

# IndiaWilds®

## Newsletter

Vol 11. Issue II

February 2019

ISSN 2394 - 6946





## Sumatran Tiger Death - Its time to abolish Zoos:

A rare Sumatran tiger was killed by another when London Zoo authorities brought them together for mating. The male tiger about 7 years old was brought from a European zoo and was kept in an enclosure adjacent to that of the female. When the door was opened to allow them to meet and mate the male killed the female. This incident will be brushed off as an act of an individual tiger. However, this episode raises some very disturbing questions when we try to analyse the underlying reasons.

### Inside this issue:

Sumatran Tiger Death - Its time to abolish Zoos	2
Giving them wings to Fly	7
Conservation News	17
Equipment Discussions	23
Natural History	31
Wildlife Photography	33

In the wild, animals choose their mates carefully. A male tiger is physically larger. So during mating the female is generally wary of the male. Only after careful assessment the female allows the tiger to mate. In the zoos, the tigers are in captivity in very small enclosures. Unlike other species, tigers rarely make good pets as they don't lose their natural instincts. The impact of captivity on a free ranging species like a tiger is not fully understood. In small cages, they often display pacing behaviour.

Human beings are found to be different than other animals. After major disasters like earthquakes and typhoons it has been proved that men indulge more in sexual acts and there is often a boom in childbirths after major natural disasters. For human beings sexual act is for fun, dominance and perhaps for stress relief. However, in this respect animals are different from human beings.

Animals mate to have offspring, to pass on their genes to the future generation. Under stressful conditions, when an animal is moved from one zoo to other and then brought in contact



Sumatran tiger which killed tigress in London Zoo

Courtesy- online media

### Cover Page Photograph:

**Grey Hypocolius**  
(*Hypocolius ampelinus*)  
by Mrudul Godbole



with another tiger to mate, the animals may not have the inclination to procreate. Animals are also known to time their births to coincide the arrival of favourable season so that their offspring has a better chance to survive. Unfortunately, the London Zoo authorities perhaps didn't understand this well. They have said that they kept the tigers closer to each other on adjacent cages to gauge their behaviour. However, clearly the zoo officials thought that animals are like humans and when given a chance a male will mate with a female. The officials couldn't understand the behaviour of the tigers and what followed was the death of the tigress.

The London zoo is reported to have spent £3.6 million for the enclosure. However, they didn't care to increase the size of the enclosure. The total size of the Sumatran tiger enclosure area is only an acre. It is ofcourse true that no zoo can create an enclosure which is truly wild in size and atmosphere. However, why not create bigger space?

We look down upon animals. So "animals" has become a derogatory term. The term animals makes us forget that animals are life forms too. They are simply a different species than us. They do have intelligence, empathy, love and respect for others and their own likes and dislikes as individuals. In some respects animals are even at a higher level of thought and individuality than us. Once I was hoodwinked by a tiger and hence appreciate their intelligence.

(Tiger Intelligence, IndiaWilds June 2010, <https://www.indiawilds.com/diary/tiger-intelligence/>). We humans are often forced to choose our own mates due to various pressures of family or friends or even due to greed of material wealth. The women of the animals decide for themselves if a particular male is an appropriate partner. So in that situation simply forcing a female and male tiger to mate can have unforeseen consequences as was seen in the London Zoo case where the tigress was killed by the tiger.

If at all the zoo officials are good enough to understand animal behaviour it is also highly possible that when an animal is brought from another zoo, time would also be short for the officials to understand its unique behaviour and idiosyncrasies. So these kinds of robot-like mating of sentient animals is highly unethical.

There was a time when zoos were created and maintained for the amusement of the kings and the rich. Later with the emergence of Nation states and modern science, Zoos became a laboratory for scientists as well as provided knowledge and amusement to private citizens. However, scientists have realised that the behaviour of wildlife in zoos is way different than that in the wild, so they prefer authentic studies in the wild. Today the people too are able to understand a lot more about animal behaviour watching wildlife films and documentaries in reputed wildlife TV channels as well as from internet videos. So the role of zoos these days is to more of provide fun and entertainment to people.

Zoos also can technically help in breeding animals and help in releasing them in the wild to augment their stock and at times help in preserving a species which is hurtling towards extinction. India's National Zoo Policy clearly states in its preamble "Today when wildlife habitats are under severe pressure and a large number of species of wild fauna have become endangered, the zoos have not only to sustain their own populations but also augment the depleting populations of endangered species in the wild" so releasing in the wild should be happening frequently for many species. Unfortunately that is far from reality. Except for Gharials/muggers and a few herbivore species Zoo bred animals have rarely been released into the wild to repopulate the wilderness areas.

Infact, whenever a landscape becomes devoid of large carnivores or mega herbivores, the anthropogenic pressures increases as the fear of these animals get removed and the forests become the happy hunting grounds of the local people. These days whenever a tiger moves in and tries to recolonize a forest devoid of tigers, the local people instigated by the timber and real-estate mafia take up arms and kill the tiger. ( Bengal tiger looking for home killed by villagers in Bengal, IndiaWilds April 2018, <https://www.indiawilds.com/diary/indiawilds-newsletter-vol-10-issue-iv/> ). In Satkosia in Odisha there have been massive demonstrations and one relocated tiger was also killed in a snare.

When zoos are not introducing wildlife to augment the wild animal population, then what is the reason for the breeding programs in the zoos? Instead of spending millions in creating costly infrastructure in big cities where the zoos are located, where the cost of land is so high, why can't that money be spent in the real wilderness areas to help a vulnerable species?

Why can't that money be spent in buying back land from people to recreate wildlife corridors so that our Tiger Reserves, National Parks, Sanctuaries and protected areas are connected and wildlife can move in to repopulate places as well as increase the genetic diversity.

The money diverted from the zoos can also be used to remove invasive species from the wilderness places so that native species can bounce back and the species diversity of the forests increase. The herbivores will find more food and remain within the forests. The carnivores too will remain where the herbivores are. This will ensure that loss of crops due to herbivores feeding on it will reduce and human-animal competition will also reduce.

It would be pertinent to mention that Shri Kailash Sankhala who was the first Director of Project Tiger and who was also head of Delhi Zoo had strongly written against zoos in his book, 'Tiger! The story of the Indian Tiger' (Kailash Sankhala, p 207-209).

Kailash Sankhala writes "*The latest craze for Safari Parks or the creation of zoos is not the answer for saving a species. I have begun to feel that these institutions change their philosophy faster than the weathercock. In Roman times animal collections were made to keep a stock for entertainment in the amphitheatres. Later they called them zoos; as fashion changed they became "Zoological Gardens", later still "Zoological Parks". Now that ecology, environment and the biosphere are all the rage they are suddenly changing their signboards to become "Ecological Centres" or "Biological Parks".*

*The new zoos are designed on an environmental concept, as indeed we designed the zoo at Delhi. But even with the best designing we have not come anywhere near this concept. Before they are brought to the zoo the animal was caught – in-*

---

*volution an inevitable degree of cruelty – and then shifted from their natural homes. Birds have their wings pinioned – so depriving them of their life's essence, free flight. Why? Purely for our benefit, to see them in “as natural an environment as possible”. The whole idea of bringing a free-living animal into captivity is revolting, and simply because they eat well and reproduce in captivity does not mean that a zoo is a proper environment for them.*

*Zoos boast that wildlife education is an aid to a better understanding of nature. In practice it is no better than the Children's Corner which I abolished. Specimens exhibited in drab enclosures certainly do not convey the sense of what the stripes or the tusks mean to the animal. Museum techniques are now so far advanced that they are quite capable of creating dioramas that can convey the real meaning of the land and those that live in it. Dioramas together with films on wildlife are far more educational than the sight of an animal walking up and down in a cage all his life. If it is not necessary to bring the Grand Canyon or the Taj Mahal, the desert or the rain forests to your city except in pictures why should there be any justification for netting and snaring animals for educational purposes at a zoo? The marvels of nature must be seen where they are, not where they are planted by human hand. With supersonic travel the world has shrunk to be a small place, and it is within the reach of many to appreciate nature's creations in their natural homes. A visit to one natural area to see a few animals is far more satisfying than gazing at a whole collection in a zoo. One should be selective, enjoying a few rather than becoming bored by many.*

*Someone will say that zoos serve as research laboratories. They do, but that does not entitle them to keep such large collections, particularly those animals not needed for research. Let us not be wasteful in our experiments.*

*I have seen zoos from Delhi to Dallas, Hyderabad to Honolulu, London to Lucknow, San Diego to Srinagar. I am sure that many zoo directors will agree with me that a zoo is for the most part a confused institution unsure of its objectives. Although it seeks justification in education it is really more of a carnival for entertainment. Except for a few zoos which do a real job of contributing to knowledge their objectives are pure hypocrisy.*

*After I left Delhi Zoo and spent two years in the wilds I could not become reconciled to the idea of such animal prisons. The idea of starting a zoo in Singapore was proposed to me; the proposal had a lot of money behind it, but my choice had to be for the animals to be free. I was also called to help in designing a zoo at Chandigarh and Bhopal in India; I attended the first meeting and went to select the site, but my conscience did not permit me to proceed any further. I had to request to be excused. I am becoming more and more convinced that zoos with multi-purpose objectives should be abandoned.*

*So what is the answer? I would suggest we concentrate on creating reserves where man's interference – or what he arrogantly calls “scientific management” – is minimal. I do not like the term “national parks”, for it has been too loosely used. The initial meaning of “the untouched glory of God” has been so diluted that it has lost its significance. The term “park” conveys artificiality and the word “national” limits its universal appeal”.*

*It is another matter that the Zoo lobby will not agree to any reduction in zoos or number of animals they handle as it is a source of revenue for them. Perhaps the zoo lobby has got an unlikely champion. To show his machismo the current Prime Minister had also posed in front of a tiger enclosure with a camera in hand.*

So do we have any hope of zoos getting abolished and the money being spent for benefit of landscape level wildlife conservation? The younger generation is prepared to show us the path as school students have been calling for strikes in support of climate change and other environmental issues. Perhaps, some day we will be too ashamed to look into the eyes of our children and take steps to abolish zoos so that the wildlife can roam free without being imprisoned in small cages. Despite tremendous odds, I prefer to remain optimistic.



## Article -

### **Giving them wings to Fly**

**By - Mrs Shakti Bishnoi & Lt Cdr A S Bishnoi**

The wonderful creations of god is seen everywhere. Since the early days of life evolving in this world, colourful and charming winged jewels came into existence to honour mother earth. Pure air, food and nectar plants in the wilderness are some of prerequisites for their survival. Unfortunately, with rapid deforestation, urbanisation and industrialization, hardly any open space is left for their survival. Some of the species have become extinct and many more will follow that path in the near future, unless we wake up from our slumber and reverse the habitat destruction of these species so that there is a conducive environment for their survival. Let our coming generation see their existence and appreciate the world of vibrant colours. Let our conscience goad us into action.

Plants in the ecosystem are the main source for our survival. Living beings depend on nature for survival. It is our prime duty to maintain the ecosystem in its prime condition. Herbivores and carnivores are mutually dependent for their survival. All fruit bearing plants except few depend on birds/insects/butterflies for pollination. A missing link in the ecosystem will lead to void, which cannot be filled again. Butterflies, the colourful winged jewels are performing the most important task in assisting the pollination of plants and are one of the harmless class of species. Looking at the pace at which the deforestation is continuing in this earth, the day is not far when these beautiful flying angels will only be found in books and video recordings.

From time immemorial, butterflies have always fascinated humankind and no group of insects is more charismatic than the butterflies. Among insects they are certainly the most popular, and that is probably why they are among the most studied insects. There was a time when butterflies were collected by hobbyists like postage stamps. Much information was generated during that period on their taxonomy, migration, variation, mimicry, speciation and evolutionary biology. Today several species of butterflies are used by conservation biologists as indicator species to identify habitats that are critical and need to be protected. Butterflies are also monitored to indicate climate change and environmental degradations. Thus like other animals and birds, butterflies are now studied as living ecological components.

Their size ranges from the tiny jewels to gorgeous Bird wings with a wing span as great as eight inches. Almost all Indian butterflies are under threat, and some are critically endangered. Large areas, once forest or wasteland, full of wild plants that caterpillars eat, have now been cleared for agriculture. Apart from the habitat loss due to conversion to agricultural land, the widespread use of insecticide has drastically reduced butterfly numbers. But a butterfly lover and nature lover finds its way and so did we with our own one of a kind “The butterfly garden”. Both of us born in a family and religion “BISHNOI” which believes in conserving the nature. So it is in our sanskar, to contribute and conserve.

During our brief interaction with Shri Isaac Khemkar at Oavlekar Wadi(Thane, Mumbai) we were so fascinated by the winged jewels that we thought to have a closer look of these species. Shri Isaac Khemkar and Sqn Ldr Girish Dantale is our inspiration in this wonderful world of colourful species.

## Article -

### **Our encounter with kingdom of Butterflies :**

During our stay in Mumbai at Mankhurd, we thought of having a closer look i.e. the life cycle of the butterflies, to appreciate this wonderful creation of God. Book on Butterflies by Isaac Khemkar was of paramount help to us in knowing their behaviour, but one thing lacked was the food plants of particular butterflies. Then we started looking at the food plants, but it seems we were searching for a needle in a hay stack. We narrowed down our horizon by looking at the caterpillars. The first thing we saw was Lime butterfly laying eggs on lemon plant in our garden. We saw it was just 2 mm spherical white/yellowish ball, underneath the fresh leaf. Fortunately we could capture this phenomena. Next few days we monitored the egg and witnessed the growth of caterpillar and our joy grew many folds. But nature had something very important in store for us. Around eighth day when we went in the morning to see the beautiful being, we were shocked to see it was eaten by spotted owlet who stayed in nearby tree hollow 2 metres away. It took us some time to understand law of nature. We decided not to take a chance with the next few eggs left with us.

Very next day we bought lemon plants from nursery and transferred the freshly erupted caterpillars on it and started monitoring the activities. There was different kind of environment in our home i.e. we both were excited and equally ecstatic to receive the new born in our family. Very soon it became our family member. We had only one thing to discuss, that was the activities of caterpillar. The life of caterpillar revolved around eating leaves of the lemon plant and excreting. Our prime focus /centre of gravity of house was caterpillar. The life cycle is quite fascinating. We started reading Book on Butterflies to understand their metamorphosis. Nothing was known to us, everything was new and we were quite apprehensive about the behavioural pattern. Our lives revolved around the little one.

### **Life cycle of the Lime butterfly :**

During it's lifespan, a butterfly undergoes complete metamorphosis, consisting of four distinct stages:

#### **1.Egg**

#### **2.Caterpillar**

#### **3.Pupa**

#### **4.Adult**

#### **1. Egg -**

Soon after mating, the adult female starts searching for an appropriate food plant to lay eggs. It lays eggs underneath the fresh leaf, as it is protected from vagaries of nature, hidden from predators and can be easily munched in the initial few days. The eggs are coated with Chitin an adhesive to stick on leaf surface. The egg is filled with nutrient fluid, and has transparent shell, which turns pale as the caterpillar develops inside.

## Article -

### **Lime butterfly laying eggs on lemon plant**



### **Egg of Lime Butterfly**



### **2. Caterpillar -**

Once outside, it now searches and get acquaint with the surrounding areas and shelter till it is pupa. It takes 3-5 days to hatch. The caterpillar emerges outside from the egg, and first thing on which it feeds is, its own egg shell. It just scrapes off the soft bud/ under surface of leaf, till it gets its jaws stronger to feed on leaves. It spends much of its time in eating whatever comes its way viz bud, leaves, flower and shoot. Basically it is a eating machine. It hogs, hogs and hogs.

### **Caterpillar feeding on lemon plant**



## Article -

### **Caterpillar feeding on lemon plant 3 days after birth**

Caterpillar sheds the skin which it consumes later, another source of protein for the caterpillar to grow stronger. The old skin then splits behind the head and larva crawls out of it. The moulting or shedding of the skin takes place once during this development. The stage between moulting is known as an instar. Before shedding the skin the caterpillar stops eating and sticks to one place.



Initially it is black/brown in colour with corrugated body structure. After two three days it sheds its skin again and turns out the green colour perfectly camouflaged in the green lemon plant for its own protection given by nature. It now has tentacles acting as sensor during their movements and are very sensitive to touch. While sleeping, they become dormant. During their movements, they actively participate for direction finding and avoiding any obstruction/danger. Curiosity led to another finding when we touched the caterpillar. To our surprise it had another weapon to show its might and fight the perpetrators. Two tentacles producing pungent smelling liquid erupted from behind the tentacles above the mouth and it made our house smell pathetic. And when threatened, they manoeuvre themselves to expose minimum portions of their body.



#### **Initial stage till one week**

On an average their droppings per 12 hours is 32 and it depends upon the leaves available to them. The droppings are green in colour. We started facing the problem of shortage of leaves as we had two-three caterpillars on our plant and their consumption rate was phenomenal.

#### **After shedding skin a new look**

## Article -

### **The front section resembles eyes (Deception measure)**

We bought two more plant with more fresh leaves to feed them. They become restless if they don't find the food. The urge to get food, makes them adventurous and explorer .One of the restless/adventurous caterpillar came down the plant and hid behind the TV cabinet. We kept on searching for the 3-4 hours early morning, but all in vain.

We started making list of predators who could be available in the protected vicinity of the

house and the lizard was on our hit list for the time being, but our house had no trace of lizard, and moreover lemon is full of thorns, then who else?. So we rejected this hypothesis and with our limited detective traits started searching for the caterpillar. after two nights one day when we gave up and started praying for its soul to rest in peace the naughty caterpillar came in the limelight no less than an awaited celebrity walking on the TV table. Maybe his hunger drove him outside the cabinet and we made him reach again on the plant like the crowd and photographers pave the path for a glimpse of celeb.



We heaved sigh of relief.

### **Droppings of caterpillar hours before it hangs upside down**

The Caterpillar stage lasts 8 days to maximum/ depending on weather, food availability and not to forget the predators. In order to become pupa, they start finding suitable place to hang upside down in swinging position. Suitable place must be hidden from preying eyes and also when it emerges out as an adult butterfly, there should be adequate clearance space to cater for the adult butterfly to rest without accidents for one to two



hours before it takes its maiden flight. This is inbuilt DNA information in the caterpillar to find the place. After the above vomiting and clearing of the entire system by way of excretion, the caterpillar stops eating and gets ready for exploring for the right place to hang. The indication of caterpillar turning into Pupa is uneasy movements on the plant and neglecting the food and trying to find the suitable place.

## Article -

### **Hanging upside down**



### **Waiting to emerge as butterfly**

This stage is wonderful stage, as you can see the sudden transformation i.e. they stop eating and remain dormant till it emerges as butterfly. We used to remain awake monitor and capture each and every unique phenomenon.

We started working on shifts to capture these moments. We missed many moments but lime butterfly was generous enough to lay eggs on my lemon plant (kept outside the home as bait) and we got opportunity to learn and captured the entire life cycle in our eyes and in our camera.



Once it determines the locations, it starts secreting juicy sticky material from its mouth and make web like threads to form a small 2mm dot structure on chosen place and first sticks its anus. Another part of This unique phenomena which made me aghast was yet to unveil. It moved the finely woven thread around its body by covering the first three segments and created swing for rest of the body(as seen above) to rest comfortably. The movement of the neck was almost twisting head 180 degree. This is very crucial phenomenon, and each woven thread from its mouth counts. Caterpillar awaits its next transformation for 6 to 7 hours. The body becomes visibly shorter and stouter within an hour or two it is a recognizable chrysalis or pupa no longer carrying forward the resemblance of caterpillar.

## Article -

### 3. PUPA -

After anchoring for about 6- 7 hours, it begins to wriggle about while remaining firmly attached to the perch. As it continues to wriggle, larval skins split from the top of this head and it works backwards and is discarded near the tail portion. A totally changed structure is getting shaped. Imagine the first stage of eggs as whitish colour to this stage.



© Shakti Bishnoi & AS Bishnoi/www.indiawilds.com

**After removing the outer skin(1st day)**



© Shakti Bishnoi & AS Bishnoi/www.indiawilds.com

**After one week taking the colour of butterfly**

A closer look reveals main parts of the body of the butterfly. The outer shell which is extremely vulnerable remains soft for 6 to 8 hours and then evolves into a hard shell for its protection. Inside the pupa is actively involved in the formation of a beautiful lime butterfly. It will remain in this stage for 7 to a maximum of 8 days. In this unknown world of butterfly life cycle, we both were not aware that yet another amazing phenomenon is about to unfold. On the 6th day evening around 6pm the pupa started changing its colour as shown below. We were not sure what was happening as this was our first experience. Gradually with the lime butterfly picture we could make out that the adult butterfly is about to come out.

### 4. Adult -

A night before emergence, the colours of the butterfly wings can be seen. By dawn the colour gets dark and the pupa case gets prominent circles and stretch marks around the abdomen as seen below. When the first two circles expand, it indicates the emergence in a few minutes.



© Shakti Bishnoi & AS Bishnoi/www.indiawilds.com

## Article -

### Hours before emergence

Pupa case opens like pilot cockpit and first the head comes out. Waving legs are thrust out, to find a clear support and then the entire body. The wings unfurl and expand rapidly to a normal size and at the same time, it checks its system viz, proboscis, antenna and oozes out the liquid from its stomach and relieves itself. After resting for 1-2 hours, it first starts flapping the wings few times and then takes off for the maiden flight into the wilderness.



© Shakti Bishnoi & AS Bishnoi/www.indiawilds.com

It feeds on nectar, juices from the overripe fruits, oozing plant sap, liquid mud, animal dung and urine, human sweat, etc.



© Shakti Bishnoi & AS Bishnoi/www.indiawilds.com

Butterfly as adults are short lived insects. Some may live for a few weeks, while others may live long as eight months. Otherwise most butterflies live up to two-four weeks, if they are not attacked or eaten.

First pupa we missed butterfly coming out as we were not aware of the phenomena. But in the second case we noticed changes in the pupa night before coming out. But then also we didn't know when it will exactly come out. So we missed second also. Finally in the third Pupa I noticed that the pupa after attaining the colour of the butterfly, expands from the rear end. This expansion from the rib like structure starts peeling off and that is the time put your eyes on pupa and position your camera, as it is going to come out in 10 minutes. So finally third pupa gave us opportunity to record the butterfly coming out. And that achievement completed the life cycle recording.

We reared/nutured lemon butterflies at our home with just three plants in our house. One plant with adequate leaves I kept outside as a bait to lay eggs and moment the caterpillar emerges, we used to bring it to our house. You should have the reserve stock to feed them and they are eating machines. The Nursery person was surprised as we bought 10 plants to make them see flying. It is an investment, as the same plant will bear lemon and rear more butterflies. You don't have to do any hard work to see the life cycle at home and contribute to nature. Your eyes should be keen enough to identify caterpillar. We had wonderful experience seeing these wonderful creations of God so closely. So harmless they are and so use-



© Shakti Bishnoi & AS Bishnoi/www.indiawilds.com

## Article -

ful for pollination and spreading colour in the nature.

Keeping them at home we reared them as our children. Frankly speaking it gave us that feeling of having with us our children but they cannot speak or express but when you go near to them and feel them, you will feel very happy. But only thing which gave us pain was as we felt emotionally attached to them. Because they are not pet, once taken the flight, they never returned. But later we got used to it and we started our factory to produce them to go in wild and add the colour to nature. Keeping them in captivity reduces the aesthetic appeal of nature. Till caterpillar stage they were babies and vulnerable but as the adult butterfly they were all set to look after themselves without the care of their parents i.e. us.

Remember, it will never come back to your home again as a pet, once taken the flight no more looking back, just it will search nectar, mate and life cycle follows....

We didn't stop our journey here; we started looking for different species. We overcame the pain of attachment and generated/reared/nurtured till date 77 butterflies of five different species and captured/recorded their entire life cycle. Most of the plants are easily available and you can attract butterflies to lay eggs and see them grow. We reared following :-

Curry leaves where 3-4 species of butterfly

• (Common Mormon) lays egg	17
• Calotropis Gigantea (Plain tiger)	27
• Lemon plant (lime Butterfly)	32
• Wild creeper (Blue tiger)	33
• Palm leaves (palm pea fly)	02
<b>Total</b>	<b>111</b>

The identification is simple. If you come across, eggs which is of the size of 2-3mm, whitish, yellowish, greenish then start your journey to see the life cycle of an amazing butterfly. We never knew it was lime butterfly till it emerged and we compared photo with Book of Butterflies by Isaac Khemkar...so just bring the egg and see what it is in store for you.

After a brief tenure of 2 years at Mumbai, I got posted to Visakhapatnam (Andhra Pradesh) and here we came across various other species of butterflies. We have reared 27 Plain tiger and made them to fly in wild to contribute the existence of other species in a mutually exclusive manner.

## Article -

### Our Journey -

So far our journey from Ovalaker's Vadi to this day has been studded with winged jewels. Had it not been the encounter with these venerable flying angels, my life would have lesser happiness. I respect owner's name grit and determination to carry on with the development of one of a kind butterfly garden without any expectations for returns he would get.

My deepest regards to Shri Isaac Kehimkar, who besides having seen most of species India has to offer, humbly shared his knowledge with us. It was not new for me to see a butterfly with beautiful patterns and colours, but what brought me close to them was their life span. Today after having helped 111 butterflies reach for sky, with equal support from my husband (Lt Cdr A S Bishnoi), we feel contented.

Numbers are adding on with each passing day. So far quest is on for entire lifetime. This never ending journey taught me many important aspects of life. For each of the five species I know their habits and traits by heart which distinguishes them from each other. All of them were like our own young ones whom we nurtured and to our surprise their life cycle resembled ours except that they had to be extremely quick in each stage:

1. In the womb
2. Infant
3. Childhood
4. Adult
5. Perish

On an average lifespan of an adult butterfly is 2 weeks, but some species live up to 11 months. On their journey from womb till death, no one can forecast their fate.

Today with experience of 111 butterflies seen and documented, each one was unique and marked different behavioural patterns. Nature is full of miracles with variety of living beings with uniqueness intact whether it is mighty elephant or fragile Lepidoptera. Mother of these young ones does not have time for parenting so, nature has designed them self sufficient. Law of nature is unassailable especially in the wilderness.

**- Mrs Shakti Bishnoi & Lt Cdr A S Bishnoi**

## Conservation News -

### **Government launches Asiatic Lion Conservation Project:**

The Central Government has launched a dedicated “Asiatic Lion Conservation Project” with a duration of three years with a total budgetary contribution is a meagre Rs 97.85 Cr over three years.

The Ministry of Environment, Forests & Climate Change has approved the project for three financial years FY 2018-19, FY 2019-20 and FY 2020-21. The Asiatic Lion which is currently restricted to Gujarat, is one of the 21 critically endangered species identified by the Ministry for taking up recovery programmes. Asiatic Lion, being listed in Schedule-I of Wildlife (Protection) Act, 1972, to be accorded the highest degree of protection.

Speaking at launch event in New Delhi today, Union Minister for Environment, Forests & Climate Change, Science & Technology and Earth Sciences, Dr. Harsh Vardhan said that the project envisages a scientific management with involvement of communities in coordination with multi-sectoral agencies for disease control and veterinary care for overall conservation of Lion. He said the visit to the Gir Forest and witnessing of lions in their natural habitat had been an extraordinary experience for him. Dr. Harsh Vardhan handed over the sanction for an amount of Rs. 17.03 Crores to the Gujarat Minister of State for Forest and Tribal Development Shri Ramanlal Nanubhai Patkar for implementation of activities during first year of the project. Expressing happiness on the collaboration, the Gujarat minister said that there are about 700 lions presently in the Gir Forest and they are increasing in number.

This project has “Species Conservation over a large landscape” approach. Besides this approach, the Greater Gir Region (GGR) is being divided into various zones and management approach of “Zone Plans and Theme Plans” for the conservation of the Asiatic Lion. “Zone Plans” include the Core Zone, the Sanctuary Zone, the buffer Zone i.e. proposed for notification as the Eco-fragile/eco-sensitive Zone and the Greater Gir Region outside the Gir PA system for people’s participation and eco-development. Theme Plans include Habitat improvement, protection, wildlife health service, addressing to man-wild animal conflict issues, eco-development and voluntary relocation of PA resident people, research and monitoring, awareness generation, and ecotourism. This project would, therefore, be beneficial in further strengthening the conservation and protection of Asiatic Lion in the country.

Modern Information and Communication Technology (ICT) is proposed in the conservation, protection and development efforts of the Greater Gir Region. Additional ICT will include the following:

1. GPS Based Tracking (Surveillance Tracking, animal tracking, vehicle tracking),
2. Automated Sensor Grid (magnetic sensors, movement sensors, infra-red heat sensors)
3. Night vision capability enhancement
4. GIS based real time monitoring, analysis and report generation.

## **Conservation News -**

The lions of Gir are facing an existential crisis as they are currently restricted to Gir in Gujarat. They don't have enough space so the lions are moving out and trying to colonise the landscape. In this process some lions are killed due to electrocution, killed by trains or in other conflict with humans.

The Central Government as well as Gujarat Government has ignored the Supreme Court order for relocation of lions to Kuno-Palpur in Madhya Pradesh to create a second home for lions. Recently 23 lions died due to canine distemper disease. In Serengeti 1000 lions had died due to outbreak of canine distemper. A single disease outbreak can wipe out a single population. So it is very important to create a second home for lions. However, the Government doesn't care. The politics of keeping lions only in Gujarat and tourism profits appears to be one of the primary motives behind the Gujarat Government in invoking the Gujarati pride to not allow relocation of lions.

The Government communiqué hasn't mentioned whether the funds for the Lion conservation project is simply rerouting of existing funds or whether new funds will be allocated. However, since no funds were allocated in the interim budget, it appears the Lion Conservation Project funding is like old wine in new bottle. So it is expected that lions will continue to struggle to eke out a living oblivious of the politics raging in their name.

---

## **Third Indo-German Environment Forum held in New Delhi:**

Third Indo-German Environment Forum with the theme "Cleaner Air, Greener Economy:" has been held in New Delhi. The one-day event through panel discussions and parallel sessions focuses on challenges, solutions and necessary framework conditions of air pollution control, waste management and circular economy as well as implementation of NDCs and SDGs based on Paris Agreement and Agenda 2030 of UN respectively.

Inaugurating the forum Union Environment Minister, Dr. Harsh Vardhan said that India and Germany have had a rich cooperation engagement for the last 60 years which extends to sectors such as natural resource management, urban environment protection, climate change adaptation and mitigation and innovative green technologies. He further emphasized that the Indo-German bilateral relations are founded on common democratic principles and today, Germany is amongst India's most important partners both bilaterally and in the global context. "India's development trajectory focuses on 5 Ps that is People, Planet, Prosperity, Peace and Partnership. The bilateral cooperation in future should focus on marine litter, SDG and NDC implementation, climate change adaptation and Forestry."

The Federal Environment Minister from Germany Svenja Schulze said that progress and implementation of 2030 agenda is slow and window of opportunity for low carbon economy is dwindling and Government, Industry and Society should do more. She congratulated the Indian Prime Minister on cooperating with UNEP on addressing plastic pollution during the World Environment Day hosted by India on June 05, 2018 and also welcomed India's commitment to create circular economy. She further stated that Indo-German Environment Forum needs to build on experience exchange and cooperation will be strengthened in the areas of marine litter, waste to energy, biodiversity, waste and water. Around 250 representa-

## **Conservation News -**

tives of ministries, business and science as well as non-governmental organizations participated in the forum, which was organized by the two environment ministries in cooperation with the Asia-Pacific Committee of German Business and the Federation of Indian Chamber of Commerce and Industry.

The Forum provided a platform for the bilateral exchange of high-level policy-makers and other key players on international environmental and climate policy and cooperation between the two countries. The four working groups met this year in the run-up to this forum, to discuss the progress made and to bring in new topics of mutual benefits. Few of the outcomes have been cooperation in field of marine litter, air pollution control, waste management, water pollution, circular economy, NDC implementation, SDG monitoring and climate change (with focus on forestry and adaptation).

---

## **MoEF signs MoU with University of British Columbia on Forestry Science:**

A Memorandum of Understanding (MoU) was signed today between Ministry of Environment, Forest and Climate Change (MoEF&CC) and University of British Columbia (UBC), Canada for next 10 years in New Delhi. Both the institutions shall explore opportunities for future collaborations in the field of forestry science through their respective organizations namely Indian Council of Forestry Research and Education, Wildlife Institute of India, Forest Survey of India, Indira Gandhi National Forest Academy and Directorate of Forest Education, Dehradun, Uttarakhand, India and University of British Columbia, Vancouver, Canada.

The MoU will help in exchange of students, researchers and faculty, developing research projects, livelihood opportunities and augment income of the forest based communities and also assist the industries to optimize the utilization of forest based resources with access of technology to different stakeholders by the respective organization.

The main areas of collaboration listed in the Memorandum of Understanding are:

- Collaborative research on wood sciences, forest resource management, adaptation and mitigation to climate change, forest genetics and breeding, wildlife, ecology, remote sensing, insect and disease pests, extension, conservation of flora and fauna, biotechnology, bio-energy, bio-economy, etc
- Exchange of students/researchers, faculty members and post-doctoral fellows through internship and other scholarship opportunities
- Capacity building on data collection and analysis of Permanent observational sample plots under forest inventory for growth, stand structure, biodiversity and climate change parameters
- Training and exposure on developing suitable protocols for Linkage of Remote Sensing and field inventory data

## Conservation News -

- Arranging joint conferences, seminar, workshops and exhibitions

The University of British Columbia is a global centre for research and teaching, consistently ranked among one of the best universities in the world. Its entrepreneurial perspective encourages students, staff and faculty to challenge convention, lead discovery and explore new ways of learning. Many years ago, I was surprised to hear from the farmers from Canada they way they have integrated forests and organic farming into their farming methodology. It is like the traditional way of farming with lots of trees and bushes around the farms a generation or two earlier. At that time the farmers from Canada had told me the benefits of having forests as forests attract insectivorous birds who do a world of good by feeding on the pests in the crops. I am sure this MoU will hopefully bring a different perspective and open up the eyes of some of our institutes, officials and planners. The following TED Talk by Suzanne Simard on "How trees talk to each other" will throw some light on her research in forestry science in Canada where she discovers how complex is the interrelationship between various species of trees in helping each other by passing carbon, mother trees passing their wisdom to others when they are injured or dying etc.

[https://www.ted.com/talks/suzanne\\_simard\\_how\\_trees\\_talk\\_to\\_each\\_other?utm\\_campaign=tedsbread&utm\\_medium=referral&utm\\_source=tedcomshare](https://www.ted.com/talks/suzanne_simard_how_trees_talk_to_each_other?utm_campaign=tedsbread&utm_medium=referral&utm_source=tedcomshare)

---

## **Solid Waste Management rules notified:**

The Ministry of Environment, Forests & Climate Change, in supersession of Municipal Solid Waste (Management and Handling) Rules, 2000, has notified the Solid Waste Management Rules, 2016. The Rules direct the waste generators to segregate the waste at source and hand over the segregated waste to authorised waste pickers or waste collectors. The Rules mandate all resident welfare and market associations, gated communities, institutions, all hotels and restaurants to ensure segregation of waste at source, facilitate collection of segregated waste in separate streams and handover recyclable material to either the authorized waste pickers or the authorized recyclers.

Further, the Rule prescribes that the bio-degradable waste shall be processed, treated and disposed off through composting or bio-methanation within the premises as far as possible.

This information was given by Minister Of State for Environment, Forest And Climate Change Dr. Mahesh Sharma in written reply to a Question in Lok Sabha today.

Unfortunately this rule is not implemented. Households in gated communities don't segregate wastes. There has been announcements over loudspeakers in the communities but not one seems to bother. One of the reasons is that households generally keep wastes in one waste bin. Now they have to buy a separate one to segregate biodegradable and non-biodegradable wastes. So no one does that at the moment.

## **Conservation News -**

### **India to host 13th COP of the Convention on the Conservation of Migratory species of Wild Animals:**

The 13th Conference of Parties (COP) of the Convention on the conservation of migratory species of wild animals (CMS), an environmental treaty under the aegis of United Nations Environment Programme, is going to be hosted by India during 15th to 22nd February, 2020 at Gandhinagar in Gujarat. Representatives from 129 Parties and eminent conservationists and international NGOs working in the field of wildlife conservation are expected to attend the COP.

India has been a Party to the CMS since 1983. The Conference of Parties (COP) is the decision-making organ of this convention.

Inaugurating the Logo and Mascot (GIBI) along with website for the international event, in New Delhi, Union Environment Minister, Dr. Harsh Vardhan said that hosting of 13th COP would give India an opportunity to showcase its conservation initiatives for wildlife species. “It will provide a global platform for deliberations on the conservation and sustainable use of migratory wild animals and their habitat.” said Dr. Vardhan.

In order to protect the migratory species throughout their range countries, a Convention on Conservation of Migratory Species (CMS), has been in force, under the aegis of United Nations Environment Programme. Also referred to as the Bonn Convention, it provides a global platform for the conservation and sustainable use of migratory animals and their habitats and brings together the States through which migratory animals pass, the Range States, and lays the legal foundation for internationally coordinated conservation measures throughout a migratory range.

The convention complements and co-operates with a number of other international organizations, NGOs and partners in the media as well as in the corporate sector. Under this convention, migratory species threatened with extinction are listed on Appendix I and Parties strive towards strictly protecting these animals, conserving or restoring the places where they live, mitigating obstacles to migration and controlling other factors that might endanger them. Migratory species that need or would significantly benefit from international co-operation are listed in Appendix II of the Convention.

India has also signed non legally binding MOU with CMS on the conservation and management of Siberian Cranes (1998), Marine Turtles (2007), Dugongs (2008) and Raptors (2016).

India is temporary home to several migratory animals and birds. The notable among these include Amur Falcons, Bar headed Gheese, Black necked cranes, Marine turtles, Dugongs, Humpbacked Whales, etc. The Indian sub-continent is also part of the major bird flyway network, i.e, the Central Asian Flyway (CAF) that covers areas between the Arctic and Indian Oceans, and covers at least 279 populations of 182 migratory water bird species, including 29 globally threatened species. India has also launched the National Action Plan for conservation of migratory species under the Central Asian Flyway.

## Conservation News -

### **Wild Tiger sighted in Gujarat:**

Gujarat has now the first state in recent times to have wild lions, leopards and tiger in the state as a tiger has been spotted in Mahisagar district.

On the basis of preliminary photos, it is claimed that the tiger has moved from Ratapani Wildlife Sanctuary in Madhya Pradesh. Tigers are known to move long distances and in this case the distance is over 300kms. Tigers are known to walk some 15 kms in night and can do more if required. Some records in Sundarbans suggest that tigers can also swim long distances over 20-30kms. So a tiger moving to Gujarat shouldn't be a surprise. We have lot of livestock wandering in the fields as well as wild prey like Nilgais, wild pigs etc in the fields. Wild animals always try to avoid humans and this tiger somehow has managed to avoid attention during its travels. There was a time when wildlife used to move from one place to another. Today our cities and towns have expanded and have become connected with each other. There are hardly any green areas to provide covers to wild animals. So this tiger movement gives hope that if some effect can be made by the forest department, NGOs and people then the corridors can be strengthened and re-established.

The appearance of a tiger has given a different headache to the Gujarat forest department and Government. Earlier the Gujarat Government had said that one of the reasons for not complying with the Supreme Court order for relocating lions to Kuno-Palpur in Madhya Pradesh is that the area is prone to visiting tigers. Gujarat Government says lions can't coexist with tigers. The Gujarat forest department had independently placed camera traps in Kuno-Palpur to find out if there are tigers. They didn't want to believe or depend on the camera traps of Madhya Pradesh Government. So it would be interesting to see if the Gujarat Government is going to capture this tiger on one or other pretext to ensure that lions and tigers don't coexist in Gujarat.

It is important that the wildlife be left alone to choose their own fate. We should have a hands off approach from wildlife. Just give them protection to live free in their own homes (habitat). When we adopt a hands off policy and give protection from poaching and stop anthropogenic pressures, nature has a great ability to heal and bounce back. Let nature do what it knows best.

---

## Equipment Discussions -

### Canon launches Fullframe mirrorless camera for enthusiasts

Canon has launched EOS RP, a lower priced full frame mirrorless camera for the enthusiasts segment.

#### **Salient points of Canon EOS RP:**

**Sensor:** 26.2 megapixel CMOS

**Processor:** DIGIC 8 image processor

**Mount:** Canon RF lens mount, 54mm, same as EOS R. Adapter to be used for EF, EF-S, TS-E and MP-E lenses.

**Autofocus:** Dual pixel AF with 4779 manually selectable AF points. Covers 88% in horizontal and 100% vertical area.

Low light AF capability of EV-5



**EVF:** 0.39 inch, 2.36 million dots Electronic Viewfinder

**LCD:** Vari-angle touch enabled LCD screen

**ISO:** 100-25600 standard. Expandable to ISO 102400

## Equipment Discussions -

**Shutter speed:** 30 to 1/4000, bulb mode.

**Still burst:** Upto 5fps for 50 Raw still shots. In jpeg it is unlimited

**Video Resolution:** UHD 4K (3840 x 2160) resolution recording at up to 23.98 fps at 120 Mb/s data rate.

**Full HD 1080p** and **HD 720p** at 60 fps for slow motion playback.

**4K video** has 4:2:0 sampling and 8-bit color depth when recorded internally, and 4:2:2 8-bit output when using an external recorder.



**Audio:** on-board stereo microphone or external mic via the 3.5mm mic jack.

**Inbody stabilization:** The EOS RP has 5-axis Dual Sensing IS can be used when recording video to electronically reduce the appearance of camera shake for sharper, smoother recording.

**Connectivity:** HDMI C (Mini), USB-C, headphone jack, mic jack, Canon E3

**Dimensions:** 132.5 x 85.0 x 70.0 mm

**Weight:** 485 gms with battery and memory card.

**Price:** \$1299 US Dollars

## Equipment Discussions -

### PRESS RELEASE

Full Frame For The Masses! Canon Introduces Its Second Full-Frame Mirrorless Camera — The EOS RP

New Super-Compact and Ultra-Lightweight EOS RP is Ideal for Users Looking to Graduate to Full-Frame Mirrorless Camera at an Affordable Price

MELVILLE, NY, February 13, 2019 – Responding to the demand from amateur and advanced amateur photographers for an entry-level, full-frame mirrorless camera, Canon U.S.A. Inc., a leader in digital imaging solutions, today announced the second camera in the EOS R lineup, the EOS RP. The EOS RP is designed for photographers looking to step up from Canon’s APS-C cameras: the EOS Rebel, EOS M and the EOS 80D, into the world of full-frame mirrorless photography. Weighing in at just 17.29 ounces, the EOS RP camera is lighter than a 500ml bottle of water and smaller than Canon’s popular APS-C DSLR camera, the Canon EOS Rebel T7i, coming in at approximately 5.0in (w) x 3.77in (h) x 2.36in (d). With optics at its core, the EOS RP takes full advantage of the complete line up of RF lenses and is compatible with the existing collection of Canon’s EF and EF-S lenses with the use of one of three optional RF EOS-R Mount Adapters.

*“As Canon continues to evolve its full-frame mirrorless cameras, our goal is that one day the EOS R line becomes as widely popular as our celebrated lineup of EOS DSLR cameras,” said Kazuto Ogawa, president and chief operating officer, Canon U.S.A., Inc. “As a company, we believe that in order for us to accomplish that goal, Canon needs to develop full-frame mirrorless cameras for every skill level of photographers and that starts with amateurs and advanced amateurs. This makes the EOS RP the perfect addition to the existing lineup.”*

The new Canon EOS RP full-frame mirrorless camera features a 26.2 megapixel CMOS sensor that is powered by the company’s DIGIC 8 image processor, providing users with high-image quality, outstanding operation and functionality. The new Canon EOS RP features Dual Pixel CMOS Auto Focus (AF) with 4,779 manually selectable AF pointsii and a wide AF coverage area of 88 percent horizontal and 100 percent vertical. With f/1.2 lenses, the camera astonishingly boasts AF sensitivity in low light in as little as Exposure Value (EV) -5. When using the RF 24-105mm F4 L IS USM lens with the EOS RP, the camera can focus in as little as 0.05 seconds with Dual Pixel CMOS AFiii. When using eye detection AF, the camera can automatically detect faces and focus on the eye of the subject. This feature is supported when the camera is set in either servo AF mode during continuous shooting and movie servo AF, as well as one-shot AF.

Like the EOS R full-frame mirrorless camera that was announced in September 2018, the EOS RP is built around the same 54mm mount diameter and short-back focus. This allows for the use of one of three optional mount adapters for full compatibility with all existing EF, EF-S, TS-E and MP-E lenses. Through the use of the optional Drop-In Filter Mount Adapter or Control Ring Mount Adapter, these lenses, in fact, gain functionality.

For photographers looking to further expand their abilities and capture a wide variety of both still and video images, the EOS RP features Visual Guide mode. First introduced with the EOS Rebel T7i and EOS 77D, this mode allows users to see

## Equipment Discussions -

on screen how switching modes on the mode dial or tweaking settings can alter the image they are about to capture. This mode helps to guide photographers to capture more compelling images, such as ones with a shallow depth-of-field or being able to give moving subjects a frozen or flowing look. For those looking to expand their imaginative options, the camera also features Creative Assist mode that allows photographers to use new and unique visual effects and adjustments when shooting, such as brightness, contrast, saturation, color tone, monochrome and background blur. In addition, the design, ergonomics, layout and ease-of-use of the camera are very similar to that of other Canon cameras consumers might already be familiar with.

Additional noteworthy features of the EOS RP camera include:

- Built-in 0.39 inch, 2.36 million dot Electronic Viewfinder with Touch-and-Drag AF
- Vari-Angle LCD touchscreen
- 4K UHD 24P/Full HD 60p video recording with 4K time-lapse shooting and the ability to extract still images from 4K video recordings
- ISO range of 100-25,600 that is expandable up to ISO of 102,400
- Built-in Wi-Fi®iv and Bluetooth®v technology
- Mobile RAW workflow supported paired with Digital Photo Professional Express Appvi

### **Availability and Pricing:**

The Canon EOS RP full-frame mirrorless camera is scheduled to be available in March 2019 for an estimated retail price of **\$1299.00 for the body only**. It will also be sold as a body-and-lens kit with the RF 24-105mm F4 L IS USM lens for **\$2399.00\***

---

## Equipment Discussions -

### Datacolor launches SpyderX colour calibration for monitors

For Photographers and videographers a calibrated monitor is very important else your great shot may appear to be lousy in someone else's colour calibrated monitor if yours is edited in a non colour calibrated monitor. Most of the time the colour calibration is a time taking process. However, with the new SpyderX Datacolour promises that the calibration time has been reduced to 2 minutes. So that would really help all of us.

Datacolor claims that it has took 3 years of work in creating the completely new lens-based color engine technology featured in SpyderX.

The Datacolor SpyderX is launched in two versions: SpyderX Pro and SpyderX Elite. The SpyderX Pro is priced at **\$169.99** US Dollars and the SpyderX Elite is priced at **\$269.99** US Dollars.



#### **PRESS RELEASE**

Datacolor debuts SpyderX, a ground-breaking color calibration solution for monitors

Lawrenceville, NJ – (February 11, 2019) – Datacolor®, a global leader in color management solutions, has launched SpyderX, its fastest, most accurate and easiest to use color calibration tool for monitors. The development of SpyderX is

## **Equipment Discussions -**

testament to Datacolor’s commitment in advancing color management solutions for photographers, videographers and creative specialists worldwide.

SpyderX uses a fully redesigned color engine that provides significantly increased color accuracy and low light capabilities, giving photographers the confidence needed to achieve their creative vision.

### **SpyderX enhanced features include:**

- Blazing Speed – Taking less than two minutes to calibrate a screen, the SpyderX is several times faster than previous models, with calibration happening so fast it easily becomes part of the workflow.
- Highest Accuracy – Providing a significantly higher level of color accuracy and shadow detail on a wide range of monitors.
- Ease of Use – Simple and intuitive single-click calibration software, as well as advanced options.

Susan Bunting, director of marketing at Datacolor, said: “We know photography is a labor of love, and a lot goes into taking every shot. That’s why we’ve redesigned SpyderX from the ground up, ensuring you can trust the color on your screen while making the whole process of calibration as intuitive and quick as possible.”

Now available in two versions, the SpyderX Pro is designed for serious photographers and designers seeking a fast and easy-to-use monitor calibration solution. The SpyderX Elite takes it one step further with more advanced settings for professional photographers and videographers who want ultimate control of their color workflow.

---

## Equipment Discussions -

### Wooden Camera launches ZIP Box Pro matte box:

Wooden camera has launched the Zip Box Pro, a high-quality mattebox with a simple design that is ready to work right out of the box - no tools or add-ons needed. It has the most robust set of features for the best value and size. There are three 4x5.65 filter trays in the Zip Box Pro and a carbon fiber top flag as well, and interchangeable backs weighing less than 1LB. It doesn't have side flags.



There are two models Clamp On and Swing away. The Clamp on model is priced at **\$399 US dollars** and the Swing away model is priced at **\$499 US Dollars**.

Each Clamp On Kit includes mattebox, top flag, and clamp on back. The clamp-on mattebox is for 80mm diameter lenses which can hold three 4x5.65 filters that are loaded from the front and held by a spring loaded latch.

The included top flag is made of lightweight carbon fiber and covers the front of the mattebox which is great for protecting

## **Equipment Discussions -**

the lens between takes. The flag can be removed by loosening the top thumbscrew, aligning the tab with the key slot, and pulling out.

Rear opening of this back can be swapped by loosening the 4 thumbscrews and replacing with clamp on backs featuring diameters of 114mm, 110mm, 104mm, 100mm, 95mm, 87mm, and 80mm.

**Weight:** 225g (0.54 lbs)

**Dimensions:** 196.8 x 50.8 x 165 mm (7.75 x 2 x 6.5 in)

Each Swing Away Kit includes mattebox, top flag, swing away back, reduction rings, and universal donut.

---

## Natural History -

### COUNTRY NOTEBOOK: Slender Loris : M.Krishnan - 13 July 1969

The Sunday Statesman (shared by Shri. Saktipada Panigrahi)

#### SLENDER LORIS

" By the time I was 41, I had to admit that I had lost my long fight with myself, and that what people euphemistically term the spread of middle age, and botanists more bluntly secondary thickening had overtaken me. And on my forty-first birthday I wrote these lines on the Slender Loris, in envy and regret.



Slender Loris      Photograph by - Akshay Kumar Manjunath

I wish I were a Slender Loris  
 And not a massive human being.  
 In such a change of course  
 Much more is  
 Lost that is gained, for though agreeing  
 With men in lacking tail and manners,  
 On evolution's path it lingers  
 Bar back' we have reached the  
 Destination  
 All the days it sleeps with shaking Fingers  
 Over sun-shy eyes, no fasionation  
 Lmoels its night; slow-limbed  
 The stories  
 Or trees it climbs for insect plunder.  
 But still I wish I were a loris --  
 Beyond all argument it's slender

By no means an inspired verse, but factually very sound. The Slender Loris (and even the Slow Loris of north-east India, with its body and limbs much thicker) is a featherweight, the size of a kitten and slim, with a very narrow waist and hard, thin limbs; the great goggle eyes are set on by a patch of dark fur around each of them and as one might guess from its owl-face and big, round orbs, it is a creature of the night.

It is highly arboreal, and spends the day in sleep, deep in the shady cover of a tree top, with its face buried in its chest, bird like and often with its hands over its eyes to shed them from the glare, especially when it is forced to keep awake by day. It is from its round face and its habit of shading its eyes with its hands that it gets its Hindi name, Sharmindi-billi (the bashful cat).

Lorises are among the small creatures the are missed easily, and so are seldom seen. In fact I can recall seeing a loris only thrice—a pair of slow Lorises high up a tree in Bhutan, and a Slender Loris twice in the south, also up trees and on both occasions late in the evening. Unfortunately for it, the slender Loris is credited by superstition with the ability to bring one luck, and its gnomelike looks are so unusual the it is commonly kept in a cage and exhibited in zoos, and as a captive animal (usually exposed to much more glare that it can tolerate) it is by no mean unfamiliar.

It is not only that they do not give it a cage large enough and deadly enough small in sleet in comfort through the day on some suitable perch -- they often give it the wrong diet as well, bread-and-milk and bananas. I do not know if a slender Loris is exclusively insectivorous when wild; perhaps it also eats eggs and even small tree-living lizards when it can find them, and soft fruits and other vegetarian fare. But I am quite sure that it dose need insect food or some suitable substitute.

In fact, its dentition is hardly that of a fruit-eater and, as I learnt in the most unpleasant manner imaginable, it has sharp teeth. To get the picture reproduced here I had the two captive Lorises taken out of their cage and placed on a long length of tamarind bough, with one end planted into the earth. Somehow those Lorises did not want their picture taken. As soon as they were put on the bough, they climbed quickly down and made for the security of their cage, moving over the ground at an awkward, shambling shurie much faster than on the bough, I caught them both and gently redeposited them on the bough, and in the process got a sharp nip from one, which confirmed my views on its dentition.

A man whom I know, who kept a Loris for a pet, told me that the animal once made a bid for liberty, and on being chased, entered a pool of water and swam across, using a rhythmic breast-stroke, only to be caught on reaching the farther bank. I cannot vouch for the accuracy of this report, but believe it, for most animals can swim when they have to."

- M.Krishnan

This was published on 13 July 1969

## Wildlife Photography -

### One hot day in summer by Shyamala Kumar



### Hawk Cuckoo by Mrudul Godbole



## Wildlife Photography -

Red berries & a red eye by Anil Kumar Verma



Spotted fly catcher by Joydip Mukherjee



**Wildlife Photography -**

**Tufted duck female by Abhirup Dutta Gupta**



**Scavenging globetrotter by Prajwal Ullal**



**Wildlife Photography -**

**Yellow throated bulbul by Paramvir Singh**



**Early morning at Mudumalai by Murugan Anantharaman**



## Wildlife Photography -

Lurking in the dark by Prajwal Ullal



Spider by Mangru Minz





This is the 122nd Issue of IndiaWilds.

In this 11th year of publishing IndiaWilds Newsletter, we find the challenges in preserving India's wilderness, wildlife and environment is much more than before. This is a time when not only India, but many countries around the world are facing increased calls for appropriating the earth for the benefits of one group of people, the wealthy and the rich. Increased xenophobic, majority vs minority and other such divisive calls are turning our attention away from the main danger impacting the planet earth i.e. Climate Change. There was a time when a few culturally and aesthetically superior were deciding the policies and the large masses of people with various degrees of ignorance were ready to accept that view. However, today, the ignorance is not limited to the large masses of working classes. The so called elite have also been ignorant about the complex interrelationships between various species and the impact of nature, wildlife and environment on our lives. So the ignorant majority is today deciding the course of action. Climate change is touted as hoax even by the current President of USA. In that scenario, it is very important to widen the understanding of our people and simply the messaging so that scientifically valid information reaches the majority of our people. Else, conservation in this country will be history.

The photo of a grey hypocolius adorns the cover page. This little passage migrant too has a role to play in the spread of our plant species and its well being. India has decided to take action to protect the migratory species. However, just talk is not enough. The migratory species passing and resting on various parts of India's geography depend on the habitat for food and shelter. This passage migrant was photographed in the vast Banni grasslands in the Rann of Kutch in Gujarat. Today large scale conversion of grasslands into industrial lands, mining, agriculture, human habitations etc is threatening the once numerous species. There is a symbiotic relationship of the resident wildlife with these passage migrants as well. Our actions are threatening the tenuous balance and pushing species to the brink of local extinction. We the people have to be cautious and put pressure on the Government to protect our wild lands, grasslands, forests, rivers and other landscapes so that future generations can live and breathe in peace.

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

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

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

If you are already a member of IndiaWilds and have forgotten your user id and/or password you can mail [administrator@indiawilds.com](mailto:administrator@indiawilds.com)

Regards,

**Sabyasachi Patra**

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

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

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

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

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

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

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

**Publisher's address: -**

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