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EXPLORERS

DEC 2016/JAN 2017

ENCHANTING WILDERNESS

By Roger Brendhagen

VULTURES IS THERE ANY HOPE?

By Tharangini Balasubramanian



conservation . photography . accessories



From dreams to action – starts from thoughts, eventually discussions and finally getting practical. This can be quite a long journey. A lot of dreams die in their infancy after the initial enthusiasm.

They float in your conscious for a time and then fade away.

And so was the dream of launching this magazine. But a group of like-minded souls didn't let it die. They nurtured it and the universe co-conspired to get support from all corners of the world.

Now this is not just a person's dream...

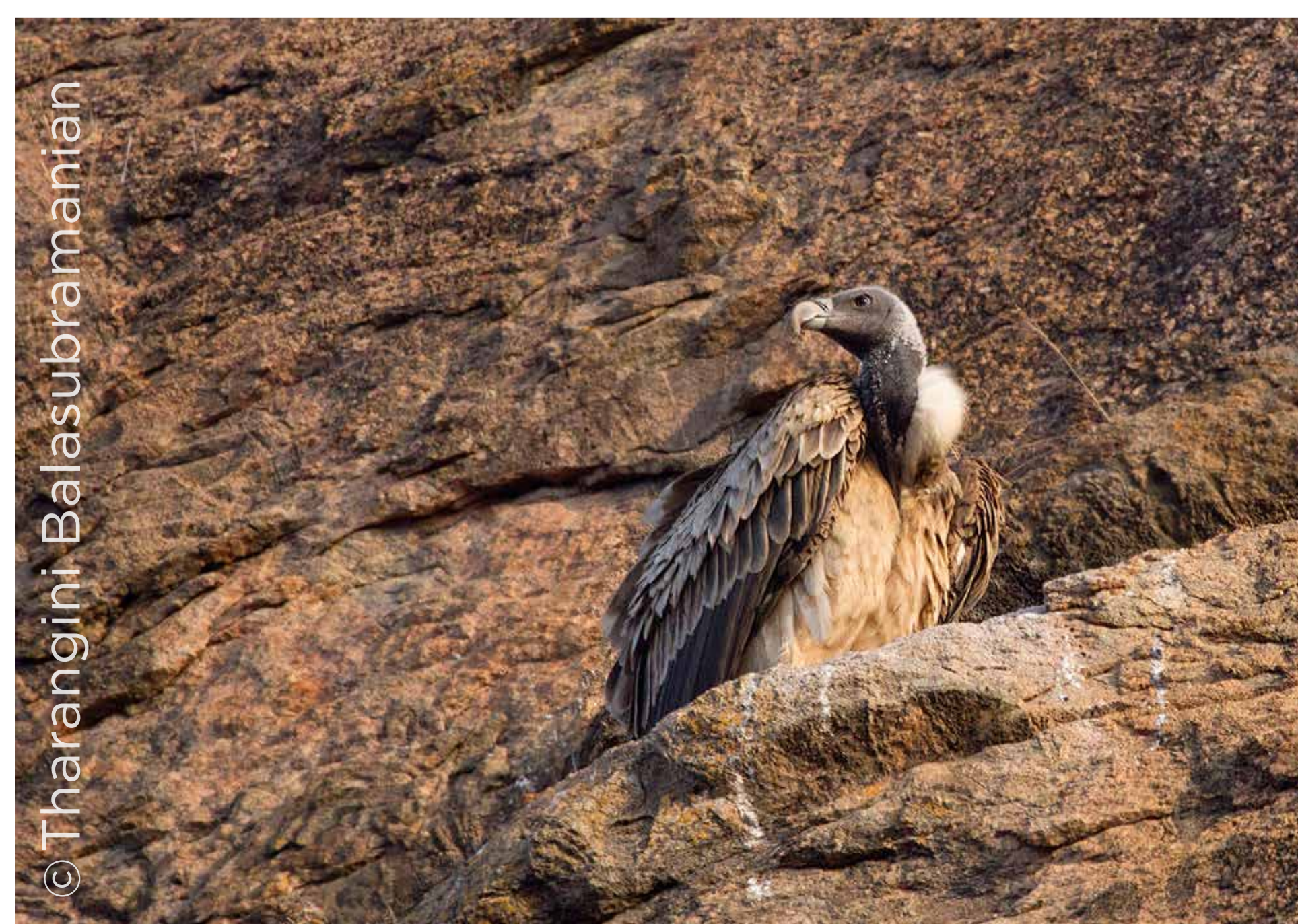
It is a collective reality.

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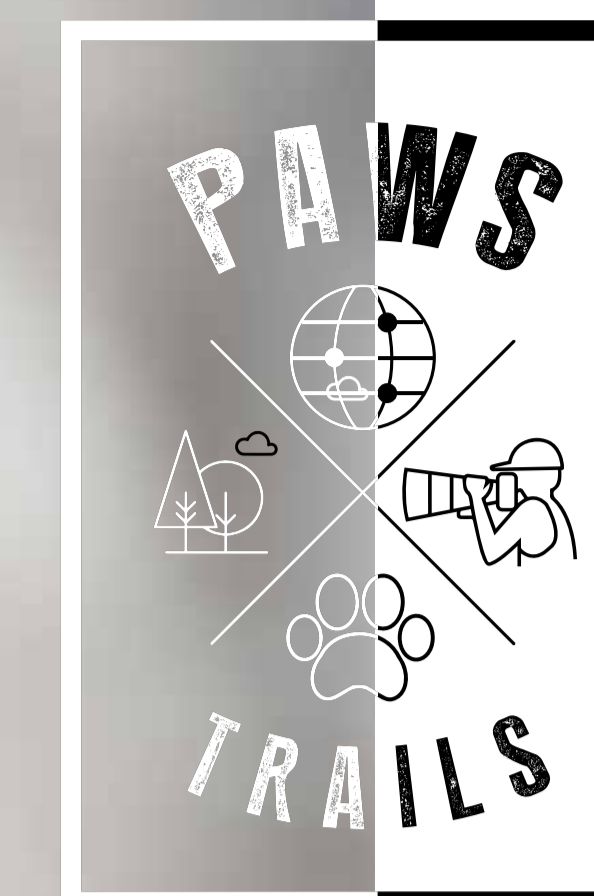
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NIKON D5
Vision Outperformed
by Thomas Vijayan

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Hank Tyler
Editor

Conservation is the core and heart of our stories. We strive to report on environmental issues where an individual or community has addressed an issue, worked on a solution, and made an improvement. We are planning to publish stories where communities have worked together to solve local environmental problems. Often an individual sees an issue and acts as a spark to ignite a movement. We look forward to sharing these success stories with you.

Promoting a sustainable lifestyle is another theme that Paws Trails Explorers will focus on. We will focus on achievable actions that individuals can take in their daily lives to reduce their footprint on Mother Earth. Recycling, growing more of your own food organically, walking to work, shopping locally, planting trees instead of chopping them down are some of the many steps one can take in their daily lives.

Paws Trails Explorers is a global magazine and we strive to cover a variety of issues and stories from around the world. While the idea for Paws Trails Explorers originated in southern India, we are reaching out to the world. Many of the articles are written by people for whom English is their second language. In editing and proofing these articles, we are careful to keep their word choices to retain the author's style and expressions. There are many versions of the English language, and you will be reading many in Paws Trails Explorers.

EDITOR'S DEN



PHOTOGRAPHY DIRECTOR'S CHOICE



Photographer
Mohan Krishna

FOUNDERS' NOTE

This is our second edition. The collective dream of a group of dedicated nature lovers. The idea whose seed was sown when we explored the world together in search of breath taking images. The seed which germinated when we set out to right the wrongs done to the environment by planting trees around the world, that seed is now a small plant , waving its tiny branches and baby leaves, asking for attention from the world.

It is an irony of our world that the decades of technological progress did nothing to improve the human intellect. Otherwise how can we explain the fact that we have been destroying Mother Earth without a second thought in the name of progress? After all isn't it the only place that we know which can sustain human life? Are we that naïve that we have forgotten to comprehend this simple fact? At least for this simple selfish thought we ought to be doing everything in our power to preserve what is left of the earth and her many life-support systems.


We have no moral right to make other fellow beings on earth suffer or die so that we can be profited. It is high time we realized that we do not have any right of superiority over other living things. On the contrary, if in fact we are superior to other beings, then it becomes our moral and primary obligation to preserve and protect other beings.

These - in a nutshell are the thoughts that stoke the fire behind Paws Trails Explorers. The best inheritance we can leave for our children is a pristine earth. That is the only thing which can give them a life worth living. Let us realize this and commit ourselves to a mission!

**Hermis Haridas &
Nisha Purushothaman**

Founders - PT Explorers





My dream was to capture an Arctic Fox silhouetted against the full moon. After a 10 year wait and countless attempts, couple of years ago I succeeded!

That was fantastic!

COVER STORY

ENCHANTING WILDERNESS

by ROGER BRENDHAGEN



Imagine having the world as your office. Imagine your models not caring one iota about their appearance. This is the fortunate situation Roger Brendhagen finds himself in, approximately 300 days of the year. This nature photographer extraordinaire and his family are settled in the beautiful countryside province of Hedemark in Norway. The forestry, wildlife, mountains, rivers and valleys of this area certainly played a role in Roger's choice of photographic themes.

Roger has photographic affiliations with Nikon and the World Wildlife Federation (WWF). He has extensive experience taking nature photos and submitting articles to both magazines and newspapers, amongst these the Norwegian Vi Menn, A-Magasinet, Aftenposten and Dagbladet as well as many others spread across Europe.

He is head of the Norwegian Nature Photo Centre based in the town of Danebu. He often holds courses, workshops in macro and nature photography and has had many exhibitions of his photographic work taken from the Antarctic in the south to Svalbard in the north. He has won several prizes, including an award during Nordic Nature Photo Contest.

web page: www.brendhagen.com **Facebook:** www.facebook.com/roger.brendhagen
Instagram: www.instagram.com/roger_brendhagen/

What was the inspiration for you to become a wildlife photographer?

Primarily it is the love of nature. And of course the power to connect with people and spread knowledge through my pictures. The beautiful countryside that I live in is full of photographic possibilities with forestry, wildlife, mountains, rivers, and valleys which has helped inspire and nurture the photographer in me.

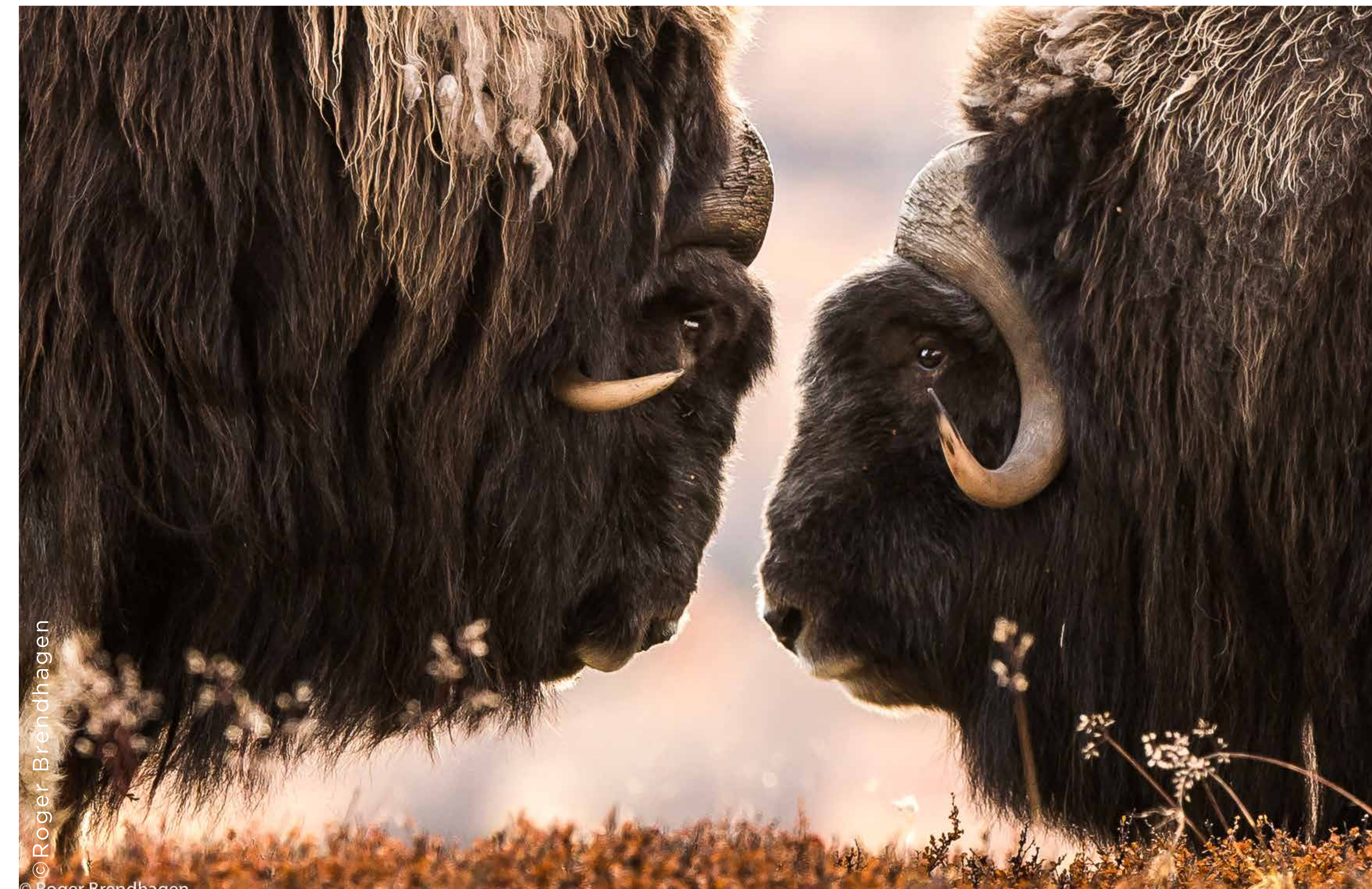
Is photography a full time profession for you?

Yes. Full time profession. I sell pictures and articles for magazines and books etc. and also conduct lectures and

workshops. The workshops are held in different countries such as Norway, Finland, Sri-Lanka, Africa, and Mongolia. I also started my own signature souvenir series, which include cups, plates, shot glasses, decks of playing cards etc. I hold about 2-3 exhibitions every year too.

What are the major challenges you faced in your journey as a wildlife photographer and solutions you managed to come up with?

My major challenge is the lack of time! I have so much of ideas and so many pictures that I want to capture. The spring in Norway and Sweden are quite short and nature reacts fast, so that







©Roger Brendhagen

leaves me a lot of places to visit in a very short time. Also the more I travel and the more I explore, the more I want to capture with my camera. My solution is to make a schedule, a plan on how to, when and where, I can take the desired picture and which one I have to let go and try to get another time, another year.

What’s your favorite location for wildlife photography?

Having travelled around the world a lot, the more I travel the more I get pulled home to the beauty in the Nordic countries and the mountains of Norway. This is where I found and photographed the Arctic Fox and it holds a special place in my heart.

Is there any specific super model for you in the animal kingdom - and why?

My favorite animal, are snakes of all variety, shapes and size. I am very fascinated by snakes, I think they are fantastic creatures and wish more people could see the beauty in them. I want my pictures to show the good side of snakes and tell their story. I want to create more understanding of them, so that people let go of their fear and of course it’s easier to sell “scary” pictures to newspapers.

Can you talk about the most cherished moment or experience in the wild?

The most cherished moment, I had a picture in my head for more than 10 years that I wanted to capture. There are only about 150 Arctic Foxes in the Norwegian

mountains and the full moon is up in these regions only once a month. My dream was to capture an Arctic Fox in front of the full moon. After a long wait and countless attempts, couple of years ago I succeeded! That was fantastic!

What is the most dangerous situation in the wild you have experienced?

I’ve been really close to some lions in Kenya and have had an elephant chasing my car for some hundred metres, these were some of the dangerous situations.

Can you talk about your most favorite photo in your collection?

The Arctic Foxes and the polar bears. Snakes may be my favorite subjects, but my images of Arctic Foxes and polar bears are very close to my heart.

What about the equipment you use? Your most favorite camera? Your most favorite lens?

I am an ambassador of Nikon and my main cameras are the Nikon D5 and D810. The optics I use mostly is the 600mm. But in my camera bag you can find almost everything that Nikon has ever made. On a normal expedition I carry along 60mm and 150mm macros. Additionally I will have 14-24mm, 24-70mm, 70-200mm, 200-400mm, 600-800mm and together around 6 camera houses.

Is there a role model for you in this field?

When I was young there was one guy Sverre M Fjelstad who led the way for a



lot of photographers in Norway, including me. Nowadays I find inspirations in a lot of photographers, for example Mathias Klum and the one and only Frans Lanting.

What are the specific technique or photographic methods you use?

Techniques I use are low angles and perspective. I try to exploit the possibilities of low/ lack of light. One of the major Techniques you should master is the art of patience and I employ a good measure of it.

What is your biggest dream in photography?

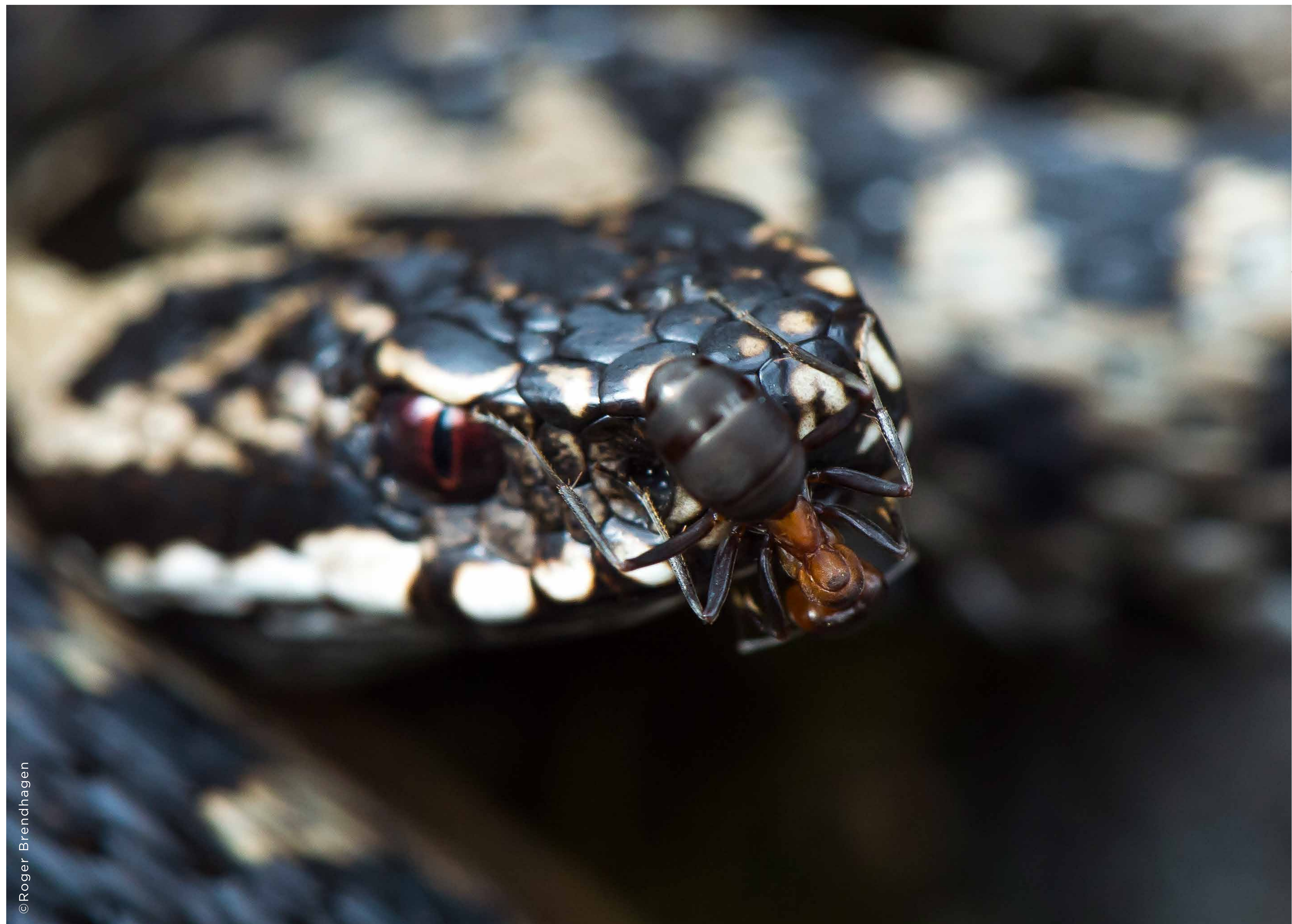
My dream is to be able to do what I am doing already for many more years from now. I love my life and what I have achieved as a photographer and so I do not need a different dream to achieve.

How do you deal with all your images after a day's shooting?

All my pictures get copied and saved to external hard discs; I never delete any picture before I'm home. Lightroom CC

My dream is to be able to do what I am doing already for many more years from now. I love my life and what I have achieved as a photographer and so I do not need a different dream to achieve.

©Roger Brendhagen







is my favoured tool to edit pictures, after every day out in the field I ensure to have a quick look at my pictures of the day. The final editing is done later on, at home

How do you link photography and conservation in your life?

I'm lucky to have the possibility to choose my assignments, that means I can go to places and find species that are endangered. So in my articles, my lectures and my pictures I talk about and show the consequences of climate change and other human factors that have

had huge impact on nature and animals. My images can bring different species closer to people, generating curiosity and spreading the awareness about them. and show the consequences of climate change and other human factors that have had huge impact on nature and animals. My images can bring different species closer to people, generating curiosity and spreading the awareness about them.

What is your major achievements as a wildlife photographer?

To be a Nikon ambassador for 10 years and

still honored to be one. Seeing that my picture are liked and viewed worldwide is a major achievement for me. I also have had the pleasure of being a jury member of photo competitions and get to view and appreciate many photographers' works and interact with them. I have been awarded during the Nordic nature photo contest and my photos and articles published in magazines, newspapers in the Nordic region and across Europe. It feels wonderful to have reached a lot of people through these publications.

What is your advice for upcoming wildlife photographers?

First thing, learn how to use your camera in all different ways. You need to invest in a good tele lens. Find your own path and find some species that you like and learn everything about them. Only that way will you be able to take pictures that are extra ordinary.





CHASING CHIMPS IN MAHALE

By Peter Hudson

THE SPECIES



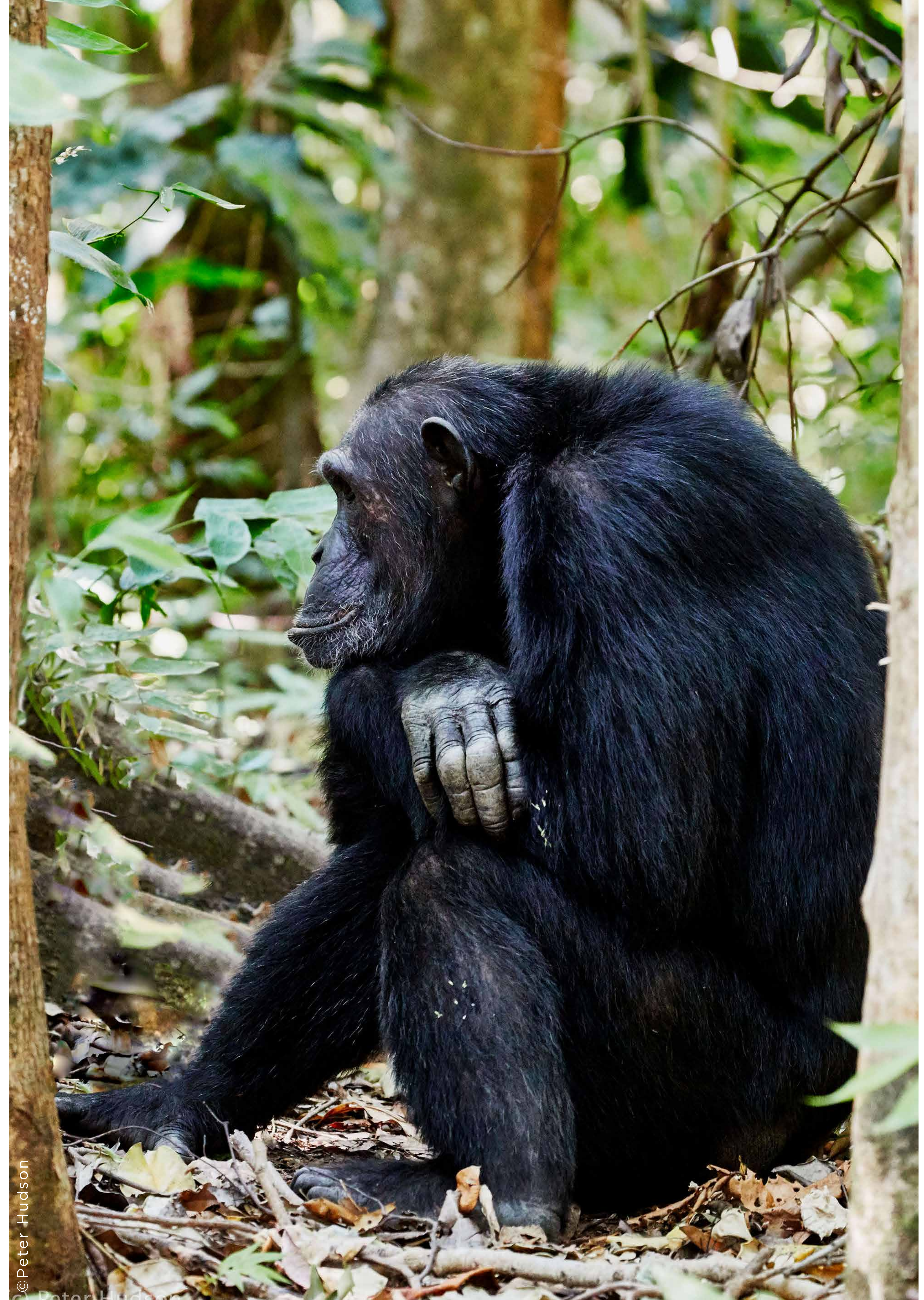
EXPLORERS



Peter Hudson is a professional biologist who studies the ecology of wildlife diseases including those infections that spillover from wildlife to humans. He is passionate about biology and intrigued about how we can capture behaviour and interactions between animals using photography.

He is The Willaman Professor of biology and the director of life sciences at Penn State and also a Professor at the Nelson Mandela Institute in Tanzania. He is a fellow of The Royal Society.

Website:
www.peterhudsonphotos.com





a small reserve and really threatened by logging. After reading some of the scientific papers and the trip reports online I felt Mahale, south of Gombe but still on the shores of Lake Tanganyika, was a much more interesting place to visit. Mahale is a beautiful, beautiful forest - with gentle rolling terrain around the edge of an old volcano and the easily accessible part of the home range of the M troop of chimps. The camp is fabulous and chimps, baboons, warthogs all just walk through the camp and the troop of chimps is rarely more than a 40 minute walk. Sixtus my guide was

As kids, my friends wanted to grow up and become the next Jackie Charlton or an underground guitarist like Eric Clapton... but I wanted to be Jane Goodall.

superb, knowledgeable, interested and both sensitive and sensible about the chimps - they come first and his field craft was gentle and wise. I stayed at the wonderful Kungwe Resort, on the beach at Lake Tanganyika, not cheap but the food, service and management were some of the best I have ever experienced in Africa and well worth every penny. I plan to go back and I would recommend the place with 5 stars every time. You spend most mornings watching chimps, the food is excellent and you can relax or photograph the other primates and animals that live in the forest.

As kids, my friends wanted to grow up and become the next Jackie Charlton or an underground guitarist like Eric Clapton... but I wanted to be Jane Goodall. I loved the idea of studying the social behaviour of chimps and living in the forest with them and discovering their social structure. As such, going to watch chimps has been right up there on my bucket list of the animals I most wanted to see and photograph.

Where to go?

My first encounter with chimps was in 1974 in the Ituri forest of the Congo - an adult chimp dropped out of a tree, really quite close to me, and then all I saw was a chimp bottom disappearing into the forest. So if you want to see chimpanzees, rule number 1, is to visit a habituated group so you can at least get close enough to photograph and watch them behave naturally. Rule number

2, is not to look the chimps in the eye since they find this threatening and they will just walk away - and you just end up with yet more photos of chimp bottoms. Rule 3 is you must wear a face-mask while you are with the chimps so you don't inadvertently pass the chimps an infectious disease like influenza.

While Gombe, the study site of Jane Goodall is the obvious place to visit, it is



The characters of M troop

The Mahale chimps have been studied by Japanese researchers since the early 1960s and the M group is well-habituated to the presence of humans. You are allowed to watch them for 2 hours a day - but not interfere with their behaviour - and this is 2 hours of biological and photo-opportunity bliss. Since they have studied this troop for so long they know so much about them - each individual is named and they know their pedigree. The troop is run by a group of 5 senior males. Let me introduce you to some of the main characters from the M group.

Primus - The alpha male.

The alpha male at the current time is 23-year-old Primus, born and raised in the

troop by his now deceased mother, Pinky. He never pant-grunts but receives pant-grunts from all the others, so when you hear the commotion of pant-grunts just follow the noise and then you will find the alpha male. The previous alpha was called Pimu and he was a nasty piece of work, bullying and beating up the other chimps.

In October 2011, Primus was grooming the alpha male Pimu when he suddenly turned around and bit Primus. Primus called for assistance and the other males came to his rescue and one by one they sided with Primus until they had bitten and beaten Pimu, finally throwing a big stone on him and leaving him to die.

Kalunde - The Kingmaker:

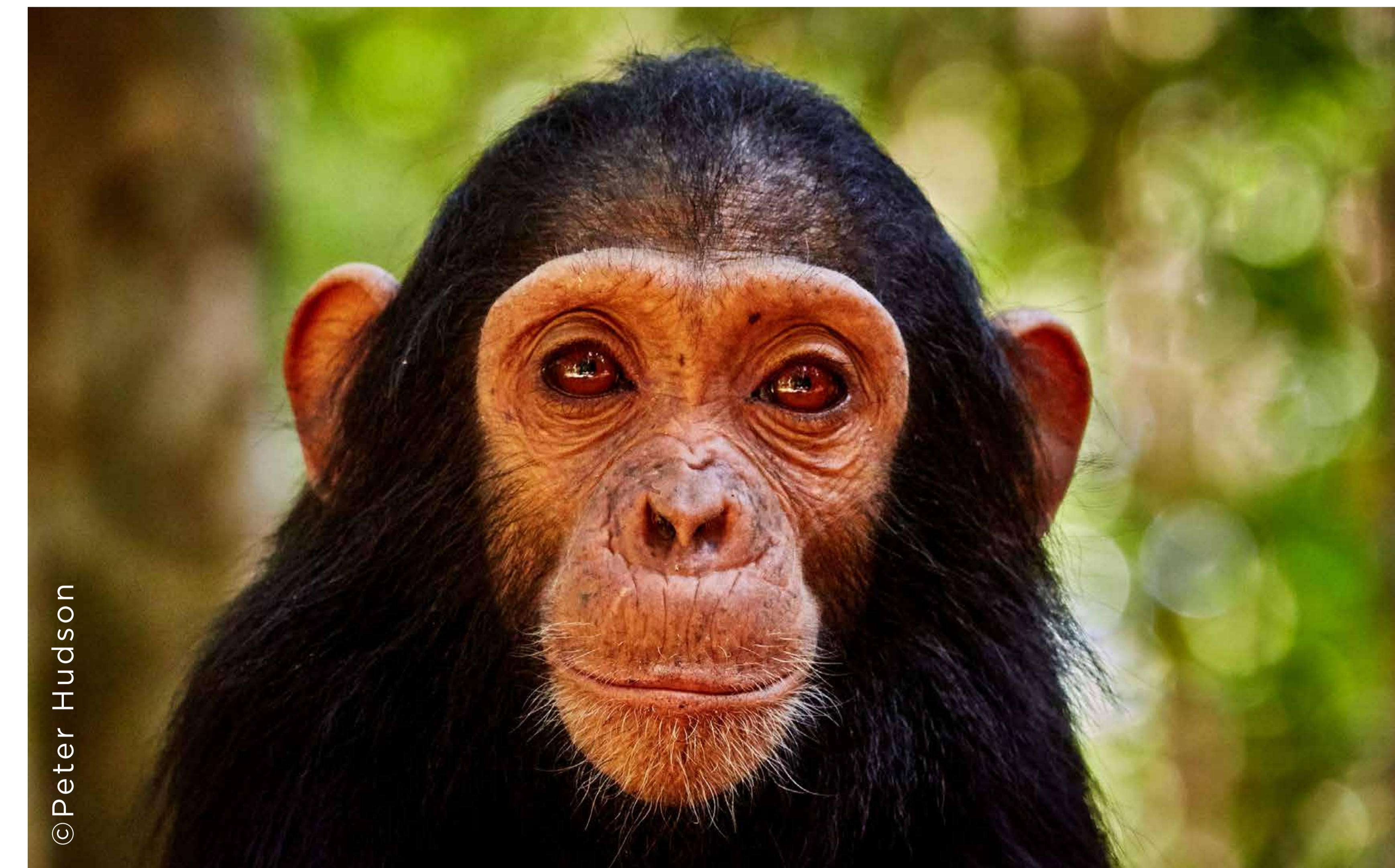
Kalunde is the gentle old male of the

troop and at 53 you may think he is over the hill but he is still a firm favourite with the females and he has been the alpha male several times in the past. He has real expertise in influencing the politics and has the knack for forming alliances and choosing the winning side thereby getting to choose who the next Alpha male will be.

He is Kalunde... the Kingmaker!

Darwin - The cool one:

A 26-year-old male chimp, who is in the group of the 5 leading males and coincidentally my favourite male. He comes across as an easy going, relaxed male, happy to let you watch him as he quietly sits there, eats fruit and picks his nose. He is a peace loving chimp and though he sometimes chooses the wrong side in the battles, he's still a good guy. I am sure I am biased towards him since the original Charles Darwin is without question a huge hero of mine.



tree next to us and moved on.

Gwekulo - The amazing one:

Adolescent females move between troops while males tend to stay in their natal troop. Gwekulo is an old female in her 50s who immigrated into the neighbouring K troop in 1972 and then moved into our M troop when the K troop disbanded. Before this, as a youngster, she was captured by some local people and taken down Lake Tanganyika in a cage from which she escaped and made

Orion - The naughty one: You can't trust Orion. You really must be careful not to catch his eye because he might just charge or pick something up and throw it at you. Even when you look sideways at him, you know he is thinking about doing something naughty. We were quietly watching a group one morning and he decided he wanted to walk straight past where we were sitting so he did a quick mock charge - slapped the

it all the way back to Mahale. She has never had a baby and is thought to be sterile. But she has been a wonderful auntie, caring for the babies of sick mothers and taking over the care of another baby when the mother died.

Chimp behaviour

While working out the character of each chimp is fascinating, I really enjoyed the diversity of the ritualized and non-ritualized

behaviours the chimps exhibited. You start to see them as a social group and watch them interact. Truly fascinating. Here are some of the behavior patterns you can expect to see.

Chimp slapping display: Making noise and commotion is part of the chimp's process of intimidation - this is really aimed at the males from neighbouring troops, although I can't help wondering if the impressive displays would also tempt adolescent females to come and join the troop. The Japanese researchers who study the troop, used to live in these round aluminum buildings at Kansyana, based near the southern end of the M troops territory. Slapping these buildings to make big noise has now become part of the culture of the M troop and is well described in the book by **Toshisada Nashida: *Chimpanzees of the Lakeshore***.

Charging display: A male chimp weighs in at about 100 pounds and is astonishingly strong, so when one charges there is serious power involved. During the charging display - all described in beautiful detail by Jane Goodall - he thumps his feet, may carry and throw tools and will often pant-hoot at the same time. When he is pant-hooting the threat isn't so much aimed at one individual but as part of his intimidation aimed at neighbours. The silent charges are focused on an individual and we experienced a couple of those - that were aimed at us. In a pant-hoot charge, he ran straight past where we were sitting.

Social grooming: Grooming is the

Be prepared to walk – it is a dry easy forest to walk through but steep hills are also present and you may have to walk a couple of hours before you catchup with the troop. A 70-200mm lens on a full frame body with the option of adding a 1.4 multiplier is the ideal set of gear for chimps.



currency of communication and immensely important to chimps. While the origin of grooming was to simply remove the ectoparasites of friends and family it is a very important part of social life. Chimps groom to form liaisons, to bond with family, to build a sexual relationship, to reconcile rivals after aggressive encounters and for forming coalitions against rivals.

Hand clasp grooming: This is an intriguing behavior because of its geographical variation. The behaviour is not uncommon in Mahale and some other locations but has never been recorded just up the coast amongst the Gombe chimps. This behavior was first recorded in 1978 at Mahale by one of my colleagues from Scotland, the charming Caroline Tutin. The chimp holds it's hand up in the air and

the other chimp usually holds their hand so they can groom the armpits.

Anting: Originally researchers supposed chimps were herbivores and survived on leaves and shoots but they do eat termites, ants. Now we know meat eating and the predation of other mammals and even cannibalism are not uncommon. Ants are now considered part of the staple diet of chimps although they have to make sure they don't get bitten.

Fishing for termites: One of Jane Goodall's astonishing findings was that chimps will make and use tools to capture termites and ants. Prior to this finding it was generally thought that only humans made tools, but she showed how they cut twigs and then poke them in termite nests to fish out the termites that they lick off the twig. Young chimps learn the technique by imitating their mothers.

Photographing chimps: Be prepared to walk – it is a dry easy forest to walk through but steep hills are also present and you may have to walk a couple of hours before you catchup with the troop. Every morning the camp sends out a guide who locates the troop and after



a sumptuous breakfast you walk, or catch a boat to where the chimps are feeding or just hanging out. Since you want to be agile through the forest, you really don't want to carry too much over and above your water bottle. I think a 70-200mm lens on a full frame body with the option of adding a 1.4 multiplier is ideal. Your guide will keep you

straight on chimp etiquette and ensure you don't disturb the animals. You will enjoy taking photographs of chimp behaviour and the really cute babies. They are precocious and will watch you and want to see what you are up to while the adults avoid looking at you.



CONSERVATION STORY

IS THERE ANY HOPE?

By Tharangini Balasubramanian





When Mother Nature created vultures, she definitely did it for a reason, to help in keeping the rest of her creations from being affected or infected in anyway by the carcasses of various other creatures. All in all it worked very well in a beautiful cycle. Animals were born, they died , vultures cleaned away the carcass, they got fed and life went on. This went on till the time the vultures that were created for this noble purpose started dying in such large numbers that

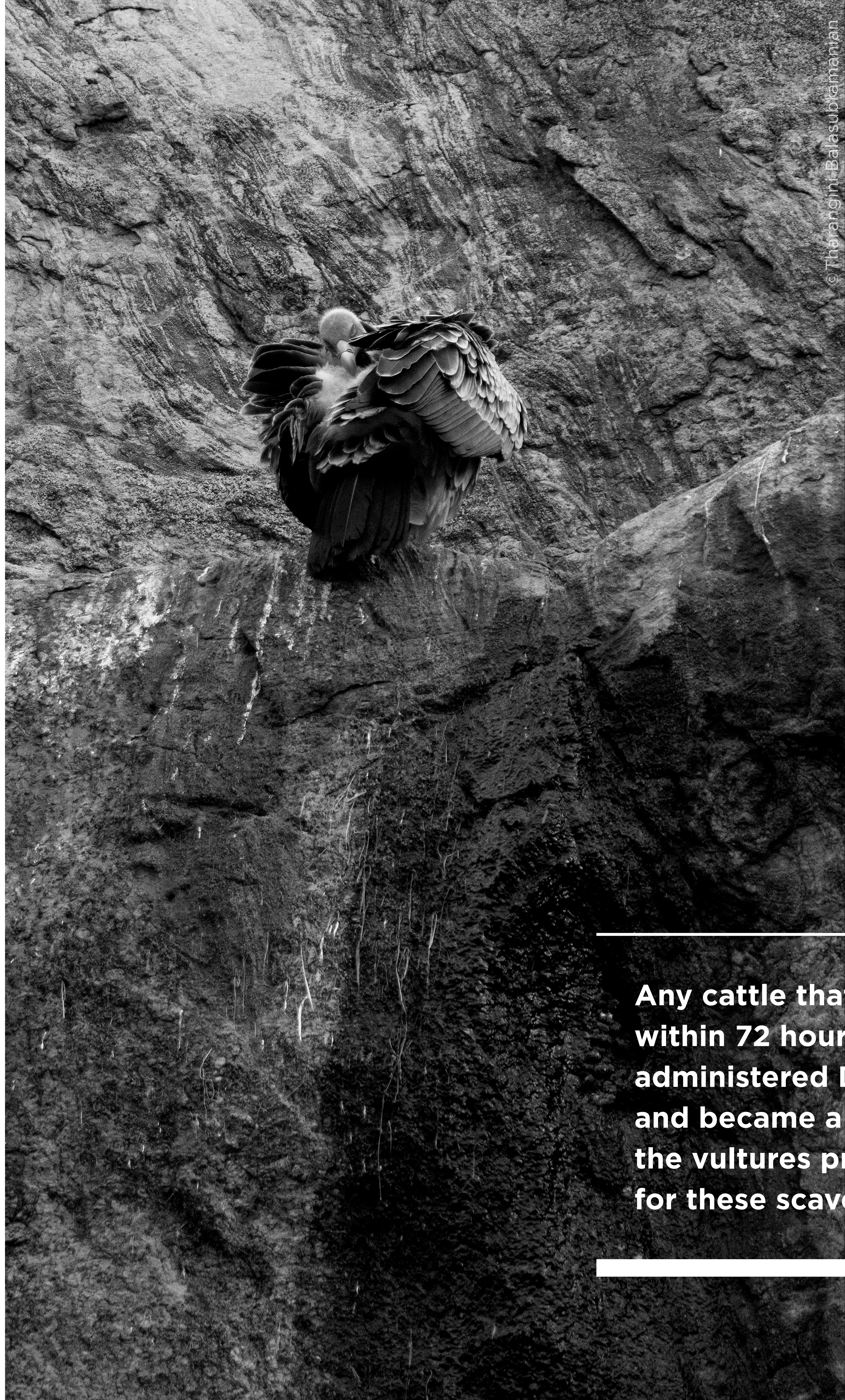
they could no longer be taken for granted and we had to sit up and take notice.

We do have so many scavengers, but then what is it that makes these vultures more suitable or rather the perfect scavenger?

Well, every aspect of their body has been custom made for being the cleanup crew of Mother Nature. Starting with their bald heads that is easy to clean after they tear away the flesh from the depths of the carcass with their razor sharp beaks, their keen eyesight that makes it possible to scan for their meal from really high up and a wingspan of almost 2-2.5 metres to carry them that high and cover a huge distance helping them to ensure that there are no rotting carcass anywhere in the vicinity. Still the best part would be their incredibly acidic stomach that has the ability to kill the most stubborn



Tharangini Balasubramanian is an independent wildlife blogger and a photographer. She is associated with wildlife conservation campaigns and contributes via her writing skills and Photographs for many organizations including Save Tiger First.



© Tharangini Balasubramanian

Any cattle that died within 72 hours of being administered Diclofenac and became a meal for the vultures proved fatal for these scavengers.

pathogens from a carcass thus preventing any from spreading to other animals and humans through waterbodies etc.

When the vultures were in plenty, it was a common sight to see them arrive within an hour of the carcass being discarded and in just a day or two everything would be cleaned out. But unfortunately this was the story when they were in plenty and that is as recent as 3 to 4 decades ago when their population was in millions. Their decline has been the fastest ever that has been recorded among any species and that includes the Dodo, as per a study.

So how did such an alarming decline happen? It was all because of one drug called the Diclofenac, an anti-inflammatory drug for cattle that became extremely popular during the early nineties. This drug was known for its ability to reduce inflammations in cattle in record time and was inexpensive as well. But any cattle that died within 72 hours

of being administered Diclofenac and became a meal for the vultures proved fatal for these scavengers. The vultures suffered from renal failures leading to their death.

Since vultures are also social birds and feed in groups, one carcass with Diclofenac still in its system would affect the entire group of almost 20-30 vultures resulting in mass deaths.

Vultures are birds that mate for life and raise just one offspring each breeding season. This meant that if one of the pair died the other was left alone, unable to breed.

Higher death rates and lower birth rates ensured a decline of over 95% of the population by 2003 when Diclofenac was identified as the main reason for the vulture deaths. Major damage was already done by the time the veterinary drug was banned in 2006.

But then their population continued to decline by almost 20% each year despite the ban. All this, thanks to the continued illegal use of human Diclofenac for cattle despite an alternative drug Meloxicam being introduced.

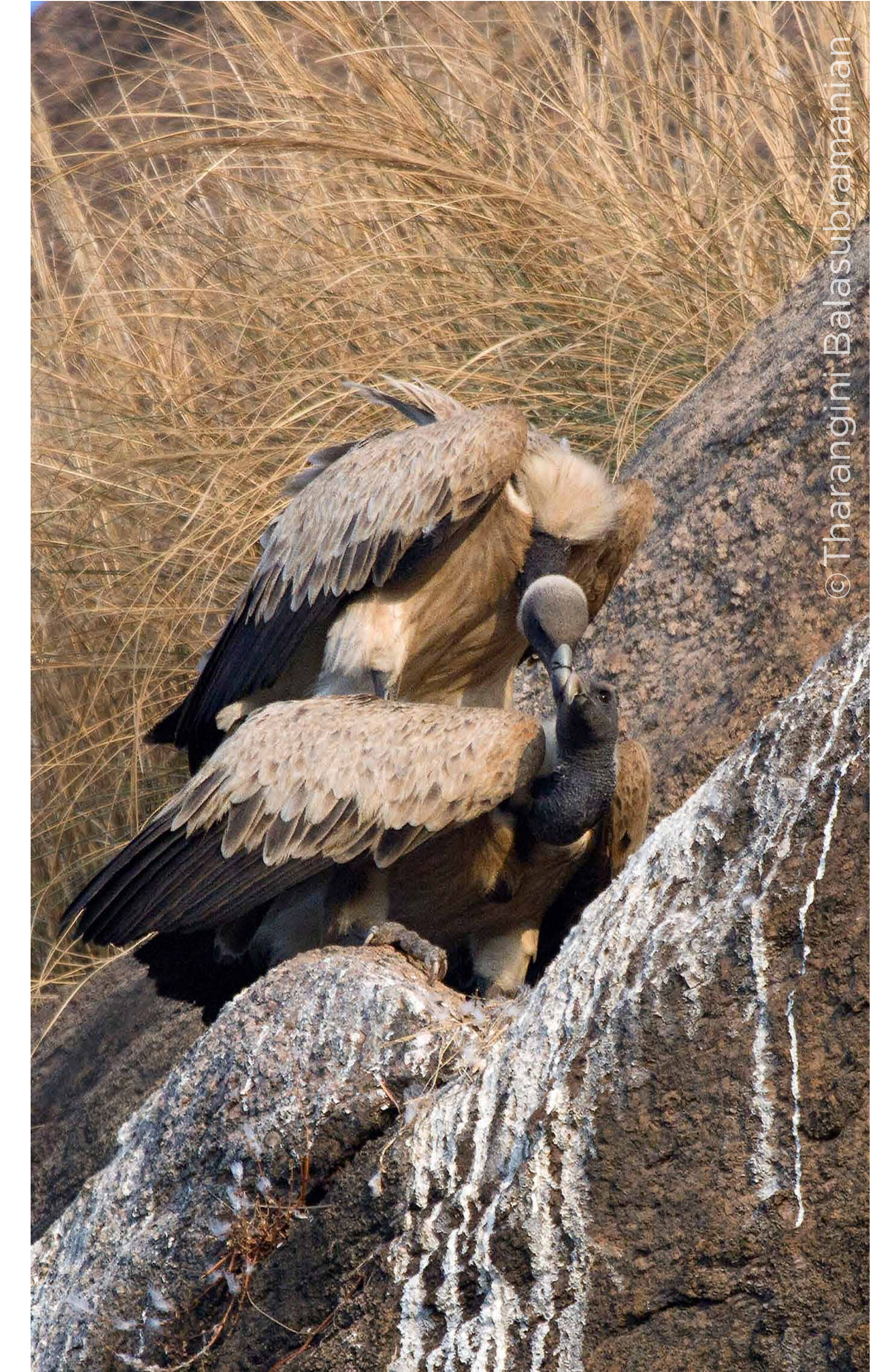
Among other reasons, lack of food with more and more people opting to either bury or cremate their dead cattle and loss of habitat

also played a major role in stumping an increase in their population. Since they roost and breed mainly in high cliffs, quarrying and cutting of tall trees have left them with no suitable places to nest and breed.

There are other random unfortunate instances as well contributing to this decline. There has been news reports couple of years of poisoned meat left out in the open at Ramanagara, India's first vulture Sanctuary, by people with vested interests. The place being declared a vulture Sanctuary has offended those who have their eyes on the real estate in and around that area. With the vultures gone, there will be no stopping them from turning Ramanagara into resorts, villas and complexes overnight. How do a few vultures stand a chance against loads of money and power?

Poaching and even incidents where 30 Himalayan Griffon vultures were killed by a speeding train in 2010 when they descended on the track to eat a rail kill makes one wonder if there is any hope at all for this declining species or will they just slip into the Extinct status from the Critically Endangered status (status of the natural world as defined by IUCN - International Union for Conservation of Nature).

In India 4 out of 9 species come under the Critically Endangered List while 3 are under Near Threatened. The Egyptian vulture or Pharaoh's chicken as they are called are more opportunistic feeders and feed on eggs and at times on small injured birds, mammals, reptiles etc. and have managed to do a better job of surviving and is listed as Endangered. Their population is equally affected, but because of their slightly flexible eating



©Tharangini Batesubramanian

habits, they have just managed to stay out of the Critically Endangered List.

The White-rumped vulture, the Long-billed vulture, Red-headed vulture and the Slender-billed vulture are already in the Critically Endangered List while the Himalayan Griffon, Cinereous vulture, Lammergeier fall in the Near Threatened List. Only the Eurasian Griffon still manages to stay in the Least Concern List. The population in Ramanagara has also gone down in the recent times from around 11 Long-billed vultures that were seen in 2012-2013 to the current sighting of 4 to 6 Long-billed vultures. Padma Ashok of Save Tiger First says "We are attempting to investigate their absence. It is worrisome that we can't spot more in the sanctuary. We will check neighbouring granite outcrops as well as neighbouring hills to see if a flock has found a safer place," She adds "Traditionally, vultures used to depend



©Ashok Hallur

on cattle carcasses. Now with farming practices changing, we want to know how these birds are adapting to the changed scenario.”

Why all the fuss about saving vultures? How does one more species nearing extinction matter so much? Does it even have that much of an impact?

In nature, every single species is part of delicately stacked deck of cards. One species impacted will sooner or later impact every other species. But as for vultures the impact is already being seen. Today in the absence of vultures, when cattle carcasses gets treated with various chemicals to keep the pathogens at bay. These chemicals most definitely seep into our soil and water bodies and in turn affect all the other beings that come

into contact. The absence of vultures are both good news and bad news for stray dogs, as the stray dogs are getting more food, their population is increasing. This is leading to noticeable changes in their behavior, they are becoming more violent and attacking humans too and as a result becoming victims of mass culling.

There is no saying as to what happens with the animals that die in the depths of the forest. If they have died of some disease, the microorganisms that killed them can very well spread to other animals that eat them. This is because no animal or bird other than the vulture has the capacity to ingest and kill these microorganisms. If it spreads to other animals, it does not take long to reach a wider range too. The number of diseases spreading is going up alarmingly. Is it just

not easier to help these vultures survive and take care of a whole lot things that are best left to their expertise?

Focusing on artificial means to counter the adverse effects due to the decline in vulture population is not only proving to be a very expensive process but also not as effective. However majority of us are still ignorant and largely disinterested, since the impact and effect is still not directly felt.

There are organizations and people who dearly care about the welfare of the vultures and are striving towards saving them from extinction. Organizations like Save Tiger First (STF) who with external guidance from the Consortium for vultures called SAVE (Saving Asia's vultures from Extinction) have been

involved in conducting a study of the habits and habitat to estimate the present population of Long-billed vulture (*Gyps indicus*) at Ramanagara, Karnataka, in association with Karnataka Forest Department.

The Long-billed vulture Conservation Project at Ramanagara, Karnataka has Padma Ashok, Project Director; Ashok Hallur, Wildlife Conservationist; Tharangini Balasubramanian, Wildlife Blogger & Photographer; supported by Chris Bowden, Programme Manager, SAVE; Dr. S Subramanya, Senior Ornithologist; Gopakumar Menon, Senior Wildlife Conservationist; Tarun Nair, Research Advisor; Iravatee Majagaonkar, Research Advisor & Beependra Singh, GIS Specialist; among others.

Apart from the conservation programme at Ramanagara, the first Saturday of September each year is observed as International vulture Awareness Day. It is also encouraging to see a lot of school and college students becoming aware and eager to contribute to the cause in various ways. But a mass involvement is needed, especially from the local communities & villagers living in and around the Sanctuary and at individual level. Awareness on the way they handle their cattle, making them realize that the use of Diclofenac will not just affect the vultures but will eventually boomerang on them.

vulture nesting and breeding areas need to be protected. Illegal quarrying has to be stopped, of course that is easier said than done, but if there can be a miracle for the Amur falcons in the North East of India, can we expect such miracles for the vultures too? There is hope, if we put our minds to action!

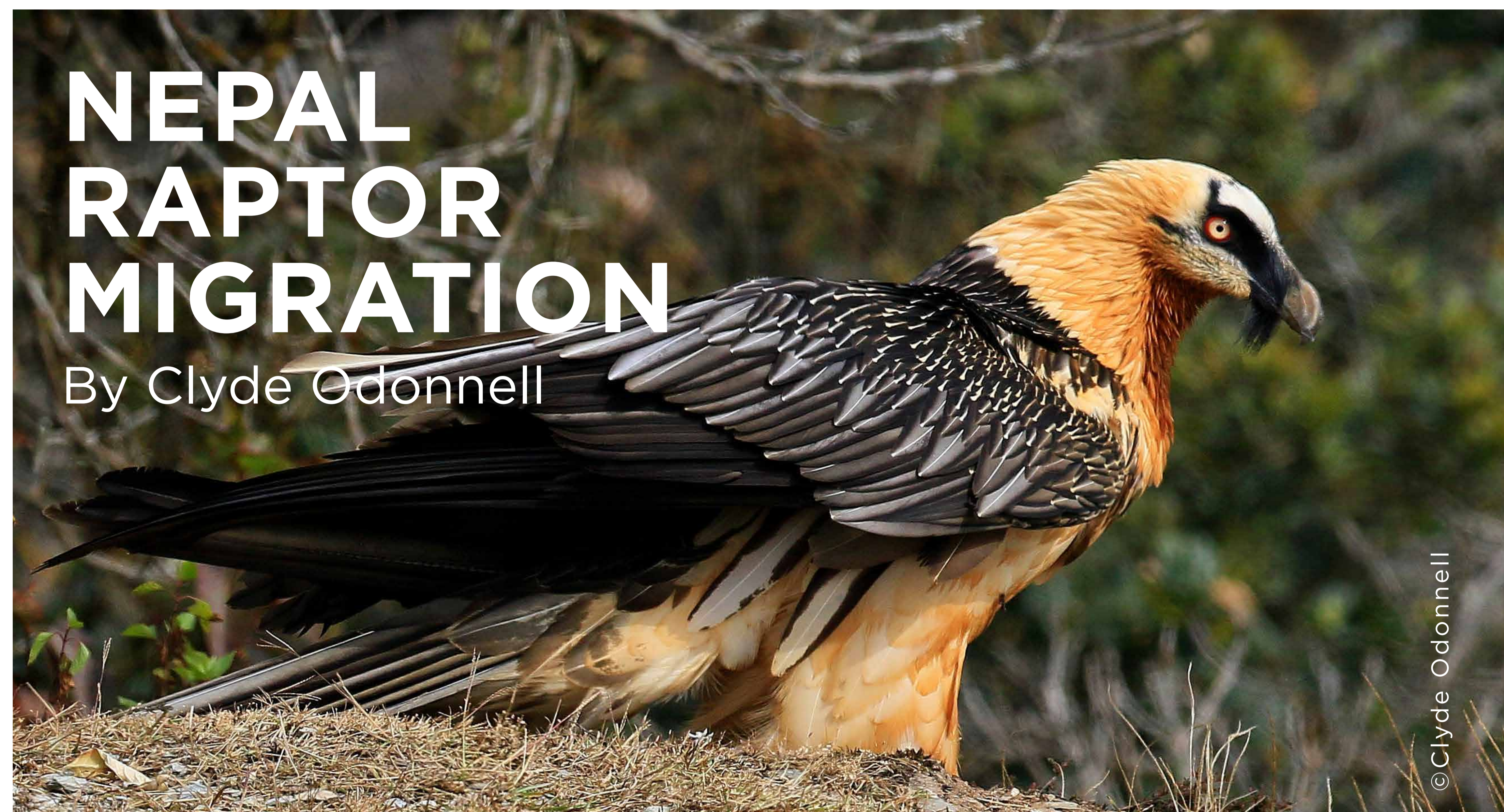




As a wildlife photographer and tour guide in Nepal since the 1980s I have always had a fascination for the numerous vultures and eagles floating effortlessly above us high in the Himalayan mountain range, particularly on the famous Annapurna Circuit Trek in Central Nepal. Until recently I had not realized the presence of so many vultures and other raptors was all part of an annual migration from north to south that had been occurring here for many thousands of years. These birds are visiting the Indian Sub Continent annually and come from as far afield as Russia and Siberia.

In 2015, I joined with two close Nepali friends and Birding Guides Som and Dinesh at a location known for its great views of the migration of the raptors and soon discovered that up to 40 species of raptor pass overhead or at eye level on their way south to India between October and December and up to 70,000 individual birds have been counted in a single season peaking in November.

Not all the raptors here are migratory like the Peregrine falcons and spectacular Bearded vultures but they join in the aerial display right before your eyes, day after day as if posing for the excited photographers. Most raptors approach from the north west after floating through saddles in the massive Himalayan range. Small groups of Himalayan



NEPAL RAPTOR MIGRATION

By Clyde Odonnell

Griffon seem to appear out of nowhere throughout the day floating on thermals on their way south, sometimes numbering 60 or more in an hour. Due to the cold morning air coming off the snow clad Annapurna Range most raptors do not appear before 9.30 in the morning when some warmth creates enough thermal lift. I spent only 3 days at the site in November 2015 but still managed to photograph 26 species, including 8 vultures. The Bearded vultures seem to appear daily but not in big numbers. This would surely be one of the most spectacular vultures I have ever seen and is so easy to photograph as they float effortlessly close by at eye level or below and circle around the hilltop. Other species include Egyptian, Red-headed, White-rumped, Slender-billed and Himalayan vultures. The main raptor migration site is surrounded by fragmented forest and small streams where many species of beautiful

forest birds can be photographed between 6 am and 9.30am while waiting for the raptors to appear in the skies above. Some of the eagles I photographed included, Booted, Steppe, Black, Golden and Indian Spotted eagles but many others have been recorded here annually. Mountain hawk-eagles and Peregrine falcons were regular visitors while I was there. Peregrine falcons put on regular aerial displays by approaching the hilltop at great speed and skimming past us barely a metre above the ground before climbing steeply off the southern slope. At such speed it was a challenge to photograph them.

A 14-day visit to various locations in Nepal often rewards us with up to 300 species photographed, including many raptors. For tour dates and other information on the tours contact Clyde at clydetheguide@gmail.com or visit the website www.ausglobalsoftadventure.com.au

BENGALURU BIRD DAY

A CELEBRATION OF BIRDS AND BIRDERS

By Raghul Patteri



This October 1, the city of Bengaluru celebrated a pioneer and his favorite subjects. The bird watchers observed the days as the 3rd Bengaluru bird day in memory of Joseph George who is credited as the pioneer of group bird watching in India. The Birdwatchers field club of Bangalore he started in the 70s have survived to this day and evolved into the online group “bngbirds”. Old timers fondly recall that group bird watching has been held every second Sunday of the month for the last 44 years without fail.

The day kicked off early with a bird watching session in Cubbon Park, which is a lung area in the heart of the city. For a newbie, an initiation to the colourful world of birds and an eye opener that their city, though crowded and polluted, is still home to so many varieties of birds. The experienced bird watchers made it welcoming for newcomers and were willing to spend time carefully

explaining the basics of birding and the characteristics of different species observed. It was heartening to see parents introducing smaller children to birding on that chilly morning and the enthusiasm on those young faces.

More was to follow, the day was filled with talks and workshops. Shubha Bhat, a homemaker presented “My experience with Bird Baths”. The talk chronicled her journey which started off with a noble intention of providing water for birds by setting up bird baths in the garden, which over the last 7 years has led to her observing more than 50 species of birds through her kitchen window, including some first sightings for Bengaluru.

There was an informative talk by Ramit Singal on identifying birds in the field. “Birder on the road” by Shashank Dalvi – was about his “Big Year” – when he took an entire year off to watch birds in India.

80,000 km and the entire year 2015 later he had observed a phenomenal 1,128 species of birds.

There was a workshop “Birds in a sketch book” by Sangeetha Kadur and Shilpa Shree. The ladies had even the most reluctant of novices doing sketches of birds in under a minute. There were quite a few in the audience who could not believe that the sketches in their hands were done by themselves. Then it was the turn of L Shyamal to take the audience through the art of contributing to Wikipedia. The talk dwelt on the importance of Wikipedia in today’s world and the dos and don’ts to observe while editing and appending wiki content.

The “Dr Joseph George memorial Talk” this year title “From Bird watching

to Nature walks” was delivered by Karthikeyan S. The talk traced the evolution of bird watching and birdwatchers over the years to include biodiversity, other animals and plants as their subjects.

The event this year was organized by the birders groups along with Ecoedu. For the conservation of nature and our fellow brethren on earth, it is important that there be awareness and appreciation for the many forms of life and life support systems we have around us. What better way to observe these than by a unhurried walk in the early hours of the morning listening to bird calls, watching out for these feathered beauties and their habitats. Events like these can trigger that spark which can spur that naturalist and conservationist hiding under the façade of unconcerned normality.



WHITE RIVER

PT EXPLOR
© TATIANA BOYLE
IMAGES

OREGON'S WILD AND SCENIC RIVER

By Tatiana Boyle, PhD

The locals aren't fooled by the innocently calm flow of the wild and scenic White River in western Oregon. The rain-abundant & snow-rich seasons turn this peaceful creek into a roaring monster, taking down sections of paved roads, bridges and overpasses, and often reshaping its entire channel. At the very source, it is ice and fire, Mount Hood's White River Glacier lying besides "Devil's Kitchen", an active fumarole field — which sets the small stream in motion. Due to isolation of its basin from other watersheds and the diversity of biomes crossed by its waters, the White River valley hosts unique combination of flora and fauna, including Columbia River redband trout and other endemic species. In spring, the river is saturated

with glacier flour turning the water into a milky-blue suspension, which explains its name. The upper reaches have been U-shaped by glaciers and churned by volcanic flows, with the most recent occurring just 260 years ago. Down below, the river valley morphs into a significantly narrower and steeper V-shaped channel. The most striking characteristic of this wild and scenic river is the contrasting diversity of its vegetation zones ranging from alpine areas and mixed-coniferous forest stands to boggy floodplains, riparian zones, and unforested grasslands.

Tatiana Boyle is a botanist specializing in the rare and endangered species of the Pacific Rim. She is based in Portland, Oregon.

S N I P P E T S

It comes as a good news to the bird lovers with the re-sighting of a rare bird for India, the Whitetailed tropicbird (*Phaethon lepturus*) by Wildlife and Bird Photographer Deepansh Mishra during his recent expedition to the Andaman Islands. Whitetailed tropicbird (*Phaethon lepturus*) has been enlisted in Indian rarities and is included in the Indian Checklist of birds. "The only record from the Andaman Islands is described by Hume as, "Colonel Tytler himself shot a fine specimen at Ross Island that for some days had constantly hovered about in the neighbourhood of this dove-cot apparently attracted by the white pigeons he had in it," (Hume 1874). ", Praveen et al - Indian Rarities -I. Though listed as a rarity for India (Praveen et al. 2013) by Indian birds forum, a specimen was taken at exactly the same locality in the nineteenth century (Hume 1874), and the present sighting appears to be a record from the Andaman Islands after 140 years. Deepansh Mishra during his travel to the islands on 4th of March 2016, at the South Andaman Island (Port Blair 11° 40'06"N 92°44'16"E) had spotted a white tern like bird. The bird was flying over the Bay of Bengal near the Ross Islands, but Deepansh could not photograph it. But the very next day, a similar specimen was sighted near the Port Blair jetty and this time he was able to record the same.

Deepansh has been into wildlife conservation and photography for about 8 years now.

WHITE-TAILED TROPIC BIRD

A RARE SIGHTING STORY



©Deepansh Mishra

CAN MIGRATORY MOVEMENTS OF BUTTERFLIES BE INDICATORS OF CLIMATE CHANGE?

By Harsha Kumar



Blue tiger (*Tirumala limniace*)



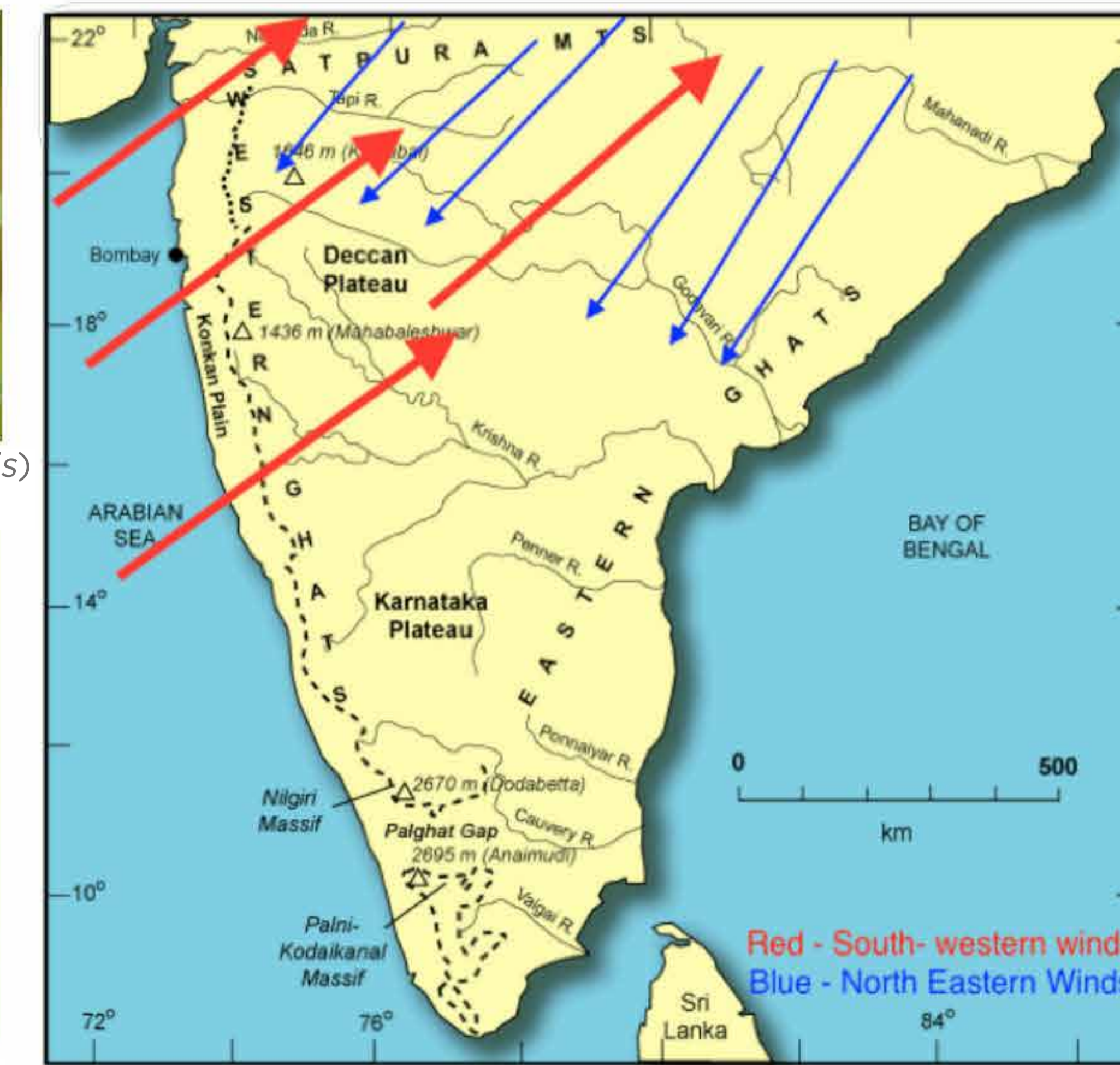
Dark blue tiger (*Tirumala septentrionis*)



Common crow (*Euploea core*)



Double branded crow (*Euploea sylvester*)



Red - South-western winds
Blue - North Eastern Winds

Lepidoptera (butterflies and moths) along with reptiles and amphibians are examples of extremely stable lineages which have shown no major evolutionary changes for a long time. This is an indication of stable, robust underlying processes as the environment which the organisms live in, always fluctuates. When the environment fluctuates from the optimum; periodically or otherwise, the animals face stress. To deal with larval host plant stress or environmental stress, butterflies have come up with different mechanisms such as migration, diapause (state of suspended development between different stages in life cycle) or even simple ones like thermoregulation when the stress isn't adverse.

Migration in butterflies be it short range or long range, has been observed in various instances to avoid stress. The Monarch butterflies and their migration has been studied now for a long time.

The migration of Mottled Emigrant, Danaid Egg-flies and Pea blues from North India to South India has also been documented.

However, the iconic migration in India, is that of Danaine butterflies of south India [Blue tiger (*Tirumala limniace*), Dark Blue tiger (*Tirumala septentrionis*), Common crow (*Euploea core*), Double branded crow (*Euploea Sylvester*)]. The number of individuals participating in this event, is in the order of millions. The butterflies travel a distance of 300- 500km over the span of a few months and continue to reproduce on their migratory routes. They are known to exhibit long range annual migrations from the Western Ghats to the Eastern Ghats and back. It has been found that rainfall controls the movement of these butterflies away from heavy rain and into semi-arid habitats which are favoured by them.

This migration is special because most

documented examples of migration are related to cold or drought stress. This is also in contrast with most other documented migrations in the sense that these migrations are longitudinal (east-west) instead of latitudinal (north-south) or altitudinal ones.

Blue tiger (*Tirumala limniace*), Dark blue tiger (*Tirumala septentrionis*), Common crow (*Euploea core*) and Double branded crow (*Euploea sylvester*) commonly seen migrating together as indicated in map.

These butterflies have been observed to start migrating from the Western Ghats to the Eastern Ghats prior to the start of the southwest monsoons (May) and start to return back to the Western Ghats after the end of the southwest monsoons. It is hypothesized that these butterflies start migrating prior to the monsoon to avoid the rains.

With these new interesting questions in

mind, it makes a fair deal of sense to protect and conserve these butterflies and migration paths until more research is carried out to answer these questions.

Harsha Kumar is a student of science interested in natural history. He has been watching butterflies for over 7 years now. He is based in Bangalore, India.

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1) Krushnamegh Kunte; *Journal of the Bombay Natural History Society*, 102 (3), Sep-Dec 2005, "Species composition, sex ratios and movement patterns in Danaine butterfly migrations in South India".

2) Wynter Blyth, *Butterflies of the Indian Region*, 1957.

Photo Credits :

Blue tiger - Sneha Kumari
Dark Blue tiger - Sastha Prakash
Common crow - Shripad Gouda
Double branded crow - Firos AK



SPREADING LIGHT...

By Joshil Maliyekkal

Translated by Raghul Patteri

Kerala, popularly known as “God’s own country”- the veritable tropical paradise situated at the south western tip of India. Bordered on one side by the Arabian sea and the majestic western ghat mountain range on the other, this amazing land is also networked by 44 rivers and numerous backwaters, giving rise to amazing varieties of fauna and flora and complex eco systems, making it one of the most sought after tourist places in Asia.

Athirappally Waterfall on the Chalakkudy river, is situated in the middle of Kerala. It is a feast to the eyes and is one of Kerala’s most popular tourist attractions. The falls is located in the eco-sensitive area of the western gnats, home to many endangered and unique varieties of flora and fauna. The growing energy needs of Kerala has made it power deficient and dependent on the national grid, leading to power outages during the summer months. The state government has proposed building a dam upstream of the Athirappally falls to set up a hydroelectric project of 163MW installed

capacity. There is a huge outcry against the project due to the perceived ecological impact. The submergence area is also feared to displace the ethnic tribal community. Detractors also say that the power generated by the project will be a mere drop in the bucket to meet Kerala’s deficit and future demand.

Provide a substitute, or keep your peace! This seems to be the overwhelming response when you bring up the topic of Athirappally project. Allow me to do the honors and name the substitute(s).

My disclosure at the start- I am not an engineer, nor have I studied physics or math beyond the intermediate level.

Times when I worked in silent valley; Monsoon, was pure torture for the colleagues who lived in the camp shed at Sairandhri. Rains start and the solar panels would surrender to the elements. The pith darkness of the night was a major hurdle for the poor souls there. Even the wireless radio would stop. A complete cut off from the

outside. Add to it the pin drop silence which blankets the valley..

The quest for ‘Substitute’ culminated in a small hydroelectric project. No dam was constructed. Not a single tree was felled. Nor was the budget astronomical.

Through a 2 inch H.D pipe, brought flowing water from a minimum height differential of 15 metres, at the rate of 12 lts per second. This turned a small turbine. A rudimentary circuit board ensured the quality of the electricity which reached the camp through a 1 km long underground cable. And that was it! The whole of extended monsoon - June through December, my colleagues still get unrestricted electricity, till date; a kilo watt of electricity good enough to light up 5 building. A little ‘Substitute’ by the guardians of the very Silent valley, which was destined to be sacrificed on the altar of a big hydel power project. There are many examples of these small substitutes in the Idukki district of Kerala. Bit bigger substitutes can be found at Meenvallam in Palakkad district or Barapole in Kannur.



THE OTHER PEOPLE

By Dr TV Sajeev

© Joshil Maliyekkal



Photo credits: Joshil Maliyekkal



Dr TV Sajeew is Senior Scientist and Head of the Forest Health Division of Kerala Forest Research Institute located in the tropical forests of Kerala, India. He is the Coordinator Asia-Pacific Forest Invasive Species Network (APFISN)- a cooperative alliance of 33 countries in the Asia-Pacific region. His research focuses on alien invasive species, political ecology, landscape fragmentation and population dynamics of forest insects. He speaks and writes on matters related to earth.



There are two types of people on this planet. One is a set to which most of us belong, those who are born at one place but able to live anywhere. Like me who live 140 km away from my place of birth. When I had to move, I just needed to pack my clothes, get my wallet and I am quite comfortable at another place, able to do whatever I did back home. The second are those who cannot survive if moved from the locale they are in. Bonded so closely with the nature around, they would be shattered

if shifted from their place of living. We call them the indigenous people or technically, the ecosystem people.

The distinction between the two types of people and my placement in this classification struck me the hard way. Once while getting back after spending a week in the hamlet of the most primitive indigenous people in South India who are still hunter gatherers, a few of them joined me in my vehicle. That day they were to forage and gather from the forests through which I was getting back. Before the forest ended, they alighted. I stopped the vehicle, got out and while going through the farewell gestures, an old lady fondly asked me "How dare you go out of the forest? Do take care!" She was referring to the fact that I was going out of the forest and in to the town and cities

where vehicles whistles past and structures grow so tall that nobody knows what they hide- things a forest dweller finds hard to make sense of. It is the other way round for my friends and family. Their concern always is how I dared to go into the forest. I bid good bye, alighted the vehicle, drew away from them, but was caught between the two totally different world views, not for a day, but for a lifetime.

The difference in sensibility across the two worlds is best articulated in the famous but unverified 1854 letter from the Seattle Chief to the American President Franklin Pierce which says: "The President in Washington sends word that he wishes to buy our land. But how can you buy or sell the sky? The land? The idea is strange to us. If we do not own the freshness of the air and the sparkle

of the water, how can we sell them? Every part of this earth is sacred to my people. Every shining pine needle, every humming insect. All are holy in the memory and experience of my people."

Unlike the world which we knew and the history we wrote, the other people had different stories to tell. While we used to "discover" them and document them, they had been through a process of massive onslaught on their culture, livelihood, native land and life. Epitomised best is the life of Crazy Horse, the Native American War leader of the Ogala Lakota who took up arms to fight against land encroachments on the territories and way of life of the Lakota people. He was captured by the US troops in 1877 and was fatally wounded by a bayonet-wielding military guard when he resisted

imprisonment. That was the last of the wars between the two world views in America. Crazy Horse died and his heart and few of the bones were buried at a place called Wounded Knee, 11 miles west of Batesland, South Dakota.

“The wounded knee” was part of the last line of a twentieth century poem. The full line went like this: “Bury my heart at wounded knee”. This phrase later turned out to be the title of one of the eye opening works on the struggle between the two worlds. Dee Brown, who was librarian at US Department of Agriculture and the Illinois University with immense access to the archival documents, put them to good use in his 1970 book titled ***Bury My Heart at Wounded Knee: An Indian History of the American West.***

Brown has traced the initial gentle and peaceful welcoming of the settlers by the native people to the later stiff resistance. He described the encroachment and removal of the native homelands of Wampanoags, Narragansetts, Iroquois, Cherokee and also what happened to the Navajo Nation, Santee Dakota, Hunkpapa Lakota, Oglala Lakota, Cheyenne, and Apache people.

While the other people were dismantled, displaced and marginalized, the main stream expanding world view was discussing methods on how best to civilize them. With the formation of the modern state, measures were in vogue as state mediated programmes to educate them into our world view. Historians wrote about the discoveries of new continents and countries and about the people living there as if they never knew that they are living in this planet. The rich oral history they maintained could not travel far and wide as against the written text of the expanding world view.

And then came Calude Levi Strauss, the French anthropologist who argued that

the “savage” mind had the same structures as the “civilized” mind and that human characteristics are the same everywhere. In his four-volume study called *Mythologies*, during the later 1960s, he followed a single myth from the tip of South America and all of its variations from group to group, north through Central America and eventually into the Arctic Circle, thus tracing the myth’s cultural evolution from one end of the Western Hemisphere to the other. He examined the underlying structure of relationships among the elements of the story rather than focusing on the content of the story itself. Strauss was one among us who studied the other people. At the far end of his life, he had this to tell about our world: “There is today a frightful disappearance of living species, be they plants or animals. And it’s clear that the density of human beings has become so great, if I can say so, that they have begun to poison themselves. And the world in which I am finishing my existence is no longer a world that I like.” It’s just that it is our number that is increasing. The number of indigenous people is tumbling down, across the globe.

Its now time to turn to the English born Verrier Elwin who went ahead to marry one among the other people and settled in India. His early work was on the Baigas and Gond of central India, but he expanded his research into the tribals of North East Indian states. Although part of the Indian nationalist movement, disgusted with the overhasty process of transformation and assimilation of the tribals, he left the movement. He remained the adviser on tribal affairs to the first Prime Minister of India. James Scott was the next to work on the ways in which agrarian communities resisted the domination of settlers in the other half of the World- South East Asia. It was Scott’s project to demonstrate that



central governments fail to see the complex and valuable forms of local social order and knowledge of the other people. Using examples like the introduction of permanent last names in Great Britain, cadastral surveys in France, standard units of measurement across Europe, he demonstrates a reconfiguration of social order necessary for state scrutiny was achieved at the cost of local information and knowledge held by the other people across the world. He also showed that schemes to civilize the other people have miserably failed.

What these gentlemen tried to acknowledge is that there exists two types of people who differ in many ways. Relationship with nature, private property, beliefs, vulnerability, all differ for these types. Also that no one type is in any way above the other. Last time I was trekking, Kannan who belonged to an indigenous tribe was my tracker. We were having bread and bananas beside a stream after a pretty long stroll, when my friend who knew him earlier introduced me to him as Dr Sajeev. He came to me and sat beside me. He told

that he needed urgent help from me. I asked about it and he told that it is regarding the allergies caused by specific trees in the forest. He had met a few doctors and they could not figure out what it was, but even then they prescribed medicines. Kannan’s request was to treat him for his allergic ailments. I told him that I am not a medical practitioner but one with just a doctoral degree. He couldn’t agree. His question was simple and straight: Are you a doctor? If yes, come on and help me.

Times have changed for good. When our past generations entered the terrain of the other indigenous people, we had guns. Guns have given way for the camera. But the question the old lady asked about how I dared to go into the city and the big gulf in communication between Kannan and me, demonstrates the presence of two worlds. One closer to nature and the other moving briskly fast, away from it. I wait to know how best the new sensibilities associated with the camera and the new times we are in, can help us know each other better.



VISION OUTPERFORMED

Nikon D5 - REVIEW

By Thomas Vijayan



Photographer par excellence - Vijayan won the Wildlife Photographer of the Year 2015 People's Choice Award, conducted by Natural History Museum - London. He has been recognized as Nikon's first Brand Ambassador for Middle East and Africa. His masterpieces have been published in various international publications.
www.thomasvijayan.com

Nikon D5

The Nikon D5, when it comes to wildlife we can call it an action-oriented beast. The main features introduced here are the 20.8 Mega Pixel full frame sensor, Expeed 5 Processor, Native ISO range from 100-102,400, 153-point face detection autofocus system, 12fps-14fps with mirror up continuous shooting and 4K video. Due to high dynamic range it even works with both low light and harsh light conditions.

The superb high ISO performance:

Nikon D5 is the best high performance camera I have used so far. I would consider this as one of the successful revolution Nikon has brought about in wildlife photography. You can pump the ISO to 102,400 and it still produce a usable image. The dream of low light photography without using any external source of light has thus become true to an extent. This high ISO performance gives the ability to shoot anything in any



light. Usually with wildlife it is in the early mornings and late evenings that we come across spectacular action of animals. The high ISO is a great help to capture those actions without the image being softened. You can even take handheld shots in low light. And above all, the D5 gives great tone and color at any ISO.

Nikon's fastest DSLR:

The Nikon D5 gives an extra frame-per-second with full AE and AF capabilities, bringing it to 12fps which will make it a high-speed shooter's dream machine. The more the frame speed the less the chance of missing a moment which is the

biggest challenge in wildlife photography. Not anymore, fill your card capturing all the moments and then select the best of them. The buffer capacity is also very good for this camera. You can capture about 200 images continuously with a high speed CF card before a buffer is completed.

Image Size:

The image size on the Nikon D5 camera is increased to 20.8 Megapixel (5568x3712 pixels) from the previous version of D4s that had 16.2 Megapixel. This 28% enhanced image size is a great upgrade. The file size is also increased from 33 MB to 42 MB





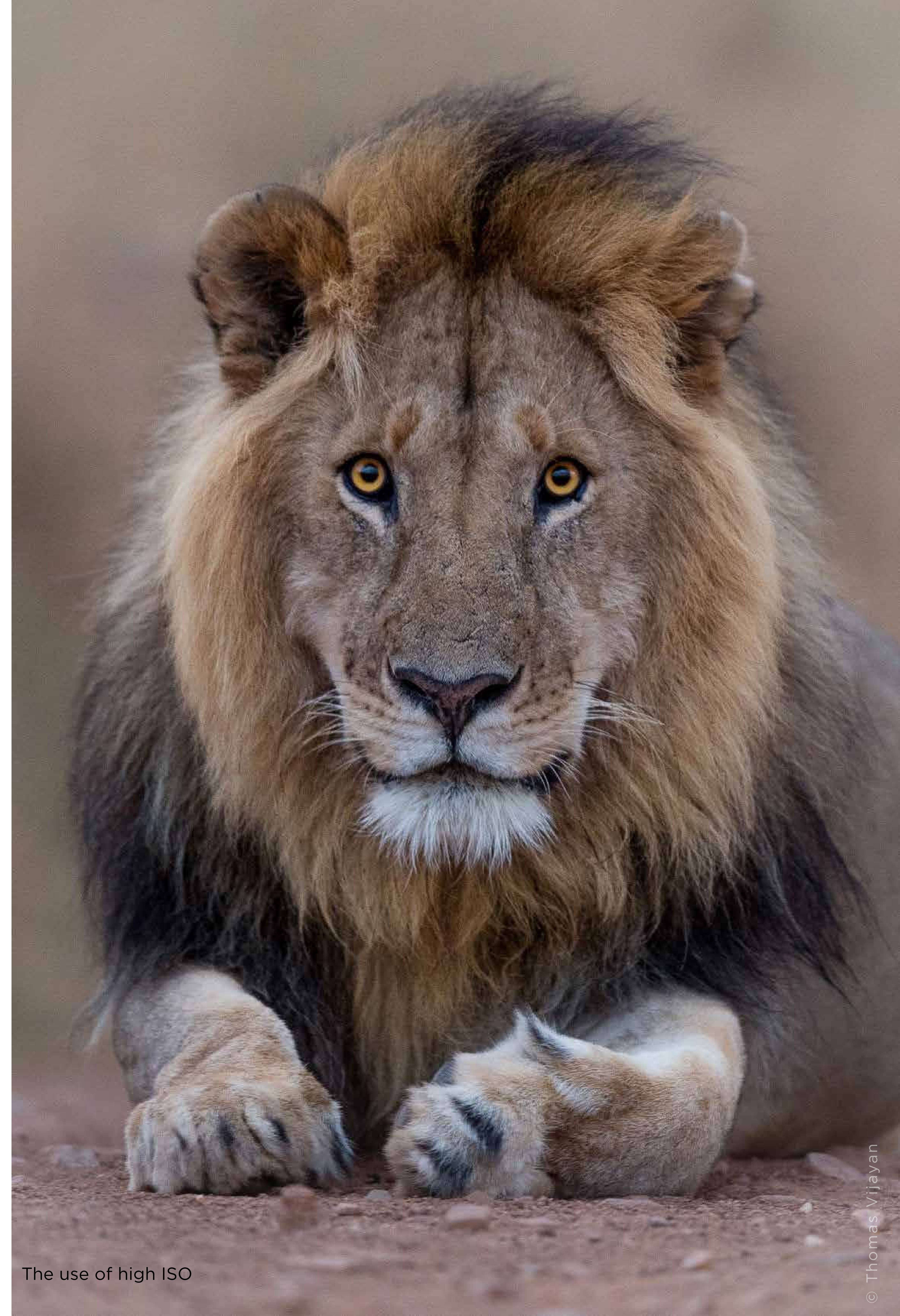
The use of 14 fps mirror up

AF System:

Another interesting change that Nikon made with the D5 camera is increase the AF sensor to 153 autofocus points from the D4s which had 51 AF points. Out of these 153, 99 are cross-type sensors and 55 selectable. This helps in increasing the percentage of sharp images. Instead of choosing an autofocus point on the D5 and following the subject by yourself, you can initiate autofocus with a single point and watch as the D5 tracks that subject around the frame with its 153 autofocus points.

Video:

D5 is the first full frame DSLR introduced by Nikon that is capable of capturing 4K Ultra High Definition videos at up to 30fps. By updating to the new firmware. D5's 4K video recording limit is of 30 minutes. D5 also gains uncompressed HDMI out, simultaneous live view, and microphone connections. The Nikon D5 also has a built-in stereo mic with twenty levels of user-selected sensitivity. While recording video you can also save a still frame as an 8 Megapixel file.



The use of high ISO



DEORIA TAL LAKE, UTTARAKHAND.

ONE OF INDIA'S HIMALAYAN NATURAL GEMS

By Raghu Iyer

© Raghu Iyer

TRAVELOGUE





Raghu Iyer is 62 and retired with 40 years of service from one of India's biggest business houses. Having started young, he has spent a lot of time over the past four decades, trekking in the Sahyadris and Himalayas. Raghu is a wildlife enthusiast and an amateur birder.

After retirement, he with a group of friends organize trekking trips to the Himalayas, introducing people to the joys of nature. They spread the message of eco conservation, fruit tree planting among the villagers and helps arrange aid for village schools.

Raghu is also admin for FB groups like The Himalayan Club, Adorable Himalayas, Just Himalayas, Mountainsque and Travellers at Tripping Himalayas.

Deoria Tal Lake is one of the scenic gems of the Indian Himalayas in the State of Uttarakhand. It is an emerald green lake situated at an altitude of 2,438 metres amidst lush forests of oak, chestnut trees and rhododendrons. The backdrop of the mighty Himalayan peaks creates spectacular scenery. The Kedarnath Sanctuary protects 975 square kilometres of Himalayan mountainous landscape, and is managed by the forest department.

Until recently, not many eco-tourists had heard of this beautiful locale except for some serious trekkers. Today, the area is more accessible by new roads, and more people visit the Kedarnath Sanctuary bringing with them the risk of environmental degradation to

this pristine natural area. The forest department has done a commendable job until now in maintaining the pristine environment.

The roadhead of Sari Village, the starting point for the 2.3 kilometre uphill trek to Deoria Tal, is an eight hour drive from Rishikesh via Devprayag, Srinagar, Rudraprayag and Ukhimath. Jeeps are available from Ukhimath to Sari Village. Sari is a small village of 140 houses with a population of around 747 and a literacy rate of 75% with a small post office and a few shops.

The 2.3 kilometre trail from Sari village climbs through the village with children smiling and waving at you. Their delighted smile which trekkers receive when a few candies are handed out is



a sight to behold. About one kilometre ahead is a small Shiva temple which is a welcome halt. As the climb progresses, one is rewarded by the sight of the beautiful village below and Chandrashila /Tunganath on the opposite range. The path winds through a dense growth of rhododendrons, oak, and chestnuts. Trekkers are often treated to sights of butterflies flitting around, lizards darting about and birds singing. If you are lucky, a pair of Khaleej Pheasants might cross your path or a Paradise Fly Catcher reward you by flitting by. The trail to the lake is short but winding, past grassy meadows known as “bugyals” and offers great views of snowy peaks on a clear day. The sight of the first road side restaurants known

locally as “dhabha” before the lake is a welcoming sight. There are three or four “dhabas” near the lake which cater to the trekkers.

A permit is required to camp here which costs Rs 150 for three days, and is also valid for Tunganath region. The lake is 300 metres from here and is the destination for many of the trekkers who camp here.

On a clear day, lazing outside one’s tent, trekkers have a grandstand view of the mighty Himalayas- from the massive Chaukhamba to Mandani, Sumeru Parbat, Kedar Peak, Kedar Dome, Jahanukut, Neelkanta, Kala Nag, and Bandarpunch. In winter the reflection of some of the peaks in the still waters

of the lake is a fabulous sight. Sitting outside the tent on a starry night, campers watch the outlines of the peaks and then at dawn the colors in the sky. Then at sunrise they stare mesmerized as the peaks are lit in a golden color. These views are the high points for most trekkers. What could be more pleasurable than to waking up to bird sounds around you and the sight of a Barking Deer cutting across your camp site? Ah, this is life in the Himalayas.

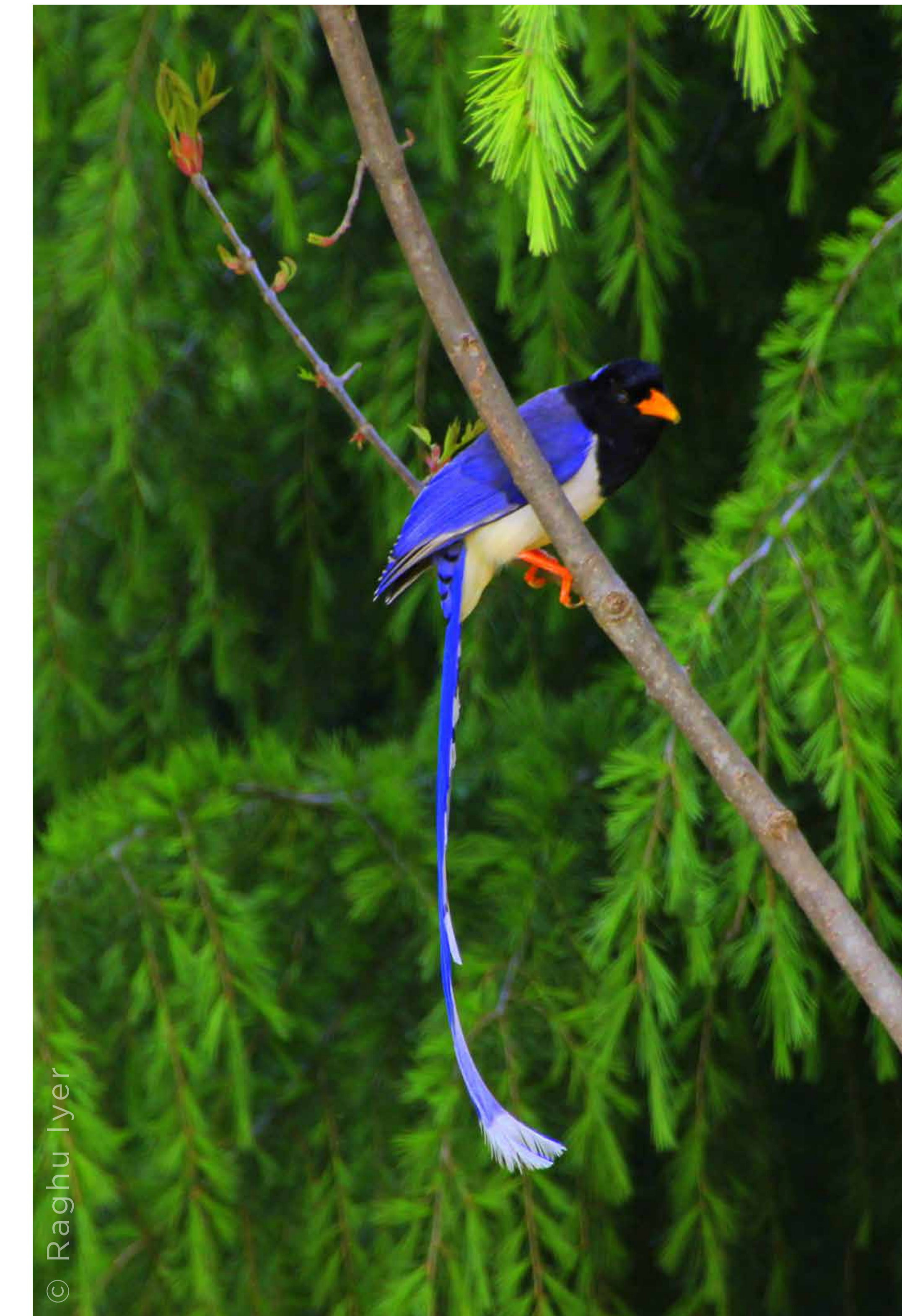
The forest around the lake is a birder’s paradise. Some of the spectacular birds include: Himalayan Bulbul, White-throated Laughing Thrush, Verditer Fly-Catcher, Ultra Marine Flycatcher, Himalayan Woodpecker, Yellow-naped Woodpecker, Black-headed Jay, Eurasian Dove, Spotted Dove, Yellow-Billed Blue Magpie, Long tailed Miniver, Rufous Sebia, and Grey Bush Chat.

I am told that bears and leopards once abounded here. Now, trekkers can still spot Barking Deer and Langur Monkeys near the lake at dawn.

This is a trek for beginners and families who love being surrounded by nature, but don’t have too many days at hand to spend. This is a place for those who want to get away from the hustle and bustle of daily life to a quiet and peaceful place, away from the usual noisy touristy places and on a shoe-string budget.

For more information see:

www.Indiahikes.in/deoria-tal-chandrashila-peak-trek



TIPS 'N' TRICKS

By Hermis Haridas,
United Arab Emirates

A self-confessed nature lover and travel enthusiast, he became deeply involved in nature and bird photography and found himself traveling around, hunting for and trying to capture moments hitherto uncaptured. His trips to Russia, Sri Lanka, India and African continent gave him the opportunity to understand the nuances of wildlife photography. Hermis believes in the adage that “practice makes perfect” and there isn’t a day in his life without peeping at the world through his “third eye”. He holds his passion closest to his heart and dreams of making it big as a nature photographer.
Website: www.hermis.me



The color of all light are not created equal. The color of a subject is affected due to different lighting conditions. Color temperature of a light source is measured in Kelvin (K). Once framing is done the camera has to understand the color temperature of the light source of that scene and then correct the colors so that white appears white. If the proper white balance is not chosen there will be a visible color cast in the picture taken.

White balance is the process of removing unrealistic color casts, so as to make the photograph look exactly same as what the eye saw. Our eye is very good at judging what is white under different light sources, but digital cameras often have great difficulty in recognizing this. That is why we need to set the proper white balance in our camera to get the real color of a picture. Understanding and using the custom white balance in your camera can have a real impact on the pictures you capture.

In photography balance is categorized under

two portions, warmer and cooler. The color temperature over 5400K is referred to as warmer which is more orange color. The lower color temperature ranging from 2700-3900 are referred to as cooler which is bluer than the standard light, which we refer to as the sunlight.

- Auto
- Tungsten
- Fluorescent
- Daylight/Sunny
- Cloudy
- Flash Shade
- Custom

Generally we use Auto white balance to be on the safer side.

This is the most convenient and easy way to gain a perfect

white balance. Still with auto white balance, your results may vary depending on the available lighting conditions. Mixed lighting conditions can cause difficulties to auto white balance. Even standard daylight can fool auto white balance.

As long as you shoot in RAW, knowing the white balance is not that important. A basic understanding of color temperature would be enough for most of the photographers. The important thing is knowing how to adjust white balance either in the camera or while processing



Kelvin: 5400

Warmer is more orange color and cooler is more blue than the standard light which we refer to as the sunlight.

the RAW file. Once you understand how to control white balance, then you can start to use it creatively in your images and can change the entire feel of the image.

I always try to follow a graph when I am out in the field for shoot - keep the K value 6,000 and above during low light condition and bring down to 4,800 K when the light is harsh say at mid noon. At the end whatever settings you use, always review the photos in the camera’s LCD monitor and try to correct the white balance accordingly in the field.



Kelvin: 2700

© Hermis Haridas



Kelvin: 5200

© Hermis Haridas



Kelvin: 3500

© Hermis Haridas



Kelvin: 7000

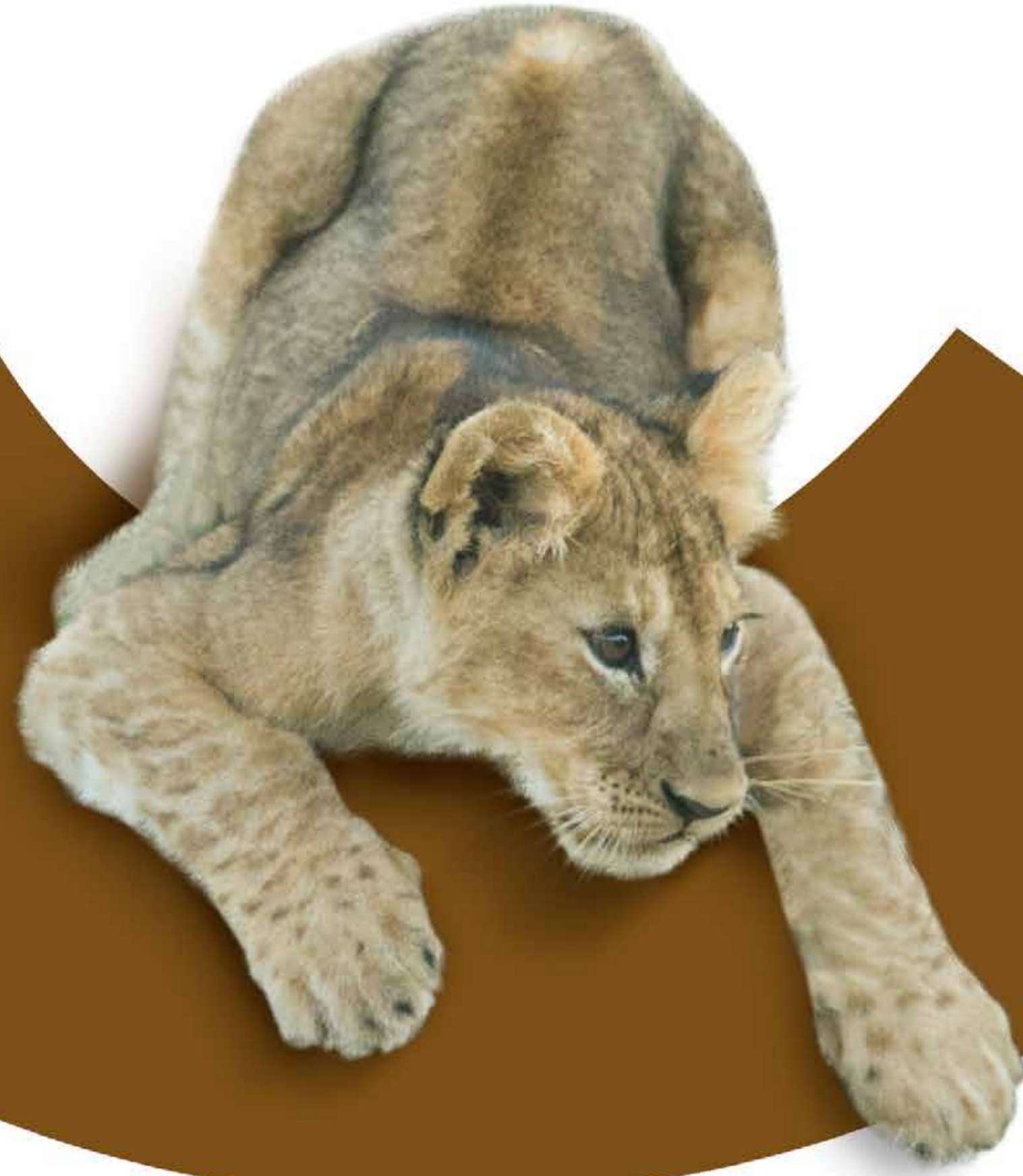
© Hermis Haridas



We firmly believe in the adage “Catch them young”. Cubs Corner is the one-of-a kind space reserved for the sole purpose of showcasing, promoting and encouraging young talent. We will strive to identify the young stars in the realms of nature conservation, photography, wildlife protection, ecotourism and environment sciences. We will share their thoughts, works, dreams or news through this space in every issue of the magazine. Every talent deserves motivation and every youngster deserves a canvas to portray his/her vision. Cubs Corner is that canvas! We look forward to hearing from you.

CUB'S CORNER

CUB'S CORNER



Children are all too often underrated and short-changed, when in reality they are capable of such extraordinary things. Take for example the 8 year-old boy featured here, his camera always at the ready to capture the perfect wildlife photographs. At such a young age you might assume this child doesn't really know how to take good photos, but think again!

ARYANS beautiful photos are sure to WOW your socks off.

FROM LEGOS TO LENS

By Aryan Patel





As for any kid, holidays were always special for me. The only difference in my case was that I spend most of my holidays in the jungle. My love of the wild was inherited from my mother who herself is a wildlife enthusiast, a brilliant photographer and my role model. I love Mother Nature and enjoy seeing animals in their natural habitat. This is one of the main reasons that I have never been to a zoo even for excursions from schools.

I was born in the very place which was the setting for the famous tale, The Jungle book. I grew up hearing

the stories of Mowgli, Bagheera, Baloo the Bear and the Royal Bengal Tiger – Shere Khan. This is how my fascination towards the majestic Bengal Tiger, one of the largest species of tigers in the world, began. I have been privileged to photograph these royal animal in the wild many times. They have been classified as endangered and are at high risk. There are only about 2,500 of them in the wild, which is less than half of the population that existed 10 years ago. Their elegance, exquisite color and proud gait which symbolises strength





attracts me the most. I was always fascinated by the way he moves around the jungle projecting his might. His very presence strikes terror in the hearts of the prey and sends them running, crying out to alert other animals to the presence of the predator. Unfortunately humans, have overcome the fear with the assistance of superior weaponry and are driving the tiger to extinction, poaching them for skin and body parts for traditional medicine. The first thing I would recommend when photographing tigers is to learn as much as you can about them, by reading before you

venture out into the wild and by observing before clicking your first photograph. Once you have researched them, it becomes easy to predict their behavior, to know where to find them and capture their unique images.

Ranthambore National Park is one of my most favorite places. It is one of the largest national parks in northern India and located in the state of Rajasthan. I travel almost every alternate month to visit this beautiful place. The Gir Forest National Park located in Gujarat, India is another place that I ensure to visit every

year. It is known as the sole home of the Asiatic Lions in the wild and is one of the most important protected areas.

It is my vow to myself that I will follow and nurture my passion - wildlife photography. Be the wild serenity of the wildlife or the hustle and bustle of the city, I never miss an opportunity to use my camera. Photography is not an easy task as many think. Dedication, patience and hard work are required to capture the perfect image. It has always pushed me to go one step further. Today, I am

not the photographer I was yesterday. Hopefully in future I will bring more dynamic changes to my photography.

Reading all this one might think that I spend all my time on photography. But I do have other interests like football, cricket, jungle trekking, art and movies. Recently I also tried snorkeling and loved the experience. My passion for wild life has helped me win prizes in school for projects on the lifecycle and behavior of animals in their habitat.





The Landscapes of Ladakh

By Mohammed Arfan Asif

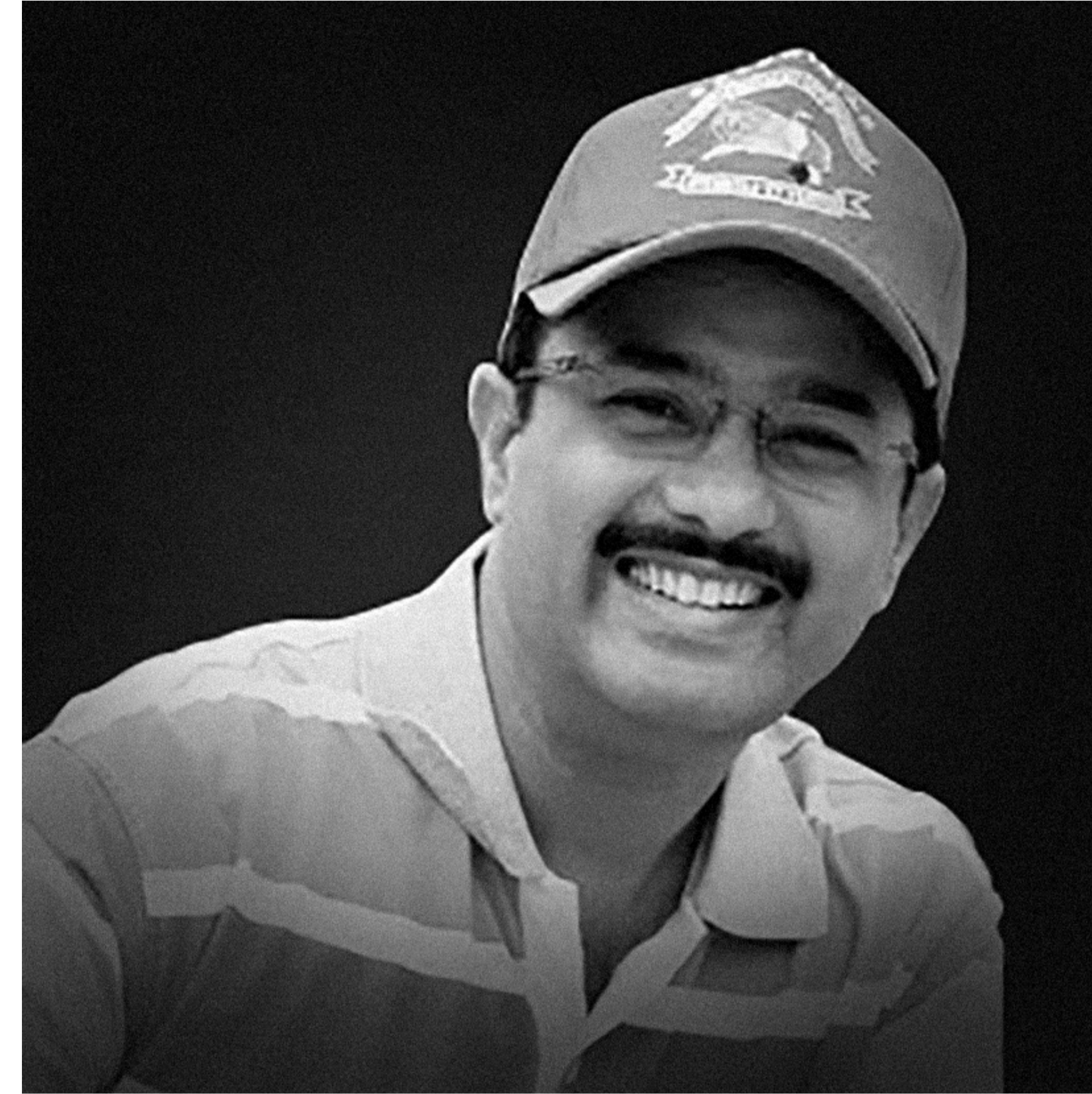
© Mohammed Arfan Asif

THROUGH THE LENS

Mohammed Arfan Asif

EFIAP/b, EPSA, ARPS, FICS, Hon.FICS,
Hon.FSWAN, Hon.EFMPA
Dubai, United Arab Emirates

A



Mohammed Arfan Asif an Indian National based in the United Arab Emirates for more than two decades, has been involved with photographic art right from his school days. The late 1980s saw him exhibiting his works in National and International photographic expositions. He has received a number of international distinctions and awards for photographic merit and services rendered in photography. Arfan has lectured on photographic subjects, judged photo contests, written columns for photography and natural history magazines and traveled to exotic destinations in pursuit of photographic subjects. Presently, Arfan mentors a small group of photographic enthusiasts in Dubai and aspires to make images that are meaningful and interesting.

Nature in the landlocked northwestern corner of India reveals not only a different hue but a starkness and unspoiled character which is difficult to match anywhere in the world. At more than 3,000 metres Ladakh is a paradise for landscapers as well as those interested in trekking, cycling and biking. Ladakh lies between two vast mountain systems, the Karakorum to the north and the Himalayas to the south. These ranges are believed to have been formed over a period of 45 million years.

Interestingly the terrain that covers 60,000 square kilometres and ranging in elevation from 3,000 metres to 7,000 metres. The landscape can drastically change in minutes as moving clouds briskly take you to another world. The Indus River keeps following you all the way as you meander between the granite mountains and the high passes.

The moistureless, rarefied air and extreme cold weather climes may be a challenge, but the sheer visual splendour helps you





©Mohammed Arfan Asif

Of great interest in pictorial terms is to view the confluence of the arid land and the snow-clad mountains. The majestic peaks, unique ruggedness and the patterns that unfold as light plays hide and seek are a delight to watch. The avid landscapist does not have to search for compositions.

overcome the high elevations quite easily. Cloudbursts are a concern as and when they happen; heavy rains can cause havoc and present the anger of the mountains! Ladakh has very low rainfall of just 102 millimetres a year and the inhabitants with their mud houses are not prepared for sudden cloudbursts. Due to the absence of drainage leading out of this area, there are a number of beautiful salt-water lakes. The most popular being Tso Moriri, Tso Kar and Tso Pangong.

Ladakh was opened to tourism in 1974. Though this created a better economy

and cash influx, it will in the long term have effects not only on the cultural and agricultural aspects but also on the ecology of the region. In order to safe guard the terrain from overuse there is now a drive for renewable energy initiatives.

Of great interest in pictorial terms is to view the confluence of the arid land and the snow-clad mountains. The majestic peaks, unique ruggedness and the patterns that unfold as light plays hide and seek are a delight to watch. The avid landscapist does not have to search for

compositions. All they have to do is, wait for the light to play around the mountains and create gentle patterns of light and shadows as the character of the mountains shine through.

Indeed the intoxicating beauty of this region makes you forget the hardships as you move deeper into the gorges and passes of this high altitude desert plateau.

Website:
www.arfanasifphotography.com



©Mohammed Arfan Asif





Why botanical art and illustrations?

By Neera Joshi



Born in 1967 into a family of artists in Kathmandu, Neera (MSc Botany) is probably the only botanical artist/illustrator/painter in Nepal. Her approach of combining art and science first

began in 1999 and was introduced in her book *Flora from Kathmandu Valley*. She has had her works exhibited in Nepal and widely in various parts of the globe. Her major exhibitions include “Fourth International Juried Botanical Art Exhibition 2004”-American Society of Botanical Artists (ASBA), New York and “BISCOT 2007”-“Flora of Nepal” Exhibition 2016, Royal Botanic Garden Edinburgh (RBGE), Scotland. She has contributed scientific botanical illustrations in “Flora of Nepal”- Volume 3, 2011 published by RBGE and national /international scientific botanical research and publications. She works as an independent artist in her home country Nepal.

Website: www.studiopetals.com

Botanical art and illustration can be very effective as a means of communication in plant science, often conveying meaning that is more easily understood in pictures than by the written word. However, to be a successful communication tool botanical art and illustration require specialist skills in observation, description, analysis and depiction. Seeing with hands and talking without words are non-verbal forms of communication that portray the power of images and technical skills.



Botanical illustrations are to be found and known to have reached a peak of achievement in the 19th century (History of Botanical Art, author Wilfrid Blunt). 1740-1840AD is considered as the golden age of botanical art. This era was a great period of exploration, discovery and promotion of botanical art. During this period artists and plant collectors worked together to record treasured plants in

their finest accuracy. Modern techniques such as digital photography rarely captures key characteristics useful for botanists to elucidate knowledge on plants. Botany explains the morphology of an individual plant species as well as its entire life cycle. The study of botany is not complete without the help of illustrations and images of a plant. The art of explaining botany or expressing the beauty of flowers and plants in a pleasing way is known as botanical art. This art varies from purely scientific, such as a scientific diagram of a root section



to the purely artistic appeal of water color of a vase of roses.

The new mode of botanical art and illustration combines not only the science and the art, but also the observational skill to capture nature. The artist must have a full understanding of the science and a passion and skill for art. Artists draw their illustration from live plants collected from fields, gardens and green houses or from

dried specimens preserved within herbaria. Botanical artists have a challenging job to bring live form, from the pressed herbarium plant specimen. There are certain rules, regulation and the conventions to follow to draw a certain diagram through different media such as water color, gouache, graphite and pen and ink. However, it is crucial for the plant taxonomists and botanists to arrive at a scientifically accurate illustration that will lead to research finding as well as aid to identify the plant by representing the salient characters.



The above rightmost image of Botanical Art featured here is a *Bahunia purpurea*, a wild and cultivated plant which is found in the conservation area of Biodiversity Conservation Center at Sauraha Chitwan. It is widely used as fodder for cattle.

This artwork was created during the workshop organized by Art for Nature organization in December 2015 at location Sauraha Chitwan.



YOUR GALLERY



Jayaprakash Bojan

Red Panda (*Ailurus fulgens*)
Location: Eastern Himalayas



YOUR GALLERY



Shabeer Thurakkal

Indian giant flying squirrel (*Petaurista philippensis*)

Location: Western Ghats



YOUR GALLERY



Hussain Nalwala

African leopard (*Panthera pardus pardus*)

Location: Masai Mara



YOUR GALLERY

Photo by Niket Chaudhary
Garden Lizard with Dragonfly kill
Location: Ahmedabad, India



YOUR GALLERY

Photo by Goutham Shankar
Melanistic Leopard
Location: Kabini, India





YOUR GALLERY



Hisham Ashraf
Common kingfisher (*Alcedo atthis*)
Location: Ranganthittu bird sanctuary, India



YOUR GALLERY



Vinod Kumar
White rhinoceros calf (*Ceratotherium simum*)
Location: South Africa



YOUR GALLERY



Sajan S
Location: Fort Kochi



YOUR GALLERY



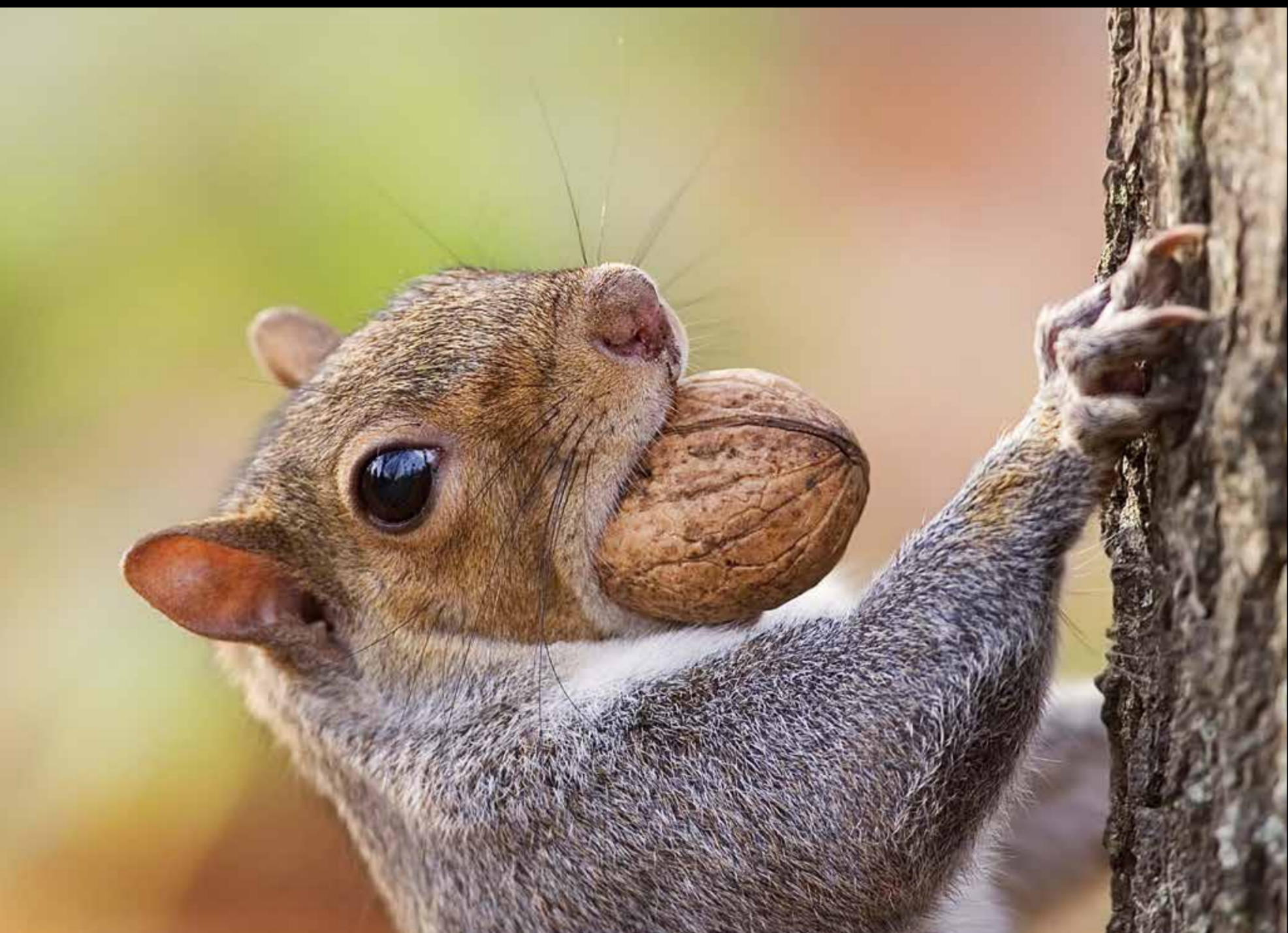
Priyanshi Nahata
African lion cub (*Panthera leo*)
Location: Tanzania

**UPCOMING
FEATURES**



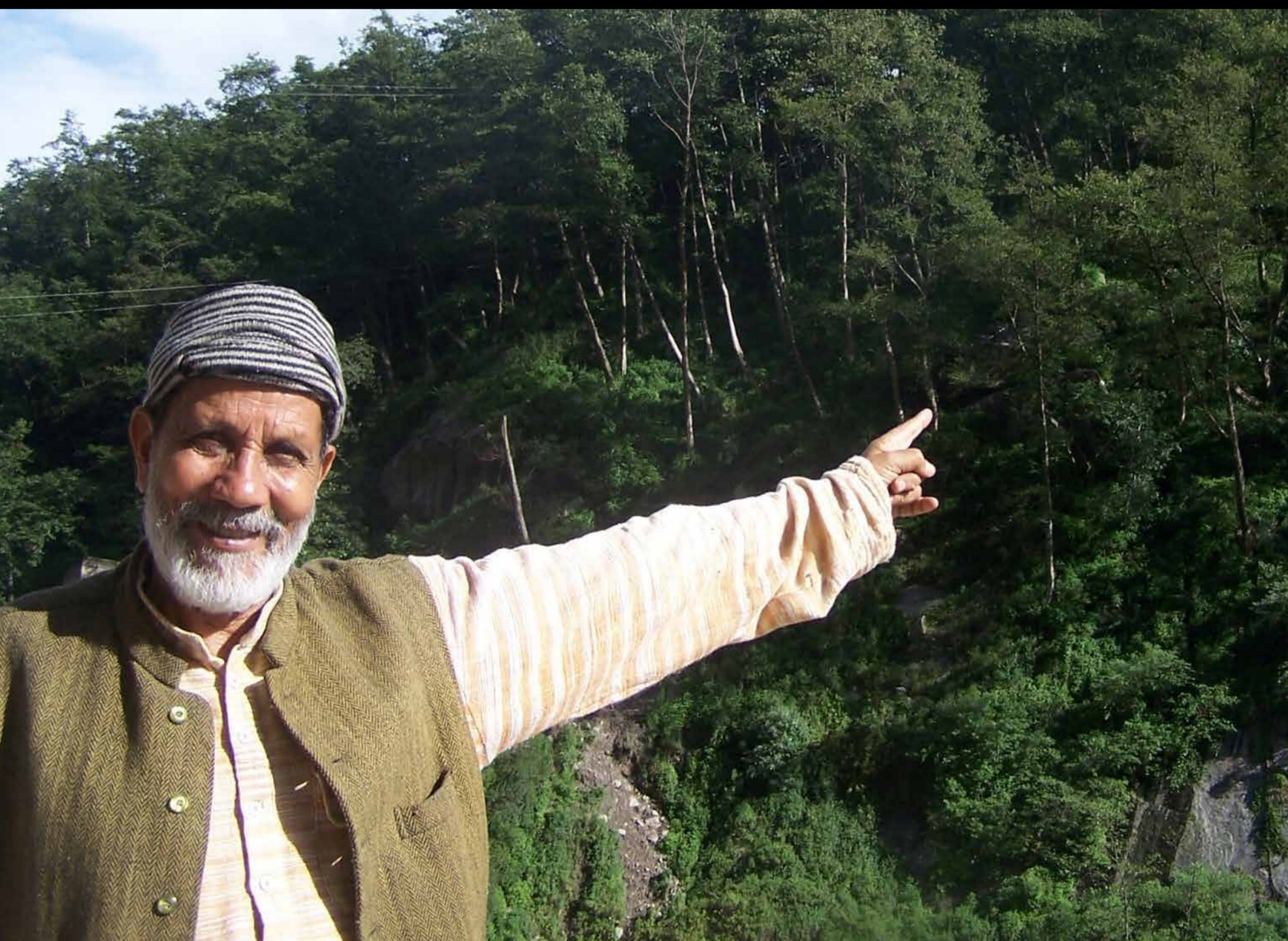
SPIRIT OF THE WILD

By Sergey Gorshkov



A SQUIRREL STORY

By Stefano Ronchi



**THE ROOTS OF
CHIPKO MOVEMENT**

By Chandi Prasad Bhatt
