



GUIDE Net E - News Letter

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Dear Readers !

Celebration of major International days related to land, ocean and wildlife such as Earth Day, World Environment Day, World Oceans' Day, World Wildlife Day, and World Soil Day were organized in GUIDE with great enthusiasm this year. The observance of the days are designated by the United Nations, serve to mobilize communities and governments towards transformative action and sustainable management of the planet's resources. Celebrating these important days from January to December not only help in protection of our earth but also make an alert to our future generation to make them



bound to think about the importance of nature and encourage global awareness and action for environmental protection. The year 2025 is special for us as the institute has been recognized with Climate Change award for 2024-25 by GEDA, Gujarat and two women scientists have been selected for IGSTC WISER Award 2025.

Dr. V. Vijay Kumar
Director, GUIDE

WORLD EARTH DAY

Earth Day is globally celebrated on April 22nd every year. This day holds immense significance as it reminds us of the importance of environmental conservation. The theme for this year's Earth Day was "Our Power, Our Planet," emphasizing the need to transition to clean and renewable energy and reduce dependence on fossil fuels.

On Earth Day, 22nd April, an environmental clean up event was organized by Dr. J. B. Bhatt, Scientist, with the active participation of scientists, project staff, field assistants, and other staff members.

During the event, approximately 15 kg of non-biodegradable waste was collected and handed over to the municipality for proper management and disposal.



SAVE THE FROGS DAY

“*Save The Frogs Day*” is an annual campaign aimed at raising awareness about frogs and their vital role in maintaining ecological balance. Frogs face numerous threats, including habitat destruction, climate change, pesticides, and pollution, all of which have contributed to the decline of many species. The observance of this day seeks to educate people about the need for frog conservation and inspire them to become stewards of biodiversity.

The 17th Annual “*Save The Frogs Day*” was organized by the *Terrestrial Ecology Division* at Divya Brahmlok Global Academy, Sukhpar, Bhuj, on 28th April 2025. Students from

classes 5th to 8th, staff members, and the scientific team participated in the event. A drawing competition was conducted for the students, followed by a technical presentation on “*Save the Frogs.*” Documentaries on frogs and amphibian conservation—“*Dancing Frogs*” and “*Rare Frogs and Endangered Species*” were screened to highlight the intricate relationship between land and water in frog conservation and habitat protection. The session was led by Dr. J. B. Bhatt, scientist, GUIDE. During the valedictory function, school Chairman Mr. V. V. Swamiji, Administrator Shri Kiritbhai Patel, school Administrator Ms. Sonal Chatterjee,

Vice Principal Ms. Akshita Shah, and Administrative Staff Member Mr. Fuldevsinh Vaghela were present. In his closing remarks, Dr. V. Vijay Kumar, Director, GUIDE, emphasized the importance of frogs and the urgent need for their conservation. Subsequently, the winners from each class were announced and awarded mementos and certificates/prizes. The event concluded with a vote of thanks by Dr. Rachna Chandra, Principal Scientist, GUIDE.



WORLD BEE DAY

World Bee Day is celebrated globally on May 20th every year. This day holds immense significance as it highlights the crucial role that bees and other pollinators play in maintaining biodiversity and ensuring food security. This year’s theme, “*Bee Inspired by Nature to Nourish Us All*” emphasized the importance of pollinators in sustaining biodiversity, promoting sustainable agricultural practices, supporting food production and strengthening ecosystem resilience. The GUIDE, celebrated World Bee Day on 20th May 2025. The event was organized by Dr. Rachna Chandra, Principal Scientist, GUIDE,

under the stewardship of Dr. V. Vijay Kumar, Director, GUIDE. All scientific staff members (both online & offline) actively participated in the virtual lecture.

Dr. Seema Tripathy, Department of Entomology, FoAG, Sri Sri University, Odisha, served as the lead speaker for the virtual session. She delivered an insightful talk titled “*Pollinators at the Crossroads: Science Sustainability, and the Future of Bees,*” in which she discussed the importance of bees, bee diversity, commercial beekeeping, entrepreneurship opportunities, and related topics. During the event, Dr. V. Vijay Kumar, Director,

GUIDE, spoke about *Apis florea* (Dwarf Bee/Little Bee) and shared insights on the common observation of bees extracting nectar from *Prosopis juliflora* in the Kachchh region. The Vote of Thanks was delivered by Dr. Rachna Chandra.



WORLD BIODIVERSITY DAY

On the occasion of the International Day of Biological Diversity, 31st May 2025, Gujarat Institute of Desert Ecology (GUIDE) organized a webinar. The theme of the event this year was “Harmony with Nature and Sustainable Development” geared towards creating action towards biodiversity conservation at every level, attracting experts, researchers, students, and environmental activists.

Prof. P. Santhanam, Bharathidasan University, Tamil Nadu presented an inspiring talk on Marine biodiversity and Marine ecology and highlighted the need for conservation of the resources and the necessity to incorporate advancements in the ocean technology in the curriculum for the better performance of the students and researchers in the Marine science. The event was organized

by Dr. B. Balaji Prasath, Senior Scientist, Coastal and Marine Ecology division, GUIDE.

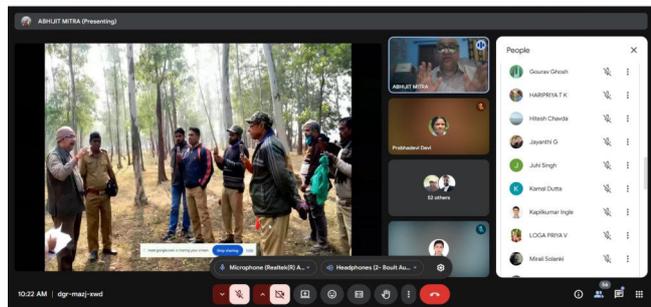


Riftia Tube worm colony in Galapagos



WORLD ENVIRONMENT DAY

The 'World Environment day 2025 on 5th June was celebrated in GUIDE and this year's theme was “Combating Plastic Pollution”. A webinar was organized by the Coastal Marine division in which Prof Abhijit Mitra, Dept. of Marine Science, University of Calcutta presented a lecture on “Climate change: Causes, Impact and Mitigation”. A second presentation was by Prof. Usha K. Aravind, Department of Environmental Science, CUSAT, Kerala on “Microplastics in Indoor Environments: Biomonitoring, co-pollutant synergies and toxicological implications”. The webinar was attended by more than 80 participants including the staff members from GUIDE.



WORLD OCEAN DAY

World Ocean Day 2025 was celebrated on June 8th, with the theme "Wonder: Sustaining what sustains us". The day is observed to highlight the importance of the ocean, its role in the sustenance of life on earth, resources, climate control and much more and to raise awareness towards its protection and promote sustainable management. The event was

attended by all the staff members of GUIDE with family at Vayro Resort, Mandvi. A drawing competition was conducted among the children and the prizes were distributed by Dr. V. Vijay Kumar, Director, GUIDE.

The event was coordinated by Dr. Durga Prasad Behera, Scientist, Coastal and Marine Ecology Division GUIDE.



WORLD DAY TO COMBAT DESERTIFICATION AND DROUGHT

World Day to Combat Desertification and Drought is globally celebrated on June 17th every year to raise awareness about desertification, drought and land degradation. The day was established by the UN General Assembly in 1994 and highlights global efforts to combat environmental challenges and encourage sustainable land management. This year's theme *Restore the land. Unlock the opportunities*, focuses on restoring 1.5 billion Ha of degraded area and promoting a trillion-dollar land resto-

ration economy by the year 2030.

The event was organized by Dr. Rachna Chandra & Dr. J.B. Bhatt at GUIDE under the guidance of Dr. V. Vijay Kumar, Director, GUIDE. All scientific staff actively participated in the plantation drive. A total of 100 saplings were planted in the campus. Plantation drive was followed by online lecture by Dr. V. Vijay Kumar, Director, GUIDE. The session started with a welcome address by Dr. Kripa M.K, scientist, Dr. Vijay Kumar delivered the talk wherein he

touched upon impact of desertification on various environmental components and emphasized how unsustainable management will lead to land degradation and productivity loss. Almost 50 participants attended the online lecture that included participants from India and abroad. The event concluded with Vote of thanks by Dr. Rachna Chandra, Principal Scientist, GUIDE.

Regulations – Restoration Act

The Indian Forest Act (1927),
 The Forest Conservation Act (1980), The Environment Protection Act (1986) and National Forest Policy (1988).
 National Mineral Policy, 2019 and Mineral Conservation and Development Rules (MCDR), 1988.
 Rule 23A of MCDR - Restoration of Mined Areas and Mine Closure Plan.
 CRZ Regulations Related to Coastal Land Conservation
 The Wetlands (Conservation and Management) Rules (2017) - Wetland protection.

India does not have specific Nature Restoration Act like the EU (Nature Restoration Law (NRL), 2024), but has "National Afforestation Programme-NAP, Green India Mission-GIM, Desertification and Land Degradation Atlas", etc.

In India, legal approaches to ecosystem restoration is based on enactment of the proposed "Nature Restoration Law".



WORLD MANGROVE DAY

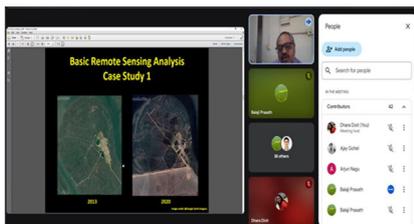
On the occasion of International Mangrove Day 2025, the Gujarat Institute of Desert Ecology, Bhuj, Kachchh, organized a special event reflecting upon the indispensable role of mangrove ecosystems in safeguarding our coastlines, preserving biodiversity, and strengthening climate resilience. This observance serves as a timely reminder of the urgent need to conserve these vital blue-carbon ecosystems to secure a sustainable and resilient future.

The program featured insightful presentation by eminent speaker Prof. Dharmendra Shah from the Department of Botany, The Maha-

raja Sayajirao University of Baroda, who delivered a lecture on "Application of GIS & Remote Sensing for Mangrove Monitoring and Conservation." His talk highlighted the critical role of geospatial tools such as GIS and remote sensing in monitoring, mapping, and conserving mangrove habitats. He also underscored the essential ecological services provided by mangroves, especially in the face of rapid climate change. Adding further depth to the discussion, Dr. V. Vijay Kumar, Director of GUIDE, presented on "GUIDE's Role in Mangrove Plantation and Conservation." He elaborated on the distribution of mangrove forests across India and outlined GUIDE's ex-

tensive efforts in promoting mangrove afforestation and conservation. As part of the Mangrove Day 2025 celebration, a quiz competition was also organized to highlight the importance of mangroves, climate change, and associated ecological dimensions. All divisions of the Institute participated enthusiastically, making the event both engaging and informative while reinforcing collective awareness on the significance of mangrove conservation.

The program was coordinated by Dr. Dhara Dixit, Dr. Kapil Kumar Ingle and Ms. Shivani Kumari of the Coastal and Marine Ecology division.



INTERNATIONAL COASTAL CLEANUP DAY

As a part of the "International Coastal Clean-up Day *Swachh Sagar, Surakshit Sagar*" was celebrated on 20th September 2025 at Mandvi Beach, Gulf of Kachchh. The objective of the program was to engage participants and create awareness on the importance of protecting our coasts and becoming better stewards of the marine environment. In this region, the event was organized by GUIDE, Bhuj, in collaboration with the National Centre for Coastal Research (NCCR), Chennai, Ministry of Earth Sciences (MoES). Under the guidance of Dr. V. Vijay Kumar, the event was presided by Dr. K. Karthikeyan, Assistant Director, GUIDE. During the mass cleaning drive, a

total of 440 kg marine litter was collected, of which 22 kg was plastic litter. A total of 120 participants took part in the drive, including students from Saraswatham Sanchalit Matrushree RHP Higher Secondary School (Maska), Vidya Bharati Sanchalit Shri Saraswati Vidya Mandir (Mandvi), White House Public School, Bhuj, Doon Public School Bhuj, and Shishukunj International School, Bhuj. Officials from Mandvi Municipality, along with scientists and researchers from GUIDE, also actively participated. The program successfully achieved its objective of creating mass awareness on the importance of keeping our coasts clean & free from plastic and other litter. Volunteers and officials

from the Forest Department, Tourism Department, Secure Nature, and Sima Jagaran Manch also extended their support, making the campaign a grand success. The overall program was coordinated by Dr. Durga Prasad Behera, scientist, GUIDE.



NATIONAL WILD LIFE WEEK

The Gujarat Institute of Desert Ecology (GUIDE), Bhuj, in association with the Forest Department, Kachchh and Shrishti Conservation Foundation (SCF) celebrated the National Wildlife Week 2025 on 04th October 2025 at the Seven Sky Clarks Exotica. The event was hosted under the stewardship of Dr. V. Vijay Kumar, Director, GUIDE. The Chief Guest of the event was Dr. A.P. Singh, PCCF & HoFF, Gujarat. Dr. Deepak Apte from SCF, Pune was the Guest of Honour. Around 09 lectures were delivered during the event. The Dr. A.P. Singh talked about the conservation needs, endemic species, Leopard-Human conflict and policies. Subsequently, Dr.

Raju Vyas delivered a talk on "Status of Crocodile and its Conservation in Gujarat". Dr. V. Vijay Kumar spoke about "Crocodile Conservation Project in India" followed up by Dr. B.C. Choudhary's virtual briefing about the aspect. The plenary talk was delivered by Dr. Deepak Apte on "CRZ and mudflat habitats". Dr. Sameer Bajarju delivered a talk on "Importance of Mudflat habitats for migratory birds of the CAF". Subsequently, Shri. Ayush Verma, DCF, East Division, Kachchh Circle spoke about "Wild Heritage of Kachchh". Dr. Sandeep Kumar, CCF, Kachchh Circle briefed the audience about the "Conservation of Wildlife in Gujarat". In the afternoon ses-

sion Dr. Girish Jathar, Executive Director, SCF elaborated upon "Ecological Significance of Wetlands from a CAF Perspective".

Dr. Rachna Chandra, and Dr. S.K. Sajan, moderated the sessions. A total of 140 participants from forest department, policymakers, corporates, academicians and wildlife enthusiasts were present. The event was sponsored by the Kandla Timber Association and the Hasten Regeneration Pune.

Dr. K. Karthikeyan, Assistant Director, GUIDE presented the Vote of thanks.



GUIDE FOUNDATION DAY

GUIDE Foundation day was celebrated on 1st May 2025 at the Floating Deck Resort, Bhuj wherein all the scientists, researchers and non-technical staff members participated with gusto. The event was graced by our beloved Director, Dr. V. Vijay Kumar and Assistant Director Dr. K. Karthikeyan. The hosting of the entire event was done by Dr. Dhara Dixit from the Coastal and Marine Ecology Division, GUIDE.



GUIDE IN PLANT RECORD

During a field expedition around Kandlain Gandhidham Taluka (Kachchh district) in October 2023, a search team from the Gujarat Institute of Desert Ecology (GUIDE) came across an unusual plant with distinct jointed leaves and creamy flowers. The specimen was collected for further study, and a detailed examination of its morphological features

led to its identification as *Zygophyllum coccineum* L. The discovery and documentation were carried out by Research scholars of Botany; Mr. Rakesh Poptani, Mr. Vivek Chauhan and Mr. Bhagirath Paradva and scientist Dr. Jayesh B. Bhatt, under the guidance of Dr. V. Vijaykumar (Director, GUIDE).



ઇજિપ્ત, તુર્કી, ઇઝરાયેલ, સુદાન જેવા સૂકા રણ પ્રદેશોમાં જ જોવા મળતી વનસ્પતિની પ્રજાતિ કચ્છમાંથી મળી આવી



Nyctanthes arbortristis- A medicinal plant of Kachchh

Rakesh A. Poptani
Project fellow, Terrestrial Ecology division

Class: Magnoliopsida (Dicotyledons)
Subclass: Asteridae
Order: Lamiales
Family: Oleaceae (Jasmine family)
Common names: Parijat

Nyctanthes arbortristis known by names such as Parijat, Night-flowering Jasmine, Coral Jasmine, Harsingar, Shefali, Shiuli, Queen of the Night is a perennial, deciduous ornamental tree (8–12ft) produces highly fragrant white flowers which opens during night. The flower is star-shaped with bright orange center occur in small terminal clusters. The fruit is a flat, heart-shaped capsule with two seeds.

The plant grows slowly but is hardy, tolerating poor soil and low water and is widely planted in temples, gardens and parks. It prefers warm temperatures (15–35°C) and moderate rainfall. The flowers are consid-

ered sacred and offered to the deities in temples and holds a special place in Indian culture and spirituality. Distribution: Parijat is native to the Indian subcontinent and widely found in Nepal, Bangladesh, Bhutan, Sri Lanka, and parts of Southeast Asia. In India, it is common in northern, eastern, and central regions and in warm regions of Africa and tropical America. It is used in the traditional medicine for treatment of cough, cold, fever, inflammation, skin diseases and also used as a laxative. The plant contains anti oxidants and has shown antiviral effects against certain viruses.



An observation on the Malacofauna of GUIDE Campus

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Mollusca is considered the second largest phylum after arthropods, which comprises about 130,000 living and 70,000 described fossil species and contributes six percent of the total species on the earth (Clark and May, 2002; Haszprunar et al., 2008). Molluscs are soft-bodied, unsegmented animals with a body organized into a muscular foot, a head, a visceral mass containing most of the organ systems, and a fleshy mantle that secretes the calcareous shell (Pyron and Brown, 2015). They play vital roles in ecosystem as grazers, filter feeders and predators. They also have significant economic importance as food sources, in pearl production, and serve as bioindicators of environmental health. The GUIDE campus in Bhuj, is a unique ecological niche for diverse faunal communities. Among these, terrestrial molluscs represent an important yet often overlooked component of biodiversity, except a few from secondary literature and collections made by the Zoological Survey of India (Tripathy et al., 2021). Their presence reflects the availability of suitable microhabitat conditions, moisture, vegetation cover, and anthropogenic influences. The current observation on the malacofauna of the Gujarat Institute of Desert Ecology campus reveals five species belonging to the four genera and three families (Table, Figs 1A–F).

The observations on these species would serve as an additional knowledge to this region's malacological diversity. The invasion of the exotic slug, *Laevicaulis haroldi* Dundee 1980, which was reported from Ahmadabad and other parts of India, was recorded for the first time from this region (Magare, 2015; Sajan and Tripathy, 2020; Tripathy et al., 2021). The species *Zootecus insularis* and *Pupoides scenopictus* demonstrate adaptation mostly to the arid conditions, while others like *Allopeas gracile* and *Laevicaulis* spp. depend on moisture-rich microhabitats such as beneath the rock, logs and soil. Their distribution under scores the importance of microclimatic variation with in semi-arid landscapes. These findings contribute to

the growing documentation on molluscan diversity in western India, providing insights into the persistence of species under harsh environmental conditions. Moreover, the presence of the invasive species *L. haroldi* suggests the swift dispersal ability and adaptive nature of the species from moist to semi-arid environments. The GUIDE campus serves as a microcosm for studying terrestrial molluscs in semi-arid ecosystems and reflects the ecological heterogeneity of the region. The recorded species, *Zootecus insularis*, *Allopeas gracile*, *Pupoides scenopictus*, *Laevicaulis alte*, and *Laevicaulis haroldi* show both ecological pliability and habitat specificity. Continued monitoring and detailed taxonomic studies will enhance our understanding of malacofaunal diversity in Kachchh and contribute to understanding the distributional pattern and broader conservation efforts.



Family	Genus	Scientific Name	Figure
Achatinidae	<i>Zootecus</i> Westerlund, 1887	<i>Zootecus insularis</i> (Ehrenberg, 1831)	1A
Achatinidae	<i>Allopeas</i> Baker, 1935	<i>Allopeas gracile</i> (T. Hutton, 1834)	1B
Pupillidae	<i>Pupoides</i> Pfeiffer, 1854	<i>Pupoides coenopictus</i> (Hutton, 1834)	1C
Veronicellidae	<i>Laevicaulis</i> Simroth, 1913	<i>Laevicaulis alte</i> (Férussac, 1822)	1D
Veronicellidae	<i>Laevicaulis</i> Simroth, 1913	<i>Laevicaulis haroldi</i> D. S. Dundee, 1980	1E

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AWARDS & HONORS

Climate Change Award

The Institute has been awarded with Climate Change Awards for the year 2024-25 by the Climate Change Department, Govt. of Gujarat for our multitude of work on "Climate Change Mitigation and Adaptation Projects" under the Institutional Category. The Award was presented by the Hon. Ministers, Sh. Mulubhai Bera Ji, Minister for Tourism, Cultural activities, Forests, Environment & Climate Change; Sh. Mukeshbhai Patel Ji, Minister of State for Forest & Environment, Climate Change, Water Resources & Water Supply. The Director Dr.V. Vijay Kumar, Dr.K.Karthikeyan, Dr. Kripa and Mr. Prakash Patel attended the function.



Dr. G. Jayanthi, Scientist, Env. Monitoring & Assessment Division received a scholarship of €4025 from the Helmholtz Centre for Environmental Research (UFZ) to undertake a one-month research stay at UFZ, Leipzig.

Dr.G.Jayanthi and Dr. Kripa, M.K. scientists were selected for the IGSTC WISER Award 2025 (Indo-German Science & Technology Centre–Women in Science, Engineering, and Research). They are among a total of 40 women scientists selected for the award across the country.



Dr. Monika Sharma received a prize for her paper "Microcosm to Cosmos: Exploring the Frontiers of Science" at the National conference for the celebration of "International Microorganisms day" on 24th September 2025'organized by Tolani college of Arts and Science, Adipur, Kachchh

Dr. B. Balaji Prasath received Young Scientist of the Year 2025 presented by the International Academy of Science and Research (IASR), Kolkata at the 4th International Conference on Environment, Forestry and Sustainable Agriculture, held during on 26-27 December, 2025.

Dr. B. Balaji Prasath, Senior scientist, Coastal and Marine Ecology Division, GUIDE has taken part in the International Conference on Future of Maritime Technology and Use of the Sea (SEA the Future 2025), at Pattaya, Thailand held during 26-28 February 2025.



INVITED TALKS / PRESENTATIONS

On 12th November 2025, Dr. K. Karthikeyan and Dr. G. Jayanthi attended the Hybrid meeting of the 5th Technical Committee Meeting of EED 05 Environmental Services Sectional Committee organized by Bureau of Indian Standards, New Delhi.

On 12th November 2025, Dr. K. Karthikeyan as a Resource Person delivered a Talk on “Transformative Trends in Environmental Science: Innovations for a Sustainable Future” in the 12 days Online Interdisciplinary Refresher Course on Environmental Studies, organized by UGC-Malviya Mission Teacher Training Centre, Central University of Kerala.

Dr. V. Vijay Kumar, Director, was invited as a Chief Guest for the “Awareness Program on NABL Accreditation and its Benefits (Gunvatta Yatra)” on the 29th November 2025 which was jointly Organized by the College of Veterinary Science & Animal Husbandry, Kamdhenu University, Bhuj and National Accreditation Board for Testing and Calibration Laboratories, New Delhi. The event was attended by Dr. K. Karthikeyan, Assistant Director, Dr. G. Jayanthi, Scientist, Dr. Monika. R. Sharma, Senior Scientific Assistant from GUIDE.

Rajiv Gandhi National Ground Water Training & Research Institute and the Central Ground Water Board, West Central Region, Ahmedabad (Gujarat) jointly organized a Tier-III Training Program on “Local Ground Water Issues and Aquifer Management” KSKV University, Bhuj. The event was specifically designed for faculty members, students and researchers from the disciplines of Geology, Ecology, and Environmental Science. Dr.G.Jayanthi, Scientist, GUIDE attended the training on 11th December 2025 at the Court Hall, Main Building, KSKV University Campus.

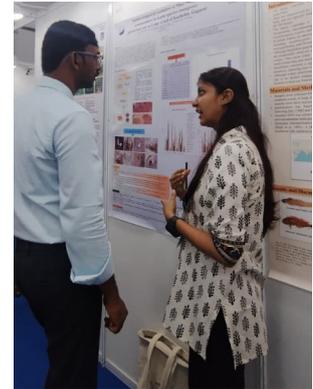
Dr. L. Prabhadevi has attended National Conference on Advancing Sciences and Innovation for Sustainability held on March 11, 2025 at MS Uni. Baroda; Presented an invited talk on ‘Wetland: Benefits and Management Approaches’, 18th July 2025 held at Dept. Civil Engineering, CSPIT Charusat, Anand, Gujarat; She also presented an invited talk on ‘Algal Bloom’ in the webinar held at Aurangabad, MH; She attended Indian Zoological Conference, held at Bangalore University on 12th and 13th June 2025 and delivered an invited talk on ‘Application of Bioluminescence in Biological Research’.





Dr. K. Karthikeyan was invited as a Resource person in the National Workshop on Research Methodology, Paper and Thesis Writing with reference to NEP-2020 sponsored by Knowledge Consortium of Gujarat and Education Department, Gujarat through RUSA and delivered his talk on the topic “Outcome-Driven Abstract Writing: Enhancing Research Communication in the NEP-2020 Era” on 12th December 2025, organized by Tolani College of Arts and Science, Adipur-Kachchh.

Ms. Shivani Kumari PA II Coastal and Marine Ecology Division GUIDE has attended MECOS-4 (Marine Ecosystem Challenges and Opportunities), an international conference on marine and coastal sciences, held at Kochi from 4th to 6th September 2025, where she presented a poster on “Spatial - temporal variation of macrofaunal communities in multispecies mangrove plantation site at Luni– Gulf of Kachchh, Gujarat.



Kanoj Village PGVCL-CSR Project Concluding Village Level Meeting-Photos



Photos of the wildlife week conference



WORLD SOIL DAY

On 5th December 2025, World Soil Day was celebrated through webinar, organized by the Environmental Monitoring and Assessment Division. This year the theme was “Healthy Soils for Healthy Cities”. The invited speakers Prof. R. Hiranmai Yadav, Central Univ. of Gujarat, and Shri. Manoj. P. Solanki, Professor, School of Env. & Sustainable Managing Trustee, Kachchh delivered talks on the significance soil and nature conservation.



Hands-on Training program in Cultivation of Medicinal and Edible Mushroom.



The Hon. Chairman Sh. V.S. Gadhari, IAS (Retd) (right) and Sh. Vijaylaxmi Sheth, Vice chairman visit GUIDE in July 2025.



Prof. Christofer, Wildlife Specialist, Cochin University Visited GUIDE



The Faculties (Dr. Apoorva Patel and Dr. Rao) and 25 Students (Integrated BSW LLB programme) from GNLU, Gandhinagar visited GUIDE for an interaction in areas of Climate Change, Disaster Risk Reduction, etc. Dr. V. Vijay Kumar delivered a talk on 'Ecology, Climate Change and Vulnerability of Kachchh' and Dr. Rachna Chandra delivered lecture on 'Disaster Management' to the students, between 10.15 and 13.30hrs.

Glimpses during NABL Awareness programme



IUCN World Conservation Congress was conducted at Abu Dhabi National Exhibition Center, Abu Dhabi between 9th and 16th Oct. 2025, Dr. V. Vijay Kumar, Director has attended the Congress.

The Indian delegation was headed by the Hon Minister for MoEF&CC, New Delhi. The Hon Minister has released the Indian Red list Book on 9th Oct. 2025, at Asian Pavilion, ADNEC, Abu Dabhi. The book was prepared jointly by the ZSI and BSI, MoEF&CC, Govt. of India.



FIELD VISITS

The director, DRDA Kachchh and a team of Scientists from GUIDE and Tanta University, Sri Ganganagar have visited Narayan Sarovar lake and collected water samples for analysis and suggest mitigation measures in connection with the monitoring and revival on 2nd December 2025



Mangrove at Jatadhari Estuary, Odisha

On the bank of the Jatadhari river estuary a patch of *Kandelia candel* mangrove having 2-3m height and large canopy with leaves was found during the field visit in December. The mangrove formation is situated close to the sand bar at the mouth of the Jatadhari estuary, Odisha, East Coast. The plants are very healthy and with flowers and seeds. No other mangrove species are present. The clean water with the fertile sediment supports a number of gastropods, bivalves and fishes.

Indo-pacific coasts. The estuarine shoreline greenbelt is with diverse group of trees, shrubs and typical wetland flora like *Pandanus* sp. The mangrove thrives in mid-intertidal zone of the relatively sheltered is supported by stable fine sandy-clay substratum and moderate salinity gradients buffered by river flow. Such isolated mangrove patches act as local blue carbon hotspots, support fisheries, stabilize banks, and serve as natural indicators for restoration suitability.



The bottom sediment also holds the seagrass *Halophila ovalis*, commonly distributed in the

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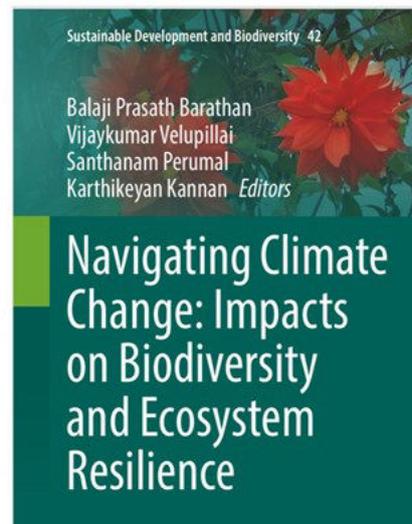
Navigating Climate Change: Impacts on Biodiversity and Ecosystem Resilience

Editors

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Chapters contributed by GUIDE Scientists:



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