

Sanctuary Asia

VOLUME 43 | ISSUE 01 | MUMBAI

JANUARY 2023 | PAGES 32 | INR 100/-



ON THE COVER

Amboli Bush Frog

An endemic Amboli bush frog sits luminously in the drizzle of the Western Ghats in Sirsi, Karnataka.

CUB

FOR YOUNG READERS

The Magic of Reality.

The scientific truth can be beautiful and provide all the answers we need!

WILD TRAVEL

A MARVELLOUS MIGRATION

The Amur Falcon migration is also a successful conservation story.

CONSERVATION

JUHU'S WINGED NEIGHBOURS

One woman's efforts to draw attention to her avian neighbours.

TAKE ACTION

YOUTH AT COP27

How can youth influence climate action?

PHOTOFEATURE

WILD WONDERS

Young photographers capture fascinating elements of our natural world.



Photo Credit: Dr. Anish Andheria

FOREVER STRIPES

The survival of the tiger and all the creatures that share its habitat, including leopards, wild dogs, elephants, rhinos and uncounted plants, insects, birds and reptiles, depends on whether humans can set aside vast undisturbed wildernesses for nature.

The wildlife conservation movement needs the support of us all. For more information on how you can help, or to pledge your support for those who work round-the-clock to protect our wildlife, write to Dr. Anish Andheria (President, Wildlife Conservation Trust) at anish@wctindia.org or visit www.wildlifeconservationtrust.org

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Amboli Bush Frog!

This endemic frog was photographed during the monsoon in the Western Ghats of Sirsi, Karnataka.

The Amboli bush frog is found among shrubs and on the ground too. While the cover image enhanced technically shows a luminous, amber creature, its body mostly has various shades of brown with black spots, and its throat is lemon yellow. The frog's forelimbs are shorter than its hind limbs, and the discs of its fingertips are enlarged.

The male of this medium-sized frog, is smaller than the female, and has a distinct transparent vocal sac when calling out to females during the mating season. Instead of beginning life as a tadpole as in many frog species, the Amboli bush frog emerges as a miniature frog from its egg. The embryo is protected by jelly-like layers of the egg, instead of a hard shell. This rare amphibian has been classified as critically endangered in the IUCN Red List



as its numbers are decreasing owing to the degradation and fragmentation of its habitat.

SCIENTIFIC NAME

Pseudophilautus amboli

FOUND IN Wet and open forests at an elevation of 500-1,000 m. in the Western Ghats of Karnataka, Goa and Maharashtra in India.

PHOTO CREDIT

Arjun Haarith

PHOTOGRAPHER'S NOTE

This image was taken during the monsoon month of July 2021 in the Western Ghats of Sirsi, Karnataka. While I was shooting, it was drizzling constantly. I noticed that the raindrops added more drama to the image. Equipment used: Nikon D7100, Tamron 90 mm., Godox v860-II flash.

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Printing Silverpoint Press Pvt. Ltd., Mumbai

Cover Photo Jagadish Barui

Printed & Published by SHASHI KUMAR on behalf of SANCTUARY NATURE FOUNDATION, Printed at SILVERPOINT PRESS PVT. LTD., A-403, TTC Industrial Area, Near Antony Motors, Navi Mumbai – 400 709 and Published from SANCTUARY NATURE FOUNDATION, 602, Maker Chambers V, Nariman Point, Mumbai 400 021. Editor: Randhir Sahgal (Bittu Sahgal). This special edition is meant for young readers. We welcome contributions and offer suitable reimbursement for accepted material. Write to us for terms and guidelines. We cannot accept responsibility for unsolicited material. Reproduction in the electronic or print media in whole or part without written permission of the publisher is prohibited. Issued in the interest of wildlife. www.dspim.com

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A Marvellous Migration.

The Doyang reservoir dazzled green under the late October afternoon sun. I stood at the edge of a hill, marvelling at one of the best natural history phenomena in the world. The space above the water was filled with shrill bird cries. **Text by Prachi Galange**

I followed the flight path of a single bird soaring across the blue skies, as it merged with a million tiny dots in the sky, each one of them an Amur Falcon *Falco amurensis*!

Come mid-November these small raptors would have travelled another 5,900 km. non-stop for five days. Their annual migration includes crossing the Indian Ocean to reach South Africa, a marvellous feat considering their size – they weigh a mere 150 grams!

MARATHON IN THE SKY

Amur Falcons undertake one of the longest raptor migrations – a staggering 22,000 km. They fly from their breeding grounds in southeastern Siberia and northern China all the way to their wintering grounds in South Africa. After wintering for three to four months, the falcons journey back to their breeding grounds, which lie in the Amur river region, giving rise to their name.

EARLY VISITS

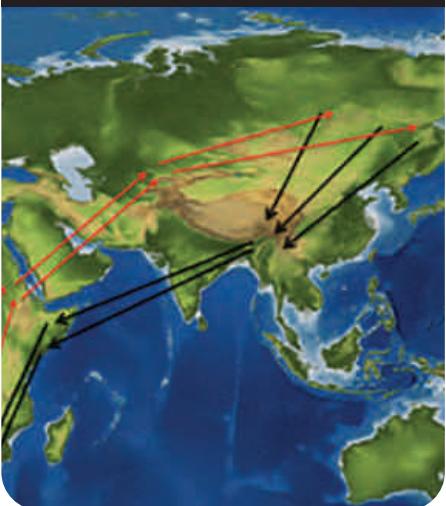
Amur Falcons have historically been recorded visiting the northeastern parts of India in early winter. However, there seems to have been a change in their migration pattern after the completion of the Doyang reservoir in the year 2000. Suddenly, the nearby Pangti village and its surrounding areas became a hotbed for millions of these birds for 10–15 days, from late October to early November. Migrating falcons typically

SAURABH SAWANT



Amur Falcons circling over the Doyang reservoir.

Migration route map of the falcons.



Amur Falcons perched in a row.



Male Amur Falcon snared in a fishing net.



gorge on newly-emerging termites, dragonflies, small birds, and even mammals, to build up fat reserves and prepare for the next leg of their journey. Such stopover sites are important safe spots for the migratory birds in their vulnerable state.

For locals, who had to give up nearly 2,000 acres of cultivated land for the reservoir, the influx of a million raptors must have felt like *manna* from the heavens, and hunting became rampant. During peak migration, every day 12,000 - 14,000 raptors were caught in thin fishing nets laid across their single roosting site, lining the Doyang bank. Considering that the migration period lasted an average of 10 days, between 1,20,000 and 1,40,000 birds were being killed from the total migrating population. If this had continued, it would have led to a sudden collapse in their population.

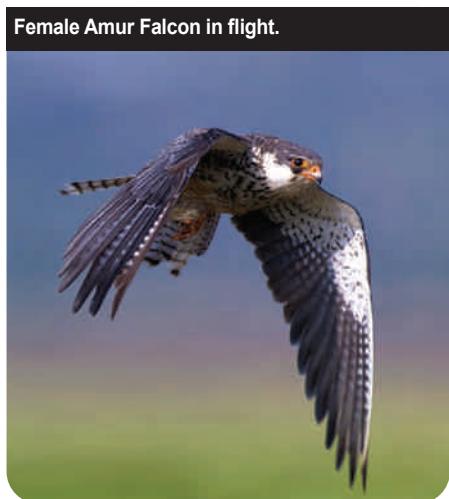
FAVoured GUESTS

Disturbed by these mass killings, local conservationists and birders launched a community education campaign with the aim of protecting the Amur Falcons. They presented the global migration map of the falcons to village leaders, highlighting the worldwide revulsion at their widespread slaughter. The campaign was led by late [Ramki Sreenivasan](#) of Conservation India, with support from BirdLife International, the Wildlife Conservation Society, the Bombay Natural History Society, and other local wildlife groups. Eco-clubs were set up for children in Pangti, Nagaland and surrounding communities and 'Amur Ambassador Passports' were given to those who pledged to protect the falcons. Locals were encouraged to become 'guardians' to the birds. This became one of the most successful conservation stories in India. The following year, in 2013 and the years after, not a single bird was killed by hunters!

A SKY FULL OF AMURS

In Pangti, our stay was arranged at a local homestay to promote eco-tourism and we were guided by hunters-turned-guides, who receive a far more sustainable income from tourism than hunting falcons. That evening, as we were led to the roosting site, we walked through narrow trails lined with waist high shrubs to reach a clearing. We found ourselves near the bank of

Female Amur Falcon in flight.



SHASHANK DALVI

PUBLIC DOMAIN/SUMEET MOGHE

the Doyang river facing a fading sky, gradually darkening from dull yellow to dull grey. There we were greeted with sheets upon sheets of falcons, wavering across the dusky sky. The moon rose, full and bright, which only seemed to magnify their restlessness. Waves of sickle-shaped falcons undulated across the skies and down to the ground, but never seemed to settle. As I looked at the handsome avians, I held faith in the locals' ability to hold safe passage for these beautiful birds.

Prachi Galange is a senior photo editor and naturalist at *Sanctuary Asia*. She has been enamoured with nature since childhood and loves everything from spiders, to insects, birds and mammals. An ideal day for her would begin with watching the sunrise over a mountain and going on a hike.



TIME TO RESTORE

- ~ Read more about the fascinating journey that the Amur Falcons undertake; scientists have mapped their entire migratory route with the help of satellite tags.
- ~ Encourage ecotourism and local guides by visiting Pangti and Doyang in Nagaland during the Amur Falcon migration season.
- ~ Raise awareness about important flyways and stopover sites and the importance of turning them into Protected Areas.

NATURE WATCH

HAIRY MOTH CATERPILLAR

These luminescent, hairy moth caterpillars *Eupterote mollifera* specifically feed on the moringa *Moringa oleifera* tree. The caterpillars feed enthusiastically, in groups, gnawing at the bark and munching on the leaves – often until the leaves begin to fall out. Here, as they descend from the tree in Tehatta, West Bengal, clinging to fine, silky strands, their slight movement in the wind makes them look almost like falling raindrops from a distance.



SUPPORT LIFE ON EARTH!

TAKE ACTION

Children and youth are now a key part of climate change discussions!

YOUNGO – UNFCCC's official youth constituency – has been officially recognised as a stakeholder in designing and implementing climate policies. This is evidence that youth can successfully insist that they be included in their government's national delegations. The recognition comes under an article of the Paris Agreement called Action for Climate Empowerment (ACE), which says countries must empower their people to participate in finding solutions to climate change.

Heads of delegations gather annually at the Conference of Parties (COP) to discuss different aspects of climate change. This year's COP was the 27th such meeting conducted from November 6 to 20, 2022 in Sharm el-Sheikh, Egypt. India's 11-year-old Licipriya Kangujam was present at COP27 to tell world leaders to take concrete action on loss and damage in the global south caused by climate change. She believes children themselves, and not adults, should be given a chance to represent their unique thoughts.

The Children and Youth Pavilion became one of the 97 official pavilions at [COP27](#), giving youth a safe space to combat the climate crisis together. You can explore the Children and Youth Pavilion on their [website](#) and on [Twitter](#).

We believe this inclusion acknowledges the power of youth, the stakeholders of the future. Combined with their energy, compassion for nature, and the will to innovate and challenge the status quo, this inclusion will certainly help steer humanity onto a course-correcting path. Not very long ago, Sweden's Greta Thunberg's demand for immediate action on the climate crisis made adults sit up and pay attention. The recognition of youth voices is an opportunity for them to be a bigger part of the solution. After all, it is their future that is at stake!



PUBLIC DOMAIN/YOUNGO

It is time to truly listen to our youth about addressing climate change.

WHAT YOU CAN DO:

- Become familiar with climate change issues from reliable sources like the United Nation's website.
- Discuss the issues with your friends and family.
- Consider which of your daily life activities can positively affect the climate – your modes of transport? The source of electricity in your home? Reusing gadgets and clothes?
- Write to the Minister of Environment, Forest and Climate Change Bhupender Yadav at office@bhupenderyadav.in with your ideas and demands for climate action. You can also write to him on Twitter [@byadavbjp](#)
- Find out who your public representatives are (corporators, MLAs, MPs), and write to them about what should be done in your area to combat climate change.
- Share your concerns with your friends, family and teachers. We must work together for a better and safer tomorrow.

Write a small letter with a photograph about how you would like to participate in climate action and send it to editorial@sanctuaryasia.com and images@sanctuaryasia.com.



The Children and Youth Pavilion became one of the 97 official pavilions at COP27.

THE INBOX



We love hearing from you!

Write in with your questions, thoughts, photos, doodles, poems and more, and we will publish them here. Send to editorial@sanctuaryasia.com



Here's what you're saying:

On November 2022 Take Action

The government hardly understands the importance of nature or wildlife. Underpasses need extra investment, which they keep in their pockets.

— Abhishek Mohan



They earth belongs to them just as us and they should have the right to passage. — Sudeep Bhatt, Mumbai

Sad that India does not consider elephant and other wildlife habitat and migration routes. Animal welfare and protection is always given less priority and infrastructure takes precedence. — Amit Daw

On November Photo Feature 'Ode to Life'

These are beautiful photos. — Angad Achappa, Bengaluru

Outstanding captures. — Suresh Shetty

On Tales from Tadoba

Wonderful write up and clicks by eight-year-old Aranya Dutt Bedi. Such a heart-warming record of safari tales! So happy to see children exploring nature, explaining why spotting a tiger is not everything; mostly, it's being in a jungle with all its creatures and trees. Heart is feeling so full. May you always be blessed by Mother Nature.

— Monika Ohson

On Wild Encounter

There are less than 300 hangul surviving in the wild.

— Bhavesh Mehta

Young Shutterbugs



JOSHUA BOSCO, 15, Maharashtra

Joshua fell in love with birds at the tender age of five and he began photographing wildlife as a hobby two years later. The Mumbai boy says it gives him a deep sense of calm and happiness.

CAMERA Canon EOS 1500D

LENS Canon EF 100-400 mm. f/4.5-5.6 IS II USM

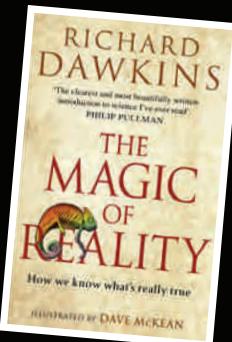
Joshua's pact with his parents to take him to wildernesses for holidays led to a lifer in March 2022! Just before exiting the Tadoba-Andhari Tiger Reserve from the Madnapur gate, he spotted a White-eyed Buzzard. He clicked the image with light-speed, seconds before the bird took flight and was delighted to capture the distinctive identification feature of this raptor, its white iris!

Dear *Cub* Kids, nature writing and reading is a wonderful way to get closer to the natural world around us. Here's a book we think you would like!

BOOK NOOK

If you wonder why there are so many species, why distinct elements blend into matter, or how rainbows form, *The Magic of Reality* by Richard Dawkins will answer all your questions!

Dawkins frames the scientific exploration of life as magic, the kind that can be understood with the use of models, mathematics and deep questioning. He will introduce you to events of a geological timescale like a walk in the park, and surprise you with your biological connections with fish!



But this isn't just a book on fascinating concepts from science, geology and geography. You will meet people from around the world. You will read about scientists who shaped the world such as Charles Darwin and Albert Einstein. The vivid examples might just inspire you to travel. I definitely was. Importantly, you will see how easy it is to ask questions, which lead you to magical, real answers and wonders of existence.

AUTHOR Richard Dawkins

ILLUSTRATIONS Dave McKean

PRICE Rs. 346/-

REVIEWED BY Shatakshi Gawade



Quiet KINGDOMS

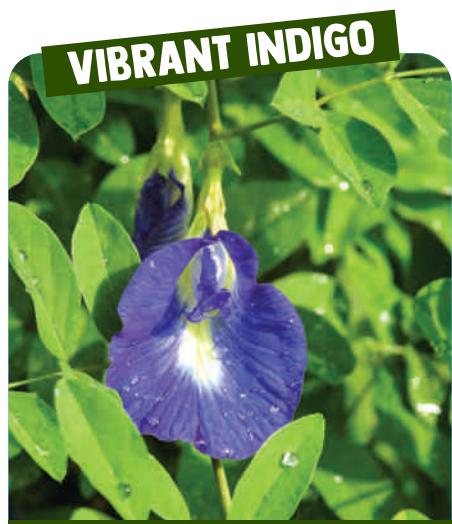


Warming climate, algal expansion in Greenland is leading to rapid ice melt.

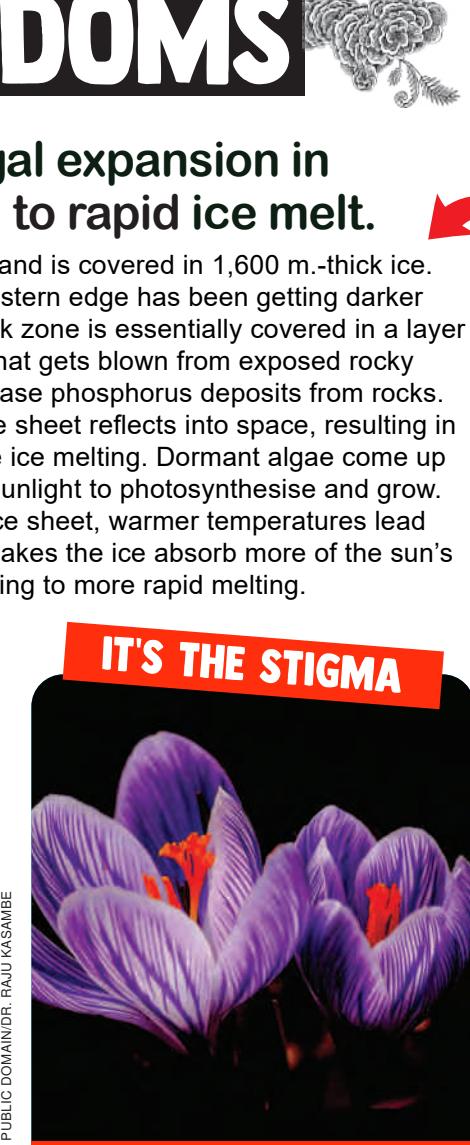
Around 1.71 million sq. km. of Greenland is covered in 1,600 m.-thick ice. But as temperatures increase, the western edge has been getting darker with algae growing profusely. The dark zone is essentially covered in a layer of carbon and phosphorus-rich dust that gets blown from exposed rocky outcrops. Warmer temperatures increase phosphorus deposits from rocks. This layer reduces the sunlight the ice sheet reflects into space, resulting in the ice warming and in the spring, the ice melting. Dormant algae come up to the surface and use the available sunlight to photosynthesise and grow. Though algae grow naturally on the ice sheet, warmer temperatures lead to more algal blooms, which in turn makes the ice absorb more of the sun's heat and become less reflective, leading to more rapid melting.



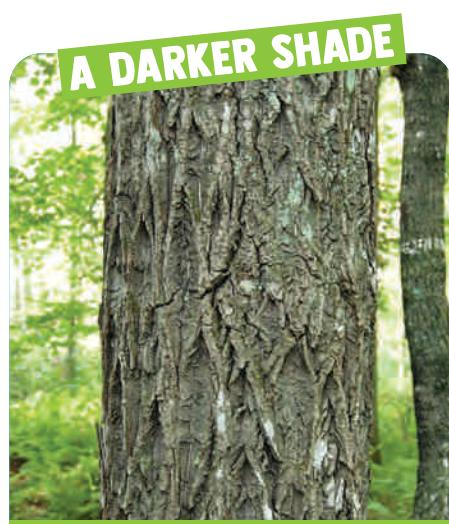
PUBLIC DOMAIN/MODIS/NASA



VIBRANT INDIGO



IT'S THE STIGMA



A DARKER SHADE

The **butterfly pea** flower is used to produce an edible blue dye that can be used to colour food and drinks.

The **saffron** blossom's colouring pigment is in its stigma, which is dried and used to create a strong yellowish-orange dye.

The **butternut** tree's bark was used to make a brown dye and its roots to make a black dye by native American Indians.

PUBLIC DOMAIN/ELI SAGOR

The vitamin-rich aloe vera is known as the plant of immortality

The medicinal applications of the aloe vera plant have been known since ancient times. Carvings of the plant, more than 6,000 years old, have been found in Egypt. Later Egyptians also offered the plant as a burial gift to pharaohs and used it to embalm the dead. They believed that stopping physical decomposition can lead to eternal life. Aloe was also used to treat tuberculosis. The plant was also recommended by Roman and Chinese physicians and Spanish monks. Scientists today confirm this ancient wisdom with research showing that it is rich in bioactive compounds such as enzymes, vitamin acids, and amino acids and it has beneficial anti-bacterial and anti-inflammatory properties. Aloe also contains Vitamin B12, normally found only in animal-based foods.



PUBLIC DOMAIN

KIDS FOR TIGERS is a nationwide effort of SANCTUARY and school children to save the wild tiger and its habitat.

KIDS FOR TIGERS



THE NOVEMBER & DECEMBER 2022 REPORT

SCHOOL SPOTLIGHT

St. Xavier's High School, MIDC

Environmental education is important for students as it gives them a chance to get more involved and learn about issues beyond the general curriculum. It also helps them make connections between the impact of their actions and the environment. The school has been prioritising environmental education to create awareness among their students. Toward this, they have been conducting various hands-on activities to which the students have shown an enthusiastic response.

These include various art-for-conservation activities such as mask making, t-shirt painting, paper bag making and distribution with the aim to sensitise students about the perils of using single use plastic. Teachers believe that through these activities, children can acquire the skills they will need to be creative problem solvers and powerful advocates of nature conservation.



Students of St. Xaviers School participated in a t-shirt painting competition.

Into the Wild – Sundarban and Ranthambore

Ranthambore in western India and Sundarban in eastern India are both home to India's national animal – the royal Bengal tiger! Kids for Tigers has been actively working with rural kids living near these wildernesses to foster appreciation for wild nature. In the last two months, we have conducted several drawing and poster-making competitions, audio-visual shows, film screenings along with nature trails and field visits, making sure that kids explore the biodiversity in their backyard. We also conducted Teachers' Environmental Leadership Workshops in Kolkata and Sundarban. Here are a few glimpses of all the-fun filled learning that we have been involved in.



Government Senior Secondary School, Gulwana school students participated in a plantation drive near the Ranthambore Tiger Reserve.



Students of Blue Star Academy, Sawai Madhopur completed a clean up drive at Ranthambore.

KIDS FOR TIGERS SERVICE AND LEARNING!

Saraswati Senior Secondary School, Kundera, students performed a skit on tiger conservation.



SANCTUARY PHOTOLIBRARY



SANCTUARY PHOTOLIBRARY

Joydip Kundu, Bagh Sankalp Coordinator, Sundarban interacted with teachers during the Teachers' Environmental Leadership Workshop.



SANCTUARY PHOTOLIBRARY

Sundarban students participated in an Art for Conservation Event at Bali Island under the Bagh Sankalp initiative of Kids for Tigers.



SANCTUARY PHOTOLIBRARY

Students of Saraswati Secondary School, Kundera and Oakridge International School, Hyderabad at the Art competition.



SANCTUARY PHOTOLIBRARY

Teachers from Kolkata schools at the Kids for Tigers Teachers' Environmental Leadership Workshop.

JOIN KIDS FOR TIGERS!

Email amandeep@sanctuaryasia.com for more info.

AMAZING BUT TRUE!

DID YOU KNOW?

Humpback whales are forming uncharacteristically large groups.

Humpback whales are known to be mostly solitary animals that sometimes wander the ocean in pairs or in small groups that quickly disperse. However, from 2011, research crews have been observing a novel and puzzling social behaviour – ‘super’-groups of up to 200 humpback whales, feeding off the south-western coast of South Africa, thousands of kilometres north of their usual feeding grounds in icy Antarctic waters.

This new behaviour was observed in 2011, 2014 and 2015 by researchers, as well as during a couple of public sightings via aircraft. Although scientists haven’t been able to determine the reason for this behavioural change, some suggest that it could be on account of shifts in prey availability or because of increasing humpback numbers.



PUBLIC DOMAIN/MODIS/NASA



ULTRASONIC

PUBLIC DOMAIN/ROBERT WEBSTER

Greater wax moths have the best ears in the animal kingdom – they can sense frequencies up to 300 kHz!



NIGHT QUEEN

PUBLIC DOMAIN/PATRICK ALEXANDER

The **Arizona queen**-of-the-night is a cactus that blooms for only one night in summer every year.



RED CARPET

PUBLIC DOMAIN/CHRIS BRAY

Over 50 million **red crabs** turn the landscape red as they migrate from Christmas Island, Australia to the coast.

A bright red lake in Tanzania that turns animals to stone!

The highly alkaline Lake Natron in Tanzania is not the most welcoming environment for plants and animals, but salt-loving microorganisms such as haloarchaea thrive in the shallower parts, lending the water its characteristic deep pink and red hues. The lake's water has a pH of 10.5 and is so caustic that it can quickly burn the skin and eyes of creatures that have not adapted to its conditions. This alkalinity is on account of the sodium carbonate and other minerals that run into the lake from nearby hills, preserving the remains of the animals that die in the lake's waters in a chalky, stony embalming. Surprisingly, the salt marshes of the lake support a flourishing ecosystem of wetland birds including the east-African Lesser Flamingo population.



PUBLIC DOMAIN/CHRISTOPH STRASSLER

SURF'S UP



'Surf's up' is a phrase used by surfers before they jump on a good wave. It's time we go along for the ride!

Great white sharks have a winter and spring getaway in the mid-Pacific Ocean.

When you think of migration, you usually think of birds. But all kinds of species migrate including great white sharks. Earlier great white sharks were mostly thought of as staying close to the shore where plentiful prey such as seals and sea lions were available. However, over the last few decades, scientists have been able to discover more about these marine animals by tagging them. Recently, a study found that adult white sharks group together in winter and spring, halfway between California and Hawaii, in a patch of open ocean that researchers are calling the 'White Shark Cafe'. You can learn more about the journey of these amazing animals at whitesharkcafe.org



PUBLIC DOMAIN/DIEGO DELSO

The migration patterns of shark species vary according to prey preference, weather changes, and breeding and birthing areas. Blue sharks migrate to subtropical waters in early summer to mate and then return to temperate waters.



PUBLIC DOMAIN/ELIAS LEVY

As waters warm and become more acidic on account of climate change, sharks are being forced to change their migration patterns and routes. Scientists are recording bull sharks in waters where they never have before, giving rise to fears of a cascading impact.

HEY SQUID, WHILE YOU AND I ARE PRETTY COOL, SHARKS, MORE THAN 500 SPECIES, TAKE COOLNESS TO A WHOLE NEW LEVEL!

TELL ME ABOUT IT! I HEAR THAT WE SQUIDS ARE AN IMPORTANT PREY BASE FOR THEM!

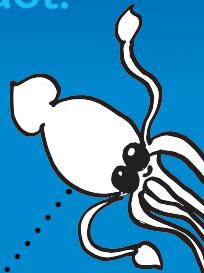
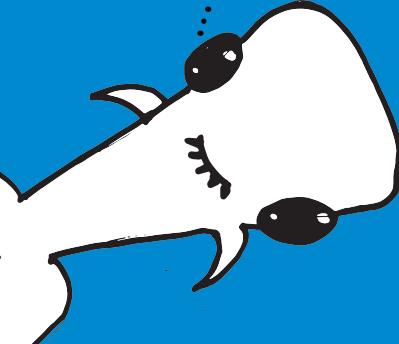
I AM GLAD THAT MODERN SHARKS ARE NOT AS HUGE AS THEIR ANCESTORS. THE CARCHARODON MEGALODON, WAS 16.7 M. LONG AND WEIGHED 22,000 KG.

ONE SHARK SPECIES ALIVE EVEN BEFORE THE MEGALODONS IS STILL FOUND NEAR THE OCEAN FLOOR - THE GOBLIN SHARK!

SORRY ABOUT THAT! A GREAT WHITE SHARK'S BITE HAS A FORCE FOUR TIMES STRONGER THAN THAT OF A TIGER. A BULL SHARK HAS AN EVEN STRONGER BITE!

MY NAMESAKE - THE WHALE SHARK - IS PRETTY HUGE TOO. THOUGH A FILTER FEEDER LIKE SOME WHALES, IT IS A TRUE SHARK WITH CARTILAGE INSTEAD OF BONE.

FIN-TASTIC! A LIVING FOSSIL THAT IS PINK-SKINNED AND HAS A LONG FLAT SNOUT.



Cub News

JANUARY WILDLIFE AND ENVIRONMENTAL NEWS FROM INDIA AND AROUND THE EARTH 2023



Sanctuary Wildlife Awards honour eight earth heroes

The Sanctuary Nature Foundation honoured brilliant men and women working for wildlife conservation in India in a ceremony on December 2, 2022. **Dr. Vibhu Prakash** was given the Lifetime [Wildlife Service Award](#) for his work to save vultures in India from extinction. **Munmuni Payeng** got the Young Naturalist award for her reforestation work in Assam, and the Green Teacher Award was conferred upon **Suprabha Seshan** for her reforestation and educational activities at the Gurukula Botanical Sanctuary. The five Wildlife Service Awardees were **Rituraj Phukan**, a climate warrior and adventurer; **Ramana Athreya**, an ecologist, conservationist and astrophysicist; **Arun Venkataramanan**, an educator and forest-nurturer; **Panchami Manoo Ukil**, a birder and author; and **Shabir Husain Bhat**, a naturalist guide.

The Sanctuary Wildlife Awards 2022 was held at the NCPA, Mumbai.



SANCTUARY PHOTOLIBRARY

Wildlife Service and Photography Awards 2022 inspire hope for the future.

The Wildlife Photography Awards were also announced, with the first prize awarded to **Anirban Dutta** for his magical image of termites and a Black Drongo. **Abhijit Somvanshi** won the second prize for capturing the face-off between a Crested Hawk Eagle and two Indian jackals. The third prize winner was **Anand Bora** for his image of a leopard trying to escape humans. The Editor's Choice Award went to **Mayuresh Kishor Hendre** for his camera trap image of two Indian civets feasting on a dead sambar.

Rhino numbers rise in India, Zimbabwe!

The greater one-horned rhinoceros *Rhinoceros unicornis*, identified as a vulnerable species, is showing a positive population trend with improving numbers in Uttar Pradesh's Dudhwa Tiger Reserve. Thirty eight years ago, five rhinos were brought to the reserve under the ambitious inter-state rhino reintroduction project. Now there are 40 rhinos in the marshy grasslands of this Terai forest, including 28 adults and eight baby rhinos. The success has encouraged the Forest Department to expand the area for rhinos and bring more individuals from West Bengal. The state government has allocated Rs. 1.43 crores for these plans.

Across the Indian Ocean too, the population in Zimbabwe has increased from 520 to 616 black rhinos and 367 to 417 white rhinos. The nation is also planning to dehorn its entire rhino population to prevent poaching for traditional medicines popular in Southeast Asia. However, other African countries such as Botswana and South Africa have fewer rhinos in 2021 than in 2017.



PUBLIC DOMAIN/SIMI

Jonathan: world's oldest land animal!

Born in the 1800s, Jonathan the tortoise is not only the oldest tortoise on record but also the oldest known living land animal at 190 years as of 2022. The Seychelles giant tortoise *Aldabrachelys gigantea hololissa* has been a resident of the remote South Atlantic island of St. Helena for the past 140 years. Shell measurements taken in 1880 showed a fully mature animal, which would mean he was at least 50 years old then.



Bird rediscovered after 140 years!

Last documented scientifically in 1882, the Black-naped Pheasant Pigeon *Otidiphaps insularis* has been photographed in New Guinea on a camera trap placed on a hillside. The finding underlines the urgency to protect the home of this endangered bird in Fergusson Island, near the east coast of the mainland. The expedition funded by Search for Lost Birds, is an initiative to find 150 avian species not recorded in science, but also not declared extinct, organised by BirdLife International, Re:wild, and American Bird Conservancy.



3-30-300 rule for better mental health



A study by ISGlobal of Spain has found that adhering to the 3-30-300 rule leads to better mental health, less use of medication and less psychologist visits. The rule, proposed by urban forester Cecil Konijnendijk, says that "one should be able to see at least three trees from home, have 30 per cent tree canopy cover in their neighbourhood

and not live more than 300 m. from the nearest green space".

Researchers from the Universities of Cambridge and Oxford, have found that most Asian countries, despite being biodiversity rich, have failed to achieve the target of having 17 per cent land as Protected Areas. Balancing biodiversity targets with human demands is crucial.

Ecuador court halts mining in Amazon

The indigenous *Shuar Arutam* people have had a historic win in protecting the Amazon rainforest from mining companies. The Constitutional court

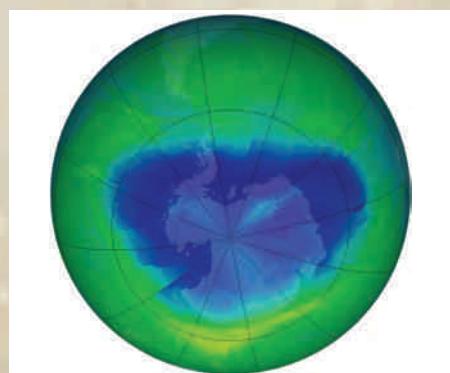
has ruled in favour of the indigenous communities, saying they have a right to choose what happens on their land. The ruling revoked the environmental clearance granted to the Panantza-San Carlos copper mining project. The project had already displaced locals, and would have contaminated tributaries of the Santiago river.

Meanwhile in India, the Uttarakhand High Court prohibited construction on the Sukhatal lakebed and ordered removal of encroachments. Plans to turn it into an artificial waterbody, would make it impermeable and block recharge of the nearby Naini lake.



Antarctic ozone hole shrinks further

Following the trend of the last two decades, the ozone layer hole over Antarctica became smaller in 2022. The consistent recovery of the hole is attributed to the ban on release of ozone-depleting chlorofluorocarbons enforced by the Montreal Protocol of 1989. The ozone layer stops the sun's harmful UV radiation from entering the Earth's atmosphere, thus protecting life on the planet.

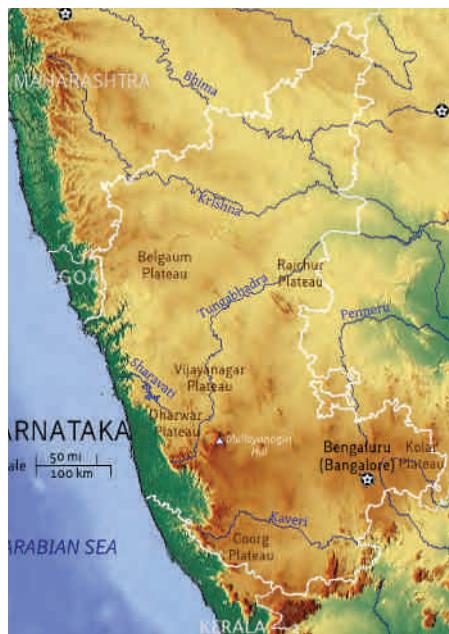


INDIAN IDOL

Meet the symbolic species of the biodiverse state of Karnataka!

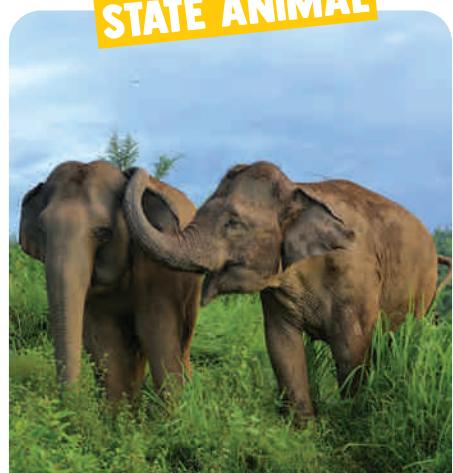
Apart from India's national symbol species, each of its states and territories have their own symbols including animal, bird, tree and flower. These flagship species are often selected as a state or country representative and they hold cultural and historical significance to support their conservation.

Karnataka, located in the southwest of India, is situated in the Deccan Plateau and is also at the convergence of the Western Ghats and the Eastern Ghats in the Nilgiri Hills. The state's natural heritage symbols include the Indian elephant, Indian Roller, sandalwood tree, and more. In addition to the state animal, bird and tree, which you will learn more about on this page, Karnataka also has a state butterfly, the southern birdwing – a large and striking swallowtail butterfly endemic to south India, and a state fish, the Carnatic carp – a freshwater fish endemic to the Western Ghats.



PUBLIC DOMAIN/WIKIPEDIA

STATE ANIMAL



PUBLIC DOMAIN/GICHRIST

STATE TREE



PUBLIC DOMAIN/ADITYA MADHAV

STATE BIRD



PUBLIC DOMAIN/SHANTANU KUVESKAR

For over 6,000 **Indian elephants**, Karnataka's tropical mixed deciduous forests provide the perfect habitat.

The **Indian sandalwood tree**, known as *shreegandha* in Kannada, is native to southern India and Southeast Asia.

The **Indian Roller**, locally known as *neelkanth*, meaning 'blue throat', has vibrant, iridescent feathers.

Read about these wonderful species and why they are Karnataka's symbols.

Karnataka's state flower is the lotus, which is also the national flower of India. These sweet-scented flowers are considered sacred in the subcontinent, and have been mentioned in ancient scriptures, traditions and mythology. In Kannada, the flower is known as *tavare-gadde*. The lotus plant is aquatic and perennial, with thick rhizomes that grow in the mud at the bottom of freshwater bodies such as ponds, lakes and marshes – and even in flooded fields. The flowers are either white or pink and grow solitarily. The starchy rhizomes are eaten in various parts of India. The flowers are often used as temple offerings. The rhizomes, leaves and flowers of the lotus plant have several medicinal properties and are used in the treatment of some ailments.



PUBLIC DOMAIN/WIKIPEDIA

THE GALLERY

When art reminds us of the natural world's magnificence and how human actions are destroying pristine Earth...



Nature has inspired artists for at least 45,000 years. The oldest known cave painting is of three wild pigs!

Cachalots

by Franck Seguin.

This image is part of the photographer's 'One Breath' series. He uses scattered light beams to emphasise the beauty of the large sperm whale while the dark spaces in the image highlight the vastness of the mighty ocean. The human's small size is contrasted to that of the whale. The image was produced with the help of free diver Guillaume Néry, with whom the photographer spent a year diving in oceans around the world.

Terra Incognita – Le Grand Canyon

by Guillaume Pépé. This photograph was part of a series created during the photographer's stay at the Dumont d'Urville polar research station in Antarctica. The white landscape encompasses the icy land and sky creating the illusion of an endless, vast landscape. The purity of the landscape suggests that it is pristine and unspoiled. The two Emperor Penguins look for a path toward the open water between 60 m. icebergs, the valley named 'the grand canyon' by scientists.



Evanescence Encounter by

Jave Yoshimoto. This artwork is a depiction of the 2010 BP Deepwater Horizon oil spill

and its impact on wildlife, the coastal habitat and humans. The brilliantly-coloured painting is a mix of traditional Japanese prints and graphic Manga style imagery. He creates a blood-red sky and swirling colours leaking from a burning oil rig. He shows an oil-covered pelican and a man cleaning crude oil. Godzilla is depicted appearing helpless despite his size and power.

DO IT YOURSELF.
D.I.Y. MAKE YOUR OWN
NATURE RAFT!

Nature boats can be made from things all around you – bark, branches, leaves... get creative and have some fun.

Materials required. Sticks, cord or thick thread, a thick bark shaving or paper or fabric for the sail.



Get started. Collect sticks fallen on the ground. Break the sticks to roughly the same length. Take an adult's help if needed for this.

Lay them out. Place the sticks close to each other into the shape of a raft horizontally and two sticks vertically at either end and tie them together tightly with the cord.



It's all about the sail. Tuck the bark in between the sticks and use a stick to prop it up.

Now take your raft to the nearest pond or lake to let it afloat.

Send pictures of your interesting and creative artworks to editorial@sanctuaryasia.com and we will publish them!

MUTTS

By Patrick McDonnell. Since 1994, MUTTS has dealt with themes ranging from animal protection, love and kindness to art and artists, highlighting many of the important issues that the world faces, including wildlife and environmental conservation. For more MUTTS, please visit www.muttscomics.com.



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WILD Encounter



On a Saturday evening, around 6 p.m., I entered the forest near my house to get some macro shots of insects. As I was heading back around dinner time, I suddenly came across this beautiful green vine snake *Ahaetulla nasuta* in the bushes. I immediately opened my camera to take some close-up shots of the

snake, concerned that the low battery would lead to fewer opportunities for getting a good image of the snake. Luckily, I was able to capture some of its fascinating poses. This slender, arboreal and slightly venomous reptile has been named for its ability to camouflage itself as a vine on a tree. Its genus name, *Ahaetulla*, means 'eye plucker' in Sinhala, thanks to the mistaken belief that it strikes at the eyes.

– Deepak S. Sagar, 22, Karnataka, student and wildlife photographer



A green vine snake in Hiremane, Karnataka.

HUM Animals



There is no 'US' and 'THEM'! All lifeforms on earth share a common ancestor. We must study 'Evolution through Natural Selection' - no longer considered a 'theory' but rather a fact - to get to know ourselves better!

Researchers claim that *Homo naledi*, an ancient human relative, used fire.

Researchers studying the cramped Rising Star cave system in South Africa claim to have found evidence that a human relative, *Homo naledi* – whose discovery was published in 2015 and has remained controversial – with a brain only one-third the size of ours, used fire for light and cooking a few hundred thousand years ago. Use of fire has long been attributed to *Homo sapiens* and Neanderthals alone. The team believes that *H. naledi* used small fires in chambers in the cave system to light their way. The new evidence has not yet been examined by other scientists and the burned material has not been dated. Many paleoanthropologists remain skeptical about these conclusions.



PUBLIC DOMAIN/CICERO MORAES ET ALII

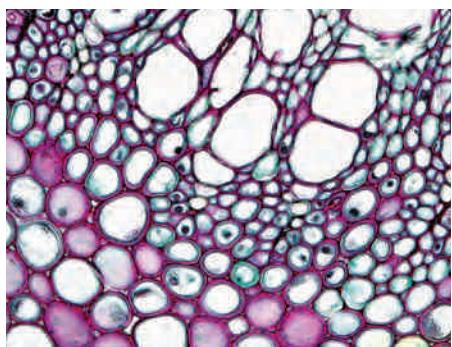
For 200 years, zoologists have thought that mobile upper beaks arrived much later in bird evolution. But the discovery of a key skull bone in an ancient bird that lived nearly 67 million years ago reveals that a piece of the upper jaw closely resembles its moveable counterpart in today's chickens or ducks. Researchers have now concluded that this ancient bird also had a jointed upper beak.



PUBLIC DOMAIN

A two-million-year-old Greenland ecosystem was reconstructed with environmental DNA – Earth's oldest discovered till date – found in Ice Age sediments.

Plants with more complex water transport structures tend to be more drought-resistant. Researchers have arrived at this conclusion after studying extensive fossil records – a collection of images of ancient and extinct plant xylems spanning approximately 50 million years, put together by paleobiologists over the past century. This increases their likelihood of surviving and passing this characteristic on to their offspring.



PUBLIC DOMAIN/FAYETTE A. REYNOLDS

DINOFACTASAURUS!



PUBLIC DOMAIN

At the Hermiin Tsav site in the Gobi desert, paleontologists have discovered the world's first dinosaur with a streamlined body, distinctly adapted for swimming. It was just 0.3 m. long and existed around 71 million years ago in prehistoric Mongolia. This new species was named *Natovenator polydontus*, the "many-toothed swimming hunter" by the paleontologist team studying its fossil remains. Researchers noticed the similarity between the design of the skeleton and the shape of many modern water birds. It neither had wings nor did it seem to use its forelimbs for walking, suggesting a penguin-like gait.

Juhu's winged neighbours.

Birds are a huge part of my life. Since 2002, I've documented and recorded over 60 bird species in Juhu. During the pandemic, I thought I would feel like a caged bird. But my love for avians sparked a lockdown project. *Text and photographs by Saloni Tirodkar*

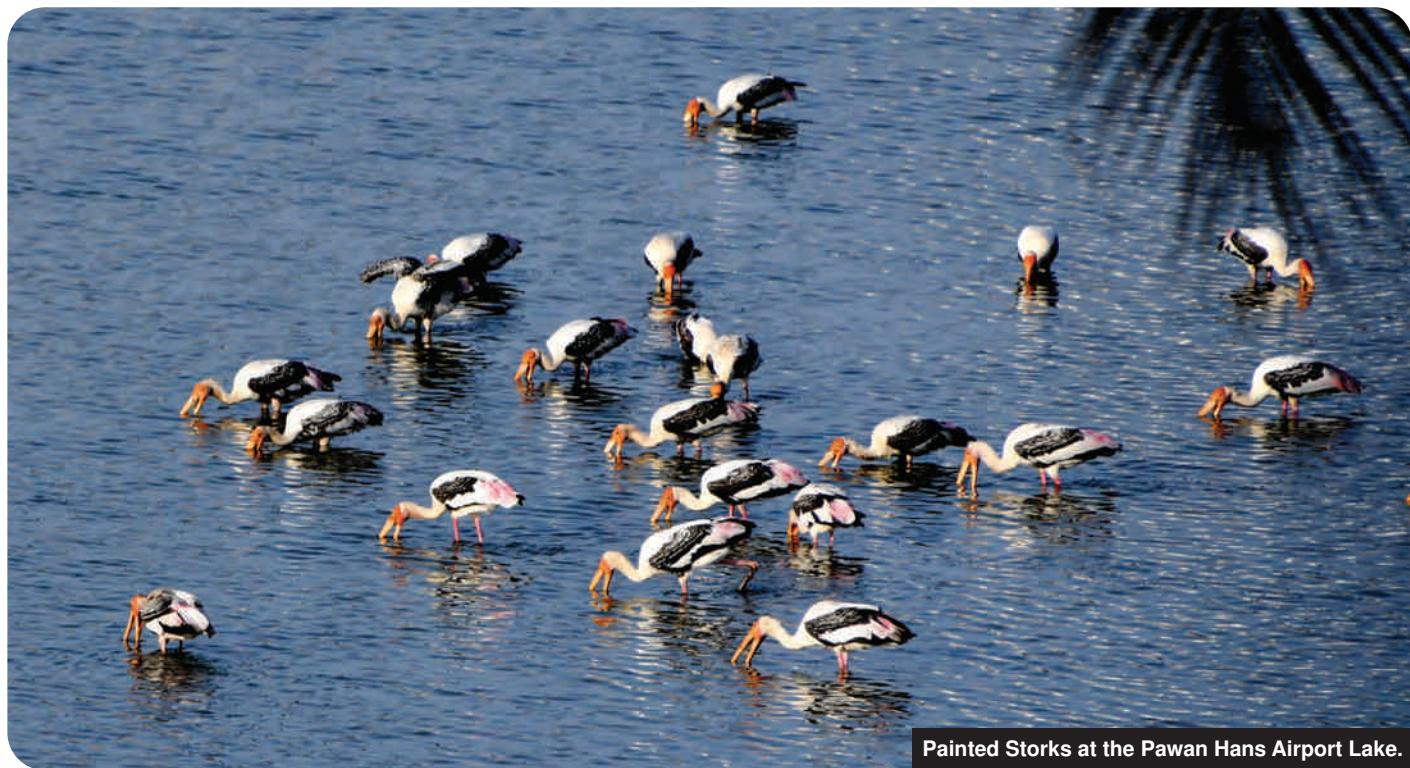
WHAT DO YOU HEAR?

When you pause your work, and close your eyes, you expect some quiet time. Instead, in a city like Mumbai, you will notice a complete absence of silence. There's that pesky horn, the buzz of construction equipment, and music playing loudly. However, if you listen intently and are lucky to be surrounded by a bit of green... you could hear the trill of a melodious bird. Or at the very least the rasping caws of a crow, and if you live in an

apartment, the echoing coos of a pigeon. Birds are literally all around us, even in a metropolis like Mumbai. These omnipresent winged creatures are a huge part of my life. My interest in wildlife and birdwatching blossomed after I met Pramod Nargolkar, a wildlife warden who turned 21 acres of land into a man-made jungle called Sipna, in Pune. Though I live in bustling Juhu, Mumbai. I am lucky to have the Juhu Pawan Hans Airport Lake as my backyard. Since 2002,

I've documented and recorded over 60 species of birds here.

The beautiful lake hasn't been untouched. In 2007, my house help shared that her neighbours captured and ate Purple Moorhens. I swung into action and wrote to Bittu Sahgal, Founder Editor of *Sanctuary Cub*, urging him to write about it. Following this, the Pawan Hans Airport authority made strict regulations and stopped locals from fishing and accessing the lake.



Painted Storks at the Pawan Hans Airport Lake.

Water hyacinth taking over the lake.



Indian Grey Hornbill.



Lesser Whistling Ducks in flight.



When the COVID-19 pandemic struck, I thought I would feel like a caged bird. But my love for avian life sparked a lockdown project.

LOVE THY NEIGHBOUR

I decided I wanted to introduce my human neighbours to their avian neighbours, and show them that they were surrounded by beautiful birds – Lesser Whistling Ducks flying with the moon on their back, Painted Storks taking flight during golden hour, and Spot-throated Fantail calls at 4:30 a.m. I made a systematic compilation of birdlife around us.

I decided to be Santa Claus for 40 families and distributed a booklet with information of all the birds one could see in the vicinity. Some species I documented and described in the booklet were Eurasian Spoonbill, Pheasant-tailed Jacana, Northern Shoveller, Glossy Ibis, Chestnut Bittern, Eurasian Coot, Paradise Flycatcher, Rufous-backed Shrike,

Greenish Warbler, Shikra and herons and egrets.

To my utter surprise, I received an overwhelmingly positive response! My neighbours – young and old – thanked me for showing them that life was thriving in the emerald lake in our vicinity. They'd always seen and heard the calls of Purple-rumped Sunbirds and Golden Orioles, but could never comprehend which bird was making which call. Armed with the booklet, they could now begin identifying different species! It was pure joy to see so many people discover the magic of birding.

A CHANGING FUTURE

However, what was once a thriving waterbody is now seeing ominous changes. Since the beginning of 2022, water hyacinth is slowly taking over the Juhu lake. It is an invasive species that indicates polluted water, and it blocks sunlight and oxygen from reaching aquatic organisms.

Several attempts of getting in touch with the Airport Authority and ministers have not helped. I haven't seen birds in the lake for almost a year! There is no sight of flamingos, Painted Storks, no Brown-headed Gulls or Little Terns hovering overhead, no Marsh Harrier in stealth mode terrorising Cattle Egrets and offspring of Purple Moorhens following their mothers.

BIRDS OF JUHU

- ~ Raptors: Pariah Kite, Eurasian Marsh Harrier, Shikra
- ~ Waders: Grey-headed Swamphen, Eurasian Coot, Greater Flamingo, Cinnamon Bittern
- ~ Garden: Golden Oriole, Purple-rumped Sunbird, Coppersmith Barbet, Ashy Prinia
- ~ Common: Barn Owl, Pied Myna, Rose-ringed Parakeet, Asian Koel

Black-crowned Night Heron.



I've been an Interspecies Telepathic Communicator since 2017. While all may not understand it, I believe I can connect with other living species and understand what they are trying to tell us. My communication with the lake and its denizens reveal the message, "This is change, and change is coming." What kind of change? I hope it is for the better, but we'll simply have to wait and watch.

Saloni Tirodkar has always been an animal person and bird enthusiast. Honing her passions, she's now a full-time telepathic animal and nature communicator, and a wildlife and pet photographer.



YOU NEVER KNOW WHAT YOU'LL FIND!

MIXED BAG

Who is moving the rocks in the flat desert landscape of Death Valley?

For several decades, no one could figure out how rocks in Death Valley located on the border of Nevada and California, seemed to be moving, usually leaving behind long, clear tracks in winter. The rocks are composed of dolomite and syenite. All sorts of theories floated around, from aliens to mysterious creatures being held responsible. In 2011, researchers Richard D. Norris and James M. Norris placed GPS devices on the rocks and used time-lapse cameras to record their movement. After two years, they found the reason – during winter months, a thin layer of ice formed at night and broke off during the day into small plates. When such a plate is under a rock, the wind and water movements push the rock slowly, which results in the rocks sliding off and leaving tracks in the mud.



PUBLIC DOMAIN/L. G. CHARLOT



* LOL *

What kind of tree fits in your hand?
The palm tree!

Why is the mushroom the life of the party?
Because it is a fun-gi!

What do you call a cheerful porcupine?
Perky-pine!

How do mammals hold their breath underwater?



PUBLIC DOMAIN/TODD KULESZA

The lungs of aquatic mammals such as whales, beavers, muskrats have a high amount of myoglobin, an oxygen-binding protein. These molecules contain a higher electrical charge than those found in land-based animals, allowing them to store higher amounts of oxygen for a longer period of time.

FAR-OUT FACT!



PUBLIC DOMAIN/KEITH WILLIAMS

Speedy electrons cause dazzling light in the sky

You may have read about auroras seen high in the northern and southern latitudes. While these are due to solar storms, radiation outbursts, and charged particles from the sun striking the earth's atmosphere, scientists were perplexed by the mechanism. After two decades of research, scientists are closer to an answer. Imagine a web of lines! If these are stretched, they try to snap back into place creating an Alfvén wave. These waves accelerate electrons that crash into atmospheric oxygen and nitrogen atoms with such energy that they create the light shows called auroras.

Sustainable ancient practices should guide modern marine technology

Mariculture or the management of marine resources has been practised for thousands of years. The ancestors of the *Kwakwaka'wakw* and other indigenous groups in British Columbia built and maintained terrace-like constructions or clam gardens that were ideal for clams and other edible shellfish. Known as *loxiwey*, these gardens increased shellfish productivity and resource security. Such strategies show a great ecological understanding that was way ahead of modern management systems.



PUBLIC DOMAIN/JOHN HARPER

Tiny Encounter

On a summer morning walk in my garden, I was surprised to find a tiny, injured Indian Scops Owl – one of the most widespread resident owl species in South Asia.

BY HELGA KHUMANthem

A surprising encounter

During the COVID-19 lockdown, tired of being indoors, I went out to take a walk around the garden. There was a cardboard box kept on top of some storage boxes in the shed, and our clearly agitated dogs were circling the area. I looked inside the box and was surprised to see the tiniest owl I'd ever seen in my life! It seemed just as surprised to see me.

My sister joined me and we both watched the owl quietly. Owls are known for their unique habits and appearance, but I never really realised just how fascinating they were until I looked at one up close. While most birds have sharp and quick movements, owls move so slowly and robotically that it's almost unnerving. This particular baby owl's movements were even more drawn out, as it was unwell. It sat in a corner of the box and turned its head ever so slowly towards us.

The rescue

My father had discovered it on the ground earlier that morning and had carefully moved it to the box. Strangely enough, it had been found smack in the middle of the yard and not near any trees. We tried to search for its parents or a nest but had no luck. Scops Owls, though common, are very good at hiding, so it was no surprise that we had never seen this particular type of owl before.



Scops Owls tend to breed in tree holes and abandoned buildings.



HELGA KHUMANthem

The Indian Scops Owl *Otus bakkamoena* has grey or brown underparts, peppered with faint buff spots and dark streaks. Its diet consists mainly of insects, lizards, small birds, and rodents. It is a nocturnal feeder, and hides in the trees during the day.

It didn't seem interested in drinking the water we offered it. We considered looking up what to feed it. But in such situations, it's unlikely that the animal will eat anything. And it's best to leave that part to trained officials.

The Forest Department authorities were soon on their way after we called, but until they arrived, I continued to observe the bird and take a few photographs. Looking at its feathers, I could definitely see it blending in seamlessly with the forest.

Special sightings

The Forest Department took the bird into their care and we said goodbye to the owl. To have such a charming encounter with a wild animal and get to capture the moment is not something that happens everyday. Back at our farmhouse, we have a white Barn Owl that lives in the attic. Unlike the baby Scops Owl, the Barn Owl is huge! It lives at the highest point of the roof, and you can see it sitting outside if you crane your neck.

Owl sightings are extra special considering how they're nocturnal. It's always a pleasure to see the Barn Owl at the farm, and the same goes for the baby Indian Scops Owl. You may end up saving an injured animal's life by taking the right steps, so do remember to stay kind and compassionate towards every creature you encounter.

GREEN PEEPS



Meet Priya Ranganathan, 29, geologist, ecologist and storyteller.

What inspired you? I lived for many years in the U.S.A. and seeing the way wildernesses were maintained there (despite having barely a fraction of India's biodiversity) made me wonder why we did not put as much effort in our country. I was also inspired by Ruskin Bond, whose love for nature is evident in his writing; my mother, who encouraged me to spend time in nature and write; and Dr. Jane Goodall for her work saving the wild apes.

Tell us about your work?

After my undergrad studies in geology and biology and a Masters in Environmental Management, I worked for four years in conservation biology in Bengaluru. Now as a PhD student in ecology at the Ashoka Trust for Research in Ecology and the Environment, I have designed a research project to understand and conserve the endangered Myristica swamps, an ancient, ecologically-diverse ecosystem in the Western Ghats. I hope to study the conditions that these swamps require to persist and look at the cultural ties people

have to these swamps so that we can better preserve them. I also began a children's e-magazine *Youth for Nature* that brings stories of conservation heroes, India's wildlife, and adventures in the wild to youth to create a fun platform of learning and collaboration for children. It has now passed 10 issues! Science communication is important because the public, especially kids, need to know why our wildlife and environment are worth preserving.

Tell us a bit about your future plans. I hope to work as a project manager or senior scientist to help further conservation projects in the Western Ghats. I would also love for *Youth for Nature* to increase its reach and conduct more interactive events for children and nature walks.

A book that influenced you?

Ruskin Bond's *Rain in the Mountains* was influential because it taught me about how good, descriptive writing can influence people to care about nature. I also recommend T.R. Shankar Raman's *Wild Heart of*



COURTESY: PRIYA RANGANATHAN

India, Deepak Dalal's 'Vikram Aditya' series, and Gerald Durrell's *My Family and Other Animals*.

Any documentaries that you would recommend.

'Wildest India,' on Netflix made me want to save India's biodiversity from extinction. 'Planet Earth,' 'Wildest India,' and 'Aghanashini' (on YouTube) allow you to immerse yourself in our planet's beauty.

A favourite quote? ...for every time I see the sky, I'm aware of belonging to the universe than to just one corner of the earth"

– Ruskin Bond

What gives you hope?

Children advocating for a cleaner environment, volunteering to clean up, and attending workshops make me hopeful that in the near future, we will have a conscientious citizen body. The number of students interested in environmental conservation work is increasing, and that makes me really proud of our country's children.

Advice for young people?

Keep exploring and challenging the way people view the world. It's up to your generation to keep the momentum going. Use your voice. If you don't ask questions or voice your opinions, we will not be able to save our biodiversity.

CONNECT WITH PRIYA!

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Instagram: @spotmepriya; @yfn_magazine (*Youth for Nature*)

Email: rpriya.ecology@gmail.com



COURTESY: PRIYA RANGANATHAN

A FEROCIOUS, TENDER MOM

As a wildlife photographer, it is beautiful when you gain an animal's trust and it allows you to observe tender moments with its young ones. More so when the animal is a fierce tiger mom. I had a magical time photographing the affection between the majestic cat and her cubs in the forests of Tadoba-Andhari Tiger Reserve. **By Narayanan (Naresh) Iyer**



Tiger moms are extremely cautious and solely responsible for raising cubs. They only leave the cubs to hunt. Licking keeps the cubs clean and strengthens the mother-cub bond.

I am a software engineer by profession and wildlife photographer by passion. I love spending time in nature, observing wild wonders. I hope to help protect wildlife by using images to raise awareness.



Wild Wonders.

Stunning images that capture the sheer magic of nature's reality – visualised by young, talented photographers.

When we think of millions of coexisting species, and how we and the spider's web are a fragment of the same universe, we see magic. Poetic magic, evolutionary biologist and author Richard Dawkins would say, which stems from a scientific understanding of the world. He'd tell you this magic is wonderful, and real – wonderful *because* real. How about looking at it through the eyes of young photographers?





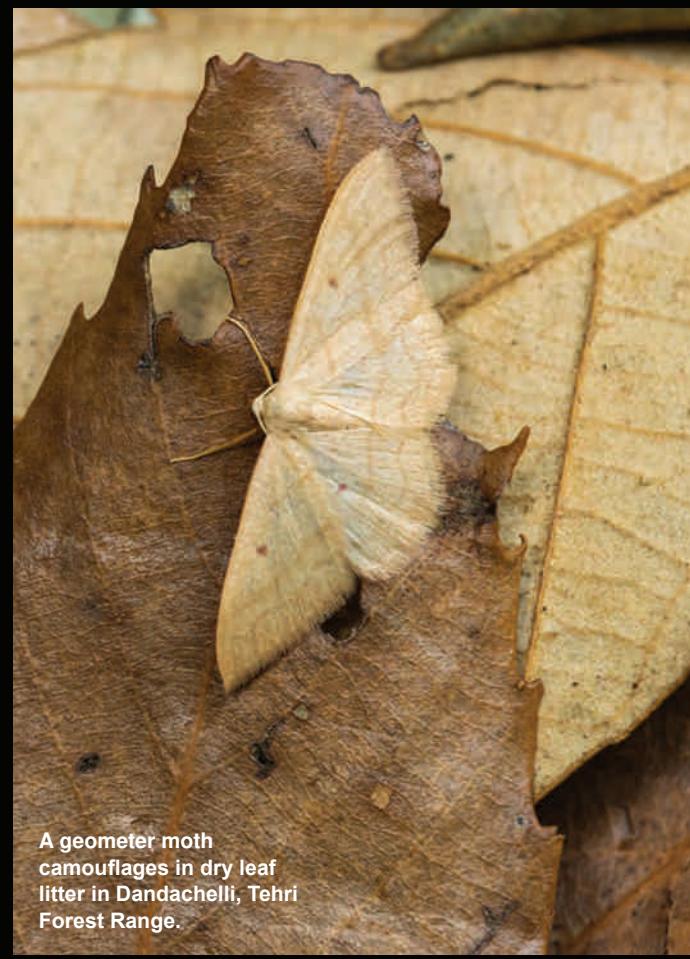
A Cormorant sunning itself in the morning mist of the Kanha Tiger Reserve, Madhya Pradesh.

VINAY BADHE SANCTUARY PHOTOLIBRARY

PHOTOFEATURE

A praying mantis reposed on a flower in Singur, West Bengal.

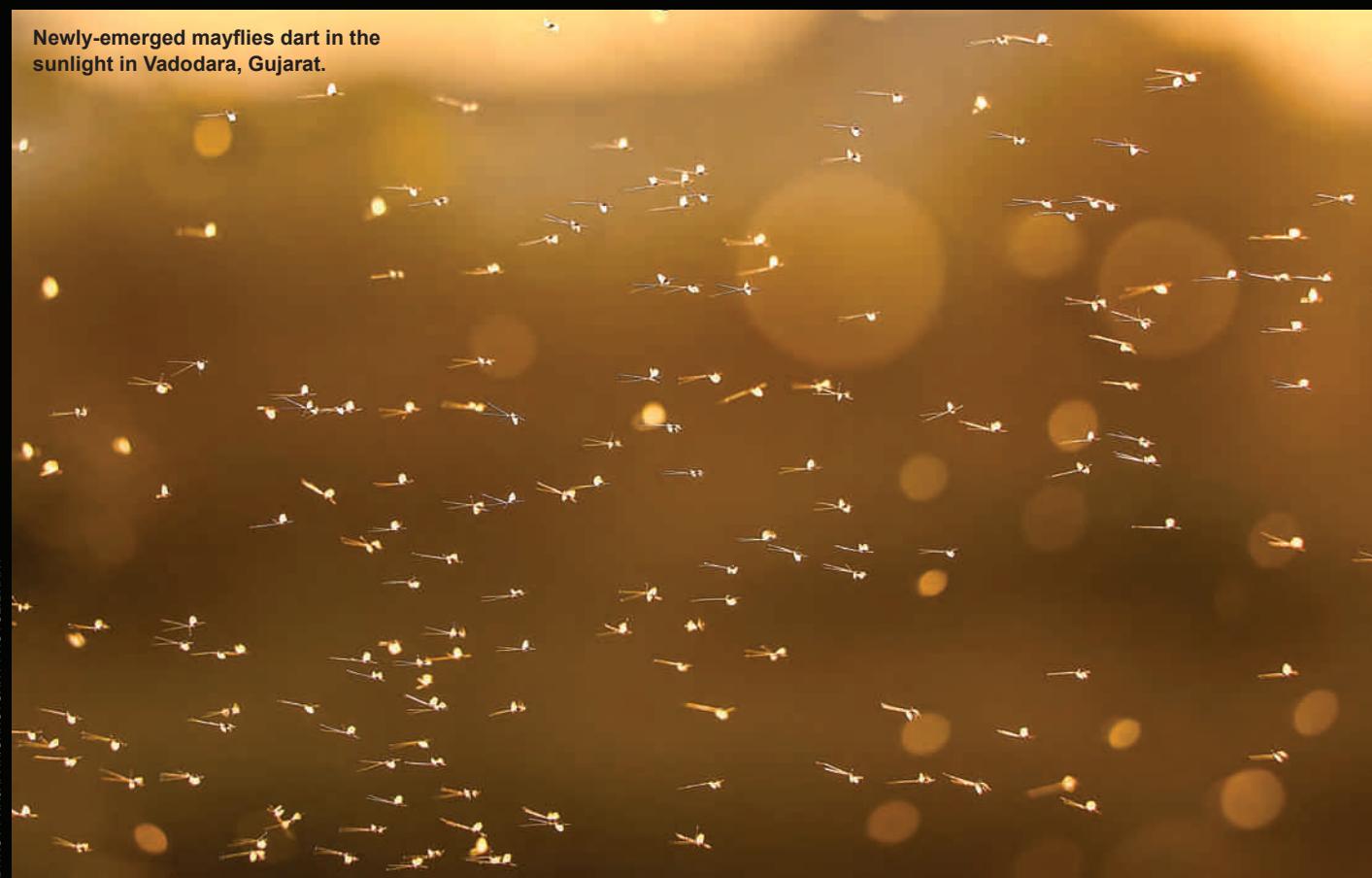
SWASTIKA MUKHERJEE/SANCTUARY PHOTOLIBRARY



AKSHAT PRATAP/SANCTUARY PHOTOLIBRARY

Newly-emerged mayflies dart in the sunlight in Vadodara, Gujarat.

DHRUV PRAJAPATI/SANCTUARY PHOTOLIBRARY

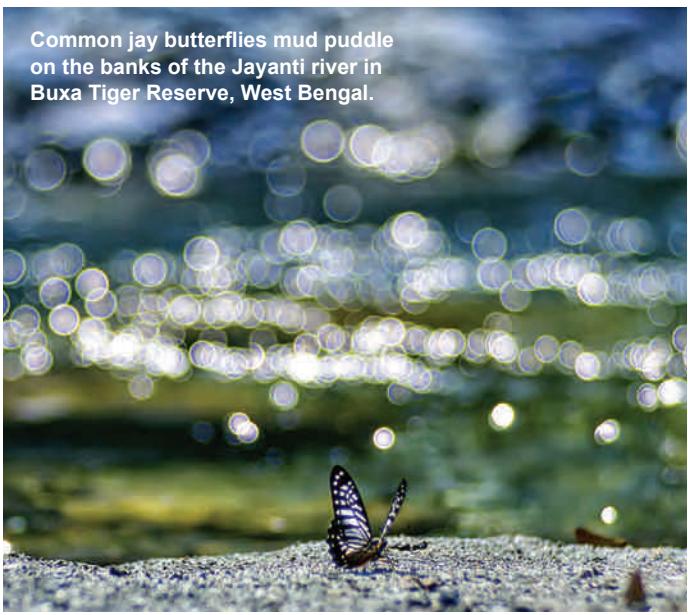




Hyacinth flowers frame a Grey-headed Swamphen in Korattur lake, Chennai.



Leaf litter provides an ideal habitat for a saw-scaled viper in Surat, Gujarat.



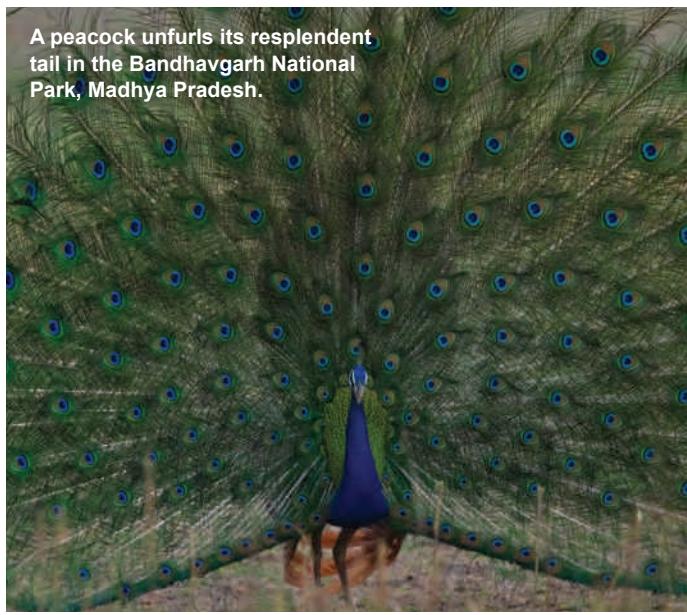
Common jay butterflies mud puddle on the banks of the Jayanti river in Buxa Tiger Reserve, West Bengal.



Dewdrops adorn an orbweaver spider web in Puducherry.



Two chital stags create sharp silhouettes in the early morning at the Rajaji Tiger Reserve, Uttarakhand.



A peacock unfurls its resplendent tail in the Bandhavgarh National Park, Madhya Pradesh.

PHOTOFEATURE

PARTH KANSARA/SANCTUARY PHOTOLIBRARY

Indian fox siblings snap at each other playfully in the Great Rann of Kutchh, Gujarat.



SACHITANANDA JENA/SACITHA/SANCTUARY PHOTOLIBRARY

A flock of Northern Pintails splash while taking flight from the Chilika lake in Odisha.



SUVANJAN DAS/SANCTUARY PHOTOLIBRARY

A Red-crested Pochard creates golden ripples in the Chupi Char ox-bow lake, West Bengal.



TEST YOUR ECO-SMARTS

QUIZTIME ...???

HINT!
CUB
January
2023 holds
the clue!

Did you learn some new facts in this issue? Try this quiz to see how much you remember!

Q1. Which part of the saffron blossom is used to create a yellow dye?
 Petal Stigma Sepal Pollen

Q2. Which new Pavilion can the young call their own at COP?
 Food4Climate Pavilion Children and Youth Pavilion WHO Health Pavilion
 The Nature Zone

Q3. How long is an Amur Falcon's migration trip?
 22,000 km. 11,000 km. 5,900 km. 14,000 km.

Q4. Which animal can sense frequencies up to 300 kHz?
 Greater wax moth Asian elephant Fruit bat Gangetic dolphin

Q5. Auroras are caused because of accelerated
 Protons Neutrons Electrons None of the above

ANSWERS 1. Stigma, 2. Children and Youth Pavilion, 3. 22,000 km., 4. Greater wax moth, 5. Electrons.

Wild GUESS!

1. Indian Scops Owl

2. Brown Fish Owl

3. Spotted Owlet

The correct answer to last issue's **WILD GUESS** is **KARVI**. Email your answers to lakshmy@sanctuaryasia.com



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PLANET CHEF



Silky Simple Chocolate Mousse



PREP TIME: 5 min.

INGREDIENTS: 100 g. roughly chopped dark chocolate; 340 g. silken tofu at room temperature, drained; 2 tbsps maple syrup (can use date syrup/pancake syrup); toppings (optional): chocolate shavings, raspberries, or fresh mint.

METHOD: Melt chocolate in the microwave in 30 second intervals, stirring each time. While the melted chocolate cools, blend the silken tofu and maple syrup in a food processor until smooth. Add the chocolate and blend until well combined. Divide the mixture into three bowls and refrigerate for 30 mins. Add toppings of your choice!

FUN FACT: Tofu, derived from soya bean, is a useful plant protein. It is a good source of antioxidants.

Choosing wisely what to put on your plate is a good way to help fight climate change! A whole-food, plant-based diet is better for your health, the planet and the animals! Here is an earth-friendly recipe that is easy as pie.

Sonam Kapoor

Ahuja, a National Film Award winning Indian actor, is a staunch advocate of animal rights along

with reprising roles in popular Bollywood movies such as *Neerja*, *Khoobsurat*, *Ranjhana* and *Delhi 6*.

From keeping animal skins out of her fashion label Rheson and not including a horse in her wedding procession, she takes conscious steps in her personal and professional life to protect animals. She has been following a plant-based diet for over five years, and was named PETA India's Person of the Year for 2018 for her actions in favour of animals.



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Sanctuary

NATURE FOUNDATION

www.sanctuarynaturefoundation.org

Registered with Registrar of Newspapers under RNI No. 37628/1981
Postal Registration No. MCS/010/2021-23.
Published on 1st of every month
Posted at Patrika Channel Sorting office, Mumbai - 400001.
Posting date: 3rd or 4th of every month

Trees for life

