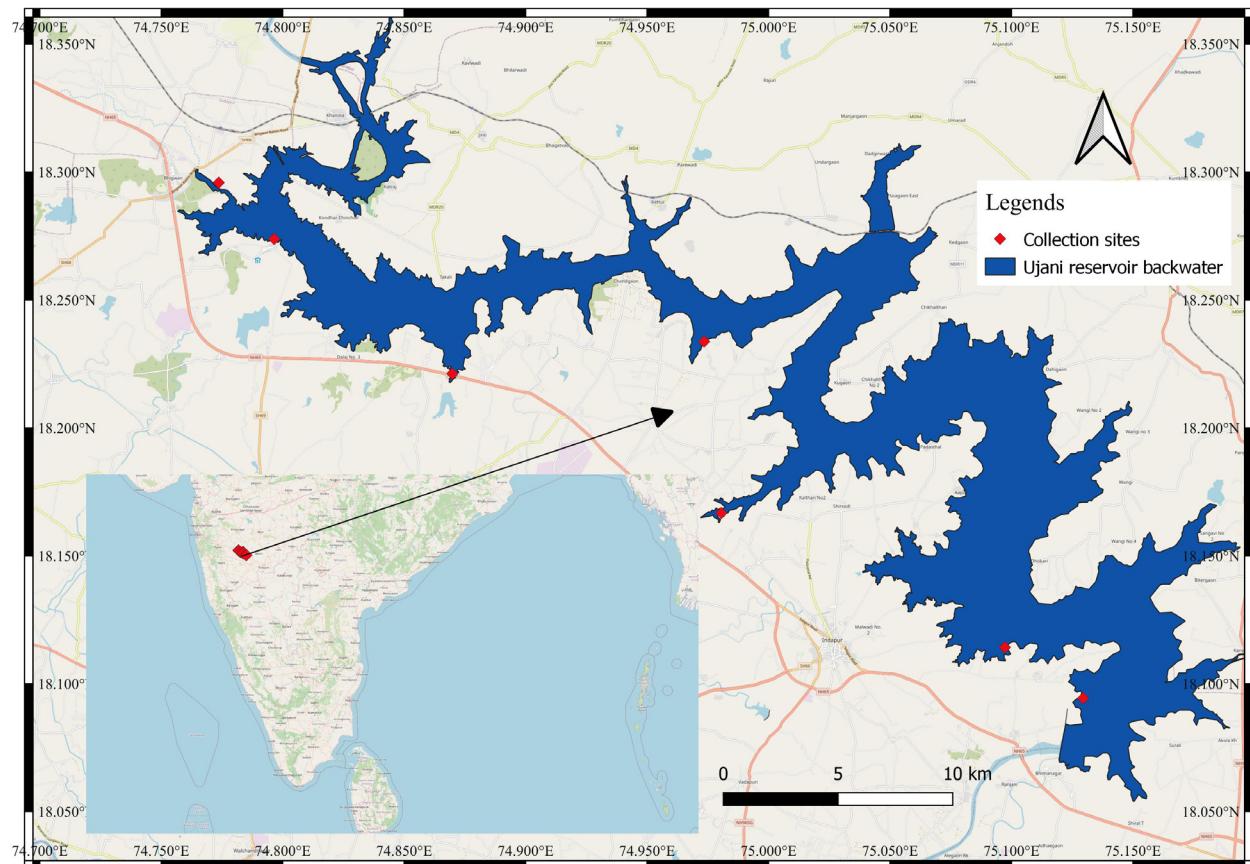


Figure 1. Map of the Ujani Reservoir, showing the study area, location of the collection sites.

RESULTS

A total of 56 fish species belonging to 39 genera, 18 families and 12 orders were reported during the study. The availability status as per catch frequency and IUCN status of species was listed in Table 1, and availability of fishes found in catch in percentage was shown in Figure 2. Of these total species, eight species endemic to the Krishna River system, seven introduced, and one exotic species were recorded during the study. Cypriniformes, with 27 species (48.21%) was found to be the most dominant order. Among 27 species, 24 were native, and three were introduced in the reservoir.

Cypriniformes was followed by Siluriformes, with 10 species (17.85%); belonging to five families. Among them, one introduced species, *Clarias gariepinus* from the family clariidae, was reported. The exotic aquarium fish *Pterygoplichthys pardalis* (family Loricariidae) was commonly encountered in the present catches. This species, first reported from the reservoir by More et al. (2020), was found in considerable abundance during the present study, indicating its successful establishment in

the system. The order Anabantiformes was represented by five species, of which four belonged to the family Channidae, and one to Nandidae, within Perciformes, only the family Ambassidae was recorded, comprising three species. The orders Beloniformes, Osteoglossiformes, and Synbranchiformes each contributed two species. Meanwhile, the orders Characiformes, Cichliformes, Gobiiformes, and Mugiliformes were each represented by a single species. The family Cyprinidae was the most dominant family, with 27 species (48.21%) of all reported species, followed by Channidae and Bagridae, each with four species (7.14%). Family ambassidae had three species; notably *Parambassis lala* was first reported from the reservoir. The families Claridae, Mastacembelidae, Notopteridae, and Siluridae had two species each. Families Anguiliidae, Belonidae, Cichlidae, Gobiidae, Hemiramphidae, Heteropneustidae, Loricariidae, Mugilidae, Nandidae, and Serrasalmidae each had one species to their account. This study revealed the occurrence of *Heteropneustes fossilis* and *Nandus nandus*, belonging to Heteropneustidae, and Nandidae respectively, in the reservoir.

Table 1. Inventory of fish species in the Ujani Reservoir.

Order	Family	Scientific name	Common name	Status as per catch frequency	Threat status (As per IUCN 2017)
Cypriniformes	Cyprinidae	<i>Amblypharyngodon mola</i>	Mola Carplet	A	LC
		<i>Cirrhinus mrigala</i>	Mrigal	C	LC
		<i>Cirrhinus reba</i>	Reba Carp	A	LC
		<i>Ctenopharyngodon idella</i>	Grass Carp	C	LC
		<i>Cyprinus carpio</i>	Common Carp	C	VU
		<i>Devario aequipinnatus</i>	Giant Danio	L	LC
		<i>Garra mullya</i>	Sucker Fish	C	LC
		<i>Gymnostomus ariza</i>	Reba Carp	C	LC
		<i>Gymnostomus fulungee</i>	Deccan White Carp	C	LC
		<i>Hypophthalmichthys molitrix</i>	Silver Carp	L	NT
		<i>Hypselobarbus kolas</i>	Kolus	R	VU
		<i>Labeo boggut</i>	Boggutlabeo	L	LC
		<i>Labeo calbasu</i>	Orangefinlabeo	C	LC
		<i>Labeo catla</i>	Catla	A	LC
		<i>Labeo rohita</i>	Rohu	C	LC
		<i>Osteobrama peninsularis</i>	Peninsular Osteobrama	R	DD
		<i>Osteobrama vigorsii</i>	Bheema Osteobrama	VR	LC
		<i>Pethia ticto</i>	Ticto Barb	A	LC
		<i>Puntius chola</i>	Swamp Barb	A	LC
		<i>Puntius sophore</i>	Pool Barb	C	LC
		<i>Puntius vittatus</i>	Greenstripe Barb	C	LC
		<i>Rasbora daniconius</i>	Slender Rasbora	L	LC
		<i>Salmostoma bacaila</i>	Large Razorbelly Minnow	C	LC
		<i>Salmostoma boopis</i>	Boopis Razorbelly Minnow	A	LC
		<i>Salmostoma phulo</i>	Finescalerazorbelly Minnow	C	LC
		<i>Schismatorhynchos nukta</i>	Nukta	VR	EN
		<i>Systemus sarana</i>	Olive Barb	L	LC
Siluriformes	Bagridae	<i>Mystus cavasius</i>	Gangetic Mystus	C	LC
		<i>Mystus malabaricus</i>	Jerdon'smystus	L	NT
		<i>Mystus vittatus</i>	Striped Dwarf Catfish	C	LC
		<i>Sperata seenghala</i>	Giant River-Catfish	L	LC
	Clariidae	<i>Clarias batrachus</i>	Philippine Catfish	C	LC
		<i>Clarias gariepinus</i>	North African Catfish	C	LC
	Heteropneustidae	<i>Heteropneustes fossilis</i>	Stinging Catfish	C	LC
	Loricariidae	<i>Pterygoplichthys pardalis</i>	Amazon Sailfin Catfish	C	NE
Anabantiformes	Siluridae	<i>Ompok bimaculatus</i>	Butter Catfish	L	NT
		<i>Wallago attu</i>	Wallago	L	VU
	Channidae	<i>Channa gachua</i>	Dwarf Snakehead	L	LC
		<i>Channa marulius</i>	Great Snakehead	L	LC
		<i>Channa punctata</i>	Spotted Snakehead	C	LC
	Nandidae	<i>Channa striata</i>	Striped Snakehead	C	LC
	Nandidae	<i>Nandus nandus</i>	Gangetic Leaffish	L	LC

Order	Family	Scientific name	Common name	Status as per catch frequency	Threat status (As per IUCN 2017)
Perciformes	Ambassidae	<i>Chanda nama</i>	Elongate Glass-perchlet	A	LC
		<i>Parambassis lala</i>	Highfin Glassy Perchlet	L	NT
		<i>Parambassis ranga</i>	Indian Glassy Fish	A	LC
Beloniformes	Hemiramphidae	<i>Hyporhamphus limbatus</i>	Congaturi Halfbeak	L	LC
	Belonidae	<i>Xenentodon cancila</i>	Freshwater Garfish	L	LC
Osteoglossiformes	Notopteridae	<i>Chitala chitala</i>	Clown Knifefish	L	NT
		<i>Notopterus synurus</i>	Bronze Featherback	C	LC
Synbranchiformes	Mastacembelidae	<i>Macrognathus pancaulus</i>	Barred Spiny Eel	C	LC
		<i>Mastacembelus armatus</i>	Zig-zag Eel	C	LC
Anguilliformes	Anguillidae	<i>Anguilla bengalensis</i>	Indian Mottled Eel	VR	NT
Characiformes	Serrasalmidae	<i>Piaractus brachypomus</i>	Pirapitinga	L	NE
Cichliformes	Cichlidae	<i>Oreochromis mossambicus</i>	Mozambique Tilapia	A	VU
Gobiiformes	Gobiidae	<i>Glossogobius giuris</i>	Tank Goby	A	LC
Mugiliformes	Mugilidae	<i>Rhinomugil corsula</i>	Corsula	L	LC

A—abundant | C—common | L—low | R—rare | VR—very rare | LC—Least Concern | VU—Vulnerable | NT—Near threatened | EN—Endangered | DD—Data Deficient | NE—Not Evaluated.

DISCUSSION

The Ujani Reservoir, a significant fishery station in Maharashtra, has been the focus of multiple ichthyofaunal studies over the past few decades. The initial assessments by Yazdani & Singh in 1990 documented 42 species from 14 families, which was later expanded to 54 species from 15 families in 2002 (Yazdani & Singh 2002). Their findings highlighted the dominance of the family Cyprinidae, with 34 species, and the abundant presence of Osteobrama, Channa, Wallago, Mystus, and major carp species. Additionally, they identified four introduced species—*Gambusia affinis*, *Oreochromis mossambicus*, *Cyprinus carpio*, and *Ctenopharyngodon idella*—which were historically introduced into Indian River systems (Yazdani & Singh 2002). Subsequent investigations were further refined by Sarwade & Khillare (2010) conducted an extensive study from January 2008 to December 2009, recording 60 species across 15 families and six orders, reaffirming the dominance of Cypriniformes with 40 species, including 37 from Cyprinidae. Among the most abundant taxa in their study were *Labeo catla*, *Cirrhinus mrigala*, *Cyprinus carpio*, *Labeo rohita*, and *Oreochromis mossambicus*.

The present study recorded 56 species, of which 42 species are classified as Least Concern (LC) by the IUCN Red List of Threatened Species, while six species fall under the Near Threatened (NT) category. Notably, 41 species are endemic to the Oriental zoogeographical

realm, and eight species are restricted to the Krishna River system. This finding aligns with Dahanukar et al. (2012), who reported 57 species from the Indrayani River, with 12 species endemic to the Western Ghats and five endemic to the Krishna River system. Similarly, Kumar et al. (2017) documented 57 species from the Hiranyakeshi River in the northern Western Ghats, including 22 species endemic to the Western Ghats, and nine species specific to the Krishna River system.

In terms of conservation significance, the study confirms the presence of *Hypseleobarbus kulos*, *Osteobrama peninsularis*, *Osteobrama vigorsii*, and *Schismatorhynchos nukta*, all endemic to India. Notably, *Schismatorhynchos nukta*, and *Torkhudree* are categorized as Endangered (EN), while *Mystus malabaricus* and *Ompok bimaculatus* are Near Threatened (NT) (IUCN, 2011). Furthermore, the study identifies *Piaractus brachypomus* (Serrasalmidae) as an introduced species, found in low numbers throughout the sampling period. *Oreochromis mossambicus* (Cichliformes) emerged as the most abundant species. Its widespread presence aligns with previous reports suggesting its intentional introduction to enhance aquaculture and fill ecological niches in underutilized water bodies (Singh et al. 2014). Another significant finding is the first documentation of *Pterygoplichthys pardalis*, an exotic aquarium species, from the Ujani Reservoir (More et al. 2020). Its likely introduction through the aquarium trade raises ecological concerns, as non-native species can alter

Table 2. Comparative account of fish diversity among different studies from Ujani Reservoir.

Species name	Yazdani & Singh 2002	Sarwade & Khillare 2010	Present study
<i>Labeo catla</i> (Hamilton, 1822)	+	+	+
<i>Gymnostomus fulungee</i> (Sykes, 1839)	+	+	+
<i>Cirrhinus mrigala</i> (Hamilton, 1822)	+	+	+
<i>Notopterus synurus</i> (Pallas, 1769)	+	+	+
<i>Cirrhinus reba</i> (Hamilton, 1822)	+	+	+
<i>Cyprinus carpio</i> (Linnaeus, 1758)	+	+	+
<i>Ctenopharyngodon idella</i> (Valenciennes, 1844)	+	+	+
<i>Hypselobarbus curmuca</i> (Hamilton, 1807)	+	+	-
<i>Labeo bogut</i> (Sykes, 1839)	+	+	+
<i>Labeo calbasu</i> (Hamilton, 1822)	+	+	+
<i>Labeo fimbriatus</i> (Bloch, 1795)	+	+	-
<i>Labeo kawrus</i> (Sykes, 1839)	+	+	-
<i>Labeo potail</i> (Sykes, 1839)	+	+	-
<i>Labeo rohita</i> (Hamilton, 1822)	+	+	+
<i>Osteobrama bakeri</i> (Day, 1873)	+	+	-
<i>Osteobrama bhimensis</i> (Singh & Yazdani, 1992)	+	+	-
<i>Osteobrama cotio cunma</i> (Day, 1888)	+	+	-
<i>Osteobrama vigorsii</i> (Sykes, 1839)	+	+	+
<i>Osteobrama neilli</i> (Day, 1873)	+	+	-
<i>Puntius conchonius</i> (Hamilton, 1822)	+	+	-
<i>Systemus sarana</i> (Hamilton, 1822)	+	+	+
<i>Puntius sophore</i> (Hamilton, 1822)	+	+	+
<i>Pethia ticto</i> (Hamilton, 1822)	+	+	+
<i>Schismatorhynchus nukta</i> (Sykes, 1839)	+	+	+
<i>Tor khudree</i> (Sykes, 1839)	+	+	-
<i>Chela cachius</i> (Hamilton, 1822)	+	+	-
<i>Salmostoma bacaila</i> (Hamilton, 1822)	+	+	+
<i>Salmostoma boopis</i> (Day, 1874)	+	+	+
<i>Salmostoma untrahi</i> (Day, 1869)	+	+	-
<i>Osparius bakeri</i> (Day, 1865)	+	+	-
<i>Osparius bendelisis</i> (Hamilton, 1807)	+	+	-
<i>Barilius evezardi</i> (Day, 1872)	+	+	-
<i>Devario aequipinnatus</i> (McClelland, 1839)	+	+	+
<i>Rasbora daniconius</i> (Hamilton, 1822)	+	+	+
<i>Garra mullya</i> (Sykes, 1839)	+	+	+
<i>Schistura denisonii</i> (Day, 1867)	+	+	-
<i>Lepidocephalichthys guntea</i> (Hamilton, 1822)	+	+	-
<i>Acanthocobitis botia</i> (Hamilton, 1822)	+	+	-
<i>Sperata aor</i> (Hamilton, 1822)	+	+	-
<i>Sperata seenghala</i> (Sykes, 1839)	+	+	+
<i>Mystus bleekeri</i> (Day, 1877)	+	+	-
<i>Mystus malabaricus</i> (Jerdon, 1849)	+	+	+
<i>Ompok bimaculatus</i> (Bloch, 1794)	+	+	+
<i>Wallago attu</i> (Bloch & Schneider, 1801)	+	+	+
<i>Xenentodon cancila</i> (Hamilton, 1822)	+	+	+
<i>Aplocheilus lineatus</i> (Val.)	+	+	-

Species name	Yazdani & Singh 2002	Sarwade & Khillare 2010	Present study
<i>Gambusia affinis</i> (Baird & Girard, 1853)	+	+	-
<i>Chanda nama</i> (Hamilton, 1822)	+	+	+
<i>Oreochromis mossambicus</i> (Peters, 1852)	+	+	+
<i>Rhinomugil corsula</i> (Hamilton, 1822)	+	+	+
<i>Glossogobius giuris</i> (Hamilton, 1822)	+	+	+
<i>Mastacembelus armatus</i> (Lacepede, 1800)	+	+	+
<i>Channa marulius</i> (Hamilton, 1822)	+	+	+
<i>Channa orientalis</i> (Bloch & Schneider, 1801)	+	+	-
<i>Salmostoma novacula</i> (Valenciennes, 1840)	-	+	-
<i>Rhynchorhamphus georgii</i> (Valenciennes, 1847)	-	+	-
<i>Amblypharyngodon mola</i> (Hamilton, 1822)	-	+	+
<i>Hyporhamphus limbatus</i> (Valenciennes, 1847)	-	+	+
<i>Chitala chitala</i> (Hamilton, 1822)	-	+	+
<i>Parambassis ranga</i> (Hamilton, 1822)	-	+	+
<i>Channa punctata</i> (Bloch, 1793)	-	-	+
<i>Hypophthalmichthys molitrix</i> (Valenciennes, 1844)	-	-	+
<i>Mystus cavasius</i> (Hamilton, 1822)	-	-	+
<i>Pterygoplichthys pardalis</i> (Castelnau, 1855)	-	-	+
<i>Nandus nandus</i> (Hamilton, 1822)	-	-	+
<i>Anguilla bengalensis</i> (Gray, 1831)	-	-	+
<i>Clarias batrachus</i> (Linnaeus, 1758)	-	-	+
<i>Clarias gariepinus</i> (Burchell, 1822)	-	-	+
<i>Heteropneustes fossilis</i> (Bloch, 1794)	-	-	+
<i>Puntius chola</i> (Hamilton, 1822)	-	-	+
<i>Parambassis lala</i> (Hamilton, 1822)	-	-	+
<i>Macrognathus panchalus</i> (Hamilton, 1822)	-	-	+
<i>Channa gachua</i> (Hamilton, 1822)	-	-	+
<i>Channa striata</i> (Bloch, 1793)	-	-	+
<i>Gymnostomus ariza</i> (Hamilton, 1807)	-	-	+
<i>Hypseleotris kulos</i> (Sykes, 1839)	-	-	+
<i>Osteobrama peninsularis</i> (Silas, 1952)	-	-	+
<i>Puntius vittatus</i> (Day, 1865)	-	-	+
<i>Salmostoma phulo</i> (Hamilton, 1822)	-	-	+
<i>Mystus vittatus</i> (Bloch, 1794)	-	-	+
<i>Piaractus brachypomus</i> (Cuvier, 1818)	-	-	+

aquatic ecosystems through predation, competition, and habitat modification. The establishment of *P. pardalis* necessitates further studies to develop management and eradication strategies.

Notably, several loach species (*Nemacheilus denisonii*, *Lepidocephalus guntea*, *Nemacheilus botia*) and hill stream fishes (*Barilius bakeri*, *Barilius bendelisis*, *Barilius evezardi*), previously recorded in Ujani (Sarwade & Khillare 2010), were absent in this study. Their disappearance may be attributed to anthropogenic activities, including deforestation, siltation, tourism, sand mining, and recreational disturbances, which

degrade the specialized habitats required by species from Balitoridae, and Cobitidae families. This study also reports the presence of *Hypophthalmichthys molitrix*, *Pterygoplichthys pardalis*, *Nandus nandus*, *Parambassis lala*, *Heteropneustes fossilis*, *Clarias batrachus*, and *Clarias gariepinus* (Table 2), which were absent from the records of (Yazdani & Singh 1990, 2002; Sarwade & Khillare 2010).

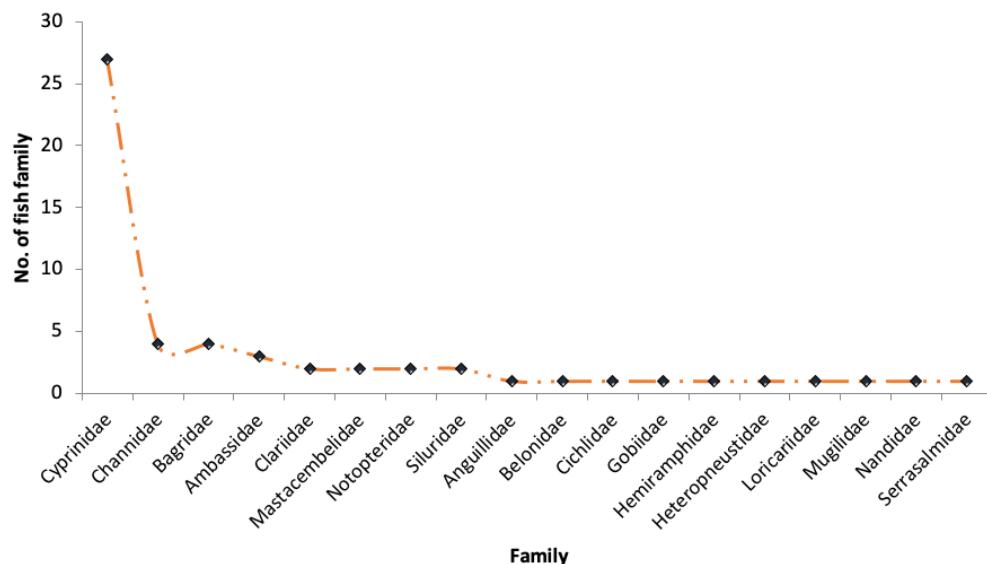


Figure 2. Number of species by family in the Ujani Reservoir, India.

CONCLUSION

The present study underscores the diverse ichthyofaunal assemblage of the Ujani Reservoir, with a total of 56 recorded species, including several endemic and threatened taxa. The dominance of Cyprinidae and the increasing presence of non-native species highlight significant ecological shifts in the reservoir's fish community. The introduction of exotic species such as *Oreochromis mossambicus*, *Piaractus brachypomus*, *Pterygoplichthys pardalis*, and *Clarias gariepinus* poses potential threats to native biodiversity through competition, predation, and habitat alteration. The absence of previously reported loach and hill stream fish species further indicates possible habitat degradation due to anthropogenic pressures, including sand mining, deforestation, and pollution. The findings emphasize the urgent need for sustainable fisheries management and conservation strategies to mitigate the impacts of invasive species, and habitat destruction. Future studies should focus on long-term monitoring of fish diversity, population dynamics of threatened species, and ecological impacts of introduced taxa. Regulatory measures should be implemented to prevent further introductions of exotic species, and community-driven conservation efforts should be promoted to safeguard the rich aquatic biodiversity of the Ujani Reservoir.

REFERENCES

Dahanukar, N. & R. Raghavan (2013). Freshwater fishes of Western Ghats: checklist v 1.0 August 2013. MIN 1: 6–16.

Dahanukar, N., M. Paingankar, R. Raut & S. Kharat (2012). CEPF Western Ghats Special Series: Fish fauna of Indrayani River, northern Western Ghats, India. *Journal of Threatened Taxa* 14(1): 2310–2317. <https://doi.org/10.11609/jott.0271.2310-7>

Dahanukar, N., R. Raut & A. Bhat (2004). Distribution, endemism and threat status of freshwater fishes in the Western Ghats of India. *Journal of Biogeography* 31(1): 123–136. <https://doi.org/10.1046/j.0305-0270.2003.01016.x>

Das, A. & M. Panchal (2018). Krishna River basin. The Indian Rivers: scientific and socio-economic aspects. Springer, Singapore.

Froese, R. & Pauly (2024). Fish Base. World Wide Web electronic publication. www.fishbase.org. Accessed on 20.xi.2024.

Jayaram, K.C. (1981). *Freshwater fishes of India, Pakistan, Bangladesh, Burma and Sri Lanka*. Zoological Survey of India, Calcutta, 475 pp.

Karmakar, A.K., B.E. Yadav, N. Bairagi, A. Das, P.K. Banerjee & S.S. Jadhav (2012). Freshwater fishes. *Fauna of Maharashtra State Fauna Series* 20: 247–367.

Kumkar, P., S.S. Kharat, N.S. Sawant, U. Katwate & N. Dahanukar (2017). Freshwater fish fauna of Hiranyakeshi river, the northern Western Ghats, India. *Journal of Threatened Taxa* 9(5): 10178–10186. <https://doi.org/10.11609/jott.3126.9.5.10178-10186>

More, R.M., J.P. Sarwade & S.K. Karna (2020). *Pterygoplichthys pardalis* (castelnau, 1855) (siluriformes: loricariidae) from ujani reservoir, Maharashtra, India. *Bioinfolet* 17(4A): 587–588.

Myers, N., R.A. Mittermeier, C.G. Mittermeier, G.A. Da Fonseca & J. Kent (2000). Biodiversity hotspots for conservation priorities. *Nature* 403(6772): 853–858.

Sarwade, J.P. & Y.K. Khillare (2010). Fish diversity of Ujani wetland, Maharashtra, India. *The Bioscan* 1: 173–179.

Singh, A. K., P. Verma, S. Srivastava, & M. Tripathi (2014). Invasion, biology and impact of feral population of Nile Tilapia (*Oreochromis niloticus* Linnaeus, 1757) in the Ganga River (India). *Asia Pacific Journal of Research* 1(XIV): 151–162.

Talwar, P.K. & A.G. Jhingran (1991). *Inland fishes of India and adjacent countries* Vol. 2. CRC Press, 1158 pp.

Yazdani, G.M. & D.F. Singh (1990). On the fish resources of Ujani wetland, Pune, Maharashtra. *Journal of Bombay Natural History Society* 87.

Yazdani, G.M. & D. F. Singh (2002). Wetland Ecosystem Series No. 3, Fauna of Ujani (Maharashtra). *Zoological Survey of India Kolkata*, India, 143–156 pp.

Cyprinidae*Amblypharyngodon mola**Cirrhitinus mrigala**Cirrhitinus reba**Ctenopharyngodon idella**Cyprinus carpio**Garra mallya**Gymnostomus ariza**Gymnostomus fulungee**Hypophthalmichthys molitrix**Hypselobarbus kohli*

Image 1. Fish species in the Ujani Reservoir, scale bar represent 1 cm. © Ganesh Markad, Ranjit More & Sachin Shelake.

Cyprinidae*Labeo boggut**Labeo calbasu**Labeo catla**Labeo rohita**Osteobrama peninsularis**Osteobrama vigorsii**Pethia ticto**Puntius chola**Puntius sophore**Puntius vittatus*

Image 2. Fish species in the Ujani Reservoir, scale bar represent 1 cm. © Ganesh Markad, Ranjit More & Sachin Shelake.

Cyprinidae*Salmostoma bacaila**Salmostoma boopis**Salmostoma phulo**Schismatorhynchos nukta**Systomus sarana***Danionidae***Devario aequipinnatus**Rasbora daniconius*

Image 3. Fish species in the Ujani Reservoir, scale bar represent 1 cm. © Ganesh Markad, Ranjit More & Sachin Shelake.

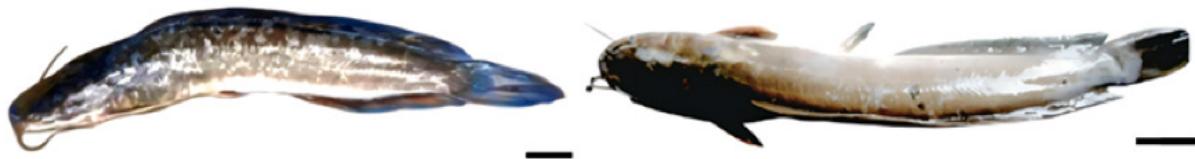
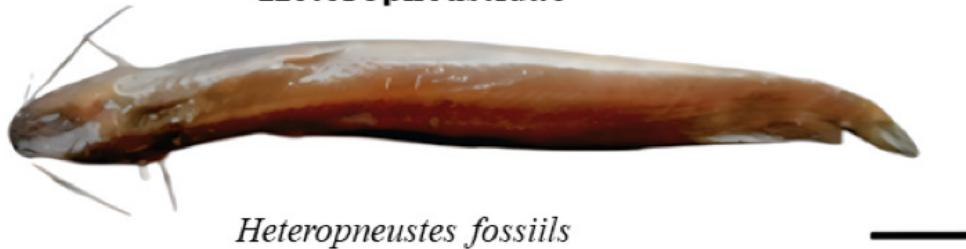
Bagridae*Mystus cavasius**Mystus malabaricus**Mystus vittatus**Sperata seenghala***Clariidae***Clarias batrachus**Clarias gariepinus***Heteropneustidae***Heteropneustes fossilis***Loricariidae***Pterygoplichthys pardalis*

Image 4. Fish species in the Ujani Reservoir, scale bar represent 1 cm. © Ganesh Markad, Ranjit More & Sachin Shelake.

Siluridae*Ompok bimaculatus**Wallago attu***Channidae***Channa gachua**Channa marulius**Channa punctata**Channa striata***Nandidae***Nandus nandus***Ambassidae***Chanda nama**Parambassis lala*

Image 5. Fish species in the Ujani Reservoir, scale bar represent 1 cm. © Ganesh Markad, Ranjit More & Sachin Shelake.

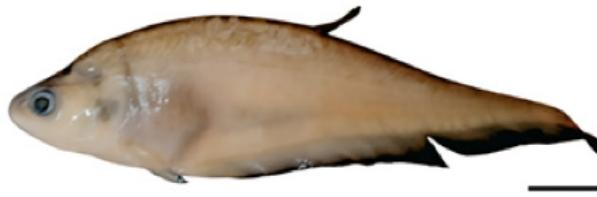
Ambassidae*Parambassis ranga***Hemiramphidae***Hyporhamphus limbatus***Belonidae***Xenentodon cancila***Notopteridae***Chitala chitala**Notopterus symurus***Mastacembelidae***Macrognathus pancalus**Mastacembelus armatus*

Image 6. Fish species in the Ujani Reservoir, scale bar represent 1 cm. © Ganesh Markad, Ranjit More & Sachin Shelake.

Anguillidae*Anguilla bengalensis***Serrasalmidae***Piaractus brachypomus***Cichlidae***Oreochromis mossambicus***Gobiidae***Glossogobius giuris***Mugilidae***Rhinomugil corsula*

Image 7. Fish species in the Ujani Reservoir, scale bar represent 1 cm. © Ganesh Markad, Ranjit More & Sachin Shelake.

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. Karen 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 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. 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. Karen 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. Priyadarshan 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 T.D. Caleb, Zoological Survey of India, Kolkata, West Bengal, India
Dr. Priyadarshan 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 KV, 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. Raja Vyas, Vadodara, Gujarat, India
Dr. Pritpal S. Soorae, Environment Agency, Abu Dhabi, UAE.
Prof. Dr. Wayne J. Fuller, Near East University, Mersin, Turkey
Prof. Chandrashekher U. Rironker, 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
Mr. H. Biju, 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 Jayopal, 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 Inskip, Bishop Auckland Co., Durham, UK
Dr. Tim Inskip, 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, 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, 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, Budhanilkantha Municipality, Kathmandu, Nepal
Dr. Susan Cheyne, Borneo Nature Foundation International, Palangkaraya, 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 Helleni 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. Bharat Baviskar, Wild-CER, Nagpur, Maharashtra 440013, India

Reviewers 2021–2023

Due to paucity 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

Articles

Fruit bat (Pteropodidae) composition and diversity in the montane forests of Mt. Kampalili, Davao De Oro, Philippines

– Ilamay Joy A. Yangurin, Marion John Michael M. Achondo, Aaron Froilan M. Raganas, Aileen Grace D. Delima, Cyrose Suzie Silvosa-Millado, Dolens James B. Iñigo, Shiela Mae E. Cabrera, Sheryl Moana Marie R. Ollamina, Jayson C. Ibañez & Lief Erikson D. Gamalo, Pp. 27551–27562

The impact of anthropogenic activities on *Manis javanica* Desmarest, 1822 (Mammalia: Pholidota: Manidae) in Sepanggar Hill, Malaysia

– Nurasyiqin Awang Shairi, Julius Kodoh, Normah Binti Awang Besar & Jephte Sompud, Pp. 27563–27575

Preliminary notes on a coastal population of Striped Hyena *Hyaena hyaena* (Linnaeus, 1758) from Chilika lagoon, India

– Partha Dey, Tiasa Adhya, Gottumukkala Himaja Varma & Supriya Nandy, Pp. 27576–27583

Wildlife management and conservation implications for Blackbuck corresponding with Tal Chhapar Wildlife Sanctuary, Rajasthan, India

– Ulhas Gondhali, Yogendra Singh Rathore, Sandeep Kumar Gupta & Kanti Prakash Sharma, Pp. 27584–27593

Amphibians and reptiles of Chitwan National Park, Nepal: an updated checklist and conservation issues

– Santosh Bhattarai, Bivek Gautam, Chiranjibi Prasad Pokhrel & Ram Chandra Kandel, Pp. 27594–27610

Butterfly diversity in Nagarahole (Rajiv Gandhi) National Park of Karnataka, India: an updated checklist

– S. Santhosh, V. Gopi Krishna, G.K. Amulya, S. Sheily, M. Nithesh & S. Basavarajappa, Pp. 27611–27636

Floral traits, pollination syndromes, and nectar resources in tropical plants of Western Ghats

– Ankur Patwardhan, Medhavi Tadwalkar, Amruta Joglekar, Mrunalini Sonne, Vivek Pawar, Pratiksha Mestry, Shivani Kulkarni, Akanksha Kashikar & Tejaswini Pachpor, Pp. 27637–27650

Ecological status, distribution, and conservation strategies of *Terminalia coronata* in the community forests of southern Haryana, India

– K.C. Meena, Neetu Singh, M.S. Bhandoria, Pradeep Bansal & S.S. Yadav, Pp. 27651–27660

Pterocarpus santalinus L.f. (Magnoliopsida: Fabaceae) associated arboreal diversity in Seshachalam Biosphere Reserve, Eastern Ghats of Andhra Pradesh, India

– Buchanapalli Sunil Kumar, Araveeti Madhusudhana Reddy, Chennuru Nagendra, Madha Venkata Suresh Babu, Nandimanadalam Rajasekhar Reddy, Veeramasu Jyosthna Sailaja Rani & Salkapuram Sunitha, Pp. 27661–27674

Potential distribution, habitat composition, preference and threats to Spikenard *Nardostachys jatamansi* (D.Don) DC. in Sakteng Wildlife Sanctuary, Trashigang, Bhutan

– Dorji Phuntsho, Namgay Shacha, Pema Rinzin & Tshewang Tenzin, Pp. 27675–27687

Checklist of floristic diversity of Mahadare Conservation Reserve, Satara, Maharashtra, India

– Sunil H. Bhoite, Shweta R. Sutar, Jaykumar J. Chavan & Swapnaja M. Deshpande, Pp. 27688–27704

Communication

Assessing fish diversity in the Ujani reservoir: an updated overview after one decade

– Ganesh Markad, Ranjit More, Vinod Kakade & Jiwan Sarwade, Pp. 27705–27719

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

October 2025 | Vol. 17 | No. 10 | Pages: 27551–27786

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

DOI: [10.11609/jott.2025.17.10.27551-27786](https://doi.org/10.11609/jott.2025.17.10.27551-27786)

Reviews

A review of 21st century studies on lizards (Reptilia: Squamata: Sauria) in northeastern India with an updated regional checklist

– Manmath Bharali, Manab Jyoti Kalita, Narayan Sharma & Ananda Ram Boro, Pp. 27720–27733

Understanding the ethnozoological drivers and socioeconomic patterns of bird hunting in the Indian subcontinent

– Anish Banerjee, Pp. 27734–27747

Short Communications

Recent records of endemic bird White-faced Partridge *Arborophila orientalis* (Horsfield, 1821) in Meru Betiri National Park, Indonesia

– Arif Mohammad Siddiq & Nur Kholiq, Pp. 27748–27753

Exploring carapace phenotypic variation in female Fiddler Crab *Austruca annulipes* (H. Milne Edwards, 1837): insights into adaptive strategies and ecological significance

– Vaishnavi Bharti, Sagar Naik & Nitin Sawant, Pp. 27754–27760

Habitat-specific distribution and density of fireflies (Coleoptera: Lampyridae): a comparative study between grassland and woodland habitats

– Kushal Choudhury, Firdaus Ali, Bishal Basumatary, Meghraj Barman, Papiya Das & Hilloljyoti Singha, Pp. 27761–27765

Hygrophila phlomoides Nees (Acanthaceae), a new record to the flora of northern India from Suhelwa Wildlife Sanctuary, Uttar Pradesh

– Pankaj Bharti, Baleshwar Meena, T.S. Rana & K.M. Prabhukumar, Pp. 27766–27770

The rediscovery of *Strobilanthes parryorum* C.E.C.Fisch., 1928 (Asterids: Lamiales: Acanthaceae) in Mizoram, India

– Lucy Lalawmpuii, Renthlei Lalnunfeli, Paulraj Selva Singh Richard, Pochamoni Bharath Simha Yadav, Subbiah Karuppusamy & Kholring Lalchandama, Pp. 27771–27776

New report of *Biophytum nervifolium* Thwaites (Oxalidaceae) from Gujarat, India

– Kishan Ishwarlal Prajapati, Siddharth Dangar, Santhosh Kumar Ettickal Sukumaran, Vivek Chauhan & Ekta Joshi, Pp. 27777–27781

Note

Water Monitor *Varanus salvator* predation on a Hog Deer *Axis porcinus* fawn at Kaziranga National Park, Assam, India

– Saurav Kumar Boruah, Luku Ranjan Nath, Shisukanta Nath & Nilutpal Mahanta, Pp. 27782–27784

Book Review

A book review of moths from the Eastern Ghats: Moths of Agastya

– Sanjay Sondhi, Pp. 27785–27786

Publisher & Host



Threatened Taxa