# ENVIS NEWSLETTER

#### on Wildlife & Protected Areas

July-September, 2021 Quarterly Newsletter Issue -2





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#### About WII-ENVIS RP "Wildlife & Protected Areas"

To disseminate information on Wildlife and Protected Areas, Wildlife Institute of India was included as the 23rd Environmental Information System Centre in India, with the focal theme "Wildlife and Protected Areas" on September 1997 by the MoEF, India. This Centre deals with general matters concerning "Wildlife" and specifically those related to "Protected Areas".

#### Goal

- Build up a repository and act as a dissemination centre for information on wildlife sciences
- Provide information for decision-making at the apex level relating to conservation and development
- Establish a database on Protected Area Network in India
- Promote national and international co-operation through networking and exchange of wildlife related information.

#### WILD BYTES & NEW DISCOVERIES

#### New species of Cascade frog discovered from Arunachal Pradesh, named after Adi tribe (Source: https://www.thehindu.com)

Researchers have discovered a new species of cascade frog from Arunachal Pradesh and named it after the Adi hills, the abode of Adi tribes. Amolops adicola, the new species discovered by a team of Indian and American biologists from the Wildlife Institute of India (WII), University of Delhi, India, and the North Carolina Museum of Natural Science, the U.S., is a predominantly brown colour frog, with a size ranging roughly between 4 cm to 7 cm.



Cascade frogs are named so because of their preference for small waterfalls or cascades in flowing hill streams, for which they have developed certain morphological features such as expanded digit tips and extensive foot webbing that makes them adapt to strong water currents.

The region from where the discovery was made is also referred as Adi hills — adi literally means "hill" or "mountain top". Historically, this region was also known as Abor hills.

"The new species was discovered while revisiting a century-old Adi expedition in 2018, and named after the land of the Adi tribe in Arunachal Pradesh, where this species dwells particularly during the post-monsoon season," said Dr. Abhijit Das, WII.

#### Rare White-Bellied Heron Spotted in Arunachal Pradesh (Source: https://science.thewire.in)

The white-bellied heron, a rare and elusive bird, was spotted at Walong in the Anjaw district of Arunachal Pradesh. The bird was spotted and photographed by divisional forest officer (DFO) of Anjaw Santosh Kumar Reddy, range forest officer Nosing Pul and scientist Dekbin Yonggam.

The white-bellied heron is categorized as 'critically endangered' in the IUCN Red Data Book and is listed in Schedule IV in the Wildlife Protection Act, 1972. It is one of the rarest birds in the world.





### New snake species found in Assam in over 100 yrs, it has a bindi on its neck (Source: https://www.hindustantimes.com

"The species is named due to its unique red marking on the back of the neck reminiscent of the red beauty spot adorning foreheads of Indian women called 'bindi'," said Abhijit Das of WII, who's associated with the discovery.

"Although majority of zoological discoveries are from northeastern states of Arunachal Pradesh and Mizoram, the discovery of 'Rhabdophis bindi' from Assam shows that more such undiscovered species could exist in the well-explored parts of the region," said Das.

The last snake species discovered in Assam was a red striped one called Oligodon erythrorhachis, which was found in Jeypore area of Upper Assam in 1910 by British herpetologist Frank Wall.

#### Activities performed by WII-ENVIS RP "Wildlife & Protected Areas", Wildlife Institute of India, Dehradun in Quarter-II (July-September, 2021)

# International Day for the Conservation of the Mangrove Ecosystem, 26 July, 2021

In the year, 2015, the international Day for the Conservation of the Mangrove Ecosystem was adopted by the General Conference of UNESCO. On 26th July, each year, this day is celebrated to raise awareness of the importance of mangroves in a unique, special and vulnerable ecosystem. ENVIS Resource Partner 'Wildlife And Protected Areas', Wildlife Institute of India, Dehradun organized a webinar on "Ecosystem services of Mangroves in India with respect to Climate Change".

The webinar was organized to aware students and general public about the importance of mangroves in a unique, special and vulnerable ecosystem. It also aims to promote solutions for their conservation, sustainable management and uses.

The webinar speaker Dr. K. Sivakumar, Scientist-F & ENVIS Coordinator, Wildlife Institute of India, Dehradun India presented presentation and spoke that India has a very vast coastline of 7500 km long, which includes the Andaman & Nicobar Islands and Lakshadweep.



In this long coastline we don't have much mangroves in Lakshadweep islands but, have good patches of mangroves in Andaman & Nicobar Island and also in peninsular India from West Bengal to Gujarat coast. He spoke about how the mangroves help us and what are the problems and what would be the future for the mangroves, especially in our country. While highlighting some scientific facts regarding mangroves, Dr. Siva spoke about the survival of the mangroves as how the surface of the mangrove should be dried for some time at least for 6 hrs in a day then only they can survive.

Because of the high sea level rise the submergence the roots of mangrove do not allow them to breathe properly and this could be fatal for their survival. Soil salinity is found to be the most important governing factor for mangroves in Coringa WLS. Mangroves have protected minimum 75,000 people from cyclone and safeguarded life and properties of Kakinada town as well as seven villages that are close proximity of The East Godavari River Estuarine Ecosystem (EGREE) Andhra Pradesh. The session ended with a question answer session and then a vote of thanks was delivered by Dr. Anju Baroth - Scientist C & ENVIS Co-coordinator, Wildlife Institute of India.

The ENVIS RP at Wildlife Institute of India, Dehradun released e-poster on the occasion of this international day. Mangroves are rare, spectacular and prolific ecosystems on the boundary between land and sea. They act as a form of natural coastal defense against storm surges, tsunamis, rising sea levels and erosion. Their soils are highly effective carbon sinks, sequestering vast amounts of carbon. The E-poster includes how the mangroves are livelihood resources of rural communities and helps in filter & trap of sediments, heavy metals and other pollutants. Mangroves stores more carbon than tropical forests.

#### International Tiger Day, 29 July 2021

International Tiger Day is observed every year on 29 July globally to raise awareness to conserve tigers. . It is a top predator and sits at the apex of the food chain. They contribute by keeping the population of wild ungulates in check, the balance of prey herbivores and the vegetation upon which they feed is maintained. On the occasion of this international day ENVIS Resource Partner at Wildlife Institute of India, Dehradun published an infographic to make aware our general public, students about the importance of tiger and its conservation. Tiger Infographic give broad idea on status, ecological, habitat etc. of tigers in India. It also includes the role it plays as a top predator, is vital in regulating and perpetuating ecological process and also includes the information on The fourth cycle of the National Tiger Status Assessment 2018-19.

#### World Elephant Day, 12th August 2021

Personifying prehistoric beauty, theological relevance, and environmental importance, this August 12, we honour one of Earth's most magnificent creatures with World Elephant Day. The inaugural World Elephant Day was launched in August 12, 2012 by Canadian filmmakers Patricia Sims and Michael Clark along with the Elephant Reintroduction Foundation of Thailand, to bring attention to the urgent plight of Asian and African elephants. The elephant is loved, revered and respected by people and cultures around the world, yet we balance on the brink of seeing the last of this magnificent creature. The escalation of poaching, habitat loss, human-elephant conflict and mistreatment in captivity are just some of the threats to both African and Asian elephants. World Elephant Day asks you to experience elephants in non-exploitive and sustainable environments where elephants can thrive under care and protection.





To celebrate the World Elephant Day this year ENVIS Resource Partner & Elephant Cell, Wildlife Institute of India, Dehradun jointly organized various online events including a webinar to celebrate the 10th Anniversary of the Elephant Day on 12th August 2021.

The webinar includes the two Talks on 1) Knowing the Gentle Giants: Story of Elephant Conservation in Changing Landscapes 2) Wandering Giants, Meandering River and Thundering Congregations

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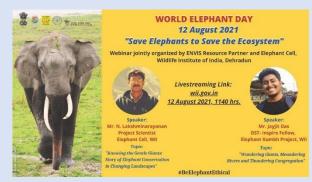
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**ELEPHANT DAY** 

12 August 2021

#ElephantsInAction

#BeElephantEthical



The first talk was about the Asian Elephant their habitat, multiple threats, the major issues related to conflict with humans and the tasks like identification of means for restoration and consolidation is very important and if do not do that there is a risk of elephants dispersing into new areas. The Second talk was about the Wandering Giants (The Asian Elephant), Meandering River (The holy Ganges) and the Thundering Congregations (The event of Maha kumbh 2021).

Painting Contest- Open to Students from Class 1st to 8th

Students from Class

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#PaintForWildlife

#BeElephantEthical

**ELEPHANT DA** 

12 August 2021

#### **Online Photography Contest**

Contest is Open to all

Theme: "Elephants In Action"

Submit your entries on or before 05:30 p.m. 10 August 2021 here: https://forms.gle/tTNbBXm4rRVdQq5p8

The main aim to organize the photography contest is to bring attention to the plight of elephants and threats to their survival and how we can become elephant guardians. The day encourage individuals and organizations worldwide to embrace this day and its mission. The theme for the contest was 'Elephants in Action'. The winners of the contest was awarded prizes and certificates were issued to all participants.

#### **Online Painting And Short Essay Writing Contest**

The main aim to organize the Online Painting and Short Essay Writing contest is to aware our general public about the importance of Elephants and to express their concern, share their knowledge and support solutions for the better care of captive and wild elephants alike. The day is being dedicated to the preservation and protection of the world's elephants. The theme for Painting Contest was' Paint for Wildlife' and theme for Short Essay Writing Contest was 'Human Elephant co-existence in 21st century'. '. The winners of the contests was awarded prizes and certificates were issued to all participants.



#### International Vulture Awareness Day, 5th September, 2021

ENVIS RP at Wildlife Institute of India, Dehradun prepared few infographics on the occasion of International Vulture Awareness Day. The first Saturday in September each year is International Vulture Awareness Day to show the human kind's appreciation for vultures and the ecosystem services they provide. The initiative is run jointly by the birds of prey Programme of the Endangered Wildlife Trust in South Africa and the Hawk Conservancy Trust in England. Vultures are an ecologically vital group of birds that face a range of threats in many areas that they occur.

The main aim to release E-Poster/Infographic is to raise awareness about the threats that vultures are facing today. The infographic includes the Vultures of India, Their threats and IUCN status. It also includes the few facts about Egyptian vulture, Bearded vulture, Griffon vulture and The Cinereous Vulture.



International Vulture Awareness Day 04 September 2021

> The Egyptian Vulture is the world's onlytoolusing vulture. It utilizes sharp rocks tocrack open eggs for a tasty snack. It has avery varied diet. Its diet consists mainly ofcarrion, but also small mammals, youngbirds, fish, eggs, animal faeces and evenrotting fruit.

The Bearded Vulture is the only vulturespecialized in eating bones of dead animals.It is capable of swallowing and digestingbones the size of a sheep's leg! If bones aretoo big, it drops them onto rocks from aheight of up to 100 meters to shatter them.





Griffon Vultures are very social in comparison to other vulture species. They forage in groups and breed in colonies on steep cliffs, sometimes numbering hundreds of individuals. When they detect carrion, a feeding frenzy occurs, as individuals step on one another to acquire theirpreferred parts of a carcass.

The Cinereous Vulture is the largest vulturein Europe and one of the largest birds inthe world. Due to its size and morphology, it feasts into a carcass first, using its sharpbeak to break into the skin and feed on thetough tissues.



Many birds hunt, kill and eat meat but they may not be raptors. Only raptors have hooked beaks with sharp edges, feet with sharp, curved claws or talons and keen eyesight.



ENVIS India: Working Toward



iriffon Vulture Gyps fulvus (Europe, Asia, Africa) – Least Concern



ENVIS India: Working Towards a Su

#### World Ozone Day, 16th September, 2021

16th September is observed as International Day for the Preservation of the Ozone Layer or World Ozone Day. In order to keep in check on substances that deplete the Ozone layer, a deal named Montreal Protocol was signed by almost every country in the year 1987 and in 1994 the UN General Assembly proclaimed this day as the World Ozone Day. The main aim of the Montreal deal was to control, preserve and take timely measures towards curbing the consumption of substances that cause the depletion of the ozone layer. The theme for 2021 for International Day for the Preservation of the Ozone Layer is 'Montreal Protocol-Keeping us, our food and vaccines cool'. The day seeks to highlight the Montreal Protocol that does so much more, including, slowing climate change and helping to boost energy efficiency in the cooling sector, which contributes to food security.

#### **Online Short Story Writing Contest**

ENVIS RP at WII organized online short story writing contest on the theme 'My Earth, My Ozone' to make students aware of the depleting ozone layer and how to make the earth a pollution free zone. It is crucial for life on earth and we must continue to protect its layer for our future generation. The winners of the contest were awarded prizes and issued certificates to all participants.

#### **Online Poster Making Contest**

ENVIS RP at WII organized online poster making contest on the Theme 'Montreal Protocol – Keeping us our food and vaccine cool' as this year Ozone day seeks to highlight, the Montreal Protocol does so much more such as slowing climate change and helping to boost energy efficiency in the cooling sector, which contributes to food security. The winners of the contest were awarded prizes and issued certificates to all participants.

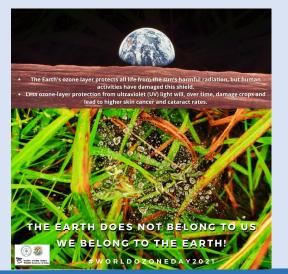


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Earth, My Ozone



#### E-Poster on World Ozone Day 2021

The E-Poster was prepared to aware our general public, students on how Earth's layer protects all life from sun's harmful radiation, but human activities have damaged this shield. Less Ozone layer protection from UV light will overtime, damage crops and lead to higher skin cancer and cataract rates. 6

## Infographic on World Ozone Day 2021

**ENVIS** RP at WII released Infographics on World Ozone Day it includes the Timeline. The day highlight the importance of Montreal Protocol in slowing boosting Climate Change and energy efficiency in the cooling sector, which contributes to food We celebrate security. and acknowledge the Montreal Protocol and its Kigali Amendment in its wider efforts to keep us, our food and vaccines cool!



#### Info graphic on "Galliformes of India"

Info graphic on "Galliformes of India" is a new initiative by ENVIS Resource Partner "Wildlife and Protected Areas", Wildlife Institute of India, Dehradun. It contains information about the scientific name, phylum, class, family order, conservation status, size, habitat, altitude range and brief description etc. of the galliformes found in the country. This weekly Info graphic will be beneficial for students, researchers and managers working in field of wildlife conservation and management. The ENVIS RP, WII published four Infographics on galliformes in this second quarter. They are as given below:

HIMALAYAN SNOWCOCK (Tetraogallus himalayensis): The Himalayan snowcock (Tetraogallus himalayensis) is a snowcock in the pheasant family Phasianidae found across the Himalayan ranges and parts of the adjoining Pamir range of Asia. It is found in the Himalayas between 4000 and 5000 meter elevation in summer, descending to 2400 meter during severe winters. It is a large grey partridge-like bird, The white throat and sides of the head are bordered by chestnut moustachial stripe and a dark broad chestnut band stretching from the eye over the ear, expanding into the collar. The upper parts are grey, with feathers of the rump and the wings are bordered with rufous. Himalayan snowcock has a large distribution range, it has been considered a species of "least concern" by the IUCN. They are more prone to predation on the alpine pastures than on steep slopes.



- **TIBETAN SNOWCOCK (Tetraogallus tibetanus):** The species is distributed across the Himalayas viz. Jammu & Kashmir, Sikkim, Arunachal Pradesh, Western Himalaya and in Eastern Himalaya. The adult has heavily streaked plumage overall, with pale greyish-buff upperparts streaked dark grey, including the upperwing. Hindneck and mantle are greyish to pale buff and unstreaked. The short tail shows pale buffy-brown uppertail-coverts and black rectrices. They basically feeds mainly on plant matter such as roots, stems, leaves, seeds and berries. It forages on the ground among the sparse vegetation of the rocky slopes. If threatened, they can perform distraction displays in order to move potential predators away from the nest.
- **BUFF-THROATED PARTRIDGE (***Tetraophasis szechenyii***):** The buff-throated partridge (*Tetraophasis szechenyii***)** is a hypoxia-tolerant bird living in an extremely inhospitable highaltitude environment, which has high ultraviolet (UV) radiation as well as a low oxygen supply when compared with low- altitude areas. The alpine shrubberies, coniferous forests, and tundra above the treeline at 3350–4600 meter above the sea level are the habitats of the buffthroated partridge from the eastern Tibetan Plateau to central China. It is treated as endangered by the Red Book of China and has been included in the Category-I of the nationally protected animals legally. Diagnostic features are bare red skin around eyes, orange-buff throat, greyish breast, spotted with black, prominent orange-buff and chestnut spotting on belly and flanks, uniform grey crown/ear-coverts and uniform brown mantle, grey rump, broad buffish and white tips to the wing-coverts, secondaries, tertials and scapulars.
- CHUKAR (Alectoris chukar): Chukar is common in the Himalayas (Jammu & Kashmir, Himachal Pradesh & Uttarakhand) largely between 1,200 meter and 3,960 meter. They have a black band running across forehead back through the eyes and downsides of neck to as a 'necklace' on upper breast enclosing the buffy to glistening white cheeks, chin and throat. Red bill and legs Chukars are generally opportunistic and forage on vegetation, including grass and forb seeds, leaves, green grass, and some shrub fruits, according to relative abundance and seasonal availability Chukars flight is generally restricted to short distances downhill, usually when flushed. They hop when crossing rough terrain and prefer running to flight.

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	Please send your valuable suggestions,		То,	
	comments and queries to:			
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**Disclaimer:** The views, ideas and information presented in the Newsletter are of the concerned sources and do not necessarily represent the views of the Institute (WII).