

India Wilds®

Newsletter

Vol 11. Issue V

May 2019

ISSN 2394 - 6946





Inside this issue:

A wake-up call from Yeti	2
In Danger: Natural & Cultural Heritage of Brihaspati Kund	11
Conservation News	17
Equipment Discussions	19
Natural History	32
Wildlife Photography	34

Cover Page Photograph:

Neelakurinji
(*Strobilanthes kunthiana*)
by Mrudul Godbole

A Wake-up Call from Yeti :

Indian Army expedition team found mysterious marks in snow in the Makalu-Barun National Park. These marks were 32 inch long and 15 inch wide. The Indian Army said that they sighted these marks on 9th April close to the base camp. The army believed that these mysterious marks were the footprints of the mythical Yeti.

The Indian army shared a set of photos and said that these marks formed a trail about a kilometre or more. Since these photos were shared by the official twitter handle of the Army, many people believed that it is possible that the army expedition team may have indeed found physical evidence of Yeti, the mythical snowman.

<https://twitter.com/adgpi/status/1122911748829270016/photo/1>

Many of us have read stories of the mythical Yeti while growing up in India. People abroad too have been fed with a diet of Yeti stories. The comic book “Tintin in Tibet” also had a story about Yeti. So there is considerable interest about Yeti. It is another matter that Yeti has been described as “abominable snowman”. Why someone wants to use the word abominable for a species is difficult to understand. Perhaps, it is our fear of the unknown which results in such nomenclature.

Some believe Yeti is half-man and half bear. Some say Himalayan brown bear is often mistaken as Yeti. Some passionate believers believe that there is always a possibility of a large biped creature existing hidden from us as we don't stay in those rarefied heights of the Himalayas. They argue that the Yeti may be a hominid, some kind of descendant of Denisovans who were



Line of impressions claimed as footprints of Yeti.

Photo Courtesy - adgpi Indian Army



much larger than humans and believed to have been extinct some 40,000 years ago. Don't we know that the Himalayas is such a huge area and few such creatures could have been existing without we knowing is the common refrain? It is another matter that these days all animal species know about the destructive hand of man and prefer to hide.

The photos shared by the Indian army showed one single line of impressions or "tracks". The melting snow results in the marks becoming indistinct. Overlapping marks can also appear later as one single large mark. While the Indian Army said that they will handover all photos for experts to take a call on it, without any direct photo of a creature with hair or other samples for DNA verification, it remains as yet another claim.

Nevertheless, this Yeti controversy shows how little we know about the world in which we inhabit. Also whether we believe in Yeti or not, if we need to give future generations a chance to discover a species, then we need to allow the habitat to remain as it is.

Protect Himalayan Glaciers:

The Himalayan region consists of large number of glaciers and covers an area of 33,000 sq. km. The Himalaya is a lifeline of our country. Apart from helping in the rains, the glaciers there are origin to many of our rivers. Various reports suggest that the health of the Himalayan glaciers is not well.

Climate change is for real. It would be naïve to assume that Himalayan glaciers will remain unaffected when the entire world is witnessing unpredictable extreme climatic events and the



© Mrudul Godbole/www.indiawilds.com

mean temperature of our cities are increasing. So the Himalayan glaciers are also melting. A study “Retreating rate of Chaturangi glacier, Garhwal Himalaya, India derived from kinematic GPS survey and satellite data” (Bisht et al, Current Science Vol. 116, No. 2, Jan 2019) used Kinematic GPS to find out that snout has Chaturangi Glacier snout has retreated 1172.57 ± 38.3 m (average = 45.07 ± 4.31 m/year) with a total area and volume loss of 0.626 ± 0.001 sq. km and 0.139 km³.

A study on the Satluj basin, which has 2026 glaciers over 1426 square kilometres, found that 55% of glaciers may vanish by 2050 and 97% by 2090. This would have a massive impact on us as the various irrigation and power projects will be hit. During this doomsday scenario, India would be already the most populated country on earth. History is replete with stories of rise and fall of civilisations due to rivers changing their course or lack of water due to draught.



Scientists believe that the Harappa civilisation declined and people migrated out of it due to monsoons failing continuously for 200 years. This finding was based the study of Oxygen 18 versus Oxygen 16 isotope in the snail shells in Kotla Dahar. In a path breaking study, published in *Geology* (*Abrupt weakening of the summer monsoon in northwest India 4100 yr ago*, Y. Dixit, *Geology*, 2014) palaeoclimatologist Yama Dixit and team found out that between 4000 and 4200 years ago, the annual monsoon rains had stopped for a continuous period of two hundred years. (<http://www.indiawilds.com/diary/indiawilds-newsletter-vol-6-issue-iii/>)

Our earth has seen various climatic conditions and extinctions of species due to changes in the climate. If meticulously planned city like Harappa can be wiped away due to vagaries of climate, shouldn't we be concerned?

One major aspect is often missed out while discussing the impact of glacier melting. In Yamal Peninsula, Siberia in the summer of 2016 the heatwave resulted in melting of the ice and a reindeer carcass got exposed. This reindeer had died due to anthrax. The anthrax got into water and soil and other reindeers got infected. A 12 year old boy died after contracting it and

another 90 people were hospitalised in August 2016. (BBC News, Aug 2016, <https://www.bbc.com/news/world-europe-36951542>)

In Siberia the melting permafrost also unearthed a virus (*Pithovirus sibericum*) which is thirty thousand year old distant relative of giant icosahedral DNA viruses with morphology of pandoravirus. And alarmingly even after the passage of 30,000 years the virus had retained its ability to infect. This shows that when the ice cover melts, there are chances of many such distant viruses coming to life. The movie “Mummy returns” will sound allegoric with all the ghosts and spirits being replaced by the various viruses buried for thousands of years and even for millenniums. We the modern human beings have lost our ability to face such viruses.

The earth has seen many species extinctions. Unwittingly we the humans may be triggering our own demise, one way or other, through our actions. Unless we wake up to the reality now, it may be too late for us to reverse our actions.

Way Forward:

The Climate crisis needs to be tackled at a war footing. There are various corporates who are trying to peddle technological solutions to fight the climate crisis. This is akin to a house on fire and its inmates bartering deals with each other regarding their roles in firefighting.

This attitude would help the corporates and their countries to benefit from the climate crisis. However it is not likely to be successful.

When the planet earth is facing a climate cauldron there are simple solutions to fight and stop this crisis. Tom Crowther, climate change ecologist at ETH Zurich has found that if the amount of carbon that can be fixed if we plant 1.2 trillion trees and allow those to grow will be far higher than any other climate change solution. He has found that there are 3 trillion trees on earth and there is room for an additional 1.2 trillion trees. So definitely this is a feasible solution.

However, one needs to be careful about it because when we inform volunteers to plant trees, they may just go and plant non-native trees which damage the ecosystem. Or they may plant trees in grasslands and marshes which are important ecosystems and shouldn't be messed with. At present the Government of India has tweaked the definition of forests and all commercial plantations are included in it. Given the pulls and pressures from the corporate lobby one can expect that exotic species like eucalyptus which are used for pulp as well as for firewood purpose will get planted. The 1.2 trillion plan will only succeed if trees are allowed to grow into giant old hardgrowth trees so that their carbon sequestration potential is maximised.

The country needs to start the 1.2 trillion tree plantation in a mission mode. Much of India's forests, grasslands, revenue lands etc are overrun with the exotic weed lantana. Removal of this exotic weed will help save the country millions of dollars. Pastur losses due to lanatana has been estimated at \$924 million dollars and the crop losses from weeds (the majority of which is lantana) amounts to a humungous \$37.8 billion dollars. (<http://www.indiawilds.com/diary/indiawilds-newsletter-vol-7-issue-vii/comment-page-1/>)

So the country can plan to remove lantana and plant species native to that area. Care should be taken in this because India is a vast landmass and the climate varies from place to place. Accordingly the vegetation also varies. So care should be taken to plant trees that are native to the area.

Generally we focus on tree plantation. However, large dams, mines, canals, roads and other infrastructure projects result in massive diversion of forest area. In the last three years, between 2015-2018, the Government of India has diverted 20314 hectares of forest land. This amounts to forests size of Kolkata being razed down. We have to first clamp down on all such diversion of forests and other areas so that hard growth trees doesn't get cut down. Unfortunately, given the track record of the Government, diversion of forests and cutting down of old hard growth trees is bound to happen, perhaps in an even bigger scale than before. This is akin to raising kids while killing all able-bodied adult men and women. Will a country progress in such a situation? So again we are back to square one.

Whether Planet Earth will remain a habitable place for humans or not is to be decided by the political class. There have been wave of protests worldwide to help save the Planet Earth. However, till date whatever we have seen doesn't inspire much hope. Nevertheless we have to continue the good fight till the last moment. May be the leaders come back to their senses in time? As an eternal optimist, I continue to believe in miracles.

Travel -

In Danger: Natural & Cultural Heritage of Brihaspati Kund

By - D.P. Srivastava

Brihaspati Kund is situated 40 kms away from the Panna city, on the way to Kalinjar Fort. The area is part of northern Vindhya Ranges which is one of oldest hill ranges in country extended from Gujrat to Uttar Pradesh from the center of Indian subcontinent. Many historians suggest that this area is one of the few regions of India, which is a treasure trove of archaeological wealth as it is witness to various human habitations since prehistoric age. In Indian mythology, Brihaspati Kund is named after *Guru Brihaspati* (Religious teacher of Gods). It is believed that *Guru Brihaspati* had founded an ashram and performed his *Yagyas* to please God and Goddesses. Pleased with his penance, the Gods blessed the area with wealth. Since then diamond has been found in this landscape. According to another myth, *Lord Rama* also visited the area to meet Rishis during exile period.

Brihaspati Kund is fed by the river *Baghein* which is said to have its source in a hill in Panna district. It then enters UP, in Banda district and flows in a north-east direction, separating the district from Chitrakoot district, before it meets the Yamuna.



The Brihaspati Kund is one of the seven Kunds in the course of Baghein River in this area. The seven Kunds are Suraj Kund, Brihaspati Kund, Gufa Kund, Sukha Kund, Hatyara Kund, Vedha Kund and Patalia Kund. The Brihaspati Kund is most important as it also has rock art shelters, discovered by Shri. K.F. Jadia in 1962. The rock shelter at Brihaspati Kund depicts human activities of varied nature as old as early Mesolithic Period.

Indian Rock Paintings have a long history and still few are not yet studied in their proper context. The major concentration

Travel -

of rock painting is in the Vindhya and Kaimur Hills, and over 150 sites have been recorded from the landscape from Paleolithic to late medieval period. These rock arts are depicted on the sandstones and these hills used to be ecological important sites where people practicing hunting and gathering can subsist. They were used for habitation by man since stone ages. On the walls and ceilings of these rock shelters, prehistoric man had painted animals, men and demons, scenes of daily life, agriculture, hunting and fighting.

The stone-age paintings of Central Indian Vindhyan hills were first reported by A.C. Carlylle in mid nineteenth century much before the discovery in Europe in 1867-68. Now Indian subcontinent alone holds more than 400 rock art sites with more than 3000 rock shelters of varying time periods.



Prehistoric rock paintings in Bhimbetka



Prehistoric rock paintings in Bhimbetka

The rock art shelter shows ample light on the art, technology, lives, religion, economy etc. The local people believe that not



Rock paintings at Khatotiya site

only prehistoric man but also the deities also reside in the rock shelters so these sites are sacred and hence relatively protected. The paintings at Brihaspati Kund are in Red, Yellow and Green colors and depict processions of royal men, scenes of hunting and dancing, and animals. The drawing of a giraffe like animal is noteworthy as describe by K.F. Jadia in 1962.

Travel -

In September 2018, while on search for the rock arts shelter, we reached Brihaspati Kund and saw the lovely waterfall. The monsoon water supplemented and increased the beauty of the waterfall manifold. The rock shelter is on the right hand side of the waterfall and a temple near to it. The ceilings of the shelters are depicted with pictographs of hunting, agriculture, domestication of livestock, wars in Iron Age to as early as Mesolithic age.

As the rock arts depict different animals, activities and life forms, it is a very important heritage. The depiction of Wild buffalo, Bison/auroch and Swamp deer on the rock shelters shows that these animals must have been found in this landscape when the forests were dense and unmolested by hand of man.

In my last visit in mid of October 2018, the things were found in different scenario. The water was very less may be due to the check dams in upstream of the Baghein River and the water was seen much more polluted due to over use by villagers.



Brihaspati Kund Waterfall in September



Downstream of Baghein river

Travel -



Group of dancing people



People on top of decorated elephant



Hunting Scene

Travel -



Auroch - *Bos primigenius* -
extinct species of wild cattle

Depiction of Swamp deer



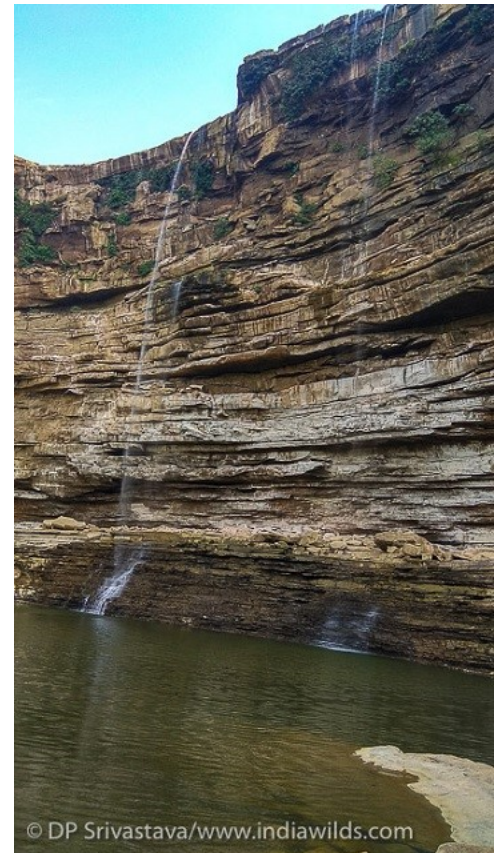
The rock arts are been deteriorating due to natural causes such as moisture and also spoilt due to graffiti by vandals who have etched their names, religious symbols using stones.

The deterioration of rock shelters due to humans impact

Travel -

In my last visit in mid of October 2018, the things were found in different scenario. The water was very less may be due to the check dams in upstream of the *Baghein* River and the water was seen much more polluted due to over use by villagers. The rock arts are been deteriorating due to natural causes such as moisture and also spoilt due to graffiti by vandals who have etched their names, religious symbols using stones.

Brihaspati Kund waterfall in October



Different stages of the diamond mining:

As we know the entire landscape around the Panna is known for Diamond mines, the quest for finding diamonds have led



to people mining the entire downstream river bed. As the area consists of sedimentary rocks specially sandstone, the potholes created in bed in search of the diamonds can fracture the underneath rocks which holds the water on the surface, in addition the quarried river bed will pollute the remaining water which is essential for people as well as wildlife in such landscape.

Landscape pockmarked by diamond mining

Uncontrolled extraction of resources in form of water and diamond mining has resulted in the deterioration of the natural river bed. The disturbance on the river bed rocks might impact the natural flow of the river. Apart from impact on the nature and ecology of river due to unchecked labourers working for mining diamonds, people are vandalising the rock shelters and rock paintings.



In search of diamonds

Over thousands of years, the rock art in these rock shelters have conveyed their message to people who care to listen. Unfortunately, there is an urgent need to save these historical as well as natural heritage from iconoclasts and vandals who seek to obliterate our rich heritage as well as save the entire river Baghein basin where these pioneers had tread thousands of years ago. Posterity will hold us complicit and will not forgive us if our generation remains a mute spectator to destruction of these treasures.

Conservation News -

‘Not all animals migrate by choice’ campaign launched to raise awareness on illegal wildlife trade

Ahead of the International Day of Biological Diversity celebrated on May 22, UN Environment India and Wildlife Crime Control Bureau (WCCB) of India launched an awareness campaign **‘Not all animals migrate by choice’** to be displayed at major airports across the country.

Illegal wildlife trade is driving species to the brink of extinction. A thriving industry with organized wildlife crime chains spreading across the world, in India, illegal trade in wildlife has seen a sharp rise. The campaign **‘Not all animals migrate by choice’** aims at creating awareness and garnering public support for the protection and conservation of wildlife, prevention of smuggling and reduction in demand for wildlife products. The campaign also complements worldwide action on illegal trade in wildlife through UN Environment’s global campaign, Wild for Life.



In the first phase of the campaign, Tiger, Pangolin, Star Tortoise and Tokay Gecko have been chosen as they are highly endangered due to illegal trading in International markets. Tiger is traded for its skin, bones and body parts; Pangolin, the most illegally traded wild mammal on the planet is trafficked for its meat and its scales are used in traditional medicines; Star Tortoise for meat and pet trade and Tokay Gecko in traditional medicine mostly into South East Asia and particularly Chinese Markets. Phase two will see more threatened species and explore other routes of trafficking.



Recent media reports on seizures of illegally traded species and their parts at airports is a growing indication of rampant wildlife trafficking. Some of the major wildlife species being smuggled through airports are star tortoises, live birds, Shahtoosh shawls, tiger and leopard body parts, ivory, rhino horns, pangolin and pangolin scales, sea shells, sea-horse, Sea-cucumber, red sanders, agarwood, deer antlers, mongoose hairs, reptile skins, live snakes, lizards, corals, orchids and medicinal plants.

Conservation News -

Actor, Producer, UN Environment Goodwill Ambassador and recently appointed Secretary-General's SDG Advocate, Dia Mirza inaugurated the campaign.

Dia Mirza, Actor, Producer, UN Environment Goodwill Ambassador & Secretary-General's SDG Advocate inaugurated the campaign and said, *"Wildlife trafficking thrives on ignorance and indifference to the species and laws that govern it. This campaign gives a glimpse of the cruelty and suffering these magnificent species have to endure for being trafficked. The need of the hour is greater awareness and commitment to protecting these species to ensure that they not just survive but also thrive in the wild."*

Speaking on the occasion, Secretary, Ministry of Environment, Forest and Climate Change, Shri CK Mishra said "Conservation is innate to India's ethos. While wildlife faces threat across the globe and India's flora and fauna's demand continues in illegal global markets, in keeping with our stringent provisions for protection of wildlife under the Wild life (Protection) Act, 1972, efforts towards creating awareness among public at large would go a long way to help protect our wild-life".

"There is an urgent need for awareness, action and stringent enforcement of laws to put an end to all illegal wildlife trade threatening biodiversity and conservation in the wild. This campaign is an important step forward in creating much-needed awareness on wildlife trafficking which threatens the very survival of these species," said Atul Bagai, Head, UN Environment India.

"A huge global demand for our flora and fauna is a major cause for illegal wildlife trade by ruthless cross border smugglers. WCCB stands committed to fight this organized crime but it is crucial to work together across various government and non-government organizations, private sector and civil society to save wildlife. Our awareness campaign at Airports is a step towards reaching out to the public," said Tilotama Varma, Additional Director, Wildlife Crime Control Bureau of India

In collaboration with the Airports Authority of India and GMR Group, the campaign will travel across 22 airports across India over the next year. Both WCCB and UN Environment initiated a comprehensive approach with a focus on awareness building of various stakeholders towards the issue of prevention of illegal trade and smuggling of wildlife and wildlife products through exit points. The awareness campaign is expected to complement the efforts of the Govt. Agencies.

UN Environment is the leading global voice on the environment. It provides leadership and encourages partnership in caring for the environment by inspiring, informing, and enabling nations and peoples to improve their quality of life without compromising that of future generations. UN Environment works with governments, the private sector, the civil society and with other UN entities and international organizations across the world.

Wildlife Crime Control Bureau is a statutory multi-disciplinary body established by the Government of India under the Ministry of Environment and Forests, to combat organized wildlife crime in the country.. Under Section 38 (Z) of the Wild

Conservation News -

Life (Protection) Act, 1972, it is mandated to collect and collate intelligence related to organized wildlife crime activities and to disseminate the same to State and other enforcement agencies for immediate action so as to apprehend the criminals; to establish a centralized wildlife crime data bank; co-ordinate actions by various agencies in connection with the enforcement of the provisions of the Act; assist foreign authorities and international organization concerned to facilitate co-ordination and universal action for wildlife crime control; capacity building of the wildlife crime enforcement agencies for scientific and professional investigation into wildlife crimes and assist State Governments to ensure success in prosecutions related to wildlife crimes; and advise the Government of India on issues relating to wildlife crimes having national and international ramifications, relevant policy and laws. It also assists and advises the Customs authorities in inspection of the consignments of flora & fauna as per the provisions of Wild Life Protection Act, CITES and EXIM Policy governing such an item.

COP meetings of Basel, Rotterdam and Stockholm conventions held in Geneva.

The joint meetings of three conventions on chemicals and waste that is the fourteenth meeting of the Conference of the Parties (COP) to **Basel Convention** on the Control of Transboundary Movement of Hazardous Wastes and their Disposal (COP 14) was held along with the ninth meeting of the COP to **Rotterdam Convention** on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade and the ninth meeting of the COP to **Stockholm Convention** on Persistent Organic Pollutants. These meetings were held in Geneva from 29th April to 10th May 2019. The theme of the meetings was “**Clean Planet, Healthy People: Sound Management of Chemicals and Waste**”.

In Basel Convention, two important issues were discussed and decided, i.e. technical guidelines on e-waste and inclusion of plastic waste in the PIC procedure. The draft technical guidelines stipulated the conditions when used electrical and electronic equipment destined for direct reuse, repair, refurbishment or failure analysis should be considered as non-waste. India had major reservations regarding these provisions as in the name of re-use, repair, refurbishment and failure analysis there was a possibility of dumping from the developed world to the developing countries including India in view of the growing consumption of electronic equipment and waste across the world. The Indian delegation strongly objected the proposed decision on these guidelines during plenary and did not allow it to be passed by the conference of the parties (COP).

Many rounds of multilateral and bilateral negotiations happened under the aegis of the Convention Secretariat in order to address India's concerns which were supported by a large number of other developing countries. On the final day of the COP, a modified decision was adopted in which all the concerns raised by India were incorporated.

These were: dumping of e-waste in developing countries; recognition that the interim guideline has issues and further work is required specially on the provision on distinguishing waste from non-waste; the guidelines were adopted on an interim basis only; the tenure of the expert working group was extended to address the concerns raised by India; and the usage of interim guidelines to be done only on a pilot basis.

Conservation News -

Under the Basel Convention, another major achievement of COP 14 was the decision to amend the convention to include unsorted, mixed and contaminated plastic waste under PIC (Prior Informed Consent) procedure and improve the regulation of its transboundary movement. This is a significant step taken towards addressing plastic pollution which has become a major environmental concern across the globe.

Further, Basel Convention has also adopted partnership on plastic which was welcomed by the Indian delegation. These steps will help prevent the illegal dumping of plastic wastes in developing countries. India has already imposed a complete prohibition of import of solid plastic waste into the country. India has also made an international commitment to phase-out single-use plastic. India fully supported this exercise and one of the members of the Indian delegation was co-chair in the contact group which negotiated this agreement for amendment in the annexes of Basel Convention to bring plastic waste under PIC procedure.

Under the Stockholm Convention the COP decided to list “Dicofol” in Annex A without any exemption. The “PFOA” was also listed with some exemptions in the Annex A of the Stockholm Convention. Under the Rotterdam Convention, two new chemicals (Phorate and HBCD) were added in the list for mandatory PIC procedure in international trade.

Laudankia Vine snake discovered from Odisha

A new species of vine snake has been discovered in Odisha. Researchers from Centre for Ecological sciences, Indian Institute of Science, Wildlife Institute of India, Natural History Museum, London, Zoological Survey of India, Wayanad Wild have published their findings in Journal of Natural History (V. Deepak, Surya Narayanan, Vivek Sarkar, Sushil K. Dutta & Pratyush P. Mohapatra (2019) A new species of *Ahaetulla* Link, 1807 (Serpentes: Colubridae: Ahaetullinae) from India, Journal of Natural History, 53:9-10, 497-516, DOI: [10.1080/00222933.2019.1589591](https://doi.org/10.1080/00222933.2019.1589591))

The study reportedly took 10 long years as the researchers found other samples in Boud and Balasore and compared with two more samples present in ZSI, which originated from Mount Abu in Rajasthan.

This discovery of a vine snake species has come after more than a century as the last discovery was in 1906. Out of the seven species of vine snakes in India, Odisha now has three species. Apart from the newly discovered *laudankia*, the other two vine snake species found in Odisha are the common Indian vine snake and the variable coloured vine snake. The researchers have proposed its standard English name as *Laudankia* vine snake. In Odia, *lau* means bottle gourd and *danka* means stem. The brown colour of the *laudankia* vine snake resembles the dried stem of bottlegourd. Its scientific name has been proposed as *Ahaetulla laudankia*.

In our childhood days we were told to be careful while plucking bottle gourd as there may be *laudankia* or vine snake in it. Personally I had believed it as myth. However, this discovery shows that some myths do have some element of truth in it. This discovery and the naming of the snake as *laudankia* has brought lot of joy to wildlife enthusiasts and herpetologists of Odisha.

Equipment Discussions -

All-new robust Olympus Tough TG-6 compact camera: Built to capture any adventure

Olympus Tough TG-6 delivers impressive image quality in an extremely rugged and compact housing

Olympus has introduced Tough TG-6, a new flagship in their Tough compact camera series withstanding all weather conditions, underwater use, drop shocks and crushing weights. The new TG-6 features not only Olympus' acclaimed toughened performance, field sensor system and the ability to capture the smallest details and brightest colors with impressive quality, but further improvements and new features: Highlights include new underwater modes, more versatile macro photo options as well as a better monitor with improved resolution. The TG-6 will go on sale from early July along with a number of new useful accessories for the expandable Tough photography system.



Tough performance in any environment: Built for adventure

The Tough TG-6 was designed to be a handy, reliable partner that is ready for the rougher parts of photographic life: It is waterproof¹ to a depth of 15m, dustproof¹, shockproof¹ to 2.1m, crushproof¹ up to 100kg, freezeproof¹ to -10°C, and features a dual-pane protective glass construction for excellent anti-fogging performance. A new attachable lens barrier (LB-To1) adds even more protection from scratches to the lens, the PT-059 underwater casing allows to capture images and movies of up to depths of 45 metres below the surface (both sold separately).

The renowned Olympus field sensor system makes it possible to record log data such as location, altitude/depth as well as air/water temperature while capturing still images or movies.

Equipment Discussions -

Impressive image quality delivered through an ultra-bright lens, high- speed sensor and Olympus' latest image processor

Being equipped with a class-leading F2² zoom lens and a hi-speed back-lit CMOS image sensor that has superb high-sensitivity performance, the TG-6 allows its users to take fantastic photos and video. A new digital teleconverter doubles the zoom factor of the 4x optical zoom for a maximum of 8x zoom. Anti-reflective (AR) coating on the image sensor glass now reduces ghosts and flares while the TruePic VIII image processor from the OM-D E-M1X professional model helps to reduce noise levels and improves the resolution in low contrast areas. The option to capture RAW data enables TG-6 users versatile editing options with Olympus Workspace or other image editing software supporting TG-6 RAW files.

Unrivaed macro system for excellent close-up shooting capabilities up to 1 cm from the subject

For spectacular close-up shots, the Tough TG-6 has an advanced Variable Macro system that goes beyond the limits of what the human eye can see: boasting a closest focusing distance up to 1 cm from the end of the lens and a maximum shooting magnification of 7x³, the camera captures high-quality images of microscopic worlds. The macro system features four modes: Microscope, Microscope Control, Focus Bracketing and Focus Stacking. In Focus Stacking mode, users can now set between 3 and 10 shots for more versatility and to fine tune settings for different subjects and more precision in the finished shot.

Full-featured underwater shooting modes and large line-up of accessories for system expansion

To expand the possibilities of underwater shooting even further, the Tough TG-6 is equipped with five underwater modes, including Underwater Wide, Underwater Snapshot, Underwater Macro, Underwater Microscope, and Underwater HDR. Each mode switches to shooting settings optimized for different situations. The popular Underwater White Balance mode has been expanded to three options, providing appropriate color adjustment for deep water shooting. The new Fisheye Converter FCON-To2 for circular fisheye photography (sold separately) has been added to a versatile lineup of accessories to further expand shooting possibilities.

Availability & pricing, extended warranty and underwater tips & tricks at MyOlympus

The new Tough TG-6 will be available in red and black along with all new accessories (see below) from early July 2019 at a RRP⁴ of £449.99.

The great-value price includes a six-month warranty extension⁵ if new owners register their camera at Olympus website.

New accessories for Tough system expansion

Tough cameras are the base for an expandable photography system with waterproof lenses, protective cases, and an underwater housing for deep dives. All the components are just as rugged as the cameras they were designed for.

Equipment Discussions -

With the TG-6, a number of new accessories were added to the line-up:

- > PT-059 Underwater Case for capturing movies and stills worry-free at depths up to 45 metres. The camera control dial is operable when the camera is stored in the case for easy exposure compensation control underwater. Two external flash units for underwater photography (UFL-3) are compatible for multi-unit flash photography in a compact system.
 - > CSH-127 Silicone Jacket protects the surface of the camera body from scratches. It also provides a solid grip on the camera when shooting during winter or water sports. LED Light Guide LG-1 and Flash Diffuser FD-1 can be attached to the camera without removing the silicone jacket.
 - > LB-T01 Lens Barrier for protecting the lens surface against dirt and scratches. The barrier is easily opened/closed by rotating the edge which ensures easy handling even when wearing gloves.
 - > FCON-T02 Fisheye Converter lens for an easy and fast switch between circular fisheye and diagonal fisheye photography. To attach this lens, the CLA-T01 Converter Adapter (sold separately) is required
 - > UC-92 Lithium Ion Battery Charger to fully charge the Tough camera battery LI-92B using an USB port in approx. 2.5 hours.
-

Equipment Discussions -

DJI launches 4K Action camera Osmo to compete against Go Pro Hero 7:

New Camera Features Front and Rear Color Screens and State-Of-The-Art Electronic Image Stabilization

DJI, the current leader in civilian drones, in an interesting move has moved into the action camera space by launching DJI Osmo. The Osmo looks similar to the Go Pro Hero 7 black. However, DJI has included a front facing LCD for the selfie generation.



“DJI has always pushed the limits of technology, and the content creators who love our products made clear they wanted us to push the limits of their creative potential too. Osmo Action is our cutting-edge answer to what the creative community demands: Exceptional image quality and stabilization in a unique and durable new form factor, with dual color screens and seamless software integration. For all types of creators who push their gear to the limits, Osmo Action sets the new standard,” said Roger Luo, DJI President. “Whether you are capturing aerial content with Mavic 2, incredibly smooth content with Osmo Pocket, or heart-racing footage with Osmo Action, DJI offers a full suite of products for your creative needs.”

Rugged construction and intuitive design

A compact yet durable design makes Osmo Action the ideal camera for life’s adventures. Constructed to handle extreme conditions with ease, Osmo Action is dustproof, shockproof ^[1], waterproof ^[2] and has the ability to operate in sub-freezing temperatures^[3]. Osmo Action uses color screens on both the front and back, a unique design feature that allows for more convenient scene composition while on the move. The 2.25-inch rear touchscreen employs a water- and fingerprint-

Equipment Discussions -

repelling coating, and the 1.4-inch front screen makes vlogging and selfies easier than ever before. With a brightness of 750 nits, Osmo Action can be used in harsh lighting conditions, including direct sunlight.

Osmo Action's interactive user interface, Action OS, combines a streamlined and functional physical design with flexible operation. Power on, initiate recording, and rotate through the video and photo capture modes in the blink of an eye with three dedicated buttons. Never miss a moment with the help of SnapShot, which allows Osmo Action to turn on and begin recording in under two seconds by pressing the shutter button once.

Advanced technology with exceptional image quality

A 1/2.3-inch sensor records 12-megapixel photos and 4K video up to 60fps at 100Mbps in stunning detail, assuring high-quality footage. A three-glass aspherical lens design records low-distortion content and aids in reducing warping effects for improved scenes. The lens cap is finished with two layers of anti-fingerprint coating to keep the shot clean during use, as well as an anti-reflective coating to reduce the unwanted effects of lens glare, giving users more flexibility to shoot in bright conditions.

Incorporating over a decade of experience creating three-axis mechanical gimbals, Osmo Action is the first DJI handheld camera to include RockSteady, DJI's Electronic Image Stabilization (EIS) technology. High-performance stabilization algorithms work in conjunction with EIS to record every movement in smooth, stable, high-quality video, even when recording 4K/60fps. Additionally, Osmo Action is capable of High Dynamic Range (HDR) video in 4K/30fps, delivering an additional three stops of dynamic range to the scene, natural transitions between light and dark areas, and rich details that are often lost in complex lighting conditions. Osmo Action has a removable battery with a run time of 93 minutes recording at 4K/30fps with RockSteady enabled, and 135 minutes recording at 1080p/30fps without RockSteady. Dual microphones let users take advantage of Osmo Action's Voice Control, and a speaker ensures outstanding playback quality.

Creative, intelligent features

Osmo Action offers a wide variety of highly creative features built into the camera which users can access with a few simple taps. While recording, one can choose between:

- **Slo-mo:** 8x slow motion in 1080p 240fps or 4x slow motion in 1080p 120fps creates a visually appealing effect when documenting action-packed scenes.
- **Timelapse:** To turn minutes into seconds, Timelapse is perfect for capturing unique content with the effect of the world moving faster.
- **Custom Exposure settings:** Shoot for the stars with manual and semi-automatic settings that allow up to 120 seconds of exposure, perfect for capturing the night sky.

Equipment Discussions -

Unlocking Osmo Action's full potential

Using the recently released DJI Mimo app, connect Osmo Action to your mobile device with WiFi or Bluetooth for added functionality, including a live feed of the camera, multiple story templates, in-app quick editing, and more. An ecosystem of accessories helps unleash all the possibilities of Osmo Action including:

- **Camera Frame Kit:** Included with Osmo Action, the Camera Frame Kit offers a universal mount for additional accessories and a window for the LED indicator to show camera status in real time while protecting the device.
- **Adhesive Mounts:** Attach Osmo Action to flat or curved surfaces including skateboards, bikes, helmets, and more to capture fast-paced moments. Both the curved and flat adhesive mounts are included with Osmo Action.
- **Waterproof Case:** The waterproof case protects the device at depths down to 60 meters while providing a clear image using high-strength glass.
- **3.5mm Adapter:** The 3.5mm adapter offers users the ability to connect an external mic for professional sound recording.
- **Extension Rod:** Capture unique angles using the Extension Rod, which features a rotatable phone holder and a 1/4-inch screw adapter.
- **Floating Handle:** The Floating Handle offers a comfortable grip for Osmo Action and keeps it floating when shooting in water.
- **Filters:** Osmo Action comes with Neutral Density (ND), Polarizer, and underwater filters. ND filters (ND4, ND8, ND16, and ND32) reduce light exposure in various environments, while Polarizer filters reduce reflections and increase color saturation for a more appealing image. Orange Seawater and Purple Freshwater filters restore the natural color of underwater scenes.
- **Charging Hub:** Charge up to three batteries simultaneously in less than 130 minutes.

Price and Availability

Osmo Action retails for **\$349 USD** and will start shipping immediately after the announcement on May 15 at store.dji.com and from authorized dealers on May 22.

B&H Link: <https://www.bhphotovideo.com/c/buy/items/ci/43095/BI/19990/KBID/13252>

Equipment Discussions -

Laowa has announced 100mm f2.8 Ultra Macro lens:

This is an interesting and slightly cheaper option for photographers shooting/filming macro subjects. Venus Optics Laowa has added a new lens to their macro lineup. Earlier it had launched the 60mm f2.8 2:1 macro lens. Now Laowa has added to its 2:1 macro lineup of lenses with the announcement of the 100mm f2.8 2:1 Ultra Macro APO lens for full frame cameras.

This lens has got 12 elements divided in 10 groups. The lens has 9 blade diaphragm which results in pleasing bokeh.



100mm f/2.8 2:1 Ultra Macro

There is a pair of apochromatic elements to reduce the chromatic aberration. Laowa says that the use of APO element makes chromatic aberration invisible. This design is supposed to make an excellent sharp image in both macro as well as infinite distances with high clarity and colour accuracy. We will only be able to verify after physical testing.

This lens is similar in size to other 100mm macro lenses. It is 72mm by 125mm. Being a macro lens there is manual focusing capabilities which helps in working with subjects that are as close as 2:1. The minimum focusing distance is 9.7 inches. The wider magnification range is likely to help capture subjects at any sizes.

The aperture range of this 100mm lens is from f2.8 to f22. The size of the front filter thread is 67mm.

This 100mm macro lens is available in Canon EF, Nikon AI and Sony FE mounts. The aperture of Canon version can be controlled by the electronic motor in the lens (Compose at wide open). Photographers no longer need to compose their shots in a dark viewfinder. A focus assistance indicator will also be shown in the camera. EXIF data will also be saved into the camera.

The weight of the Laowa 100mm f2.8 lens is **638 gms**. It doesn't have any image stabilisation.

Price: It is Available this May, at **£469** inc vat in Europe. This lens is priced at **\$449 USD** at B&H:-

<https://www.bhphotovideo.com/c/search?InitialSearch=yes&N=0&Ntt=Laowa+100mm+F2.8+Ultra+Macro+&Top+Nav-Search=&sts=ma&BI=19990&KBID=13252&KWID=EZ>

Equipment Discussions -

Canon launches EOS 250D DSLR

Canon has launched the world's lightest DSLR camera with a moveable screen.



Here are the salient features:

Resolution: 24.1 Megapixels

Sensor: 22.3 x 14.9 mm, APS-C size CMOS sensor.

Processor: DIGIC 8

Autofocus: DualPixel autofocus (DPAF) and Eye AF. It has a 9 point AF sensor with one cross type AF point. The 9 AF points are based on phase detection.

Viewfinder: Since this is a DSLR, there is an optical viewfinder. The optical viewfinder covers 95% area. Also there is a variangle LCD which helps in shooting from different positions as well as helps in vlogs.

ISO: 100 to 25600 (Extended: 100-51200)

Shutter speed: Max 1/4000 to 30 seconds, bulb mode. Mechanical shutter.

Exposure compensation: -5 to +5 EV

Burst still shooting: 5 fps in jpeg at 24.1 MP resolution till card is filled. 5 fps in raw (24.1 MP resolution) for 10 frames.

Equipment Discussions -

Video: Recorded in MP4 or H.264 in UHD 4K (3840 x 2160) at 120Mbps upto 25P. Full HD upto 60p (max 60Mbps)
External video recording can be done at 4:2:2 at 10 bits

ISO for Video: 100 to 12800

Image Stabilisation: 5 axis digital image stabilisation while filming video

Media: There is one SD card slot. There is a mini HDMI C slot, USB 2.0 and a 3.5mm microphone jack slot. Bluetooth and WiFi connectivity.

Size: 4.8 x 3.6 x 2.7"

Weight: 449 gms

Price: \$549 US dollars

PRESS RELEASE

Make beautiful memories in a click with the Canon EOS 250D, the world's lightest DSLR with a moveable screen

London, United Kingdom, Wednesday 10th April 2019 – Canon Europe announces the launch of the Canon EOS 250D, the world's lightest DSLR camera with a moveable screen¹. For a family looking to step-up from smartphone photography or upgrade from their existing camera, the EOS 250D is a fun and easy to use DSLR, packed with the latest technology that provides users with a formidable introduction to interchangeable lens photography in a small and lightweight body.

Successor to Canon's multi-award winning EOS 200D, the EOS 250D has a guided user interface for easy operation, a large 24.1 Megapixel Dual Pixel CMOS APS-C sensor, 4K movie capability, super-fast and responsive autofocus, and excellent connectivity to smart devices. In addition, the camera features DIGIC 8, Canon's latest image processor which powers many of its functions, including 4K movie recording, 4K time-lapse and 4K frame grabs from 4K movies.

Straightforward handling in a lightweight and manageable body, the EOS 250D enables the whole family to enjoy capturing life's experiences, whenever, wherever. The guided user interface makes this effortless from the moment the camera is switched on, with on-screen hints and tips to ensure everyone is getting the most out of the camera. It is also easy for users to capture their experiences in imaginative ways with Canon's Creative Assist feature, a suite of effects, filters and colour adjustment tools to apply to photographs when composing an image or after it has been taken.

Canon's DIGIC 8 image processor supports a variety of improvements in Live View autofocus precision and Eye AF, Auto Lighting Optimizer, Digital Lens Optimizer and Highlight Tone Priority for sharp high-resolution images ready to share

Equipment Discussions -

straight from the camera. The 24.1 Megapixel sensor performs well in low-light and facilitates a shallow depth of field, adding beautiful background bokeh to treasured family portraits. The camera's cutting-edge technology combined with its ease of use, makes the EOS 250D the perfect DSLR for those wanting to capture precious family moments so they can be enjoyed for generations to come.

The EOS 250D is a camera for every occasion. Its intuitive Vari-Angle touchscreen enables comfortable shooting from a variety of angles, making family selfies a joy or recording a vlog effortless. Canon's Dual Pixel CMOS AF technology will also keep family and friends in sharp focus when shooting stills and video via the touchscreen. Delivering a classic shooting experience, the EOS 250D features an optical viewfinder with a responsive 9-point AF, so moments can be framed clearly and as they were seen with the naked eye.

When images and videos are ready to be shared, the EOS 250D integrates effortlessly with smart devices² via Bluetooth[®]³ and Wi-Fi using the free Canon Camera Connect app for iOS and Android. From here, images and videos can be downloaded to a smart device, reviewed and posted on social media or shared with friends and family.

The Canon Camera Connect app also facilitates shooting remotely from a smart device, perfect for capturing family group shots or a hands-free selfie. Images can then be sent to a paired smart device as soon as they are taken via the Automatic Image Transfer function, delivering peace of mind that cherished memories are safely backed-up.

The EOS 250D is available in three sleek finishes: black, white and silver and is part of the Canon EOS ecosystem, comprising of over 80 world-class lenses, flashes and accessories, offering an optimum level of choice as users look to expand the camera's capabilities.

The EOS 250D's guided and creative features, combined with Canon's cutting edge technology, will set families up for storytelling greatness and equip them with the tools and knowledge to make beautiful memories in a click.

The EOS 250D is now available to pre-order from Canon's online store or to purchase with a range of lens and body options from official Canon retailers from 25th April 2019.

Canon EOS 250D/Key Features:

- 24.1 Megapixel APS-C sensor and DIGIC 8 processor
- For superb image quality, even in low light
- Optical viewfinder

Equipment Discussions -

- See things as they really are – clear and simple
 - 4K movies
 - For incredible resolution
 - Dual Pixel CMOS AF
 - When using Live View mode, focusing is fast for photos and smooth for movies
 - Vari-angle touchscreen
 - Shoot from any angle and control the camera with familiar touchscreen gestures
 - Guided user interface helps you learn
 - Friendly, hands-on advice that helps you learn how to get the image you want
 - Bluetooth® and Wi-Fi
 - A constant connection between camera and smart device for simple, automatic sharing
 - Creative Assist
 - Try new looks and enhance images
-

Natural History -

COUNTRY NOTEBOOK: Shower Bath : M.Krishnan - 6 May 1951

The Sunday Statesman (shared by Shri. Saktipada Panigrahi)

SHOWER BATH

"I CAME here early in April to keep my annual date with the southern summer. For a week all went well, slowly the budding heat burgeoned. Then suddenly massed clouds rolled up overhead and the rain came down in torrents. A passing shower, I said to myself, while it rained three inches and it passed. the sun burned fiercely in a clear sky the next day and the heat was all more apparent for the interlude. But since morning it has rained again today, the sky is overcast, the air cool, and it looks as though I must wait for my assignation.



Malabar Whistling Thrush

Photographed by - Sandipan Ghosh

Seating on my leaky verandah, I have been watching birds in rain. I happen to have Dewar's 'Birds of the Indian Plains' with me just now-he has a chapter on "Birds in the Rain" in the book, and perhaps he wrote it not far from here. I would like to observe something original about reaction of the birds around me to the shower, but such things do not go by preferences and I have to confirm Dewar largely. He said that birds enjoy the rains acutely, and in India it is rarely that they are forced to take shelter from it.

"They know naught of rheumatism or ague" they sit in the rain or splash about the puddles, delighted with the opportunity for a shower-bath, and afterwards there is a great shaking out of feathers and preening of wings and they are smart and fresh and glad. Dewar also comments on how the first monsoons bring feasts of termites and other insects for birds and nestlings, and softens terra firma for the probing bill of the Hoopoe. All this is true. An odd group of three Common Mynahs

has been parading the gravel path outside for the past hour, wading into every puddle and splashing about, as if trying to drown themselves in the knee-high water, and still they are not drenched- their well-oiled plumage seems waterproof.

I can hear the neighing call of a White-breasted Kingfisher and know where it is-on the top of a Casuarina pole in the backyard. Far out, in a field beyond the road, a flock of Cattle Egrets alights on the dazzling wings, surprisingly white in this grey atmosphere, and quaver the wet grass. There are Crows on exposed perches all around, determined not to miss a drop of rain. The only birds I can see that do not seem too keen on a shower-bath is a party of White-headed Babblers sheltering under a mango tree.

Watching these birds, it is obvious that Dewar wrote about the reaction to the rain from accurate observation, but I cannot help feeling that he assigned a wrong motive for their behaviour. It is no craze for originality that makes me say this- it is that I can see no patent signs of joy in these rain-bathing birds. The lives of birds are ruled by instincts mainly and their responses and emotional expressions follow set patterns.

There is a Crow sitting on a dead limb of a Neem not 20 yards from me, and I have been observing it closely for the past half-hour. It has been sitting there dully, unmoving except to fluff its plumage or caw in a sad undertone from time to time-the illustration is from a leisurely sketch of its obliging model. Now if the crow is enjoying the shower, I must say it takes its pleasure sadly; Poe's raven could hardly have made a less sprightly picture had it been out there, on that branch.

Nor can I note any tokens of jubilation in the other birds out in the rain. Dewar says that the normally sedate mynahs shed their reserve when it rains and go mudlarking in the abandoned enjoyment. I am alive to the tonic properties of slush and downpour-it does one's soul good to get drenched and splashed with mud for all ponderous unlovely notions of self-importance and dignity are shed at once, and this sudden jettisoning and the feeling of lightness that follows moves one to frisk about and find life joyful. But I think the Mynahs I see are undignified only because they are bathing, bathing vigorously in two-inch water-few beasts or birds (bar all cats) look their best at their toilet.

Birds are wonderfully equipped for extremes of climate and weather. And they enjoy dust-baths. But that is not saying that they may feel no discomfort from clogging dust and secretions in their plumage. It is not only that their addiction to rain is an unreasoned response, an instinctive utilisation of an opportunity to wash away dust and water-soluble accumulations from their feathers and skins? That would explain their "non-enthusiastic" but sustained insistence on exposing themselves to the first rains after every spell of dry weather."

M.Krishnan

This was published on 6 May 1951

Wildlife Photography -

Deer in Bharatpur by Sabyasachi Patra



Desert Fox Pups by Vipin Sharma



Wildlife Photography - **Tiger by Shyamala Kumar**



Tigress in Kabini by Jerin Dinesh



Wildlife Photography -

Robin by Mrudul Godbole



Rufous-throated Wren-babbler by Sandipan Ghosh



Wildlife Photography -

Streak-Throated-Woodpecker by Murugan Anantharaman



***Lagerstroemia speciosa* (Pride of India/Jarul) by Prajwal Ullal**





This is the 125th issue of Indiawilds. The photo of Neelakurinji adorns the cover page of this issue. The Neelakurinji blooms every 12 years and had last bloomed in 2018. These mountains are the home of these flowering plants. If a modern day EIA (Environment impact assessment consultant) goes to this place, he will say that the land is barren or has some weeds and plants and recommend diversion of this place for some industry. The person will not know that once in 12 years this mountain landscape will be completely transformed with blooming of Neelakurinji plants.

Despite scientific studies we don't know enough about our wild lands. The Yeti controversy as mentioned in the lead article in this issue as well as the discovery of a new species of Vine snake in Odisha shows that we should focus on the unknown mysterious species of plants, microbes, reptiles and smaller animals and their inter-relationships. And to discover new species their habitat has to be protected. So we have to focus on protecting our wilderness so that future generations have a chance to take pleasure watching nature's miracles like the blooming of neelakurinji and relaxing in those wild places as well as seek inspiration. Hope the new Government of India focuses on protecting our wild places for posterity.

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 your user id and/or password you can mail administrator@indiawilds.com

Regards,

Sabyasachi Patra

Profile: <http://www.indiawilds.com/about.htm>

Contact: <http://www.indiawilds.com/contact%20us.htm>

Facebook: <http://www.facebook.com/pages/IndiaWilds/132629240481>

Diary: <http://www.indiawilds.com/diary/>

Equipment reviews: <http://www.indiawilds.com/diary/category/equipment/>

Forums: <http://www.indiawilds.com/forums/index.php>

Channel: <http://www.youtube.com/indiawilds>

Publisher's address: -

**Plot No. 1, Akarpuri Colony,
Near Vaithal Temple, Old Town,
Bhubaneswar, 751002
Odisha
Mobile - +919910900446**
