WE LOVE OTTERS!

NICOLE DUPLAIX AND MARGHERITA BANDINI









Published by

IUCN-Species Survival Commission's Otter Specialist Group, Santa Fe. NM. USA

Copyright

© 2016 IUCN-Species Survival Commission's Otter Specialist Group

Reproduction of this publication for educational or other non-commercial uses is authorized without prior written permission from the copyright holder provided the source is fully acknowledged.

Reproduction of this publication for resale or other commercial purposes is prohibited without the prior written permission from the copyright holder.

Citation

Duplaix, N. and M. Bandini (2016) We Love Otters. Version 1.0. IUCN-SSC Otter Specialist Group, Four Corners Institute, Santa Fe, NM, USA. 78 pages

ISBN

978-0-692-69951-5 (e-book) 978-0-692-69950-8 (paperback)

Cover photos

© Mark Bridge (front cover)
© Nicole Duplaix (back cover)

Available online from

IUCN-SSC Otter Specialist Group Four Corners Institute Santa Fe USA www.iucnosg.org

All photographs used in this publication remain the property of the original copyright holder. Photographs must not be reproduced or used in other contexts without written permission from the copyright holder.

The views expressed in this publication do not necessarily reflect those of IUCN or the Species Survival Commission.

Thank you to our sponsors on Kickstarter who provided initial financial support and to the contributing members of the Otter Specialist Group

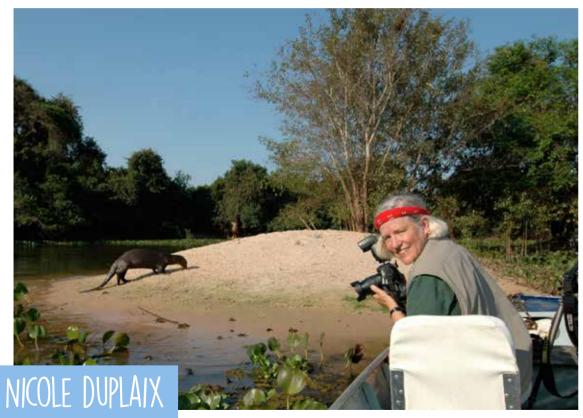


TABLE OF CONTENTS

Nicole Duplaix	4
WHY OTTERS	
James Williams	8
Eurasian Otter	70
David Webb	12
Jordi Ruiz Olmo	72
Lesley Wright	16
Asian Small-clawed Otter	18
Katrina Fernandez	20
Meryl Theng	27
Smooth-coated Otter	22
Omar F.Al-Sheikhly	24
Atul Sinai Borker	25
Hairy-nosed Otter	20
Padma de Silva	28
North American River Otter	30
Thomas L. Serfass	32
Megan Isadore	33
Sea Otter	34
Angela Doroff	36
Giant Otter	38

Jessica Groenendijk	40
Neotropical River Otter	42
Oldemar Carvalho-Junior	44
Marcelo Rheingantz	
Victor Manuel Santiago Plata	
Marine Otter	48
Juan Valqui	50
Southern River Otter	52
Alqjandro Valenzuela	54
African Clawless Otter	56
Rowan Jordaan	58
Congo Clawless Otter	60
Jo Thompson	62
Helene Jaques	63
Spotted-necked Otter	64
Jan Reed-Smith	66
WHO WE ARE	
WHAT WE DO	69
OTTER-FRIENDLY NGOs	72
Photo References	82
Acknowledaments	83





CHAIR, OTTER SPECIALIST GROUP

Otters are very special. I dare you to look at a group of otters for more than ten minutes and not be captivated, usually for life. What is it about them? They are actually fierce predators and fighters when need be, nothing cuddly about them. Yet a short-clawed offer will play with a pebble for hours, tossing it from hand to hand without a glance. North American otters gallop and slide in the snow, chasing one another they don't look like predators then. As a professional biologist, I was told that I must not attribute human emotions to the animals I observe, but after 40 years I am still tempted, because otters are so expressive, so vocal, and so clear about their intentions and feelings.

Otters have given me great pleasure over the years, both in the wild and in captivity, and I still feel privileged and content every time I am with them. I remember when I saw my first wild giant otter in Suriname in 1976. One otter surfaced right next to my canoe and snorted in alarm, inches away. The other otters in the group came screaming to investigate, rushing through the water towards me from all directions. Worried, Limitated a coo sound that otters use to calm their cubs and suddenly the whole group was silent and attentive, all threat gone. They turned and swam away, looking back at me now and then. What a range of emotions on both sides! Otters are in trouble today everywhere they occur. They are losing their clean rivers. They are trapped and shot for their pelt. They are seen as competitors by fishermen. Yet, when given the chance and protected, they do recover and return to former haunts. Today, otters are seen in bustling cities with clean water, like Singapore, where people are delighted to welcome them back again. The work of our Otter Specialist Group is focused on giving offers a second chance everywhere, and maybe this time it will be for good.



GIANT OTTER CUBS

WHY OTTERS



MARGHERITA BANDINI

EURASIAN OTTER, PORTUGAL

I knew nothing about otters until I looked for a project for my Masters thesis. Suddenly, I found myself in Portugal working with a group of radio-collared otters that I never saw. And slowly, I came to love and admire these animals that I had never set eyes on.

Every night I would look for their signal and hear the familiar beeping in ponds and along rivers that were in their territory. And sometimes, I wouldn't. Then I knew it would be a long night, travelling in ever increasing circles around their home range, one hand on the wheel and one holding the radio antenna leaning on the side view mirror, a dull aching in my wrist. The car would creep along quiet country roads, past sleeping farmers' houses; headlights shining on foxes, hares and once, a genet. I'd find them in new ponds. In new rivers. Most times I'd leave the car, sometimes rushing blindly through thickets and meadows

after a signal that galloped across meadows to reach the next stream.

Then one evening, after having found one of our females. I was packing up all the gear and putting it in the trunk of the car when a movement caught my eye. Something was bounding along an irrigation canal towards the dam I had parked next to. Towards me. I looked in the darkening twilight, and thought it was a dog. Two - no wait, three dogs. But they were different somehow...genets? Too big. A heartbeat later, I knew they were otters. And when they crossed the road, less than five meters from me, standing there with my camera filming the whole thing, I saw that there were four offers: Zelda, our collared female, and her three adult cubs.

After that the sightings, especially of Zelda and her offspring, became more frequent. That first time, however, was simply magic.

When the year of research was over, I had changed. I was an Ethologist, I was a researcher and, more importantly, I was an Otter Conservationist. Nothing had prepared me for the surprise when I realised that I didn't need to go to Africa or South America to come across such a fascinating and understudied animal. That is the beauty of the otter - anyone and everyone can find an association that works with offers, an animal that is so important for every wetland and so many coastal habitats, in their own countries. And otters, everywhere, need our help - by spreading the word we can create more awareness and therefore more interest and protection. Just walk out to the nearest river and start looking. Except for those that live in Australia. They have platypuses, and that's more than enough.



A captive Eurasian otter







1939-2014, EURASIAN OTTER, UK

It takes dedication to study a species that you never see. This nomadic creature comes mysteriously through my garden at night and it doesn't give two-pence about us, it is just going through the river as it has done for hundreds of years. Our presence is nothing to the otter, but the otter's presence is everything to me.

Otters live right on the cusp of what it is possible for them to live. If the otters go it means the streams are in a mess, it means the fish are in a mess, it means the dragonflies are in a mess, it means that the kingfisher that

just came past us now won't come past again.

Otters are actually rather lean mean weasels, they are not cuddly very much, but they are self reliant, they own their own territory, they are capable, they are much better at being otters than rabbits are at being rabbits, any fool can be a guinea pig or a fox. But it takes an expert to be an otter: a self reliant, advanced animal, in control of their environment, learning its skills, looking after its young for a year. They are just the top predator, a very exceptional grade of animal.





EURASIAN OTTER



The Eurasian offer is an elusive, solitary offer that has one of the widest distributions of all palearctic mammals, from Ireland to China and down to Southeast Asia. Notwithstanding its large range, its population is declining in many countries in which it is not protected and in others its status is unknown. This species has made a spectacular comeback in the British Isles since the 1980s when pollution levels decreased and it became protected. This playful otter has a varied diet which includes fish, crustaceans, amphibians and sometimes reptiles, birds, eggs, insects and worms. It is usually nocturnal and can be found in many freshwater environments. In some environments, however, such as the Scottish Isles, it has diurnal habits and forages in the sea, later looking for freshwater pools to wash the salt out of its pelt. The Eurasian otter is solitary, but sometimes it is seen in family groups, composed of a mother and her offspring.

IUCN status: Near Threatened

alias: old world otter, river otter, European otter

predators: birds of prey, crocodiles,

threats: habitat loss, poaching, accidental trapping, pollution, roadkill

size: 102-138 cm (body 57-70 cm tail 35-40 cm)

weight: 4-11 kgs







EURASIAN OTTER, UK

I first got involved with otters (Lutra lutra) whilst at school. Through being bullied badly, if I could help it I never used to attend and instead I would visit our local river and woodlands. I soon saw what I thought was an oversized rat - on closer investigation I realised that it was in fact an otter. That was some 40 years ago and my passion for otters has remained as strong now as it was then.

I was intrigued as to its behaviour ... it was odd and it prompted me to find out more about this magical creature. I spent a few years watching the same otter and soon learnt how it behaved, almost to the point of being able to predict its movements to the minute. To me, otters are mystical, very clever and strong willed and I always knew I needed to do something to help them.

After eventually getting a Facebook group page going for otters it soon had over

1500 members. There was a strong interest in otters so I started to look at creating a website to provide information about them and hopefully encourage people to find out more about them. Although there were many groups out there and various offer organisations, there was something missing. That something was an advisory, educational feed that could not only raise awareness of otters but be able to help other groups financially. Otters need our help - they need our support and they need our protection. They are not out of the woods yet and are under threat from anglers & fishery owners that suffer predation. We, The UK Wild Otter Trust, are currently working with anglers and fishery owners to address these issues, something that has never been done by pro otter groups before and I am confident will make a massive difference to offer conservation of the future.



JORDI RUIZ—OLMO

EURASIAN OTTER, SPAIN

When I was a child, few people in Spain knew what an otter was. The first documentaries I saw about the otter (in "El Hombre y La Tierra" by Dr. Felix Rodriguez de la Fuente) produced in me a great fascination. An animal that lived perfectly both in water and on land, friendly, playful, that took care of its young with love, that could stand on two feet like us and that could hold things in its front paws made me think that it was the most human-like animal around. The closest animal to a friend, or myself.

Halfway between a plush toy (so cuddly!) and a mustachioed boy, I soon discovered that I was not the only one whose magic the otter had acted on – everyone was affected by this animal. When the series "Tarka the Otter" came out, no one missed a single episode. As the years went by and I learnt more about the otter, I discovered that not all was as I had imagined

and that this animal was even more interesting than I had thought. Not only that - the otter needed to be researched and helped.

Getting to know this animal brought on the realisation that it was about to become seriously endangered in most of Europe. In the middle of the 20th centry there was no river, lake or coastal area that didn't have an otter happily living on it; during the 70s and the 80s most of them had disappeared. This somehow attracted me even more to the plight of the otter, and I decided to dedicate my life to studying and trying to save them.

It comes without saying that we should not need a reason to save an animal that is in danger. However, otters are extremely useful for many things: they are very sensitive to pollution and a decrease of water quality; to the amount of prey in the environment; to the state of

riparian vegetation. Because of this, they are considered a very important bioindicator.

If otters can live and reproduce in an area, this means that the ecosystem in which they are is healthy. For this reason, we should all want an otter to choose to live near our house: if the rivers, lakes, fish, frogs, crayfish and air are good enough for an otter, they will be good enough for us.

Thousands of people working for and with the otter in Europe managed to turn things around. Water systems were cleaned, riparian vegetation and forests were re-established, prey animals started recolonising the improved environments and the otter slowly recovered, returning to areas it had been absent from for years.

There is nothing I prefer than to sit on the bank of a river during a dusky summer's evening and hope to see an otter. To see one you need a lot of patience

but it is definitely worth the wait. Watching an otter foraging, or carefully watching over her young, or playing with its family members aives me a sense of peace and fulfillment that watching no other animal could. Offers are coming back, slowly and with caution. Being such sensitive animals, there are still few and any change in the quality of their environment could bring disastrous effects. We need to be alert and careful because this species is not only important per se, it helps keep in check all those animals that it eats - fish, cravfish - and by association also the plants and acquatic vegetation in our rivers and lakes that keep the riverbanks strong and stable. Our houses, our towns and our countryside depend on the offer. Respecting and helping the offer should be everyone's priority. With offers around we are healthier, happier, and live in a more balanced environment.







ASIAN SMALL—CLAWED OTTERS, UK

The first time I met, really met an otter, she was a tame. ambassador animal handed to me casually with the words "Here you go." Otters will give you the best times of your life, and break your heart. As Belinda Otter confidently scrambled into her preferred shoulder riding position, I was struck by the fact that I was not handling an animal - I was meeting a person, albeit of a totally different order, with her own clear ideas and opinions. Nothing has ever changed that impression. Since then I have met other tame otters, zoo otters and even occasionally seen a wild offer, but always they are intensely, vividly alive and about their own business A 700 otter may courteously break off an important activity such as looking for worms to come over to greet a keeper, but there is a lot to do, and only so much

time available before sleep, so soon gets back to his or her own agenda. A wild otter may look up and notice you are there, but will not freeze with fear, instead rapidly calculate whether you are worth investigating, worth avoiding or just a bit of unimportant moving landscape.

Otters are so well-designed for their lives that they don't need to spend all their time in pragmatic survival activities. Otters play - not only as cubs but also as adults. Wild otters slide repeatedly down snow banks just for fun. Zoo otters juggle stones in ever more inventive ways, simply because they enjoy doing it.

There are no species - species are a human construct, a convenient way of grouping animals together. What exists are individual animals, each

with its own story, experience and preferences. Each otter intelligently analyses its surroundings and constructs a plan of action, and carries it out with exactly as much haste as it decides the situation warrants. Otters are adaptable, versatile, opportunistic - and they don't read the scientific literature! Any given offer may conform to the research-derived principles expected of an otter - or it may not. For me then, each otter is valuable, each offer is important, each offer is part of the web of interconnections that make up reality.

Reducing an otter, a bright, busy, decisive, animal that lives each second of its life at full tilt, to a skin, to a fur coat, to a dead thing to be bought and sold is simply obscene. Keeping an otter in a zoo or as a pet in a bleak concrete pen without opportunities to play,

squatting in a corner dull-eyed and lethargic, is unforgivable. If we don't care, if we turn a blind eye without comment, without trying to change the situation, we lose part of our humanity. Animals cannot have compassion for other species - we can. Animals cannot take responsibility for others - we can. And because we can, we have a clear moral duty to do so.

While I was thinking about this, I came across a quote from the early 20th century writer Ernest Thompson Seton, who precisely encapsulates why I love otters: "The joyful, keen and fearless otter: mild and loving to his own kind and gentle with his neighbour of the stream; full of play and gladness in his life, full of courage in his stress; steadfast in death; the noblest little soul that ever went four footed through the woods."





ASIAN SMALL—CLAWED OTTER

AONYX CINEREUS



If you give any species of otter a piece of fish, the animal will reach for it with its mouth. Give a small-clawed offer a piece of fish and it will grab it in its paws! An extremely dextrous animal with reduced claws (hence the name) and diminished webbing between the fingers, this otter is probably the most charismatic in the world. Like its close cousin the smooth-coated otter, it is very social, forming dynamic, playful family groups. They form lifelong monogamous pairs and are very adaptable, living in fast flowing waters in Thailand, pools of stagnant water in West Java, swamps, rice paddies, peat and mangrove forests. During their foraging trips they wander further from the water than other Asiatic species, looking for crabs, along with snails, molluscs, insects and small fish. Sometimes seen in large groups of up to 20 individuals, the crab-eating offers are seen as an asset by local rice farmers since crabs are considered a pest in rice paddies.

IUCN status: Vulnerable

alias: oriental small-clawed otter, ash otter

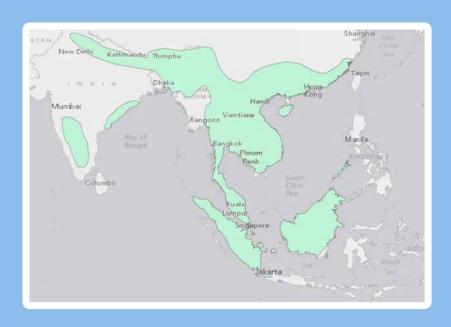
predators: crocodiles, large carnivores

threats: habitat loss, poaching, overfishing, pollution, pet trade

size: 65-94 cm

(body 40-63 cm tail 25-35 cm)

weight: 2-5 kgs





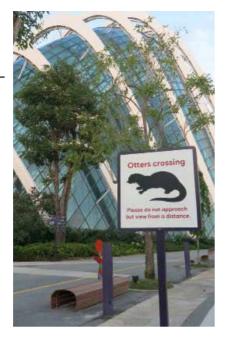
ASIAN SMALL—CLAWED OTTER, MALAYSIA AND INDIA

The book "Ring of Bright Water" was my primary inspiration to delve into the world of otters. While engaged in fieldwork for my doctorate, the beautiful streams that meandered through the Western Ghats proved to be yet another attraction (oftentimes a distraction as well) towards wanting to study the otter. Little has changed since. The feeling of unbridled joy I encounter upon spotting an otter in the wild is incomparable. The fact that otters are elusive by nature and very hard to find adds to the excitement of having seen one swimming by - it is hard to not romanticize the

moment as one in which all of time stands very still while nature takes her course in the form of a flowing river and some high pitched squeaks as offer swim, play, hunt - all of it a fleeting moment in time. Being part Iranian, I recently acquired the knowledge that otters in Ancient Persia were extremely sacred - this has been another factor that further ignited my passion for these wonderful creations of Nature. It is a privilege to be able to study offers and a job I take very seriously. I look forward to many years of hopefully not so fleeting offer encounters.



Seeing an otter never fails to put a smile on my face. Whether you see them in a concrete canal in the heart of urban Singapore or deep in the Pantanal wetlands of Brazil, seeing them roll around in a pile of sand or mischievously nip at the tails of lazing crocodiles



would warm anybody's heart. My story started when I realised the existence of wild otters in the concrete jungle of Singapore and hardly anything was known about them. An undergraduate biology student, I was eager to study their habits and of course, it was the perfect excuse to hunt for them all day! One of my first experiences with otters started out like a horror movie: I heard heavy breathing in the midst of a survey and not a soul was in sight. Apprehensively walking towards the breathing, I eventually saw an offer perched onto the breakwaters looking straight into my eyes, clearly out of breath! What an utterly wonderful encounter. It is always heartening to see members of the public share a similar positive experience of watching a wild offer in her habitat and I would love to see that happen for generations to come. It would be horrible for any place to lose the perfect symbols of healthy wetlands that so many people can easily connect with!

TESTIMONIAL



SMOOTH—COATED OTTER, SINGAPORE



SMOOTH-COATED OTTER

LUTROGALE PERSPICILLATA



A close cousin to the small-clawed offer, the smooth-coated offer has a large distribution that is slowly but steadily shrinking, a fact made obvious by the remnant of a population in Iraq – its range once spread from the Middle-East to southeast Asia. Its problem is and has always been its biggest asset: a short, smooth, velvety fur, warm chocolate brown on the back and soft grey on the stomach. These offers are mainly nocturnal, although they can be diurnal when unmolested. Smooth-coated offers form large, vocal, family groups, preying together on fish, shrimps, frogs, crabs, insects, birds. Found mainly in the slow flowing waters typical of rice paddies and floodplains, they may use large rivers in some regions. The smooth-coated offer needs thick riverside vegetation in which to hide, dig dens and raise cubs. Recently, illegal trapping for the fur trade has taken a heavy toll in many Asian countries in which this species occurs and law enforcement is lacking.

IUCN status: Vulnerable

alias: Indian smooth-coated otter,
Asian otter

predators: crocodiles, large carnivores

threats: habitat loss, intensive poaching,

fishing nets, pollution

size: 106-130 cm

(body 65-79 cm, tail 40-50 cm)

weight: 7-10 kgs





SMOOTH—COATED OTTER, IRAQ

I started working in the Iraqi marshes immediately after the marshland inundation of 2003. The habitat destruction of the marshlands and illegal hunting led to a dramatic decline of the endemic Maxwell's (Lutrogale perspicillata otter maxwelli) population, which turned out to be one of the most elusive and rarest endogenous mammal of Mesopotamia. Therefore, finding the mysterious otter was a challenge for the recovery of the Iraqi marshlands. It was a great moment when evidence of its persistence in the Iraqi marshes was revealed. Currently, we are developing genetic maps and working on a conservation project for Maxwell's offer in the Iraqi marshes, helped by many local researchers and native Marsh Arabs.





66

Otters are very interesting species to work on. Being one of the most playful animals, the joy of watching them in the wild is second to none.

I waited for 32 hours in the hide to see my first otter. Sighting was magical. A transient smooth-coated otter pops out on the other side of the creek with a fish in its paws, half of its body underwater, half on land. It dives in after it has finished eating and disappears. Felt like watching a little dinosaur in action.

The answer to 'Why I work to conserve otters?' is very simple. With otters, I saw a conservation need which mapped my interest. They are adorable animals and it is hard to imagine a world without otters, which propels me towards saving them.

Otters are very wise animals too, some being able to adapt to their changing habitat. There is so much more that needs to be studied about their behaviour and adaptation. Some new



findings often make a mockery of our already existing knowledge about them as we lean towards appreciating their wisdom.

It's high time that we understand the gaps in otter conservation research and fill them. Globally there are a lot of promising otter habitats starving for conservation research and actions. We need to locate these areas and collaborate our efforts to protect them. We need more people working full time to ensure the survival of these cute little dinosaurs.



SMOOTH—COATED OTTER, INDIA



HAIRY—NOSED OTTER



IUCN status: Endangered

alias: Sumatran otter

predators: unknown

threats: habitat loss, poaching, overfishing, pollution, accidental trapping, roadkill

size: 105-113 cm (body 50-82 cm tail 35-50 cm)

weight: 5-8 kgs

The hairy-nosed offer is easily recognizable by its hairy nose pad and white upper lip. This offer is considered a miracle offer: having been declared extinct in 1998, this small, elusive ofter was recently and with great excitement rediscovered in Vietnam, Thailand, Malaysia, Indonesia, Borneo and Cambodia, mostly thanks to camera trap evidence. Individuals killed on roads and sighted in the wild are popping up in seeminaly disconnected locations in southeast Asia, evidence that the hairy-nosed offer is still, albeit precariously, present and largely unknown. Based on the contents of recovered scat, its diet seems composed predominantly of fish, but it also eats water snakes, frogs, lizards, terrapins, crustaceans and insects that live in swamps and shallow coastal waters. It is so rare and the risks to its survival so elevated that ex-situ conservation methods are being considered - mainly capturing individuals for reproduction in captivity and the chance of a future restocking of nature reserves. To date only one hairy-nosed offer is in captivity, donated by a fisherman to a wildlife sanctuary in Cambodia.



TESTIMONIAL CC





ALL ASIAN SPECIES, SRI LANKA

The otter situation in Asia is somewhat different from other continents in the world. Indeed, we are fortunate to have 5 out of the 13 offer species found in the world today. However, the otter is not that popular in the region mostly because of its elusive nature. In addition, the public attraction is directed more towards large mammals in Asian countries. Therefore, we had to work extremely hard to change this attitude and make them aware of the presence of this lovable, charismatic and appealing animal in the wetlands of Asia.

In the tropical island of Sri Lanka, where I come from, only the Eurasian otter is present. When I started my work in 1988, I had just a very superficial idea of this small

animal Moreover I had never seen an otter in my life either in the wild or in captivity. Nevertheless, the First Asian Otter Symposium we had in Bangalore, India, was the same year that slowly changed my attitude towards the otter.

Immediately after. with knowledge gained during the symposium, I started a small survey on offers in Sri Lanka using otter scats and footprints. This paved the way to attend the 5th International Otter Colloquium held in Hankensbüttel, Germany, in 1989. Honestly, my happiness knew no limits after I watched the clips of the Colloquium on Provincial TV in Germany where I was interviewed by the local authorities. That was my first unforgettable experience in offer research in International

Otter Arena!! The Colloquium gave me a real encouragement to work and learn more and more about the otters that I saw in the Otter Centrum for the first time in my life. Furthermore, at the same meeting I was selected as the Asian coordinator for the IUCN-SSC Otter Specialist Group, and later Chair of the Otter Specialist Group.

Over the last 3 decades the otter situation in Asia has been changing gradually and now we are deeply involved in surveying, researching, educating the public and carrying out awareness programs on otters in several countries across the region. As a result, the researchers of South East Asia have been extremely successful in re-discovering the

supposedly extinct species, the hairy-nosed otter, in most of its range countries. The general public, especially children, are getting to know more about the otters in the Asian wetlands, which is in itself a great success.

The story would be incomplete if I didn't say that we still have plenty to do to maintain a clean & healthy environment for the otter in Asia. Unfortunately, the otter is being displaced very fast due to habitat destruction and poaching for fur, medicine and perceived competition with fishermen. These activities are at the zenith in Asia. Therefore, it is our duty to contribute in whatever possible way to fight this situation and save the charismatic otter from being wiped out from the planet forever.







NORTH AMERICAN RIVER OTTER



IUCN status: Least Concern

alias: northern river otter, river otter, Canadian otter

predators: alligators, bobcats, cougars, coyotes, dogs, wolves

threats: habitat loss, poaching, accidental trapping, pollution, roadkill

size: 100-153 cm (body 66-107 cm tail 31-46 cm)

weight: 8-11 kgs

The North American river offer is a large offer whose story is a success. By the 1950s its numbers were greatly reduced due to trapping and pollution, but after a long campaign to clean the waterways, trapping management and reintroductions in states in which it no longer occurred, this species now thrives throughout the USA and Canada. Renowned for their playfulness, North American river otters are active year round, even in deep snow. They are mainly crepuscular and eat fish, molluscs and crustaceans while other sources of food are consumed opportunistically. More social than Eurasian otters, they are commonly seen in small family groups of mothers and their offspring and that may include year-old individuals known as "helpers". They build their dens in river banks and line them with leaves, moss, grass, bark and hair.





NORTH AMERICAN RIVER OTTER, NORTH AMERICA

have been privileged with the opportunity of being involved with the research and conservation involving the North American river otters through the entirety of my professional career, mostly focusing on aspects related to the restoration of the species where it had been eliminated by combined insults of trapping, water pollution, and other human-caused disturbances to aquatic systems. A good part of my conservation activities have involved discussing and promoting the river offer and its conservation with the outdoor-loving public. During these interactions the appeal of the river offer became apparent - anglers,



birdwatchers, hikers, and other nature enthusiasts were drawn by the charm and grace of this animal. Clearly, the combination of public support and dependence on healthy aquatic ecosystems raises the spectre for the river offer to serve an important role in the environmental movement - as an ambassador to promote and rally support for aquatic conservation. My goal is to spend the rest of my career promoting this cause and hope that others interested in river ofter conservation and the bigger cause of aquatic conservation will join in helping to make this animal a national "Flagship for Aquatic Conservation."

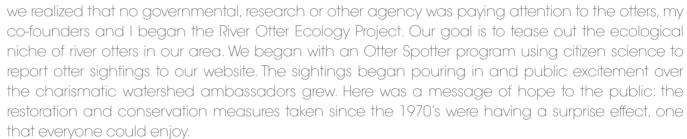




MEGAN ISADORE

NORTH AMERICAN RIVER OTTER, NORTH AMERICA I fell in love with watershed ecology in all its complicated and elegant messiness while working with the critically endangered coho salmon of Lagunitas Creek in Marin County, California. As the salmon population continued to decline, the political and very human battles over land use policy became angry, personal and painful. At the same time, we began to note an increase in North American River offer sightings, particularly along the coastline, estuaries and bays.





In addition to citizen science and educating children and adults on the importance of watersheds, we began a focused study effort using noninvasive camera trapping, observation and scat collection for DNA analysis. This is where the pure joy began... the thrill of watching otter families give birth, raise their young, hunt, play, socialize, interact with other wildlife in my home watershed over months and years has been like none other. Getting up before dawn to catch a glimpse of them and follow the otters along bluffs as the sun rises behind us, watching the pups learn to fish and even catch shorebirds, seeing them roll for minutes at a time along a sandy shore... it makes me abidingly happy. For me, it's the privilege of a lifetime to observe my home watershed over the course of years, get to know all the life within it as my neighbors and share that joy with others. My hope is that we all may become better stewards of our planet.





SEA OTTER



IUCN status: Endangered

alias: Kamtchatka otter, sea beaver

predators: orcas, great white sharks, eagles, bears

threats: poaching, accidental trapping,

pollution, oil spills

size: 67-163 cm

(body 55-130 cm tail 12-33 cm)

weight: 23-36 kgs

A top favourite among otters, the sea otter is the international ambassador species for otters, being the first to have been nearly hunted to extinction and saved in the nick of time. Sea otters, unlike all other marine mammals, have no blubber to protect them from hypothermia. Instead, they have the thickest, densest fur of all mammals: 500,000 hairs per square centimetre! It was this feature that made its fur so desirable and nearly caused its demise. Even though sea otters have made a remarkable recovery in Alaska and the Northeast Pacific, they are still in danger from predators like orcas, poachers, and water-borne toxins that are increasing due to warmer water temperatures. Sea otters are social, living in single sex groups, unlike other otter species. They rarely come ashore but float together instead, diving to retrieve clams, crabs, and urchins.



TESTIMONIAL __





SEA OTTER, NORTH AMERICA

In the mid-1980s, in Alaska and California with the University of Minnesota, I would spend my days behind a field spotting scope, recording feeding and social behaviors of sea otters. Through winter storms, mudslides and even wildfires we documented time and activity budgets, reproduction rates, survival, and movement patterns for northern and southern sea otters. I found a home in the near-shore habitats that these animals thrive in and

help shape. I've continued to work with sea otters since then and I've never tired of it: they continually surprise me. There is always something new to learn from sea otters; over time I've seen each preconceived notion I had about their behavior overturned by more observation! So, there has always been a deep joy in working with sea otters for me.

They also tell us a lot about howwearecurrentlylivingon the planet and the multiple stresses human industry can exert on the marine ecosystem. I worked very intensively with sea otters in Prince William Sound, Alaska after the Exxon Valdez oil spill, to document and understand acute and long-term effects from oil pollution on sea otters and their habitat. Coastal landscapes in the Pacific Northwest have polluted the near-shore marine ecosystems with excess nutrients and land-based pathogens. Warming

temperatures ocean biotoxins increase in sea offer prey, ocean acidification may impair the growth and development of marine invertebrates they rely on for food, and increased storm events may reduce first-year survival of sea otters. Sea otters are an intelligent and adaptable species and through their life history, we can see the dents in the fabric of the near-shore marine ecosystem.







GIANT OTTER

PTERONURA BRASILIENSIS



IUCN status: Endangered

alias: ariranha, river wolf, water dog

predators: puma, caiman, jaguar

threats: habitat loss, persecution, poaching, pollution

size: 145-180 cm

(body 96-123 cm tail 45-65 cm)

weight: 24-34 kgs

The largest extant otter species in the world is the giant otter from South America. Nearly hunted to extinction, it can reach up to 170 cm in length and lives in large, social family groups that sleep, play and hunt together. Typically, a monogamous pair that mates for life is at the head of the group composed of their offspring. They are vocal and territorial and although they will actively defend their home from intruders, some instances of acceptance of new, unrelated individuals to the group have been recorded. Being diurnal, noisy and living in groups, the giant otter is relatively easy to see in areas in which it is protected and is very popular with ecotourists. Its latin name, Pteronura, refers to its flat, winglike (ptero) tail (nura), which is one of the giant otter's distinctive features, along with the markings on its neck that are used to identify individuals.







JESSICA GROENENDIJK

GIANT OTTER, PERU

I remember my first encounter with a giant otter family vividly. was in September 1998, in southeastern Peru, while making our way up a small tributary of the Madre de Dios River. We rounded a curve... and there they were. Five giant otters surged towards us from all directions, one uttering a harsh, wavering scream. Suddenly, the whole family let loose a burst of sound. The noise at such close quarters was stunning and sent shivers down my spine.

A sixth otter wailed in response, swimming rapidly towards the group. Once reunited, they all headed downriver. It was a deeply impressive experience and, from that moment, I was hooked.

Almost two decades and many such encounters later, I still find the giant ofter the most charismatic of rainforest creatures, with an incomparable zest for life that makes a day spent watching a family endlessly fascinating.







NEOTROPICAL RIVER OTTER

LONTRA LONGICAUDIS



IUCN status: Near Threatened

alias: water dog, taira, water cat, South
American river otter, long-tailed otter,
little water wolf

predators: caimans, anacondas, jaguars

threats: habitat loss, pollution, mining, poaching

size: 90-136 cm

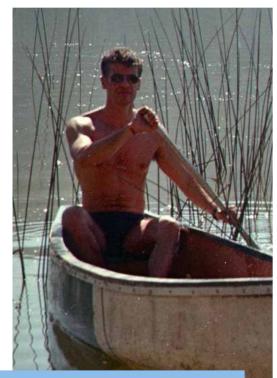
(body 50-79 cm tail 37-57 cm)

weight: 10-14 kgs

A large otter with a very, very long tail (hence the latin name), the Neotropical River otter seems to have a large distribution but an unknown population size. It is a versatile otter that can be found in a variety of habitats, ranging from tropical to evergreen forests, creeks to rivers. One sighting in Chile was even made at 3885 m in elevation! Sympatric with the giant otter, it has different habits and preferences – they may use the same rivers but they ignore each other. The Neotropical River otter may be diurnal or nocturnal and hunts fish, crustaceans, sometimes small mammals, birds, reptiles and insects. It is sometimes kept as a pet by fishermen and trained to help them corral fish into nets. Between the 1950s and the 1970s, an extremely high hunting rate nearly drove this little mustelid nearly into extinction when over 30,000 otters were killed every year for their pelts. Now, they are protected in every country in which they occur.







OLDEMAR CARVALHO—JUNIOR

NEOTROPICAL RIVER OTTER, BRAZIL

I have spent most of my life working with Neotropical river otters. When I look back I miss the old times: sleeping in the otter caves of Lagoa do Piri, rubbing offer faeces in my grandpa's shirt, trying not to be a complete intruder in the den. All I wanted was to be with them, to learn how to be lonely and happy, delicate and strong, to do a ballet in the water, to be harmonious with nature. In the end, Neotropical river otters taught me to be a better person. When I look back I feel a great debt towards them. I learned so much and gave so little in return. Neotropical river otters are endangered, climate is changing, biodiversity decreasing.

However I still have hope: the Lagoa do Piri is still there, the otters are still there and I'm still fighting, together with my 7 year-old daughter. I work so that future generations can still have the chance to see this fantastic species in the wild.







NEOTROPICAL RIVER OTTER, BRAZIL

My story with the otters began in 2003, when I was selected to work in a project with otter ecology in Rio de Janeiro, without having any idea of what they would represent for me in the future. After months of studying indirect signals, my first sighting of an otter in the field was a very fast sighting in Pantanal in 2003. I quickly learnt that studying otters in this biome would imply rarely seeing them. Only in 2009, six years after going into the field every month, I saw one again. It was an indescribable experience - spotting an otter for about four seconds, looking at each other...the longest seconds of my life.

During the last 12 years, I realized that when you study offers it is not only offers you study, but everything that surrounds and influences them. The stability of the offer depends on both the terrestrial environment, where they sleep, reproduce and rest, and the aquatic environment, where they forage. Therefore

the struggle to study and conserve the otters is a struggle



not only for an extremely charismatic animal, with unique adaptations and that make it special. It's a fight to save an entire biome that includes land, rivers and coastal environments. Environments that are extremely affected by human actions. As might be expected, the healthier environments are those with more conditions to maintain a stable population of otters and my fight for their conservation is to show what is a healthy environment for them. It's hard work, with few sightings in the field and many difficulties, but the search to understand what causes its occurrence and what hinders it makes the job extremely rewarding.





NEOTROPICAL RIVER OTTER, MEXICO

My first contact with otters was 10 years ago, when I was an undergraduate. As a student of Wildlife Management our final exam was to work on an environmental enrichment project at the zoo. I walked around the enclosures to choose a species, and a couple of Neotropical river otters that were playing and swimming in their pool caught my attention. They were so playful, despite the conditions in which they were. During two weeks, I studied these offers from sunrise to sunset and Lidentified every behavioural pattern they showed. Whereas most of the zoo's visitors didn't

know much about otters and were not attracted to them, I slowly realized that otters charismatic. were unpredictable, playful, familyoriented animals. Towards the end of semester, the otters became for me the most spectacular mammals that I had ever come across and I was definitely hooked on the species. This was the beginning of what I hope is a lifetime commitment to working for the conservation of otters.

In the wild, offers are elusive and difficult to observe. I found out when I was doing my research for University and

visited many rivers hoping to see offers. I only saw them twice. Currently, the main threats to Neotropical river offers are habitat loss and pollution of aquatic systems by agrochemicals or as a result of mercury poisoning from gold mining. Although more researchers are starting to study the ecology and behaviour of the offer, still little is known about this species.

As the otter is a threatened species, we need to work hard - beyond ensuring habitat conservation, it is important to educate children and teenagers to create awareness, especially

in those human settlements near rivers and lakes. Thanks to their natural charisma playful behaviour and and their adaptations to aquatic life, otters can be seen as ambassadors for the conservation of aquatic ecosystems. As a researcher dedicated to the study and conservation of the species I am sure of the importance of this species and know that to help the otter, everyone should care about this beautiful animal. I hope that, motivated by all of us, future generations can understand the importance of the otter as a top predator in riparian ecosystems.





MARINE OTTER

LONTRA FFLINA



IUCN status: Endangered

alias: sea cat, huallaca, chingungo

predators: birds of prey, orcas, sharks

threats: habitat loss, persecution,

poaching, accidental trapping

size: 87-115 cm

(body 57-79 cm tail 30-36 cm)

weight: 3-6 kgs

The smallest of the new world species, the marine offer is also a very special offer - it is the only exclusively marine species apart from the sea offer. It lives on rocky coasts with an abundance of caves which it uses for shelter and dens. It is known to never stray more than 30 m inland. It has long whiskers and a dark coat and it prefers a diet of crustaceans, octopus and molluscs during the day, although slow fish will also be eaten. The marine offer is monogamous, mating for life. Like the Southern river offer, its habitat is extremely fragmented and the areas in which this offer no longer occurs increase every year. Conflict with fishermen who view it as a competitor also take a heavy toll and this offer's numbers are steadily decreasing.





MARINE OTTER, PERU

Once, as a child during one of our family trips along the Peruvian coast, one of my older brothers told me: "if one day you become a biologist, you should study the marine otter! Nobody knows much about them and if you have the privilege of observing them in their environment (our rocky shores with their breaking waves) you will be fascinated".

Not much has changed since then, not even the fact that we don't know much more about the marine offers today than two decades ago. Of course, I'm still fascinated every time I see them diving between breaking waves, swimming along our beautiful coast and escaping into their hidden dens between the rocks.

During my biology studies, while working on penguin and fur seal projects along the Peruvian coast, I was always looking out for the otters to show up. It is very hard to track them and, for that reason, they were always a "bycatch" subject in most research projects done at our coast.

So, trying to put the otter more in the spotlight, I did my Masters thesis on their behaviour and my PhD thesis on their population genetics. As the years passed I learnt more and more about them and I also understood that they face many imminent threats (habitat loss and pollution, among others).

It is crucial to protect this charismatic species and its environment and that for we have to really get to know them: where do they live? How is their social behaviour? What are their populations like? Do they migrate? Along with this scientific work, it is very important to engage in environmental education at Peruvian fishing ports as well as in schools and with the population in general. We all have to understand how important it is to protect this species as well as our coasts. This is the only way we will allow our children (and our children's children...) to experience the magnificent ecosystem we have the privilege of being able to enjoy right now.







SOUTHERN RIVER OTTER

LONTRA PROVOCAX



The rare Southern river otter lives in freshwater systems with abundant riparian vegetation. In these rivers, lakes and streams it hunts mainly fish, but also forages for crabs, molluscs and birds. It is found in inland lakes and close to the rocky coastal habitats of Argentina and Chile, never far from a source of freshwater. The Southern river otter's habitat is very fragmented, possibly due to its rarity and also the fact that this extremely shy animal avoids the many fishing villages and areas with no potential shelter. Imported salmon is taking over some areas, and by devouring local fish species and being too fast for otters to catch, its presence is proving to be a problem for the Southern River otter. In addition to this, trapping for otter pelts and conflict with fishermen is still very common in some areas. The Southern river otter has been wiped out of much of its Argentinian area because of habitat loss and poaching.

IUCN status: Endangered

alias: huillin, little Patagonian wolf, Chilean otter

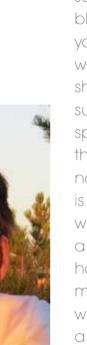
predators: free-ranging dogs, birds of

threats: habitat loss, exploitation, fishing conflicts, poaching, invasive fish species

size: 100-116 cm (body 57-70 cm tail 35-46 cm)

weight: 5-10 kgs





My history with otters could be summarized in one quote: "Love is blind (but not odorless!!) "When I was young, during a boy scout camp, I was playing with my friends on the shores of Nahuel Huapi Lake when suddenly we heard "something" splashing into the water. We knew that it was an animal, but we could not see it. The only thing I remember is that, after staying motionless for a while, waiting, we started to sense a strong, "ugly" smell. This episode had almost been erased from my memory until almost 15 years later when the same smell "triggered a neuronal storm" that recovered and immediately made sense of this memory - we had been in the presence of a fleeing otter. Working with this species now in Tierra del Fuego, the smell is no longer "ugly". On the contrary, today I would describe it as a sweet odor, even when it does have a hint of fish it is one of my favorite fragrances in nature.

This was in 2005, when I began mv doctoral dissertation in Tierra del Fuego studying the huillín, or southern river ofter, and how it was being affected by the invasion of American mink in the archipelago - the ends of the Earth. During my very first trip into the field, I discovered an otter latrine and immediately recognized the scent, which brought back the experience related above. That thing splashing into the water when I was a child had probably quickly fled its den, frightened by our presence, and the scent was that of the otter's feces used to mark the territory. These two experiences stand out also because the only two places in Argentina where this species maintains viable populations are precisely Nahuel Huapi National Park and the Fuegian Archipelago. For years, this otter was hunted for its pelt, but its populations fell also



SOUTHERN RIVER OTTER, ARGENTINA

because of habitat loss - this loss is caused by the advance of human activities and infrastructure, such as river channelization and dam construction and the spreading of cities and ranches. Only those populations found in protected areas survive.

For the past 12 years I have studied this "perfume." The huillín is a shy otter, elusive and difficult to see, especially when there are few animals. As luck would have it, during all these years, I have never actually seen one directly, but rather have studied them via signs and camera traps. Nonetheless, I do not feel rearet or disappointment - on the contrary, I feel as if this is a personal challenge and every time I go into the field I think "today is a good day to see a huillín". The first time I took a photo of an otter with a camera trap, it was a mother with two pups and I almost cried! I finally managed to see them, even if it was through a lens. I still

haven't seen a huillín, but I still am in love with its scent. Whenever I walk along the coast and I smell it, the emotion is so strong I need to stop whatever I am doing and look for my dear otters.

Besides the known conservation problems due to hunting and habitat loss, I think that one of the principle hurdles this species faces is the lack of knowledge about it on the part of the broader society - in particular managers and decision-makers. Its elusive nature means that few people know this ofter and it is impossible for people to care for something they cannot see. As scientists, I think we have an important social role. Not only do we have to study and find new information on our otters, but also communicate and transmit our enthusiasm and love for them. In this way, we scientist-story tellers can help more people know and care about ofter conservation all over the world.





AFRICAN CLAWLESS OTTER

AONYX CAPENSIS



The third largest species in the world, the African clawless ofter is highly versatile - it can be found both in unpolluted inland freshwater habitats where crabs occur, even foraging in some urban and suburban waters and also in marine habitats, as long as there is freshwater close-by to wash off the salt. It has crepuscular habits and can hunt in very murky water thanks to its long and sensitive whiskers. The African clawless ofter has large molars adapted to crushing crabs and lobsters, but will also prey on frogs, fish and insects. The absence of claws and the reduced webbing on its paws gives this species incredible dexterity. It is usually solitary, but when prey is abundant it can be found in family groups of a female with her offspring or, more rarely, a male and a female with their young.

IUCN status: Near Threatened

alias: white-cheeked otter, cape clawless

predators: crocodiles, leopards, and other large carnivores

threats: habitat loss, hunting, poaching

size: 115-160 cm (body 72-95 cm tail 40-60 cm)

weight: 10-16 kgs







AFRICAN CLAWLESS OTTER, SOUTH AFRICA

Growing up in South Africa, otters were animals that I had never encountered or given much thought to. This was probably due to their extreme shyness and being overshadowed by the easier to see and bigger mammals of Africa, such as the Big 5. When the opportunity for me to do a post graduate project on their diet arose, I jumped at it - I thought that this was my chance to finally see one and learn more about them!

I spent six months collecting spraints (scat) along the coastline of South Africa without seeing a single ofter despite seeing tonnes of signs. But then, on my last day of fieldwork, I had a sighting that was worth the wait: a big male was foraging in the surf. I stealthily made my way closer to the water's edge while keeping an eye on him diving in the breakers. I found a nice rock to observe from, made myself comfortable and continued to watch him dive and search for prey. After a few more dives, he was coming back to shore with something in his mouth. Luckily for me he chose a rock about 20m away to process his most recent catch and, oblivious

to my presence and my camera shutter going crazy, he ate away. After about 3 minutes and a few hundred photos, he had devoured his rock sucker fish (a favourite prey species in the colder coastal waters) but suddenly the wind changed direction, he caught my scent and off he was. He curiously observed me from a distance before disappearing into the rocky coastline. I had a permanent giant smile on my face for the next few weeks as I played the scene over and over again in my head.

This lone sighting along with the mystery behind these incredible animals had me hooked. I have subsequently done more work on this species, had more incredible sightings and interactions and I am even more intrigued by them. The more I learn about them, the more I realise how much still needs to be learnt; I therefore plan to do even more work on them. Otters are understudied and often misunderstood as a result of our lack of knowledge. My aim is to change this and give otters the limelight they deserve.







CONGO CLAWLESS OTTER

AONYX CONGICUS



IUCN status: Near Threatened

alias: Cameroon white-cheeked otter, Zaire clawless otter, small-toothed clawless otter

predators: leopards and other large carnivores

threats: habitat loss, overfishing, pet trade

size: 110-150 cm

(body 79-95 cm tail 50-56 cm)

weight: 13-18 kg

Nearly as large as the African clawless ofter but definitely lighter and more slender, the Congo clawless ofter was thought to be a subspecies of the former African clawless ofter until recently. Little is known about this ofter, which is the least studied of the African species. Its reduced whiskers, absent webbing, tiny claws and generalised dental morphology together with sporadic observations show that this species is mainly terrestrial, exploring marshes and forests. It uses its fingers to dig up molluscs, crabs, earthworms and frogs from the muddy banks. The Congo clawless ofter's head and neck is frosted with a brilliant white, that make its characteristic black markings under the eyes even more evident. Solitary, enigmatic and elusive, the Congo clawless ofter still has many mysteries to reveal!







CONGO CLAWLESS OTTER, CONGO

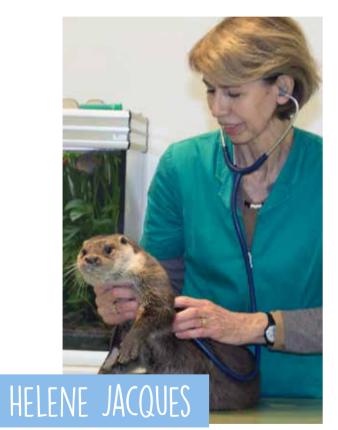
One day in 1995, a newborn Congo clawless ofter was brought to my hut door. I knew instantly from the unique shape of her head and tail that she was an ofter. But that was the extent of my knowledge. The first thing I did, when I was able to, was access the Internet and search for information. At that time there was nearly nothing, yet even then the best source was the IUCN Ofter Specialist Group network. From there the vast world of ofters slowly opened to me, and after learning from and living with the little orphaned wild pup, I became committed to working for ofter conservation.

Through experiences with otters around the world, I came to appreciate them as the true example of fine-art in life: the very expression of nature's own sense of joy and humour. Living in a remote jungle village provided countless opportunities to raise and care for wildlife, but across the whole of my experiences the little otter indisputably stands out as the most special of them all.

For humans, water is the very essence of our existence. otters live in the most important environment for humans: freshwater systems. People want to, need to or already live close to water. Confirming that otters occupy a landscape is not just a privilege but it is a reassurance that the environment, which sustains everything, including us, is healthy.

Helping people see the multiple facets of the otter as an important part in our natural world. It is a gratifying and rewarding endeavour, one that I will pursue for the rest of my life because there is still a tremendous amount of research and study that needs to be done.





GIANT OTTER AND CONGO CLAWLESS OTTER, FRENCH GUIANA AND CONGO

My first otter sighting in the wild was far away on a rainy, misty day on the Isle of Skye in Scotland. I was not even sure I had actually seen one! It was just a dark, vague shape in the distance, real or imagined, maybe a ghost, that caught my eye. I was hooked. Twenty years later, after studying otters in France, French Guiana and various African countries, I can say that 80% of my enriching, funny, amazing, unexpected (be it meetings, field work, reading, research) experiences and 80% of the people that I most enjoy, near or far, are the happy result of my involvement with otters.

Recently, in my capacity as a vet, I shared my life with an otter for two weeks. Seriously injured in a road accident, I was amazed by its will to live, its daily improvements, its adaptability to captive conditions and its enthusiasm. This otter convinced me, yet again, that otters are very special indeed. For me, they are natural mood enhancers whose loss would be dramatic for our planet.

Time will tell if we have succeeded in protecting this precious asset.





SPOTTED-NECKED OTTER

HYDRICTIS MACULICOLLIS



IUCN status: Near Threatened

alias: speckle-throated otter

predators: crocodiles, leopards and other

large carnivores

threats: habitat loss, fishing conflicts, fish nets,

invasive fish species

size: 95-115 cm

(body 57-69 cm tail 33-44 cm)

weight: 4-7 kg

The spotted-necked otter is easily recognised thanks to the distinctive white patches on its neck, although not all individuals show a spotted neck and some have just a few flecks. Unlike the two other sympatric African species, the spotted-necked otter is slim and has webbed paws, reduced whiskers and is diurnal, specialised in hunting fish by sight in deep, flowing waters. It will also prey on frogs, crabs and small water birds and is more aquatic than the other African species. If there is enough prey, it will form large, social, groups. It is famous for its strong inclination to play and has been seen playing with other otters and alone; the cubs are very dependant and stay with the mother for about two years. Introduced fish species, such as the Nile perch, are a threat to the spotted-necked otter because they tend to be too large and fast for the otter to catch and, being more aggressive, are pushing the smaller, local species to the brink of extinction, leading to a decrease in the otters' preferred food supply.







SPOTTED-NECKED OTTER, TANZANIA

Otters are worth saving because they are an integral part of their ecosystem. And they also bring joy and smiles to our faces.

Few people know that spotnecked otters exist. Most of those who do, routinely misunderstand them and the role they play in healthy ecosystems. This little otter can easily disappear from most of its range as a result of our ignorance. They aren't big and majestic like elephants or lions but they are charismatic creatures that evolved to navigate the worlds of land and water – how cool is that?

My first experience with otters was when I started working with them in 1992 at a small mid-western zoo. At the time North American river otters seldom bred in zoos and I had a female believed to be pregnant. Her name was Minnie and her mate was Potter Otter. One morning while Minnie was moving from one den to another she sat down and began licking her tail area quietly, not disturbed

by my presence or what I was doing. Next thing I knew, Minnie and I saw something brown and furry coming out – her first pup. My heart jumped, I could not believe I could be so lucky as to witness the extremely rare event of an otter pup being born!

From that moment on I knew I would work to improve our care and breeding of otters in zoos and aquariums. This is what got me started, 22 years ago.

Otters around the world need our help because without it, they will fall through the cracks and succumb to habitat loss, illegal trade and hunting. To me, they represent the mystery of nature; they travel easily through water and on land, they have adapted to life on almost every continent yet most people do not know there are 13 otter species.

For me Africa's otters are personified by T Lightening, a Spotted-necked otter I watched over the course of his first two years on Rubondo Island in Tanzania's Lake Victoria. Our first meeting was when he was about 4 months old and hanging out on the rocks with his mother and auntie. I watched him grow for the next year.

My experiences with otters in Africa range from waiting hours and seeing one for 5 seconds to sitting for 7 hours with offers grooming, sleeping, squabbling and eating on and under rocks within 10 feet of me. I have run head-on into an otter as we both climbed a small rocky point to go to the other side. We met at the top and stopped for a second before the offer ran and L smiled. I once was hiding between two large boulders (with my bum in the water) when an otter swam up. It stopped, turned and left, came back - just could not figure out what that was in its way. Frozen so as not to scare it all I could think about was my camera sitting 5 feet away!

In Africa the 3 endemic species are almost unknown beyond the shores they frequent; people do not even know they exist. Even in the shoreline communities ofters

are considered somewhat sacred, mysterious – people crowd around you with stories of the otters' magical powers, voracious appetite, or insatiable love making to the rocks (actually rubbing and grooming). Explaining their true ecology and behaviour to groups of children, I always hope they will understand a little better the value of the natural world around them and the benefit s they will reap if they help conserve this world.

If we do not begin to study the otters in Africa, we will never understand the role they play in the African ecosystems. Unanswered questions do not sit well with me.

These are the reasons I study otters and work to promote awareness of them and encourage ordinary citizens like myself to participate in conserving the world around them. Ask a question and find the answer. We can do it. It only takes a minute to stop and look around you and admire the wonder of the natural world that after all, is where every one of us lives.





WHO WE ARE



The International Union for Conservation of Nature (IUCN) helps the world find pragmatic solutions to our most pressing environment and development challenges by supporting scientific research, managing field projects all over the world. The IUCN brings governments, NGOs, the UN, international conventions and companies together to develop policy, laws and best practice. The world's oldest and largest global environmental network, IUCN is a democratic membership union with more than 1,000 government and NGO member organizations and almost 11,000 volunteer scientists and experts in some 160 countries. IUCN's work is supported by over 1,000 professional staff in 60 offices and hundreds of partners in NGOs and public and private sectors around the world. IUCN's headquarters are located in Gland, near Geneva, Switzerland. For more details go to www.iucn.org where you can find many publications to download for free.





The IUCN Species Survival Commission (IUCN-SSC) is a science-based network of more than 10,000 volunteer experts from almost every country of the world, all working together towards achieving the vision of "a just world that values and conserves nature through positive action to reduce the loss of diversity of life on earth". Most members are deployed in more than 140 Specialist Groups, Red List Authorities, Task Forces **and Sub-Committees**. Some groups address conservation issues related to particular groups of plants, fungi or animals while others focus on topical issues, such as reintroduction of species into former habitats or wildlife health. Publications on endangered species can be downloaded at www.iucn.org/about/ work/programmes/species/publications/



The IUCN Red List of Threatened Species™ is widely recognized as the most comprehensive, objective global approach for evaluating the conservation status of plant and animal species. From its small beginning, the IUCN Red List has grown in size and complexity and now plays an increasingly prominent role in guiding conservation activities of governments, NGOs and scientific institutions. The introduction, in 1994, of a scientifically rigorous approach to determining risks of extinction, applicable to all species, has become a world standard. In order to produce The IUCN Red List of Threatened Species™, the IUCN Global Species Program working with the IUCN Species Survival Commission (IUCN-SSC) and with members of the IUCN draws on and mobilizes a network of scientists and partner organizations working in almost every country in the world, who collectively hold what is likely to be the most complete scientific knowledge base on the biology and conservation status of species. Check it out at www.iucnredlist. org. To ownload the Red List brochure and other free documents go to the tab Resources and Key Documents.

WHAT WE DO



Research: The Otter Specialist Group has the leadership and expertise to address and solve otter problems worldwide. Our members have studied otters for decades and can determine the status of otters to develop conservation measures.

Education: we train biologists, naturalists and other scientists to be otter researchers in those countries in which otters are at risk. We create local school programs to spread the otter conservation message. We collaborate with local communities to protect their otters.

Conservation: the goal of our more than 270 members is to make sure that otters will be around for decades to come.

The Otter Specialist Group has focused on global offer conservation since 1974 with great success. Now all 13 offer species face new threat and challenges that we must overcome. More research is needed to evaluate how best to reverse the downward spiral – new conservation programs must be adapted to local conditions and regional conservation priorities. This requires trained offer specialists, time and money.

Our website www.iucnosg.org contains many resources which may be used freely. See the Bulletin for the latest other research, our Library or contact us if you can't find what you were looking for.

OTTERS ARE IN TROUBLE ...and you can help!





OTTERS ARE IN TROUBLE

Threats to otters take many forms. Otters live in rivers, lakes, and coastal areas which may be polluted and overfished. Wetlands are the most threatened habitat in many parts of the world, disappearing to make room for development. Otter numbers are plummeting in Southeast Asia where they are heavily poached and traded for their pelts, destined for newly prosperous Asian markets.

Yet in some regions, otters made spectacular comebacks after receiving protection and where anti-pollution measures were enforced. Recovery is possible but we need your help to broaden our efforts and make this happen.

OTTERS ARE THE WORLD'S WETLAND AMBASSADORS

Otter skins for sale in Cambodia

future looked bright.

ic Solcrith Hene



countries, returned again. Otter cubs are too cute to resist. A widespread trade in otter skins in Asia. numbering in the thousands, cleared otters from many rivers and wetlands. And this trade is flourishing, fueled by the skin trade and traditional medicine markets. We are working in 13 Asian countries to assess the damage and create conservation programs tailored to local needs.

SPECTACULAR RECOVERY?

Forty years ago, the global animal trade was

curtailed through international conventions and better law enforcement. Otters were listed as endangered species and protected in many countries. Some, on the brink of extinction, made a comeback like the Eurasian otter in Britain, the Sea

otter, and the Giant otter in South America. The

CATASTROPHIC DECLINE?

With the new century came new threats and a

sudden reversal in otter numbers, particularly in

Southeast Asia. The otter pet trade, illegal in most

ASIAN OTTERS NEED OUR HELP TO SURVIVE



at N Duplaix







SAVING OTTERS WORLDWIDE

The Otter Specialist Group has focused on global otter conservation since 1974, with great success. Now all 13 otter species face new threats and challenges that we must overcome. More research is needed to evaluate how best to reverse the downward spiral. New conservation programs must be adapted to local conditions and regional conservation priorities. This requires trained otter biologists, time and money.

WHAT WE DO

RESEARCH: The Otter Specialist Group has the leadership and expertise to address and solve otter problems worldwide. Our 270 members have studied otters for decades and can determine the status of otters to develop conservation measures. EDUCATION: We train biologists to be otter researchers in many Asian and South American countries where otters are at risk. We develop local school programs to spread the otter conservation message. We collaborate with local communities to protect their otters.

CONSERVATION: Our goal is to make sure that otters will be around for decades to come.

Smooth-coated otter © C Bennetto



Friendly admirer

COMMUNICATION

Otters are their own best ambassadors. It is easy to love otters when you watch one up close gliding through the water or juggling a stone with one paw. Zoos play an important role in giving people their first unforcettable otter experience.

e I Sanchez

ZOO CONSERVATION

The Otter Specialist Group works closely with zoos, collaborating with their scientists to provide the best care for otters in captivity. Zoos fund otter research to help biologists learn more about otters in the field.

YOUR DONATION PAYS FOR OTTER RESEARCH AND EDUCATION

These students in Cambodia know all about otters o N Duplaix



HOW MANY OTTER SPECIES ARE THERE?

13 otter species but only the North American river otter is out of danger.

5 are ENDANGERED: Marine otter, Hairynosed otter, Giant otter, Sea otter, Southern river otter

2 are VULNERABLE: Asian short-clawed otter, \$mooth-coated otter

5 are NEAR THREATENED: Neotropical otter, Eurasian otter, Congo clawless otter, Cape clawless otter, Spot-necked otter



SINCE 1974 the 270

members of the Otter Specialist Group have launched conservation programs for all 13 species of otters worldwide. We still need to expand our efforts further if we are to overcome the increasing threats facing otters in many countries today.

iucnosg.org



facebook.com/OtterSpecialistGroup

instagram.com/ IUCN_OtterSpecialistGroup

OTTER-FRIENDLY NGOS

- EUROPE -



NATURSCHUTZBUND ÖSTERREICH

WWW.NATURSCHUTZBUND.AT

Mission

To protect Austrian nature, ecosystems and animals; to develop and support environmental protection projects and the funding of research projects.



ALKA WILDLIFE

WWW.ALKAWILDLIFE.EU

Mission

To raise awareness in the Czech Republic of the plight of the Eurasian otter, causes of its decline and ways to prevent this; to develop and apply the newest technologies in field ecology as a way of better understanding the environment.



CZECH OTTER FOUNDATION FUND

WWW.VYDRY.ORG

Mission

To increase public acceptance, respect and responsibility towards the environment in the Czech Reblublic and abolish the black and white perception of nature, using the Eurasian otter as a flag-species and symbol.



STANICE PAVLOY, O.P.S.

WWW.STANICEPAVLOV.EU

Mission

To rescue and rehabilitate offers and manage positive public relations in the Czech Republic.



GRUPPO LONTRA MOLISE

WWW.GRUPPOLONTRAMOLISE.BLOGSPOT.COM.ES

Mission

To monitor Italian populations of otter; to collect environmental data and to safeguard the only area in which the Eurasian otter still survives in Italy.



THE FINNISH SOCIETY
FOR NATURE AND ENVIRONMENT

WWW.NATUROCHMILJO.FI

Mission

To raise awareness about Finnish environmental issues, participate in governmental committees and positively influence the public opinion on environmental matters through the management of a nature school, seminars, excursions, clubs and nature camps for adults and children.



THE FINNISH ASSOCIATION FOR NATURE CONSERVATION

WWW.SLL.FI

Mission

To manage Finnish cultural landscapes; confront land use issues, protect endangered species; educate regional representatives and follow the public participation in water management projects.



STICHTING OTTERSTATION NEDERLAND

WWW.OTTER.TO

Mission

To improve the environment and the protection of the Eurasian otter and other endangered freshwater species in The Netherlands.



OTTERFRANKEN.DE

Mission

To establish a habitat corridor connecting the Czech Republic through Upper Franconia in Germany to Luxembourg and Belgium to connect the eastern and western European otter populations



ACTION FISCHOTTERSCHUTZ

WWW.OTTERZENTRUM.DE



To promote the conservation the Eurasian otter in Germany; to promote research, projects on education, nature protection, landscape conservation as well as national and international collaborations.



BUND (FRIENDS OF THE EARTH GERMANY)

WWW.BUND.NET

Mission

To involve the general German public in nature conservation and environmental protection by creating activities such as planting hedges, creating ponds, taking care of protected areas and fighting for the preservation of valuable areas.

GESELLSCHAFT FUR NÄTURSCHUTZ UND LANDSCHAFTSÖKOLOGIF

WWW.GNL-KRATZEBURG.DE

Mission

To support protected areas in Germany; to carry out public education programs and to coordinate with local and national government offices



NATURE AND BIODIVERSITY
CONSERVATION UNION

WWW.EN.NABU.DE

Mission

To preserve German habitats and biodiversity; to promote sustainability in agriculture, forest management and water supply and distribution, as well as to enhance the significance of nature conservation in our society.



LUIKA INŠTITUT ZA OHRANJANJE NARAVNE DEDIŠČINE

WWW.LUTRA.SI/SL

Mission

To promote conservation and research work involving Eurasian otters in Slovenia, combining these with education and public awareness and creating activities aimed at the general public.



RÄDDA UTTERN I SMÅLAND

WWW.LANSSTYRELSEN.SE

Mission

To work towards cleaner water, healthier fish, and increased diversity in Swedish nature.



RÄDDA UTTERN I UPPLAND NATURVÅRDSSTIFTELSE

NATURVARDSSTIFTELSE.SE

Mission

To survey, preserve, manage and educate the Swedish public on Roslagen's valuable habitats and species, including the Eurasian otter.



PRO-LUTRA

WWW.PROLUTRA.CH

Mission

To carry out surveys to evaluate the possible return of the Eurasian otter to Switzerland from adjacent countries; to obtain public support for the return of the otter; to scientifically prove how the change in habitat led to the loss of biodiversity and determine with modern methods what measures could be taken to expedite the return of the otter.



INTERNATIONAL OTTER SURVIVAL FUND

WWW.OTTER.ORG

Mission

To protect and help the 13 species of otters worldwide through a combination of compassion and science; to support projects that protect otters and their environment. Based in the UK.



SOMERSET OTTER GROUP

SOMERSETOTTERGROUP.ORG.UK

Mission

The Somerset Otter Group is dedicated to the conservation and research of the otter in Somerset.



UK WILD OTTER TRUST

WWW.UKWILDOTTERTRUST.CO.UK

Mission

To promote a positive understanding of otter conservation everywhere and to raise awareness through education, involvement and information. Based in the UK.



NACRES BIODIVERSITY CONSERVATION AND RESEARCH

WWW.NACRES.ORG

Mission

To safeguard Georgian biodiversity through conservation activities at a national and local level, based on science, principles of sustainability and local participation; to maintain the current long-term study of the otter population of the Alazani valley and to provide a detailed population assessment.



VYDRA (RURAL DEVELOPMENT AGENCY)

WWW.VYDRA.SK

Mission

To promote environmental education, preservation of traditional, cultural and natural values, healthy lifestyles and developing local eco-friendly tourism in Slovakia.

- ASIA -



SAVE VIETNAM'S WILDLIFE

WWW.SAVEVIETNAMSWILDLIFE.ORG

Mission

To protect the increasing populations of threatened wildlife in Vietnam by rescuing, rehabilitating and releasing animals that need protection; to train the Vietnamese Forest Protection Department rangers on mammal identification and protection; to organise field surveys of small carnivores and to create projects aimed at conserving carnivores.





Mission

To secure the future of smooth-coated otters in Goa, India, by linking and encouraging likeminded individuals and organisations and prompting respect and appreciation of otters and their habitat



CIKANANGA FOUNDATION

WWW.CIKANANGAWILDLIFECENTER.COM

Mission

To conserve Indonesian wildlife and its habitat by creating a large, functional animal clinic and rehabilitation centre.



JAKARTA ANIMAL AID NETWORK

WWW.JAKARTAANIMALAID.COM

Mission

To strive to help wildlife rescue centres all over Indonesia and the people behind them; to promote respect and knowledge on wildlife and the environment.



INTERNATIONAL ANIMAL RESCUE

WWW.INTERNATIONALANIMALRESCUE.ORG

Mission

To support wildlife rescues, rehabilitation centres and lifelong maintenance for captive wild animals that cannot be released. Based in Indonesia



PAKISTAN WETLANDS PROGRAMME

WWW.PAKISTANWETLANDS.ORG

Mission

To assess of other distribution, to promote research and distribute information on the offer in Pakistan and to work on the conservation of smooth-coated and Eurasian offers in collaboration with communities and government departments.

- NORTH AMERICA AND CANADA -



FRIENDS OF THE SEA OTTERS

WWW.SEAOTTERS.ORG

Mission

To work actively with state and federal agencies, scientists, educators, and the public to maintain, increase and broaden the current protections for the sea offer. To inspire the public about the offers' unique behaviour and habitat.



SEA OTTER FOUNDATION & TRUST

WWW.SEAOTTERFOUNDATIONTRUST.ORG

Mission

To ensure the survival and recovery of sea otters in their habitats by building funds to support research, conservation and education.



THE RIVER OTTER ECOLOGY PROJECT

WWW.RIVEROTTERECOLOGY.ORG

Mission

Our mission is to illustrate the linkages between the recovery of local river otter populations and healthy watersheds, and foster public and organizational participation in restoration and conservation.



THE OTTER PROJECT

WWW.OTTERPROJECT.ORG

Mission

To promote a rapid recovery of the Californian sea otter, an indicator of near shore ocean health, by facilitating research and communicating research results to the general public and policy makers.



THE RIVER OTTER ALLIANCE

WWW.OTTERNET.COM

Mission

To promote the survival of the North American river otter through education and habitat protection; to support research and reintroduction programs; to monitor abundance and distribution; to educate the general public.

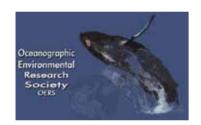


DENMAN CONSERVANCY ASSOCIATION

WWW.DENMANCONSERVANCY.ORG

Mission

To preserve unique, environmentally sensitive and historically important areas on Denman Island, Canada; creating offer conservation and educational projects.



OCEANOGRAPHIC ENVIRONMENTAL RESEARCH SOCIETY

WWW.OERS.CA

Mission

To conserve and preserve Canadian and non-Canadian marine life and natural habitats through research, education, rescue and rehabilitation.

- SOUTH AND CENTRAL AMERICA -



FUNDACIÓN OMACHA

WWW.OMACHA.ORG

Mission

To improve conservation strategies, resource use and cooperative work with resident populations in many countries of Southern and Central America. A widespread and very active workforce, not solely focussed on one animal or ecosystem but with many projects concerning others.



ASSOCIAÇÃO AMIGOS DO PEIXE—BOI

WWW.AMPA.ORG.BR

Mission

To support and coordinate scientific research and education regarding freshwater mammals of the Brazilian Amazon, which include among others the Neotropical river and giant otter.



INSTITUTO ARAGUAIA

WWW.ARAGUAIA.ORG

Mission

To protect the biodiversity of the Araguiaia river basin in Brazil and its ecological processes, in particular inside and around Cantao State Park; to develop, manage and publish scientific research that will contribute to the region's conservation; to develop and to implement community outreach programs; to undertake the legal action necessary to continue their mission.



INSTITUTO EKKO BRAZIL

WWW.EKKOBRASIL.ORG.BR

Mission

To map and characterise the occurrence, distribution, size and territorial extension of giant otter groups in the Brazilian Aquidauana River.



CHINCHIMÉN ECOLOGICAL

WWW.CHINCHIMEN.ORG

Mission

To establish an environmental network for marine otter conservation; cooperating with local Chilean communities; developing environmental education activities; citizen participation and rehabilitating coastal wildlife.



NATIONAL COMMITTEE FOR DEFENCE OF FAUNA AND FLORA

WWW.WEBCODEFF.CL

Mission

To collect information on the Southern river otter, its habitat and threats, as well as to manage educational activities and restoration of the riparian habitat in Chile.



CONSERVACIÓN MARINA

WWW.CONSERVACIONMARINA.ORG

Mission

To develop a project for marine and Southern river otter conservation in Chile and education with the support of International foundations.



KWATA

NATURVARDSSTIFTELSE.SE

Mission

To study and protect wildlife in French Guiana and to develop programs to conserve species and their habitats by involving local decision makers, managers of natural spaces, users of resources and members of the public.



PRO DELPHINUS

WWW.PRODELPHINUS.ORG

Mission

To legally ban dolphin hunting and consumption in Peru; to conduct projects on research and conservation of threatened and endangered marine species, such as marine otters, and their interactions with fisheries.



FRANKFURT ZOOLOGICAL SOCIETY

FZS.ORG/EN/

Mission

To survey giant otters in the Madre de Dios watershed, Peru; monitor population and threats to the otters and the aquatic ecosystem in which they live; to work with Protected Area authorities, tour guides and agencies to ensure sustainable giant otter tourism.

- AFRICA -



LUKURU WILDLIFE RESEARCH PROJECT

WWW.LUKURU.ORG

Mission

To conduct scientific research on, conservation of, and educational activities regarding local fauna, including the Congo clawless otter's unique behaviour and habitat in the Democratic Republic of Congo.

- PHOTO REFERENCES -

- © Margherita Bandini, Eurasian otter, page 7
- © Jose Luis Bartheld, Southern River otter, page 52 and 53
- © Carol Bennetto, Smooth-coated otter, page 25
- © Atul Sinai Borker, Smooth-coated otter, page 22 and 23
- © Sean Braine, Spotted-necked otter, page 65
- © Janet Brown, North American River otter, page 30
- © Mark Bridge, Eurasian otter, cover
- © Glen and Rita Chapman, Congo Clawless otter, pages 61, 62 and 63
- © Nicole Duplaix, Giant otter, pages 5, 38, 39, 41, 82 and 83

Eurasian offer, pages 9, 11, 13, 15 and 17

Asian Small-clawed otter, pages 3, 18, 19, 20 and back cover

Smooth-coated otter, page 24

Hairy-nosed otter, page 26, 27 and 29

North American River otter, page 31 and 32

Sea otter, page 34

Neotropical River otter, pages 42, 43, 44 and 47

Congo Clawless offer, page 60

"Otter crossing" sign in Singapore, page 21





- © Roman Golubenko, Sea offer, page 35 and 37
- © Charlie Hamilton, Eurasian otter, page 10
- © David Harper, North American River otter, page 33
- © Jared Hersch, Cape Clawless offer, page 56
- © Rowan Jordaan, African clawless offer, page 59
- © Maurizio Lagotto, Spotted-necked otter, page 64
- © Jan Reed-Smith, Spotted-necked otter, page 67
- © Kevin Schaffer, Marine otter, page 48 and 49
- © Alejandro Valenzuela, Southern river otter, page 55
- © Juan Valqui, Marine offer, page 45 and 51
- © Cathie Withers, Cape Clawless offer, page 57

- ACKNOWLEDGMENTS -

This book not only celebrates offers but also the marvellous team that put it all together. It certainly is a labor of love.

First and foremost we would like to thank **our Kickstarter backers** who trusted us from the beginning and waited patiently as we struggled to complete it.

Agata Matteucci created the lay-out and accepted our endless corrections – she is a gem!

Many members of the Otter Specialist Group kindly agreed to tell us why they love otters: Atul Sinai Borker, Oldemar Carvalho-Junior, Angela Doroff, Katrina Fernandez, Jessica Groenendijk, Megan Isadore, Helene Jaques, Rowan Jordaan, Victor Manuel Santiago Plata, Jan Reed-Smith, Marcelo Rheingantz, Jordi Ruiz-Olmo, Tom L. Serfass, Omar F. al-Sheikhly, Padma de Silva, Jo Thompson, Meryl Theng, Alejandro Valenzuela, Juan Valqui, David Webb, James Williams and Lesley Wright.

We would also like to thank **Melissa Savage** who made insightful suggestions, proofread the text and encouraged us every step of the way.

Most important, we are indebted to the **IUCN Survival Service Commission** that created Specialist Groups. Thanks to this amazing framework, backing and vision, the Otter Specialist Group has served its mandate to lead global otter conservation since 1974.

Last but not least, the **Altman Foundation** has generously contributed to many projects of the Otter Specialist Group, including this one.

Thank you!













