

IndiaWilds THE.LAND.OF.THE.TIGER

Re-engineering our Life: Back to Nature

Prakriti Rakshati Rakshataha

Nature protects the protectors goes the wise saying by our ancestors. These wise men and women had lived in nature and had keenly observed natures myriad ways and means, deeply understood the patterns and designs of nature, its impact on our lives and the intricate linkage of our life on the natural world.

Inside this issue:

Re-engineering our Life: Back to Nature	2
Turtle Tales: Arribada In Od- isha	7
Conservation News	13
Equipment Discussions	16
Natural History	26
Wildlife Photography	28

Even though some of our early texts talk about clearing forests to build new cities, if one dispassionately understands the origin of the texts then one can understand the origins of the train of thought of coexisting with nature and clearing forests (even to a limited extent based on need). The early settlers who had come from the grasslands of the steppes were nature worshippers as noted in the beautiful hymns in the Rig Veda where the forces of nature are eulogised. They were in awe of the forests as well as intimidated and fearful of what kinds of threats the dense forests holds for them. Hence at times clearing up of the forests to create Mahajanapadas or mega cities was seen as a heroic task. When one considers the massive effort needed to cut down trees or break down a hill by means of an axe or hammer or fight with elephant or tiger with just bows and arrows i.e. devoid of all modern equipment, it used to be test of strength. Clearing up forests was also a means to break down the defences of the forest tribes who were resisting the advance of these nomadic races. Hence burning or clearing up of forests are at times seen in the epics like Mahabharata. The forest tribes on the other hand

Cover Page Photograph:

Tiger by Sabyasachi Patra



Himalayas



used to worship trees along with worshipping nature Gods like Sun, Moon, wind, thunder, Mountains like Himalaya etc. Nevertheless, there was a sense of dharma in both the nomadic grazers as well as forest living tribes. A sense of right and wrong dictated their actions. Even harming insects was seen as inviting their curse.

Lesson from Mahabharata:

In Mahabharata it is said that Gandhari, wife of King Dhritarashtra and mother of 100 sons was cursed by an ant. Gandhari as a kid had once unknowingly thrown hot water while cooking rice and the hot water had killed the 100 offspring of an ant. The ant then cursed that Gandhari will have 100 kids and all of them will die. In some versions the ant becomes a termite or insect, nevertheless one gets the idea that even unknowingly we are not supposed to harm any species. Whereas a lot of people these days may not attach any importance to it, even today there are sects like Jains who cover their mouths so that unintentionally they won't ingest flies and harm them.

Bruhad-aaranyaka Upanishad:

Our Upanishads teach us that there is God in everything. In Bruhad-aaranyaka Upanishad, Yajnavalakya on a series of questions by Vidagdha Sakalya first says that there three hundred and three and three thousand and three Gods and then he says "They are but manifestations of them, but there are only thirty three Gods. And when again asked "Katame te trayas trimsad iti?" (Which are these thirty three?), Yajnavalakya says "astau vasavah, ekadasa rudraha, dwadasadityah, te ekatrimsat indraschaiva, prajapatischa trayastrimsav iti" means "The eight Vasus, the eleven Rudras, and the twelve Aadityas, these are thirty one, Indra and Prajapati (makeup) thirty three."

"Katame vasava iti?" Which are the Vasus?

Yajnavalakya responds, "agnisca prithivi ca, vayus caantariksham caadityas ca dyaus ca chandramas ca nakshatrani ca, ete vasavah, ete su hidam sarvam hitam iti, tasmad vasava iti" means "Fire, the earth, the air, the sky, the Sun, the heaven, the Moon, the stars, these are the Vasus for them in all this is placed: therefore they are called Vasus"

Praaninaam karma-phalasrayatvena karya karana samghata-rupena tan nivaasantvena viparinam anto jagad idam sarvam vaasayanti vasanti ca.

The Vasus transform themselves into bodies and organs of all beings which serve as the support for their work and its fruition as also into their dwelling places. They help other beings to live and they themselves live.

Te yasmaad vaasayanti, tasmad vaasva iti: means because they help others to live they are called Vasus.

Because the Vasus or Gods transform themselves into different beings, people are told "Sarva ghate Narayana" ie. God is there in everybody. So there are traditions, even today in the eastern and in some southern states, of doing Namaste and saying Vishnu when your feet accidentally touches someone else as well as any inanimate object.



Aping the British:

Anything, which was termed as God was deemed as sacred. So people didn't cut off trees just for the sake of it. Even today, old woodcutters of some tribal communities say that when you need wood and have to cut down a tree then they choose a sick one and cut it. They know that healthy trees will grow whereas a sick one will fall down at the first sign of storm. They ancients knew that they should kill only for their needs. However, the British taught us wanton slaughter of wildlife. In one birdshoot in 1938 in Keoladeo Ghana wildlife sanctuary in Bharatpur, the then Governor General and Viceroy of India Lord Linlithgow shot 4273 birds.

Gradually our cultural values have fallen by the wayside on our relentless quest for a materialistic lifestyle, we are ready to sacrifice other species and our wilderness areas for meeting our narrow short-term vision of creating concrete megacities.

Modern lifestyle not in sync:

We have to realise that living in sync with Mother Earth along with other species is the best lifestyle. Due to our intense hatred for other species we have been eliminating them and hence creating major problems.

In India, though we have lived with snakes for thousands of years, we can't identify the few poisonous species from the many non-poisonous ones. Snakes feed on the rodents and keep their numbers in control else the rodents have a habit of

multiplying exponentially. Similarly having trees nearby and a bit of garden area lying "unmanaged" with bushes ensures that mongoose can live and feed on rodents as well as snakes.

Unfortunately, we have adopted the aesthetics of the British and want lawns. So we clean up the gardens for lawns. And since the native grass doesn't look great in lawns we import grass. And to keep the grass green we spray pesticides. We forget that lawns take up more water. The water then washes away the pesticides and gets collected in the streams or leach down to poison our earth and any fruits or vegetables grown nearby.

Trees ensure that shikra, kites, eagles can perch on the branches and feed on the rodents and snakes. We cut down large trees because we get annoyed at the leaves falling down as we want that clean look in our garden and roof top. Once the big trees are cut, we lose the shade which used to keep buildings cool. So we rush for air coolers and air conditioners. Similarly more concretisation leads to the air surrounding the buildings heating up and creating a heat island effect leading to desperate installation of ACs in home and hence the spike in energy consumption. The increased demands for energy and water for the metros and other big cities needs dams in rivers. When the flow of a river is stopped, it effectively stops the movement of species in the rivers as well as stops the self-cleansing ability of the river. Perhaps this is why the ancient seers wrote some 3500 years ago in Rig Veda (19th Mantra of 23rd Sukta of 1st Mandala)

"Apsu antah amrutam,

apsu bhaisajam,

apamuta prashastaye,

devah bhavat bajinah"

This loosely translates as "immortality is within the waters, the healing powers are in the waters, O Gods, become full of plentitude (so that) the waters become praiseworthy".

When entire landscape is converted into concrete jungle, it has impact on the weather pattern. Rainfall decreases due to lack of desiccation from trees. Exposed soil is more prone to erosion leading to desertification. So simple actions by millions of people in unison has lead to the present crisis and onset of climate crisis.

Cornona as trigger for a better world:

As we cross a month of forcibly staying indoors due to the corona virus going rampant and killing more than 2 lakh people worldwide, it is a time to introspect about our wayward ways and think of the best way forward. It is very clear that we can't be working in the same lackadaisical manner in which we have treated the environment and our natural world.

The metros and other big cities have immense level of pollution. A recent study by Leonardo Setti at University of Bologna in Italy have found corona virus on particulate matters in the air. (*SARS-Cov-2 RNA Found on Particulate Matter of Bergamo in Northern Italy: First Preliminary Evidence*; doi: https://doi.org/10.1101/2020.04.15.20065995, April 24, 2020).

Though this is a preliminary study, given the huge pollutions in Indian cities, we need to be very careful about the health impacts and need to immediately work towards decongesting our big cities. Simply reorganising the transport system into public transport will not work. We have already seen the impact of Odd-Even numbered vehicles plying on the roads on alternate days and have seen that the impact on pollution is very less. And the lockdown induced clear skies with mountain peaks visible from as far as 200kms is a clear sign that we need to have wholesale changes to no only the way we do business but the way we live and exist.

It is abundantly clear that we need to reimagine the way we need to move ahead. And the best thing is we don't need an extensive re-imagination exercise as we can simply learn from nature and change our lifestyle.

With the advent of internet broadband and the social media, people are more busy in their smartphones and connected with their own groups. They are physically disconnected from their neighbours. They are living in those places simply because of the need to work in big corporates. With the forced work from home situation due to the Corona virus, people as well as companies are now used to this kind of disruption. And corporates now know that these kinds of virus attacks can reoccur in future. When corporates do the necessary tweaking to their security protocols, people can then go back to their native places and work. It is the best way to decongest our cities and large towns and ensure that people can be more connected with nature.

Saving Planet Earth:

The corona virus has forced us to depend on the local stores for our needs. We have local produce and happy with it. However, people in metro towns suffer due to lack of vegetables and fish as most of the things are transported from far off towns. The reduction in air cargo as well as road and rail cargo due to the virus is leading to more reduction of greenhouse gases than the collective resolutions of hundreds of world leaders in United Nations Climate Change conference of parties COP 21.

Man has used his mind to create creature comforts for his sense organs. However, as the God of death Yama has told Nachiketa in the Katha Upanishad:

"Indriyebhyah param mano

Manasah sattvam-uttamam;

Sattvaad-adhi mahaan aatma

Mahatovyaktam –uttamam"

Which means "superior to the sense organs is *manas* (mind). Superior to *manas* or mind is *buddhi* (reason), higher than *buddhi* is *mahat* (cosmic mind). And higher than *mahat* is avyakta (nature in its undifferentiated state).

We have all grown up watching Hollywood movies like Independence Day and believing that all countries in the world can come together and fight a common enemy invading the earth. Today corona virus or Covid-19 is standing as a common enemy of the human race, apart from our own stupidity of course. We hope that the people can convince our leaders to stop pandering to a select few industries and stop decimating our wilderness areas and wildlife.

TURTLE TALES: ARRIBADA IN ODISHA

By Mrs. Shakti & Mr. A S Bishnoi

Introduction

Every Year Odisha witnesses a migration of epic proportions. Huge numbers of Olive Ridley turtles arrive at Gahirmatha, Rushikulya and Devi River mouth to lay eggs. To a lesser extent, some Olive Ridley turtles (*Lepidochelys Olivacea*) also visit the coasts of Maharashtra, Tamil Nadu, Andhra Pradesh as well as Andamans. This is a unique feature in their life as every year these turtles come to the same place for mating and laying their eggs. The hatchlings after reaching adulthood again come back to the same place to lay their eggs.

Our Experience

An opportunity to witness this mesmerising spectacle materialised suddenly when we got a call from a forest official friend. Both of us knew that we don't have time, so immediately along with our kid we drove from Balasore and within four hours at 11pm in the night were were in the site to withness the mass nesting of turtles.

Olive Ridleys (Lepidochelys Olivacea), are the smallest of all other turtles. They owe their



name to the colour of the carapace and skin which is grey to green. Found in the warm tropical waters of Pacific, Indian and Atlantic Oceans, the Olive Ridleys have been the most abundantly found sea turtle. However, their numbers have been declining over the past few years, and the species is recognised as Vulnerable by the International Union for conservation of



Nature (IUCN) Red list. These turtles, along with their cousin, the Kemp's Ridley turtle, are best known for their unique mass nesting called "Arribada", where thousands of females come together on the same beach to lay eggs.

Olive Ridley Turtles returning to the sea

Olive Ridley turtles have given Gahirmatha the distinction of being the world's largest rookery as official figures indicates that 90% of the population of sea turtles along the Indian coastline come to Od-

isha coast for nesting. The other nesting sites in Bay of Bengal in Andhra Pradesh and Tamil Naidu etc see occasional and smaller number of nesting. They are also found in Andamans, in the Coromandel coast, Velas in Maharashtra and Sri Lanka. The other congregations for nesting in world are found at Mexico and Costa Rica. However they are becoming endangered slowly due to loss of suitable breeding or nesting grounds all over.

Mating

As the mating occurs in the sea waters, the males retreat to the foraging ground post mating. The females linger around looking for shallow waters over a month (general figure is 45 days) till they reach the beaches to lay their eggs. As per forest officials, nesting seasons in India last from around Jan-Mar depending upon the conducive and favourable conditions prevailing at that point of time. The females lay around 100-150 eggs per individual. Each female takes around 30 minutes to an hour to dig a hole around 2-3 feet with its flippers and lay her eggs.

Egg Laying

When we reached the site, it was pitch dark and the silence of the night was occasionally broken by roaring sea waves, barking of dogs as well as the soft intermittent noises of digging the sand and beating the covered nests with the plastron. According to forest officials approximately 9000 Olive Ridelys had congregated in the beach. On moving ahead we could see the female turtles approaching steadily towards the sandy beach with a hope to dig their nests and lay eggs.



Olive Ridley Turtles mating in the sea

Olive Ridley Turtle laying eggs

We planned to visit next day in day light as few turtle visit during day times also so that we can appreciate much better. We went back to Bhubaneshwar for a rest so that we reach fresh in the morning to witness. To our surprise, we could see few enthusiastic turtle laying eggs. We were ecstatic and walked near a turtle to see the entire phenomena, it was as if the moment was played again but in day light. We walked with careful footsteps and sat near a turtle. The egg laying is an exhaustive process and their movements are slow.

We were over whelmed to find that the one turtle in front of us started to dig the earth indicating that she will lay eggs here in front of us. The female turtle laid eggs and covered nest with the plastron in aprox 45 min. Turtle started moving towards sea and we

followed her. After completion of their duty of laying eggs they all proceeded towards the sea. They will return again only in the next season. There were little clashes for space and few nests were dug out by other females accidentally due to shortage of space.

We were able to observe four turtles complete the egg laying process before the heat and humidity forced us to break for lunch under the shade of a tree.

Kid watching in awe



We could see that forest department staffs posted and NGOs were sincerely performing their duties, not allowing any tourist to disturb their habitat, chasing dogs and ensuring, that foreign guests (Olive Ridley) are safe and have peaceful nesting.

Interacting with forest officials we came to know that compared to previous years where there have been instances of no nesting at all due to various reasons like change in temperature, cyclonic disturbances, salinity, oil spillage etc, this

year has been heartening and we were more than excited to have our foreign guests (Olive Ridley) in Orissa with definitely encouraging numbers. We could also spot one tagged turtle and forest official were ecstatic as she revisited the same place to lay eggs.

Next day we revisited the site in the wee hours to have their closer glimpse. I reached at 0300 and to my surprise, there was hardly any space to walk even with measured and careful footsteps. We had witnessed mating and found that our daughter was searching for the same turtle amongst the ones laying eggs. She was surprised that all the turtles looked similar. Soon she gave up. This uniformity of appearance of this species along with the massive numbers in the beach multiplies the impact and makes it mesmerising.

One important and noticeable aspect which touched us was hard work of forest department staff and their sincerity. Even NGOs were actively involved and working day in and day out during the season of nesting till hatchlings move safely in to the sea. The local villagers have been instrumental in discouraging poaching and trade of products like eggs, meat, carapace etc to a huge extent. The young children also participate in saving the turtles babies from being predated by the numerous predators like the crows, dogs, jackals, hyenas, wild boars, raptors etc. Inspite of vigilance during laying of eggs, dog and raptors make their way to have eggs as their food. But still we need to put in efforts to keep them healthy and alive.

Hatchings

Next step was to wait for 45 days to be able to watch the Olive Ridley turtles hatch from the eggs and make their way to the

sea and then return back after attaining adulthood to again mate, lay eggs and repeat the cycle of procreation. We reached the Rusikulya beach, Orissa with a small group of environmentalists and tourists, and cheers erupted as the hatchings

poured out of the sandy pits, to take their first wobbly steps.

Hundreds of baby Olive Ridleys were taking their first steps to find their way to the sea, with their parents no where near to help them. We watched them in awe, realising that these tiny tots are on their own without their parents to help them grow up. Such is the laws of nature. The sight of hundreds of newly hatched Olive Ridley turtels walking over the carpet of sea sand, wading through the white foam of the receeding waves towards the blue sea waters is mesmerising and can melt the hearts of anyone. It is a sight that common men and women should experience which will instill the love of nature in them.



Freshly hatched Olive Ridley turtles from eggs

The first steps

Watching the struggle of one of the babies through the camera lens helped really appreciate its effort as it takes in its bearings and stretches each and every sinew in its tiny body amidst a whirlwind slapping of minuscule flippers. Around it, hundreds of similar looking turtle babies, some as small as our thumb, are wobbling and thrashing their flippers on the wet



sand, trying to move ahead, losing direction and bumping into each other with their tiny bodies etching crisscrossing trails in the sand. Near me, volunteers from a turtle conservation NGO were releasing the hatchlings and also protecting them against predatory birds that were already circling overhead. It is interesting to note that the female turtles among the babies upon reaching adulthood will return to Rusikulya for laying eggs. As the last of the babies makes it to the sea, swimming vigorously into the open ocean away from the predators, I heaved a sigh of relief, feeling proud to have been a part of these little ones journey.

Tiny freshly hatched Olive Ridley turtles returning to sea

The hatching season is from February to April and the end date depends upon the date of laying eggs as it takes 45 days to hatch. While large stretches of India's coastline are home to the turtle species, the Rusikulya beach is the most popular nesting site on the Orissa coastline. However, just visiting the beach during the hatching seasons does not guarantee you sightings. One needs to be in touch with forest officials and based on their confirmation, make a visit.





The journey of the newborns towards the sea is extremely challenging. It is so perilous that only a few hundred make it to their destination out of the thousands of eggs laid. Wild predators and less space on the beach are major threats, but this is where the role of conservation societies comes in play along with local population and official duty of forest department.

Olive Ridley: Quick Facts

- 1. It grows about 2-3 feet in length, and weigh about 50 kg, the Olive Ridley derives it name from its Olive coloured carapace, which is heart shaped and rounded. Males and females grow to the same size, however, females have a slightly more rounded carapace as compared to male. They are carnivores, and feed mainly on jellyfish, shrimp, snails, crabs, molluscs and a variety of fish. These turtles spend their entire life in the ocean, and migrate thousands of kilometres between feeding and mating grounds in the course of a year.
- 2. Females return to the very same beach from where they first hatched, to lay their eggs. During this phenomena of nesting, up to 6000,000 and more females emerge from the waters to lay eggs.
- 3. Easiest way to identify the gender of an Olive Ridley is by the size of its Tail. The males have longer tails than the females
- 4. Although the Olive ridely is closely related to Kemp's Ridley, the former is found only in warmer waters, including the southern Atlantic, Pacific and Indian oceans.
- 5. The coast of Orissa in India is the largest mass nesting site for the Olive ridley, followed by the coasts of Mexico and Costa Rica.
- 6. Olive Ridley turtles have a slightly smaller head and shell as compared to the Kemp's Ridley
- 7. The scientific name of Olive is *Lepidochelys Olivacea*
- 8. Olive ridleys are migratory, sometimes travelling several thousands kilometres between their feedling grounds and nesting sites
- 9. Whether hatchings are male or female depends on the temperature when they are in the nest, known as the Pivotal

temperature, while warmer temperatures yield more female offsprings, more males are born if temperature is cooler

- 10. After about 45-50 days of the laying eggs, the hatchings begin to pip, or break out of their eggs, using a small temporary tooth located on their snout, called a caruncle.
- 11. The last walk of a hatchling from the nest to the sea is very critical to the imprinting of a geomagnetic field that helps female olive to their place of birth as adults.
- 12. It is believed that olive ridley was named after henry Nicholas Ridley, a Noted scientist.

Challenges over the Nesting Sites:-



Turtles often get caught in the fishing nets which doesn't have TED

(Turtle Excluder Device)

- 1. Industrial areas near the vicinity of Rushikulya.
- 2. Artificial lighting along the coast at the nesting sites
- 3. Use fishing mechanisms which is not turtle friendly for deep sea fishing.
- 4. Changing pattern of the beach and shoreline due to tidal dynamics and cyclonic disturbance which over period of time is more frequent and devastating.
- 5. Beach salinity, pollution levels due to oil spillage, temperature.
- 6. Hatchlings being consumed by wide range of predators from scavengers to birds, mammals and even crabs.
- 7. Shrinking habitat due to beaches divided into fragments and beach erosion leading to shortage of available space for nesting. Cutting of trees lead to beach erosion which reduces the nesting space.

Conservation News -

MoEF&CC becomes clearing house of projects during lockdown:

While the country is under lockdown and battling the corona virus, the Ministry of Environment, Forests and Climate Change has shown extreme alacrity in allowing destruction of forests in the name of industrial development.

On 27th March the Ministry has made an amendment to the EIA notification 2006 and has allowed all projects related to bulk drugs and intermediates to be recategorized from existing Category A to B2.

It is to be noted that all projects falling under B2 Category are exempted from the requirement of collection of Base line data, EIA (Environment Impact Assessment) Studies and public consultation. These amounts to blanket approvals. It doesn't matter how they process their effluents, if at all they process and where they dump it. This will bring untold environmental degradation.

According to the press release the Government claims that "The re-categorization of such proposals has been done to facilitate decentralization of appraisal to State Level so as to fast track the process. This step of the Govt. is with a view to help in increasing the availability of the important medicines/ drugs in the country within short span of time. This amendment is applicable to all proposals received up to 30th September 2020. The states have also been issued advisories to expeditiously process such proposals.

Further, to ensure expeditious disposal of the proposals within given time-line, Ministry has also advised states to use information technology e.g. video conference, considering the fact that in view of the prevailing situation on ground, appraisal of proposals may not be possible through physical meetings."

As expected, there has been an avalanche of project clearances. Within a period of about two weeks, more than 100 proposals have been received under this category, which are at different levels of decision making by the concerned regulatory authorities in the states.

It is telling that even though the amendment to EIA notification 2006 was done on 27th March, the Ministry decided to do a press release only on 15th of April, 2020.

Given that there has been virtually no political opposition to this Government, they have become blatant in the manner in which they sacrifice our environment and forests for industry.

On 7th of April the standing committee of NWBL chaired by the Minister Shri Prakash Javadekar cleared a host of projects via video conferencing. Unfortunately all the projects striked crucial blows to our various wilderness areas. However, all the minister did was tweet that he approved wildlife clearance for number of developmental projects from 11 states. No details were mentioned in the twitter thread.

He mentioned "a multi-purpose project in Uttarakhand to harness water for irrigation and electricity, and irrigation project

Conservation News -

in Telengana are approved, which will usher in economic & agricultural development of the regions. However, he didn't mention that the project in Uttarakhand is the Lakwar Vyasi hydroelectric project where 768 hectares of forest land are diverted. This area is close to Binog wildlife sanctuary.

As we had earlier seen, Himalayas is a comparatively young mountain range and is fragile. The blasting of the mountains for dams and roads is taking its toll. Uttarakhand had its worst landslides in 2013. However all that is forgotten and the Lakwar Vyasi project is cleared. And interestingly this is happening when the cost of solar power has touched Rs. 2.44 per kWH as per 2018 SECI auction. The cost of hydel power works out to around 6 rupees or more. Many projects are not seeing financial completion or being abandoned as the state electricity boards are not lifting high cost power. So it simply defies logic to clear such projects in an ecologically fragile area. And the only two conditions mentioned while clearing this project is construction of speed breakers and no night traffic. So clearly the ministry has decided that environment and wildlife doesn't matter.



Jungle Cat killed on road in Vyasi, Uttarakhand

Advisory regarding containing and management of COVID-19 in National Parks/Sanctuaries / Tiger Reserves:

In view of the spread of COVID 19 in the country and a recent news report on a Tiger being infected with the COVID 19 in New York, the Ministry of Environment, Forest and Climate Change has issued an advisory regarding containing and management of COVID-19 in National Parks/Sanctuaries/Tiger Reserves as it is felt that there are possibilities of spread of the corona virus amongst animals in National Parks/Sanctuaries/Tiger Reserves and also transmission of the virus from hu-

Conservation News -

mans to animals and vice-versa. In some parks like Bandhavgarh and Ranthambhore, at times tigers move very close to the vehicles. So the chances of human to tiger transmission of virus is a possibility.

The advisory has asked Chief Wildlife Wardens of all States/UT's to:

- 1) Take immediate preventive measures to stop the transmission and spread of the virus from humans to animals and vice versa, in National Parks/Sanctuaries/Tiger Reserves.
- 2) Reduce the human wildlife interface.
- 3) Restrict the movement of people to National Parks/Sanctuaries/Tiger Reserves.
- 4) Constitute a Task Force/Rapid Action Force with Field Managers, Veterinary doctors, Frontline staff, to manage the situation as quickly as possible.
- 5) Create a 'round the clock' reporting mechanism with a Nodal Officer for swift management of any cases noticed.
- 6) Set up essential services for emergency treatment of animals and their safe release back to their natural habitats, as and when required.
- 7) Enhance disease surveillance, mapping and monitoring system through coordinated effort amongst various Departments.
- 8) Maintain all other stipulations issued by the Health Ministry in the movement of staff/tourists/villagers, etc. in and around National Parks/Sanctuaries/Tiger Reserves.
- 9) Take other possible steps to control the spread of the virus.
- 10) Report the action taken to this Ministry.

Many people are dependent on tourism. The hotels, tour operators, guides, drivers etc were hoping that at least a month of the summer season can be salvaged. However, the number of Corona virus deaths is increasing and several states have demanded the lockdown to be extended at least till end of May. Some of the National Parks are closed for monsoon. It appears that all the parks may open during October if the corona cases continue for the next month or two.

The wildlife safaris in India are cramped. People are pushed into cramped vehicles where legroom is often less than the low cost airlines. Tourists who are unknown to each other would definitely not like to be pushed into such cramped vehicles, especially since there is no vaccine developed for Corona virus and the virus is still active. So the tourism sector cannot run the way it was running till early this year before corona virus ensured all activities were stopped.

The forest departments are also greedy and allow many tourist vehicles which leads to over crowding. That has to stop. It is to be seen if the forest department does any changes post Covid-19 opening of forests.

Canon announces EOS C300 Mark III cinema camera:

Canon announced the Cinema EOS C300 Mark III camera in a virtual event today. The EOS C300 Mark III cinema camera has a Super 35mm sensor unlike the C500 Mark II camera. However, it shares the similar modular philosophy as the C500 Mark II and will be able to use some of the same accessories. The camera will be available towards the later half of the year depending upon the Covid-19 situation.



Salient Features:

Sensor: Super 35

Sensor: 4K Dual Gain Output (DGO) sensor

Processor: DIGIC DV 7

Raw: Cinema Raw Light

Dynamic range: 16+ stops

Resolution: 4K DCI/UHD upto 120p, 2K 180p with 4:2:2 10 bit XFAVC

Media: 2 CFexpress slots

DPAF: Dual pixel CMOS AF works upto 4k 120fps.

Stabilisation: 5 axis Electronic stabilisation

Audio: 4 channel recording on 4 XLR inputs via EU-V2 expansion unit

Size: 6 in (width) x 5.8 in (height) x 6.6 in (depth)

Mounts: User interchangeable mounts (EF and PL)

Weight: 3.9 ibs

Price: \$10,999/- US Dollars.

Unlike the C500 Mark II, this is limited to 4K resolution, though one can have nice 120fps slow motion when required. This will be a good workhorse camera for lot of people. Already the Canon C200 is a capable camera but it lacks the XFAVC codec as well as the slow motion options which people need. So Canon has nicely slotted the C300 Mark III camera in between C200 and C500 Mark II. However, a price below the psychological 10K mark would have been very good.

PRESS RELEASE

Family Tradition: The New EOS C300 Mark III Cinema Camera Is A Super 35mm Modular Workhorse

Equipped With a Newly-Designed 4K Dual Gain Output (DGO) Sensor and DIGIC DV 7 Image Processor, the Camera Also Features Internal Cinema RAW Light Recording

MELVILLE, NY, April 20, 2020 – Adding to its robust and expansive line up of Cinema EOS digital cinema cameras, Canon U.S.A. Inc., a leader in digital imaging solutions, is excited to announce the EOS C300 Mark III. The next-generation Super 35mm workhorse features a new Dual Gain Output (DGO) sensor and, like the full-frame EOS C500 Mark II digital cinema camera, employs a modular design and an interchangeable lens mount optional accessory that allows users to easily customize the camera according to the needs of each project, making it an ideal tool for a wide range of video content production. The introduction of C300 Mark III, alongside the already announced C500 Mark II, signal Canon's equal and high attention to the two important constituencies of Super 35mm and full-frame content creation.

"Creativity should never be hampered by a lack of choice. Canon understands that, which is why we continue to expand and build upon our award-winning lineup of Cinema EOS cameras," said Tatsuro "Tony" Kano, executive vice president of the Canon U.S.A., Inc. Imaging Technologies and Communications Group. "The EOS C300 Mark III is the latest finely engineered cinema camera from Canon that will seamlessly integrate into a creator's toolbox, providing users with an imaging solution that delivers a myriad of possibilities and potential. We look forward to seeing the visionary content created with the EOS C300 Mark III camera."

The newly developed 4K Super 35mm DGO imaging system captures high dynamic range content by reading out each pixel through two separate gains. One gain prioritizes saturation in highlight areas while the other suppresses noise in the shad-

ows. The result is an image with up to 16+ stops of dynamic range, clean rich shadows and vibrant highlights in up to 4K/6op. In 2K recording mode, the EOS C300 Mark III camera features recording speeds up to 180p. Equipped with



Canon's latest video imaging processor, the DIGIC DV 7, the camera achieves more fluid and efficient recording of 4K and HDR and can process high-speed video recording, including 4K at up to 120p.

The EOS C300 Mark III camera utilizes Cinema RAW Light [i], a very powerful and useful tool for helping to cut the data size of a file to about one-third to one-fifth of a similar Cinema RAW file, without losing grading flexibility. In addition to being able to record 4K and 2K RAW data internally without using an external recorder, the camera also supports XF-AVC (with a choice of Intra or LongGOP), offering flexible options in recording durations.

The EOS C300 Mark III camera is modular and customizable, just like the EOS C500 Mark II camera. Included with the camera are 13 accessories, such as a 4.3-inch LCD monitor and the GR-V1 grip. Users can also choose from a wide range of additional optional accessories that allow them to configure the EOS C300 Mark III camera to their preferences. Optional accessories include the EVF-V70 electronic viewfinder, SU-15 shoulder support unit and EU-V1 and EU-V2 expansion units. The EU-V1 expansion unit allows for gen-lock, sync out, remote use and ethernet connection; while EU-V2 expansion unit features those functions plus a V-mount battery connection, two analog XLR audio ports and 24v DC Out. Additionally, the mount kits (sold separately) allow users to exchange the EF mount with an EF cinema lock mount or PL mount.

Additional features of the Canon EOS C300 Mark III camera include:

- 4K DCI/UHD up to 120 fps and 2K/HD up to 180 fps with 4:2:2 10-bit XF-AVC recording
- 2 CF express media card slots
- Compatibility with EF and PL lenses (with optional mount kit) as well as anamorphic and spherical lenses
- Dual Pixel CMOS AF, up to 120fps
- 5-axis electronic image stabilization, which can be utilized even without the use of a lens with IS functionally
- Support for Canon Log 2 and 3
- Four-channel recording that supports 4 XLR inputs with the use of the EU-V2 expansion unit
- User LUT allowing users to upload and apply custom LUTs
- The camera body is approximately 6 in (width) x 5.8 in (height) x 6.6 in (depth) with a bodyweight of approximately 3.9 lbs., making it compact and lightweight.

Pricing and Availability

The Canon EOS C300 Mark III Cinema Camera is scheduled to be available later in 2020 for an estimated retail price of \$10,999.00*.

Canon announces Final Specs of 8K EOS R5 mirrorless camera:

Canon has finally announced the complete specifications of its EOS R5 camera which promises to be revolutionising the filming industry since the original EOS 5D Mark II did.



The Canon EOS R5 mirrorless camera is named R5 as it has the RF mount and is denoting that it is equivalent to the 5D of the SLR cameras. Canon had introduced the EOS R full frame mirrorless system in 2018 and has been making constant efforts to ensure that this becomes a premium system with high quality lenses. Canon says that the specs of the EOS R5 camera is a result of major improvements to its imaging technology as well as new RF lenses specifically built to give massive improvements. With Canon ensuring 8K video upto 30p in the EOS R5 mirrorless camera, this is expected to be a gamechanger.

Now it is upto to the photographers and filmmakers to elevate your creativity to the next level using this camera.

Advanced Full-Frame CMOS Sensor

Canon has developed an entirely new CMOS image sensor for the EOS R₅. Canon promises that the distinguishing feature of this camera is its image quality due to the newly developed CMOS sensor and new DIGIC processor.

High Speed still shooting upto 20fps

The EOS R5 can capture still photos of fast moving subjects in high speed burst. At up to 12fps with mechanical shutter and up to 20fps with silent shutter, the EOS R5 can capture the split-second details between a subject's movement.

Astonishing Autofocus and Subject detection

The EOS R5 brings subject detection to a new level — Utilizing Canon's Dual Pixel CMOS AF Technology, the EOS R5 will be capable of making Ultra-High-Speed Autofocus calculations to match its immensely powerful High-Speed Shooting capability of 20 fps. Subject detection adopted from the Live View AF tracking system in the EOS-1D X Mark III brings Face, Head and even Eye tracking when People detection is set, providing ease and accuracy when capturing stills or video. Detection of Animals will also be possible for the first time in a Canon camera, effectively tracking the whole body, face, or eye of cats, dogs, or birds for speed and precision.

8K video

Canon EOS R5 can shoot and record internally uncropped 8K video shooting at up to 29.97fps, and 4K video shooting at up to 119.9fps, in 4:2:2 10-bit (H.265) Canon Log. Dual Pixel CMOS AF is available in all 8K and 4K modes so we will not struggle with focusing while shooting high resolution video in slow motion.

One can also shoot and Internally record uncropped 8K RAW Recording up to 29.97 fps with Dual Pixel CMOS AF, and HDR-PQ Recording (H.265) capability.

Dual Card Slots

The EOS R5 has one super high-speed CFexpress card slot plus for 8K video as well as a UHS-II SD card slot. It would have been better to have both CFexpress slots, however, Canon perhaps thought that having a UHS-II SD slot will be better for people who don't shoot video. For Video shooters who want to use the 8K video, this is a compromise. Many professional shooters will be troubled that there is only one CFexpress slot.

In body stabilisation

The EOS R₅ is Canon's first camera to incorporate 5-axis IBIS (In-Body Image Stabilization). This will help while shooting stills in slow shutter speed as well as help in reducing shake while recording movies. The EOS R₅'s IBIS will work in combination with Optical Image Stabilization found in many Canon RF and EF lenses.

Uploading to Cloud:

With the creative process being just as important as image capture, the EOS R5 will support automatic transfer of still image and video files from the device to the new image.canon cloud platform. New workflows will be possible through the automatic download and backup of data to your Mac/PC, or automatic transfer of data to external services such as Google Drive and Flickr*. *Starting in June, image.canon will expand both of its partnerships with Google to include original quality backup with Google PhotosTM via Google OneTM, a membership plan for expanded storage, as well as Adobe® Creative Cloud® (membership plan). Event shooters can easily take the benefit of this option.

Price: Canon hasn't announced the price till date.

DJI launches Mavic Air 2

DJI has launched the Mark II version of the Mavic Air and it includes some features of its flagship drone. The DJI Mavic Air 2 has a nice foldable and hence portable frame and has a good camera. The sensor of the DJI Mavic Air 2 is ½" and has an interesting 8K hyperlapse time-lapse mode. However, it doesn't have 8K video like the Autel drone which had been teased a few months ago.



DJI Mavic Air 2 specifications:

Sensor: 1/2" CMOS sensor

Video resolution: 4K 6op and 108op 24ofps

Stills: 48 MP stills

ISO for Video: 100-6400

ISO for Photo (I 2 MP): 100-3200 (Auto) and 100-6400 (Manual)
ISO for Photo (48 MP): 100-1600 (Auto) and 100-3200 (Manual)

HDR mode: High dynamic range mode available for both stills and video. From the high-performance Quad Bayer image sensor, a single frame separates exposure levels in different areas to accurately capture details in light and dark areas. Then images are layered to create a colorful, balanced, and eye-catching picture with higher dynamic range.

Smart photo mode: Mavic Air 2 features SmartPhoto, which integrates scene recognition, HyperLight, and HDR into one mode for optimal results. Scene recognition optimizes different camera parameters for various scenes and supports intelligent recognition of five categories: sunset, skies, grass, snow, and trees.

Storage: 8 gb internal, external SD cards upto 256 Gb can be used

Flight time: Max 34 mins (depends on ideal conditions). 3500mAh battery

Flight speed: Max flight speed of 68kmph in sport mode

Max Service Ceiling Above Sea Level: 5000 m

Max Flight Distance: 18.5 km

Battery life: 240 mins max RC battery life

Obstacle avoidance: APAS 3.0 (Advanced Pilot Assistance Systems) obstacle avoidance utilizes an advanced mapping technology for smooth following and reliable obstacle avoidance in complex scenarios.

Mavic Air 2 perceives its environment in three directions: forward, backward, and downward. An auxiliary light improves visibility, and the extra layer of security that obstacle avoidance provides is ideal for pushing the limits of what is possible. According to DJI, in forward direction the vision sensor is accurate upto 22meters and 23.6 meters in backward direction. For downward there is an infrared vision sensor. The auxiliary light assists with visual positioning, safe landing, and visibility in the air. It can be turned on and off manually.

ActiveTrack 3.0: In this mode the DJI Mavic Air 2 follows a target while avoiding obstacles and can also identify the target once it is lost.

Spotlight 2.0: In this mode you can lock the camera on a subject and fly freely and the camera will always keep the subject in focus.

POI 3.0: This mode keeps the camera centred and then creates an automated path to fly around the target

Video transmission: Ocusync 2.0 10km range with 1080p @30fps transmission

Colour profile: D-Cinelike flat color profile retains more information for post-processing.

Video Codec: HEVC (H.265) video codec records more image information, uses less storage, and preserves the dynamic range and detail.

Max bit rate: 120 Mbps

Signal: Mavic Air 2 supports 2.4/5.8GHz dual-frequency communication and automatically switches to the best channel with the lowest interference in real time. This significantly improves the aircraft's anti-interference ability in challenging environments, increasing flight safety.

Weight: 570g

Size: Folded: 180×97×84 mm (Length×Width×Height) **Unfolded**: 183×253×77 mm (Length×Width×Height)

Cost: \$799 USD for base version and \$988 for Fly More combo

B&H Link: https://www.bhphotovideo.com/c/product/1558185-REG/dji-cp-ma-00000167-03-mavic_air-2-fly.html/
BI/19990/KBID/13252

Canon introduces Cine servo 25-250 mm T2.95-3.95 cinema lens

Canon has introduced an interesting cine-servo lens with 25-250mm zoom range. This lens is designed for 4K cameras and is available in both EF as well as PL mounts.

The optical zoom range of 10x (25mm to 250mm) is complemented with a built-in 1.5x extender making it 37mm to 375mm. Natively this lens (CN10x25 IAS S) is designed for S-35 sensor cameras. However, when the 1.5x extender is used, the lens covers full frame 35mm sensor cameras. Given that more and more cameras are being launched in full frame, this ability to shoot with full frame cameras as well as S-35 cameras will be a big help. The lens loses only one stop of light when the 1.5x extender is engaged.



The lens has a Parfocal design to maintain focus during zoom. Canon has also said that the focus breathing is minimized. It has 11 blade iris for smooth bokeh. The focus ring rotates 180 degrees for nice follow focus.

This new cine-servo lens has a powerful and removable servo motor drive unit. When engaged one can have a broadcast-friendly shoulder operation for ENG/EFP and documentary style shooters as well as tripod mounted. The servo-zoom can help in getting the precise zooms and focus. Given the features in this lens, the weight of 3.04 kgs can be considered as real lightweight.

The price of 30K USD would be a deterrent for many except for deep pockets and networks.

PRESS RELEASE

Canon U.S.A. Introduces New Cine-Servo 25-250mm T2.95-3.95 Cinema Lens Available in Both EF and PL Mount

Superb Combination of Focal Range, Compact Size and Light Weight Makes it Ideal for a Range of Broadcast and Cinema Productions

MELVILLE, NY, April 20, 2020 – Canon U.S.A. Inc., a leader in digital imaging solutions today announced the CINE-SERVO 25-250mm T2.95-3.95 (CN10x25 IAS S), a new CINE-SERVO cinema lens designed for use with 4K cameras. The new lens, which is available in both EF and PL mount, features 10x optical zoom, a built-in 1.5x extender and a powerful and removable servo motor drive unit, providing broadcast-friendly shoulder operation for ENG/EFP and documentary style shooters. The lightweight design of the lens (6.7 lbs.) is remarkable given the zoom range and feature set, especially when compared with other lenses of similar focal lengths. This outstanding model, as well as the Sumire Prime Lenses announced in 2019, have further strengthened Canon's robust lineup of Cinema Lenses.

"As the lines between broadcast, cinematic and commercial productions continue to blur, it becomes more important to have a seamless product line that can provide solutions across a broad scope of applications," said Tatsuro "Tony" Kano, executive vice president of the Canon U.S.A., Inc. Imaging Technologies and Communications Group. "The CINE-SERVO lens family combines outstanding performance and an unmatched focal range from 17mm up to 1500mm in the three-lens family. The new CINE-SERVO 25-250mm lens adds a great deal of versatility to the lineup, and will soon be a favorite of productions large and small."

Similar to the existing award-winning 17-120mm and 50-1000mm lenses, the CINE-SERVO 25-250mm offers outstanding 4K optical performance thanks to its ultra-low dispersion glass and a large-diameter aspherical lens. Combined with Canon's unique optical design technology, these components work to help correct color fringing and limit chromatic aberration during operation. The lens features Canon's renowned warm color science and an 11-blade aperture that produces a beautiful, smooth bokeh.

The new lens is ideal for cameras with a Super 35mm sensor. While the 10x zoom covers a focal range of 25-250mm, the built-in extender stretches that range to an impressive 375mm with an added benefit of allowing for full-frame sensor coverage with only a stop of difference in light loss.

The servo drive unit included with the 25-250mm lens can be easily removed to allow for manual operation, and the gear pitch is compatible with standard cinema controls of zoom and focus. The EF mount version of the lens allows for the utilization of Canon's proprietary Dual Pixel CMOS AF, which provides users with smooth AF operation and high-speed tracking performance, and the PL mount version supports Cooke/i Technology. In addition, like the 17-120mm, the 25-250mm lens also features a macro function to enable close-up shooting.

Pricing and Availability

The Canon CINE-SERVO 25-250mm T2.95-3.95 (CN10x25 IAS S) is scheduled to be available later in 2020 for an estimated retail price of \$29,999.00*.

Natural History -

COUNTRY NOTEBOOK: The Cat that almost Was: M.Krishnan: - 26 August 1973

The Sunday Statesman (shared by Shri. Saktipada Panigrahi)

The Cat that almost was

(SMALL INDIAN CIVET)

"EVERYONE knows the Wolf of the fable which, seeking justification for killing it, blamed the kid drinking downstream with fouling the water.

TWO months ago, I ate a variety of mango sedulously cultivated in the Deccan, in far away Madhya Pradesh. No one knows how and why these local fancies and preferences spread out centrifugally across the country.



And it what was the vogue in ratters in Anantapur a hundred years ago had extended to rest of India, we would have few cats in our homes. We would have CIVET-CATS, instead

Even only 25 years ago, when I was living in the Deccan and kept dogs and milch-goats and racing homers, a kindly old lady who lived next door used to deplore my taste in pets. We lived from harvest to harvest in those days, and stored grains and pulses and gram for the year in enormous earthen-ware jars as tall as man - and naturally we had to be on our guard against rats. My neighbour conceded the utility of my goats, but was critical of my dogs and pigeons and the dogs, perversely were very fond of her "What good are these big clumsy dogs?" she would ask. "they are much too large to follow a rat through drains and narrow passages and a rat has only to climb up to a shelf to be safe from them. Why don't you have the wits to get yourself a Civet-Cat? With a Civet in the house you need never to be bothered with rats".

Then she would tell me of her younger days and how she like many others there, kept Civets to keep the house free of rats. She assured me that taken in hand young, a Civet can safely be given the run of the house and would not run away when grown as a Mongoose will. It was lean, quiet and affectionate, and peerless as a ratter. The trouble was getting it in the first place: if only young Civets were as easily available as kittens, no one would keep cats.

I have no personal experience of keeping Civets, but can well understand their exceptional qualifications as useful and de-

pendable pets - it is the small Indian Civet that I am writing of, of course. Years ago, a wilder and more nocturnal creature, a Palm-Civet, took up residence in the many layered tile of my kitchen roof, and lived there for years till the old roof collapsed and was replaced with a concrete slab.

Somehow, the potential of the Civet as a valuable and arrestingly attractive domestic animal does not seem to have been investigated outside the Deccan and the surrounding tracts. In the old days, before synthetic perfumes were produced in such profusion, Civets were kept in barrow, barred cages, for the sake of the secretion from their subcaudal glands which was scraped off and refined into scent, Civet. This was valued not only for its perfume, but also for its alleged therapeutic virtue. But the Civet-Cat was seldom kept and prized as a pet. Zeuner does not even mention it in his History of Domesticated Animals.

By nature, Civets are less strictly carnivorous than cats, and feed on variety of things - insects, grubs, crustaceans, birds when they can catch them, and such reptiles and small mammals as they can overpower, and also many wild fruits and even, I suspect, some tubers. A captive specimen I used to know was fond of bananas. Obviously such an omnivorous animal is not hard to feed and rear, and since it tends to stay where it grew up, returning home even if occasionally it goes away on a voyage of discovery, a Civet shall be easy to keep and can be given the run of the house instead of being cooped up in a cage, and it is not an animal that is demanding and wants to be noticed and petted from time to time, like some other domestic pets.

I have watched Civets hunting in the grass and shallow puddles of the borders of a lake; frogs, perhaps crabs, and insects were what they were obviously hunting. I have seen them eating the fruit of Carisa, and even of a Lantana, and other small jungle berries. Once I saw a Civet up a jamun tree that was in fruit; Civets can certainly climb trees if the want to, but I do not know whether it had climbed the tree for the ripe fruit, or for some other reason. It saw me when I saw it, climb down the tree, and made off."

- M. Krishnan

This was published on 26 August 1973.

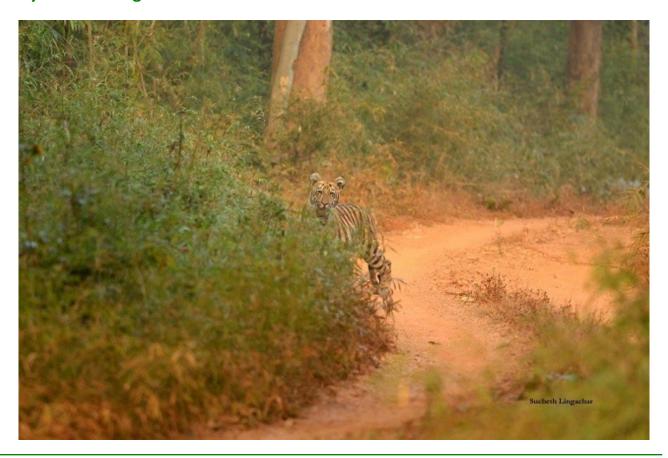
Irrawaddy Dolphin by Mrudul Godbole



Indian Fox Pups by Vipin Sharma



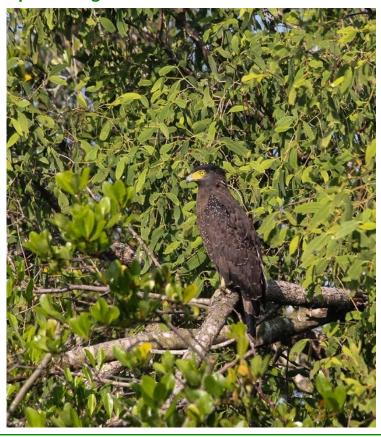
Tiger cub by Sucheth Lingachar



Tigress by Shyamala Kumar



Crested-Serpent Eagle in Sundarbans by Saktipada Panigrahi



Peregrine Falcon by Sabyasachi Patra



Nature's Own Canvas by Sandipan Ghosh



Grey Heron with Snake by Mrudul Godbole



Parasitoid wasp by Prajwal Ullal



The Flying Lizard by Jerin Dinesh





This is the **136th issue** of IndiaWilds. The photo of an adolescent tiger staring at the water from a check dam adorns this issue. Tiger cubs and adolescents are curious by nature. They stop to investigate anything and everything that catches their attention. They start hunting by catching small prey including frogs. In this image we don't know why the tiger is so intently looking at the water. Is it for food or is it trying to do some cyrstal gazing wondering what its future looks like? Given that tiger is revered as Goddesses Durga's

vehicle, it would know what is happening in various parts of India. In such case, the tiger would be really worried as every now and then the Government gives away tiger habitat to industries and for construction of dams and other projects. The forest corridors connecting various wildlife sanctuaries and National Parks have been destroyed. So it becomes very difficult for tigers to move from one area to another in search of suitable territory. The result is loss in genetic diversity. And when there is an outbreak of infectious disease, the lack of genetic diversity ensures that tigers in a particular area become more susceptible to the disease.

Tiger is not just a symbol of power and grace. Tiger as the apex predator also acts as a bellweather of the health of the land-scape it lives in. To save the tiger we have to save the forests it lives in, and numerous other species get saved in the process. The rivers and streams originating from those forests too get saved. And we too can get saved from the vagaries of climate change. Forests are also repositories of our biodiversity and natural wealth. We are yet to unravel the various mysteries of nature and benefit from those. The sooner we learn that human life is intricately linked with the health of our ecosystems, the better will be the chances of longterm survival of human race.

I look forward to your inputs and support in preserving the last tracts of wilderness and wildlife of our beautiful country. For other interesting articles and images check - http://www.indiawilds.com/forums/

To post in the IndiaWilds forums, you can register free of cost using your Full Name as user id at -

http://www.indiawilds.com/forums/register.php

If you are already a member of IndiaWilds and have forgotten you user id and/or password you can mail administrator@indiawilds.com

Regards,

Sabyasachi Patra

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