



AIWC



NEWSLETTER

Half-Yearly Newsletter

YEAR 2025/ ISSUE 2

JULY-DECEMBER 2025

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Director's Note

Dear Readers,

It gives me great pleasure to present the July–December 2025 edition of AIWC's newsletter. Over the past months, our research and range teams have achieved several milestones, reflecting our shared commitment to excellence and innovation. AIWC continues to thrive as a hub of knowledge, collaboration, and creativity in wildlife conservation.

This half-yearly edition highlights the third one-month certificate course for Forest Range Officers on 'Wildlife Conservation and Forensics', which was held from 10th November to 9th December 2025, the inauguration of the 'Tamil Nadu Raptor Research Foundation (TNRRF)' - a landmark step in advancing raptor conservation, a series of training programmes, workshops, webinars, and stakeholder visits that enriched our collective learning and the launch of 'Training of Trainers' workshops in collaboration with the Tamil Nadu Forest Academy (TNFA) to strengthen the skills of forest officers and students in wildlife conservation, forest management, and educational techniques.

As we look ahead, let us carry forward the spirit of curiosity and resilience that defines our community. Together, we will ensure that AIWC remains a beacon of inspiration for generations to come.

With best regards,

A. Udhayan, IFS,

Principal Chief Conservator of Forests & Director,
Advanced Institute for Wildlife Conservation,
Vandalur, Chennai – 600 048.

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- **Selvi. S. Senbagapriya, IFS, Deputy Director (Admin), AIWC, Vandalur.**
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Certificate course, Trainings & Workshops

One-day workshop & First meeting of Tamil Nadu Raptor Research Foundation (TNRRF) on 02.09.2025

The inauguration of Tamil Nadu Raptor Research Foundation (TNRRF) and a one-day workshop on Raptors of Tamil Nadu were held on September 2, 2025, in Advanced Institute for Wildlife Conservation (AIWC).

Selvi. S. Senbagapriya, IFS, Deputy Director (Admin), AIWC, welcomed the participants.

Thiru. A. Udhayan, IFS, Principal Chief Conservator of Forests (PCCF) & Director, AIWC, presented the vision and mandate of the TNRRF, outlined its objectives and future directions.

Thiru. Rakesh Kumar Dogra, IFS, PCCF & Chief Wildlife Warden, Tamil Nadu, presented a special address.

Tmt. Supriya Sahu, IAS, Additional Chief Secretary, Environment, Climate Change & Forest Department, Government of Tamil Nadu, delivered the inaugural address.

Expert presentations and field methodologies were delivered and an open discussion was moderated by Selvi. S. Senbagapriya, IFS.



Release of 'Wild Animal Carcass Management Guidelines' by Tmt. Supriya Sahu, IAS

Certificate course, Trainings & Workshops

Forest Range Officers' conclave on Human- Wildlife Conflict Management

Forest Range Officers' conclave on 'Human-Wildlife Conflict Management' was organized on October 07, 2025, in the Advanced Institute for Wildlife Conservation, Vandalur. The programme was conducted under three sessions, namely i) Human-Elephant Conflict, ii) Human-Carnivore Conflict and iii) Rescue and Release of Wildlife.

The conclave was inaugurated by Tmt. Supriya Sahu, IAS, Additional Chief Secretary, Environment, Climate Change & Forests Department, Tamil Nadu.



Other dignitaries participated in this event were: Thiru. Srinivas R Reddy, IFS, PCCF (HoFF), Thiru. Rakesh Kumar Dogra, IFS, PCCF & Chief Wildlife Warden, Thiru. A. Udhayan, PCCF & Director, AIWC, Thiru. Anurag Mishra, Special Secretary to Government ECC & F Dept., Thiru. H. Venuprasad, IFS, APCCF (WL), and Thiru. M.G. Ganesan, IFS, Project Director, Nilgiri Tahr Project.



Release of the Picture Postcard on 'Nilgiri Tahr Day' by Tmt. Supriya Sahu, IAS along with the other dignitaries

Certificate course, Trainings & Workshops

Third One-month Certificate Course for Forest Range Officers

The Third one-month certificate course on 'Wildlife conservation and Forensics' was conducted from 10th November to 9th December, 2025, building upon the success of two programs. The programme continued to draw participants from Maharashtra and Telangana State Forest Departments, reflecting its growing regional significance.



Inaugural Session

A total of 21 participants (Forest Range Officers) from the following states took part in the programme.

- Telangana: 1 participant
- Maharashtra: 1 participant
- Tamil Nadu: 19 participants



Participants

The course was formally inaugurated and graced by the distinguished dignitaries, including Thiru. Srinivas R Reddy, IFS, Principal Chief Conservator of Forests (HoFF), Tamil Nadu Forest Department, Ms. Mita Banerjee, IFS, PCCF, and Thiru. Ritto Cyriac, IFS., Chief Conservator of Forests & Director, Arignar Anna Zoological Park.



Special Address: Thiru. Srinivas R Reddy, IFS, PCCF & Head of Forest Force



Dignitaries and Participants

Course Structure and Methodology

The month-long programme adopted a balanced and integrated approach comprising:

- Classroom Sessions
- Practical Sessions
- Field Visits
- Group Activities & Discussions

One-month Certificate Course.....

Course Objectives

The core objectives of the course were:

- To provide an in-depth understanding of wildlife conservation and management.
- To introduce wildlife forensics as a critical tool in the investigation of wildlife crimes.
- To strengthen officers' capabilities in wildlife law enforcement, including anti-poaching operations and investigative methodologies.
- To promote ethical, sustainable, and scientifically informed wildlife management practices that contribute to overall ecosystem health.

Classroom Sessions

Lectures by subject matter experts from AIWC, Tamil Nadu Forest Department, universities, and conservation agencies on:

- Wildlife ecology and behaviour
- Protected area management
- Wildlife laws and policies
- Investigation procedures and documentation
- Forensic applications in wildlife crime

**Classroom Sessions****Crime Scene Investigation****Morphometry analysis of wildlife articles****Practical Sessions****Practical Sessions**

Hands-on training in:

- Species identification
- Sample collection techniques
- Necropsy demonstration
- Forensic laboratory procedures
- Camera trapping and field surveys



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One-month Certificate Course.....



FRO Trainees Group Photo

Wildlife Tour

As part of the experiential learning component, participants undertook an eight-day Wildlife Management Study Tour across key conservation sites in Kerala.



Thrissur Zoological Park



CMFRI, Kerala

The tour provided practical exposure to diverse ecosystems, protected area management practices, and ongoing conservation initiatives implemented by the Kerala Forest Department and affiliated institutions.



Shri Virendra R Tiwari, IFS (Retd.), Chairperson, National Biodiversity Authority, Government of India, distributed the Certificates to the FRO Trainees

Certificate course, Trainings & Workshops

Workshop on Telemetry & Flipper tagging study on Olive Ridley sea turtle held on 19.11.2025

A one-day workshop on 'Telemetry and flipper tagging in Olive Ridley Sea turtle' was organized at AIWC on November 19, 2025.

The two sessions of the workshop were:

- Technical Session I – Identification, Ecology and methodology for flipper tagging
- Technical Session II – Satellite Telemetry Study



Welcome Address by Thiru. A. Udhayan, IFS, PCCF & Director, AIWC



Address by Thiru. Ritto Cyriac, IFS, Director, Aringar Anna Zoological Park



'Overview of Sea turtles and telemetry method' by Dr. Kirubhanandhini, Project Associate, AIWC

Workshop on Statewide Raptor Assessment 2026 for Frontline Forest Staff

A One-day workshop on Statewide Raptor Assessment was conducted on December 23, 2025 at AIWC. Thiru. A. Udhayan, IFS, PCCF & Director, AIWC, and Thiru. Rakesh Kumar Dogra, IFS, PCCF & CWLW, Tamil Nadu, delivered special addresses.

Ms. Madhumita Rajkumar, SRF, AIWC, presented on 'Introduction to Tamil Nadu Raptor Research Foundation (TNRRF)'. Dr. Suresh Marimuthu delivered a presentation on 'First Statewide Raptor Assessment Methodology'. Dr. C. Divyapriya and Dr. Manigandan Selvaraj presented 'Identification of Raptors of Tamil Nadu'. The participants were exposed to an outdoor session – 'Raptor Assessment Exercise' and a post Survey Methodology was conducted. The programme was followed by an open discussion.



Certificate course, Trainings & Workshops

Certificate Programme for 20,000 School Students

வனமும் வாழ்வும் மாணவர்களுக்கான பயிற்சி திட்டம்

The scheme aims to benefit **20,000 school children** through **1,000 teachers** across Tamil Nadu through short-term training programmes focused on Forest Conservation, Forest Fire Management, Wildlife Census, and Human-Animal Conflict Management.

Training of trainers' Workshop



Training of trainers' Workshop for Teachers



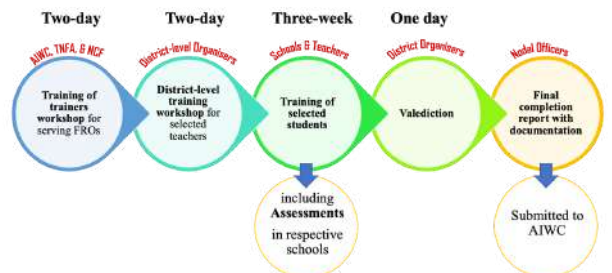
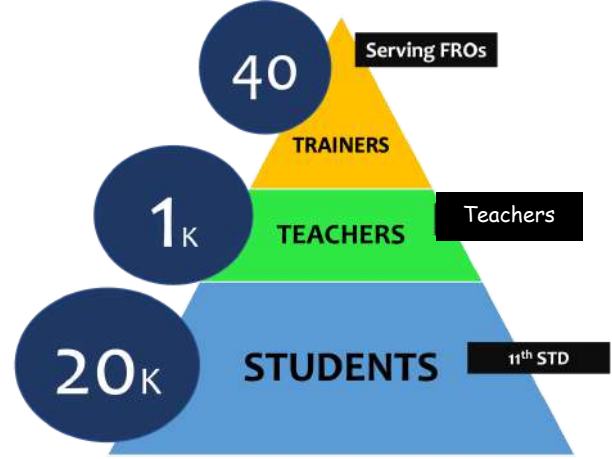
Training to the 20,000 Govt. School Students



Valedictory



Target groups and work plan



Training Materials

Distribution of toolkits for school, teachers & students



AIWC in association with Nature Conservation Foundation (NCF) have developed the toolkits and distributed to 40 trainers, 1000 schools, 1000 teachers, 20000 students



Team

Thiru. A. Udhayan, IFS., Director & PCCF
 Selvi . S. Senbagapriya, IFS., Deputy Director (Admin)
 Thiru. D. Eswaran, Deputy Director (Technical)
 Dr. S. Siva Ranjani (Forest Veterinary Assistant Surgeon)
 Mr. S. Selvakumar (FRO, CCE) & Range team CCE
 Dr. S. Rajesh Kumar (Project Scientist)
 Mr. V. Thirumurugan (Project Coordinator)
 Ms. R. Madhumita (Project Coordinator)
 Ms. R. Mahesh Priya (Project Associate)





Action Summary

Tamil Nadu Raptor Research Foundation (TNRRF) Events (July to December, 2025)

Dr. C. Divyapriya, Scientist, Centre for Species Survival, AIWC.

1. Establishment of the Tamil Nadu Raptor Research Foundation (TNRRF)

The Tamil Nadu Government Order G.O (D) No.165, E, CC & F (FR5) Dept. dated 09/07/2025 marks the establishment of Tamil Nadu Raptor Research Foundation (TNRRF) in the Advanced Institute for Wildlife Conservation (AIWC). The AIWC serve as a hub for the research and conservation of raptors of Tamil Nadu.

2. TNRRF inauguration & workshop – launch of logo & steps forward (02 Sep 2025)

The inauguration and first meeting of the TNRRF were held on September 2, 2025, at AIWC.

The event has brought policymakers, forest managers, researchers, and conservationists under one roof. Tmt. Supriya Sahu, I.A.S., Additional Chief Secretary, Environment, Climate Change & Forest Department, Government of TN, launched the TNRRF logo and released the Guidelines on Wild Animal Carcass Management. The vision of the TNRRF is to study, conserve, and celebrate the raptors of Tamil Nadu.

The logo comprises raptors in flight and perched, symbolising the raptor diversity and the need to protect them. The blue and beige colour tones depict the blue sky and beige land and terrestrial ecosystem.



TNRRF Logo



TNRRF events.....

The TNRRF foundation members shared their expertise and collaborative ideas with the single mission of conservation of TN raptors.

3. AIWC-WWF Collaboration meeting (4th Dec 2025)

The Raptor Conservation Programme team of the World Wildlife Fund-India (WWF-India) met the TNRRF team at AIWC to join hands in advancing raptor conservation in Tamil Nadu. Mr Ratul Saha, Director, Raptor Conservation Programme, appraised their understanding on TN raptors, conservation research and possible partnership pillars with the TNRRF team of AIWC.



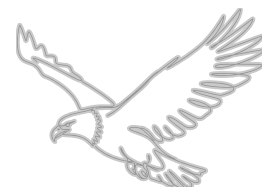
4. TNRRF's First Webinar on 'Owls of Tamil Nadu: Night Guardians of our Ecosystem' on 6.12.2025.

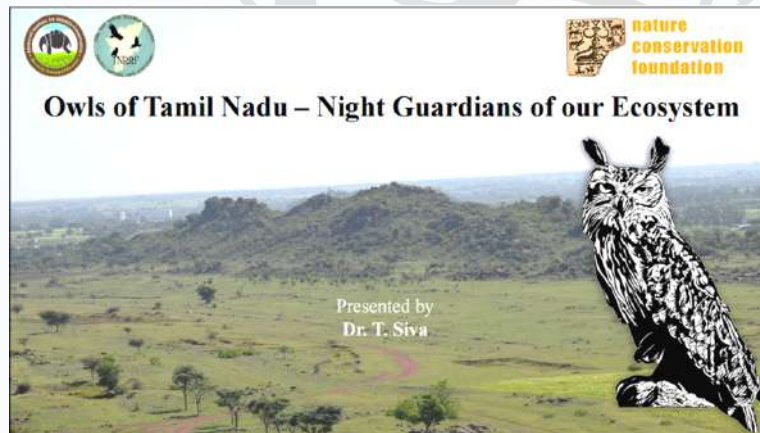
TNRRF has initiated an online webinar to raise awareness of raptor conservation initiatives and the importance of raptors to the general public. The first webinar was conducted on December 06, 2025. Dr T. Siva, TNRRF member and owl researcher, has presented his field expertise on the introduction to owls of Tamil Nadu with special reference to the Indian Eagle-owl. He elaborated on the feeding, nesting behaviour, and habitat preferences of the Indian Eagle-owl. The webinar was well received, with active participation from schoolchildren and the public.



5. One-day workshop on First State-wide Raptor Assessment (23 Dec 2025)

A one-day workshop on the raptor assessment was held on 23rd December, 2025, at AIWC. The Forest Range Officers, bird watchers, and wildlife biologists across the State had participated in the program. The methodology of the first state-wide raptor assessment and key identification cues of raptors were discussed during the session. The outdoor session involved a raptor assessment exercise followed by an open discussion on the survey methodology.





Raptor of the Week

Every week, AIWC is publishing information about a raptor in social media. The 'Raptor of the Week' is a conservation initiative for creating awareness, educating the public, and promoting the conservation efforts for raptors





Raptor of the Week.....

Tamil Nadu Forest Department
Advanced Institute for Wildlife Conservation
(Research, Training & Education)

Tamil Nadu Raptor Research Foundation
Raptor of the Week
8 November 2025

சிவப்பு வல்லூறு, சிறந்தெழால்
கனம் சிவப்பு வல்லூறு, சிறந்தெழால்
ICCA Population trend: Stable
WCLL Population trend: Stable

Adult Male
Size: 31-39 cm
Wingspan: 62-90 cm

Identification Keys

- Large red with pointed edge
- Feeding with red and yellow on open field and forest
- Distinct dark spotting on the breast

Global Distribution & Range

Observations in Tamil Nadu

FACTS

- Commonly seen hunting small birds in open field
- They are known to prey on small mammals as well as larger birds on the ground

Threats

- Loss of natural habitat
- Poisoning by agricultural pesticides

Conservation

- Protect natural habitat
- Avoid use of pesticides

References

- [Bhat, 2010](#)
- [Bhat, 2010](#)

Tamil Nadu Forest Department
Advanced Institute for Wildlife Conservation
(Research, Training & Education)

Tamil Nadu Raptor Research Foundation
Raptor of the Week
30 October 2025

பாம்பு தின்னும் கொண்டைக் கழுஞ்சு
கனம் பாம்பு தின்னும் கொண்டைக் கழுஞ்சு
ICCA Population trend: Stable
WCLL Population trend: Stable

Adult
Size: 50-74 cm
Wingspan: 109-169 cm

Identification Keys

- Head and neck with white
- Head and neck with white
- Head and neck with white

Global Distribution & Range

Observations in Tamil Nadu

FACTS

- They are known to prey on small mammals as well as larger birds on the ground
- They are known to prey on small mammals as well as larger birds on the ground

Threats

- Loss of natural habitat
- Poisoning by agricultural pesticides

Conservation

- Protect natural habitat
- Avoid use of pesticides

References

- [Bhat, 2010](#)
- [Bhat, 2010](#)

Tamil Nadu Forest Department
Advanced Institute for Wildlife Conservation
(Research, Training & Education)

Tamil Nadu Raptor Research Foundation
Raptor of the Week
23 October 2025

கரும்புருந்து
கனம் கரும்புருந்து
ICCA Population trend: Stable
WCLL Population trend: Stable

Adult
Size: 50-74 cm
Wingspan: 109-169 cm

Identification Keys

- Head and neck with white
- Head and neck with white
- Head and neck with white

Global Distribution & Range

Observations in Tamil Nadu

FACTS

- They are known to prey on small mammals as well as larger birds on the ground
- They are known to prey on small mammals as well as larger birds on the ground

Threats

- Loss of natural habitat
- Poisoning by agricultural pesticides

Conservation

- Protect natural habitat
- Avoid use of pesticides

References

- [Bhat, 2010](#)
- [Bhat, 2010](#)

Tamil Nadu Forest Department
Advanced Institute for Wildlife Conservation
(Research, Training & Education)

Tamil Nadu Raptor Research Foundation
Raptor of the Week
19 November 2025

கழுஞ்சு ஆந்தை
கனம் கழுஞ்சு ஆந்தை
ICCA Population trend: Stable
WCLL Population trend: Stable

Adult
Size: 50-64 cm

Identification Keys

- Head and neck with white
- Head and neck with white
- Head and neck with white

Global Distribution & Range

Observations in Tamil Nadu

FACTS

- They are known to prey on small mammals as well as larger birds on the ground
- They are known to prey on small mammals as well as larger birds on the ground

Threats

- Loss of natural habitat
- Poisoning by agricultural pesticides

Conservation

- Protect natural habitat
- Avoid use of pesticides

References

- [Bhat, 2010](#)
- [Bhat, 2010](#)

Tamil Nadu Forest Department
Advanced Institute for Wildlife Conservation
(Research, Training & Education)

Tamil Nadu Raptor Research Foundation
Raptor of the Week
28 November 2025

விரால் அடிப்பான்
கனம் விரால் அடிப்பான்
ICCA Population trend: Stable
WCLL Population trend: Stable

Adult
Size: 50-64 cm

Identification Keys

- Head and neck with white
- Head and neck with white
- Head and neck with white

Global Distribution & Range

Observations in Tamil Nadu

FACTS

- They are known to prey on small mammals as well as larger birds on the ground
- They are known to prey on small mammals as well as larger birds on the ground

Threats

- Loss of natural habitat
- Poisoning by agricultural pesticides

Conservation

- Protect natural habitat
- Avoid use of pesticides

References

- [Bhat, 2010](#)
- [Bhat, 2010](#)

Tamil Nadu Forest Department
Advanced Institute for Wildlife Conservation
(Research, Training & Education)

Tamil Nadu Raptor Research Foundation
Raptor of the Week
27 November 2025

வெண்முதுகு (பாறு) கழுஞ்சு
கனம் வெண்முதுகு (பாறு) கழுஞ்சு
ICCA Population trend: Stable
WCLL Population trend: Stable

Adult
Size: 50-64 cm

Identification Keys

- Head and neck with white
- Head and neck with white
- Head and neck with white

Global Distribution & Range

Observations in Tamil Nadu

FACTS

- They are known to prey on small mammals as well as larger birds on the ground
- They are known to prey on small mammals as well as larger birds on the ground

Threats

- Loss of natural habitat
- Poisoning by agricultural pesticides

Conservation

- Protect natural habitat
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References

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- [Bhat, 2010](#)

Tamil Nadu Forest Department
Advanced Institute for Wildlife Conservation
(Research, Training & Education)

Tamil Nadu Raptor Research Foundation
Raptor of the Week
28 December 2025

காட்டு வல்லூறு
கனம் காட்டு வல்லூறு
ICCA Population trend: Stable
WCLL Population trend: Stable

Adult - ஆண்
Size: 50-64 cm

Identification Keys

- Head and neck with white
- Head and neck with white
- Head and neck with white

Global Distribution & Range

Observations in Tamil Nadu

FACTS

- They are known to prey on small mammals as well as larger birds on the ground
- They are known to prey on small mammals as well as larger birds on the ground

Threats

- Loss of natural habitat
- Poisoning by agricultural pesticides

Conservation

- Protect natural habitat
- Avoid use of pesticides

References

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- [Bhat, 2010](#)

Tamil Nadu Forest Department
Advanced Institute for Wildlife Conservation
(Research, Training & Education)

Tamil Nadu Raptor Research Foundation
Raptor of the Week
28 December 2025

காட்டு வல்லூறு
கனம் காட்டு வல்லூறு
ICCA Population trend: Stable
WCLL Population trend: Stable

Adult - பெண்
Size: 50-64 cm

Identification Keys

- Head and neck with white
- Head and neck with white
- Head and neck with white

Global Distribution & Range

Observations in Tamil Nadu

FACTS

- They are known to prey on small mammals as well as larger birds on the ground
- They are known to prey on small mammals as well as larger birds on the ground

Threats

- Loss of natural habitat
- Poisoning by agricultural pesticides

Conservation

- Protect natural habitat
- Avoid use of pesticides

References

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- [Bhat, 2010](#)

Tamil Nadu Forest Department
Advanced Institute for Wildlife Conservation
(Research, Training & Education)

Tamil Nadu Raptor Research Foundation
Raptor of the Week
28 December 2025

காட்டு வல்லூறு
கனம் காட்டு வல்லூறு
ICCA Population trend: Stable
WCLL Population trend: Stable

Adult - ஆண்
Size: 50-64 cm

Identification Keys

- Head and neck with white
- Head and neck with white
- Head and neck with white

Global Distribution & Range

Observations in Tamil Nadu

FACTS

- They are known to prey on small mammals as well as larger birds on the ground
- They are known to prey on small mammals as well as larger birds on the ground

Threats

- Loss of natural habitat
- Poisoning by agricultural pesticides

Conservation

- Protect natural habitat
- Avoid use of pesticides

References

- [Bhat, 2010](#)
- [Bhat, 2010](#)

Feature Articles

Bengal Fox, a hidden fortune of the Salem landscape

V. Thirumurugan, Project Coordinator, AIWC.

In January 2025, as part of the Incubation Centre program visits, I spent time at Salem's Bengal Fox incubation centre. During that visit, I had an insightful interaction with Dr Brawin Kumar, Biologist, Mr Alaguraj, Technical Assistant and other researchers regarding the incubation centre program and outreach activities. The primary objective of the Incubation Centre was to create awareness about the ecological significance of the Bengal fox among school and college students. (Figure 1). The centre was well-designed and highly focused on conservation education, with miniatures and information boards about Bengal Fox (*Vulpes bengalensis*). Innovative facilities, such as selfie booths, a herbarium, and various digital tools, were also incorporated.



Figure 1. Salem Bengal Fox Incubation Centre

Conversations with the forest officials helped me understand the distribution records of Bengal foxes. In the past, sightings were recorded from Kettavadi, Thamayanur, Kottavadi, Vazhaippadi, Illampillai, Serugapadi Block, and CN Palayam (Figure 2). However, in recent times, such sightings have become rare.

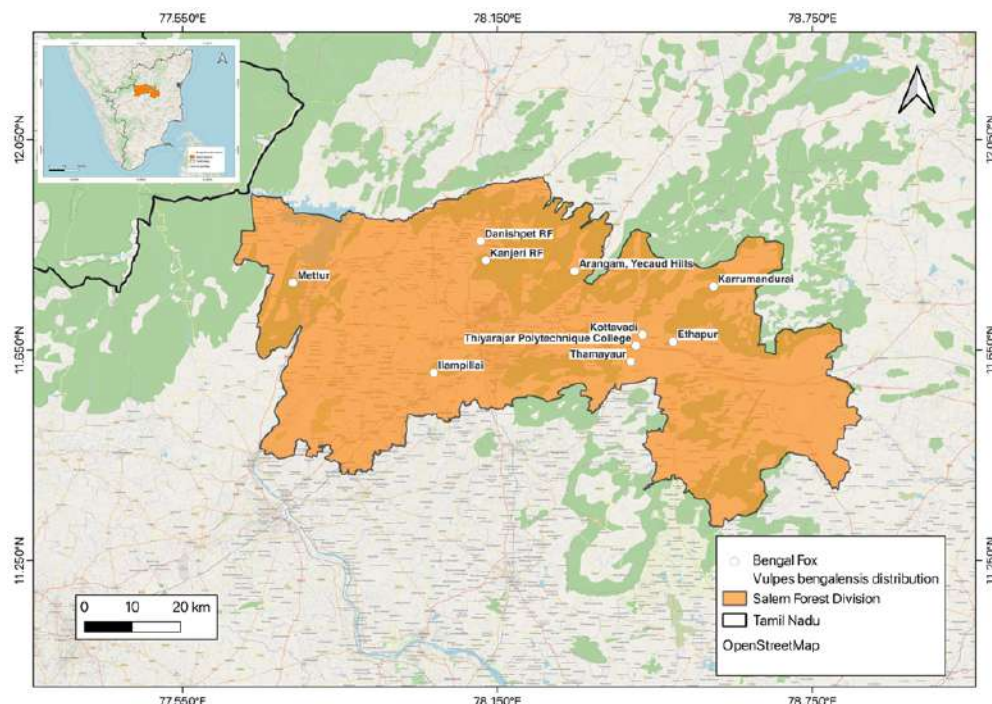


Figure 2. Distribution of Bengal Fox in Salem division.



This species is typically sighted only during the breeding season, when it can be observed in remnant scrub jungle patches, open grasslands, and barren lands of Salem and neighbouring districts. Otherwise, it remains highly elusive. The officials highlighted the primary constraints involved in conserving the Bengal fox such as habitat loss, fragmentation, local hunting and unethical ritual practices. The local inhabitants of Salem seem to have a ritual practice (called “Vanagnari”) of capturing the Bengal fox and tying it to a tree during their Pongal festival, which takes place in mid-January. This practice has had a severely detrimental impact on the population of the species. Hence, the forest department has been working hard, involving a large workforce, to protect the species during the festival season from December to February. Still, some efforts have been deemed to fail too.

Multiple brainstorming discussions with Sociologists and other researchers at Salem, helped us to identify the historical events that connect the local inhabitants of Salem with these unethical rituals. Conversations with Thiru. Kovai Sadhasivam explains the mythical stories and beliefs behind the ritual. Historically, the inhabitants of Salem belong to the agrarian community and have followed a practice of providing sacrifices for high yield during the harvesting season, especially in the month of Thai (mid January to mid February).

A similar practice of capturing and sacrificing Bengal Fox was also found in parts of Karnataka, but the good part is that it was stopped around 20 years ago. Until today, some local inhabitants of Salem still follow such rituals that harm the Bengal fox population. Thiru. Kovai Sadhasivam also mentioned that, with and without capturing the animal, the yield has been good during the harvest season due to the soil and climatic conditions of Salem, not because of any unethical rituals.

He also extended the story behind this ritual back to the 16th century, when the Marathas Shivaji tried to expand his territory in the south; during the invasion, with his large troops, he had a nomadic warmen community named Bakiri boli, an Indo Aryan community. After the war ended, the warmen reached Tamil Nadu and lived near the barren lands, and were primarily hunter-gatherers. For their livelihood, the Bakiri boli community assisted the farmers by hunting vermin rats, peahen, and wild boar, which helped to control pests in farmlands. Also, for their livelihood, they hunted the predators to protect the cattle (cow and sheep) from threats. They also hunted the important predator, the Bengal fox, for their teeth and horns (myth).





Figure 3. Habitat, Distribution and Ecology of Bengal fox

Earlier, fox hunting took place in a few places where local people said reasons such as the animal hunting the little kids in their community, or that they believed hunting could bring them fortune and prosperity. Whereas some communities believed that spotting a Bengal fox early in the morning, after waking from sleep, would bring good fortune. But now, most communities have opted out of hunting practices due to better education and awareness.

In Tamil and Sangam literature, the Bengal fox is called kurinari or kanam nari. This species plays a significant role in the ecosystem as a key predator; they thrive in the Mullai region (one of the five “thinai” landscapes, representing pastoral and forest zones), scrubland, grassland, thorn forest, and hardy conditions and can adapt to disturbed environments too. They feed on *Ziziphus mauritiana* (ilanthai), *Ziziphus oenoplia* (Surai ilanthai), *Carrissa spinarum* (kala kai), *Carissa casandras* (perukala), *Cattunaragen spinosa* (karai), *Syzygium cumini* (naval), and kaya fruits, were also mentioned in Tamil Sangam literature.

Bengal fox is among the significant seed dispersal (vidhaiparaval) species that assist in the

natural dispersal of these important edible fruiting trees in the forest. They also feed on insects, small mammals, reptiles and ground-nesting birds (Figure 3). They are opportunistic feeders that help control pests such as rats and peafowls. The recent literature and sources say that the Bengal fox population has declined adversely as per IUCN status.

A round of conversations with Thiru. Venkatesan, a historian, gave us new historical perspectives about the animal. He shared that there are inscriptions of nadukal (kalvettu) in the ancient temples at Salem for Wild boar hunting with local people, dog inscriptions, cropland inscriptions, deer inscriptions in Yercaud, Horse inscriptions and snake inscription with local people.

But there are no records of fox inscriptions found in the temples of Salem. He also mentioned that the practice of hunting the fox for ritual practices might have started 300 years ago. It was around the 17th century, Chinnamanayakar ruled Belur, Vazhappadi, and surrounding regions. He practised Vainavam, and hence after a victory over a neighbourhood region, he sacrificed a Bengal fox in the temple.



The Bengal fox was sacrificed to provide good fortune and prosperity. He suggests that this could have been the starting point of the region's Bengal fox ritual practice. In the earlier period, there were no traces of such hunting practices of Bengal foxes.



Fast forwarding to today, during the second day of Pongal festival, Kari naal (the day after Mattu Pongal), the local inhabitants join together as a community, worship their deity and rejoice to the sound of drums and other musical instruments while getting ready with a net to capture the Bengal fox and tie it to a tree for performing the unethical ritual practice. This seems to be celebrated in a grand manner in certain villages where they even term it as a Tamil tradition. But in reality, this is a considerably new practice. The point of doing this ritual is that it would provide fortune and wellness to the community.

The fact that hurting a wild animal can cause prosperity to the community seems to be flawed and the most shocking part is even educated individuals are being part of this unethical practice. In spite of multiple efforts taken by the forest department to curb the practice, still certain villages are hellbent on following it.

If conservation initiatives with the local community don't work, it's high time that policy-level decisions are made, and research oriented management is incorporated.

Celebrating traditions requires understanding our responsibilities towards wildlife and the environment. We are interconnected with nature, and prioritizing the Bengal fox as a keystone predator and its habitat is crucial for a sustainable future.

It must be noted that the region has seen a significant rise in the population of Peahen and Rats due to the decline of the Bengal fox population, which invariably affects agriculture and human wellbeing.

Biodiversity and its inhabitants are interconnected and this knowledge seems to be imparted well by the efforts of Bengal Fox Incubation Centre at Salem. Their work towards creating awareness and conservation efforts to the educational institutions regarding this Schedule I species is crucial and commendable.

Review by: Krishnaveni Srinivasan, Independent Nature Educator, Chennai and Karthy, S., Ph.D. Scholar, Sun Yat-Sen University, Taiwan.

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A Mother against the odds: Incident of missing hind flipper in nesting Olive Ridley Turtle

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It was close to midnight when the call came from a volunteer monitoring the shoreline at Neelankarai. A turtle had emerged. Our team moved quickly toward Thiruvannamiyur beach, the rescue vehicle cutting through the quiet coastal roads of Chennai. The nesting season of the Olive Ridley was underway, and each emergence carried scientific value and sometimes, a story.

Under dim red lights and from a careful distance, we watched her. The female turtle had already begun the laborious process of nesting. With rhythmic movements, she excavated the sand using her hind flippers, creating a flask-shaped chamber deep enough to protect her eggs from predators and tidal wash. Everything appeared normal until we noticed something unusual in her crawl pattern.

Only after she had completed oviposition and carefully covered her nest did we approach for closer observation. One hindlimb was completely missing, with an old, healed amputation. Yet she had managed to dig, lay, and conceal her clutch successfully. But it took more than one hour to complete the entire process.

For sea turtles, the hind flippers are essential tools. They shape the egg chamber, regulate its depth, and gently position each egg during deposition. The absence of one limb should, theoretically, compromise this process. However, this female demonstrated extraordinary behavioural plasticity. By adjusting her posture and alternating movements, she compensated for the loss.

The olive ridley turtle has a circumtropical distribution, living in tropical and warm waters of the Pacific and Indian Oceans from India, Arabia, Japan, and Micronesia south to southern Africa, Australia, and New Zealand. In the Atlantic Ocean, it has been observed off the western coast of Africa and the coasts of northern Brazil, Suriname, Guyana, French Guiana, and Venezuela. Additionally, the olive ridley has been recorded in the Caribbean Sea as far north as Puerto Rico.

The Olive Ridley is known for its spectacular mass nesting events, called arribadas. In India, major nesting aggregations occur along the Odisha coast. The coastal district in Chennai observes solitary nesting behaviour. Tracking data show that olive ridley turtles undertake open-ocean migrations in the bay and exhibit a migratory corridor between the foraging habitat of Sri Lanka and nesting sites along the Odisha coast of India.

The olive ridley is predominantly carnivorous. Common prey items include tunicates (salps and sea squirts), starfish, sea urchins, bryozoans, squid, bivalves, snails, barnacles, shrimp, crabs, rock lobsters, and sipunculid worms. Additionally, consumption of jellyfish and both adult fish (e.g. *Sphoeroides*) and fish eggs may be indicative of pelagic (open ocean) feeding. The olive ridley is also known to feed on filamentous algae in areas devoid of other food sources.



Olive Ridley faces mounting anthropogenic threats. Between 1993 and 2003 alone, more than 100,000 Olive Ridelies were reported dead along Odisha due to fisheries-related bycatch (Shanker *et al.*, 2004). Entanglement in trawl nets, gill nets, ghost gear, boat strikes, egg poaching, and coastal development continue to exert pressure. Humans are still listed as the leading threat to *L. olivacea*, responsible for unsustainable egg collection, slaughtering nesting females on the beach, and direct harvesting of adults at sea for commercial sale of both the meat and hides.

Olive Ridley has a major threat to their whole lifetime, such as

- Hatchlings are preyed upon as they travel across the beach to the water by vultures (*Cathartes*, *Coragyps atratus*), frigate birds, crabs (*Gecarcinus*, *Ocypode*), raccoons, coyotes, iguanas, and snakes. In the water, hatchling predators most likely include oceanic fishes, sharks, and crocodiles
- Adults have relatively few known predators, other than tiger sharks and crocodiles, and killer whales are responsible for occasional attacks.
- On land, nesting females may be attacked by jaguars, the only cat with a strong enough bite to penetrate a sea turtle's shell.
- Boat collisions, incidental takes in fisheries, trawling, gill nets, ghost nets, longline fishing, and pot fishing significantly affect olive ridley populations, as well as other species of marine turtles
- In addition, entanglement and ingestion of marine debris are listed as a major threat to this species. Coastal development, natural disasters, climate change, and other sources of beach erosion have also been cited as potential threats to nesting grounds (National Marine Fisheries Service, 1998)
- Coastal development also threatens newly hatched turtles through light pollution. Hatchlings, which use light cues to orient themselves to the sea, are now misled into moving towards land, and die from dehydration or exhaustion, or are killed on roads (Karnad, 2009)

- In some cases, nests become cross-contaminated by bacteria or pathogens of rotting nests during translocation.

The incident of this one-flipped turtle likely began offshore. Limb loss in marine turtles is frequently associated with entanglement in fishing gear or propeller injuries. That she survived long enough to return and nest speaks to the resilience of the species but also to the intensity of threats in coastal waters.

From a scientific perspective, such observations are significant. Previous records indicate similar resilience in nesting females, including a documented nesting event at Dhanushkodi beach on February 02, 2019, following multiple failed attempts. Such cases highlight the remarkable behavioural plasticity of sea turtles. However, injuries may affect oviposition duration (OD), a critical parameter for estimating nesting population size.

As we watched her disappear into the Bay of Bengal, dragging her uneven but determined body toward the surf, the beach returned to silence. Beneath the sand lay a clutch of eggs silent evidence of survival against the odds.

For researchers, she was more than an injured turtle. She was a reminder that conservation is not only about numbers and models, but also about resilience and responsibility.



Now, the Tamil Nadu government has initiated satellite and flipper tagging methods for regular monitoring of the Olive Ridley Turtle. Hope for the species will remain in future.

A Mother against.....

The species is currently classified as Vulnerable by the IUCN and is listed under Appendix I of CITES. Conservation interventions such as Turtle Excluder Devices (TEDs), seasonal fishing regulations, beach monitoring, and community awareness are vital.



satellite tagging of a turtle

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Stream glory (*Neurobasis chinensis*)

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The stream glory (*Neurobasis chinensis*), a striking species of damselfly in the family Calopterygidae (order Odonata), is widely distributed across Asia.

*Neurobasis chinensis* Male

Location: Kadamparai Road, Attakatti;

Photo credit: S. Ravichandran

Male Morphology

Forewings: Transparent, lightly tinted pale yellow, with green venation.

Hindwings: Opaque, shimmering metallic green, produced by thin-film interference in the wing membrane.

Behaviour: Males display their iridescent hindwings to attract females and establish territories along moderately fast-flowing forest streams.

Female Morphology

Wings: Transparent, light coffee-brown with distinct white spots.

Additional Markings: A creamy yellow patch at the nodal region.

Breeding Ecology

Habitat: Forest streams, typically near water bodies.

Territoriality: Males guard stretches of stream to secure breeding sites.

Oviposition: Females deposit eggs in submerged vegetation, often within root masses



How Sunbirds became my favourite bird

Mahesh Priya, R.

Project Associate II, Centre for Conservation Education, AIWC.

Fieldwork often teaches us more than data sheets and protocols ever can. Sometimes, it quietly introduces us to unexpected companions, tiny, vibrant lives that leave a lasting imprint on our hearts. For me, that companion turned out to be the sunbird.

During my field visit to the Dindigul Forest Division as part of the project “Spatial Decision Support System (SDSS)”, my primary objective was to study road-kill instances in identified hotspots. The days were long, spent assessing National Highways, documenting observations, and understanding patterns of wildlife mortality. It was intense, meaningful work—but what made those days truly unforgettable were the quiet moments that followed.

After each day in the field, I found solace in birdwatching near where we stayed. It was during these peaceful evenings that I encountered many birds for the very first time in my life. And among them was the sunbird, though, to be honest, I hadn't paid much attention to it before. That realization itself felt like a harsh truth: how had I overlooked something so beautiful for so long?

Each morning began with a gentle, melodious call. It soon became familiar with the song of a male Sunbird. As I stepped outside, I would see him, delicate yet striking, visiting regularly to drink water from the small flow created by the AC discharge. For all six days of my stay, he came without fail. That tiny ritual became the highlight of my mornings.

What fascinated me most was how this little bird seemed to follow me beyond those quiet mornings. Whether I was out in the field, conducting NH assessments, or simply walking through different patches, I would spot a sunbird somewhere nearby. It felt almost like a constant presence, subtle yet reassuring.

Their vibrant, iridescent colours would catch my eye instantly, and their soft, musical calls made them easy to locate. Without realizing it, I began searching for them everywhere I went. Slowly, the sunbird became more than just another species on a checklist. It became a symbol of connection between work and wonder, science and emotion. Amidst studying road-kills, a topic that often reflects loss, the sunbird brought a sense of life, resilience, and quiet joy.



By the end of the field visit, I knew something had changed. The sunbird was no longer just a bird I had “noticed.” It had become my favourite bird a small but powerful reminder that even during rigorous fieldwork, nature always finds a way to surprise us, comfort us, and stay with us long after we leave.

Sometimes, it only takes a tiny bird to open our eyes to the beauty we've been missing all along.

Masters of Disguise: Survival Strategies of Arthropods through mimicry, Camouflage, and Warning colours

Dr. M. Gabriel Paulraj, Project Scientist, AIWC.

'Arthropoda' is the largest and most diverse phylum in the animal kingdom and nearly 85% of all known living animal species are Arthropods. Members of this phylum, particularly the insects, have evolved remarkable survival strategies that integrate physical, physiological, and reproductive adaptations to evade predation. Camouflage, mimicry, and aposematism are their important survival strategies, each representing a distinct evolutionary pathway.

Mimicry

Mimicry is explained as an evolutionary adaptation where one organism - 'the mimic' - appears like another organism or object - the model - to confuse or mislead others, usually for its survival, protection, or hunting. Two major types of mimicry are: i) Batesian mimicry and ii) Müllerian mimicry.

Batesian mimicry

A harmless species imitates a harmful or unpalatable one



Honey bee



Hover fly
(*Eristalinus* sp.)

A hoverfly (harmless mimic) resembles a honey bee (harmful model) and is avoided by the predators such as insect-eating birds and reptiles.

Batesian mimicry in the moth *Spirama helicina*

The wing pattern of *Spirama helicina* moth at resting position looks like the face of a snake with slightly opened mouth. The mimicry is to frighten predators of moths like Lizards.



Spirama helicina

Batesian mimicry: Ant-mimicking spiders

Ants are generally avoided by predators due to their defensive capabilities. Some spiders within the Salticidae and Corinnidae families behave and appear like ants. These harmless ant-mimicking spiders (*Myrmarachne* spp.) avoid being eaten by predators



Spider *Myrmarachne* sp. mimicks the ant,
Tetraponera rufonigra
(Photo: M. Gabriel Paulraj)



Red weaver ant-mimicking Spider *Myrmaplata* sp. mimicks the red weaver ant

Müllerian mimicry

In this type, two or more toxic/distasteful species mimic each other, reinforcing the natural enemy learning (Example: Monarch and Viceroy Butterflies - Both are unpalatable to predators and share similar wing patterns). Unlike Batesian mimicry (where a harmless species mimics a harmful one), all species in Müllerian mimicry are dangerous and benefit from the shared warning signal.

Müllerian mimicry is a powerful example of natural selection where, over time, populations converge on a common phenotype for better survival



Monarch Butterfly (*Danaus plexippus*)



Viceroy Butterfly (*Limenitis archippus*)

Photos: Wikipedia

Camouflage

Camouflage is a form of cryptic coloration that enables individuals to blend into their surroundings to reduce the likelihood of their detection. Examples: Stick insects resemble twigs and leaves, leaf insects and katydids resemble foliage, and many moths display wing patterns that imitate the tree bark or dead leaves. This concealment provides prey with a crucial advantage - remaining unnoticed by predators.



Praying mantis



Stick Insect

The flower mantis and the stick insect resemble twigs



Moth



Praying Mantis

Cryptic colouration in Moth and Praying mantis

Aposematism

Some species advertise themselves by using warning signals (colours or sounds) to indicate that they are dangerous or unpalatable. Monarch butterflies advertise their unpalatability with their striking orange-and-black coloured wings. Müllerian mimicry and aposematism are closely related. For example, brightly coloured insects like ladybird beetles secrete toxic chemicals. Velvet ants (Hymenoptera) display a vivid red-black colouration to deter their enemies.

The transition from camouflage to aposematism is complex. Some species use the hidden warning signals, but reveal bright colours when they are threatened.

Conclusion

Camouflage, mimicry, and aposematism explains the evolutionary arms race between arthropods and their natural enemies. Each of these strategies showcases the inventive power of natural selection. Yet, many species blur the boundaries between them - remaining inconspicuous until danger arises, then unveiling vivid warning signals. This dynamic interplay highlights that survival often depends on a blend of defenses rather than a single tactic.

In-house Events & Activities

Dr. G. Umapathy, Chief Scientist, CCMB, CSIR, delivered a special talk on 'Environmental DNA and its application in biodiversity monitoring and conservation' on July 14, 2025



Independence Day celebration on 15.08.2025



**Pooja Celebrations on
30.09.2025**



**Pulicat Lake visit by AIWC team on
20.12.2025**

**In-house
Activities**



Stakeholders' visit to AIWC



**Dr. Sivanandhan Elagupillary, Malaysia,
visited AIWC on 21.07.2025**



**M.Sc. students of Freshwater Ecology and Conservation,
Wildlife Institute of India, Dhhradun, visited AIWC on 16.09.2025**



**IFS Probationers' visit
on 13.12.2025**



Stakeholders' visit to AIWC



**Thiur. Ravikanth Upadhyay, IFS (Retd.)
visited AIWC on 03.11.2025**



**B.Sc. Forensic Science Students of Jain
University, visited AIWC on 11.09.2025**

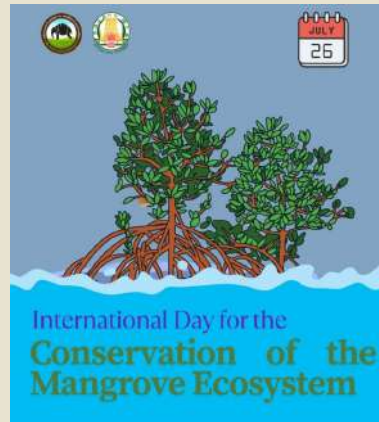


**Thiru. Satyam Kumar, ACF, Bihar, visited
AIWC on 08.11.2025**

Special Day Posters



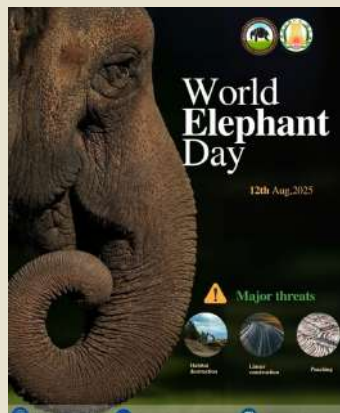
World Snake Day
16.07.2025



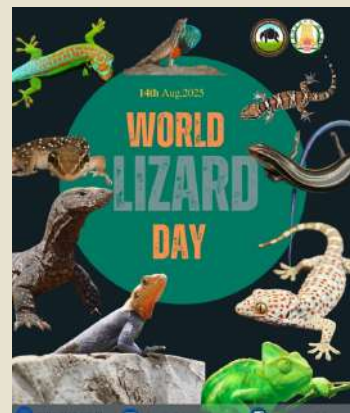
International Day for the
Conservation of the Mangrove
Ecosystem
26.07.2025



International Tiger Day
29.07.2025



World Elephant Day
12.08.2025



World Lizard Day
14.08.2025



One-day training programme for 48 frontline forest watchers and forest guards on 'Snake Rescue and Handling' given by experts from Tamil Nadu Veterinary and Animal Sciences University (TANUVAS), Chennai and Kalinga Foundation, Karnataka on July 01, 2025

Contact

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