

## E- Monthly Newsletter

### Conservation Initiative for Sharks and Rays in the Estuarine Regions of West Bengal

We are implementing a conservation initiative to protect sharks and rays in the estuarine regions of Digha, Hingalganj and Diamond Harbour. These species play an essential role in the marine ecosystem, yet they face serious threats from overfishing and illegal trade. Through this project, we raise awareness, engage local communities and strengthen protection measures to support their survival.

We conduct focused awareness campaigns to prevent overfishing. Our team regularly interacts with fishers, explains the ecological value of sharks and rays and encourages them to follow sustainable fishing practices. By promoting responsible methods, we help reduce direct pressure on these vulnerable species. We also address illegal trade by identifying risk zones and working closely with enforcement agencies. Our team gathers information, supports monitoring efforts and helps prevent the unlawful capture and sale of sharks and rays.

Community involvement remains central to our approach. We build trust with fishers, share knowledge and motivate them to participate actively in conservation efforts. By increasing their understanding of the ecological importance of these species, we encourage long-term behavioral change. We carry out this initiative under WTI's R.A.P. program, strengthening our collective effort to protect and conserve these vital marine species



**Sharks and rays caught, urgent need for conservation**

### Rebuilding Hope Through Education in South 24 Parganas

A single visit to Gadhabaduli Abjakhali Free Primary School in Abjakhali, P.O. Bishnupur, South 24 Parganas, was enough to show us both the promise and the challenges that live side by side there. We met more than one hundred lively, curious children whose smiles reflected a deep desire to learn and dream beyond their circumstances. Yet the school that shelters their hopes is in distress. Damaged classrooms, broken furniture and the absence of basic facilities make learning difficult and unsafe.

These children come from economically challenged and marginalized communities, but they continue to walk into school each day with courage and determination. They deserve far better. Education is their right, and a safe, clean and supportive space is essential for their growth.

We have begun the effort to renovate and restore the school and we welcome everyone who believes in the power of education to stand with us in rebuilding their future.



**Gadhabaduli Abjakhali Free Primary School**

# Editorial

[WNE](#) is currently expanding its scope of work across multiple domains, resulting in the engagement of a diverse group of individuals with the organization. Many are joining WNE through internships, research-based initiatives supported by grants, and other collaborative opportunities. As we prepare to commence our upcoming coursework, our objective is to ensure that conservation efforts are grounded in scientifically sound approaches.

Alongside this, a wide range of professionals are engaging with us—social workers involved in social welfare initiatives, individuals working in wildlife conservation and practitioners closely associated with forest-adjointing communities. These contributors are sharing their valuable field experiences, insights and ongoing work with us through the WNE newsletter.

We are hopeful that in the coming days, we will be able to highlight many more meaningful experiences and impactful work from dedicated individuals through this platform. The newsletter aims to serve as a space for knowledge exchange, learning, and collective growth.

Individuals and organizations who are interested in contributing, collaborating, or sharing their experiences are warmly encouraged to connect with us and participate through our [newsletter](#).

## Exploring the Truth Behind Snakes: Myths, Culture and Science Unveiled

WNE organized a webinar that brought together students, researchers and nature enthusiasts for an enriching session on the myths, culture and science surrounding snakes. We extend our sincere gratitude to Dr. Niladri Bhusan Kar, Assistant Professor at Fakir Mohan University and an expert in herpetology, venomous and phylogeny. He delivered a powerful presentation that guided participants through the cultural, ecological and scientific aspects of snakes.

We thank all participants for their active engagement. Their enthusiasm and thoughtful questions added depth to the session. The discussion began with ancient myths and cultural stories and Dr. Kar corrected common misconceptions by presenting clear scientific explanations. He then introduced the medically important snakes of Odisha and explained their ecological roles. He also discussed venom evolution, its biochemical nature and the challenges of developing effective antivenom.

The session concluded by emphasizing the ecological importance of snakes and the need for informed conservation.



An insightful session by Dr. Niladri Bhusan Kar



## T11 aka Kamli's Era

- Story by Pratik Mahapatra

A year passed on....Kamli is now designated as T11 - a new era dawned in Sanjay-Dubri with her. On 1 June 2017, she was discovered nurturing her three newborns – one male and two females. As the time passed, the cubs grew up with their mother's tender loving care, and with the bold protection of their father, officially known as T5.

Sitting here remotely, and compassionately receiving the news from several corners, known and unknown, I was just about to discover yet another fascinating sights one can hardly imagine...!! Nilanjan Roy Chowdhury, Sayantan Dey and Late Amitabha Guha – three passionate hearts, who are quite close to being, set out for Sanjay-Dubri in October 2019 along with a handful of other escorts from the close constellation. Already we have received the news that Kamli has given birth to her second litter on 3 March 2019. This time, there are four cubs – three females and a male. By now, they should be seven-month-old. Framing the full family of mother and the cubs were going to be a real treat, we thought...!!

With his keen observational skills and sheer guiding capacity, Jairaj Ji soon tracked down the entire family, proudly prowling on the horizon of Route 1. One bonus was there to be embraced. There is a great sense of integration in the big cats of having the birthplace of the cubs selected quite assuredly, a hardwired response of securing the prospect of the new generation. Kamli used to select the same zone in Route 2 for having her own cubs, where the erstwhile territory holder of the area used to give birth. Moreover, perhaps in order to put a healthy distance between the two litters of cubs, as well as to avoid some inevitable territorial disputes, Kamli never let her litters step out of the specific zones as long as they used to hang out with her.

The bonus that our acquaintances got was Karnavat, the male cub from Kamli's first litter; fondly known as Barka Deo by the guides and the drivers, meaning 'the elderly god'. He stepped out of his natal range as the male tigers usually do to put a distance between their birthplace and them to avoid inbreeding. Here in this case, however, Barka Deo had not only stepped out of his horizon, rather, he was very much hanging out with his mother and younger brothers and sisters. Occasionally, he was seen performing the act of babysitting when Kamli was out for hunting. Not so long ago, witnessing a wonderful capture by Nilanjan Roy Chowdhury, featuring Kamli, her two cubs along with Barka Deo in the auspicious evening of the eighth day of Navaratri, or, to say it otherwise, the evening of Mahashtami of Durga Puja was really something special. It was 6 October 2019 and it happens to be my birthday. So, it took the sensational frame quite personally, as a presentation from Nature on my birthday in this case.



**Kamli ....A gorgeous tigress of Sanjay  
Dubri tiger reserve M.P. 2018**

## Chaitanya Reddy: A Life Rooted in Nature and Community Empowerment

Chaitanya Reddy dedicates her work to reconnecting people, especially children, with the natural world. She believes emotional connection strengthens conservation, and she creates experiences that nurture this bond. She conducts immersive eco camps where children learn sustainability through activities such as paper recycling, leaf mandalas, mud play, seed sowing and nature journaling. These experiences build creativity, mindfulness and responsibility.

She leads bird walks and seasonal nature trails for adults and older children, helping participants observe habitats, understand migratory changes and appreciate ecological relationships. Her initiative Endangered Stitches uses detailed hand embroidery to highlight threatened species and fragile habitats, blending art with conservation storytelling.

Through the Forest Stories project, she supports rural and tribal women by developing nature-based crafts and providing livelihood opportunities rooted in local ecological knowledge. As the author of *Children Lead Parenting*, she promotes conscious nurturing and nature-based learning. With an MBA in Marketing and Supply Chain, she brings structure and community engagement to every initiative she leads.



Meaningful and inspiring work focused on community empowerment by Chaitanya Reddy

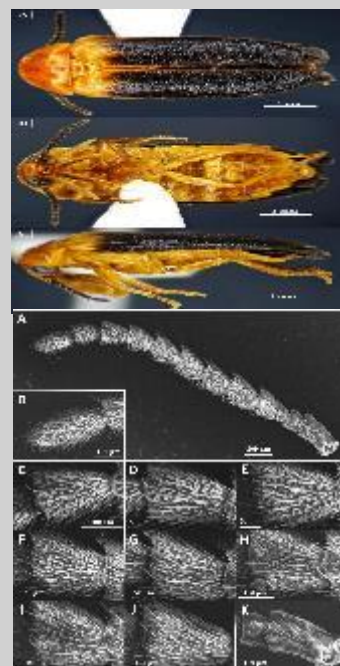
## Silent Signals: How Non-Luminescent Fireflies Stay Connected

-by Chakrovorty and Bhattacharjee

The Lampyridae family includes over 2,400 beetle species, many of which glow through bioluminescent photophores on their abdomen. However, several evolutionary lineages lose these organs, raising an important question about how non-luminescent fireflies communicate. Researchers now show that these species rely strongly on pheromone-based communication.

Pacheco *et al.* (2025) confirm that diurnal, non-glowing fireflies use large numbers of mechano- and chemoreceptive sensilla on their antennae and mouthparts. The genus *Lamellipalpodes*, recently expanded through discoveries by [Chakrovorty](#) and Bhattacharjee, displays this adaptation clearly. These species develop long maxillary and labial palps, supporting McDermott's hypothesis that non-luminous fireflies evolve stronger sensory structures.

Scientists use Scanning Electron Microscopy to study these sensilla. The antennae, maxillary palps, and labial palps contain 16, 5, and 10 types respectively. All three species show a dense chemosensory patch on the maxillary palp tip, enabling long-distance pheromone detection when hidden females stay deep in the soil.





## The Decline of the Lion: Why Their Roar Has Grown Quiet

The International Union for Conservation of Nature released its first Green Status of Species assessment for the lion on March 27, 2025, offering a deeper understanding of how far the species has recovered across its historic range. Although lions remain classified as Vulnerable on the IUCN Red List, the Green Status places them in the category of Largely Depleted, indicating that their populations exist far below their former ecological strength across most of Africa and India.

The assessment identifies human-driven pressures such as habitat loss, expanding settlements and conflict as the greatest barriers to recovery. Lions have completely disappeared from North Africa and Southwest Asia, and their numbers remain significantly reduced in many regions.

Despite these challenges, conservation efforts have successfully prevented extinction in certain areas, including parts of West and Southern Central Africa, South Africa and India. Notably, the Asiatic lion continues to survive in Gujarat's Gir landscape.

The Green Status assessment goes beyond measuring extinction risk and reveals how much recovery still remains. It emphasizes the urgent need for sustained and strengthened conservation action to restore lions as fully functional members of their ecosystems.



Echoes of a vanished range

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## The Slow Collapse of Madhya Pradesh's Sal Heartlands

In the forests of Dindori district, Madhya Pradesh, a quiet disaster is unfolding among the towering sal trees. An aggressive infestation of the Sal Heartwood Borer has begun to spread across large stretches of forest, and experts fear that nearly 100,000 sal trees may now be at risk.

Villagers watch with heavy hearts as forest workers mark weakened trees for cutting. Entire settlements that once lived under the cool shade of dense sal canopies now feel the heat, as the forest slowly loses its protective cover.

This crisis is not new. In 1995, a massive outbreak forced authorities to cut down more than half a million sal trees—both infected and healthy—before the danger was fully understood. Today's situation echoes that old warning, only with greater urgency.

Scientists believe that heavy rainfall and rising humidity this monsoon may have accelerated the pest's spread. Without immediate monitoring, strong forest-management action and community involvement, vast sal-dominated landscapes may disappear—along with the wildlife, water systems and livelihoods that depend on them.



Borer infestation spreads on Sal