IndiaWilds®

Newsletter

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IndiaWilds
THE.LAND.OF.THE.TIGER

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Cover Page Photograph:

Pelican
by Sabyasachi Patra

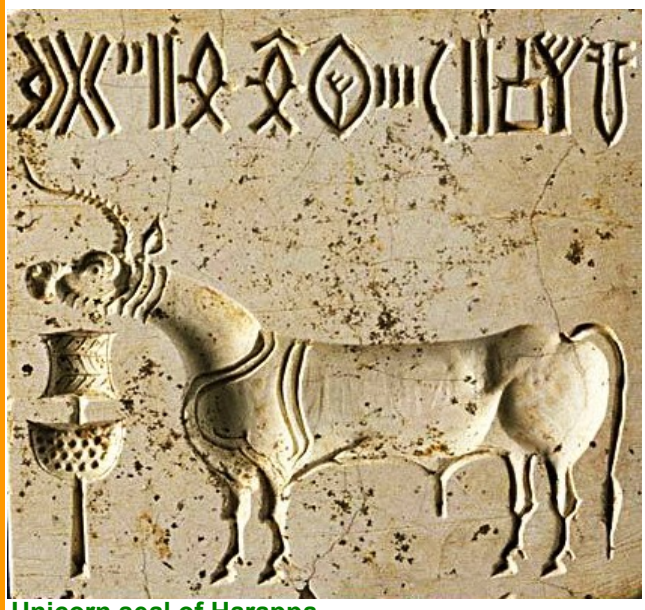
Saving India's Wilds in Materialistic times:

Wildlife in India is closely linked with our culture. Various wildlife species are treated as vehicles of different Gods and Goddesses. India's leaders have often taken pride in our cultural ethos, which encourages compassion towards other species. So there is a tradition of feeding animals and birds. Historically, wild animals are also considered as omen or sign of impending events. People have worshipped wild animals for ages. The seal from Indus valley showing animals shows about the importance given to them even 4200 years ago in Harappa.

Indus valley seal - God of fertility

Prehistoric men and women were terrified and in awe of the power of wild animals. They had drawn cave art in caves around the world. Even in early 1st AD during the time of Chakravarty Emperor Kharavela, one can find about an incident when elephants entered into the lake raising panic among the royal women who were taking bath at that time.

During those days wildlife were plenty and the human population was low. Today, the population of our species on earth has crossed 7 billion and is projected to go beyond 9 billion by 2050. And the population of most of the wildlife species are on decline and many species have become extinct. Human beings without any natural inbuilt weapons like claws, canines, fangs etc. have used their intelligence to create tools and subjugate and decimate other species including bigger and powerful ones. Initially the tools that humans used were rudimentary. With the discovery of bow and arrows, man learnt to create much impact on



Unicorn seal of Harappa

wildlife. Gradually with the knowledge of metals, man could create weapons, which were strong and sharp enough to take on many wild animals. The invention of gunpowder tilted the balance of power towards man. With the use of modern firearms, big and powerful wild animals can't even give a semblance of fight. Nevertheless, hunters still crave for killing wild animals and posing with their dead bodies as hunting trophies. So the killing spree continues unabated.

Realising the dwindling numbers of wildlife many Governments have banned or restricted hunting. However, the hunters are using many legal loopholes to hunt wildlife. Often tigers and leopards are declared as man eaters on some flimsy pretext and a few chosen hunters hunt these animals. There is a nexus between the hunters and a few politicians and some forest department officials. Not only carnivores are declared as man eaters, various other wild animals like deer, macaques, wild boars, nilgai etc. have been declared as vermin and these hunters are then free to hunt.

On the other hand, poachers continue their hunting spree to cater to the demands of wildlife trade. Skin, bones, meat and other body parts of wildlife are in demand from Chinese medicine, fashion etc. At times even before we know that a certain species is found in a place, the poachers through their extensive local connection get to know it and then place traps and kill the animal.

Every day some wild animal or other is killed by a speeding vehicle in the roads and cut away by trains. Even large animals like elephants are mowed down by trains and big freight containers. The authorities turn a silent eye to these brutal killings. With the limited attention span

Two elephants killed by train in Assam

that people have these days, by and large these killings are soon forgotten.

A far greater number of animals are wiped out because their homes are sacrificed for our needs. Vast tracts of forests are given away to industries and cut for linear projects like roads, railways and canals; drowned by dams and dug up for mines. When the forests are cut open by such projects, the habitat of wildlife is fragmented and that impacts the health of the gene pool. The plans to divert forests for various projects are done to please the industries and are termed as progress and necessary cost for developing India.

India has sacrificed forests size of Calcutta in three years between 2015 and December 2018. The Government officers, ministers and even common men and women think that sacrificing forests and wildlife animals is inevitable if we need to progress. So clearly India has changed a lot. India is the Land of Buddha who taught ahimsa or non-violence and compassion for other beings and coexistence with them. Our Vedas and Upanishads talk about the importance of nature. Unfortunately, those messages are not given any importance these days. Leaders while delivering speeches only remember it.

Inter-relationships between species:

Awareness about the importance of wildlife as basic building blocks in our ecosystem is very limited. People don't realise that there is a complex web of inter-relationships between various species. When a species becomes extinct its role in the ecosystem has to be carried out by someone else. At times to certain extent some other species can carry out that role, but more often than not there remains a big gaping hole and hence the overall ecosystem suffers.

Elephants consume a huge amount of food. A lot of food that elephants consume comes out in the dung as partially digested and provide nutrients to the forest as well as to other species who feed on it. In African forests, Omphalocarpum produces large fruits with hard shells. Only African forest elephants can break open these fruits and the seeds easily germinate after passing through the elephants stomach and coming out in the dung. With reduction in the African forest elephants, the germination of Omphalocarpum tree is at risk. Similarly many species of fig trees have their own wasp pollinators. The extinction of one wasp pollinator or seed disperser will spell a death knell on that species of trees.

Trees may look like individual entities. However, under the ground, the trees have a dense network of roots and there is a very close relationship between various species of trees through their roots and mycorrhiza at the tips of the roots. These kinds of mutualism between different species of trees and between trees and fungi are slowly coming to light. If at the moment a species of tree or plant is eliminated, then we still won't know what we lost and how that loss is going to imbalance our ecosystem.

Economic Benefits:

At the moment, materialistic tendencies have taken over and people give more importance to money over anything else. Since the British era, authorities have been only viewing forests in terms of how many cubic meters of wood it can yield i.e. in terms of their economic impact. Since a long time, it was known that forests help in conserving soil as the soil erosion is checked and nutrients are preserved. Forests also contribute moisture and towards rains and play an important role in the

water cycle. Forests act as sponge in soaking up rain water and helps percolation and recharge of underground aquifers. Our forests give rise to our rivers and rivulets. So if our forests are wiped out then our rivers will go away too. The forests also help in carbon sequestration and regulating the gasses in the atmosphere and controlling the climate. In the last century our understanding about the importance of forests and natural ecosystems have improved. Especially in this era of climate change and air pollution and at a time when India is staring at desertification, we have to focus more in raising awareness about the benefits of our wildlife and natural ecosystems. Fortunately, the NTCA has encouraged IIFM to conduct economic valuation of tiger reserves and two phases of the study has been completed.

The phase II study of economic valuation of tiger reserves comprising Anamalai, Bandipur, Dudhwa, Melghat, Nargunasa-garSrisailam, Pakke, Palamau, Panna, Similipal and Valmiki found that the monetary value of flow benefits range from

Rs. 5094.91 crore to 16202.11 crore annually. These tiger reserves also conserve enormous stock of timber and carbon valued in the range of Rs. 13745.53 crore to Rs. 96744.71 crore. The per hectare values of these Tiger reserves fall in the range of Rs. 4.08 lakhs to Rs. 7.41 lakhs per year. The Total Economic Value of these tiger reserves depend on the direct, indirect and option values of the ecosystem services from these tiger reserves and the quantum of collective direct benefits generated are estimated to be in the range of Rs. 8.97 crore to Rs. 101.87 crore. The indirect benefits from these tiger reserves range from Rs. 4221.34crore to Rs. 13317.50crore per annum.

These massive economic benefits are an eye opener and should be taken into account while drawing up the union as well as state Government budgets. Unfortunately, our Government is a huge monolith with one hand not knowing what the other hand is doing. The officials of the finance ministry are not aware of these benefits and hence tend to ignore it. So it would be very important to raise awareness in general among the people of India about the benefits of our wilderness places so that they can raise their voice whenever an ignorant corporate or Government agency decides to sacrifice our forests for a project. It is also important that the judges of Supreme Court as well as other courts and the lawyers too need to be briefed about the importance of wild lands, so that they too offer judgment without any bias against wildlife and forests.

Change has to start with us. Let us first be aware and then try to make the people in our networks be aware so that the awareness level is increased by word of mouth. Lets hope that in this era of climate change where extreme weather events is increasing in frequency and intensity, where desertification is increasing at a rapid pace, we can now realise our folly and help save our wildlands and wildlife to reverse these impacts. Lets awaken our inner child within us so that we can again hope and dream, after all hope is a waking dream.

Conservation News -

India assumes presidency of UN body on Migratory Species for 3 years:

The Thirteenth Conference of the Parties (COP 13) to the Convention on Migratory Species (CMS) kicked off in Gandhinagar on 17th February, 2020 in the presence of senior Government officials, environment advocates, activists, researchers and biodiversity leaders from as many as 130 countries.

Inaugurating the key UN Summit via video conferencing Prime Minister Shri Narendra Modi said that the CMS COP13 is of particular significance to India, which is known for its rich biodiversity and is one of the seven megadiverse countries in the world.

"*India has four biodiversity hotspots – Eastern Himalayas, Western Ghats, Indo Myanmar landscape and Andaman and Nicobar Islands and home to as many as 500 species of migratory birds from across the globe*", said the Prime Minister.

Bar Headed Geese

The Prime Minister stressed that his government is committed to championing sustainable lifestyle, conservation and a green development model. He further added that in India's role as the COP President in the next three years, it will look at conserving the Central Asian Flyway. To achieve this, India has prepared a National Action Plan. He further added that India is keen to facilitate action plans of other countries in this regard and aims at taking conservation to a new paradigm with active cooperation from all.

As President, India shall also look at strengthening cooperation with ASEAN countries for Indo-Pacific activities and conservation of marine biodiversity. He also added that India has launched the Marine Turtle Policy and Marine Standing Policy to address pollution caused by micro-plastics in the marine ecosystem. Other areas that will be under focus include

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transboundary cooperation, establishment of eco-development committees etc.

The Conference kicks off "'Super Year for Environment", which will include a UN Summit in September and culminate in the UN Biodiversity Conference at the end of 2020, when a new global biodiversity strategy for the next decade will be adopted - the Post-2020 Global Biodiversity Framework.

India has assumed COP Presidency for the next three years with a focus on Collaborative Approach to tackle Biodiversity Issues. Assuming the presidency the Union Minister Shri Prakash Javadekar said that CMS is very important to India and is at an exciting moment of development and the COP in India will mark the start of focused attention to migratory species and their habitats.

"*Migratory birds, mammals and aquatic species are increasingly in danger on their migration routes and countries need to work together to protect them. For India, caring about these species is part of our ethos to protect all animals and natural life on earth. India is very happy to host CMS COP13*.", said the Union Minister.

Amur Falcon **Image courtesy - Roopak Gangadharan**

Stressing the urgency to take collaborative action towards conservation, CMS Executive Secretary Ms Amy Fraenkel said: "*COP13 comes at a critical time for wildlife conservation, with continued downward trends of habitat loss and species decline.*

The Convention on Migratory Species is the only multilateral treaty dedicated to addressing the needs of migratory species and their habitats on a global scale. The conference will set in motion actions needed to better protect migratory species that rely on multilateral cooperation for their survival."

Migratory species of wild animals move from one habitat to another during different times of the year, due to various factors such as food, sunlight, temperature, climate, etc. The movement between habitats, can sometimes exceed thousands of kilometers/miles for some migratory birds and mammals. A migratory route will typically have nesting sites, breeding sites, availability of preferred food and requires the availability of suitable habitat before and after each migration.

India is home to several migratory species of wildlife including Amur falcons, bar headed Geese, black necked cranes, marine turtles, dugongs, humpbacked whales, etc.

Conservation News -

Animal Culture Linked to Conservation for the first time at UN Wildlife Conference in India

Animal culture, the learning of non-human species through socially transmitted behaviours, is being linked to conservation action for the first time.

There is evidence that whales, dolphins, elephants and primates acquire some of their knowledge and skills through social learning. In addition to individual learning, some animals may learn socially from adults or peers about various behaviours, including optimal migration routes.

To consider conservation measures for the Eastern Tropical Pacific Sperm Whale and the nut-cracking Chimpanzee two such proposals will be presented to delegates at the ongoing 13th Conference of Parties meeting to the Convention of Migratory Species at Gandhinagar (CMS COP 13).

The concerted action for the Sperm Whale recognizes the complex social structure within four subspecies. They differ little from each other in their nuclear DNA, but their vocalizations vary considerably, indicating that these can only be acquired through social interaction and learning. Collecting data through acoustic and photographic records can help conservationists fully understand the social structure of all subspecies. The proposed conservation measures call for research and transboundary information exchange to close knowledge gaps.

The initiative for the nut-cracking Chimpanzees highlights the species' unique technological culture. The species can crack open different types of nut by using stones and pieces of wood as a hammer and anvil. Despite nuts, stones and wood being commonly available, nut-cracking skills occur only in the most westerly parts of this subspecies' range spanning Guinea, Sierra Leone, Liberia and Côte d'Ivoire, and not in other populations across Africa. Scientists say this cultural capacity enables these Chimpanzees to survive dry seasons in their western habitats. Such behaviour could enhance survival prospects of chimpanzees in areas showing climate induced changes to vegetation.

Human activities that disrupt the social fabric of culturally developed species can have severe impacts. Once a species has vanished from an area, critical knowledge can be also be lost. For example, the Southern Right Whales' knowledge of migration routes around New Zealand's coastline was lost to the species as a result of commercial whaling in the 1800s. Nowadays, a handful of whales have again started to calve around New Zealand.

Recent evidence of genetic mixing among these whales suggests that the species may recolonize forgotten migration destinations once the population recovers from the impact of whaling.

Protecting cultural knowledge among peers and across generations may be vital for the survival and successful reproduction of certain species. Supporting individuals that act as 'repositories' of social knowledge such as elephant matriarchs, or groups of knowledgeable elders, may be just as important as conserving critical habitat. Understanding how Sperm Whales pass on valuable information to their offspring or why some groups of Chimpanzees have a culture of cracking nutritious

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nuts with stone tools while others do not, can be key to evaluating conservation challenges for such species.

The Convention on the Conservation on Migratory Species of Wild Animals (CMS) has been spearheading efforts to use scientific knowledge on animal culture, to better protect endangered wildlife. Scientific research has made significant progress in animal culture. However, it is necessary to develop findings and recommendations that show how this complex issue can be further considered in conservation efforts under CMS.

International protection for Great Indian Bustard, Bengal Florican and Asian Elephant

India's proposal to include Great Indian Bustard, Asian Elephant and Bengal Florican in Appendix I of UN Convention on migratory species was unanimously accepted on 20th February, 2020 at the ongoing thirteenth Conference of the Parties to the Convention on Migratory Species (CMS) in Gandhinagar, Gujarat.

Asian Elephant

The Government of India has declared Indian elephant as National Heritage Animal. Indian elephant is also provided highest degree of legal protection by listing it in Schedule I of the Wildlife (Protection) Act, 1972.

Placing Indian elephant in Schedule I of the CMS Convention, will fulfil natural urge of migration of Indian elephant across India's borders and back safely and thereby promote conservation of this endangered species for our future generations. Intermixing of smaller sub populations in Nepal, Bangladesh, Bhutan and Myanmar and widen the gene base of these populations. It will also help to reduce human elephant conflicts in many parts of its migratory routes.

Mainland Asian elephants/Indian elephants migrate over long distances in search of food and shelter, across States and Countries. Some elephants are resident while others migrate regularly in annual migration cycles; proportion of resident and migratory populations depends upon, size of regional populations, as well as on extent, degradation and fragmentation of their habitats.

The challenges confronting Asian elephant conservation in most elephant Range States are habitat loss and fragmentation, human elephant conflict, and poaching and illegal trade of elephants.

"*India, being natural home of largest population of mainland Asian elephant/Indian elephant (Elephas maximus indicus), wishes to promote conservation of this species, by seeking natural migration of elephants in all range countries, through bringing the subspecies under Appendix I of CMS Convention*", said Shree Soumitra Dasgupta, ADG(Wildlife), while mooting the proposal which was unanimously accepted by the parties to the convention.

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Great Indian Bustard

The Great Indian Bustard, an iconic, critically endangered and conservation dependent species, exhibits transboundary movements, and its migration exposes it to threats such as hunting in boundary area of Pakistan-India and power-line collisions in India. Inclusion of the species in Appendix I of CMS will aide in transboundary conservation efforts facilitated by International conservation bodies and existing international laws and agreement.

Great Indian Bustard Image courtesy - Subhajit Chaudhuri

The Great Indian Bustard is a Critically Endangered species with a small population of about 100–150 individuals that is largely restricted to Thar desert in Rajasthan, India. The species has disappeared from 90% of this range; their population has reduced by 90% within 50 years (six generations); and their threats are expected to increase in future.

Bengal Florican

The Bengal Florican an iconic, critically endangered species of topmost conservation priority, exhibits transboundary movements, and its migration exposes it to threats such as land use changes, collision with power transmission line at boundary area of India-Nepal and probable power-line collisions. Inclusion of the species in Appendix I of CMS will aid in transboundary conservation efforts facilitated by International conservation bodies and existing international laws and agreement.

Populations have declined as a result of habitat loss, hunting and the species no longer breeds outside Protected Areas in the Indian subcontinent, except in a few areas of Assam.

The CMS Conference underway in Gujarat has kicked off the Super Year for Environment, which will include a UN Summit in September and culminate in the UN Biodiversity Conference at the end of 2020, when a new global biodiversity strategy for the next decade will be adopted - the Post-2020 Global Biodiversity Framework.

Conservation News -

India and Norway joint statement on mitigating marine plastic litter & micro-plastics

On the side-lines of the COP, the Union Minister met a delegation led by Norwegian Minister of Climate and Environment, H.E. Mr. Sveinung Rotevan.

India and Norway have taken cognizance of the urgent nature of global environment issues including marine plastic litter, plastic pollution and microplastics and have realized that these issues cannot be solved by any one country alone. So India and Norway have decided to work jointly towards mitigating marine plastic litter and microplastics and have issued a Joint Statement. The Joint statement has been signed by Mr. Sveinung Rotevan, Minister of Climate and the Environment, Government of Norway and Mr. Prakash Javadekar, Minister of Environment Forest and Climate Change, Government of India.

The text of the Joint statement is as follows:

India – Norway Joint Statement on Climate and Environment

1. Meeting at the beginning of the '2020 Super Year' for the environment, the Ministers stressed that they will do their share to ensure that the 2020s will be a decade of rapid action on climate and environment.

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2. The two sides expressed interest to continue and strengthen the mutually beneficial cooperation on environment and climate between the two countries, including on ocean affairs.

Plastic waste in Thane Creek

3. Actions that target climate change and air pollution at the same time pose a win-win situation. The two sides recognized that such actions should be stepped up, and agreed to work together to raise this agenda.

4. The Ministers recognized that the Kigali Amendment to the Montreal Protocol for phasing down use of Hydrofluorocarbons (HFCs) could prevent up to 0.40C of warming by end of the century, Further, noting that universal ratification of Kigali Amendment to the Montreal Protocol shall allow realization of its full potential.

5. The Ministers noted the results of the projects supported by Norway on issues / aspects related with phase down of HFCs. It was agreed to continue such projects for facilitating a smooth transition towards energy efficient solutions and technologies while phasing down HFCs.

6. If managed properly, the ocean holds the key to meeting many of the Sustainable Development Goals. Integrated ocean management is central to achieving a sustainable blue economy. In 2019 Prime Minister Modi and Prime Minister Solberg welcomed the signing of the MoU on India-Norway Ocean Dialogue and the establishment of the Joint Task Force on Blue Economy for Sustainable Development. The two Ministers were pleased with the progress that has been made under this MoU, including the establishment of the Marine Pollution Initiative. They were particularly satisfied that Norway and India will sign a Letter of Intent on integrated ocean management including sustainable Blue Economy initiatives.

7. The Ministers also noted the importance of delivering concrete, scalable solutions for ocean health and wealth at

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the UN Ocean Conference in Lisbon on June 2020.

8. The Ministers further noted the importance of sustainable management of chemicals and waste and welcomed the cooperation between India and Norway on the implementation of the Stockholm Convention on Persistent Organic Pollutants and on the minimisation of discharge of marine litter.

9. The Ministers emphasized a shared understanding of the global and urgent nature of marine plastic litter and microplastics and underlined that this issue cannot be solved by any one country alone. They are committed to supporting global action to address plastic pollution and exploring the feasibility of establishing a new global agreement on plastic pollution.

10. The Ministers agreed to support and work together with other political leaders to prompt a global and effective response to curb the direct and indirect drivers of biodiversity loss. They agreed to work together to deliver an ambitious, strong, practical and effective global biodiversity framework at COP15 of CBD to be held in Kunming, China, in 2020.

11. The Ministers further discussed the conservation of migratory species of wild animals. The Ministers recognized the importance of integrating ecological connectivity into the post-2020 global biodiversity framework.

12. The Ministers stressed that international supply chains and finance must de-invest from deforestation and destruction of nature and invest in companies and projects that improve smallholder livelihoods while promoting sustainable production and consumption. They agreed to continue the discussion on forests and deforestation free supply chains.

13. The Ministers stressed that the fifth United Nations Environment Assembly of the United Nations Environment Programme offers a good opportunity to call for greater international action on several environmental issues, in particular strengthening action for nature to achieve the Sustainable Development Goals.

14. Minister Rotevatn thanked Minister Javadekar for the great hospitality extended to him and his delegation during the visit. He invited Minister Javadekar to visit Norway and the Arctic, to further strengthen the collaboration between India and Norway on climate and environment.

15. Norway and India will explore areas of cooperation in forestry and linking the same with climate change.

Equipment Discussions -

Nikon releases flagship D6 Digital SLR Camera:

Nikon has released its flagship D6 DSLR camera which had got a brief development announcement on 4th September 2019. The D6 is being touted as the camera with the most powerful autofocus in the history of Nikon.

The salient features of D6 DSLR camera:

- **Sensor**: 20.8 MP CMOS FX format
- **Processor**: EXPEED 6 image processor
- **Burst still shooting speed**: 14fps
- **Silent mode burst speed**: 10.5 fps
- **ISO**: 100-102400 (expandable from 50 to ISO 3280000. No idea how bad the high ISOs would be)
- **Video resolution**: UHD 4k upto 30fps
- **Still AF**: Multi-Cam 37K autofocus system with 105 cross type points with 1.6 time greater frame coverage
- **Magnesium** alloy construction
- **Shutter** good for 400,000 shutter cycles
- **Dual CFexpress Type B cards**
- **Price**: **$6496.95 US Dollars**
- **Link**: *https://www.bhphotovideo.com/c/buy/Nikon_D6_DSLR_Camera__Body_Only_/Ntt/Nikon%2BD6%2BDSLR%2BCamera%2B%2528Body%2BOnly%2529/N/0/kw/search/BI/19990/KBID/13252/DFF/d10-v1-t12*

Equipment Discussions -

With these specifications the Nikon D6 is underwhelming as compared to the Canon EOS 1DX Mark III camera. Nevertheless, the D6 is a capable camera and would be far better than many Nikon still shooters. As such Nikon is way behind in video capabilities. So it is expected that Nikon users would be used to the lack of decent video capabilities and hence should be fine with the video aspect of D6. Overall this announcement is perhaps a clear sign of future with increasingly focus shifting to mirrorless cameras. Nikon as a brand is clearly appearing to lose its way in the highly competitive DSLR and mirrorless camera markets.

PRESS RELEASE

Nikon releases the D6 digital SLR camera

February 12, 2020

The flagship model with the most powerful AF in Nikon history

TOKYO - Nikon Corporation (Nikon) announces the release of the Nikon D6 FX-format digital SLR camera, a new flagship model that responds to the needs of professional sports photographers and photojournalists.

Development of this product was announced on September 4, 2019.

With the new D6, Nikon has realized the most powerful AF performance in its history through significant improvements over its predecessor, the Nikon D5 (released in March 2016). All focus points in the new, densely packed 105-point AF system utilize cross-type sensors, and all are selectable. The AF sensor built into the D6 is approximately 1.6x denser, and supports three times the number of selectable cross-type focus points than the D5, demonstrating superior focusing performance. The group-area AF option so popular with users of the D5 has evolved even further with support for 17 custom arrangements from which users can choose depending upon the scene or way the intended subject moves for precise capturing of decisive moments. The new dedicated AF engine developed for the D6 enables high-speed continuous shooting at up to approximately 14 fps*1 with all focus points working to keep the subject in focus for improved subject-tracking performance. In addition, adoption of a new algorithm enhances the camera's ability to maintain focus on the intended portion of a subject without responding to those that pass through the frame.

The D6 also contributes to a faster on-site post-shooting workflow that is so vital to professional users. It does so with new functions that enable faster transmission of decisive photos, including one that allows photographers to transmit their winning images first with a flick operation using the camera monitor that moves the current image to the top of the waiting list*2, and another that enables simultaneous recording of two JPEG images with different size and quality settings — a smaller one suited to transmission and a larger one for editing, for example. What's more, the D6 supports the same 1000BASE-T Ethernet standard as the D5, with an approximate 15% increase in its transmission speed. Together with the built-in Wi-Fi® capability, it makes for a complete response to the wired and wireless networking needs of professional photographers. Further, equipping the camera with a GPS function*3 enables acquisition of accurate date, time, and loca-

Equipment Discussions -

tion information.

The D6 offers increased usability while inheriting the D5's operability and reliable hold. Usability has been refined with improved connector arrangement and increased visibility for the top control panel and LCD monitor when button illumination is used in dark situations, providing professional photographers with even greater support. In addition, the D6 not only offers the strength and durability, and dust and drip resistance that allow Nikon flagship models to continue working in even the tough environments, but it has also been equipped with a security slot that supports connection of anti-theft cables that can keep the camera safe during remote operation.

The D6 is the flagship Nikon digital SLR camera that provides all the support professional sport photographers and photojournalists to perform at their best. It supports a rich lineup of NIKKOR F mount lenses, from ultra-wide-angle to super-telephoto, allowing photographers to capture decisive, once-in-a-lifetime shots, and fully responds to the needs of professional photographers who must deliver those images as soon as they are captured.

•*1Continuous shooting rate varies with lens used, aperture settings, etc.

•*2When connected to a computer or FTP server via Ethernet or using the WT-6/A/B/C Wireless Transmitter (optional).

•*3GPS function is not available in some countries or regions.

Equipment Discussions -

Primary Features

1.The most powerful AF system in Nikon history with 105 densely packed cross-type focus points

The D6 is equipped with a newly developed, densely packed 105-point AF system with which all focus points utilize cross-type sensors and all can be selected. The new focus point layout and the use of a triple-sensor arrangement for each focus point achieve AF coverage that is approximately 1.6x denser than that of the D5. The D6 also enables pinpoint focusing on the intended portion of a subject with approximately three times the number of selectable cross-type focus points as its predecessor. In addition, the group-area AF option popular with users of the D5 has evolved even further with support for 17 custom arrangements from which users can choose according to the scene or subject movement.

The D6 also demonstrates superior low-light AF performance. The center focus point works down to -4.5 EV*1 and the others to -4 EV, making autofocus possible even in dark situations or with low-contrast subjects. In addition, the dedicated AF engine newly developed for the D6 makes it possible for all focus points to work to maintain focus, even with high-speed continuous shooting at approximately 14 fps. The camera's ability to maintain focus on the intended portion of a subject has also been increased — especially clear when Custom Setting a3 "Focus tracking with lock-on"*2 strength is set higher. This allows photographers to maintain focus on an athlete's face, for example, even if that athlete is a runner or table tennis player whose face is temporarily obstructed by a hand or paddle.

The Advanced Scene Recognition System, which uses a 180K-pixel RGB sensor, offers even greater performance with the EXPEED 6 image-processing engine's superior processing capabilities in addition to the vast amount of information provided by the new dedicated AF engine. The D6 is also the first digital SLR camera*3 capable of placing priority on the subject's eye with autofocusing in auto-area AF and 3D-tracking modes, allowing photographers to concentrate on framing portraits.

*1At ISO 100, 20°C/68°F.

*2With continuous-servo AF autofocus mode.

*3As of February 12, 2020 based on research conducted by Nikon. With phase-detection AF using the AF sensor module.

2.Equipped with a variety of functions that make for a more efficient post-shooting workflow

The D6 responds to the needs of professional photographers who require the ability to deliver their winning images as quickly as possible by placing the best images at the top of the waiting list. The photographer needs only to use a flick operation in the upward direction to add the current image displayed on the monitor with playback to the top of the queue. There is also a function designed especially for those who only shoot JPEG. This function allows for the simultaneous recording of two JPEG images with different image size and quality settings, which is convenient for separating images that will be transmitted from those that will be edited.

Equipment Discussions -

The D6 supports the same 1000BASE-T Ethernet standard as the D5, with an approximate 15% increase in transmission speed. The camera also supports a number of options for wireless networking. In addition to conventional wireless networking using the WT-6/A/B/C Wireless Transmitter (optional), the D6 also offers built-in 2.4- and 5-GHz*1 Wi-Fi®. What's more, stills, including those recorded in NEF (RAW)*2 format, and video recorded with the camera can be uploaded to a smart device*3 using the SnapBridge app. Support for GPS satellites, GLONASS satellites and Quasi-Zenith satellites enables accurate date, time, and location information acquisition with shooting.

*1Available in station mode; not available in some countries or regions.

*2Be sure to use the latest version of the SnapBridge app.

*3The iPhone®, iPad®, iPod touch®, and Android™ devices running the SnapBridge app can be used. The SnapBridge app can be downloaded free of charge from the App Store® and Google Play™. See Nikon's website for further information.

https://youtu.be/NdrJ6ivnnCI

3.Superior image quality and reliability that allow users to concentrate on shooting

The D6 has an effective pixel count of 20.8 megapixels, and is equipped with a Nikon FX-format CMOS sensor and EXPEED 6 image-processing engine that contribute to a broad range of standard ISO sensitivities — ISO 100 to 102400. Sharpness and clarity are preserved and noise is effectively reduced, even at high sensitivities. Auto white balance stability and precision have been increased for clearer, more natural colors with no color cast in skin tones. The D6 also supports recording of 4K UHD video.

The D6 is constructed of the same magnesium alloy as the D5, ensuring a strong and durable, dust- and drip-resistant body that never misses decisive moments, even under the tough conditions. The layout of operational controls has been refined for increased usability, and a security slot that supports connection of anti-theft cables has been added to help keep cameras safe during remote operation.

Equipment Discussions -

Canon to offer 8K video with EOS R5 Mirrorless camera

Canon announces development of EOS R5 Mirrorless camera with 8K video

Canon in a significant announcement has thrown some light on its next mirrorless camera offering with RF mount. The Canon EOS R5 will be a full frame mirrorless camera. It will have a newly developed CMOS sensor and new image processor. Both of which is understandable because Canon has announced that the EOS R5 will be able to shoot 8K video. Since it will have the processing power to shoot 8K video, the EOS R5 will definitely be able to shoot high quality and high frame rate videos in 4K. Canon hasn't announced the resolution of the sensor.

The EOS R5 will shoot stills at 12 fps using mechanical shutter and in silent mode using electronic shutter it will shoot stills at 20fps. People shooting sports would love to keep on shooting in bursts hoping that one of the shots would be unique and picked up by their clients worldwide. However, in wildlife, I am at the moment fine with 12fps. Lighting and the angle here is more important so the burst is only for a second or so.

The EOS R5 will have inbody image stabilization which will work with the IS of the lenses. So I guess it would be a good thing. We will know how it works when we get one in hand. However, given the fact that Canon is generally cautious in releasing products, I have a feeling that this feature will work well.

Overall, this looks promising and I will be eagerly waiting for this camera to showup.

According to Canon the EOS R System was initially developed to provide engineers with the ability to design lenses that

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were thought to be impossible to create. The wide lens mount diameter, shorter back focus, and high-speed system for transmitting data between camera and lens have resulted in an imaging system that delivers higher image quality and greater ease-of-use than ever before.

In its continued development of the RF mount, Canon has announced that it would launch Seven RF lenses and two RF Lens extenders. This clearly is an effort to make the RF mount the future industry leader.

Among the seven lenses Canon has said that it is launching a RF 100-500mm F4.5-7.1 L lens. This is a nice zoom range and has the ability to be popular if the price is not high. In the EF mount lenses we have the EF 100-400 f3.5-5.6 L IS USM and its IS II version. And if you add a 1.4x extender then the focal length at the tele end goes upto 560mm at f8.

The President an Chief Operating Officer of Canon USA inc. Mr. Kazuto Ogawa said “Today’s announcement comes as a

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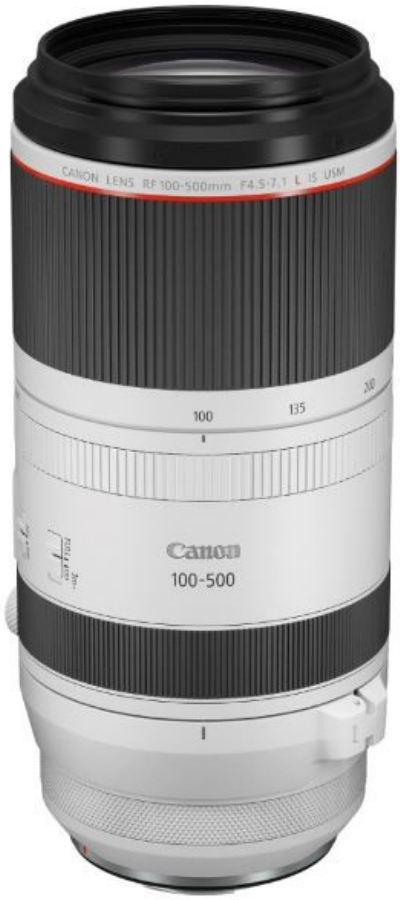
direct result of the tireless effort of Canon engineers who have been tasked with developing the next generation of Canon EOS R camera and RF lenses to help elevate the popular system that was announced in 2018". He further added "In developing the new camera, Canon listened to extensive user-feedback from a variety of photographers. The outcome is a camera and lenses that will delight a variety of shooters and further helps to demonstrate Canon's commitment to full-frame mirrorless cameras and lenses."



The Canon EOS R5 camera will provide photographers with more efficient workflows due to improved transmission functionality, operability and reliability. These enhancements, along with many others, will help to further elevate and solidify the EOS Series concept of "Speed, Comfort and High-Image-Quality."

The EOS 1DX Mark III can shoot 4K 60p. So it is expected that the EOS R5 probably will be able to shoot more than 4K 60p. Ability to shoot 4K 60p in 10/12bits in 4:2:2 in XFAVC codec would be nice. The recently launched EOS 1DX Mark III has the ability to record raw video. So I would also be interesting if Canon decides to also offer Raw video mode in the EOS R5 camera. That would indicate that Canon is going at full pace in development of the RF mount.

The data rate shooting 8K video would be humongous and won't be for the faint hearted. It would be for professionals to tap all the juice that Canon is hinting this camera has. We will wait for Canon to officially announce the final specs.

Equipment Discussions -

Canon announces EOS 850D DSLR camera

Canon has announced the 24.1 MP EOS 850D digital SLR camera with DIGIC 8 image processor. The ISO for stills is from ISO 100 to ISO 25600 and it is expandable to 51200. The EOS 850D has all 45 cross type AF points. It can track subjects with 7 fps burst shooting, Eye AF in Live View, advanced iTR AF with face detection and it has a Vari-Angle touchscreen to place the camera high up or low down or in any height and angle the screen and shoot so that no action is missed.

EOS 850D can shoot 4K UHD video in 23.98p/25p and Full HD video upto 59.94p/50p format. There is also a 4K time-lapse movie function. The 850D also has an in-body electronic Image Stabilization to enable “Movie digital IS”. So it will be useful to grab useable shots even without tripod.

The EOS 850D at 515g is small and light and can be easily carried in difficult treks.

PRESS RELEASE

Elevate your Photography with the Intuitive EOS 850D

Packed with powerful semi-pro DSLR features, the new EOS 850D is a versatile camera that users can enjoy anytime and anywhere

SINGAPORE, 13 February 2020 - Canon today launched the brand new EOS 850D, powered with advanced technology such as Dual Pixel CMOS AF, EOS Intelligent Tracking and Recognition Auto Focus (iTR AF) for face detection and 4K video recording for crisp and smooth footage. The EOS 850D is the ideal camera for those looking to step up from smartphone photography or those looking to upgrade to a DSLR, offering great versatility of use across genres.

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"The EOS 850D combines many semi-pro features of a DSLR in an affordable package that is great for both stills and videos," said Udagawa Eiichi, Vice President of Regional ICP Sales & Marketing, Canon Singapore. "With advanced capabilities and packed into a compact body, the EOS 850D is the perfect companion for those looking to shoot landscapes, their travels, sports and daily life."

Compact in Size but Big on Features

Weighing approximately 515g, the EOS 850D comes with a 24.1-megapixel APS-C size CMOS sensor and DIGIC 8 imaging processor for superior image quality. With an improved max ISO performance to 25,600 for still images and expandable to 51,200, the EOS 850D possesses exceptional low-light capability and is perfect for shooting at night and in dark places.

The EOS 850D also comes with an optical viewfinder that is equipped with excellent shooting performance and controls. During viewfinder shooting of up to 7 fps, users will not experience any time lag, and with all cross-type 45 point AF, a wider area can be covered to allow flexibility in composing and tracking. With EOS iTR AF, subject tracking performance will be enhanced through a face detection function, which enables users to detect faces even in environments where skin colour detection is lost against the background. It is made possible with information from the 220,000-pixel RGB+IR metering sensor.

During Live View shooting, Dual Pixel CMOS AF on the EOS 850D makes it possible to achieve high-speed AF. When it is paired with a compatible lens, AF is possible in an approximately 88% horizontal by 100% vertical area, allowing more freedom in composition. With free composition, users are able to achieve fast and comfortable Live View shooting with the EOS 850D. Since the EOS 850D can specify any position from a maximum of 3,975 AF positions, it is possible to move the AF point smoothly, making it easier to pinpoint AF on the subject and focus as desired.

Additionally, Eye Detection AF is available on the EOS 850D, enabling the camera to automatically focus on the eyes of the human subject and allowing the user to focus on capturing natural expressions while ensuring a sharp focus, even when the subject is in motion.

Operation-wise, the new Quick Control Dial allows for easy setting changes and image search. Located in positions on the camera body that can be easily accessed, users can quickly change camera settings by simply turning the dials. Additionally, the new AF-ON button on the back of the EOS 850D allows the user to operate autofocus separately. When shooting a moving subject, pressing the AF-ON button allows the camera to keep tracking the subject with AI Servo AF and the shutter release button allows the user to concentrate on timings their shots perfectly and not miss out on crucial moments.

A Great Movie Shooting Companion

On top of its advanced features for stills, the EOS 850D is able to record 4K UHD video in 23.98p/25p format for a cinematic feel and Full HD video in 59.94p/50p format. The 4K time-lapse movie function allows users to easily capture stunning day-to-night time-lapse movies of cityscapes in ultra-high resolution through a selection of pre-set scenes or simple

Equipment Discussions -

manual settings.

The EOS 850D also incorporates in-body electronic Image Stabilization to enable “Movie digital IS” for steady vlog or handheld movies. The 3-inch 1.04 million-dot Vari-angle touch panel LCD monitor makes it easy to shoot video from high or low angles.

Users can expect seamless connectivity with Wi-Fi available on the camera for easy transfer of images to smartphones and laptops. Bluetooth Low Energy (BLE) is also available for remote shooting with smartphones through the Canon Camera Connect app.

Product Specifications of EOS 850D

Camera Model	EOS 850D
Image Processor	DIGIC 8
Image Sensor Camera Effective Pixels (Total pixels)	APS-C size CMOS Approx. 24.1 megapixels (Approx. 25.8 megapixels)
Exposure Control	Approx. 220,000 dot RGB + IR metering sensor 216-zone (18 x 12) full-aperture TTL metering
Viewfinder AF	All cross-type 45-point (27-point f/8 compatible, 9-point cross), Single-point AF, Zone AF, Large Zone AF EOS iTR AF (face detection)
Focal Plane AF	Dual Pixel CMOS AF Image display area max horizontal approx. 88% x vertical approx. 100% Number of AF area segments: max 143 zones1 4K movie: Contrast AF
Still Image Normal Max ISO Speed	ISO 25600 H (ISO 51200 equivalent
Movie Normal Max ISO Speed	ISO 12800 (ISO expansion 25600 equivalent) 4K movie: ISO 6400
Continuous Shooting	Max. approx. 7.0 fps (during viewfinder shooting, AF fixed/tracking) Max approx. 7.5 fps (during Live View shooting, AF fixed) Max approx. 4.5 fps (during Live View shooting, AF tracking)
Max Shutter Speed	1/4000 sec. (mechanical 1st curtain, electronic 1st curtain)
LCD Monitor	3.0-type, approx. 1.04 million dot, Vari-angle touch panel
Movie	4K 23.98p/25p Crop
Size	Approx. 131.0 x 102.6 x 76.2 mm
Weight2	Approx. 515 g
Network	Wi-Fi / Bluetooth Low Energy
Other	Quick Control Dial

Natural History -

COUNTRY NOTEBOOK: The Giant Squirrel: M.Krishnan:- 8 April 1973

The Sunday Statesman (shared by Shri. Saktipada Panigrahi)

The Giant Squirrel

" The big, handsome Giant Squirrel was a regular visitor to the Range Office at Kargudia in the Mudumalai Sanctuary, during September last. She was wild alright, and completely free to go where she pleased, but over the years she had been accustomed to take tidbits, like crisp biscuits and nuts, from the men there.

In the mornings she usually stayed in the forest around, and could be called up to the trees in the Range office compound with a judicious display of something she specially fancied, but this worked only when she had an appetite; sometimes, when she had already had a good feed off teak or Terminalia tomentosa fruits, or the young leaf of Garuga pinnata or Anogeisus latifolia, she would stay put in the treetops and no amount of calling or the proffer of inducements would bring her down.

I did not try to offer her anything myself; but left this to the men who said she knew then and trusted them, and confined myself to the photography I was using a 10-inch lens focused by guessing the distance and setting the lens on its footage-scale, and a muffled flash to illumine the dense shadows. I had quite enough to keep my fully occupied without also trying to make friends with a stranger.

However, I did notice that the squirrel's readiness to answer the summons of those who claimed that she was actually fond of them was much dependent on how hungry she was, but it could be she did know and recognise them.

This squirrel had a grownup daughter with her when I saw and photographed her last September. The young doe was quite as long as her mother and every bit as richly and beautifully coloured, but much less substantial, and was under a year old.

On occasion the younger squirrel accompanied her mother to the Range Office compound, but was much more wary and shy: she generally kept to the treetops and would not come down the bole to take the nuts or biscuits offered, though sometimes, when some tit bit had fallen to the ground, she would race down, pick it up, and race up the tree again to eat it from a safe height.

When her mother was eating some sizeable morsel, hanging head down and gnawing the food held in her paws (these squirrels, all squirrels in fact, seldom eat food held in their paws when facing the treetop~ when they are going up the bole), at times the younger squirrel would come down to her and nibble the food held in the maternal paws. I was impressed by the tolerance shown by the older squirrel towards her daughter.

I mentioned how squirrels hang head down when nibbling food held in the paws. There is a reason for this. They hang on to the bark of the tree-trunk with their outspread hind legs their sharp, curved claws cannot support their body weight.

Quite often a Giant Squirrel nibbles food held in the paws while hanging head down from a branch, with the long tail pendent from the other side counterpoising the paws and head, and the body weight balanced securely across the bough on the belly. But when hanging down from a tree trunk, the grip of the dug-in hind claws supports the weight of the squirrel, eased no doubt by the fact that the entire body is closely applied to the bole along the abdomen and chest.

I had an acute reminder how efficient the grip of the hind claws can be when I was photographing the big doe. Her daughter was up a tree behind me and decided to share the food. She took a short- cut via my bent head to where her mother was, suddenly I felt something heavy and alive land on my thin-thatched dome, then felt the sharp prick of the claws as the young squirrel took off from by head to the tree trunk on which her mother was. For minutes afterwards, the blood came up in droplets out of the punctured wounds on my nose and scalp.

Watching these squirrels, which do not get un-interestingly tame when not caged, I thought how attractive a feature of many of our sanctuaries they could be, if the officials in charge to not try to tame to tidbits and near human presence, as at the Mudumalai Sanctuary. Giant Squirrels are found all over India in the deciduous forests, and are to be found in most sanctuaries."

- M. Krishnan

This was published on 8 April 1973.

Wildlife Photography -

Jungle Cat in Sundarbans by Sabyasachi Patra

Matkasur-T54 by Sucheth Lingachar

Wildlife Photography -

Hyena by Ashok Sorout

Gaur Calf by Shyamala Kumar

Wildlife Photography -

Wallowing Sambar-Deer by V S Sankar

Great-Egret in Sundarbans by Saktipada Panigrahi

Wildlife Photography -

Peregrine Falcon in Sunderbans by Mrudul Godbole

Brown-winged Kingfisher in Sundarbans by Sabyasachi Patra

Wildlife Photography -

Snow partridge by Sandipan Ghosh

Lesser-Rufous-headed Parrotbill of Namdapha by Samrat Sarkar

Wildlife Photography -

Grey-fronted-Green-Pigeon by Abhishek Jamalabad

Chalky Percher by Prajwal Ullal

This is the **134th issue** of IndiaWilds. The photo of a pelican adorns this issue. The pelican with its bill open evokes different emotions in people. This pelican was clicked when it was protesting against another pelican landing close to it in Nelapattu bird sanctuary in Andhra Pradesh. These tiny sanctuaries were once big but gradually shrunk due to people reclaiming land for farming. Even much bigger wetlands like Kole-ru has also shrunk drastically as people in collusion with land mafia and politicians have systematically drained and reclaimed a large area of the wetland for themselves. These kinds of efforts are happening throughout the country. The challenge is most of the wetlands are not mapped and protected.

People view wetlands as not forests. In Tamil Nadu wetlands are known as peramboke or wastelands. The situation is similar in different parts of the country as we the people have been taught that these wetlands are wastelands and remaining unproductive. It is very important to raise awareness about the importance of our wetlands. There was a time when the kings used to order digging of large ponds for conserving water. Modern science also tell us about the carbon being trapped in the peat bogs and the moment we drain those, then all the organic matter will decay and convert the submerged carbon into CO2 and release into the air, increasing the amount of greenhouse gases. In an era of climate change the authorities should be cautious as the poor and vulnerable communities are the first to be impacted.

The wetlands are also important birding places and serve as habitat for around 500 species of migratory birds. This month India has assumed the presidency of the Convention of Migratory Species CMS CoP13. Hope this will make the leadership think more to protect our wetlands so that our future generations can take pleasure watching the antics of these pelicans and other species.

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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