

# PFI

EXPLORERS

FEB 2021 / MAR 2021



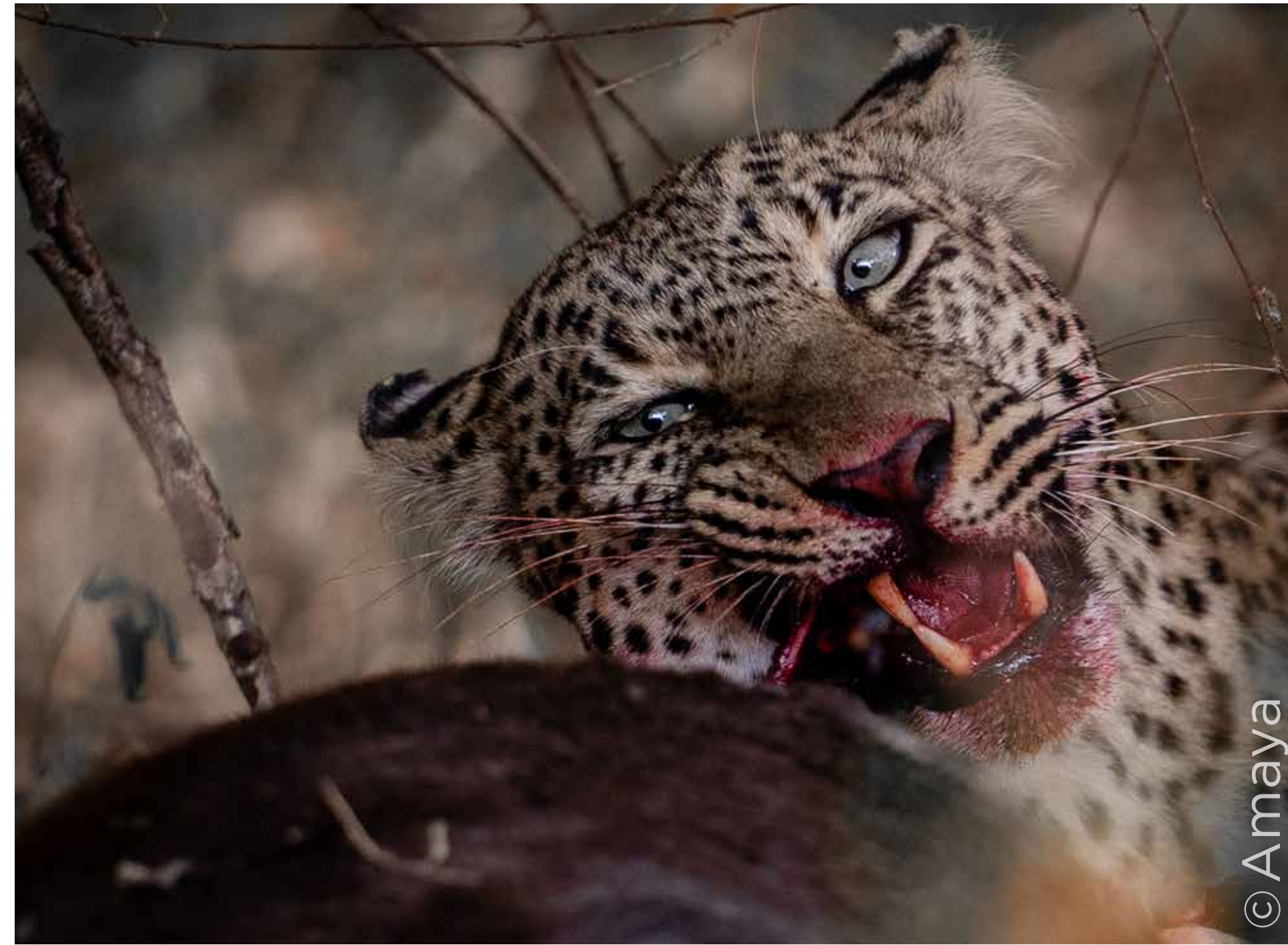
## INTO THE WILD WITH AUSTIN THOMAS

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EAST ASIAN AUSTRALASIAN  
FLYWAY PARTNERSHIP  
BY VIVIAN FU



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©Amaya



©Cynthia Bandurek

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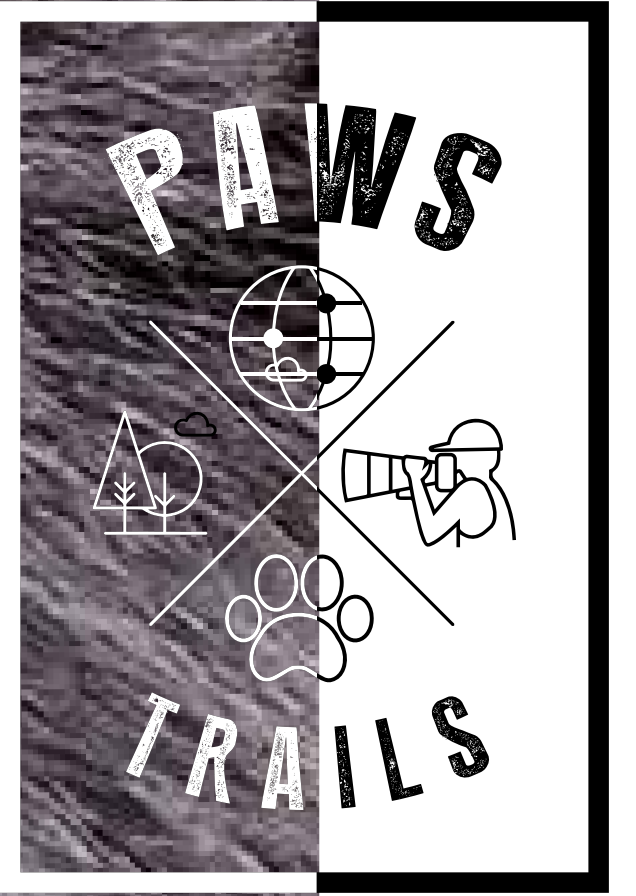
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# 008

Cover Story  
Austin Thomas



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Hank Tyler  
Editor

Oceans cover 70% of the earth and are the habitats for much of the world's biomass and biodiversity. Unfortunately, human exploitation has depleted much of ocean's major fish, whale and seal population. Only in the last few decades have restrictions of harvesting commercial species been established, and some recovery management plans started.

In addition, pollution from urban and industrial waste, oil and plastic threaten the oceans. Much of the additional heat in the atmosphere resulting from burning fossil fuels has been absorbed into ocean waters resulting in increased melting of polar ice, killing of coral reefs and altering marine habitats.

In this edition's cover story Austin Thomas from England discusses his experiences of photographing wild birds and animals and about his desire to explore and photograph marine environments.

Vivian Fu tells the story of conservation efforts in the western Pacific focused on shorebirds, waders and ducks. Twenty-two countries, 39 partners and hundreds of volunteers contribute to the amazing Flyway Partnership.

From New Zealand, Keith Woodley describes the spectacular non-stop flight by a Bar-tailed Godwit from Alaska to New Zealand setting a new world record for a flight across the Pacific.

Argentinian marine photographer, Gustavo Costa captures amazing photos of Pacific Sea Lion in the Gulf of California in the eastern Pacific.

Nelli Otero tells the story of photographing the birth of baby Southern Elephant Seals on the Argentinian coast.

In Her Views & visuals, Mailen Palma presents stunning photos of whales, seals and dolphins from Argentinean Patagonia

Again, from Argentina, Cynthia Bandurek focuses on the world of small and talks about the fascinating group of insects known as Hoppers.

Australian print maker, Kate Gorringer-Smith tells her story of shorebird prints and raising money for conservation.

As an oceanographer, I am acutely aware of the devastation to marine species, populations and environment during the past century. It is time for the world to focus more on repairing the damage to the earth's marine environments.



PHOTOGRAPHY DIRECTOR'S CHOICE



Rageesh Pinarayi  
Damselfly  
(Zygoptera - Odonata)





## FOUNDERS' NOTE

Welcome to the 27th edition of PT Explorers.

The year 2021 has brought a bit of cheer to a gloomy pandemic hit world. The much-awaited vaccines have arrived, and many countries have started vaccination campaigns. A huge planning and logistical endeavour awaits many of the countries with a bigger population. Producing or procuring the vaccine and distributing to the entire world is no mean feat, and calls for co-operation between a lot of governments, corporations, and organisations.

At Paws Trails we are eagerly looking ahead for a great year, with reassurances for everyone for a healthy and safe world. In the mean while we have re-started our Paws Trails expeditions on a small scale. We will be planning more of these based on the changes in circumstances. One of the things which we really regret is being forced to stop our monthly photographic exhibitions. We have tried to make amends by switching to an online format for a limited number of exhibitions, but we miss seeing people flock to the exhibition hall and watching them get awestruck at the fabulous images, and the engaging conversations that follow. It is that mingling of people and images acting as conversation starters that we long to see again.

This year has also brought in some very gory news about atrocities against wildlife. It is really alarming to hear such news as an elephant being set ablaze and a leopard being hunted for meat, that too from an area like the south of India. We request the global Paws Trails community to be vigilant and co-operate in all preventive and awareness measures possible to thwart crimes against wildlife.

We sincerely thank all the authors and photographers for contributing the articles and photographs in this edition. Our congratulations to all of you for helping make this world a better place.

**Hermis Haridas & Nisha Purushothaman**

Founders - PT Explorers



COVER STORY

# Into the Wild

with Austin Thomas



Little Owl (*Athene noctua*)





**Austin Thomas is an International Award Winning wildlife and nature photographer, based in the United Kingdom.**

**Since an early age, he has been interested in nature, wildlife and the great outdoors, often spending many a happy hour walking in the fresh air with a pair of binoculars.**

**All of that changed in 2007, when he decided to purchase a camera. He now gets up earlier, spends half of his life in a hide, views wildlife through a camera lens and spends the other half in front of the computer. In 2008 he joined a camera club, Wigan 10 Foto Club, which enabled him to diversify photographically and learn new skills. Entering photographic competitions both nationally and internationally broadened his exposure in those early years to the world of nature photography. Having specialised in Bird Photography and African Wildlife images for more than ten years he decided to turn his attention to Underwater Photography. He now spends roughly equal amounts of time “top side” and ‘underwater”, creating images of wildlife.**

**Austin has had countless images published, both Nationally and Internationally. He was named as Bird Photographer of the Year in 2014 by Bird Guides and Nature Photographer of the Year by the Photographic Alliance of Great Britain in 2015. He has worked with the BBC, BBC Wildlife Magazine, Canon, The British Ornithological Trust, Zeiss and many other companies on various photographic projects and assignments.**

**He uses Canon equipment, having started life with a Canon 300D. Today he typically carries two camera bodies in his kit bag. A Canon DSLR 1DX MK3 and a Canon Mirrorless R5. When underwater he uses Nauticam housings and specialist optics.**

**[facebook.com/AustinThomasPhotography](https://facebook.com/AustinThomasPhotography)  
[austinthomas.co.uk/](http://austinthomas.co.uk/)**





Little Owl (*Athene noctua*)







**Hi Austin, Thank you for joining us in this edition of PT Explorers. Would you please do a self introduction for our readers.**

I am a wildlife photographer living in the UK who specialises primarily in photographing wild birds and animals. More recently I have started a journey to photograph the wildlife in our seas and rivers, which is both challenging and rewarding. I took a serious interest in photography in 2007 and haven't stopped creating images since. I have as much passion today to photograph almost anything that moves.

**From an enthusiastic nature lover to an ace wildlife photographer - how did you evolve?**

As a person I am naturally self-driven and strive to improve myself in every aspect of my life. If something is important to me then I will give a lot of energy and effort to reach my potential. I am a good self-critic. I look at every image I take and challenge myself to learn and improve. I am very rarely totally satisfied with an image. I can always think of ways to improve. Being self-critical and listening to feedback from others motivates me to work harder and improve.

**Who, if any, were your early role models in photography?**

I didn't have any photographic role models. I came into photography because I was useless as a bird spotter! I was not able to accurately identify bird species through my binoculars, so I sought ways to solve that "problem" and ended up buying a DSLR and a 500mm



Common Kestrel (*Falco tinnunculus*)



©Austin Thomas



Grey Seal (*Halichoerus grypus*)



lens at that time! The rest is history.

**What is your favorite genre of wildlife photography and how did that love develop?**

I would have to say bird photography. I have a natural love of birds anyway and in 2007 it was seen as a challenge photographically to record high quality bird in flight images. I love a challenge, so dedicated a lot of time learning about my subjects behaviour and working out ways to photograph birds in flight. Over time I developed methods of photographing birds 'walking' or 'marching' which added impact and became my signature image as I developed my craft.

**Being based in the north west of England, is that an advantage or a disadvantage for a wildlife photographer?**

England is a great place for bird photography. We are fortunate that birds migrate here and breed here, so we see different species over the course of a calendar year. Being close to the west coast of England gives me the opportunity to use the low setting sun late in the evenings to illuminate my subject which is a big advantage to eliminate shadows.

**Is there a favourite wildlife subject that you love to photograph repeatedly?**

The Little Owl has to be my favourite bird to photograph. If you google "Austin Thomas Little Owl images" you will see a lot of them! I discovered back in 2008 that Little Owls were living locally to

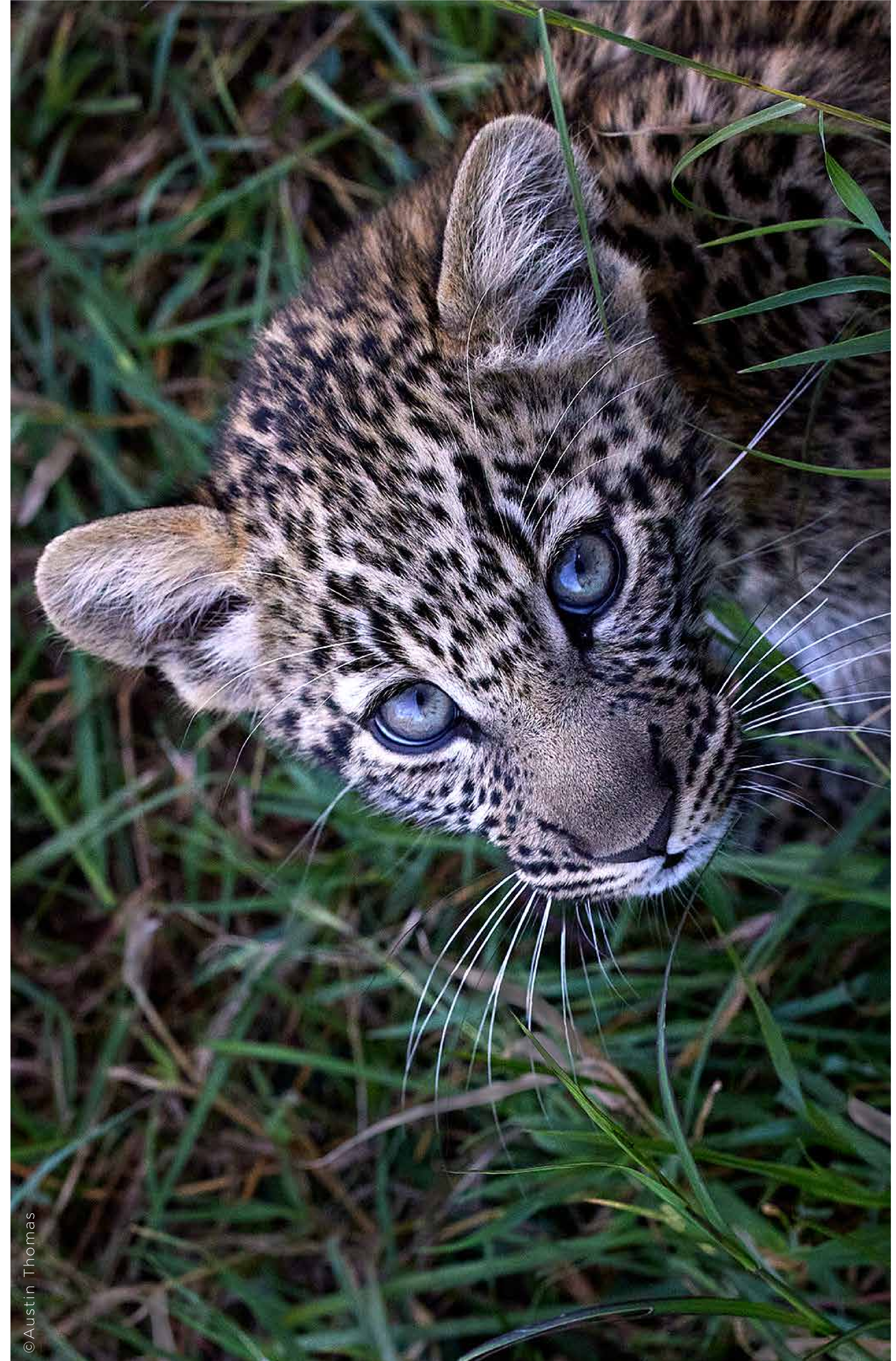
me. It therefore became the subject that I could try and photograph every day whilst I was learning my skills. Being on the doorstep I was able to quickly make changes and repeat things to get the images I had in my mind.

**Austin, kindly brief us about your work with Garden Wildlife and its significance.**

It started initially as a challenge to photograph small birds in flight. Having mastered the art of photographing medium sized birds (Little Owls and Kestrels for example) I wanted to push myself further to photograph the small birds in my garden whilst they were flying. Working in my garden allowed me to leave my camera in position a lot longer than when I am out in the field. I built a hide in my garden, specifically for photography, to make the project more comfortable and successful. Once I had small birds in my portfolio I then went on to photograph some of the small mammals that also appear in my garden from time to time.

**What is your favourite photographic location. Can you please brief us about the treasures there?**

My most enjoyable trip each year is to Africa. I typically visit Rwanda to photograph the Mountain Gorillas and then move into Kenya to go on a photographic Safari. If I had to pick just one then it would be the Masai Mara in Kenya. I love the variety of wildlife that is available in the Masai Mara from the adorable cats, the abundance of birdlife as well as many reptiles and insects. No two trips are the same. You find something to photograph around almost



©Austin Thomas







©Austin Thomas



Gorilla (*Gorilla beringei*)

every corner. It is my second home...

**Please tell us about your projects and what is there in the pipeline.**

I have gone underwater recently as I look to photograph the wildlife that lives in the sea. I envisage a greater proportion of my photography time in the coming years will be spent underwater. There are so many species down below, dotted all over the world, so I have a lot to learn and hopefully plenty of travel ahead of me in pursuit of underwater wildlife images.

**Is there a Wishlist - somewhere or something which you eagerly wish to photograph?**

I would like to photograph Polar Bears. I have that on my bucket list. I also want to photograph marine life in a thriving and healthy coral reef. I have found some marine ECO resorts that have conservation at their heart, so I will add one of those to my wish list.

**What is the importance of gear in wildlife photography and what are your favourites?**

Equipment is necessary but light is the most important element in photography. I personally like to use a shallow depth of field in a lot of my images, so aperture is important to me. My Canon 400mm f2.8 lens is typically the first item I pick up when photographing wildlife, especially in Africa. Cameras are clearly necessary to record images and yes, the professional models give you larger files and faster performance. However, the important thing with equipment is to





Great Crested Grebe (*Podiceps cristatus*)



know how it works. Moments in wildlife occur in a split second.

If you don't know how to adjust your camera instinctively or have it set correctly for when that split second action occurs, then you will need a lot of luck to get a special image. Learn how to make your camera work for you, rather than buy the most expensive camera and have no clue how to use it.

**Do you think that there should be a code of honour for wildlife photographers? If so, what will be your top points in it.**

Absolutely yes. I remind my clients that we are visiting the natural habitat of the wildlife. We are the visitors here. We have to adjust our behaviour and be respectful to the wildlife.

**Number 1** is that the welfare of the subject is far more important than anyone's picture.

**Number 2** would be never to stress a subject. Read the signs and you should be able to tell whether your actions are causing the subject concerns.

**What are your thoughts on Conservation Photography?**

Conservation Photography is an excellent example of what photography is all about. At the same time, it raises awareness on a global scale. A photograph should create emotions, feelings, tell a story or raise a question. Conservation photography does all of that superbly.

For me conservation is critical to protect our planet which will allow future

Warthogs (*Phacochoerus africanus*)







Green sea turtle (*Chelonia mydas*)





generations to see nature in the wild. I am one of the contributors to the Remembering Wildlife initiative. I cannot image a world without Cheetahs, Gorillas, Elephants, Lions, Rhinos and so many more endangered species...

**Any tips and tricks that you wish to share with budding photographers?**

*Practice.*

*Patience*

*Persistence.*

Repeat those words as a wildlife photographer and you won't go too far wrong. You should also learn your subjects behaviour. I spend hours in the field, without my camera.

I just take binoculars when the light is

poor and watch and learn how my target subject behaves. I find the more time I spend with my subject, the luckier I am when I photograph it.













Common Kestrel (*Falco tinnunculus*)





Common Kestrel (*Falco tinnunculus*)



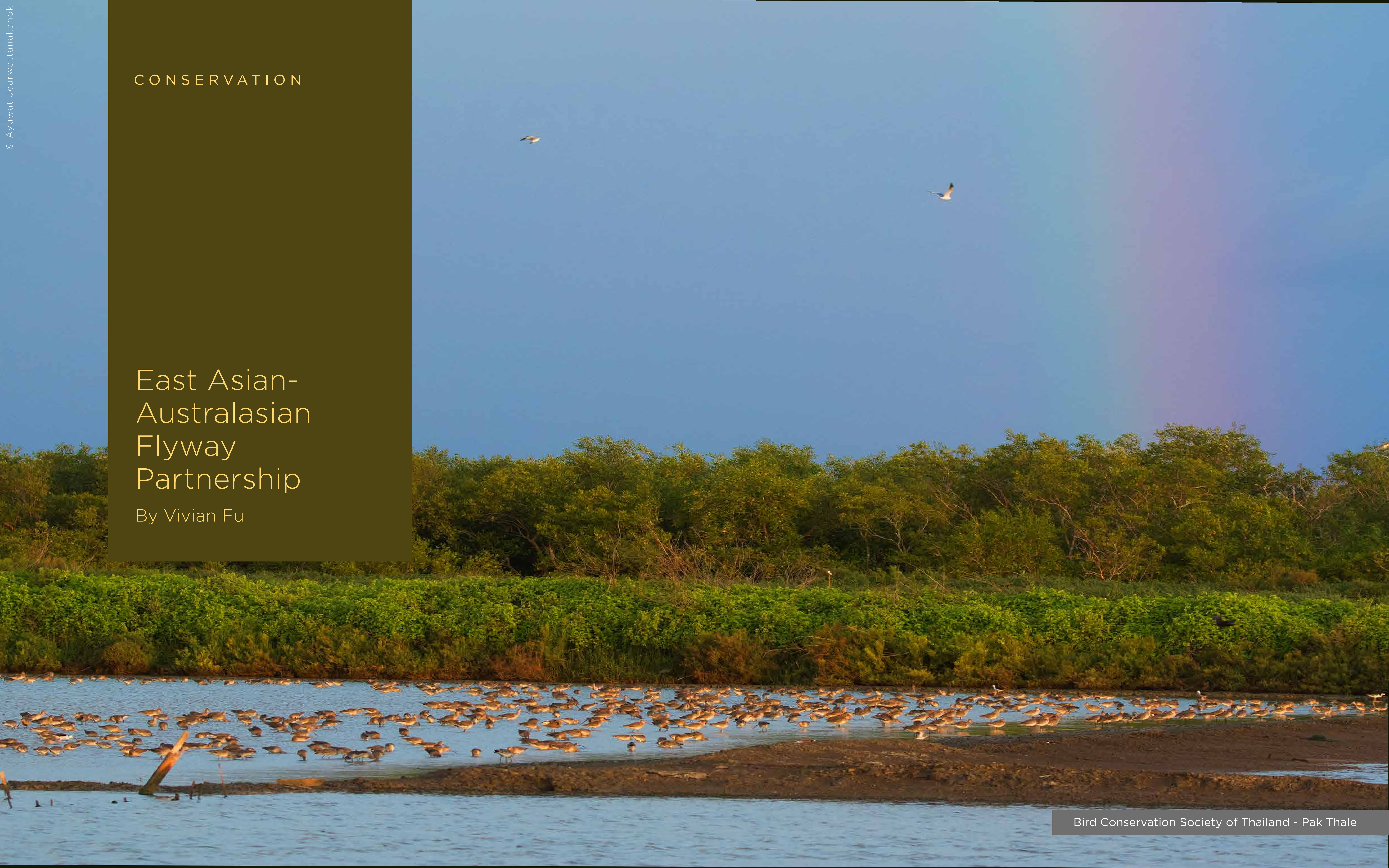


Green sea turtle (*Chelonia mydas*)









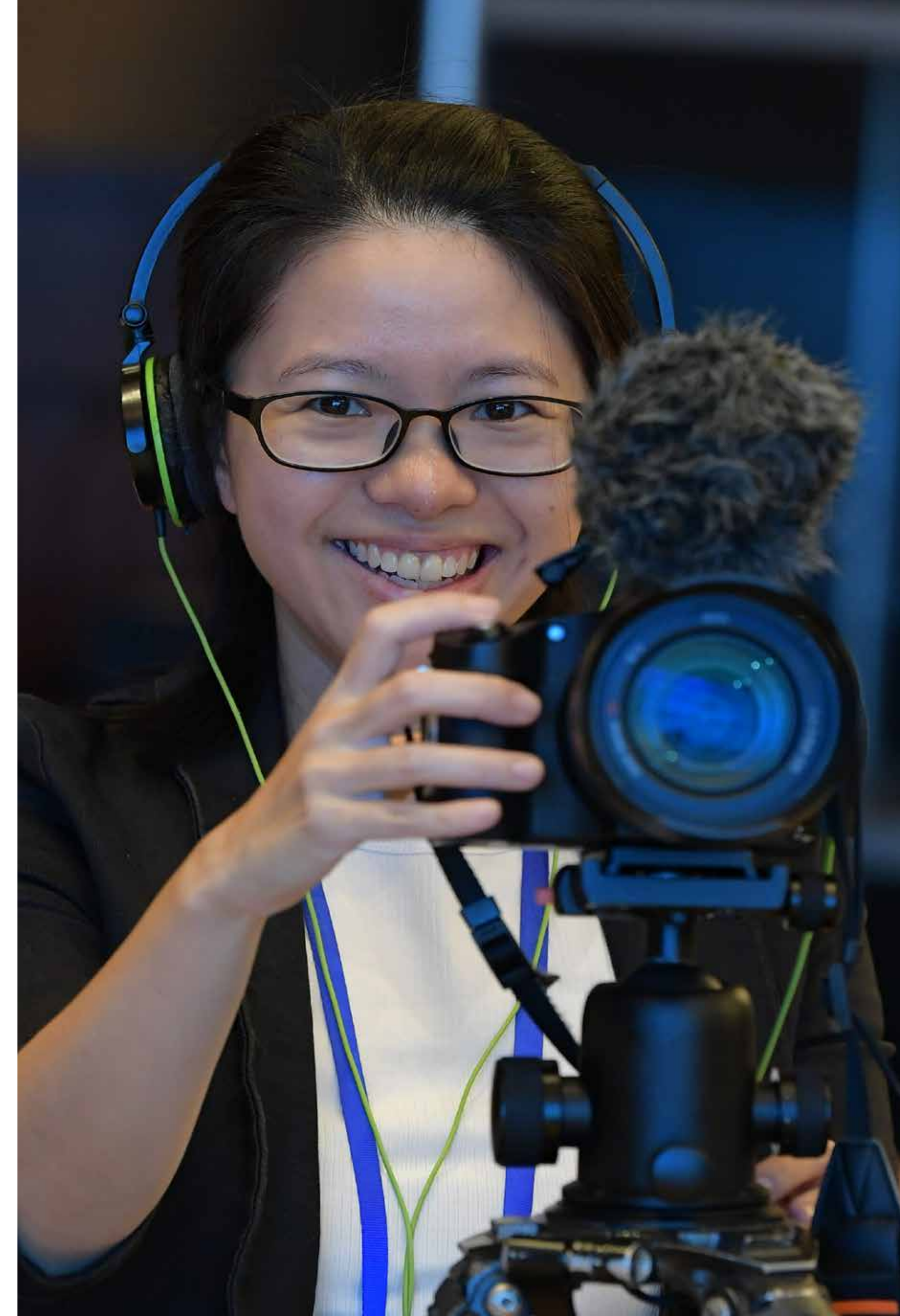
CONSERVATION

# East Asian- Australasian Flyway Partnership

By Vivian Fu



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**Vivian Fu is Communication Officer of EAAFP Secretariat based in South Korea.**

**She is from Hong Kong and worked for the position for two years. Before joining, she has about 8 years of working experience in bird conservation.**

Twice a year, 50 million migratory waterbirds of more than 210 species travel thousands of miles between their breeding ground in the Northern Hemisphere and wintering grounds in the Southern Hemisphere. The routes that migratory waterbirds traverse annually on a regular, seasonal basis are known as flyways. The East Asian-Australasian Flyway (EAA Flyway) is one of the nine major flyways in the world.

The EAA Flyway covers 22 countries, stretches from Russian Far East and Alaska, southwards through East Asia and Southeast Asia to Australia and New Zealand. Because no single site or country can conserve all the migratory waterbirds in the Flyway, adopted in the list of the World Summit on Sustainable Development as a Type II initiative and became a Ramsar Initiative in 2005, and the East Asian-Australasian Flyway



Black-faced Spoonbill (*Platalea minor*)

© Lee Kisup





Ramsar wetland in Australia



Partnership was launched on 6 November, 2006. The EAAFP aims to conserve migratory waterbirds, their habitats and the livelihood of people dependent upon the wetlands in the flyway.

At present, there are 39 partners, comprising 18 national governments, six Inter-Governmental Organizations, 13 international Non-governmental Organizations, one International organization, and one international Private Enterprise. This is a unique form of collaboration all sectors can work together and exchange knowledge at the same level. EAAFP provides a flyway-wide framework to promote dialogue, cooperation and collaboration among a range of stakeholders, such as governments, site managers, scientists, NGOs, educators, private companies and local communities.

To ensure that the internationally important sites are sustainably managed to support the long-term survival of different species, a “Flyway Site Network” was established. Over 1,000 sites of internationally important sites were identified, and working with government Partners who can designate the “Flyway Network Site (FNS)”, we have 148 sites in this network. The government and site managers play a key role in safeguarding these sites. Under the Flyway Site Network Sister Site Agreements, sites in different countries can pair up, to enhance capacity building, information, and experience exchange with each other.

Each species of migratory waterbirds has different needs in lifestyles, diet, habitats which may change in different seasons.









We need scientists and expertise to collaborate to enhance the knowledge of these different species and suggest effective conservation measures accordingly.

Before the launch of the EAAFP, there were already networks on different groups of waterbirds with long-term and international collaboration on shorebirds, ducks and cranes.

These networks later joined EAAFP and became the Shorebird Working Group, Duck Working Group, Crane Working Group and Seabird Working Group. To further address other flyway-wide issues, Working Groups of CEPA (Communication, Education, Participation and Awareness), Avian Influenza were formed.

Under the EAAFP, Task Forces were formed to address species- or issue-specific conservation issues. For example, Spoon-billed Sandpiper Task Force focuses on saving the Spoon-billed Sandpiper, Task Force of Yellow Sea Ecoregion promotes the conservation actions in the region.

### Major Conservation Species

There are about 30 key species in EAA Flyway, here four species of special concern are highlighted:

#### Spoon-billed Sandpiper (*Calidris pygmaea*)

- IUCN status: Critically Endangered (CR)
- Distribution Range: Breeding in Russian Far East, winter mainly in Bangladesh,

Myanmar, Thailand, South China and Vietnam

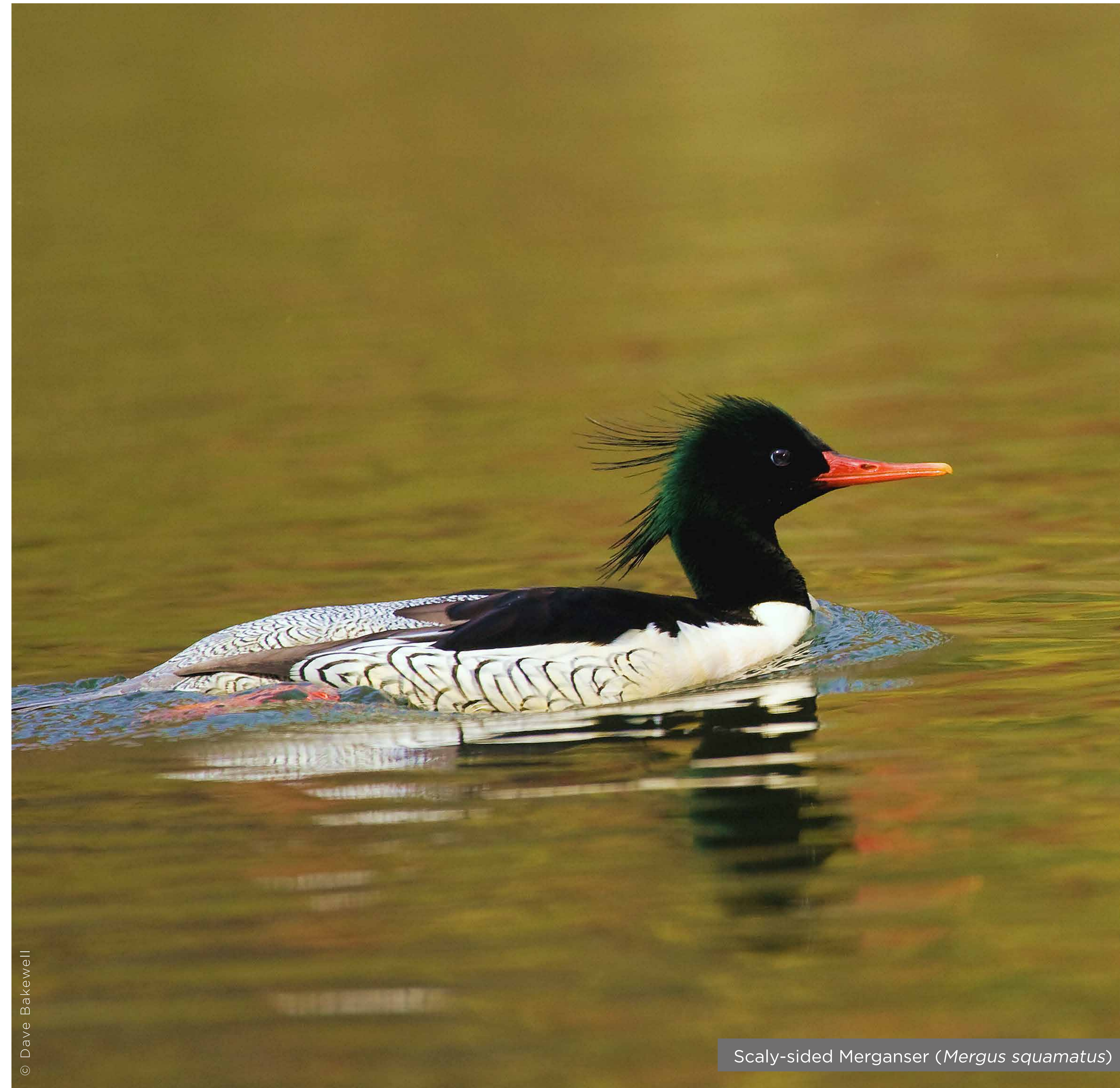
- Habitats: They require specialized breeding habitats at coastal lagoons, river mouth or sand spit with sparse vegetation. They use inter-tidal flats during the non-breeding season.
- Global estimated population: roughly 360-684 individuals

#### Black-faced Spoonbill (*Platalea minor*)

- IUCN status: Endangered (EN)
- Distribution Range: Breeding in Northeast China, North Korea and South Korea, winter mainly in Taiwan, Hong Kong (China), Japan.
- Habitats: They mainly breed on islets off the coast near tidal flats. In non-breeding time, they use tidal flats, and even artificial wetlands like fishponds.
- Global estimated population: 2250 mature individuals

#### Far Eastern Curlew (*Numenius madagascariensis*) \* note: in Australia, Eastern Curlew is more commonly used.

- IUCN status: Endangered (EN)
- Distribution Range: Breeding mainly in Siberia, winter in a wide range spreading from Japan, eastern China, Indonesia, New Guinea, Australia and a few records in New Zealand.
- Habitats: Breeds in open mossy or transitional bogs, moss-lichen bogs and wet meadows. Non-breeding season inhabits coastal and estuarine swamps, salt marshes and intertidal flats.
- Global estimated population: estimated 20,000-49,999 individuals



© Dave Bakewell

Scaly-sided Merganser (*Mergus squamatus*)







**Bar-tailed Godwit**  
**(*Limosa lapponica*)**

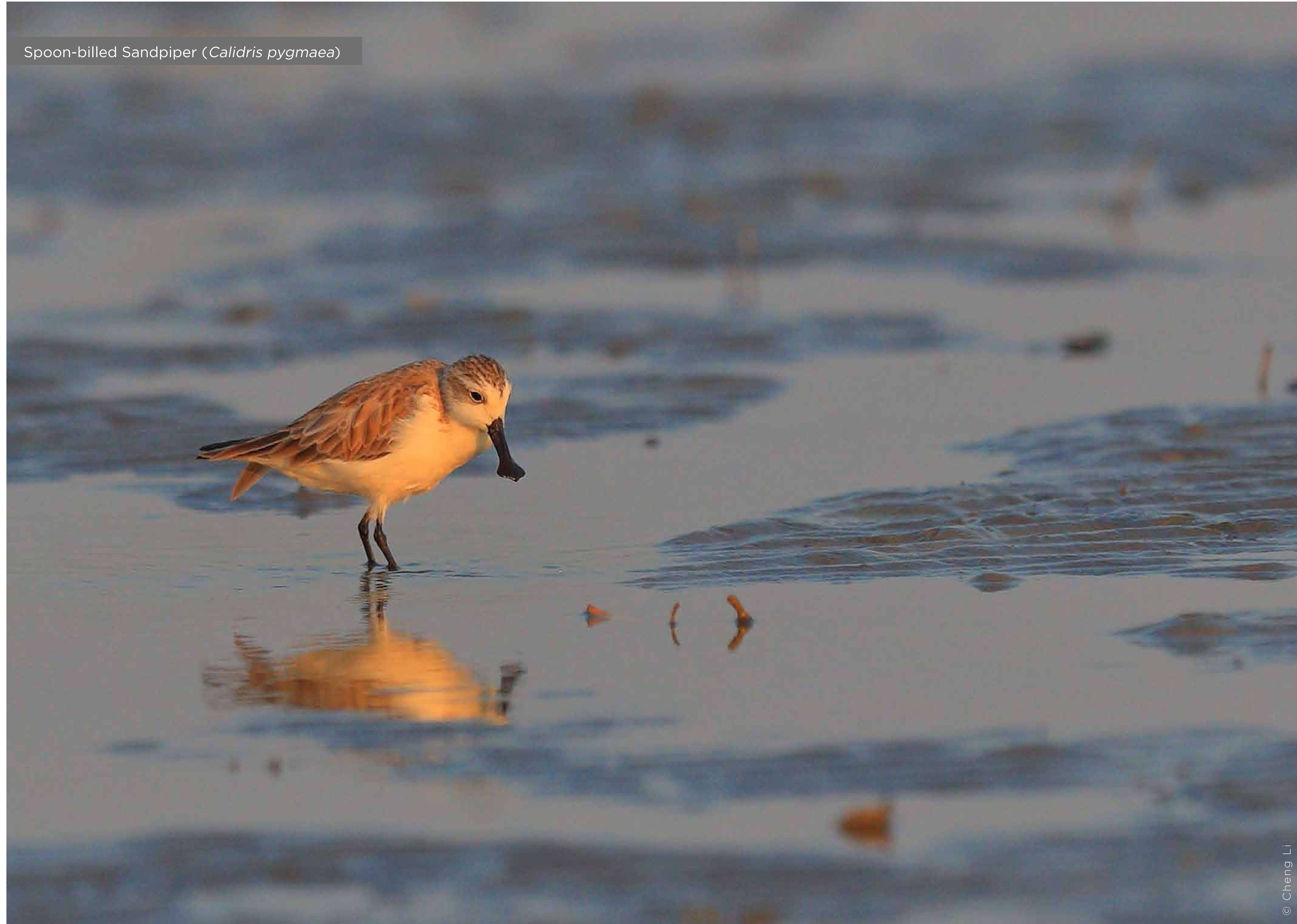
- IUCN status: Near Threatened (NT)
- Distribution Range: It has several subspecies, the subspecies within EAA Flyway breed in Alaska and Russian Far East, migrate through the Yellow Sea region and winter along coasts in southern China and Southeast Asia as well as Australia and New Zealand.
- Habitats: Breeds in marshy, swampy areas in lowland tundra near river valleys, lakes and sedge bogs in the Arctic. In winter inhabits intertidal wetlands with tidal flats or sandbars.
- East Asian-Australasian Flyway population: estimated 325,000 individuals

**Collaboration Stories**

**Spoon-billed Sandpiper, star of EAA Flyway**

When talking about the East Asian-Australasian Flyway, the Spoon-billed Sandpiper (SBS), nick-named “Spoony”, is no doubt a “celebrity”. Because of its rarity, bird watchers from all over the world came to the sites in particular seasons to watch it; Because of its Critically Endangered status, efforts from all over the world join in to save it from the brink of extinction. It was back in the early 2000s that the scientists had solid evidence of the drastic decline that 90% of the population of this small bird was gone. Thus, SBS Recovery Team was initiated, which then joined the EAAFP and evolved to a species Task Force (SBS TF). Maybe it is a species representing the most substantial joint conservation effort in terms of countries (Russian Federation, Japan, People’s Democratic Republic

Spoon-billed Sandpiper (*Calidris pygmaea*)











Spoon-billed Sandpiper (*Calidris pygmaea*)

of Korea, Republic of Korea, Vietnam, Myanmar, Cambodia, Thailand, Malaysia, Indonesia, Bangladesh and India) and several organizations and funding for on-site conservation.

In order to understand more about the migratory route of SBS, in 2016 leading experts from the SBS TF and the UK deployed tracking devices on SBS with the smallest ever satellite tag invented. Low survival rate of chicks of SBS is one of the factors that the population could not recover well. Therefore, the headstarting programme has been established. The idea is to collect eggs from the wild, hen hatch and hand-raise the chicks in captivity until the chicks are at fledging age, which would be released back to the wild. Since 2012, over 180 headstarted birds were released. It was suggested by scientific modeling that the programme contributed to a 3% increase in the population.

**Black-faced Spoonbill, the most successful conservation example of EAA Flyway**

In the early 1990s, there were only a few hundreds of Black-faced Spoonbill (BFS) known to the world, thus being listed as Endangered in the IUCN Red List. What has been done to boost the population from a small population to nearly 5,000 individuals in about 30 years' time? Knowing this species mainly distributed in East Asia, with breeding grounds along Asian coast and west coast of Korean Peninsular, while wintering mainly parts of Asian coast and Japan, the first meeting convened for conservation Black-faced Spoonbill was held in 1994.









Yellow River Delta

With this international team, widespread awareness-raising and public education programme was established, an inventory of Importance sites was compiled, the breeding ground study was conducted. Satellite-tracking work to understand the migratory routes of the species was applied for the first time for the first time between 1997 and 1999. BFS recovery has been demonstrated as one of the most successful citizen science programmes in the field of bird conservation in the EAA Flyway.

#### **Far Eastern Curlew, the best story of sites in the flyway are interlinked**

Far Eastern Curlew, or Eastern Curlew in Australia, is the largest migratory shorebird endemic in EAA Flyway. The bird has a wide distribution range, with

breeding grounds lies in the tundra in Siberia and roughly three-quarters of the population spends the non-breeding season in coastal areas in Australia. Researchers found that the drastic population decline (decrease by 80% of the population in 30 years) may relate to the rapid habitat loss in Northeast Asia. Not being properly fueled up during their long migration journey, Far Eastern Curlew and other migratory waterbirds would be more susceptible and impacted by environmental changes. The Australian government proposed to establish the Far Eastern Curlew Task Force under EAAFP that was adopted in 2015. As a species linking with the maximum number of countries in the EAA Flyway, Far Eastern Curlew's fate will be depending on the effective collaboration among government, researchers,

conservationists, site managers of the range countries.

#### **Bar-tailed Godwit, the king of long-distance avian migrant**

Bar-tailed Godwit broke its own (known) record for nonstop avian flight in 2020, for an individual was tracked to had flown over 12,000 km from Alaska to New Zealand, in 11 days. While different migratory birds have different strategies for migration, Bar-tailed Godwit, uses as few stop-over as possible to make its migration very efficient. The finding was a result of collaborative research between Globally Flyway Network, Pūkorokoro Miranda Shorebird Centre, Birds New Zealand, and Massey University in 2020. Twenty Bar-tailed Godwits were tagged in

the Firth of Thames, a Ramsar Site as well as a Flyway Network Site in New Zealand.

In September, Bar-tailed Godwit flies north to its breeding ground in Alaska, having one stop-over at the Yellow Sea Region that is a bottleneck to the migration of many migratory shorebirds in the EAA Flyway, but it is, unfortunately, losing the coastal wetlands in the fastest rate than other places in the Flyway. The Pukorokoro Miranda Naturalists Trust and the Dandong City government signed the Sister Site Agreement in 2004 to pair Firth of Thames and Yalujiang National Nature Reserve. Joint surveys and important researchers were carried out regularly in Yalujiang Estuary. In addition, Pukorokoro Miranda Naturalists Trust reached out to North Korea to conduct joint shorebird surveys and capacity building since 2009.





Gannet (*Morus*)

### Trends and Future Project

In 2018 a ten year Strategic Plan was adopted by the 39 Partners and other stakeholders to effectively conserve more than 210 species of migratory waterbirds in the EAA Flyway. The Strategic Plan is guiding Partners on developing the Flyway Site Network, enhancing CEPA (communication, education, participation and awareness), enhancing monitoring and research, capacity building, developing flyway-wide approaches and prioritize species and habitat conservation.

Important steps have been made on designating the Yellow Sea region as UNESCO World Heritage Sites. The Migratory Bird Sanctuaries along the Coast of the Yellow were entered into the World Heritage List in 2019. The government in South Korea is also preparing to nominate important intertidal flats in the west coast to the World Heritage List. The next Meeting of Partners (MoP 11) of EAAFP is expected to be held in Australia in Brisbane in 2022.

COVID-pandemic breakout made an unprecedented splash to all people in 2020. Yet, it alerted us to rethink and repair our relationship with Nature and immediate actions are needed. In 2021, there are a number of events to set global agenda related to the future of biodiversity of the planet, including the coming 14th Meeting of the Conference to the Ramsar COP14, the 26th United Nations Climate Change Conference and the 15th Meeting of Conference to the Convention on Biological Diversity, which will adopt the Post-2020 Global Biodiversity Framework, and moves

forward to the “[Living in harmony with nature](#)”.

The EAA Flyway has a staff based in South Korea and Hong Kong, and hundreds volunteer scientists and citizens in 22 countries in the Western Pacific

Reference: <https://www.eaaflyway.net>.  
Vivian Fu, Communication Officer of EAAFP (communication@eaaflyway.net)







SPECIES

# The Hoppers

By Cynthia Bandurek







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**Cynthia Bandurek is an Argentinian Conservationist Ecologist, Field Naturalist, Nature photographer and wildlife artist. She has worked for more than eleven years at the Natural Science Museum and two years at the Darwinian Botanical Institute in Buenos Aires. In January 2021, Cynthia moved to Costa Rica to pursue work in conservation biology.**

**She participates in Conservation Projects in Argentina. She is author of the Book: “The world of small, An approach to the universe of arthropods from an artistic, visual, and evolutionary perspective.” Cynthia is PT Explorers’ Contributing Editor for South America.**

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**[instagram.com/  
cynthiabandurek\\_artphotography/](https://www.instagram.com/cynthiabandurek_artphotography/)**



Plant Hopper (*Fulgoroidea*)





Leaf Hopper (*Cicadellidae*)



Hoppers are a fascinating group of minute insects that have a wide variety of shapes, sizes and colors.

The hoppers belong to the Hemiptera Order, and common names include tree hoppers, plant hoppers, leaf hoppers, cicadas, and true bugs.

Most species of hoppers are great jumpers, and almost all are terrestrial and feed on plants.

Like other insects that also live on plants, they communicate with the individuals of same or another species moving the plant either by flicking the wings, or vibrating their abdomen, and amazingly, in some species they can move the plant even without contact.

Their size varies from just millimeters to nine centimeters in one species of planthopper.

Hoppers comprise about 28,500 named species, within four superfamilies among an estimated total of 2,000,000 insect species. But we already know that there are hundreds or thousands of species, hidden in the wild that we need to discover.

#### **Tree hoppers (*Membracidae*)**

When I am exploring tropical rainforests, my sharp eyes are searching for tiny tree hoppers, about 3mm in length - one of my favorite group of insects. I look for hoppers that are sitting on the top of leaves or on tree trunks that I can easily









focus my macro-lens on in good lighting.

The 3,400 species of treehoppers are very diverse, especially in the tropical rainforests of the Americas.

Tree hoppers are mostly on trees, branches, and leaves. Several species resemble a tree thorn, others caterpillar excrement, some a raindrop and there are some species with really striking ornaments and bright colors. They feed on sugar rich phloem sap, and they produce a sugary excrement, called honeydew.

Several species of ants, bees and wasps which have a symbiotic relationship with treehoppers. Ants feed on the honeydew and in exchange they contribute with security to tree hoppers, defending them from predators.

Some treehoppers are solitary but most of them specially in the lowlands of tropical forest in America show varying degrees of maternal care. There are three kinds of maternal care. The simplest is that the female rests on the eggs until they hatch. Apparently, this behavior decreases predation but not parasitoidism. The second is prolonged maternal care, in which the female remains with the eggs but also protects them from natural enemies, through physical defense with their legs and fluttering wings. In addition, the female cuts the plant to facilitate the feeding of nymphs. The third class of maternal care consists of females actively maintaining clusters of nymphs.

Some tree hoppers have cryptic colors but other seem to have aposematic

coloration, a strategy that shows bright colors, and striking combinations of them to try to inform to predators that they are unpleasant or dangerous to eat.

But the fact is that these animals were not so well studied by Science, so we still do not know so much about them, and the actual reason behind these odd designs. Females generally deposit their eggs within the plant tissue, except some species, which deposit the eggs on the surface of the plant and cover them with secretions.

Within the little knowledge scientists have on hoppers, there are several studies that show that acoustic communication occurs vibrating leaves and branches. These vibrations are identified as a defensive signal in nymphs of some species, in others as detection of feeding sites in nymphs. The vibrations occur in the meeting of mating couples and courtship by the male. All these sounds are inaudible to humans.

Among the natural enemies are birds, which feed especially on nymphs, and invertebrates such as spiders, wasps, flies, bed bugs and mantises. Treehoppers eggs and larvae are attacked by parasitoid wasps and entomopathogenic fungi.

### **Leafhoppers (*Cicadellidae*)**

Leafhoppers comprise about 10,000 species that are very abundant and found in a wide variety of habitats globally. Colorations is highly variable and covers a rainbow mix of color shades and tones. The largest species feed on xylem sap,

Leaf Hopper (*Cicadellidae*)



© Peter H. R.

© Cynthia Bandurek





Tree Hopper (*Membracidae*)



while some of the smallest feed on mesophyll sap and the other on phloem sap or on the combination of all of them. Their hind legs are modified with strong muscles for jumping and are covered with hairs that facilitate the spreading of a secretion over their bodies that acts as a water repellent and carrier of pheromones.

Because leafhoppers are always jumping around and moving fast, they are rather difficult to photograph.

### **Planthoppers (*Fulgoroidea*)**

Planthoppers are plant feeders that number about 12,000 species. Planthoppers range in size from 3mm to 5mm and have a wide variety of bizarre shapes. Although planthoppers occur worldwide, the African and Neotropical regions are especially species rich. Nymphs of many planthoppers produce wax from special glands on the upper abdominal and other parts of the body. These are hydrophobic and help conceal the insects. Adult females of many families also produce wax which may be used to protect eggs.

Plant hoppers nymphs also possess a biological mechanism at the base of the hind legs, which keeps the legs in synchrony when the insects jump. The gears are not present in the adults. These organs were known for decades but understand only recently.

### **Froghoppers or Spittlebugs (*Cercopoidea*)**

The 3,000 or so species of Frog or Spittlebugs are best known for the







Leaf Hopper (*Cicadellidae*)



nymphal stage, which produces a cover of foamed-up plant sap visually resembling saliva; the nymphs are known as spittlebugs and their foam as cuckoo spit, frog spit, or snake spit.

The characteristic spittle production is related with the unusual trait of xylem feeding. Whereas most insects that feed on sap feed on the nutrient-rich fluid from the phloem, Cercopidae utilize the much more dilute sap flowing upward from the roots via the xylem. The large amount of excess water that must be excreted and the evolution of special breathing tubes allow the young spittlebug nymphs to grow in the relatively protective environment of the spittle. Normally an animal should not be able to survive on a diet so low in nutrients, but the insects' digestive system has two symbiotic bacteria that provides them with the essential amino acids.

The foam serves several purposes. It hides the nymph from the view of predators and parasites, and it also works as an insulator against heat and cold, it also provides thermal and moisture control, without the foam, the insect would quickly dry up.

Adult froghoppers are amazing acrobats, and they can jump from plant to plant; some of them can jump up to 70 cm vertically: a more impressive performance relative to body weight than fleas. Spittlebugs can jump 100 times their own length.

Many species of froghoppers resemble leafhoppers, but they can be distinguished by the possession of only a

Froghoppers or Spittlebugs (*Cercopoidea*)









Leaf Hopper (*Cicadellidae*)



few stout spines on the hind tibiae, where leafhoppers have a series of small spines.

Although many froghoppers have cryptic coloration, many species of the family Cercopidae are brightly colored, with some combination of red, red-orange, yellow, and black, perhaps representing warning coloration associated with reflex bleeding.

### Conservation

Despite the fact that there is no specific information about the conservation situation of this group of animals, we already know that the insects in general are declining around the world at a high rate. The reasons for that can be attributed to::

- Habitat loss and land conversion to intensive agriculture and urbanization.
- Pollution by synthetic pesticides and fertilizers is a major cause of mortality.
- Industrial pollution, that includes water and air pollution are adversely affecting arthropod populations.
- Light and noise pollution.
- Biological factors, including pathogens and introduced species.
- Climate change.
- Overexploitation of forest habitats.

### Photographing hoppers

Taking macro photos of hoppers. Photographing insects is a fun experience, but you will need a lot of patience. The first difficult part is to find them in nature. Some of them that are extroverts and have a considerable size, but most of them are tinny and shy. So,

the first step is training your eyes to locate them in the wild.

When we are doing macrophotography to portrait small subjects, we need to get really close to them to get the magnification. So, we will discover that every species and even every individual has their own “Personality”, and you will start to learn that every species has a special set of behaviors and strategies to survive. You will find yourself playing hide and seek sometimes, and you will discover yourself with your belly on the ground, on the mud and even inside the water.

It’s important when you are in the wild doing photography to be respectful of nature, do not manipulate the subjects, and when you are using flash (something that is common in macrophotography), it is important that you use a diffuser to reduce the impact of light on the subjects, and of course the diffuser will also give you great and soft lighting in your images.

Despite these animals are spread worldwide, always tropics are a special place because of the great biodiversity. I always enjoy photographing insects and arthropods, but I have to say that my favorites are the tree hoppers, because of its strange designs and leaf hoppers, because of the amazing combination of colors.

Grab your camera and macro lens, suit up in old cloths, and go to a field, meadow, or garden, and get down on the ground to have a fun time finding and photographing hoppers!

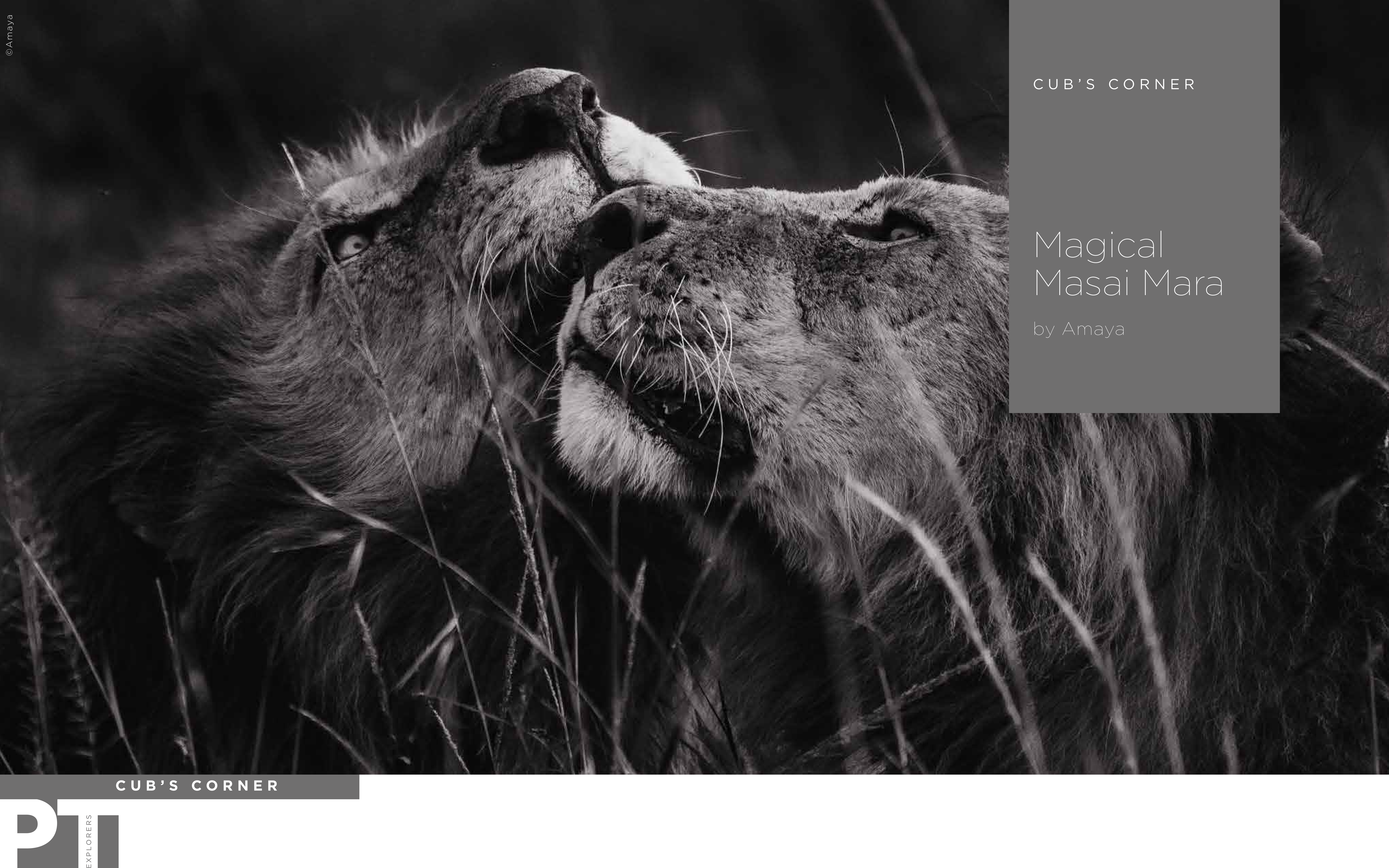


Tree Hopper (*Membracidae*)



© Cynthia Bandurek





©Amaya

CUB'S CORNER

# Magical Masai Mara

by Amaya

CUB'S CORNER



## CUB'S CORNER

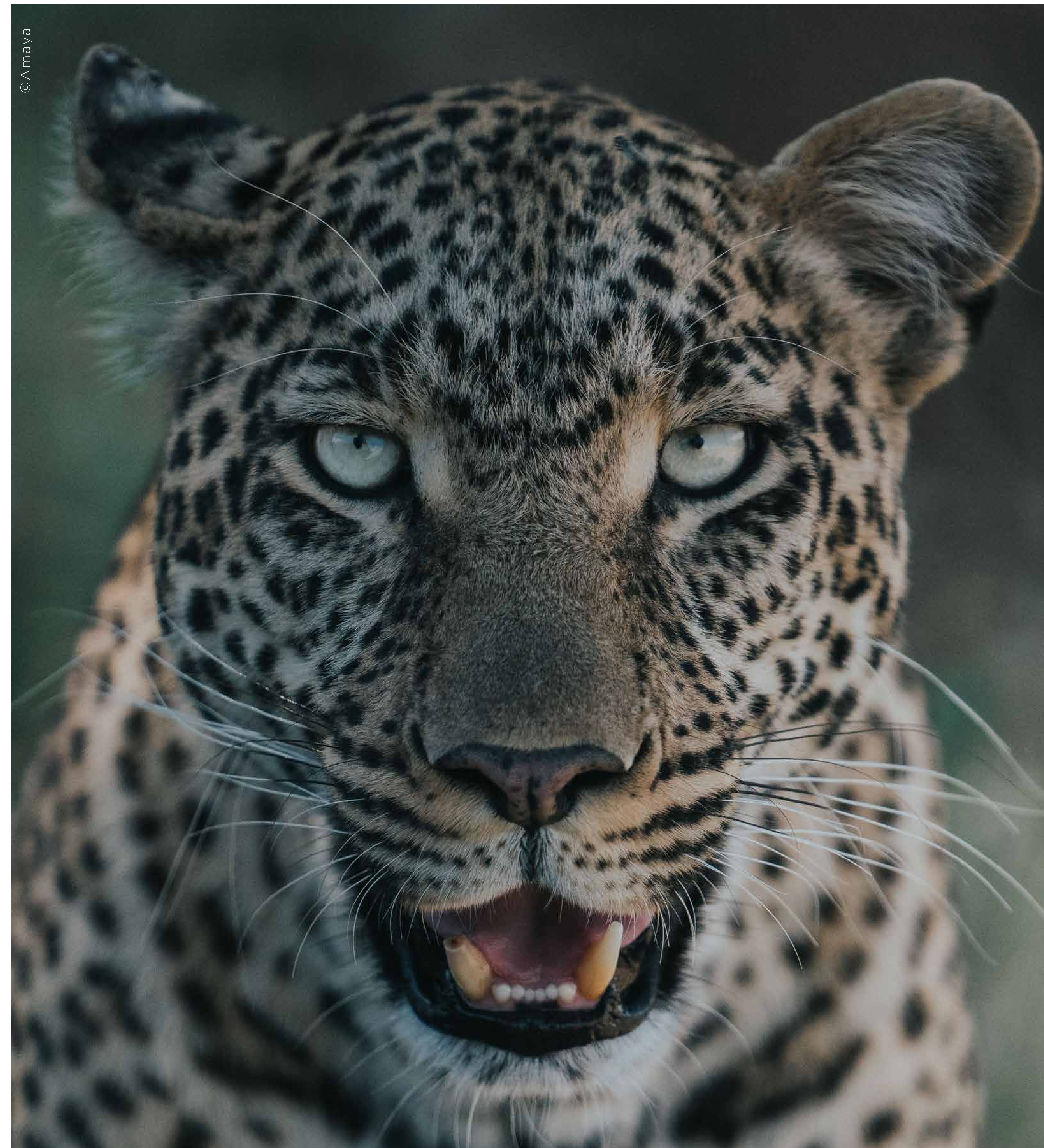


Amaya is a 10-year-old girl who was born in London. She moved to Kenya when she was three. She loves it there as she can visit the famous Kenyan National Parks often. She was seven when she started taking photos of animals and her favorite animal is the leopard. She started shooting with a compact camera and two years ago she moved on to a mirrorless camera.

Photography is her favourite hobby and it is her passion and has taught her to be patient and calm. She loves observing the animals in their own wild environment.

Amaya wants her friends to engage in conservation activities by doing beach clean ups, recycling, reusing, planting trees, and reducing the usage of plastic. She wants people to stop littering and care for the earth so that mother earth remains healthy for the future.

[instagram.com/chekazuri/](https://www.instagram.com/chekazuri/)























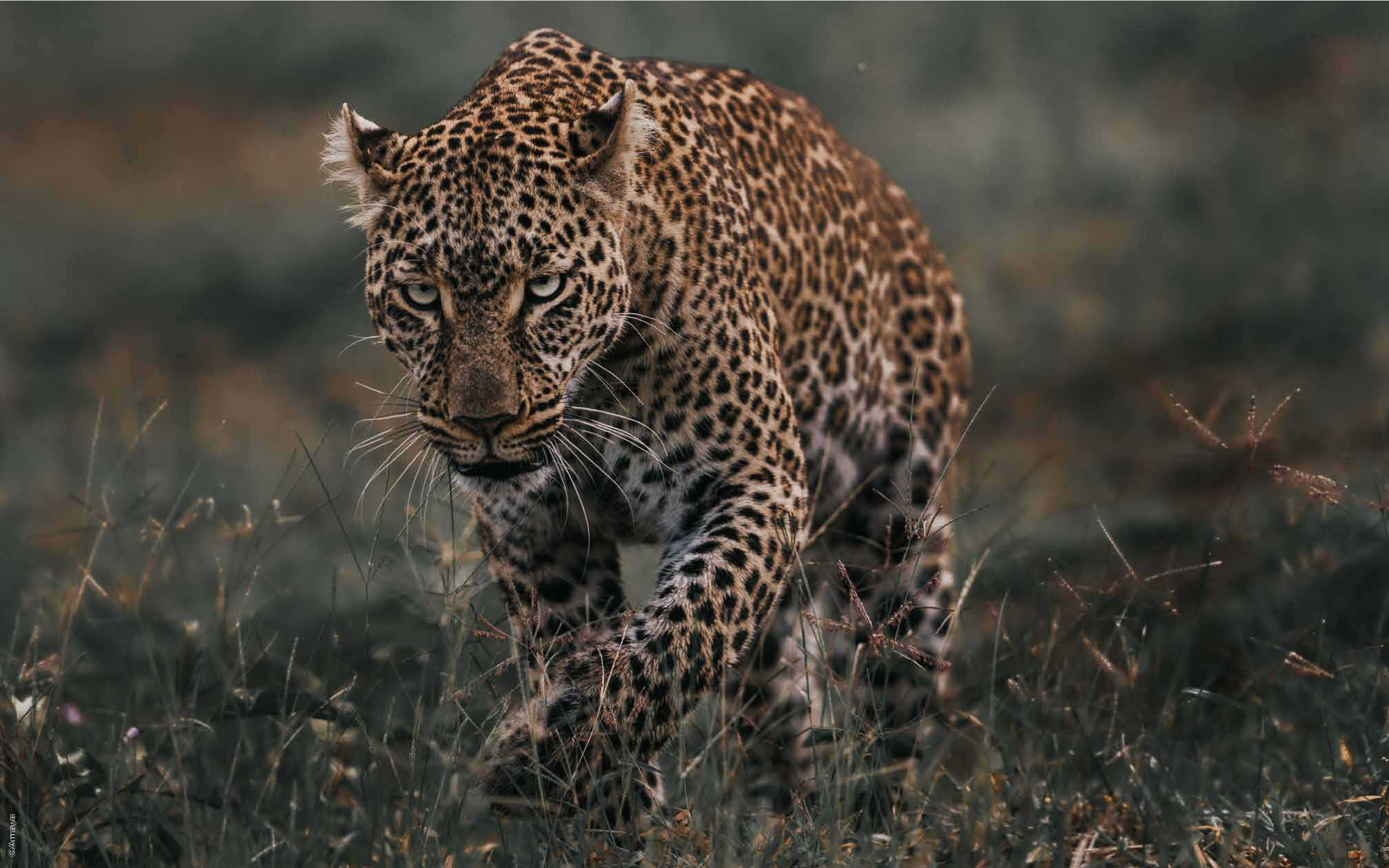














# Her Views & Visuals

By Mailén Palma







**Mailén is an Argentinean Audiovisual Designer and Wildlife Photographer. Three years ago, she moved back to the Patagonia, the place she was born, and two years later started with wildlife photography as a bridge to the marine mammals. In her photos, she wants to combine the majesty and harmony of the cetaceans in their habitat with the fragility and mystery of the ocean.**

[instagram.com/mailenpalma/](https://www.instagram.com/mailenpalma/)

# Her Views and Visuals



© Mailén Palma

Humpback Whale (*Megaptera novaeangliae*)







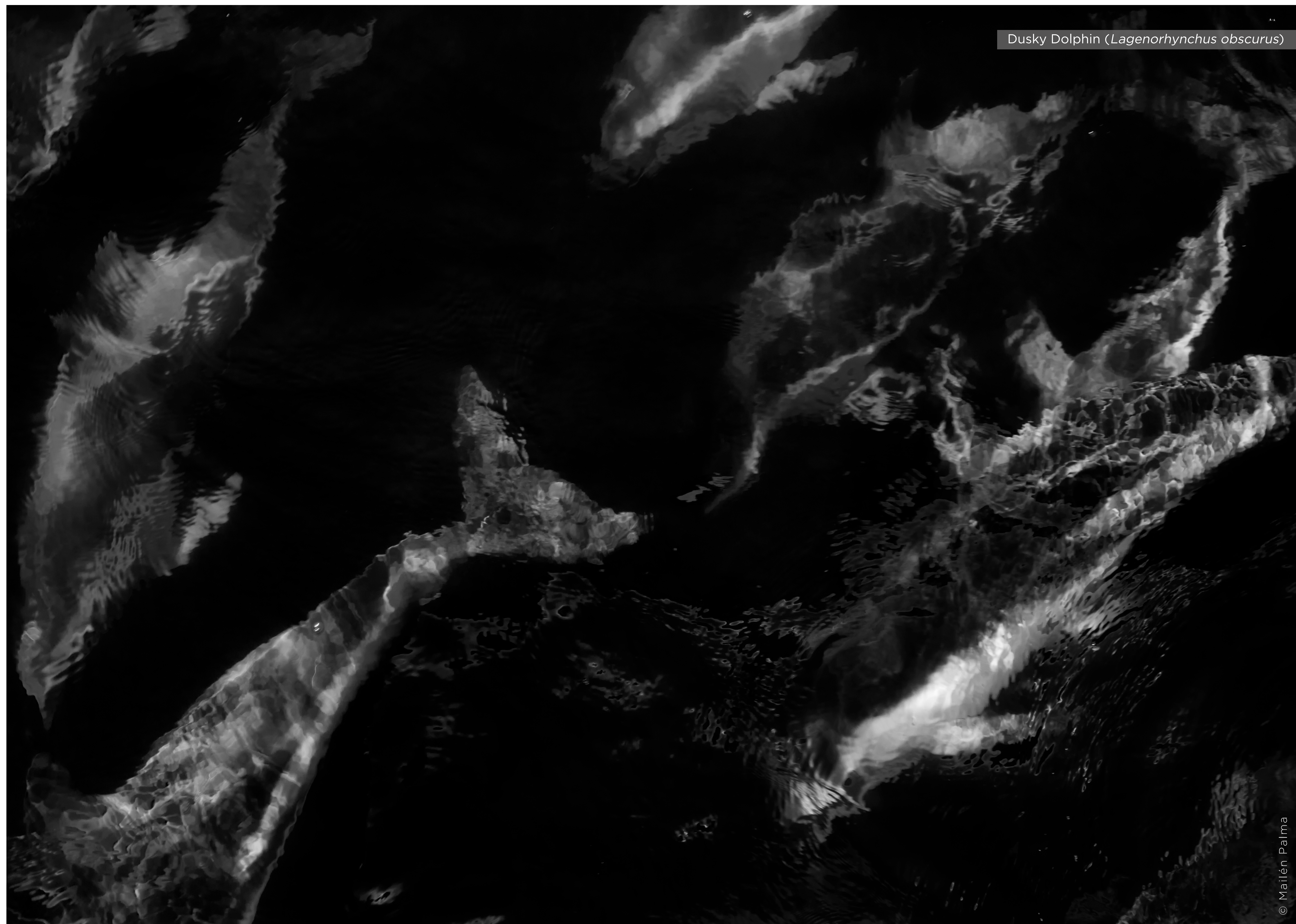
### How did your interest in wildlife arise?

I was born in the Argentinean Patagonia, surrounded by nature, in a place naturally privileged for whale watching – actually, there are many different kinds of cetaceans here. I felt connected to this place since I was little, but as I came of age, I became aware of what was it that connected me to it.

When I was three years old my family moved to the countryside, far from the sea. My encounters with whales ended up happening at aquariums (oh the irony). There was a time, when I was seven or eight years old, when in spite (or because) of being able to be around the animals I love my heart switched from dreaming of working as a trainer in the aquarium to openly condemn it based on their actions – I actually became a non-consumption activist. I reckon that was the moment it struck me that love for animals is not enough if you keep them from their freedom.

### How do you describe your journey as a photographer and a person?

My journey as a photographer enhanced and deepened my contact with nature. Even though I always had an interest in the environment, photography made me more aware that we are a part of it. We often look at it as spectators, standing on the side. Photography pushed me to investigate what I'm seeing through my viewfinder, and everything I learn has a link to me. I am a part of this. I always was and I always will be. If I don't mind it, I'm not minding myself. Not for me, and not for my loved ones. It becomes



Dusky Dolphin (*Lagenorhynchus obscurus*)









Dusky Dolphin (*Lagenorhynchus obscurus*)



an inner journey, right? This thought ends up challenging even those who have no interest in the environment, but do have it for their own survival. Questioning what surrounds me about its survival and wondering how to influence and harm as little as possible the environment helps me, in my opinion, to evolve as a person every day. And after all, isn't this - at least a part of - our life's purpose?

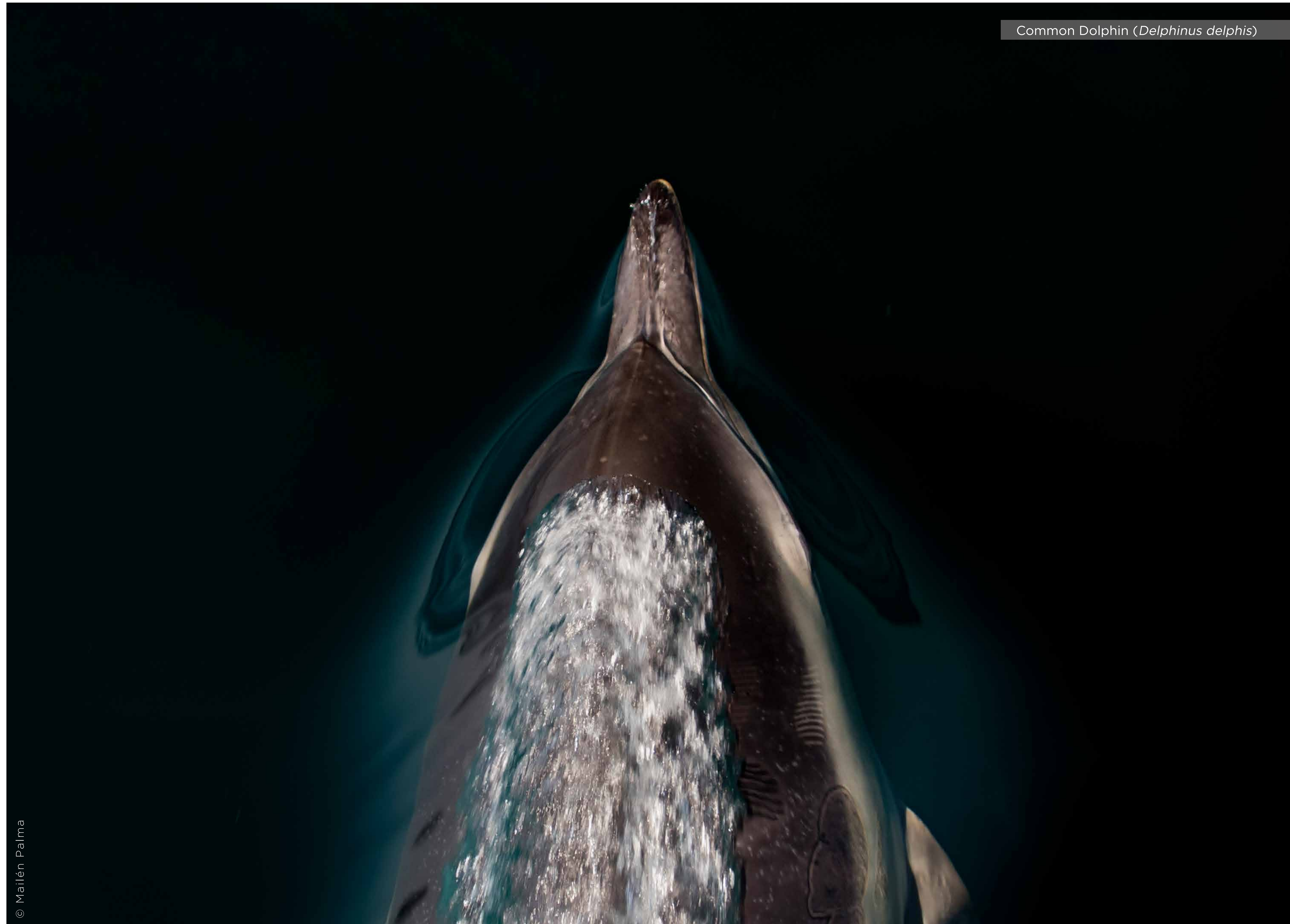
**What is your view on Nature Conservation? How can we, as wildlife photographers, help to protect our Mother Nature?**

I've always been aware of environmental care, but the conservationist me had a sudden growth when I moved back to the Patagonia. Walking through the steppe and finding that plastic reaches the confines of earth made me take on that responsibility. I think all of us heard the phrase "you can't love what you don't know, nor defend what you don't love".

I'm 29 years old and throughout my life I've went through different stages of conservationism, both personally and as a socio-cultural collective. It's important to acknowledge and nurture this evolution that comes with the new generations - even though we may have a hard time seeing this change. Younger people have a keener perception about environmental care that their parents did not have, let alone their grandparents.

As a nature photographer, I feel that it is possible to raise a certain sensibility among spectators on what they're watching that can end up challenging them, helping them develop

Common Dolphin (*Delphinus delphis*)



© Mailén Palma





Dusky Dolphin (*Lagenorhynchus obscurus*)







consciousness on the possibilities and responsibilities that as human beings we all have to preserve Mother Nature... in the end, we are part of it. That's something we ought to remember.

**Can you give our readers the best wildlife photography tips? Do you have any recommendation on settings or gear for wildlife photography?**

Underwater photography might be very Wildlife photography is really broad, and every project will require a particular technique: the only thing in common is and will always be utter respect for the environment. The fundamental principle is to never put our quest for the perfect photo over fauna's welfare.

Animals do transmit discomfort if our presence is being disrupting; empathizing and acting accordingly is what I stand for as a photographer.

Another tip is believing in yourself as an artist, trying to be creative and getting the most of existing conditions when they are not optimal (lighting, climate, equipment, etc.). In the end, there are many things one cannot control. Training your adaptation skills can bring many nice surprises.

**What plans do you have in the future related to Wildlife Photography?**

The lockdown triggered endless questionings about my future in photography, my quests and aspirations. I don't have many answers yet, but I look forward to finding them.

I think it is part of one's growth as an artist to question your own works and how satisfied you are with them. I cannot give a concrete answer to that since I'm transitioning, I don't know yet... but I know I'm getting there, I have faith in myself, so the conclusion is imminent.

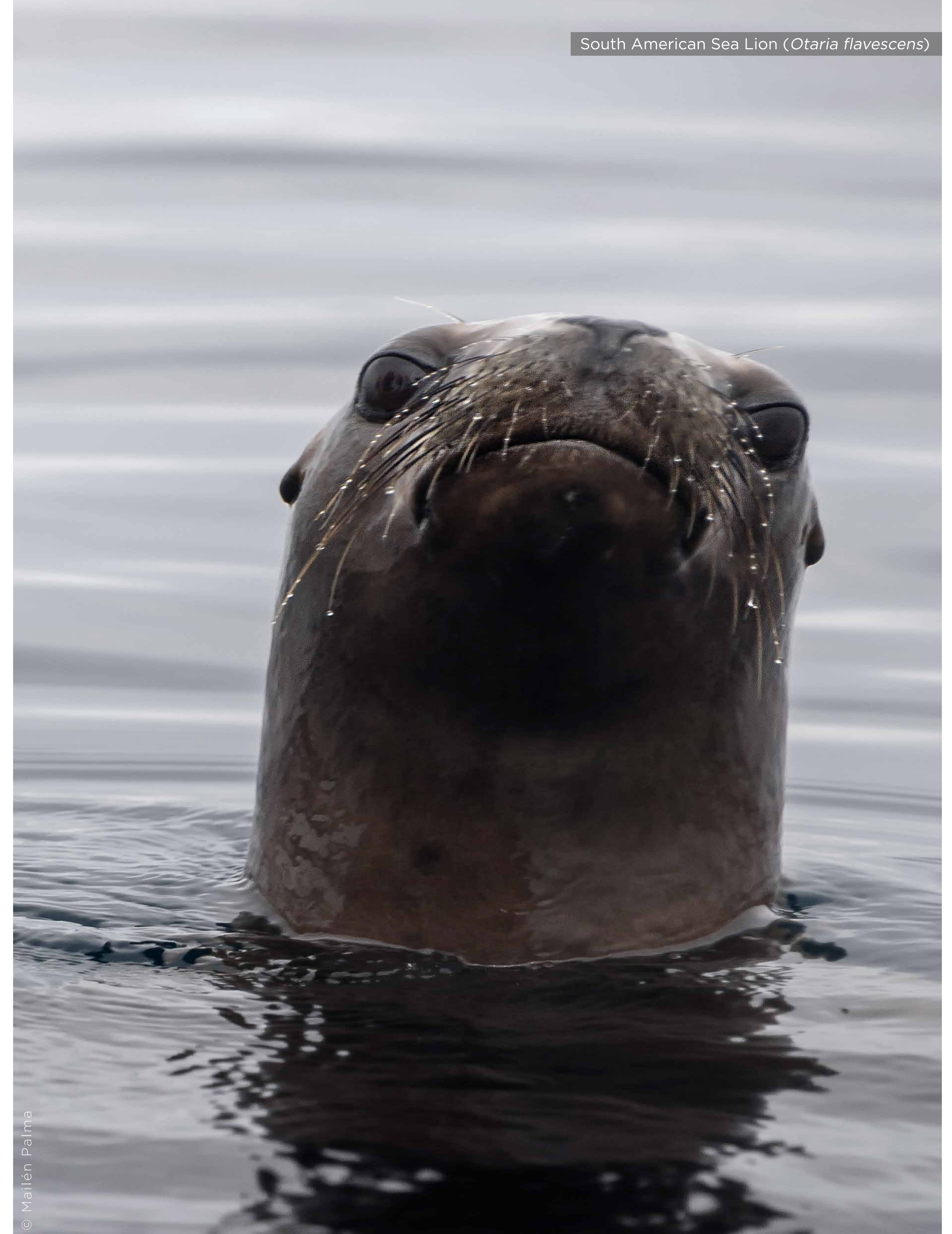
**Tell us something about the gears you use.**

I have a Canon 6d Mark II camera. I use my Tamron 28-300, F/3.5-6.3 lens - a robust, all-around lens. It has the common aberrations to its focal, but it is perfect for sea photography since it allows you to follow an animal that comes near and away in a split second without the need to swap lenses or carrying two cameras - which is another advantage being in a tight, crowded space such as a boat.

I also like to use a polarizing filter since I can play with reflections, transparencies, the curve of the water on the surface and the animals.

The lockdown and its introspective revolution encouraged me to go for a double-sized focal: it's on its way so once I've tested it, I will tell you all about it.

I'll have to make up some kind of structure in order to stabilize it on the boat - bear in mind that a boat is a surface that lies on top of water, so you have to account for the constantly moving base while using a long focal. It's not going to be easy, but I will have fun!



© Matlén Palma

















© Nelli Otero

THROUGH THE LENS

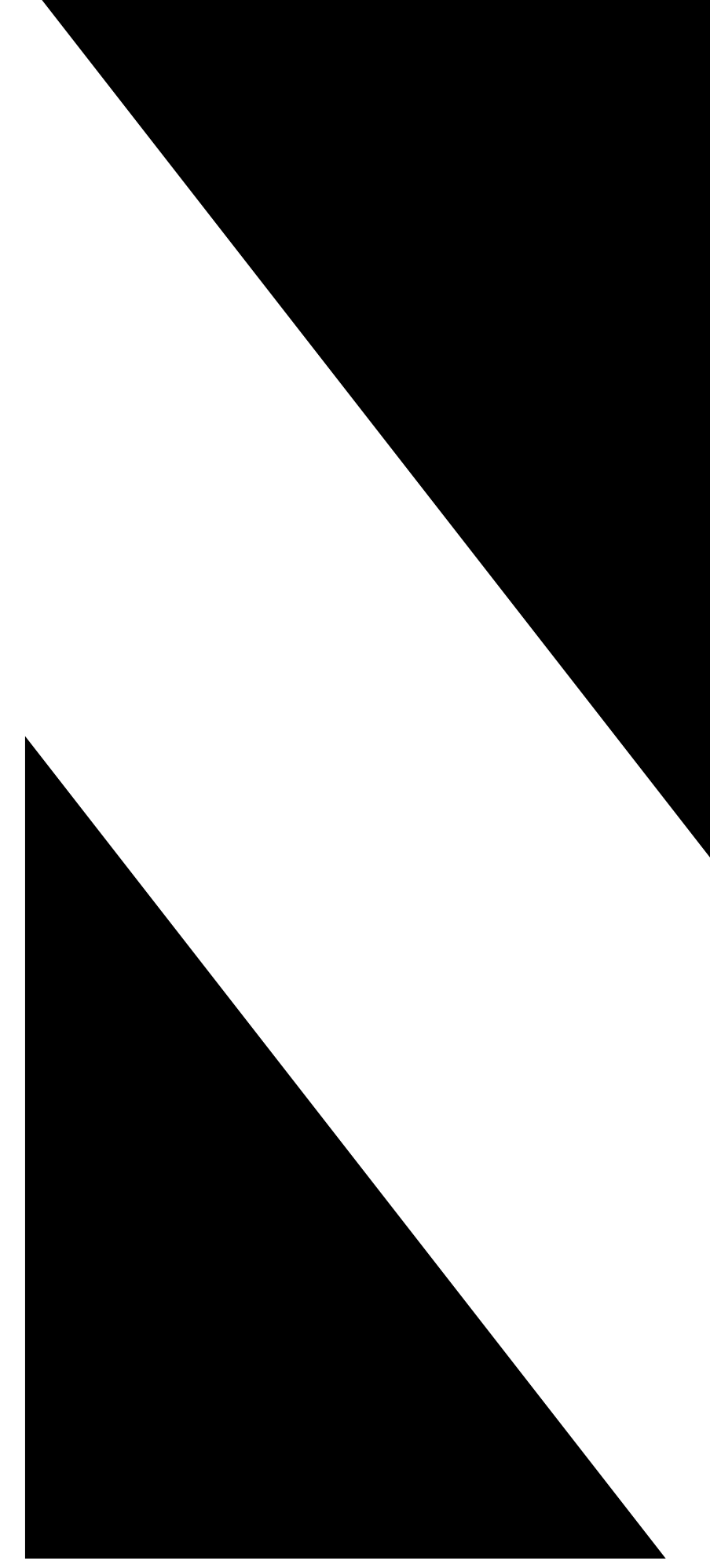
# BORN IN PANDEMIC: Elephant Seal

*(Mirounga leonina)*

By Nelli Otero

THROUGH THE LENS





**Nelli Otero, is an administrative employee and about three years ago she started in the wonderful world of nature and wildlife photography. She lives in the Province of Chubut in Patagonia Argentina, in a city with a little more than 100,000 inhabitants called Trelew.**

**She undertook several courses and workshops on nature photography and she participated in photographic exhibitions in different parts of the country. She is also Founder partner of AFONA (Argentine Association of Nature Photographers)**

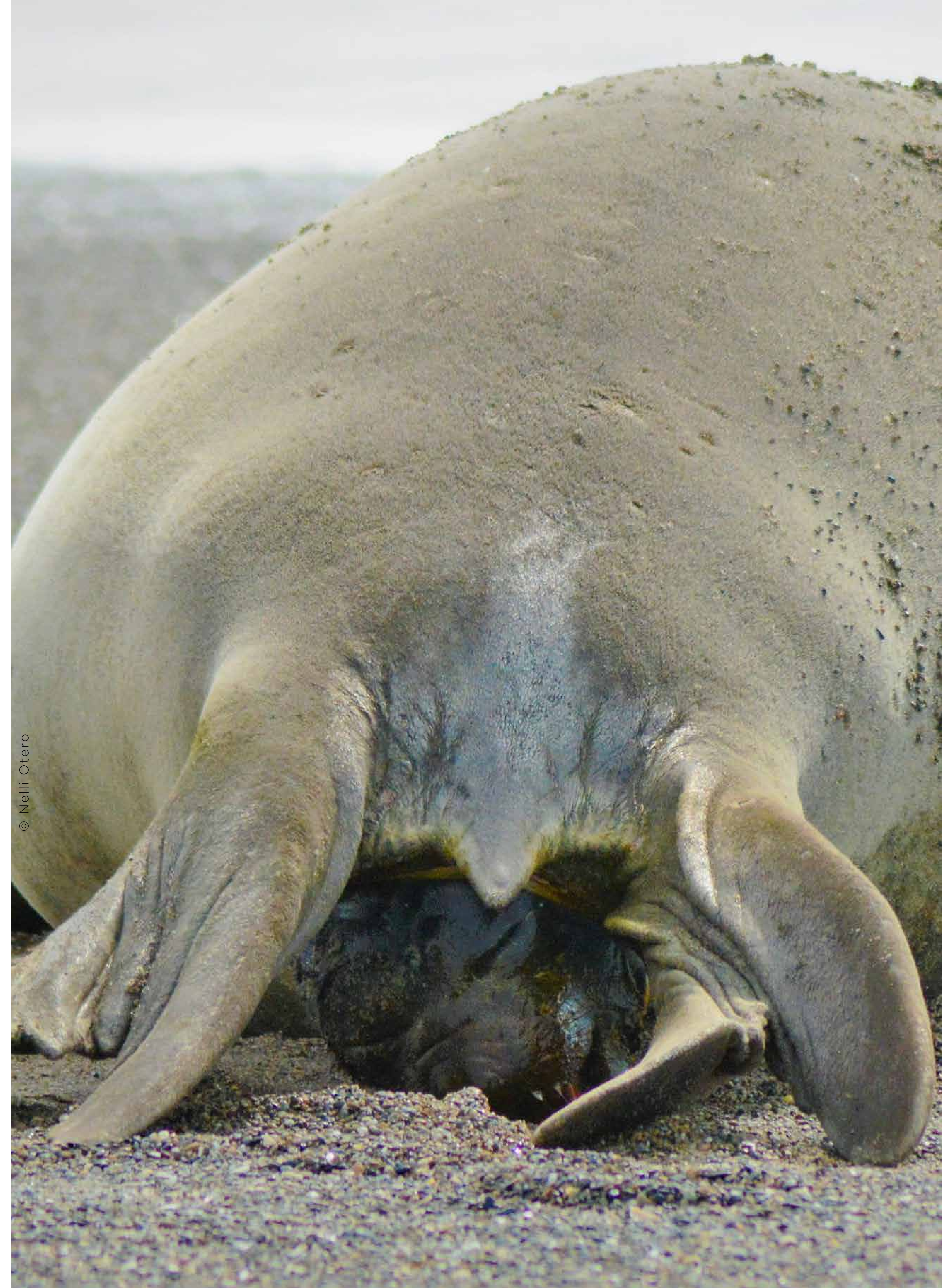
**[instagram.com/nelliotero\\_fotos/](https://www.instagram.com/nelliotero_fotos/)**

On September 21, 2020, we settled with some fellow photographers, in Isla Escondida, located about 80 km from Trelew Chubut Patagonia Argentina.

Southern Hemisphere's spring is the time of births and new mating of sea elephants in the area and being in a pandemic, and without being able to travel since all outings and therefore photography congresses planned in different parts of the country were suspended, the Island

was our only refuge and destination to shoot.

We woke before dawn and headed to the coast where one of the largest elephant harems is located. In the middle of the morning, I found myself in front of a group of females, I was struck by a female who would not stop moving, she was very restless, that was the moment that I realized that she was about to give birth.



© Nelli Otero











It was at that moment that she lifted her tail and I saw to my amazement and surprise that her baby's head poked out.

I did not know whether I should begin photographing. I took my camera and started to shoot, to share and spread the wonder of nature, a new life in the middle of the pandemic.

#### **ABOUT THE SPECIES:**

The Southern Elephant Seal is the largest of the seals, with males weighing around 3.5 tonnes and up to 5.5 meters long, while the females are smaller, 900 kg and less than 3 meters long.

Elephant seals breed mainly on the subantarctic islands and in the Valdes Peninsula and adjacent coastal sectors of the Chubut province, which is the only continental breeding area outside of Antarctica and one of the largest.

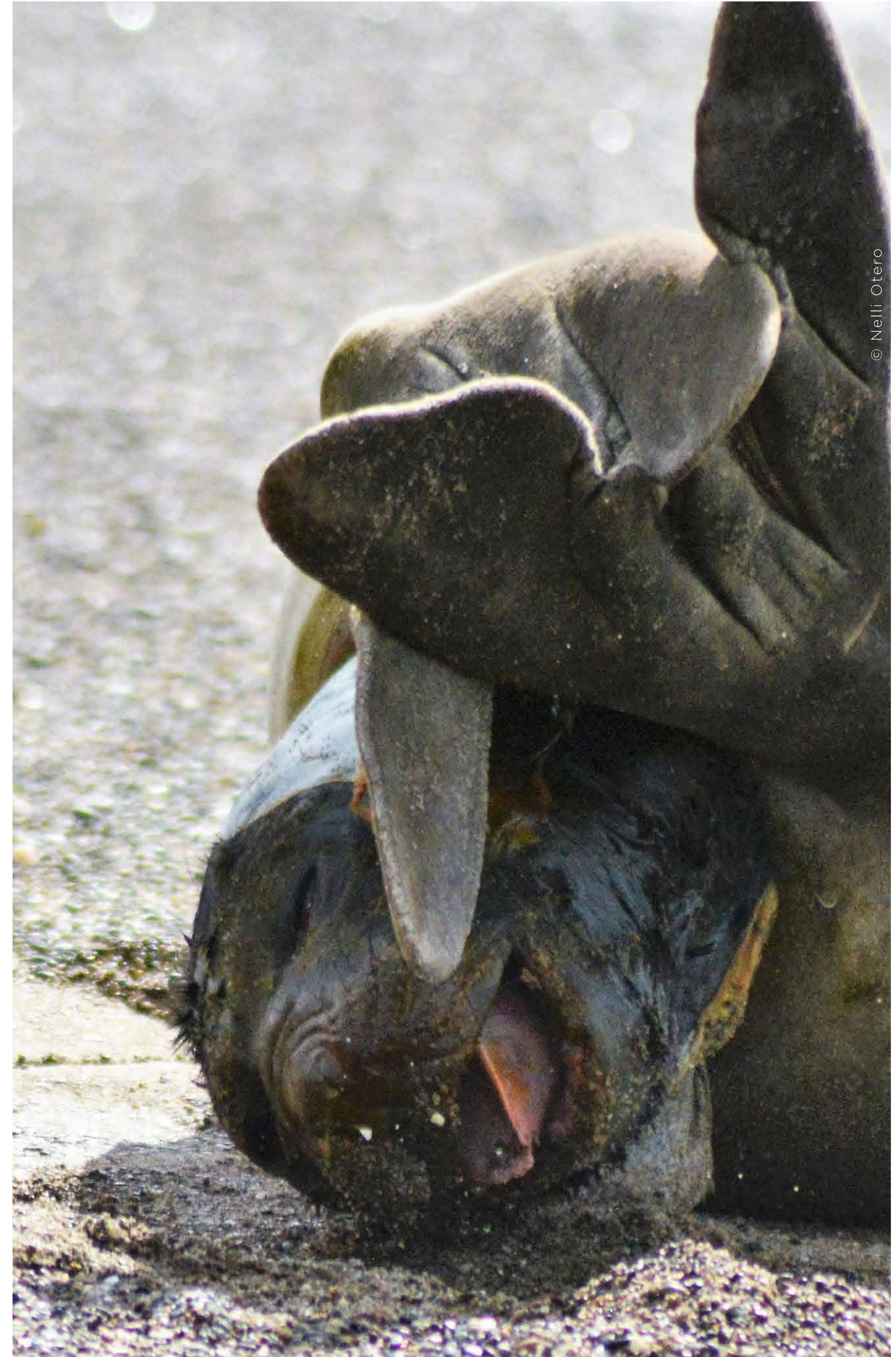
Elephant Seals are the largest of the pinnipedios. Its body is plump and obese, the head is robust, with large eyes and it has relatively short pectoral fins. It presents a marked sexual dimorphism. The adult male can be up to five times heavier than the female and has a remarkable proboscis, which is an enlargement of the nasal passages and is fully developed at eight years of age, when the male begins to compete for the females. In a relaxed position, the trunk is hanging in front of the muzzle, but during a fight it is inflated by the action of the exhaled air and by muscular movements, acting as a resonance chamber for the sounds produced in the mouth. The coloration in both sexes is quite variable,

both between individuals and in the same specimen during the year; in general, it ranges from bright gray to brown, somewhat lighter on the belly. The skin on the chest and neck of the adult male is very thickened and cracked and presents a large number of scars as a result of territorial fights with other males. When the puppy is born it is black, but after the first molt, at three or four weeks of age, it turns silvery gray with an exceptionally light belly.

#### **Habitat:**

Circumpolar cold seas. During the breeding and molting season, it lives on sandy or gravel beaches, avoiding rough coasts exposed to the waves.

**Customs:** Throughout the year it alternates short periods on land, for reproduction and molting, with others for feeding in the water, spending approximately 75% of the year sailing in the open sea. At the end of the reproductive season, in early summer and after a long fast, the adults return to the sea to feed. In late summer or early fall they return to the beaches to shed their fur. Non-reproductive specimens molt in late spring. During this period, they are always on land, fasting and at the end they return to the sea. On land it moves slowly and somewhat clumsily by undulations of the trunk. In the water, on the other hand, it moves with agility. He is an excellent diver, with dives that last on average between 20 and 30 minutes and can reach 800 meters in depth, although dives of more than 1,200 meters that exceeded two hours in duration have been recorded. It feeds mainly on squid















and octopus and to a lesser extent on fish and crustaceans.

**Reproduction:** The males arrive on the coast approximately from August and during the entire reproductive season, which lasts for about 90 days, they remain fasting, losing more than 12 kg of weight per day. In order to establish a dominance hierarchy within the colony, adult males compete with each other aggressively; they face upright, snapping at the neck and head, emitting powerful roars that can be heard hundreds of meters away. Harems vary in size from a few dozen to several hundred females, with only one male or a few dominant males controlling the harem and succeeding in copulating. The females arrive on the beaches between September and October; on the fifth day of arrival, they give birth to a calf conceived in the previous season after a gestation of almost a year.

The cub at birth is 1.30 m tall and weighs 40 kg and is suckled for about 23 days. From the moment she arrives at the beach and during the lactation period, the female is fasting and loses nine kg per day. Mother's milk is very rich in fat and during lactation the puppy gains five kg per day. After weaning, the females are fertilized and after a few days they leave the beaches. The cubs spend a period of fasting on land for one to three months and then go out to sea in search of their first solid food. Females reach sexual maturity at four years and males at 6 years, but these rarely reproduce before 10 years of age. The maximum longevity is 15 years for the male and 20 years for the female.













TRAVELOGUE

# The playful Sea Lions of Baja California

By Gustavo Costa

TRAVELOGUE





**Gustavo is a professional photographer and scuba diving instructor. Born in Argentina, he moved to the Yucatan Peninsula, Mexico, 15 years ago. His objective is to create evocative images that capture the public's interest in the natural aspects of the planet and thus raise awareness of the importance of its conservation.**

**[gustavocostaphotography.com/](http://gustavocostaphotography.com/)  
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Since I started underwater photography several years ago, I have sought to make images of sea lions in the Baja California peninsula. Somehow, I felt that taking pictures of such curious and playful beings would be an incredible and challenging experience. Fortunately, and despite the very special circumstances that we are experiencing, I had the opportunity to travel to that beautiful corner of Mexico and enjoy spending great moments in the company of these marine mammals.

The California sea lion (*Zalophus californianus*) is undoubtedly one of the most emblematic species of the Baja California Peninsula. Sea lions are pinnipeds, this means that they are carnivorous mammals adapted to living in water, with an elongated body and short fin-shaped limbs. In addition, they belong to the Otariidae family, that is, they have small visible ears and are able to walk with their limbs. This is the main difference from the seal family.



© Gustavo Costa













The sexual dimorphism is notorious, since the males weigh between 300 and 380 kg and reach about 2.4 meters in length, while the females barely reach 80 to 120 kg and between 1.8 and 2 meters. Adult males have a pronounced sagittal crest. It has a hydrodynamic body, with a layer of fat under the skin, to provide warmth and buoyancy. The mantle is chocolate brown. Its large eyes help compensate for low light levels in the underwater environment, while its whiskers increase its sense of touch. Their nostrils close automatically once they touch the water. Their long front fins rotate outward for better movement on land, and propel them forward in the water, where they stay as long as possible.

It feeds on fish and mollusks. They are very sociable and can be found in large groups, on cliffs and coasts. Males are territorial and have harems of about fifteen females each. They usually mate between May and June and the females have one pup that is born in land or water at 12 months of gestation. The males emit great sounds to mark the territory, resulting in their name.

Being underwater with these creatures is an experience that takes you back to childhood and leaves your heart full of joy. These guys play with starfishes, nibble on your camera or regulator hoses, roll past you at supersonic speed, or stop inches from your face and look at you as if to say “are you going to play with us?” Before you know it, your dive time is up, and you cannot wait to get back in the water with them.

Having done many dives in the company of these friendly beings, I have had the

opportunity to learn various lessons and tips to achieve the desired photo.

- High speed. Because of sea lion's fast and rapid movements underwater, a fast shutter speed is required. When you shoot with strobes, you will set the speed at the maximum synchronize speed possible, typically around 1/250th of a second. If you shoot in ambient light, you can bump the speed up.

- Aperture. Closing down the aperture with these quick moving subjects will help keep them in focus. A Good starting point can be f.8 and will close it down if required; this in turn means some sacrifice with having to shoot a higher ISO. Sea lions usually play near the surface. Most days are bright and sunny here in Baja California, which gives you plenty of ambient light to work with. And if the sea lions are closer than around 2 meters, adding some low amounts of artificial light helps bring out the detail in their fur and more of their color. It also helps freeze their motion for the image. While conditions are normally excellent during the summer months, there is always potential for backscatter, so keeping your strobes out helps minimize this.

If you decide to go only with ambient light, unless you are going for silhouettes, you typically want the sun at your back. You can hit the focus and freeze the action perfectly on your speedy sea lion, but if the sun is behind your subject, you'll get a dark blob, and your photo won't have the connection that makes it really pop. As you will typically be on the Surface, or close to it when shooting ambient light, it can often work to shoot straight at the subject or even at a downwards angle, as that will give the











nicest lighting.

Overall, this means I'm typically trying to shoot around 1/320 sec, f/8, ISO 400. Keep in mind this does change with ambient light conditions, but it's a good starting point. If the water is clear and there's bright sunlight, then I may be able to turn down my ISO to 200 and bump up my f-stop while still getting a nice bright blue background.

- Visualize the shot beforehand. Adjust all your settings for that scenario, and then doggedly pursue it without being distracted by too many other things. (The exception to this is if you see really cool behaviors like a sea lion playing with a starfish. In such a case, drop everything and go for it!)

What I would recommend is that you create a shot list of the sea lion photos you want. Once you're in the water, observe the sea lions and figure out what shot on your list is the best to try based on how they are behaving.

Get all your settings dialed in for your chosen shot, and then stick with it! Sea lions are really distracting. You may see them playing and having fun with each other, so you decide you want to do a sea lion interaction shot. So, you get all set up, maybe you pre-focus 3 ft away and put your strobes out... and then a sea lion comes up to your dome port and nibbles on it, then swims away. Well, missed opportunity. But stick to your plan. Keep the set-up for an interaction shot and keep looking for it. Because as soon as you adjust for that close-up nibbling shot, then you'll see the interaction you were looking for... and you'll miss it because you're not set up for it.

To finish with, let me give you this piece of advice. With a curious and playful nature, sea lions are always more than happy to be in front of the camera. Juvenile sea lions are like big puppy dogs of the ocean and will lose interest quickly if you don't interact with them. So, remember to take in the moment, interact with them, spin when they spin, let them play, and fire off some snaps within those moments. You can make a friend for the whole dive.



© Gustavo Costa















The male Bar-tailed Godwit (*Limosa lapponica*), known as BBRW set a new world's flight record on 27 September 2020.

This male godwit BBRW had taken off from the coast of southwest Alaska over nine days earlier. Now, 12,000 km later, his feet were to touch land again for the first time since departure. It is a feat of endurance and stamina that until recently many biologists considered to be physically impossible. Yet this bird was just the latest to contradict that view.

BBRW had been one of 20 adult godwits fitted with satellite tags at Pukorokoro Miranda Shorebird Center, New Zealand, in November 2019. From March 2020 the birds were tracked northwards to Alaska via refueling stopover sites around the Yellow Sea. By August only ten of the tags were still operating.

Four of these birds including BBRW departed from the Kuskokwim Shoals in southwest Alaska on 18 September.

These departures took place over a five-hour period presumably in four separate flocks. South of the Aleutians they had to battle head winds, before strong easterly winds began pushing the birds westward of the direct path to New Zealand. At times, the paths



©Tony Habraken

## Record Setting Pacific Ocean Flight of Bar-tailed Godwit

By Keith Woodley

of the four birds with transmitters were over 500 km apart.

Their course showed them headed for New Caledonia, where two other tracked birds had stopped earlier. Yet three of the godwits then changed track and headed straight for New Zealand. At times BBRW was rocketing along with a 40-45 km/h tail wind, and groundspeed of 80-90 km/h. When he landed at Pukorokoro at around 2130 on 27 September, he had travelled at least 12,050 km in nine days and seven hours. This broke the 11,680 km record of E7, the famous female godwit whose flight from Alaska in 2007 had finally proved what some people had suspected: that a nonstop flight bridging the length of the Pacific was possible.

Tiny cardio-vascular systems burning brown fat are the engines for these mammoth journeys. To store sufficient fuel, birds need to double their weight before departure. Prior to migration flights they undergo physiological and biochemical changes within their bodies: expanding the digestive system to full capacity, developing more red blood cells to carry lipids to where they are needed to build tissue, and shrinking non-essential organs immediately before departure. The essential factor making all this possible is abundant food, and healthy intertidal flats where that food is found.

In their annual cycle, bar-tailed godwits link widely separated locations. Tidal flats in New Zealand and Australia are where they moult and prepare for northward migration; similar habitats in the Yellow Sea region are where they refuel during migration, enabling them to arrive on their Arctic breeding grounds in good condition for breeding; and the super-rich mudflats of the Kuskokwim Shoals is where they find the quantities of fuel needed for that trans-Pacific journey.

In 2005 researchers at the USGS Alaska Science Centre began a program to deploy satellite transmitters in godwits. This finally bore fruit with the epic journey of E7 in 2007. This latest tracking project involved a team of researchers as widely dispersed as the tidal flats the birds depend on, including the Global Flyway Network based in the Netherlands, Massey University in New Zealand, Max Planck Institute in Germany, Birds Canada, Fudan University, China, and Pukorokoro Miranda Naturalists' Trust.

Keith Woodley is the managing director of New Zealand's Pukorokoro Miranda Shorebird Center.

[www.miranda-shorebird.org.nz](http://www.miranda-shorebird.org.nz)



# SNIPPET





# Australian Printmaker By Kate Gorringe-Smith



WILD ARTS SHOWCASE

2011, Memories of Flight iii, linocut, 30 x 76 cm. Photo credit: Christopher Sanders.





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**Kate is an Australian print maker based in Melbourne where she studied print making at the Royal Melbourne Institute of Technology. Kate worked as an editor at Bird Life Australia where she developed a passion for shorebirds.**

**She has organized three projects involving a number of printmakers working on shorebird art that is displayed to raise awareness and money for shorebird conservation in Australia.**

**[facebook.com/harold.bolitho](https://facebook.com/harold.bolitho)**

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### **Printmaking**

Artists either love printmaking or hate it. Artists either love printmaking or hate it. As a medium, it is a group of techniques characterised by making your image on a substrate – e.g. wood, metal,

a silk screen, lino or stone – and using ink to transfer that image onto paper. It requires patience, technical knowledge, specialised equipment and time.

Printmaking is like this because its



2015, Setting out iii, linocut with woodblock, 76 x 56 cm. Photo credit: Kate Gorringe-Smith.





2013, The Fossil Memory of the Sky, monoprinted linocut and woodblock print, 56 x 76 cm. Photo credit: Christopher Sanders.



history lies in industry and the transfer of knowledge. Every 'classic' printmaking technique was originally used to spread information as widely as possible, whether via image or word. Printmaking was the original internet! Explorers travelled with artists who created images of the lands they visited, sent them back to engravers who transferred them to wood or metal. The images were then mass printed as pamphlets for people to discard or collect. Etchings (metal), silk screens, woodblocks or engravings, lithographs (stone) - their original purpose was to disseminate information. Their creation was always an art, and so eventually they too passed into the realm of art.

I fell for printmaking in my final year of school. I went to school with the daughters of the great Australian artist Fred Williams. When he sadly passed away too young, his widow donated his beautiful printmaking press to our school. I was taught etching using Fred Williams' press! I was hooked. After school I got a BA in English and Zoology, but kept doing short printmaking courses until I finally committed and did another BA, a decade later, in printmaking at RMIT. In my degree my preferred medium was copper etching, but these days I mainly make linocuts as the technique is simpler, requires less equipment, and has more consistent results.

### Influences

The artists John Wolseley, Hertha Kluge-Pott and India Flint have all been major influences..

British-born John Wolseley is one of

Australia's greatest living artists. My mother introduced me to his work when I was young and she was doing a BA through Deakin University as a mature-aged student. John Wolseley co-wrote one of her Visual Art textbooks. His work is that of an artist-naturalist. After fires he will go through the bush with paper to rub against the charcoaled trunks of trees to capture their impressions - literally. He has released sheets of paper to the wind in certain places, and returned weeks, months or years later to retrieve them and see what marks nature has wrought on them. His energy to capture his environment on paper, to learn from it, be in it and to observe and record it in both the broadest and most detailed ways has always inspired me, and I never tire of marvelling at his work. He melds the eye of the artist and scientist in the most luminous way.

Hertha is a legendary printmaker who came to Australia from Germany in 1958. Her work is also very influenced by the Australian environment whose wildness and openness caught her attention soon after she immigrated. I was lucky enough to have her briefly as a tutor at RMIT, and her passion for printmaking as a medium and her integrity as an artist was memorable. Like Wolseley, Hertha is based in Victoria. Her work has a fierce energy.

Lastly, India Flint is another acclaimed Australian artist who does not work in a traditional medium. She is a pioneer of the art of eco-printing/eco-dying. This is when you bundle fabric or paper (Flint mostly works with fabric) with natural vegetation and steam, simmer or boil the bundles in order to coax colour and



©Kate Gorringe-Smith

2012, An Instinct for Mapping, etching with chine collé, 15 x 15 cm. Photo credit: Christopher Sanders.



©Kate Gorringe-Smith



2015, New Constellations, hand-coloured linocut, 56 x 76 cm. Photo credit: Craig Wilson.



impression from the plant material to the fabric or paper. She has especially honed her ability to coax colour from eucalypt leaves and produces amazing designs patterned with the deep reds that they produce. In my most recent work I have printed linocuts over eco-printed paper. So these linocuts, of birds and other animals, are printed over eco-prints made from plant material gathered from the animals' environment.

### Why shorebirds?

In 2009 my family and I returned home to Melbourne after three years in London. Our return was spurred by my father's death; my mother needed me at home. We all had trouble reconnecting with our old lives. My parents migrated to Australia in 1966, the year I was born. My father came to join the RAAF having flown as a navigator for the RAF during and after WW2. Without my father, it was suddenly clear that it was not so much Australia that was Mum's home, as my father himself. Without him to anchor her, her heartland reverted to England.

I began to use migratory shorebirds in my work for my first solo show in 2010, in particular the Bar-tailed Godwit. These birds travel annually from Australia, where they avoid the harsh northern winter, to Siberia, where they breed. Ever restless, they never settle – neither destination is their true home. Our brief period overseas, coupled with my bereaved mother's stories, gave me an insight into the tragic and hopeful world of migration and resettlement. The birds provided the perfect metaphor.

As well as embodying this deep sadness, shorebirds also carry the hope of overcoming amazing odds as they travel annually across the globe, traversing seas and continents. These tiny birds can fly for eight days straight without stopping to rest or eat; they can navigate an entire ocean without any landmarks; they can fly in their lifetime further than from the earth to the moon, and they link the 23 countries of the East Asian Australasian Flyway with their journeys.

Since my first shorebird and migration inspired solo exhibition in 2010, I have continued to work with migratory shorebirds as my major theme. I am driven both by them – they fascinate me and I find them endlessly beautiful – and for them, as they are our least known and most endangered group of birds. My interest is aided by the fact that I worked for six years in the 1990s for BirdLife Australia as a scientific editor, so have access to the Australian network of shorebird scientists and experts, many of whom I either had met or knew of from working at BirdLife. Like most passionate experts, they are more than happy to share their knowledge.

### Group Projects

Through my art I try to engage people with migratory shorebirds. I have a dream that, like whales, one day they will enter the lexicon of our general knowledge. And, like whales, this will ultimately prevent their extinction. Migratory shorebirds fly in their lifetime further from the earth to the moon! And some of them weigh only 28 grams – no more than a box of matches! People need to know about them! So since 2013 I have created



©Kate Gorringe-Smith

2014, Journey, woodblock stencilled monoprint, 76 x 56 cm. Photo credit: Christopher Sanders.





©Kate Gorrage-Smith  
2018, Tidal Fugue, linocut on eco-printed paper, 60 x 90 cm. Photo credit: Andrej Kocis

three group art projects about migratory shorebirds: *The Flyway Print Exchange*; *From a Home to a Home: a Story of Migration*; and my ongoing project, *The Overwintering Project: Mapping Sanctuary*.

“*The Flyway Print Exchange*” involved 20 artists from nine Flyway countries who I invited to make an original print inspired by the idea of the Flyway – the route the birds fly annually from Australia to their arctic breeding grounds and back. Because prints are reproducible, each artist made what is called an edition of 30 prints (so the same image printed 30 times, each identical). Each artist received a set of the prints with sets left over to sell and exhibit. Also, one of each print was posted up the Flyway and back from artist to artist, returning to me in Melbourne worn and torn, addressed and stamped. This set, the ‘Travelled’ prints, is exhibited alongside the pristine prints in order to embody the birds’ migratory journey. They bear the wear and tear of the birds’ plumage and have travelled the miles of their migrations, so have a silent story to tell alongside their pristine counterparts.

The second project, “*From a Home to a Home: a Story of Migration*,” was a single exhibition in Melbourne where I invited artists with migrant and refugee backgrounds to create a work inspired by migratory shorebirds. It was a mixed media exhibition with a rich variety of works.

My third and ongoing project, “*The Overwintering Project*,” has been going since 2017. It invites Australian and New

Zealand printmakers to create a print in response to their local migratory shorebird habitat, and send me two of those prints, one to sell and one to enter into the Overwintering Project Print Portfolio for exhibition. In addition, artists can hold their own exhibitions themed around their local habitat; there is no obligation for them to send me a work or donation, and works can be in any media. So far there have been over 20 exhibitions Australia-wide; artists have donated over 300 prints to the project and we have raised \$23,000 so BirdLife Australia’s migratory shorebird research and conservation projects.

#### **Printmakers**

Just like the people at BirdLife, printmakers are a wonderfully generous community. I have met printmakers from all around Australia through my role as Vice President of the Print Council of Australia, a 50+ year-old organization created to foster printmaking in Australia. And, like the migratory shorebirds of the art world, prints are a poorly understood and not very visible medium! And, like shorebirds, printmaking is under threat.

Department after department of tertiary printmaking studies is being closed in institutions across Australia. Just this year Griffith University in Queensland announced its intentions to close its printmaking department – which is the last tertiary course available in the state. There has been such an outcry from the Arts community that I believe this decision is under review, but it is a common threat today. So the other face of the Overwintering Project is to promote Australian printmaking.





Far Eastern Curlew (*Numenius madagascariensis*)



**The Overwintering Project: Western Port.**

The next *Overwintering Project* exhibition focuses on Western Port, in Victoria, Australia, a globally significant, unique environment.

This is recognised through the heritage and custodianship of its traditional owners, the Mayone buluk and Yallock balug clans of the Bun Wurrung people and the Bulug willam clan of the Woi Wurrung, and its national and international ecological significance as a Ramsar site (or wetland of international importance), a Key Biodiversity Area and a UNESCO Biosphere.

Western Port has numerous overwintering sites for migratory shorebirds and is one of the most important areas for migratory waders (i.e. shorebirds) in south-east Australia.'

From March 6 to May 23, the Mornington Peninsula Regional Gallery will feature works in a variety of media created by a group of curated artists in response to the Western Port environment programs and alongside the Overwintering Project Print Portfolio.

All welcome!



©Kate Gorringer-Smith

2015, *New Constellations*, hand-coloured linocut, 56 x 76 cm. Photo credit: Craig Wilson.





YOUR GALLERY



Kambiz Cameo Pourghanad

Lion (*Panthera leo*)





VINU MATHEW

## YOUR GALLERY



Vinu Mathew

Black Leopard (*Panthera pardus*)





YOUR GALLERY



Mahesh Sivadas

Cheetah (*Acinonyx jubatus*)





YOUR GALLERY



Nithya Purushothaman

Rose-ringed Parakeet (*Psittacula krameri*)





YOUR GALLERY



Brahmanand Kori

Leopard (*Panthera pardus*)





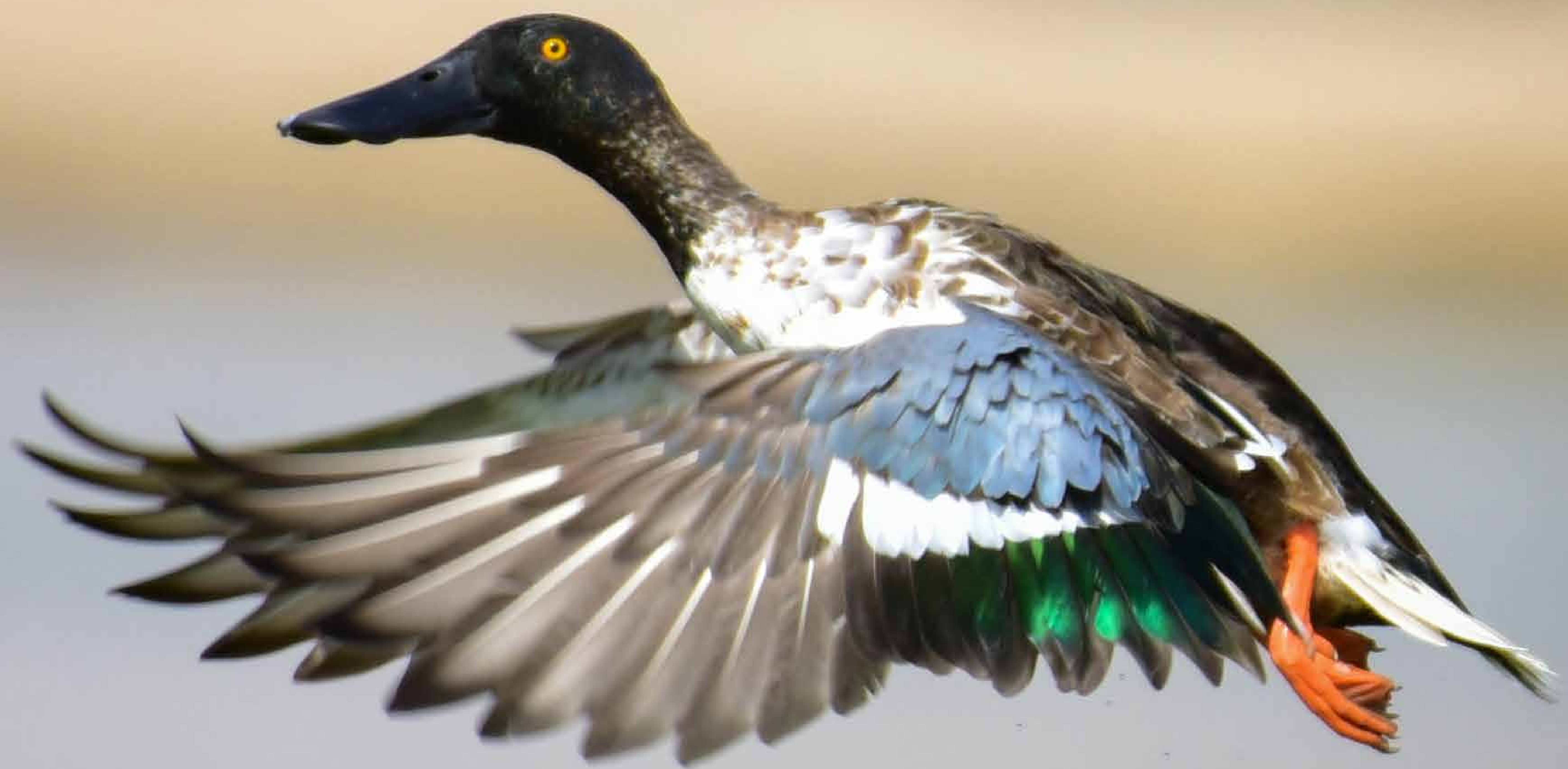
YOUR GALLERY

Murad Habib

Lesser Flamingo (*Phoeniconaias minor*) and Wildebeest (*Connochaetes*)







YOUR GALLERY

Muhammed Thabreez

Northern Shoveler (*Spatula clypeata*)







YOUR GALLERY



Ritika

African Elephant (*Loxodonta*)





YOUR GALLERY



Sneha Kumari

Little Owl (*Athene noctua*)





YOUR GALLERY



Mohammed Aslam Sultan

Leopard (*Panthera pardus*)





YOUR GALLERY



Shruti Kori

Serval (*Leptailurus serval*)





YOUR GALLERY



Goutham Ganesh Sivanandam

Bighorn Sheep (*Ovis canadensis*)





YOUR GALLERY



EXPLORERS

Arun Raj

Orb-weaver Spider (*Araneidae*)



# PR

EXPLORERS

UPCOMING  
FEATURES



## INTO THE WILD

With Jeffrey Wu



## WILD TENDER MOMENTS

By HERMIS HARIDAS



## ELIZBETH

## THE QUEEN OF QUDRA

By Kambiz Cameo Pourghanad