

**Photo Courtesy: Wikipedia** 

# IndiaWilds THE.LAND.OF.THE.TIGER

# White Tiger introduction: Converting Forests into Zoos

India's wilderness and wildlife is under tremendous assault. Every other day a wilderness area falls under the malefic gaze of the Government which unhesitatingly is opening up our forests, swamps, mountains and other ecologically fragile areas for exploitation to serve the narrow short-sighted benefits of a few interest groups.

In a democracy there are institutions, regulatory bodies and arms of Government, which aid the decision making process. Unfortunately, the pressure from the Government is alarmingly moulding the opinions of the institutions, which were earlier set up to protect our wilderness and wildlife. Some of the decisions have been so far removed from the wildlife conservation requirements that one wonders whether all is well with these institutions.

One such case pertains to the advisory issued by the Wildlife Institute of India (WII), which is engaged in training and advisory and research on biodiversity related issues since 1982. Its opinion is often sought to understand the impact of proposed projects on ecologically fragile areas. In recent times its advisory in many cases has raised eyebrows.

Some seven years ago the then Madhya Pradesh Government had come out with an idea of introducing captive bred white tigers into the wild. The Wildlife Institute of India had strongly opposed it and the plan was shelved. However, now out of the blue the WII officials have taken out the old files and given an opinion retracting their previous stand. The NTCA too seems to be fine and soon you may see white tigers being brought out from zoos and released in enclosures in Sanjay National Park.

White Tiger

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**Cover Page Photograph:** 

Tiger by Sabyasachi Patra



This idea is purely driven by commerce. They want to increase tourist traffic to Sanjay National Park and they believe white tigers will help in that regard.

These days most of the tourist traffic is focused on the premier national parks. Other National Parks and Wildlife Sanctuaries get much less number of tourists as the chances of sighting of mega fauna is limited. When a forest loses its herbivores, it becomes difficult for the carnivores to sustain and they too have to move out of the forest or die due to lack of food. When tigers and leopards are not sighted, tourists lose interest in a place. So the authorities need to first ensure that the poaching of wildlife is stopped and anthropogenic pressures like cattle grazing, wood cutting, grass and other non-timber forest produce collection is controlled. Else, the herbivores cannot multiply. During the British era, hunters were killing several tigers in small patches. The presence of many tigers in small areas was possible due to the higher prey density in the areas. So several tigers were able to stay in smaller ranges. These days with lower prey density, individual tigers have to maintain large territories to be able to get sufficient prey for their own needs.

The prey density is also dependent on the richness of the food the prey species undertake.



These days most of our forests are runover by invasive species, which out compete the native species. With the proliferation of invasive species the herbivores find it difficult to find enough food and hence the

numbers of herbivores remain limited.

The role of the protected area managers is to manage the forest in an ecologically sound manner. The staff ought to undertake routine patrolling to bring the poaching under control and also to understand the potential issues in each part of the forest. However, these days in a majority of our protected areas the focus of the authorities is on tourists. They routinely talk about the total revenue earned from tourists in the forest under their control.

During the pre independence era, the British had brought woodcutter mentality to the forest

department. At that time they used to view forests in terms of cubic feet of wood that can be harvested from each forest. That mentality had stayed back even after the British had left India. And these days, the protected area managers have shifted their revenue earning focus from woodcutting to tourism. Nevertheless, the short-term revenue earning focus has continued to be the bane of our Forest Department as well as Government.

These days there have been studies to quantify the carbon sequestration potential of various forests and estimate an economic valuation of each forest based on its biodiversity potential. Nevertheless, the focus on making quick money remains. And that is now again getting reflected in the efforts to release white tigers into the wild.

## Folly of releasing White tigers into forest:

There was a time when Rewa of Madhya Pradesh was famous for its white tigers. The coat of the tigers used to be more pale than yellow and in some cases the coat had white and black stripes. However, its been years since the last white tiger has been sighted in the wild. All the white tigers that we find today are from a single stock and have been severely inbreed in zoo so that the recessive allele responsible for the white coat is expressed. These tigers have been zoo bred for generations. In Nandankanan Zoo in Odisha, three white tiger cubs were born to normal coloured parents Deepak and Ganga. Deepak was the father of Ganga. Later one of the cubs of Deepak and Ganga was mated with an unrelated white tigress Subhra to produce white tiger cubs. Repeated inbreeding resulted in many white tigers in Nandankanan zoo which were then sent to other zoos world over to create a large number of white tigers.

Being zoo bred, the white tigers have no idea about survival in the wild. They have no knowledge of hunting in the wild. In the wild it is a question of survival of the fittest.

Tigers despite their power and sudden burst of speed have to deal with the speed of the prey. And the prey species have multiple members and hence spotting a tiger becomes easy unless the tiger maintains extreme caution. So a tiger has to plan and replan its line of attack many times and even then the hunt is often unsuccessful. So releasing zoo bred tigers into the wild needs to be done with abundant caution and after a lot of training hunting live prey.

However the question still remains regarding the conservation value of a species reintroduction in the wild. Introducing white tigers means the genes of severely inbred tigers will get transmitted into the future tiger populations. Mixing of genetic cocktail to healthy populations is fraught with risks. It has the potential to not only transmit the physical problems faced by white tigers like scoliosis of spine, abnormal skull and facial features etc to the wild populations. It will compromise the ability of tigers in the future to fight against diseases and survive. Mapping of the genes of the present white tigers in the zoos have not yet been done. So exact severity of future challenges cannot be fully ascertained at the moment.

With the economy in doldrums, the Central Government has already stripped the RBI (Reserve Bank of India) of its surplus and transferred those to itself. Now the Government is looking at stripping the surplus of SEBI. So it is a fact that the Union Government will not leave any stone unturned. In that scenario the Madhya Pradesh State Government too may be pushing its officers to some how find way to increase income. So no wonder ecological considerations have taken a back seat. Nevertheless, this decision to release white tigers into Sanjay National Park also throws several others questions. Is it right to treat

our National Parks only to generate revenue for the Government?

Our forests are repositories of our biodiversity. The way modern science is progressing in future it would be easier to unravel some of the secrets of nature. The field of Biomimetics is getting increased funding to research and create materials, products and machines that can mimic biological processes and help solve some of our human problems. Plants, trees and microorganisms are being used for drug discovery. So is it right to destroy our forests and lose our natural treasures even before our future generations have a chance to discover them?

Till date we have been trying to conserve so that we can profit from it in future. However, the legendary biologist George B. Schaller in his essay on Serengeti makes a point about preserving for the sake of preservation and not for profit.

"Preservation for profit should not be the ultimate goal. Tanzania has maintained the Serengeti in spite of crushing social needs not for economic reasons but as a statement of the nation's vision and identity. The Serengeti does, however, have inestimable value as a genetic storehouse of numerous species. At some future date, when we are ready to mend and restore what has been squandered, the grasses and animals may provide stock for rehabilitating other pastures. Parks such as the Serengeti also provide valuable natural laboratories, baselines against which changes elsewhere can be measured and placed into perspective. But, above all, certain places are so unique in the pleasure and inspiration they afford that they must be preserved without compromise as repositories of beauty-as living museums. They must remain unmanaged, as original fragments of our past. Unaffected by human greed, their survival will be witness to man's moral obligation to society and to other species. And there must be a global commitment to maintain such cultural resources. As Edward Hoagland phrased it in another context, the Serengeti should be viewed as "the best and final future place to make a leisurely traverse or enjoy a camping trip that [is] not rooted in our century."

Scientists studying human psychology are finding the benefits of staying close to nature. In today's world the earth is burdened with more than seven billion people, which is way beyond its carrying capacity of 5 billion human population. So we find cities growing bigger and skyscrapers and concrete jungle becoming the norm. Devoid of minimum personal space, mental health is becoming one of the biggest casualties. In such a situation, people are yearning to find peace and solitude. So it is imperative that we tap our forests and other natural landscapes to act as a sponge to absorb our stress.

So the Government should rather stop the crowded and stressful jeep safaris where vehicles crowd around tigers. Instead the tourists should be allowed to trek and stay in tents and just relax and soak in the solitude of the forest. The experience would be therapeutic.

Nevertheless, with people wanting to grab attention of the people in power, they are fighting hard in a game of oneupmanship to do one egregious act after another to please their higher-ups. The fact that the Wildlife Institute of India has decided to simply throw out all the concerns expressed by the previous scientists and happily oblige present day politicians is perhaps a reflection of the social mores of the present day. Nevertheless, it is a massive cause for concern and doesn't speak well about our priorities towards wildlife conservation in India.

## **Rhino introduction in Corbett**

The 14th Uttarakhand Wildlife Board meeting chaired by the Chief Minister Shri Trivendra Singh Rawat has decided that Rhinos will be introduced in Corbett Tiger Reserve. It was felt that the terrain of Corbett is conducive for the reintroduction of rhinos and the environmental conditions are also conducive. So an experimental reintroduction will be carried out. It was also felt that this move to reintroduce rhinos would not lead to any man-animal conflicts. The Uttarakhand wildlife board felt that rhinos would further increase the attraction of Corbett Tiger Reserve as a tourist destination.

The river and rivulets, swamps and chaurs will help the rhinos survive in Corbett. However, many of these reintroductions are meant to create glorified zoos as in the name of protection of rhino the forest department would create barbed fencing as has been seen in Dudhwa National Park. The rhinos after the initial acclimatization have to be allowed to roam free and settle in the area they find best.

If that happens, then it would be better for conservation as a different population can be established. Also, at the moment tourists crowd around tigers. Too many jeeps line up and create traffic jams for tiger sighting. Having rhinos will also lead to people moving in a different direction to spot them and hence reduce the pressure on tigers. However, all this depends on the implementation.

The Uttarakhand Wildlife Board also decided that a voluntary protection force will be set up in villages that are vulnerable to man-animal conflicts. A proposal to study the carrying capacity of Rajaji and Corbett Tiger reserves with respect to the number of tigers and elephants will be done. This move is primarily designed to declare animals as vermins and help in



killing them lawfully. At the moment, there is a hidden nexus between forest officials and the hunting lobby who declare tigers and leopards etc as maneaters and get them killed by hunters.

When the Government hasn't done a proper carrying capacity study of tourists getting into the tiger reserves, the traffic that destroys the peace inside the reserve deciding on number of tigers and elephants these reserves can have is an egregious move. The anthro-

pogenic pressures that these premier tiger reserves face is enormous. Hope the Government can do something to contain it.

## Measures taken by Govt. for Endangered species protection

Minister of State, Ministry of Environment, Forest & Climate Change, Shri Babul Supriyo's written reply to a question in Rajya Sabha today on protection of endangered species.

#### **Protection of Endangered Species**

Census of major flagship species is undertaken at the State-level by the respective State/Union Territory Governments periodically. However census of tiger and elephant is undertaken at the national level once every four and five years respectively. As per the report of the latest census carried out by the state and central government, the population of endangered species especially lions, rhinos, tigers, and elephants has increased in country.

Ministry is providing financial assistance to State /UT Governments for the recovery programme of critically endangered species under the component- Recovery programme for saving of critically endangered species and habitats of the Centrally sponsored scheme 'Development of Wildlife Habitats'. Presently 21 critically endangered species have been identified under this programme.

The Ministry has formulated the 3 'National Wildlife Action Plan' for a period of 2017 to 2031 to save wild animals in the country. The Plan focuses landscape approach in conservation of all wildlife irrespective of where they occur. It also gives special emphasis to recovery of threatened species of wildlife while conserving their habitats which includes terrestrial, inland aquatic, coastal and marine ecosystems.

The measures taken by the Government to control illegal killing and poaching of wild animals are:

- 1. The Wild Life (Protection) Act, 1972 provides for punishment for violation of its provisions. The Act also provides for forfeiture of any equipment, vehicle or weapon that is used for committing wildlife offence(s).
- 2.Law enforcement authorities in the States maintain strict vigil against poaching of wild animals.
- 3. Wildlife Crime Control Bureau has been set up to gather intelligence about poaching and unlawful trade in wild animals and animal articles and to achieve inter-state and trans-boundary coordination in enforcement of wildlife laws.
- 4. The State/Union Territory Governments have been requested to strengthen the field formations and intensify patrolling in and around Protected Areas.
- 5. Protected Areas, viz., National Parks, Sanctuaries, Conservation Reserves and Community Reserves covering important wildlife habitats have been created all over the country under the provisions of the Wild Life (Protection) Act, 1972 to conserve wild animals and their habitats.
- 6. Financial assistance is provided to the State/Union Territory Governments under the Centrally Sponsored Schemes of

'Integrated Development of Wildlife Habitats', 'Project Tiger' and 'Project Elephant', for providing better protection to wildlife and improvement of habitat.

## **National Centre for Sustainable Coastal Management**

The Ministry set up the National Centre for Sustainable Coastal Management (NCSCM), Chennai to undertake studies and research in the area of Coastal Zone Management including coastal resources and environment.

The aims and Objectives of the Center are:

- (i) Strive for being a World Class Knowledge Institution related to coastal zones, environment, resources and processes,
- (ii) To promote integrated and sustainable management of the coastal and marine areas in India for the benefit and well-being of the traditional coastal and island communities, and(iii) Advice the Union and State Governments and other associated stakeholder(s) on policy, and scientific matters related to Integrated Coastal Zone Management (ICZM).

The six (o6) research divisions of the NCSCM are: Geospatial Sciences, Remote Sensing and Geographic Information Systems (GIS), Integrated Social Sciences & Economics, Coastal environmental impact assessment, Conservation of Coastal & Marine Resources, Knowledge, Governance and Policy, and Futuristic Research and Integrated Island Management Unit.

Survey of India and NCSCM have mapped the Hazard Line for the entire coast of India, which includes vulnerability mapping of flood, erosion and sea level rise. The outputs will be used by all the coastal States and UTs in managing coastal vulnerability in the coming years and as a tool for preparation of disaster management plans.

The Government of India is committed to taking all necessary steps in supporting NCSCM to achieve its goals, in its efforts to developing into a world class institution. NCSCM is partnering with leading national and international research institutions and agencies through advanced research, networking, scientific committees and peer reviewed publications in international journals. NCSCM is mandated to disseminating knowledge pertaining to coastal management by capacity building at all levels for the benefit of coastal communities and stakeholders. NCSCM's Integrated Coastal Zone Management (ICZM) Plan has been developed on international standards that can be replicated in other parts of the World. Science based knowledge on coastal management developed by the Centre is used extensively for policy decisions. For the first time, Integrated Island Management plans including holistic island development plans have been prepared by NCSCM for implementation by coastal States/ UTs. NCSCM's cutting-edge research infrastructure provides for world class research outputs and decision support system that directly enables policy decisions. NCSCM's state-of-the-art laboratory facility provide an excellent opportunity to other Indian universities, Research Institutes, Government agencies for a collaborative research with NCSCM in the field of integrated coastal management.

This information was provided by Minister of State, Ministry of Environment, Forest & Climate Change Shri Babul Supriyo in written reply to a question in Lok Sabha on 13th December, 2019.

## **National Afforestation Programme:**

The Ministry of Environment, Forest and Climate Change (MoEFCC) is implementing plantation/afforestation schemes in the forest areas with participatory approach. The plantation species under the schemes is selected by the implementing agencies/the members of Joint Forest Management Committees (JFMC) on the basis of their needs, ecological conditions and other local factors in consultation with the Forest Department. The native forest species are encouraged for plantation in the forest areas giving importance to trees with multiple uses. MoEFCC has not issued any specific direction for plantation of fruit bearing trees as it is decided by the JFM Committees considering local conditions and the micro plan of the area.

The conservation and development of forest primarily involves three strategies – afforestation through natural/artificial regeneration, protection and management. The ministry is implementing three major schemes for development of forest areas i.e. National Afforestation Programme (NAP) scheme, National Mission for a Green India (GIM) and Forest Fire Prevention & Management Scheme (FFPM). While NAP is being implemented for afforestation of degraded forest lands, GIM aims at improving the quality of forest and increase in forest cover besides cross sectoral activities on landscape basis. The FFPM takes care of forest fire prevention and management measures. For scientific management of forests, the States prepare management plan called Working Plan which highlights various activities to be undertaken in a forest division for effective management of forest. The working plan is approved by the Ministry. Besides, the funds collected under Compensatory Afforestation Fund Management and Planning Authority (CAMPA), as compensatory levies from states inter-alia, is also used in plantation activity including compensatory afforestation by States/UTs.

The overall objective of the National Afforestation Programme (NAP) scheme is ecological restoration of degraded forests and to develop the forest resources with peoples' participation, with focus on improvement in livelihoods of the forest-fringe communities, especially the poor. NAP aims to support and accelerate the on-going process of devolving forest conservation, protection, management and development functions to the Joint Forest Management Committees (JFMCs) at the village level, which are registered societies. The scheme is implemented by three tier institutional setup through the State Forest Development Agency (SFDA) at the state level, Forest Development Agency (FDA) at the forest division level and JFMCs at village level.

The major components of the scheme includes afforestation under Seven plantation models, maintenance of previous years plantations and Ancillary Activities like soil and moisture conservation activities (SMC), fencing, overheads, monitoring and evaluation (M&E), micro-planning, awareness raising, Entry Point Activities (EPA) etc.

The Scheme is demand driven and afforestation area is sanctioned on the basis of past performance, potential degraded forest land available for eco-restoration and availability of budget. The Annual Plan of Operation (APO) of SFDAs is approved as per Guidelines of NAP. NAP is a centrally sponsored scheme which is implemented with the fund sharing pattern of 60: 40 percent between Centre and States wherein the sharing pattern for Northeastern and hilly States is 90:10. The central share of funds are released through State Government and state government transfers the funds to SFDA along with its state share which sometime causes delay in fund availability to SFDAs for implementation of NAPcausing delay in submission of mandatory documents for subsequent release of funds.

Since inception of the NAP (2000-2002) an amount of Rs.3874.02 crores has been released till 2018-19 to various States and is being utilized for treatment/afforestation over 21 lakh hectare sanctioned area.

This information was provided by Minister of State, Ministry of Environment, Forest & Climate Change Shri Babul Supriyo in written reply to a question in Lok Sabha on 13th December 2019.

## Funds released for Project Tiger in last three years

An amount of Rs. 370 crores, Rs. 345 crores and Rs. 350 crores was allocated during the financial years 2016-17, 2017-18 and 2018-19 respectively, while an amount of Rs. 350 crores has been allocated for the current financial year under the Centrally Sponsored Scheme of Project Tiger. Details of funds released under the ongoing Centrally Sponsored Scheme of Project Tiger, during the last three years and the current year is given below

Funds released under the ongoing Centrally Sponsored Scheme of Project Tiger, during the last three years and the current year, State-wise

| S.<br>No. | State             | <b>2016-1</b> 7<br>in Rs. Lakhs | <b>2017-18</b><br>in Rs. Lakhs | <b>2018-19</b><br>in Rs. lakhs | 2019-20 (as on 21.11.2019) in Rs. Lakhs |
|-----------|-------------------|---------------------------------|--------------------------------|--------------------------------|---|
| 1.        | Andhra Pradesh    | 173.49                          | 232.49                         | 217.992                        | 114.480                                 |
| 2.        | Arunachal Pradesh | 597.29                          | 671.0222                       | 929.762                        | 737.080                                 |
| 3.        | Assam             | 1510.93                         | 2309.608                       | 1919.624                       | 2198.760                                |
| 4.        | Bihar             | 487.84                          | 552.273                        | 570.897                        | 562.840                                 |
| 5-        | Chhattisgarh      | 626.57                          | 1315.076                       | 536.135                        | 358.530                                 |
| 6.        | Jharkhand         | 323.76                          | 338.62                         | 367                            | 172.070                                 |

| Tota | ıl  | 34224.80 | 34500.00  | 32317.284 | 21123.811 |
|------|---|----------|-----------|-----------|-----------|
| 19.  | AIL India Tiger Estimation (AITE) All Tiger Reserve States including Nagaland, Manipur and Goa. | 0.00     | 14.93     | 24.8625   | 0.00      |
| 18.  | West Bengal   | 536.14   | 597.5808  | 719.01    | 480.280   |
| 17.  | Uttar Pradesh   | 1057.05  | 820.074   | 1417.26   | 1793.960  |
| 16.  | Uttarakhand   | 1023.41  | 1187.439  | 685.336   | 1242.490  |
| 15.  | Telangana   | 239.26   | 350.416   | 1115.65   | 333.701   |
| 14.  | Tamil Nadu  | 949.87   | 2551.058  | 2366.823  | 1387.700  |
| 13.  | Rajasthan   | 381.3    | 773.09    | 791.83    | 1164.030  |
| 12.  | Odisha  | 917.17   | 1646.127  | 1022.322  | 1303.320  |
| 11.  | Mizoram   | 301.55   | 215.316   | 318.842   | 0.000     |
| 10.  | Maharashtra   | 8229.72  | 6524.165  | 11049.59  | 3709.550  |
| 9.   | Madhya Pradesh  | 12885.6  | 11455.457 | 5343.89   | 2985.910  |
| 8.   | Kerala  | 780.23   | 636.412   | 653.03    | 593.160   |
| 7.   | Karnataka   | 3203.62  | 2308.846  | 2267.428  | 1985.950  |

## (Rs. in Lakhs)

This information was provided by Minister of State, Ministry of Environment, Forest & Climate Change, Shri Babul Supriyo in written reply to a question in Rajya Sabha on 2<sup>nd</sup> December 2019.

## Leica MI0 White:

Leica has launched a limited edition M10 camera in white colour. The new colour option comes in a set with a Summilux -M 50 mm f/1.4 ASPH. lens.

The Leica M10-P 'White' is a new colour option of the iconic Leica rangefinder camera and is available now. The all-white design of the current M10-P camera takes its cue from the extremely popular Leica M8 White Edition released in 2009: The top and bottom plates are finished in white paint and are colour matched with the camera's high-quality, genuine leather trim in white. Silver control elements with engravings picked out in white ideally complement the design concept of the Leica M10-P 'White'.



The Leica M10-P 'White' comes as a set with a silver chrome version of the Summilux-M 50 mm f/1.4 ASPH. lens. The engravings on the lens are also picked out in white to match those of the camera. A genuine leather carrying strap in white with Leica embossing and a white leather case for the lens round off the set. The set is available in a worldwide limited edition of only 350 examples. All Leica M10-P 'White' cameras have their own unique serial number.

The technical specifications of both camera and lens are identical to those of the standard models. Particularly discreet and concentrating entirely on the most essential camera functions, the Leica M10-P embodies the essence of the M-Philosophy. The outstanding feature is the extremely low noise level of its shutter and the quietest shutter release of all M-Cameras ever built. The discreet sound of its almost inaudible shutter makes it the ideal tool for capturing authentic photographs from the heart of life itself. With its handling concept, the Leica M10-P fulfils everything that discerning

photographers expect from a Leica M and, in this traditional concentration on essential functions, follows the lead of all past and present Leica M-Cameras.



The Summilux-M 50 mm f/1.4 ASPH. lens ideally complements the Leica M10-P. The lens delivers practically consistent



exceptional performance at all apertures and distance settings. Whether used for selective sharpness at short distances, high contrast available light photography or for landscapes with enormous depth of focus, the Summilux-M 50 mm f/1.4 ASPH. lens delivers outstanding results in all situations and superbly fulfils its tasks as a true universal lens.

Price: \$14495 US Dollars.

## Rode VideoMic NTG

The new Rode VideoMic NTG announced by Rode is an interesting and compact microphone having the highly regarded NTG name and will be of use to youtubers, video content creators, run-and-gun filmmakers, voiceover artists, podcasters.



## Key features:

- Revolutionary acoustic design, delivering unmatched acoustic transparency and a natural, uncoloured sound.
- Highly directional supercardioid polar pattern and very flat frequency response
- Unique infinitely variable gain control
- Auto-sensing 3.5mm output interacts seamlessly with both cameras and mobile devices
- Class-compliant USB-C output with headphone output for seamless audio monitoring
- Digital switching controls high-pass filter, pad, high frequency boost, and safety channel
- dB peak warning light
- Internal rechargeable lithium-ion battery provides 30+ hours of recording, charges via USB-C
- High-quality Rycote® Lyre® shock mounting with cable management and a sliding rail to adjust mic placement on a camera cold shoe.

• Lightweight (94g) and rugged aerospace-grade aluminium construction

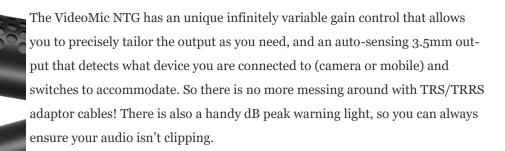
## **Revolutionary Acoustic Design**

The VideoMic NTG features the same annular line tube technology as the NTG5, which employs acoustic perforations along the length of the microphone in place of the linear slots found in other shotguns and on-camera microphones. This revolutionary acoustic design delivers unmatched transparency, and a natural, uncoloured sound. Add to this an incredibly flat frequency response, highly directional supercardioid polar pattern, and very low self-noise, and what you have is a compact on-camera microphone that contends with the world's best shotgun mics.

#### The Most Feature-Packed VideoMic Ever

As well as sounding outstanding, the VideoMic NTG is extremely flexible, with an array of tools and features to help you take on any recording situation. Digital switching gives you access to a high-pass filter (at 75Hz or 150Hz), a high frequency boost for enhancing clarity and detail, a switchable pad (with a -20dB cut), and safety channel, which records a separate

channel at -20dB in case the main recording clips – an absolute lifesaver.



The VideoMic NTG runs off an internal rechargeable lithium-ion battery that provides 30+ hours of recording – more than enough for the most demanding shoots. This is charged via USB-C (empty to full in 2 hours), meaning continuous recording is also possible with a power pack.



## **Unmatched Versatility**

The VideoMic NTG is so much more than just an on-camera mic. As well as pairing perfectly with DSLRs, compact cameras, and smartphones — either on-camera, as a boom mic, or on a pistol grip — the VideoMic NTG is also a fully-featured USB microphone that can be plugged into a computer, tablet, or smartphone, perfect for recording voiceovers, podcasts, gaming or livestream-

ing. On top of this, the 3.5mm jack doubles as a headphone output for seamless monitoring of audio while using the USB output. This is adjusted by the variable gain control, which can deliver everything from mic to line to headphone level.

#### **ACOUSTIC & ELECTRICAL SPECIFICATION**

Acoustic Principle: Pressure gradient electret condenser

Polar Pattern: Supercardioid

Frequency Range: 20Hz – 20kHz

Frequency Response: 35Hz - 18kHz ±3 dB

Output Impedance:  $10\Omega$ 

Signal to noise Ratio: 79 dBA

Dynamic Range: 105dB SPL (A-weighted, as per IEC651)

Equivalent Noise: 15dB SPL (A-weighted, as per IEC651)

Sensitivity: -26 dB re 1V/Pa (50mV @ 94dB SPL) ± 1dB @ 1kHz

Input SPL @ 1% THD: 120dB SPL

High Pass Filter Frequency: 75Hz, 150Hz

Battery Life: 30+ hours

Battery Capacity: 350mAh

Output Connection: 3.5mm auto-sensing USB-C

Bit Depth: 24-bit

Sample Rates: 48kHz

OS Requirements: Mac OS 10.12, Windows 10

#### **MECHANICAL SPECIFICATION**

Weight (g): 94

Dimensions

Diameter: 21.6mm

Length: 171mm

#### **COST:**

The Rode Videomic NTG is priced at \$249 US Dollars.

## Natural History -

#### COUNTRY NOTEBOOK: Hazaribagh Sambar: M.Krishnan:- 30 January 1972

The Sunday Statesman (shared by Shri. Saktipada Panigrahi)

#### **SAMBAR**

#### (Browtine,Sore-patch)

"THE FEATURE of Haharibagh National Park is its Sambar. By day, they stay in deep cover, but with dusk come out to the roadsides and licks and the rare pools of water. In the course of three summers, in 1968,69 and 70 I have seen many hundreds of Sambar in Hazaribagh at night, and early in the morning and late in the evening, and while undoubtedly many were these animals I saw more than once, they were of all sizes, from young fawns to dark, burly old stags with impressively heavy antlers.

Two features about these Hazaribagh Sambars were especially noteworthy. Most of the Stags were in hard horn when I saw them, and in full-grown animals the 'browtine' was usually exceptionally long and heavy, though the antlers themselves



Sambar from Panna

Courtesy: Shyamala Kumar

were of medium size. This notable development of the brow tine is a feature of Sambar in parts of Orissa, Bihar and Madhya Pradesh; I have not seen enough Sambar in Uttar Pradesh to be able to say if this is a feature of the animals there, too, but Sambar seen elsewhere in peninsular India did not display this development of the brow tine.

The second and more note-worthy, feature of Sambar here was that though I kept looking for it specially, in not a single animal did I notice a 'sore-patch'. The occurrence of the sore-patch in Sambar at the base of the throat, where it joins the chest in a symmetrical, median, bare extravasated patch of variable size, with a small, central, white-lipped tubercle when well developed) is something already discussed in this column years ago (23 August 1964). I do not propose to recapitulate that discussion here, but it may be said that the invariably symmetrical,

median ventral location of the patch at the base of the neck, as

well as the fact that in the same animal the sore- patch diminishes and increases in size, suggests a glandular origin for it - it may, for these very reasons, be also connected in some way with the nervous system. Anyway, the sore-patch is something peculiar to Sambar, not known in any other kind of deer.

Schaler thinks the sore-patch has a glandular origin, and suggests that it is probably connected with the rut in Sambar and serves to establish a scent- trail. I am unable to agree with the latter part of this view: I do not think the sore-patch has any sexual significance, for I have seen it on Sambar both in summer and in winter (November- January), and also on stags in velvet - I have even seen, and photographed, a heavily gravid hind with an extensive patch, and also hinds with very young fawns that displayed it - the hinds, not the young.



Sambar with a sore-patch Courtesy: Rajan Kanagasabai

To return to Hazaribag, how is it that Sambar here are so unanimously free of the 'sore-patch' in February-March, when most of the stags are still in hard horn - when I have even seen stags following hinds and sniffing at their hind quarters?"

#### - M. Krishnan

This was published on 30 January 1972.

Tiger by Shyamala Kumar



# Leopard with cub by Vipin Sharma



# Rhinoscape by Samrat Sarkar



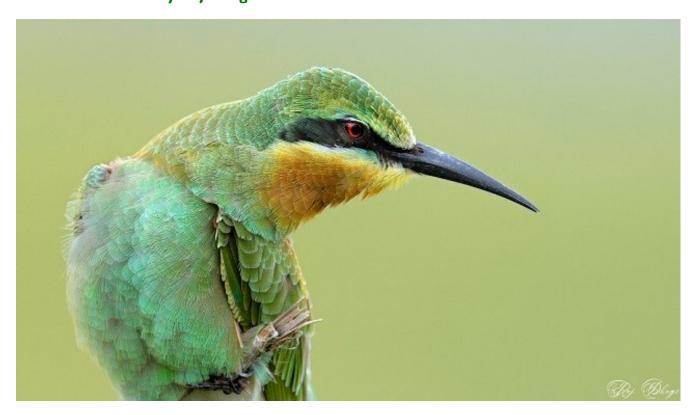
Deer in Sundarbans by Mrudul Godbole



# **Brown Shrike by Arun Acharjee**



## Blue-cheeked Beeeater by Raj Dhage



# Common cerulean by Prajwal Ullal



Tiger close-up by Sabyasachi Patra





This is the 132nd issue of Indiawilds. With this issue we complete our 11th year of uninterrupted publication. The photo of a tiger in a grassland enjoying the early morning Sun adorns the cover page of this issue. Tiger is the apex predator in most of the forest landscapes in our country. The health of the tiger indicates the overall health of the ecosystem as the predators, prey as well as millions of other species including herpetofauna and microorganisms are tightly bound with each other by a complex web of ecological inter-

relationships. One cannot survive without the other. Modern science is yet to unravel the myriad of ways the species are dependent on each other. So it is very important to protect our biodiversity so that future generations can discover the mysteries as well as derive abundant pleasure by watching the languid grace of a wild tiger and other species.

Our forests and wildlife have been bequeathed on us. It belongs to all of us and to the entire earth. Let us not devastate our wild landscapes for the satiating our greed. As the year 2019 comes to an end, we are more conscious of the fact that sudden extreme weather events triggered by climate change has become the norm. So it is time to think of protecting our natural heritage. We can't remain silent spectators when our natural heritage is vandalised. All of us need to realise that we have a duty to raise our voice to protect our wild lands, our life harbouring ecosystems, as the quality of our life is intricately linked with the health of our nature and environment.

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 - <a href="http://www.indiawilds.com/forums/">http://www.indiawilds.com/forums/</a>

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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