ZOO'S PRINT Communicating Science for Conservation

Magazine of Zoo Outreach Organization www.zoosprint.zooreach.org

Vol. XXXIV, No. 2, February 2019 ISSN 0971-6378 (Print); 0973-2543 (Online)



Communicating science for conservation

Vol. XXXIV, No. 2, February 2019

ISSN 0971-6378 (Print); 0973-2543 (Online)

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<u>THE SAHYADRI (WESTERN GHAT</u>S)

The Western Ghats, known as Sahyadri in the local language, stretches for 1,490km from Tapi Valley in Gujarat to Kanyakumari in the south, covering six states (Kerala, Tamil Nadu, Karnataka, Goa, Maharashtra and Gujarat) in India. The freshwater rivers and streams in the Western Ghats fall under five main broad categories or ecoregions, namely, Narmada-Tapi, the northern Deccan Plateau (Godavari River system), the southern Deccan Plateau (Krishna River system), the southern Eastern Ghats (Cauvery River system), and the Western Ghats (west-flowing rivers).

The Western Ghats is home to some of the world's most unique fauna, flora, and fungi. The freshwater ecosystem biodiversity within the region is highly diverse, unique, and of immense importance to livelihood and economies. These ecosystems, however, are also among the most heavily used, depended upon, and exploited by humans for sustainability and well-being. The Western Ghats has lost nearly 50% of forest cover since the early 1900s and the trend is continuing with increased fragmentation and encroachments. Additional threats include hunting in many parts, which extirpated local populations of several species and groups of terrestrial and freshwater fauna.

Western Ghats freshwater biodiversity in numbers

Four major species groups, namely, dragonflies and damselflies, molluscs, fish, and aquatic plants, have been chosen as representatives to understand the status of freshwater species of the region. The Western Ghats houses 2% of the world's freshwater

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fishes, 3% of the odonates and amphibians, and just over 4% of freshwater-dependent mammals. The plants have the highest representation within the region with over 25%.

The highest levels of species richness (between 260–312 species per sub-basin) and endemism (103–129 species) of freshwater species are almost all within the southern part of the Western Ghats Hotspot. These high richness catchments include the west-flowing rivers Pamba, Meenachil, Muvattupuzha, Periyar, Karuvannur, Bharatapuzha, Chaliyar, Kuttyadi, and Valappattanam (Kerala), Netravati, upper Kabini, and Cauvery (Karnataka), and upper Vaipar, Amaravati, Bhavani, and Moyar (Tamil Nadu). Catchments that qualify as potential Key Biodiversity Areas (KBAs) also lie in this region. KBAs triggered by the highest numbers of fish, odonate, and mollusc species include the Pamba, Manimala, Periyar, Bharatapuzha, and Chaliyar rivers in the southern Western Ghats.

Although many protected areas are located within or near areas of the richest freshwater diversity, the southern Western Ghats region also experiences the highest level of threat to freshwater species. The highest numbers of threatened species (40 and 48 species within a sub-basin) are found almost entirely within the southern tip of the Western Ghats Hotspot in Kerala and Tamil Nadu.

Overall species richness and numbers of threatened species decrease along a northerly gradient through the Western Ghats Hotspot and eastwards towards Andhra Pradesh. The northern Western Ghats region within Maharashtra has a lower documented freshwater diversity than the southern region.

Aquatic plants and fishes are the most heavily utilized freshwater groups in the Western Ghats. Twenty-eight per cent of aquatic plants is harvested for medicinal purposes, and 14% and 13% as food for people and animals, respectively. More than half (56%) of fish

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species are harvested for human consumption, and a growing percentage (37%) of species are captured for the aquarium trade. Eighteen per cent of mollusc species is used as food for humans.

Western Ghats freshwater biodiversity threats

Close to 16% of the 1,146 freshwater taxa assessed is threatened with extinction, with a further 1.9% assessed as Near Threatened. Approximately one-tenth of species were assessed as Data Deficient (10.5%), with the two invertebrate groups contributing more to data deficiency (25.8% on average). The main threats impacting freshwater biodiversity in the Western Ghats include:

- pollution, with approximately 50% of fish, 20% of molluscs, and 21% of odonates threatened, and with urban and domestic pollution ranking as the worst threats followed by agricultural and industrial sources of pollution.
 - biological resource use with 38% of fishes, 17% of molluscs, and 7% of odonates threatened by commercial fisheries and the aquarium trade.
- residential and commercial development with 14% of fishes, 11% odonates and aquatic plants, and 8% of molluscs threatened.
 - dams and other natural system modifications, with 13% of fishes, 8% of molluscs, 4% of odonates, and 3% of plants impacted.
- alien invasive species which, as understood currently, impact 22% of fishes.
 - agriculture and aquaculture which impact 7% of odonates and 4% of plants

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energy production and mining which impacts 6% of fishes, 5% of molluscs, and 4% of plants overall.

Recommendations

- Studies on freshwater plants and animals of the Western Ghats to understand their life history, ecology, and populations should be promoted
- Endemic species, which are under the threat of extinction, are narrowly distributed. Hence, their habitat should be protected.
 - Pollution, a key threat to freshwater biodiversity, should be controlled.
 - Environment impact assessment of development activities such as construction of dams and roads should be conducted.
- Education and awareness programmes to instil the urgent need to sustainably use, conserve, and manage wetlands and rivers must be conducted.

Quick facts

- Only 0.03% of the world's water is available as liquid freshwater on the Earth's surface.
 - Habitat loss and degradation is the primary cause of extinction of freshwater species. Of the 29,000 known fish, about 30% are freshwater species.
 - Agriculture accounts for about 70% of all water taken from rivers and is the main cause of wetland loss worldwide, due

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to cleaning, transformation, drainage, and water abstraction.

- ~80% of the world's population currently lives in areas lacking water security. By 2025, two-thirds of the world population could live under water stress conditions and a similar proportion could be without adequate sanitation.
- Wetlands, such as mangroves and river floodplains, protect human communities from natural catastrophes such as tsunamis and floods.
 - Nearly half of the world's large cities obtain some, if not most, of their drinking water supplies from protected or managed forested areas.

Information taken from: Molur, S., Smith, K.G., Daniel, B.A. and Darwall, W.R.T. (Compilers). 2011. The Status and Distribution of Freshwater Biodiversity in the Western Ghats, India. Cambridge, UK and Gland, Switzerland: IUCN, and Coimbatore, India: Zoo Outreach Organisation.





Aquatic Plant

Jottings

Citizen science takes wing to understand local avian patterns

By Vidya Mary George. Published on Jottings on 17 November 2018



A group of citizen scientists flocked together behind binoculars to help in urban wetland management by compiling baseline data on the waterbirds in a wetland in Tamil Nadu.

Tracking trends

Although most urban wetlands in India are considered to be extremely polluted, they still attract a large number of winged visitors for food, rest, and shelter. A group of citizen scientists took to birding in Perur Lake, a wetland complex in metropolitan Coimbatore, Tamil Nadu, to assess the composition and status of its waterbirds from May 2014 to April 2016.

The systematic monthly count indicated that Perur Lake sustained resident/local migrant birds throughout the year and is home to 112 species of birds, including 49 species of waterbirds. The lake is also a major stopover and wintering ground for 17 species of winter migrant birds. It appears that avian diversity and numbers are at their highest from February to April during the northward migration of birds in spring.



Bird-friendly wetlands

Waterbirds generally prefer wetlands that maximise the abundance and accessibility of their food and avoid areas with extensive human disturbance. Perur Lake contains a rich diversity of molluscs and fish that provide food for waterbirds and is relatively unpolluted. The lake, however, is subject to various habitat encroachments such as road construction and its use by motor vehicles, illegal and unauthorised dumping of waste material, conversion to an artificial reservoir for agricultural use, and the establishment of hutments. These human activities impair the functionality of the wetland, as seen from the reduced number and diversity of birds during the road construction period in the lake.

The study also suggested that the presence or absence of water and its levels in the lake is a key determining factor of the avian species composition. Meeting the needs of all birds by maintaining adequate water levels in the wetland during the critical months of February–May can also be beneficial for local communities as it allows more time and opportunity for groundwater recharge.

- Adequate water levels must be maintained in wetlands during the crucial months of February–May for the benefit of all birds, especially migrating waterbirds.
- Similar studies need to be conducted in some of the adjoining wetlands of the area in a synchronous manner for better understanding and substantiating the possible avian patterns.

Reference

Parameswaran, G. & R. Sivashankar (2018). The composition and status of waterbirds of Perur Lake in Tamil Nadu, India. *Journal of Threatened Taxa* 10(11): 12464–12488; https://doi.org/10.11609/jott.3864.10.11.12464-12488

Citizens have the power to make a difference. <u>Contact us</u> if you're interested in taking your binoculars on the road with <u>LivelyWaters!</u> or <u>PteroCount</u>.

This write-up was originally published on <u>Jottings</u> at <u>https://threatenedtaxa.org/jottings/conservation/citizen-science-takes-wing-to-understand-local-avian-patterns/</u>

Read the media report here.

Instagram

INSTAGRAM IMAGES



The Painted Stork wades about in flocks, its long legs stirring the shallows, its curved bill partially open in the water, ready to snap up any prey that comes its way. As it stands motionless in water during the heat of the day it flaunts its vivid wing pattern and the 'painted' pink patch on its rear. Shot at Achankulam Lake in Coimbatore by B. Ravichandran, ZOO; posted on 25 Jan 2019.

The chivalrous Crimson Rose is indeed a sight to behold as it hovers over its beloved flowers with its brightly banded forewings and elegantly forked, crimson-spotted hindwings, bringing glory to Hector, the Greek hero it was scientifically named after. Shot at Coimbatore by B. Ravichandran, ZOO; posted on 22 Jan 2019.





The Crested Tree Lizard is commonly seen basking in the sun, making a great show of the stunning crest on its head. Quite the freak, this Oriental cousin of the dinosaurs is seasoned at juggling its body colours and cocking each of its eyes in different directions, especially when confronted. Shot at Coimbatore by B. Ravichandran, ZOO; posted on 10 Jan 2019.

The attractive black fur running along the nape of its neck makes the Indian Hare unmistakable in the wild and gives it its other name, the Black-naped Hare. This solitary herbivore makes its home in depressions in the grass and, like all hares, has long ears and large, well-furred hind feet that make it a powerful runner. Shot at Coimbatore by B. Ravichandran, ZOO; posted on 8 Jan 2019.



We bring to you every week shots and tidbits of incredibly diverse species from around the natural world. Follow us on Instagram to be part of a growing community that celebrates our natural heritage: https://www.instagram.com/threatenedtaxa/ Follow B. Ravichandran on Instagram: https://www.instagram.com/discoverravi/

INDIAN ROCK PYTHON



Mating behaviour of *Python molurus molurus* (Linnaeus, 1758) in Moyar River Valley, Tamil Nadu, India



Female Indian Rock Python showing initial stage of ecdysis in neck region during mating

IUCN Red List: Not Evaluated

Reptilia [Class of Reptiles]

Squamata [Order of Scaled reptiles]

Pythonidae [Family of Pythons]

Python molurus molurus [Indian Rock Python]

Species described by Linnaeus in 1758

Indian Rock Pythons are large, non-venomous, heavybodied ambush predators that prey on small- to medium-sized mammals, birds, and lizards (Bhupathy et al. 2014) and occupy diverse habitats in the Indian subcontinent (Ramesh 2012). Due to their secretive habits, information on their ecology is largely based on observations in captivity (Dattatri 1990; Vyas 1995, 1996, 2002; the few existing wild mating records of the species are from northern India (Smith 1943; Daniel 1983; Bhupathy & Vijayan 1989; Vyas 1996; Ramesh 2012).

This is the first report of the mating of free-ranging Indian Rock Pythons from southern India and is based on the observation in Moyar River Valley (11.564^oN & 76.968^oE; 352m), in Sathyamangalam Tiger Reserve, Tamil Nadu, India.



During a field survey on 17 January 2018 at 14.42h, we observed a mating pair (ca. 2.5m male and ca. 5m female) at about 1m distance from the waterline on the bank of Moyar River. The mating pair was in a coiled position — the male was lying under the female. Rapid tongue-flicking was apparent in both the Indian Rock Pythons during the

mating process. Maximum effort was taken not to disturb the pythons — a safe distance was maintained and python movement was monitored through binoculars. Individual Indian Rock Pythons were identified using dorsal natural blotch patterns (Ramesh & Bhupathy 2012) for further monitoring. The onset of ecdysis in the neck region of the female Indian Rock Python was recorded. We could not record the various mating phase events because of the

Global Distribution : India (throughout the country except in the Lakshadweep, Andaman & Nicobar Islands and northeastern region), Pakistan, Nepal, Bhutan, Bangladesh and Sri Lanka. (Whitaker 1978)

snakes' position. Mating lasted till 16.55h when the male Indian Rock Python left the mating site for the river. At the end of the mating event, everted right hemi-penis of the male was visible. The observed microhabitat was the forest floor covered by partially dead and degraded thick bushy vegetation of a straggling shrub *Phyllanthus reticulatus* under a closed canopy (ca. 12m height) of *Mallotus nudiflorus* (locally known as 'Kanchi maram'). The abundant fresh leaf litter of the deciduous tree on the forest floor also indicated the

onset of the dry season. Weather conditions were sunny, with air temperature approximately 25°C.

Indian Rock Python is a solitary species; mating is the only time these snakes are usually found in pairs (Murphy & Henderson 1997). Basking and aggregation of this species, however, was reported during winter in northern India (Ramesh 2012; Ramesh & Bhupathy



Mating habitat of Indian Rock Python along Moyar River in Sathyamangalam Tiger Reserve, Tamil Nadu, India

2013). Reproduction in snakes, including python, is strongly seasonal. Female Indian Rock Python usually mate with several males (Dattatri 1990). In Keoladeo National Park (KNP) in northern India, Ramesh (2012) recorded mating aggregations of Indian Rock

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Pythons consisting of a single adult female and several males. In India, mating of Indian SARN Rock Pythons was reported during late winter and spring (Achariyo & Misra 1976; Whitaker 1978; Daniel 1983). In KNP, courtship and mating events occurred in February-May (Ramesh 2012). The present observation, however, confirmed that mating of Indian Rock Pythons in southern India starts a little early in January, probably due to the optimal warmer temperature than in northern India.

Indian Rock Pythons usually reach sexual maturity between two to three years of age, provided proper body weight is met (Bhupathy 1993). After mating, approximately three months later, the female lays eggs and incubation lasts about three months (Murphy & Henderson 1997; Ramesh & Bhupathy 2010). Based on the present observation and available records, we infer that in mating pairs, female Indian Rock Pythons are usually larger than males in size (Reed & Rodda 2009; Ramesh 2012). Females appear to attain significantly larger body sizes than males in most python species (Shine & Slip 1990). The larger size of females might have evolved to increase reproductive success by increasing fecundity (Blueweiss et al. 1978; Koegh et al. 2000), egg size (Forsman & Shine 1995), and clutch size (Smith & Fretwell 1974).

Radcliffe & Murphy (1984) suggested that ecdysis appears to stimulate courtship in pythons. This assumption was supported by Ramesh & Bhupathy (2013) and Walsh & Murphy (2003), where the former reported that higher incidences of ecdysis coincided with reproductive activity in Indian Rock Pythons at KNP, India, and the latter reported that ecdysis appeared to stimulate courtship in captive Indian Rock Pythons. Synchrony in mating and ecdysis was also reported in other snake species (Nilson 1980; Lillywhite & Sheehy 2016). Further, reproductive events can also be highly correlated with climate conditions (e.g., temperature, rainfall, and photoperiod) and ecologic factors (e.g. resource availability, reproductive mode, and phylogenetic relationships) (Margues 1996; Madsen & Shine 1996, 1999; Brown & Shine 2006). Our observation supports the existing synchrony between mating and ecdysis in Indian Rock Pythons and also relatively early reproductive activity in Indian Rock Pythons inhabiting the warmer climate condition in southern India. Long-term data and multiple observations on reproductive activity in free-ranging Indian Rock Pythons, however, are required to support these inferences.

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SARN

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Acknowledgements: This paper is an outcome of a research project funded by DST-SERB-Extra Mural Grant (EMR/2016/003963), Government of India. Our heartfelt thanks to the Principal Chief Conservator of Forests and Chief Wildlife Warden, Tamil Nadu, Shri. I. Anwardeen, Chief Conservator of Forests, Dr. V. Naganathan, Chief Conservator of Forests, Shri. P.G. Arunlal, District Forest Officer, and Mrs. C.H. Padma, District Forest Officer, Sathyamangalam Tiger Reserve, for permission and support in the field. We are grateful to the Research Coordinator, Dean and the Director at Wildlife Institute of India for their support. We also thank Dr. K. Sivakumar, Dr. K. Ramesh, and Dr. H.S. Prayag for encouragement and support during the study. Also, we appreciate Shri. Selvam and Shri. Ramasamy for their assistance in the field.

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Citation: Ramesh, C., P. Nehru, S.N. Vishnu, S. Karthy, V.T. Murugan, A. Das & G. Taluktar (2019). Indian Rock Python: Mating behaviour of *Python molurus molurus* (Linnaeus, 1758) in Moyar River Valley, Tamil Nadu, India. Reptile Rap #191. In: *Zoo's Print* 34(2): 10-14

GREY-HEADED LAPWING

Sighting of *Vanellus cinereus* in Koothappar Big Tank in Tiruchirappalli District, Tamil Nadu



IUCN Red List: Least Concern (BirdLife International, 2016)

Grey-headed Lapwing in Koothappar Big Tank

Aves [Class of Birds]

Charadriiformes [Order of small to medium-large birds]

Charadriidae [Family of plovers and lapwings]

Vanellus cinereus [Grey-headed Lapwing]

Species described by Blyth in 1842

The Grey-headed Lapwing *Vanellus cinereus* is a wetland bird distributed in East Asia to Southeast Asia, mainly found in riverbeds in the lowlands and marshes (Sonobe & Robinson 1985; Nakamura & Nakamura 1995). It breeds in north-eastern China and during winter in Myanmar, Bangladesh, India, Nepal and other parts of Southeast Asian mainlands (Robson 2005; Bamford et al. 2008).

Until 2000, the Grey-headed Lapwing is a rare winter visitor in Peninsular India (Kumar et al. 2003) and only a few published records are available from India (Kasambe et al. 2012). According to Ali & Ripley (1983), this bird is a winter visitor, regularly seen in small flocks in West Bengal, Assam, Manipur and Bangladesh and stragglers recorded from Kashmir, Rajasthan, Uttarakhand and Andaman Islands. Besides, Rasmussen & Anderton (2012) reported this bird from other parts of India in Bihar, southern Assam hills, southwestern Bengal, Odisha, and a few reaching Delhi and Bharatpur (Rajasthan) areas, northern and southern Gujarat and the southern peninsula. Grimmett et

al. (2011) opined that in the Indian subcontinent, it is mainly distributed in the northeastern part of India. However, in peninsular India it has been reported from Maharashtra (Palkar 2010), Andhra Pradesh (Pittie 2001; Conroy 2003; Sreekar & Ram 2010), Goa (Lainer 1991) Karnataka (Subramanya 1987), Tamil Nadu (Sundar 2000; Santharam 2003; Santharam et al. 2006). The bird was reported for the first time in Kerala in 1999 by Ravindran & Nameer (2002). About a decade back, in Tamil Nadu, Santharam et al.



Grey-headed Lapwing in Koothappar Big Tank

Global Distribution:

Native: Bangladesh, Cambodia, China, Hong Kong, India, Japan, Korea, Laos, Mongolia, Myanmar, Nepal, Philippines, Russian Federation (Eastern Asian Russia), Taiwan, China, Thailand, Viet Nam. Vagrant: Brunei Darussalam, Indonesia, Malaysia, Singapore, Sri Lanka Present - origin uncertain: Bhutan (BirdLife International 2016)

(2006) reported frequent sightings of Grey-headed Lapwing and the same is construed as the bird has extended its range in coastal Tamil Nadu.

A pair of Grey-headed Lapwing Vanellus cinereus was observed in the Koothappar big tank (10.794°N & 78.781°E) in Tiruchirappalli in central Tamil Nadu on 17 January 2016 from 11-12 hr (Siva & Neelanarayanan 2017). The Koothappar big tank is one of the

important seasonal wetlands in Tiruchirappalli district which supplies water for irrigation. The wetland acts as both feeding and breeding ground for many wetland birds and other common birds. In 1998, Salim Ali Centre for Ornithology and Natural History (SACON), Coimbatore had prioritized this tank as one of the important wetlands in Tiruchirappalli District. This wetland receives water from the *Uyyakondan* channel, a tributary of the river Cauvery. The wetland spreads over 74 hectares. It is evident from the present observation that the bird has also extended its range to the central part of Tamil Nadu besides coastal regions.

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Citation: Siva, T. & P. Neelanarayanan (2019). Grey-headed Lapwing: Sighting of *Vanellus cinereus* in Koothappar Big Tank in Tiruchirappalli District, Tamil Nadu. Bird-o-soar #25. In: *Zoo's Print* 34(2): 15-17

Plantasia

FLAME OF THE FOREST

Unusual flowering in *Butea monosperma* (Lam.) Taub. in Sahyadri Tiger Reserve in northern Western Ghats, India



Butea monosperma in Sahyadri Tiger Reserve a) habit, b) leaves, c) flower

IUCN Red List: Not Assessed

Magnoliopsida [Class of Dicotyledons]

Fabales [Order of Flowering plants]

Fabaceae [Family of Legume, pea or bean]

Butea monosperma [Flame of the Forest] Each plant has a definite time period for flowering and fruiting albeit strongly controlled by climatic factors and evolutionary processes (Borchert et al. 2005; Silva et al. 2011; Chang-Yang et al. 2013; Zhao et al. 2013). These phenologic events ultimately determine their reproductive success (Silva et al. 2011; Pezzini et al. 2014; Carvalho & Sartori 2015). Although some plants such as *Corypha* palm, bamboos, *Strobilanthes callosa*, and *S. kunthiana* have exceptionally unique phenologic events with respect to their lifespan (Matthew 1970; John & Nadgauda 2002; Kulkarni & Mulani 2004), it becomes interesting when these events change.

Plantasia

Butea monosperma (Lam.) Taub. (Fabaceae), a legume tree of tropical and subtropical climate, is found throughout the drier parts of India in open grasslands and wastelands. Commonly known as the Flame of the Forest, 'dhak', and 'palas'. This medium-sized tree is a characteristic species of the plains, often forming pure patches in grazing grounds and in other open places. The deciduous tree is drought-resistant and

frost-hardy, although the leaves turn white and fall off during harsh weather. Generally, *B. monosperma* flowers regularly once in a year but all trees do not flower every year. Peak flowering occurs from March to April though sometimes also occurs in late February and lasts up to early May (Tandon et al. 2003). Additionally, a study

Global Distribution: India and southeastern Asia

(Zhao et al. 2013) revealed that in consecutive years, peak flowering was in the first week in April and trees remained in bloom for 6-8 weeks. Fruiting commenced in the last week of March and the first week of April, with the fruits reaching maturity by the end of May and dispersing in mid-June. Seeds were not liberated from the fruits. Leaf primordia appeared in April–May and the leaves attained their maximum size in May–June.

Notably, during one of the field surveys in Sahyadri Tiger Reserve in Kolhapur, Maharashtra (consisting of Chandoli National Park and Koyna Wildlife Sanctuary), in the northern Western Ghats, the first author observed 10 fully-grown individuals of *B. monosperma* in full bloom during mid-November to late December in Chandoli NP (17.179–17.182 °N & 73.870–73.847 °E) and around 50 fully-grown individuals in Koyna WS (17.745–17.757 °N & 73.660–73.666 °E). Upon continuous monitoring of these individuals in the area, the authors confirmed unusual phenologic events that were not reported earlier in this species. The change in these events could be due to fluctuation in temperature, irregular drought, or genetic factors, albeit needs further research. Genes which regulate phenological expression are likely to be governed by environmental triggers. A change in external environment can initiate the expression of genes in such cases.

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Acknowledgements: Thanks to the Director and Dean of Wildlife Institute of India, Dehradun, for institutional support, Dr. Vishnupriya Kolipakam for editorial comments, and Sahyadri Tiger Reserve in Kolhapur, Maharashtra, for logistic support.

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Citation: Vishwakarma, A., S. Sati, A. Kumar, A. Singh, V.C. Ben & G.V. Gopi (2019). Flame of the Forest: Unusual flowering in *Butea monosperma* (Lam.) Taub. in Sahyadri Tiger Reserve in northern Western Ghats, India.Plantasia #10, In: *Zoo's Print* 34(2): 18-20

Field Report

World Wetlands Day 2019: Wetlands and Climate Change, University of Lucknow, UP



Water birds in Tattoo

World Wetlands Day is celebrated every year on 2 February to raise global awareness about the value of wetlands for humanity and the planet. It also marks the adoption of the Ramsar Convention on Wetlands in 1971 in the Iranian city of Ramsar. Wetlands and Climate Change is the theme for World Wetlands Day 2019.

To observe the day, we organized a one-day workshop on Wetlands and Climate Change on 31st January, 2019 at the University of Lucknow. On that occasion Prof. Amita Kanaujia (Department of Zoology) delivered a lecture on "What are Wetlands, Wetland Ecosystem", Dr. Shailendra Singh (Director T.S.A.) delivered a lecture on "Reptiles of Wetland", Shri. Praveen Rao Koli (IFS) delivered a lecture on "Birds of Wetland", Shri. Amit Mishra and Dr. Neeraj Srivastava (State Coordinator, Wetland International IBCN) delivered a lecture on Bird Behaviour and Ecology. Eighty schools & colleges, UG students of different streams like BBA, BCA, BTC and BSc attended the programme.

Volunteers, spread awareness on 1st February 2019 by distributing pamphlets and flyers based on wetlands conservation amongst several schools, colleges and general public. Prof. Amita Kanaujia motivated the volunteers and students to explore the wetlands and explained about threats to the ecosystem. Different teams with volunteers were set out to

Field Report

various places to spread the awareness and cleaning, maintenance, management of urban wetlands. They explained the local people of urban locality how wetlands control flooding, filter waste from water, improve air quality, source of drinking water, promote human wellbeing and source of livelihoods.



Bird walk at Nawabganj Bird Sanctuary

A group of students along with volunteers and Prof. Amita Kanaujia has visited Nawabganj Bird Sanctuary, Unnao to attend the Uttar Pradesh Bird Festival and to explore the wetland biodiversity. A bird walk was organized for students within Nawabganj Bird Sanctuary premises.

During the bird walk, some common birds like Water Hen, Jacanas, Coot, Comb Duck, Bar-headed Goose, Mallard, Open-bill Stork, Sarus Crane, migratory birds like Gadwall, Northern Pintail, Northern Shoveller, Red-crested Pochard, Cotton Pygmy Goose, Greyheaded Lapwing, White-tailed Lapwing, Temminck's Stint, pisces, amphibians, reptiles, and common wetlands flora were spotted.

Submitted by Amita Kanaujia and Adesh Kumar, University of Lucknow, Uttar Pradesh, India. Email: kanaujia.amita@gmail.com

Field Report

World Wetlands Day 2019 celebrated at Madurai, Tamil Nadu

Forty six National Green Corps students of Government High School, Anaiyur, Madurai along with A.C. Senthilkumar, Headmaster and Haribabu, NGC, Co-ordinator observed the World Wetland Day 2019 at Karuppasamy temple pond, Anaiyur. After the welcome by the headmaster, Jessie Jeyakaran, Member, CEC-IUCN explained about the history, objectives, theme of World Wetland Day and conducted two sessions on observing and

recording the pond life, collection of live forms from the pond and its study. Garbage collection and cultural programme in folk arts, were conducted by Haribabu.

Students of 6-9th standard listed out the plants, birds, buildings and the shore in different areas. From this they were able to learn more about the water bed. Through the sample water collected from the pond, the students were able to study the water clarity, the types of fishes, tiny particles etc. Some of the students along with the NGC coordinator collected the garbage in and around the pond.



Learning about the life forms collected from the pond

Kasi, Police Officer of Koodalnagar voluntarily joined in this event and encouraged the students and advised them to keep water bodies clean wherever they go. Puthiya Chelam, Headmaster of Meiglarpatty and Folk Art trainer Thangapandi spoke to the students how to create awareness through folk arts. Vigneswaran trained the students in Parai and Silambam which were the centre of attraction to the passer-by, as the students performed these arts in the waterbed itself. Haribabu along with the students sang a song about the earth with action which attracted the general public. The programme came to an end with vote of thanks by NGC Coordinator. The day's programme along with the photo was published in The Hindu, Tamil edition.

Submitted by Jessie Jeyakaran. Email: jessiejey@rediffmail.com



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Publication Information

ZOO'S PRINT, ISSN 0973-2543

Published at: Coimbatore Owner: Zoo Outreach Organisation, 12, Thiruvannamalai Nagar, Saravanampatti - Kalapatti Road, Saravanampatti, Coimbatore, Tamil Nadu 641035, India.

Editors: Sally R. Walker and Sanjay Molur Associate Editor: Daniel B. Ayyachamy Managing Editors: Lathadevi Ravikumar & B. Ravichandran Editorial Assistants: R. Marimuthu & S. Radhika

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