

INTERNATIONAL COOPERATION



■ CAN INTERNATIONAL COOPERATION IN WILDLIFE CONSERVATION SURVIVE IN AN AGE OF NATIONALISM AND POST-TRUTH? ■ IS BREXIT THE BEGINNING OF THE END FOR INTERNATIONAL COOPERATION? ■ EXPEDITIONS A - Z & MUCH MORE

20
18
magazine

Welcome



to the ninth issue of the annual Biosphere Expeditions Magazine. Our title of "International Cooperation" follows on thematically from the "Conservation Communication" title of last year. This year's issue showcases how we cooperate with partners from around the world and how we believe cooperation and communication are vital in the age of Trump, Orban, Duterte and Brexit. On Brexit, we have something to say too, including details about our move to Ireland.

And, as every year, we showcase each expedition so that this Magazine can serve as a point of reference, and hopefully inspiration, to you, our readers, to come and join us in the field. You will also notice some significant changes in the wording and layout we use. This is all connected to our brand-new website, which will go online early in 2018. Have a look at www.biosphere-expeditions.org; perhaps it's already up when you read this.

I hope you enjoy the Magazine. Do join us in our efforts, if you can.



A handwritten signature in black ink, appearing to read "Matthias Hammer".

Dr. Matthias Hammer
Founder & Executive Director

ÜBER UNS A PROPOS



ABOUT US

Artenschutz fördern – damit Natur profitiert



Unser Planet steckt in der Krise - noch nie stand die Natur so unter Druck. Wir glauben daran, dass es in der Macht jedes einzelnen liegt, das zu ändern. Wir achten auf die Natur und befähigen Menschen sie zu schützen - durch Bürgerwissenschaft und angewandten Naturschutz. Wir sind eine gemeinnützige, visionäre und nach ethischen Standards handelnde Naturschutzorganisation. Wir sind Mitglied der IUCN und des UN-Umweltprogramms. Wir arbeiten Hand in Hand mit Menschen und Biologien vor Ort in unseren Projektgebieten, setzen uns für einen Wandel ein und schützen unser aller Natur. Und unser Konzept ist erfolgreich – die Erklärerung von Schutzgebieten auf vier Kontinenten ist nur ein Beispiel.

Helfen Sie mit und gestalten Sie Ihre Urlaubszeit besonders wertvoll. Teilen Sie unsere Vision eines intakteren Planeten und verschaffen Sie Ihrer Stimme Gehör als Teilnehmer an unseren Natur- und Artenschutzexpeditionen. Erfahren Sie - für eine Woche oder auch länger - Neues an wunderschönen, entlegenen Orten, erwerben Sie neue Fähigkeiten, treffen Sie Gleichgesinnte aus der ganzen Welt und erleben Sie Naturschutz hautnah. Lassen Sie uns gemeinsam so handeln, als hinge das Wohl des Planeten von uns ab - denn genau das tut es.

Promouvoir la conservation de la vie sauvage – pour la nature, pas le profit



Notre planète est en crise – jamais encore la nature n'a autant été en danger. Chacun a le pouvoir de changer les choses. Nous en avons conscience, et c'est pour cela que nous donnons les moyens nécessaires aux hommes de la préserver, au travers d'actions participatives et scientifiques, sur le terrain. Nous sommes une organisation à but non lucratif, visionnaire, plusieurs fois récompensée, éthique et durable, qui vise à promouvoir la protection de la nature. Nous sommes également membres de l'IUCN (Union internationale pour la conservation de la nature) et du programme des Nations Unies pour l'environnement. Nous travaillons main dans la main avec les communautés et les biologistes locaux. Nous incitons au changement et protégeons la nature. Nos efforts sont couronnés de succès : la création d'espaces protégés sur l'ensemble des quatre continents est juste un exemple de tout ce que nous avons réussi à accomplir.

Rejoignez-nous et donnez de votre temps. Partagez notre vision d'une planète préservée. Quel que soit votre âge ou vos compétences, faites compter votre voix et participez à une mission pour la préservation de la nature pendant une semaine ou plus. Partez avec nous vers des endroits magnifiques et reculés. Développez vos connaissances et rencontrez des personnes du monde entier, qui ont la même volonté que vous. Participez concrètement à la préservation de la nature. Ensemble, agissons pour le bien de notre planète car notre futur en dépend.



Advancing wildlife conservation – for nature, not profit



Our planet is in crisis, with nature under attack like never before. We believe everyone has the power to change this. We are mindful of nature and empower people through citizen science and hands-on wildlife conservation. We are a non-profit, visionary, award-winning, ethical, sustainable, conservation organisation. And a member of the IUCN and the UN's Environment Programme. Working hand-in-hand with local biologists and communities, we champion change and protect nature. And we succeed - the creation of protected areas on four continents is just one example of our achievements.

Come and join us and make your holiday time count. Share in our vision of a healthier planet. Whatever your age or background, make your voice heard and spend a week or more on a wildlife conservation expedition with us. Travel with us to remote and beautiful places, learn new skills, meet like-minded people from around the world and experience conservation in action. Together - for nature, not profit - let's act like our world depends on it. Because it does.

.....
Flush survey in the fynbos biome of South Africa,
on the Biosphere Expeditions South Africa expedition.
© Craig Turner

LEAD TOPIC

INTERNATIONAL COOPERATION

Can international cooperation in wildlife conservation survive in an age of nationalism and post-truth? **10**

We explore this question in guest essays interspersed with examples from the Biosphere Expeditions world.

CONSERVATION PROJECTS

AMAZONIA 28	MUSANDAM 42
ARABIA 30	SLOVAKIA 44
AZORES 32	SOUTH AFRICA 46
COSTA RICA 34	THAILAND 48
GERMANY 36	TIEN SHAN 50
MALAWI 38	TIOMAN 52
MALDIVES 40	EVENTS 54

BACKGROUND & INFO

Welcome	3
About us	4
Meet the staff	6
Contents / Editorial	7
World map of expeditions	8
Round-up	24
Awards & accolades	55
The Friends of Biosphere Expeditions	56
Placement programme	58
The Look Ahead network	59
News & views	60
Media clippings 2017	64



38 New MALAWI expedition



10 INTERNATIONAL COOPERATION



24 ROUND UP



58 Placement programme

The backbone of Biosphere Expeditions:

Meet the staff

Here are just two from our team and more can be found at www.biosphere-expeditions.org/staff.

MALIKA FETTAK is one of the longest serving staff members at Biosphere Expeditions and the brains and creative energy behind these, our annual Magazines. Malika is half Algerian, but was born and educated in Germany, with a degree in Marketing & Communications. She heads up the German office, is involved in strategic thinking, and has led more expeditions than you can shake a stick at. These days, we can't imagine a Biosphere Expeditions without old hand Malika any more. 😊

PETER SCHÜTTE has held many roles in Biosphere Expeditions. A geographer by trade, Peter's first exposure to Biosphere Expeditions was in Namibia shortly after the millennium, where he was a member of the local team of scientists. He was promptly bitten by the expedition bug and went on to lead expeditions in Namibia, Altai, Oman and Slovakia. In parallel, Peter became increasingly involved with wolf conservation in his native Germany. So it was only natural that he asked Biosphere Expeditions to become involved too, culminating in the inaugural Germany wolf expedition in 2017. Thank you for all you have done Peter!



Biosphere Expeditions employs a global team of wildlife professionals who all contribute to the success of the organisation: expedition leaders, scientists, field-based and administrative staff. Their roles are as diverse as their backgrounds, but they all share a love of the outdoors and wildlife.

EDITORIAL

PUBLISHER Biosphere Expeditions
info@biosphere-expeditions.org

EDITORS Matthias Hammer, Kathy Gill

ARTWORK Malika Fettak
m.fettak@biosphere-expeditions.org

PICTURES © Biosphere Expeditions unless otherwise stated

COPYRIGHT © Biosphere Expeditions
All rights reserved. No partial or total reproduction without the written permission of the publisher. Printed in Germany 2018.

CONSERVATION PROJECTS

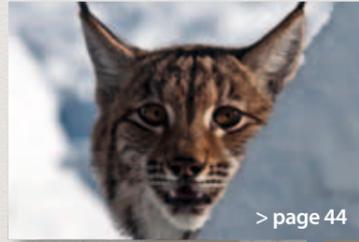
WORLDWIDE



AZORES (Portugal)
Whales, dolphins, turtles



SLOVAKIA
Lynx, wolf, bear



GERMANY
Wolves



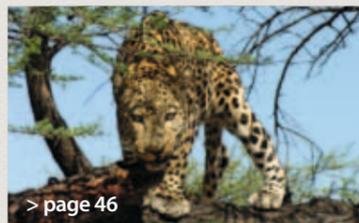
COSTA RICA
Leatherback turtle



MALAWI
Elephants, cats & African biodiversity



AMAZONIA (Peru)
Cats, primates & others



Leopard, caracal & biodiversity
SOUTH AFRICA

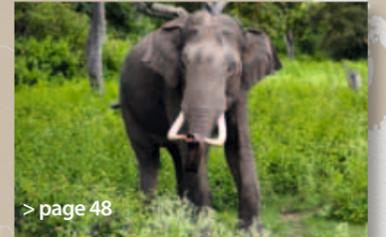
MUSANDAM (Oman)
Coral reef



TIEN SHAN (Kyrgyzstan)
Snow leopard



ARABIA (U.A.E.)
Oryx, wildcat, sand fox & others



Asian elephant
THAILAND



Coral reef & whale shark
MALDIVES

TIOMAN (Malaysia)
Coral reef





INTERNATIONAL COOPERATION

Can international cooperation in wildlife conservation survive in an age of nationalism and post-truth?

Brexit, Trump, Orban, Duterte, Le Pen, Babis – nationalism is on the rise and shredding international agreements en vogue. Add to this the age of post-truth, where science and rational arguments are on the back foot against blatant lies and fake news. And finally throw into the toxic mix neoliberalism, where endless growth and profits are all that matters and ‘the market’ is seen as the only regulator to everything, and you know we – and our planet – are in trouble. Can conservation be effective in this age? How important is international cooperation to conservation? We explore these questions in guest essays interspersed with examples from the Biosphere Expeditions world.



Is Brexit the beginning of the end for international cooperation? We may be witnessing the twilight of the multilateral era.

William Magnuson, Associate Professor of Law, Texas A&M University

The UK, one of the largest and most prosperous countries in the EU, will soon leave the 28-member bloc. While the process could drag on for years, the Brexit decision serves as a historic and stinging setback to proponents of a unified Europe. Pro-Europe commentators, on both sides of the Atlantic, have argued that Brexit is a historical blip, a rash decision made by an uninformed electorate after a vicious and one-sided campaign. But to dismiss Britain’s decision as an anomaly is too simplistic. We may be witnessing the twilight of the multilateral era.

The history of civilization has been one of peoples coming together in larger and larger collectives — from villages to city-states, from city-states to nations and from nations to international organisations. Today, we live in an era typified by the proliferation of global bodies such as the United Nations, the World Trade Organization and the European Union.

People have created these greater communities for a number of reasons, but the overriding one has always been the most basic: security. As German philosopher Immanuel Kant wrote in 1795 in his essay “Perpetual Peace,” the only means for nations to emerge from a state of constant war was to “give up their savage, lawless freedom... and, by accommodating themselves to the constraints of common law, establish a nation of peoples that (continually growing) will finally include all the people of the earth.”

The European Union is arguably the greatest example of this ideal. An organisation forged from the desolation of two world wars, the EU brought the states of Europe together in a continent-wide commitment to cooperation and integration. Its ultimate aim was to draw nations together so closely that war would become unimaginable.

An impeccable aspiration, to be sure. But Britain’s vote to leave the EU illustrates the costs associated with that aspiration, and with multilateralism more generally. Governments have become increasingly detached from the people they govern. Local communities have surrendered control over an ever-growing array of matters to distant bureaucrats. And people increasingly perceive that their own groups and beliefs are under siege by outsiders.

.....
Theresa May and
Angela Merkel:
A picture that speaks
a thousand words.



This sentiment is not unique to the United Kingdom. Disillusionment with multilateral agreements is widespread today. Just look at Trump or other anti-EU leaders such as Orban, Le Pen or Babis (another maverick billionaire just elected into his country's – the Czech Republic's – highest office).

During and after the presidential campaign, Trump repeatedly denounced America's international agreements. The targets of his ire have ranged from free trade deals (think NAFTA and the Trans-Pacific Partnership) to defense pacts (e.g. NATO) to environmental accords (see the Paris climate deal). His rhetoric has struck a chord with many Americans who fear that international agreements have destroyed American industry and cost Americans jobs.

But to say that we are disillusioned with multilateralism does not provide an answer to the more difficult question: If not multilateralism, then what?

The answer of the day, it appears, sadly, is aggressive unilateralism. Instead of working through multilateral institutions to solve their problems, countries are increasingly going it alone. The United States, for example, has responded to the failure of international negotiations on a range of topics by imposing its domestic laws abroad. The US forces foreign banks to abide by its financial regulations and foreign businesses to comply with its corruption laws. All of these laws were made and enforced without international agreement. This comes with a dark side as other countries go down the path of aggressive unilateralism too. Just look at Russia's recent prosecution of Google for anti-trust violations or China's injunction against the sale of iPhones as examples. If every country did the same, the outcome would be catastrophic and incalculable.

Multilateralism has been a great engine of peace over the course of human civilization, and we should tread carefully in rejecting it. As Kant warned, the alternative is for us to "find perpetual peace in the vast grave that swallows both atrocities and their perpetrators." ■

DIVING expeditions

Our diving expeditions are a good example of how crucial international cooperation is to success of conservation initiatives.



The expeditions originally came about through a partnership with Reef Check, a US-based NGO that has developed a global citizen science methodology for divers to help survey and protect coral reefs – an ideal springboard for Biosphere Expeditions. The next ingredient was a coral expert, who came from the Marine Conservation Society in the UK, to lead on the science side of the expeditions. The bulk of funding comes from our expeditioners who join from all over the world, but also from grant-giving bodies such as the Rufford Foundation (UK), the Anglo-Omani Society (UK), Vascutek (France) and the Ford Motor Company Conservation and Environmental Grants (Middle East).

On the ground, our local partners Reef Check Malaysia, Maldives and Oman are es-

sential. Reef Check Malaysia existed before Biosphere Expeditions, but the NGOs in the Maldives and Oman are a direct result of Biosphere Expeditions training local people and supporting and encouraging them to found their own community-based NGOs and reef monitoring programmes. It is people and organisations from all over the world coming together that have made this possible. Without international cooperation, none of our diving expeditions would exist.

In Malaysia, data from our expeditions is fed, via Reef Check Malaysia, back to the government agencies tasked with protecting the reefs. They can be ineffective, often with profits taking precedence over conservation, but our work keeps them on their toes and gives the environment a voice over developers and profiteers.

In the Maldives, reef health is in steep decline, following the Great Barrier Reef down a path of death and destruction. The government seems fixated on more development



and, in doing so, killing off their unique and sensitive marine ecosystem, the very foundations of their economy, traditions, well-being and the country itself. Biosphere Expeditions sometimes seems to be a lone voice for the environment in a wilderness of ignorance and profiteering. But now we are backed up by brave local people (environmental activism in the Maldives is not risk free), all of them graduates of our placement programme, who founded Reef Check Maldives and are trying, through community

action and education, to give a local voice to the battered reefs of their country.

In Oman, by contrast, environmental protection is on the government agenda and Biosphere Expeditions has been, and continues to be, crucial in establishing protected areas by providing hard evidence for the government to act upon – and by reminding decision-makers often about the need to protect reefs in order to protect local people and livelihoods. As in the Maldives,

graduates of our placement programme have gone on to create Reef Check Oman, a community-based organisation that is now helping with influencing decision-makers and organising its own surveys to supplement the dataset created by the expeditions. This expedition is also supported by Hyatt and Euro Divers. ■



Poachers work across borders, so why not conservation efforts? A new study finds that three-quarters of African savanna elephants cross country borders, but the treaty that protects them from the illegal ivory trade does not account for that.

Rachael Bale, National Geographic writer

That's according to a new study in the journal Biological Conservation in which researchers analysed savannah elephant population data to demonstrate the importance of "transboundary" conservation efforts - when governments and organisations cooperate to manage and protect migratory elephants regardless of political boundaries.

African elephants face serious threats from poaching for the illegal ivory trade. Some 27,000 savannah elephants are killed each year, leading to a 30 percent decline between 2007 and 2014, according to the Great Elephant Census. A ban on the international commercial trade of ivory went into effect in 1990, but there's a thriving black market to meet demand in China, Japan, the US and elsewhere.

The problem with that ban, according to many conservationists, including the study's authors, is that it led to a two-tier system in which elephants in some African countries get more protection from the ivory trade than

Elephants can travel up to 50 miles a day. And because the majority of them live near national borders, that means an elephant that begins its evening in Botswana may be in Angola by the morning.

Here's the catch: Angola's elephants have greater protection under international law than Botswana's. In fact, more than half of Africa's elephants live in border regions where as soon as they cross that arbitrary line, the level of protection they have changes.



elephants in others. In 33 African countries, the ivory trade is outright banned because elephants are listed on Appendix I of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), the treaty that regulates international wildlife trade.

CITES is one of the most important international treaties for protecting elephants from poaching and Appendix I is the highest level of protection from the wildlife trade a species can get. But another four African countries - Botswana, Namibia, South Africa and Zimbabwe - have their elephants on Appendix II. That listing entails a temporary (nine-year) moratorium on the re-opening of the ivory trade. Last year, however, while the moratorium was still in play, Namibia and Zimbabwe applied to CITES to have ivory trade restrictions lifted, a request that was denied. After the moratorium ends at the end of 2017, they can make the request again and, with CITES permission, hold ivory sales.

Katarzyna Nowak, one of the study's authors and a researcher with the University of the Free State, in South Africa and her colleagues argue that giving Africa's elephants two separate levels of protection from the ivory trade depending on what country they are in does not make sense, because the majority live in populations that straddle national borders.

Therefore, they argue, the best way to protect elephants is by taking a transboundary approach - one that treats elephant populations as shared across regions, rather than belonging to one country or another based on the animals' particular location at any moment.

That, Nowak says, means granting them all the same level of protection under international agreements such as CITES. "If a species is highly mobile, then we have to adjust the scale of our management policy to that." Plus, she adds, poaching groups do not care about national borders. They operate across the continent. "Conservationists need to be more, not less, coordinated transnationally than poaching groups."

Many other species are managed cooperatively by all the countries the animals pass through. Take migratory birds in North America. Many native species were verging on extinction at the turn of the 20th century. The trade in native North American birds was booming so well-to-do women could wear plumed hats and hats topped with stuffed birds. In 1916 the USA and Canada signed the Convention for the Protection of Migratory Birds, which later underpinned the Migratory Bird Treaty Act, the USA's first major environmental law. It ensured that birds travelling across the continent were afforded equal protection from hunting, the feather trade and egg collection, regardless of which side of the border they were on. In the years that followed, Mexico, Japan and Russia signed similar treaties with the USA to make sure birds were protected throughout their migration routes.

In another effort to protect Africa's elephants cooperatively, five southern countries banded together in 2012 to create a conservation area that transcends national borders. The idea behind Kavango Zambezi Transfrontier Conservation Area, or KAZA (the creation of which Biosphere Expeditions was involved in), was to create a space for animals to recover from decades of decline and to promote sustainable human development. That too, however, does not deal with the trade issue.

What the study's authors ultimately see as most important for elephants in terms of transnational cooperation is getting countries to agree to give all African elephants the highest level of protection under CITES. The prospect that a handful of countries could revive the ivory trade is enough to pose a threat to elephants, according to Nowak. "The prospect of trade, or the anticipation that a trade can open up, can in itself encourage illegal activity," she says.

At last year's big wildlife trade meeting in South Africa, a vote was taken to give the elephants of Botswana, Namibia, South Africa, and Zimbabwe the same CITES

Appendix I protection as the other 33 African countries that have elephants. Those countries and Botswana, voted in favour of it. The other three southern African countries, as well as the US and EU, voted against it. The US worried that the southern African countries would simply "take a reservation," or formally ignore, the ivory ban if it passed, which is allowed under CITES. The EU argued that some African countries' elephant populations were too robust to qualify for more protection.

And Namibia, Zimbabwe and South Africa want to maintain the possibility of a legalised ivory trade.

Nowak is frustrated. "The forces behind [elephants' decline] are beyond the control of any one country, but you cannot get CITES to think beyond the national level," she says. "It's about cooperation and diplomacy as much as it is about conserving elephants." ■

AFRICA expeditions

Our Africa expeditions are another showcase for how expeditions are, and can only be, truly international affairs.

One of our first expeditions was to Namibia. This came about because we met a person at a trade fair in Germany who referred us to someone in Namibia, who referred us



onto some German biologists working in big cat conservation. We ended up staying for twelve years from 2002 to 2014. In that time we played a small role in the establishment of the Kavango Zambezi Transfrontier Conservation Area (KAZA TFCA), at the time the world's largest conservation area, spanning five southern African countries. We also played a pivotal role in establishing the country's largest leopard research project, working with local ranchers and resolving human-wildlife conflict, which led to a significant reduction in big cats killed in the country.

As well as citizen scientists coming from 24 countries over the years, international partnerships included German and Namibian research organisations, grants from US funders, corporate sponsorship from Land Rover, Motorola and MTC (a Namibian mobile phone network). We left when one of the study sites was sold to investors, the German scientists went back home, and Namibia, in a move towards nationalism and reverse racism, sadly, became hostile to citizen scientists from abroad entering the country.



When we left Namibia, we transferred across the border to South Africa, setting up a project with a South African scientist we had met on and worked with on our Amazonia expedition in Peru. The first expedition ran in 2015, in the scientist's backyard - Blue Hill Nature Reserve - which has become a centre for conservation research on a diverse array of species, from big cats to small mammals, to birds, bats and tortoises. Scientists from all over the world come to Blue Hill to conduct their studies, assisted by our citizen scientists from eight nations so far.

The latest addition to our expedition portfolio is Malawi. Our partnership there is with the Lilongwe Wildlife Trust, which is networked across the continent, and we look forward to many years of cooperation there. ■



Will nationalism trump conservation in a 'post-truth' world? Is the new US administration's apparent negative attitude toward environmental protection an open door for renewed Japanese commercial whaling?

Chris Butler-Stroud, chief executive of WDC (Whale and Dolphin Conservation NGO)

WDC, a UK charity, has often discussed the issue of Japanese vote buying at the International Whaling Commission (IWC). Japan has even admitted to using overseas development aid to get countries to attend the whaling commission and vote in favour of whaling, even if they have no interest in the issue and no need for whaling themselves. For nearly twenty years, WDC has been reporting on and campaigning to stop this undermining of international law through the use of what we believe is a form of 'economic imperialism'.

Japan's Prime Minister Abe has long been a supporter of whaling and this should not come as a shock considering his family links to the whaling industry. However, his political use of the whaling issue in support of his increasingly nationalistic political agenda within Japan should not be underestimated.

Japan has been free to build its whaling empire through economic imperialism (i.e. vote buying) under what I have loosely called, the US 'permission umbrella'. As far back as 2014, I called for the US to champion an international regulation to encourage Japan to pull back on its whaling.

That was of course under the previous Obama administration. The new Trump presidency has not yet made any inroads into the issue of whaling that we know of, but I am not holding my breath that whale conservation, or any

environmental conservation for that matter, is going to be high on the list of policy initiatives for those running the White House. I do not provide that opinion from any political standpoint, but simply based on the comments and actions coming out of the White House since Trump came to power.

Indeed, I would go so far as to warn that the statements and actions coming out of the US are creating a new form of 'permission umbrella', enabling Japan to reject international cooperation over whaling as the US leads with its new political nationalist agenda.

Japanese nationalism is not new and indeed has nothing to learn from the new US administration. In fact, some observers have noted similarities between President Trump and Prime Minister Abe. But Abe has regularly played the nationalism card in his bid to maintain power in Japan and indeed has recently been re-elected with a sizeable majority on just such a ticket.

Japan's whalers have been quick to merge the new nationalistic rhetoric with the whaling debate to create a 'post-fact world' (or provide 'alternative facts') of their own making. For example, Japan has been a staunch proponent of the 'whales eat all the fish' argument, contesting that if there were fewer whales in the oceans, then there would be more fish for its fishermen to catch. They continue with this rhetoric despite the rejection of such claims by many of the world's foremost fisheries scientists and ignore emerging research, which underscores the ecological role of whales in rebuilding fish stocks.

For whatever his reasons, US President Trump seems to be following a somewhat similar strategy declaring the press to be the 'enemy of the people' and dismissing expert opinions. In so doing, Trump is most likely seeking to create a public distrust of the media so as to prevent it from publishing any current or future news story that does not coincide with the administration's point of view. That this approach to managing the press

has included the defensive use of 'alternative facts' is worrying, as we have seen the use of such 'alternative facts', or lies as I like to call them, used by pro-whaling forces in the IWC for many years.

Trying to create distance between the press and the public should not be surprising either, considering the US President's views on experts was made clear during the recent presidential campaign when he seemed to suggest that he did not need to rely on experts as, "the experts are terrible".

This dismissal of experts was a tactic successfully used by the 'Leave' campaign in the recent UK European membership referendum (Brexit). In dismissing experts as being "part of the problem", the Leave proponents were able, in one sweep of rhetoric, to dismiss the informed opinion of a whole group of influential specialists that were trying to ensure the public were informed fully before engaging in such a monumental decision.

This dismissal of expertise with 'alternative facts' makes life difficult in a forum such as the IWC where, whatever your opinion on the rights and wrongs of whaling at the end of the day, most people involved in this field are consistent in wanting to have as much agreed science and facts upon which to base their positions. When 'alternative facts' become the currency of scientific and policy decision making, everyone suffers. To those in Japan who may wish to see the free press marginalised, reinventing history or historical revisionism, is, of course, second nature. If the US is beginning to use similar tactics, we may see these nationalistic pro-whalers take this as permission to push even harder for a resumption of commercial whaling. And pro-whaling elements in Japan may also feel empowered by the US's apparent intention to reject international agreements or even adhere to their own environmental protection regulations.

For example, Trump campaigned on his commitment to withdraw from the Paris Agreement, a ground-breaking



Abe & Trump share a nationalist, post-truth approach to politics.

international agreement on climate change. His appointment of Scott Pruitt as the new administrator of the US Environmental Protection Agency (EPA) has been followed almost immediately by Pruitt declaring climate change needs more "study and debate", and that "carbon dioxide is not a primary contributor to global warming". This came just a week before scientists demonstrated that the "Earth's oceans are warming 13% faster than thought, and accelerating". In one interview, Pruitt has turned US climate change policy on its head.

Again, Japan may take its lead from the new US administration. Like Pruitt's stance on climate change, Japan may well see its effective rejection of the 2014 International Court of Justice's ruling against its whaling as simply being a similar refutation of actual facts replaced with its own 'alternative facts' that means it can simply ignore the Court's judgement.

Whilst I do not anticipate any change in the Japanese Government's position on whaling, I am concerned that the US Government's potential abdication of a long-standing leading role at the IWC and the European Union's (EU) internal 'naval-gazing' after the shock of the decision of the UK to leave the EU, will leave a vacuum in which the Japanese agenda will be allowed to flourish.

We cannot afford to let this happen. ■



MARINE expeditions

In contrast to the Abe/Trump agenda of nationalism and post-truth politics, international cooperation is good news for the whales in European waters. In 1985 the EU introduced legislation against whaling, which means whale hunting around our Azores expedition site had to stop (the Azores are part of Portugal and therefore the EU). Soon after, in 1989, the first commercial whale-watching trip took place. Today this has boomed into a lively industry, which brings with it its own challenges.

Several of these are addressed by the expedition work, such as safe viewing practices that do not disturb the animals, and the movement of whales and dolphins around the archipelago. We work with a scientist based on the Azores, collect data for the local university and collaborate with whale watching companies, one of which supplies our research vessel. Data collected about whale

and dolphin movements are fed into several international databases that help to connect the dots of the animals' movements around the seven seas of the planet. Without international cooperation none of this would be possible.

Costa Rica is the site for our sea turtle expedition, particularly leatherbacks. Our partner on this project is Latin American Sea Turtles (LAST), which has over 30 years of experience in sea turtle management. LAST have initiated projects to monitor reefs, trained national park rangers in monitoring turtle nesting and educated hundreds of local students on the importance of marine and coastal conservation. They also act as environmental advisors to the government on marine environments, participate in several local, national and international networks and publish articles to improve the knowledge about the ocean and its life. In order to



reduce threats to sea turtles, and to restore population levels, LAST has implemented a series of sea turtle management programmes on many of the Caribbean beaches in Costa Rica – including Pacuare beach, the expedition's study site. ■



International cooperation for the protection of nature and wildlife: the legal framework

Not all threats to wildlife and nature can be tackled at the national level and international cooperation is required to combat threats and provide greater protection for wildlife and their habitats. Examples where international cooperation offer the best form of protection include combating illegal international trade in endangered species, protection of migratory species and their habitats and tackling climate change and its negative impact on nature and wildlife.

A number of multilateral conventions (international agreements made between several countries) have been developed to protect habitats and wildlife:



Ramsar Convention on Wetlands of international importance especially as Waterfowl Habitat 1971

The purpose of the Convention is to stem the progressive encroachment on and loss of wetlands. It seeks to promote the wise use of wetlands, encourage research and promote training in research and the management

of wetlands. It also requires contracting parties to designate suitable wetlands to be included in the list of wetlands of international importance. All designated Ramsar sites are also SSSIs (Sites of Special Scientific Interest) and most of them overlap with Natura 2000 sites.

The most recent and twelfth meeting of the Conference of the Parties to the Ramsar Convention on Wetlands (COP12) was held in Punta del Este, Uruguay. Over 800 participants representing the 168 parties to the Convention, as well as the International Organisation Partners (IOPs) of the Ramsar Convention, UN agencies, intergovernmental organisations and non-governmental organisations (NGOs) attended the meeting. Wetlands are disappearing fast: "40% of wetland habitats have been lost over the last 40 years and 76% of all wetland species are threatened", ran the stark reminder at the meeting, where a Strategic Plan 2015-2024 was adopted. Efforts to link to this the Strategic Plan of Sustainable Development Goals (SDGs), brought to light the on-going tensions between wetlands conservation and other economically-driven sectors, highlighting the need to extend Ramsar's reach into fisheries, sanitation and infrastructure development. COP12 warned that conservation and wise use of all wetlands should contribute "towards achieving sustainable development throughout the world," while noting that to achieve this mission, it is essential to recognise "vital ecosystem functions and the ecosystem services wetlands provide to people and nature."



The convention for the Protection of the World Cultural and Natural Heritage 1972

The World Heritage Convention seeks the identification, protection and conservation of cultural and natural heritage of global importance. Each country party to the Convention may nominate a possible site together with the appropriate management plan, for consideration by the Convention secretariat.

At the moment, there are 241 natural and mixed sites on the World Heritage List. Biosphere Expeditions is working or has worked in four of them: The Tien Shan mountains in Kyrgyzstan, the Golden Mountains of Altai in Russia, the Primeval Beech Forests of Slovakia, and the Cape Floral Region in South Africa. We are also pushing for the Musandam Peninsula in Oman to become a World Heritage site.



Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) 1973

The Convention seeks to regulate the international trade in endangered animals and plants and in products derived from them. CITES protected species include whales, dolphins and porpoises, sea turtles, parrots, corals, cacti, aloes, corals and orchids. The Convention recognises that people and states are the best protectors of their own wildlife, but that international cooperation is essential for the conservation of certain species due to over-exploitation through international trade.

Forty odd years ago, the multi-billion dollar international trade in endangered wildlife was largely a free-for-all. While many countries had imposed export restrictions to try and protect threatened species, there was no global trade agreement in place to provide a standard for such trade. So illegally exported products – such as rhino horns or leopard skins – could still be legally imported into most

countries. This made a mockery of national efforts to save endangered species, while also undermining hopes that countries could sustainably boost their legal wildlife trade for the benefit of species and people. The answer – or at least the agreed approach – was the launch in 1973 of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).

One of its earliest decisions was to ban all international trade in rhino horn since demand was rapidly driving some rhino species towards extinction, with black rhino numbers in particular plunging across Africa. The ban supported African countries, especially South Africa, which were battling to increase their rhino populations. But here we are four decades later with rhinos being poached in alarming numbers in southern and east Africa again. No surprise then that critics are questioning whether the Convention has the teeth to make a difference.

CITES can certainly point to an enormous body of work, with over 35,000 species of animals and plants now under some form of international trade regulation. Some successes are evident from well-regulated legal trade (such as crocodiles and vicuna) and from global trade bans (elephants saw a steep decrease in poaching after the international ban in 1989 until a new wave of illegal killing began in 2007).

But the pressure keeps growing as the world's population rises and consumer demand for wildlife and wildlife products – for food, medicine, furniture, status – soars with it. The recent Conference of the Parties meeting (COP17) in South Africa was the largest ever with a record 183 Parties and an unprecedented number of trade proposals and agenda items.

With international organised crime networks driving a global surge in illegal wildlife trade and the legal sustainable use of threatened wildlife increasingly in the firing line in many countries, COP17 was under pressure to deliver. What it did deliver was a closure of domestic ivory markets, protection for pangolins, sharks, rays, African grey parrots and rosewood.



Convention on the Conservation of Migratory Species of Wild Animals (CMS or Bonn Convention) 1979

The Convention on the Conservation of Migratory Species of Wild Animals - more commonly abbreviated to just the Convention on Migratory Species (CMS) or the Bonn Convention - aims to conserve terrestrial, marine and avian migratory species throughout their range. It is an international treaty, concluded under the aegis of the United Nations Environment Programme, concerned with the conservation of wildlife and habitats on a global scale. Since the Convention's came into force in 1983, its membership has grown steadily to include over 120 Parties from Africa, Central and South America, Asia, Europe and Oceania. The Convention was signed in 1979 in Bad Godesberg, a suburb of Bonn (hence the name). The depositary is the government of the Federal Republic of Germany.

The CMS is the only global and UN-based intergovernmental organisation established exclusively for the conservation and management of terrestrial, aquatic and avian migratory species throughout their range. CMS and its daughter agreements determine policy and provide further guidance on specific issues through their Strategic Plans, Action Plans, resolutions, decisions and guidelines. All maintain on their websites a list of all decisions taken, guidelines issues and Action Plans adopted by the Member States.



Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention) 1979

The Bern Convention seeks to conserve wild flora and fauna and their natural habitats and to promote European cooperation in this area. It gives special attention

to endangered and vulnerable species, including endangered and vulnerable migratory species. Although it primarily operates at the European regional level, it extends to some parts of Africa, including Burkina Faso, Tunisia, Morocco and Senegal, which are state parties to the Convention.

UN Convention on the Law of the Sea (UNCLOS) 1982



UNCLOS provides the legal framework for international governance of seas and oceans. Although not primarily concerned with the protection of wildlife and nature, it does require states to promote peaceful use of the seas and oceans and equitable and efficient utilisation of their resources. Some of the provisions of UNCLOS that affect nature and wildlife include the duty to prevent, reduce and control marine pollution and coastal states' responsibilities to conserve and manage resources in their respective exclusive economic zones (EEZ). UNCLOS also allows for the protection of cetaceans and other marine mammals in the high seas.

Convention on Biological Diversity (CBD) 1992



Convention on Biological Diversity

The objectives of the Convention are the conservation of biological diversity, the sustainable use of its components and the fair and equitable sharing of the benefits of utilising the genetic resource. Amongst other things, the Convention requires parties to draw up plans for conservation and sustainable use of biological diversity. ■

LARGE CARNIVORE expeditions

Biosphere Expeditions by and large concentrates on the nitty-gritty fieldwork on the ground, gathering and writing up sound scientific data and evidence for others, who are often Parties to the Conventions mentioned above, to make the big policy decisions. But we too work with the 'big hitters' such as WWF and NABU (a large, international NGO from Germany), mostly on big carnivores.

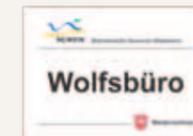


Our tiger expedition to Sumatra is in cooperation with WWF Indonesia. Supported by the Keidanren Nature Conservation Fund and the SeaWorld & Busch Gardens Conservation Fund, the expedition helps the local scientist and WWF better to understand the community's perspective on tigers, poaching and human-tiger conflict. The expedition is also active in local schools, delivering presentations to students and teachers about the tiger and its habitat, and what changes are needed if both are to survive.



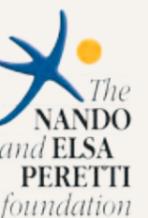
Batu Dinding Community Group is intimately involved in the expedition's logistics, providing an alternative income based on intact nature as well as training in tourism services to the local community.

NABU (Naturschutzbund = nature conservation alliance) is our partner for the wolf expedition in Germany and the Tien Shan snow leopard expedition. Both work with local NABU teams, be it on wolf data gathering to inform



policy-makers in Germany, or with the local NABU snow leopard anti-poaching group to study snow leopard distribution and biodiversity, and to help local people design and create community-managed protected areas. Another crucial partner in Germany is the state environment ministry's "Wolfsbüro" (wolf bureau) who help to train our citizen scientists and provide science guidance. The snow leopard expedition is also supported by the Nando and Elsa Peretti Foundation.

Our Slovakia lynx, wolf and bear expedition is the odd one out. There we support a lone conservationist in his fight against a corrupt system of national park officials and foresters who are hell-bent on illegal logging to line their pockets. Conservationists have slammed the Slovakian government for mismanaging its national parks and the IUCN (International Union for the Conservation of Nature), of which Biosphere Expeditions is a member, is currently considering downgrading parks due to logging, hunting and overdevelopment without environmental safeguards. ■



Some positive wildlife news from 2017, based on international cooperation

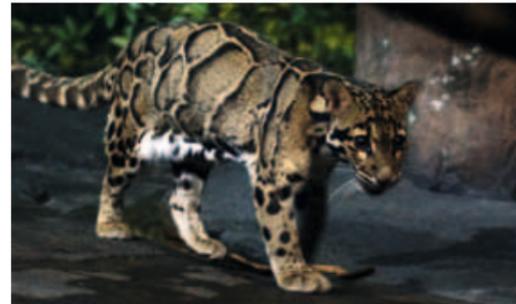


China to ban its elephant ivory trade within a year

January 2017. The Chinese government announced it will close its domestic commercial ivory market by the end of 2017. Conservationists are applauding the move, calling it a game-changer for elephants, which are being rapidly driven toward extinction due to ivory poaching. Momentum has been building for such action leading to member states at CITES COP17 passing resolutions to close domestic elephant ivory markets. ■

Scimitar-horned oryx return to the Sahara nearly two decades after going extinct in the wild

March 2017. A second group of animals was returned to the wild since the species was listed as Extinct in the Wild on the IUCN Red List in 2000. Eight female and six male scimitar-horned oryx were released in January 2017 in the hope that they would join the herd of 21 oryx that were reintroduced to Chad's Ouadi Rimé-Ouadi Achim Reserve in August 2016. The initial group of oryx — 13 females and 8 males — have reportedly thrived in their new habitat. In fact, in September 2016, the herd welcomed what is believed to be the first scimitar-horned oryx born in the wild in more than 20 years. ■



The clouded leopard: conserving Asia's elusive arboreal acrobat

February 2017. The clouded leopard is not closely related to the leopard, but has its own genus (Neofelis), separate from the big cats (Panthera). In 2006, the single species of clouded leopard was split in two: Neofelis nebulosa is found on the Asian mainland, while Neofelis diardi, the Sunda clouded leopard, occurs only on the islands of Sumatra and Borneo. Another subspecies native to Taiwan (Neofelis nebulosa brachyura) is believed to be extinct, after none were found in a camera trapping survey conducted between 1997 and 2012. Multinational efforts are now underway to conserve the cats, which are incredibly elusive, and only with the advent of new technology, including camera traps (Biosphere Expeditions recently photographed a clouded leopard in Sumatra) and radio collars, have scientists from around the world been able to begin defining clouded leopard ranges, distribution, populations and threats. Public outreach is also helping build awareness around the plight of these wild cats. ■

Rwanda welcomes 20 South African black rhinos to Akagera National Park

May 2017. Twenty South African rhinos have been taken to Rwanda. The black rhinos are of the eastern subspecies (Diceros bicornis michaeli). African Parks, the NGO that manages Akagera National Park in cooperation with the government of Rwanda, says that it has rhino trackers, canine patrols and a helicopter to protect the rhinos from poaching. Fewer than 5,000 black rhinos exist in Africa. Their numbers have been decimated by poaching for their horns, which fetch high prices for use in traditional Chinese medicine. Officials hope that the new rhino population will boost Akagera National Park's visibility as an ecotourism destination. ■



Cheetahs return to Malawi after decades

May 2017. International cooperation has resulted in cheetahs returning to Malawi. The animals have been moved into special enclosures called bomas for now, where the animals will learn to adapt to their new home under constant supervision. After spending some time in the bomas, the cheetahs will be released into the wider park. The cheetahs are the first large predator to be reintroduced into Liwonde National Park, and are said to be in good health. ■

Promising stories for Global Tiger Day

July 2017. Since the last Global Tiger Day in 2016, researchers in various countries have discovered tiger populations in unexpected areas, such as forested corridors along riverbanks and in areas that recently served as theatres of war. Several countries have worked to protect the tigers that live within their borders, including the creation of national parks and taking steps to end tiger farming. Camera trap surveys continue to prove invaluable to wildlife researchers in tracking down tigers and other species that can range over huge areas. ■

Brazil rejects oil company's 'Amazon Reef' drilling bid

August 2017. Ibama, Brazil's environmental regulator, rejected Total SA's environmental impact study for proposed drilling near the mouth of the Amazon. The environmental agency said the French energy giant failed to provide sufficient information on potential threats to wildlife and habitat. Environmentalists and NGOs from around the globe have been fighting the project. ■



Trade in silky and thresher sharks now to be strictly regulated

October 2017. All three species of thresher shark and the silky shark were included under Appendix II of CITES in 2016. Countries were granted a one-year grace period "put the necessary regulations and processes into place". The trade restrictions came into force in October 2017. However, merely listing the species under CITES will not protect the sharks, some conservationists warn. ■

Oryx and elephants

A success story akin to the scimitar-horned oryx in Chad comes from our Arabia expedition in cooperation with the Dubai Desert Conservation Reserve (DDCR). The DDCR has successfully introduced Arabian oryx already. So much so, that they now need to be managed carefully. Our citizen scientists therefore assess their health each year and also study other desert species such as foxes, Gordon's wildcat and gazelles, in close cooperation with the DDCR management. This relationship is the closest international cooperation we have between scientists, managers and decision-makers, and it is kindly supported by Platinum Heritage and Al Maha.

In Thailand, our expedition supports a small band of dedicated conservationists of the Kindred Spirit Elephant Sanctuary in trying to establish science-based methods to reintroduce Asian elephants to the wild. ■



ROUND-UP

Executive director Dr. Matthias Hammer reviews 2017 and looks ahead to 2018

Over the last three years we have considered communication and cooperation in wildlife conservation at some length. We asked whether we were boring, preaching to the converted and talking to the wrong people. We wondered how we could talk to the (unconverted) conservatives, whose neoliberal agenda is wrecking the planet, about the value of sustainability, as well nature and its conservation. And we covered, and continue to develop in this issue, the rise of cynicism about (citizen) science in particular and politics in general and how international cooperation, not isolation and nationalism, are the answer. Especially on a planet covered by migrating species that have no idea what national boundaries are. These are the bigger questions we have asked and the answers sound too much like doom and gloom. We need to push back!

Take the “talk to a conservationist” challenge

But here’s a challenge first, perhaps for your next expedition: take a conservationist out for a drink and ask them about their work. You’ll probably walk away feeling despondent, suicidal, guilty. Because rainforests are being axed and species are falling over the extinction cliff edge. Because of the way in which corrupt governments and shady corporations are destroying the planet just to keep voters happy or the profits coming. If you can stick it out a bit longer, you’ll hear about melting glaciers, dissolving reefs, overfished oceans, plastic gyres and the fallacy of growth on a finite planet that no politician in their right mind wants to tackle.

So next to trying to save species from extinction, we also have to work to keep our colleagues and the whole field of conservation from slipping into total despair. Because the increasingly bleak tone threatens to undercut recruiting future scientists and ignores the many positive stories that are happening on the ground. Worst of all, the constant pessimism may actually be causing the general public, politicians, governments and decision-makers to tune out, which is the last thing we want. So, yes, we need to push back.

Still selling our vision of a better, healthier, happier world

In a paper about conservation optimism scientists Swaisgood and Sheppard argue that we should “characterise our philosophy as hopeful, which is not the same as optimistic. So even if we are realistic in believing that the environmental crisis can no longer be averted (optimism), we still believe that even in a dramatically altered world we can find meaning and a place for nature (hope).”

We have to get better at telling a story, because in the end, the goal is for people to ‘buy’ our ideas - ideas for a better, healthier world. But not at the expense of diverting from the facts and not telling the truth, for this would be selling out to the post-truth approach of lies, bigotry and prejudice.

If conservation is to prevail and endure, we will need to marshal our forces with equal doses of realism and hope. We cannot have empty hope, but we must call upon all to act, and in some cases, sacrifice. We need to be more like Winston Churchill, who challenged his countrymen to expend copious quantities of “blood, toil, tears and sweat” to combat the Nazi peril. When Churchill issued this challenge, there was little doubt that he had hope that the war could be won. As he saw it, “success consists of going from failure to failure without loss of enthusiasm.” Conservation biology is now a well-established and rapidly expanding scientific discipline, so we have a pretty good grasp of reality. Today, when things are taking a turn for the worse, we need hope more than ever.

The pushback

So we have pushed back in 2017. We do not accept the nationalistic, isolationist, jingoistic worldview of Brexit and have almost completed our move to Ireland. I have been put forward as a UN “Champion of the Earth” by a great number of people, which is in itself a great, and humbling, honour already. We have worked with partners from all over the planet towards a common goal, involving, training and educating local people on the way, hosting them on our expeditions as part of our capacity-building and community empowerment drive – and saw, as a result and with our help, two local NGOs, one in the Maldives and one in Oman, founded by graduates of our placement programme.

We continue to publish in the scientific and popular literature, carrying our message of hope far and wide. We have achieved a world conservation first by capturing a Hottentot buttonquail bird (*Turnix hottentottus*) in South Africa. We can report stable

populations of lynx, wolf & bear in Slovakia and high-impact citizen science that is crucial for local reserve management of the Dubai Desert Conservation Reserve. We have relocated 220 turtle clutches in Costa Rica, where poaching continues to be a problem and must be addressed by government, but we are helping to keep species alive whilst pressuring decision-makers. We keep badgering governments and decision-makers to protect their reefs and therefore local livelihoods, traditions and culture in the Maldives, Malaysia and Oman. In the Azores a remarkable 244 sightings of eleven different species of cetacean and one species of turtle were recorded during the expedition period; this shows impressively how conservation through research can work for an archipelago that has gone from whale hunting to watching - from consumption and destruction to conservation and livelihoods based on intact nature. In Sumatra we report good tiger habitat in Bukit Rimbang Bukit Baling Wildlife Reserve, including a good prey base, which is great news on an island almost wholly taken over by highly destructive palm oil interests. In Germany our inaugural wolf expedition exceeded all expectations in terms of data collected – and we are pushing back hard against hunters and farmers who want to see the wolf eradicated again (not on our watch!). And finally, we have brought a new expedition online in Malawi, working to safeguard African biodiversity.

Do join us in 2018 and help us to carry a message of hope for the planet. We can’t do this alone and the more people join in, the better! ■



Biosphere Expeditions' ACHIEVEMENTS

and how citizen scientist volunteers have brought them about

Protected area creation

Altai Republic

Data collected by our citizen scientist volunteers in the Altai have helped our local and international partners make arguments that have led to the declaration of a protected area in the Altai Republic, Central Asia. This area now provides a protected habitat for a number of endangered species, including the snow leopard.

Ukraine

Data collected by our citizen scientist volunteers in the Ukraine have helped our local partners make arguments that have led to the declaration of a national park. This park now protects a unique steppe area jutting into the Black Sea, a stop-off point for many migratory birds, as well as a haven for fauna (e.g. birds & wolves) and flora (it boasts amongst other things Europe's biggest orchid field).

Oman

Data collected by our citizen scientist volunteers as well as our intensive work to influence decision-makers have led to the protection of two marine areas in the Musandam Peninsula of Oman, where all fishing except local handline fishing has been banned by a new ministerial decree.

Southern Africa

Data collected by our citizen scientist volunteers in Namibia have helped our local and international partners make arguments that have led to the declaration of the Kavango Zambezi Transfrontier Conservation Area, or KAZA TFCA. The KAZA TFCA is the world's largest conservation area, spanning five southern African countries; Angola, Botswana, Namibia, Zambia and Zimbabwe, centered around the Caprivi-Chobe-Victoria Falls area. Also in Namibia, fewer lions, leopards and cheetahs have been killed in farmer-predator conflict due to our data collection, awareness-building and educational work.

Australia

When Australia created the world's largest network of marine reserves in 2012, the Roebuck Commonwealth Marine Reserve, site of our flatback turtle study, was part of the network. Along with our local partners, we were working towards getting flatback turtles listed within the 'major conservation values' of the reserve and this is what happened, with the citation being 'Foraging area adjacent to important nesting sites for flatback turtles'.

Prevention of wildlife and wilderness destruction

Poland

We played an active role in saving 50 wolves from being declared legitimate hunting targets in the Bieszczady mountains in Poland. This was achieved by providing accurate information on the predator numbers and by influencing the local authorities who reversed their decision to cull wolves.

Peru Amazon

Together with our partners in Peru, we were able to halt a dam construction project, which was threatening a biodiversity hotspot in our Madre de Dios study site region in the Peru Amazon region.

Capacity-building and community-based conservation

Through our placement programme for local people, we have built capacity and empowered people around the world and helped to create local conservation NGOs in Oman and the Maldives. We have also co-financed field research stations in Namibia and Peru, which served as hubs for conservation research, employment and capacity-building.

Wildlife and wilderness management & protection

Dubai Desert Conservation Reserve, United Arab Emirates

Our recommendations for the management of Arabian oryx and Gordon's wildcat have been incorporated into the action plan of the Dubai Desert Conservation Reserve. Based on the data collected by our citizen scientist volunteers, an Arabian wolf reintroduction programme is now underway.

Peru Amazon

Our guidelines for boat behaviour at clay licks in the Tambopata Reserve have been incorporated in local management plans. Guidelines are needed because unsustainable forms of farming, logging and tourism are threatening the natural habitat in the Peruvian Amazon.

Brazilian Atlantic rainforest

Our recommendations for the management and protection of jaguars have been incorporated into national and state-wide jaguar action plans in Brazil's Atlantic rainforest.

Caribbean marine protected area, Honduras

Our recommendations for the management and protection of the coral reefs of the Cayos Cochinos marine protected area in Honduras have been incorporated into the managing authorities' action plan.

Spanish Pyrenees

Together with our partners in Spain, we helped to reverse a EU high altitude carcass removal regulation, which was designed to combat the spread of BSE, but was starving high mountain vultures and bears.



EXPEDITIONS A-Z



AMAZONIA



LATEST NEWS

Pushing back against logging

The Amazonia expedition is the longest-running project in Biosphere Expeditions' portfolio. "In fact, it was one of our first-ever expeditions, starting in 2001", recalls Kathy Gill, who co-founded Biosphere Expeditions back in 1999. "Over the last 17 years, we have conducted research in various locations across the Amazon, helped build a research station and pushed back against logging, mining and encroachment", says Kathy. The need to keep pushing back is as great as ever, especially in the Amazon, which is under threat from so many sides.

AMAZONIA - Peru

AT A GLANCE

Icons of the Amazon: Jaguars, pumas, parrots and peccaries in Peru

This expedition to volunteer in South America will take you to a remote and beautiful biodiversity hotspot of the Amazon basin. As part of a small international team, you will experience living and working in the jungle together with local biologists on an important wildlife survey concentrating on cats, primates, macaws and other flagship species of the Amazon. In doing so, you will also aid community conservation efforts and the development of sustainable management strategies. Based at a comfortable jungle lodge in a remote part of the forest, you will be working on foot in the jungle, recording cat, primate and other species and setting camera traps, as well as from hides observing macaws feeding on riverside clay lick sites, creating databases, and much more. All this as an integral part of a conservation project that will preserve an intact landscape of forest for further multidisciplinary research projects.

Expedition contribution	Duration	Dates	Meeting point
€ 2490	7 days	9 - 15 Sep 2018	Puerto Maldonado

Study species: Jaguar, puma, parrots, peccaries



More info www.biosphere-expeditions.org/amazonia

ARABIA

ARABIA - United Arab Emirates

Ways of the desert: Conserving Arabian oryx, Gordon's wildcat, sand fox & other species in the iconic sandy desert landscape of Arabia

This Arabian oryx and other desert species conservation project will take you to the fascinating and iconic sandy desert landscape of the Arabian Peninsula. Working alongside scientists from the Dubai Desert Conservation Reserve, you will be part of a small international team, monitoring Arabian oryx, Gordon's wildcat, red and sand fox, mountain and sand gazelles, as well as other flagship species of the desert. From a comfortable oasis field camp, you will venture out in the expedition 4WDs and on foot to study antelope behaviour and social structures, camera- and live-trap Gordon's wildcat, red and sand fox, and monitor them by radio and GPS telemetry. All this to ensure the survival of these important flagship desert species in their beleaguered world.

AT A GLANCE

Expedition contribution	Duration	Dates	Meeting point
€ 1870	8 days	20 - 27 Jan 2018	Dubai

Study species:

Arabian oryx, Gordon's wildcat, sand fox, sand and mountain gazelle



More info www.biosphere-expeditions.org/arabia

Most productive annual survey

In January 2017 17 citizen scientists and conservation professionals from nine nations in Europe, Africa, North America and the Middle East joined forces to survey the biodiversity of the sand dunes not far from the glittering metropolis of Dubai. Together they counted 31 bird, 11 mammal & reptile, 11 insect and 15 plant species. Amongst them 104 Arabian oryx, 77 Arabian gazelle, 4 sand gazelle, 140 palm trees, 843 ghaf trees, 28 acacia, 12 Sodom's apples and a whopping 8,000 or so broom bushes. Greg Simkins, Conservation Manager of the DDCR, says: "The annual survey with Biosphere Expeditions this year was the most productive we've ever had. This joint effort by people from across the globe is important for us. The data that the citizen scientists collect help us to manage the reserve more effectively. For example, by adjusting oryx feed or working out how many gazelles the reserve can support. And on top of this it is both rewarding and humbling to have so much interest and support from so many places around our planet."

LATEST NEWS





LATEST NEWS

Whale number 2254 seen in the Azores for the tenth time in 29 years!

The expedition, now in its 13th year of collaboration with marine biologist Lisa Steiner, observed a sperm whale 29 years after she was first seen swimming in the Azores as an adult in 1987! This is the longest recorded re-sighting of a sperm whale. Also sighted during the 2016 expedition were a couple of blue whales that had been seen previously, one in 2006 & 2013, and the other in 2010. Lisa Steiner says that “photo ID projects of whales take time to bear fruit, so it is great to have Biosphere Expeditions in for the long haul. We are now generating some amazing results from our efforts. Inter-annual matches of these migrating giants show that they tend to move along the same corridors year after year. Matching some of these animals to breeding grounds or feeding grounds gives us clues as to how these whales are split into separate stocks. And the icing on the cake, for me, is identifying an individual sperm whale ten times over the last 29 years; that is absolutely incredible.”

AZORES - Portugal

AT A GLANCE

Fascinating creatures of the deep: Studying whales, dolphins and turtles around the Azores archipelago in the Atlantic Ocean

This expedition will take you to the remote and spectacular Azores Archipelago in the middle of the Atlantic Ocean. As part of a small international team, you will photograph whales and dolphins and record them for local and international monitoring databases. You will also listen to and make recordings of whale and dolphin vocalisations and capture loggerhead turtles in the open ocean for tagging and release. All this in an effort to elucidate the animals’ life histories and migration patterns across the oceans and assist with the formulation of effective conservation strategies. The whole team will be working on a modern catamaran research boat during the day and staying in a comfortable and modern guesthouse at night.

Study species:

Whales and dolphins, loggerhead turtle



Expedition contribution	Duration	Dates	Meeting point
€1740	10 days	8 - 17 Mar 2018	Horta, Faial Island
€1740	10 days	19 - 28 Mar 2018	Horta, Faial Island
€1740	10 days	30 Mar - 8 Apr 2018	Horta, Faial Island
€1740	10 days	10 - 19 Apr 2018	Horta, Faial Island

More info www.biosphere-expeditions.org/azores

AZORES



COSTA RICA

AT A GLANCE

COSTA RICA

Gentle giants: Protecting leatherback sea turtles through direct conservation action on the Caribbean coast of Costa Rica

This wildlife volunteering project will take you to the Caribbean coast of Costa Rica, the Central American country best known for its beaches, volcanoes, biodiversity and inspired environmental policies. Working on a remote black sands beach, you will be involved in direct conservation actions to support the critically endangered leatherback sea turtle, the world's largest living turtle. Venturing out from a research station by the beach, you will conduct beach patrols, guard and collect eggs, count and measure hatchlings and adult turtles, and assist with other direct conservation and research activities. All this to help create strategies to ensure the species' survival into the future.

Expedition contribution	Duration	Dates	Meeting point
€1730	8 days	7 - 14 May 2018	San José

Study species: Leatherback and other sea turtles



More info www.biosphere-expeditions.org/costarica

LATEST NEWS

1.397 turtle eggs saved

2017 was the second year for Biosphere Expeditions in Costa Rica, working at Pacuare Beach in cooperation with LAST (Latin American Sea Turtles). Eighteen nests were saved, totaling 1397 eggs. "There is simply no substitute for "foot soldiers" patrolling the beach at night, and the volunteers also provide alternative income to the local community" explains Fabian Carrasco, the expedition scientist. "We got to one turtle only five minutes before a poacher walked passed. It is such a good feeling when you manage to save a clutch of eggs" says Candice Cox, expedition participant from the USA. When a turtle is encountered the volunteers carefully collect all the eggs. They then measure and tag the nesting turtle. The eggs are brought back to a fenced hatchery where they are protected from poachers until they hatch.





Data gathered in 2017 and media interest exceeded all expectations

LATEST NEWS

June 2017 saw the start of Germany's first-ever wolf citizen science expedition, organised by Biosphere Expeditions in cooperation with the Wolfsbüro (wolf bureau) of the state environment ministry NLWKN. Forty-nine citizen scientists from all over the world searched for wolf sign for a month. The results in terms of signs found, data gathered and media interest exceeded all expectations of the expedition's organisers. In total 1,100 km were covered on public footpaths and bridleways, which is where wolves also like to walk, patrol and mark their territories. Almost 80 wolf scats and as many other wolf signs again were found and passed onto the wolf bureau for further analysis. Expedition scientist Peter Schütte says that "the data gathered by our citizen scientists are a valuable addition to official wolf monitoring efforts and a great way to show support for all the other wolf ambassadors working in our state." His colleague Kenny Kenner adds "we alone simply can't cover large areas. I can just about manage to cover 'my' area and 'my' wolf pack within. So I am very grateful for the additional help that the expedition provided - in areas where we want to and should know more".

Study species: Wolf



More info www.biosphere-expeditions.org/germany

GERMANY

AT A GLANCE

Love / hate relationships: Monitoring the return of the wolf to the German state of Lower Saxony

This expedition will take you to the beautiful lowlands of Lower Saxony, a federal state in northern Germany, to help monitor and protect the returning wolf population. Working in small teams mainly around the famously picturesque Lüneburger Heide (Lüneburg Heath), you will record signs of wolf presence such as tracks, kills, and survey prey species such as deer and wild boar. You will also camera-trap the animals and collect samples to study wolf diet and for genetic analysis. The expedition base is a charming guesthouse with all modern amenities, right on the edge of the Lüneburg Heath.

Expedition contribution	Duration	Dates	Meeting point
€1840	7 days	23 - 29 June 2018	Bremen
€1840	7 days	30 Jun - 6 July 2018	Bremen

GERMANY

MALAWI



AT A GLANCE

MALAWI

From big cats to small butterflies: Monitoring biodiversity of Vwaza Marsh Wildlife Reserve, Malawi, Africa

This African wildlife conservation project will take you to the little known, but species-rich and quintessentially African Vwaza Marsh Wildlife Reserve in Malawi to monitor elephant, hippo, zebra, buffalo, cats, primates, bats, antelopes, as well as insects and vegetation. You will be working as part of an international team, based at a rustic but comfortable field camp. You will be covering ground in off-road vehicles and on foot and conducting research activities such as live and camera trapping, target species searches, transect and species identification work, as well as data entry. All this in an effort to help local scientists assess the nature and patterns of biodiversity in Vwaza Marsh Wildlife Reserve and to inform biodiversity monitoring and management in order to protect this relatively untouched part of Africa for future generations.

Expedition contribution	Duration	Dates	Meeting point
€2240	13 days	2 - 14 Sep 2018	Lilongwe
€2240	13 days	16 - 28 Sep 2018	Lilongwe
€2240	13 days	7 - 19 Oct 2018	Lilongwe

Study species: African species including elephant, hippopotamus, zebra; Carnivores including leopard, caracal, hyaena, Primates including yellow baboon, Antelope species such as greater kudu



More info www.biosphere-expeditions.org/malawi

LATEST NEWS

New expedition 2018

This new expedition in Biosphere Expeditions' portfolio was launched in December 2017 with the initial groups selling out within a few days. "We have added additional groups and are very pleased that the project is so popular. There is so much potential to make a difference on this project, as local capacity is low at the moment, so the citizen science we will do will help park management a lot. We are also planning to build capacity through our placement programme and really look forward to the inaugural expedition in September 2018", says Biosphere Expeditions' executive director Dr. Matthias Hammer.



MALDIVES

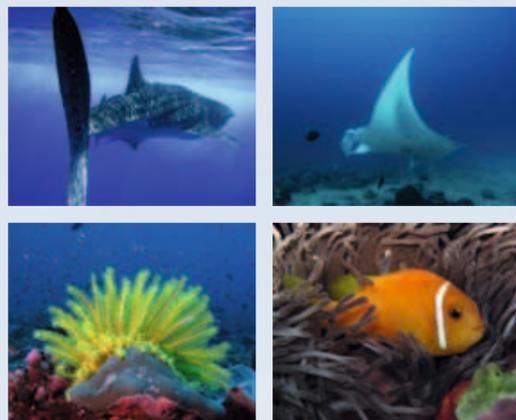
Little and large: Surveying and safeguarding coral reefs & whale sharks of the Maldives archipelago

This SCUBA diving expedition will take you to the beautiful 26 coral atolls that make up the Republic of Maldives. Based on a very luxurious and modern liveaboard yacht, you will help marine biologists study and protect the Maldives' coral reefs and resident whale shark population. All this because the Maldives government identified a need for further research and monitoring work as far back as 1997. Biosphere Expeditions is addressing this need with your help and will train you as a Reef Check EcoDiver. With this qualification you will then gather important reef and whale shark data and you will also be eligible to apply for PADI or NAUI Reef Check Speciality Course certification after the expedition.

AT A GLANCE

Expedition contribution	Duration	Dates	Meeting point
€2140	7 days	21 - 27 Jul 2018	Malé
€2140	7 days	28 Jul - 3 Aug 2018	Malé

Study species: Whale shark & coral reef

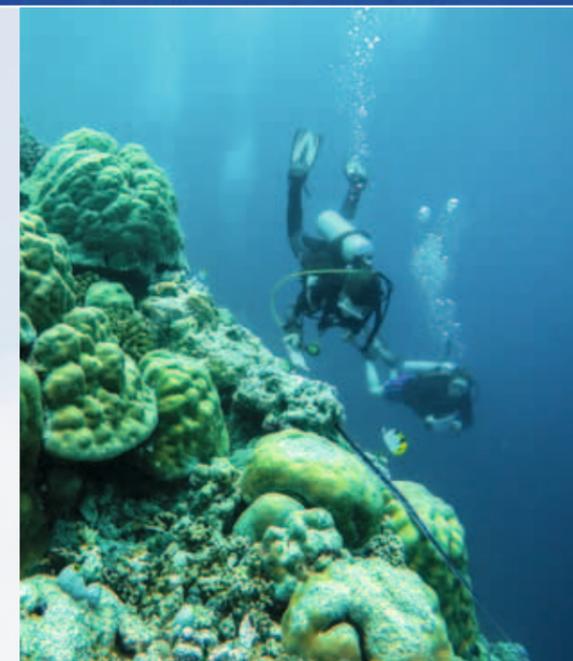


More info www.biosphere-expeditions.org/maldives

Impact of 2014 - 2017 bleaching events investigated

LATEST NEWS

The July 2017 expedition investigated the impact of the 2014-2017 bleaching events. During the first half of the expedition it was apparent that many of the inner reef sites had not recovered from the bleaching and hard coral had reduced dramatically since the bleaching down to only 8%, from percentages of 40-50%. The picture was more encouraging for outer reefs that were more heavily dominated by Porites colonies. Here, much of the reef appeared to have totally recovered from the overheating in 2016, with hard coral cover at 38%. The second half of the expedition visited sites further afield in Vaavu Atoll, attempting to glean information from historic survey sites first visited in the late 1990s. There too was a mix of good and bad news, with healthy sites generally located in more exposed and southerly locations on atolls. The best news is the keen participation of local Maldivians. Graduates of the Biosphere Expeditions placement programme founded Reef Check Maldives and "we hope this will go from strength to strength and build a true community-based reef conservation programme", says expedition leader Catherine Edsell, "because the reefs of the Maldives need all the help they can get".



MALDIVES



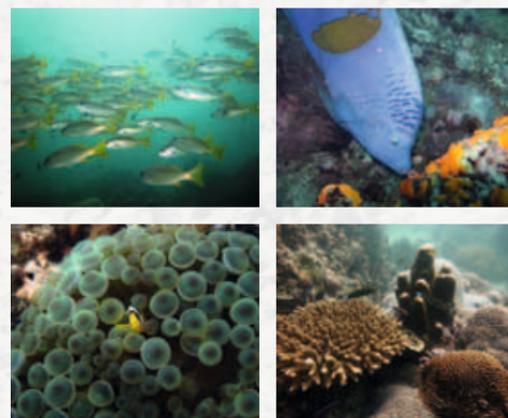
LATEST NEWS

Remarkable resilience

The corals of Oman's Musandam Peninsula continue to show remarkable resilience, enduring "extreme conditions such as high salinity and temperatures, existing – indeed thriving – in what would be considered marginal and highly challenging environments for corals in other parts of the world. This is remarkable and may hold the key to coral survival in the face of global warming and its devastating effects on reefs across much of the planet." This is the upbeat message from Biosphere Expeditions after its eighth annual reef survey expedition to Oman. It is in stark contrast to the coral death and destruction in the Maldives reported by us earlier in the year. There are also moves by the government to protect the area, but these proceed slowly. However, where government fails, we now have civil society in Oman in the form of the success story of Reef Check Oman, founded earlier in the year by graduates of the Biosphere Expeditions placement programme, which is designed to build capacity and empower local communities to run their own conservation programmes.

Study species:

Hard and soft corals, reef fish & invertebrates



More info www.biosphere-expeditions.org/musandam

AT A GLANCE

MUSANDAM - Oman

Underwater pioneers: Studying & protecting the unique coral reefs of the Musandam peninsula

This SCUBA diving expedition will take you to the United Arab Emirates and from there to the remote and mountainous Musandam peninsula of Oman. Based on a comfortable and modern liveboard yacht, you will study the diverse coral reefs fringing the areas where the spectacular mountains plunge into the Arabian Gulf and the Gulf of Oman. These reefs boast a rich mixture of beautiful corals and a multitude of fish and other animals. This pioneering study to map this unique underwater environment has already led to the creation of two protected areas. But more data on the biological status of the reefs and of population levels of key indicator species are needed for educational purposes and to be able to put forward further ideas for more and larger marine protection areas. Data collection follows an internationally recognised coral reef monitoring programme, called Reef Check, and will also be used to make informed management and conservation decisions within the area. The expedition includes training as a Reef Check EcoDiver.

Expedition contribution	Duration	Dates	Meeting point
€1990	7 days	25 Nov- 1 Dec 2018	Dubai
€1990	7 days	2 - 8 Dec 2018	Dubai



SLOVAKIA

AT A GLANCE

True white wilderness: Tracking lynx, wolf and bear in the Carpathian mountains of Slovakia

This expedition will take you to a little-known part of the Slovakian Carpathian mountains to monitor lynx, wolf & bear populations and their interrelationship with prey species. Based in a cosy and comfortable mountain chalet, you will be part of a small international team, working with the local scientist and contributing to an important piece of research. You will track large carnivores through snow in the forest and meadow habitats of the mountains and you may be involved in capturing and radio-collaring them. You will also learn how to recognise and record other signs of their presence, such as radio telemetry signals, scats and scent markings, camera trap them, collect samples to study their diet and for genetic analysis, and survey prey species. All in an effort to create a sustainable future for these icons of the Carpathian wilderness and to promote greater understanding of their role in European ecosystems.

Expedition contribution	Duration	Dates	Meeting point
€1780	7 days	4 - 10 Feb 2018	Bratislava
€1780	7 days	11 - 17 Feb 2018	Bratislava

Study species:
Lynx, wolf, bear



More info www.biosphere-expeditions.org/slovakia

LATEST NEWS

Highest number of bear recordings in 2017

In February 2017 this expedition ran for its fifth year in Velká Fatra National Park with 17 citizen scientists from all over the world. The team walked 344 km of transects, recording animal signs and sightings, collected 36 samples for DNA analysis and set up 21 camera traps. 98 signs of bear, 66 of wolf and 20 of lynx were found. This is the highest number of bear recordings since the project started in 2013. "A lot of food is available in the forest this year, first and foremost the nuts of beech trees", scientist Tomas Hulik explains, "so there is no strong reason for the bears to hibernate. We have confirmed bear presence throughout our study site and our results now allow a much more realistic estimation of brown bear numbers within the National Park". Wolf signs recorded this year confirm the presence of three packs occupying different territories within the National Park and beyond. Lynx are also present in the park "and there may have been some non-resident individuals around too this year, since the expedition took place during the lynx mating season", explains Hulik. Other findings during the surveys include tracks of red and roe deer, fox, otter, wild boar, pine marten, hare, hazel grouse, squirrel and other species. Golden eagles were also sighted three times.



SLOVAKIA

SOUTH AFRICA

SOUTH AFRICA

Carnivores of the Cape Floral Kingdom: Surveying Cape leopards and biodiversity in the fynbos mountains of South Africa

This expedition will take you to South Africa's beautiful Cape Floral Kingdom (fynbos), a UNESCO World Heritage Site and the world's only biome contained within one country, to conduct a survey of leopard and fynbos biodiversity and to experience African fauna (such as buffalo, giraffe, eland, kudu, zebra, etc.). Based in a remote mountainous part of the Western Cape on a comfortable former farmstead with all modern amenities, you will first learn some bush skills and then conduct surveys on foot, mountain bike or car. You will also set camera traps, conduct game counts and you may assist with cat capturing and collaring, and other studies that may be ongoing at the research site at the time, such as bird, tortoise or flower monitoring. All this in an effort to mitigate human-wildlife conflict and create a sustainable future for all.

AT A GLANCE

Study species: Leopard, caracal, black-backed jackal, porcupine



More info www.biosphere-expeditions.org/southafrica

Wildfire impact studies on biodiversity

LATEST NEWS

A team from Biosphere Expeditions spent October 2017 trying to understand how fire affects a range of species, from flowers to felines, in the fynbos area of South Africa. The study site (Blue Hill Nature Reserve) was impacted by wildfire in early 2017. The Cape Floral Kingdom (fynbos) of South Africa is one of the world's biodiversity hotspots and as such a UNESCO World Heritage Site. It is dominated by a fire-driven ecosystem – the fynbos biome with unsurpassed botanical richness: 7,000 of 9,000 plant species that are found here are endemic. It is in the flower-filled Cape Fold Mountains that the Cape mountain leopard is also found – a leopard half the size of the savannah leopards of Africa, but with home ranges twice the size. "Understanding the impact of fire on feline predators is really important" says expedition scientist Dr. Lee. "There is mounting evidence to show that smaller predators, e.g. black-backed jackal and mongoose species are more common when leopards are rare or absent". Black-backed jackals are notorious stock predators, resulting in large numbers of small stock loss per year: especially in the karoo area adjacent to the fynbos – an area where leopards are largely absent". Farmers considering leopards 'vermin' to be exterminated, despite legal protection, is a major threat to leopard survival. "We hope our research will change this attitude", concludes Dr. Lee.



Expedition contribution	Duration	Dates	Meeting point
€2060	13 days	14–26 Oct 2018	George



THAILAND

AT A GLANCE

THAILAND

Elephant encounters: Studying Asian elephants in the hills of northern Thailand to increase their welfare and conservation

This expedition will take you to the tropical highlands and Himalayan foothills in the shadow of Thailand's tallest peak (Doi Inthanon at 2,565 m). There you will conduct close-encounter behavioural and other studies on Asian elephants to make an important contribution to elephant conservation in Thailand. Our study elephant herd lives in the forested area surrounding a remote hill tribe village, where the expedition is based in the community. The expedition will also work on general biodiversity monitoring, as well as education, capacity-building and incentive creation for local people, which are all vital if elephants are to have a future in Thailand living side-by-side with humans.

Expedition contribution	Duration	Dates	Meeting point
€1880	9 days	12 - 20 Nov 2018	Chiang Mai

Study species: Asian elephant



More info www.biosphere-expeditions.org/thailand

LATEST NEWS

First study of natural elephant behaviour

In October 2017 Biosphere Expeditions & Kindred Spirit Elephant Sanctuary (KSES) ran their very first Asian elephant conservation expedition within a Karen hill tribe community in Mae Chaem region in the mountains of Northern Thailand. Seven citizen scientists from Canada, Germany, Russia and the US helped gather data, spending a total of 76 hours in the forest with elephants. The goal of the research is to contribute to welfare initiatives in Thailand by collecting data on elephant behaviour in the wild. Almost 3,500 elephants are currently kept in captivity in Thailand, working for their upkeep in tourist camps. "With so many captive elephants in the country, mostly living in inadequate conditions, more research is urgently needed on natural elephant behaviour to provide guidelines to improve their lives", says Talia Gale, head scientists of KSES.



TIEN SHAN



TIEN SHAN - Kyrgyzstan

Mountain ghosts: Protecting snow leopards and other animals of the Tien Shan mountains of Kyrgyzstan

This snow leopard conservation project will take you to the remote, spectacular and beautiful Tien Shan mountains of Kyrgyzstan to survey snow leopards, as well as their prey animals such as the argali mountain sheep, the Central Asian ibex, marmots and others. You will be working as part of a small international team from a mobile tented base camp set at various locations and altitudes of around 2000 m (where altitude sickness is not an issue). You will be covering ground in the expedition vehicles and on foot, looking for tracks, kills, scats and the animals themselves, and setting camera traps. True expedition-style base camp conditions, testing but satisfying mountain surveying, off-road driving and the breathtaking high mountains make this a challenging, but very rewarding expedition.

AT A GLANCE

Expedition contribution	Duration	Dates	Meeting point
€2190	13 days	9 - 21 Jul 2018	Bishkek
€2190	13 days	30 Jul - 11 Aug 2018	Bishkek

Study species: Snow leopard, argali, ibex, marmot



More info www.biosphere-expeditions.org/tianshan

GIS models built that transform data into visual representations

LATEST NEWS

Four of the widely agreed key approaches in snow leopard conservation, as agreed by conservationists worldwide, are private conservation initiatives, local involvement, capacity-building and ecotourism. "Our Tien Shan project ticks all those boxes beautifully in an expedition that does it all. Funded by the private donations of our citizen science participants, we involve local people and organisations and bring benefits to herders and other people on the ground. For us these are the key factors to ensure the future of the snow leopard in Kyrgyzstan and elsewhere", says Dr. Volodymyr Tytar, the expedition scientist. With the help of our expedition participants over the past four years, Dr. Tytar has been able to produce GIS models that transform collected data into visual representations that suggest locations within the study that are appropriate habitat for snow leopards. "Using these models we have been able to find signs of both snow leopard prey species and the snow leopard itself," says Dr. Tytar. "And with each new year's data we are refining the model and gaining a better understanding of the snow leopard population within the Kyrgyz Ala Too Range." A new initiative to gather more data for more of the year was also started during the 2017 expedition. Community members from the surrounding area were trained in camera trapping techniques in order to extend the study season another six months.



TIOMAN



AT A GLANCE

TIOMAN - Malaysia

Paradise in peril: Studying & protecting reefs of the Pulau Tioman Marine Park, Malaysia

This SCUBA diving expedition will take you to Tioman, the Malaysian island named by Time Magazine as one of the world's most beautiful. Working in a small group of fellow divers and volunteers in Malaysia, and based on a comfortable and modern liveboard yacht, you will assist the local researcher to study and protect the local Marine Park's beautiful but fragile coral reefs. Diving two to four times a day, the expedition includes training as a Reef Check EcoDiver; with this qualification you are eligible to apply for PADI or NAUI Reef Check Speciality Course certification after the expedition. Please note that you need to be a fully qualified diver to take part in this expedition (minimum PADI Open Water or equivalent).

Expedition contribution	Duration	Dates	Meeting point
€1990	8 days	14 - 21 Aug 2018	Singapore
€1990	8 days	22 - 29 Aug 2018	Singapore

Study species: Hard and soft corals, reef fish & invertebrates



More info www.biosphere-expeditions.org/tioman

LATEST NEWS

Strong recovery for Malaysian coral

The El Niño effect in 2016 devastated coral reefs around the world, but the reefs of one island in Malaysia are fighting back. The expedition assessed the health of the Tioman island reefs following the devastating rise in sea temperatures that happened in May 2016, which led to coral bleaching (disease) and death. But the reefs around Tioman island fought back and in the months since they were 30 to 40% bleached, they have largely recovered, as the Biosphere Expeditions team found. "So for these reefs the danger of bleaching has passed for now, but the threats of overfishing and pollution are still there", says expedition scientist Alvin Chelliah of Reef Check Malaysia and that "it is through working with the communities on the island that the threats to these reefs will be tackled and sustainability can be secured. We need monitoring as the base for such efforts, so the more Biosphere Expeditions teams we have, the better."



EXPERIENCE DAYS

Experience days are just what they say they are: days that will give you a unique insight into what it's like to be in the field with Biosphere Expeditions assisting scientists with wildlife research and conservation. They are set amongst the beautiful scenery of a national park or protected area, where you will be part of a small team, alongside a park ranger or nature guide, and your expedition leader. You will discover expedition and wildlife research and conservation skills such as working with a map, GPS and compass, collecting important animal data, reading animal tracks and signs, using telemetry equipment and wildlife camera traps. You will also learn about the area you are in, its fauna and flora, history and the conservation work going on inside.

Experience days are always on a Sunday from 09.00 to 17.00. Experience day contribution: €65 per person. We will credit €65 back to you if you subsequently join one of our expeditions.

OTHER EVENTS

We also have events around the world throughout the year. These include talks, exhibition attendance, get-togethers, etc.

More info www.biosphere-expeditions.org/events



EVENTS



Skål International Sustainable Tourism Awards
Winner of the category "Countryside and wildlife" (international award scheme)



World Travel and Tourism Council
Tourism For Tomorrow Awards: Finalist in the "Environment" category (international award scheme)



Hero of the reef award
Our executive director is awarded this title by Reef Check for his services to reef conservation worldwide



First Choice Responsible Tourism Awards
Winner of the "Best Volunteering Organisation" award (international award scheme based in the UK)



Multiple National Geographic awards
"Best New Trip" or "Tours of a Lifetime" awards for several expeditions (international award scheme based in the USA)



Environmental Best Practice Award
Silver award by the Green Organisation (international award scheme based in the UK)



Virgin Holidays Responsible Tourism Awards
Highly commended in the categories "Best for Protection of Endangered Species" and "Best Volunteering Organisation" (international award scheme based in the USA)



Umwelt-Online-Award (Environment-Online-Award)
German government prize awarded to businesses and organisations with an online presence who have displayed excellence and best practice for the environment (international award scheme based in Germany)



Blue List Award
Best in Sustainable Travel for Azores expedition (international award scheme based in the USA)



"Best Holiday for Green-Minded Travellers" for experience days; **"Top Ten Outdoor Pursuits"** for Altai & Azores expeditions; **"Best Desert Adventure Holiday"** for Arabia expedition; **"Best Activity and Adventure Break"** for Musandam expedition; **"Best Volunteer Career Break"** for Brazil expedition; **"Best for the Wild at Heart"** for Slovakia expedition.



"Best Adventure Outfitter" and **"Best Save-the-Earth Trip"** listings

"Ten Best Wildlife Volunteering Holidays" for Oman expedition; **"Ten Best Wildlife Holidays in Europe"** for Azores expedition



"Best Volunteer Travel" for Namibia expedition

WALL STREET JOURNAL **"Most satisfying trip of the year"** for Altai expedition

"Top Ten Conservation Holiday" for Altai expedition



"Life-changing volunteering trip" for Tien Shan expedition

"Unforgettable Travel Adventure (Unvergessliches Reiseabenteuer)" for taster days and Honduras expedition



"Top Holiday For Nature" listing in the category "Where can I do something for nature during my holidays?" (Wo kann man im Urlaub etwas für die Natur tun?)



"Top Responsible Holiday" for Amazonia expedition
"Twenty of the world's greatest adventures" for Brazil expedition

"30 Great Escapes / Best Adventure Trips on the Planet" for Slovakia expedition



More awards & accolades are on www.biosphere-expeditions.org/awards

AWARDS & ACCOLADES

Biosphere Expeditions is an officially accredited member of the following bodies

 United Nations Environment Programme's Governing Council and Global Ministerial Environment Forum	 International Union for the Conservation of Nature	 Marine Conservation Society	 Reef Check
--	---	--	---

The FRIENDS of Biosphere Expeditions

GET INVOLVED

Who are the Friends?

The Friends of Biosphere Expeditions are people who feel passionate about providing support to our critical wildlife conservation and research projects across the globe. By joining the Friends you can play a vital part in making a real difference to the survival of our planet's endangered species. Joining is easy, not expensive and just a click away at www.biosphere-expeditions.org/friends.

Become a member

If you can't take part in a full-blown expedition or project yet, or if you have already been with us and would like to stay involved, or if you would simply like to be part of what we are doing, then why not become a Friend of Biosphere Expeditions today? Help us to support critical wildlife conservation and research projects across the globe for a membership fee* starting from a monthly €10 / £10 / US\$13 / AU\$15.

**Depending on your country of residence, your membership fee may be tax-deductible (for example membership fees to our US 501(c)(3) charity, or our German e.V. charity, where we can issue tax-deductible receipts or German "Spendenbescheinigungen").*

Membership benefits

Friends membership benefits include expedition and events discounts, the Biosphere Expeditions Magazine, first notification and preference for last-minute expedition places, news and updates on how your membership fee is making a difference to our conservation work in the field and much more. More information and a joining form are at www.biosphere-expeditions.org/friends.

Where does my membership fee go?

Wondering where your money will go? We guarantee that 100% will go into supporting conservation. We can do this because we are a small, flexible organisation with no steel and glass headquarters to maintain or bureaucratic dinosaurs to feed. Whenever we make a significant expenditure on one of our conservation projects from the Friends' funds, we will let you know in a clear and transparent way. For example, we may spend some of the fund to enable scientists from different projects to present the findings of their Biosphere-supported projects at international conservation conferences, or we may spend some of the fund on printing education materials for local people, or on training up a local conservationist under the guidance of our project scientists, or creating placements on our expeditions for local students and people. Have a look on the next pages for recent examples of what the Friends' funds have been spent on.



Local people for their local reefs:

Much needed community-based reef survey and care programmes launched in the Maldives and Oman

Since 2009 Biosphere Expeditions have been surveying Maldivian and Omani reefs and training local people in reef survey techniques. This has already resulted in the establishment of marine protected areas in Oman and community-based surveys in the Maldives and Oman. But now Maldivians and Omanis, spearheaded by Rafil Mohamed from Male' and Jenan Alasfoor from Muscat, have taken the next step, setting up local NGOs Reef Check Maldives and Reef Check Oman, and giving reefs the science-based care they desperately need.

Rafil Mohamed from Male' says: "I was trained by Biosphere Expeditions in 2012 and 2014 to Reef Check Trainer level and my real passion is the sea, especially our Maldivian reefs. We all know they are under threat from climate change and rampant development. And it often seems our reefs have no voice, despite being the basis of our country, culture and livelihood. We need more Maldivians speaking for our reefs and if I can do this, it will be an honour."



Jenan Alasfoor from Muscat says: "I am an avid diver and I was trained by Biosphere Expeditions to Reef Check Trainer level and recently became the Reef Check co-ordinator for Oman. The ocean is my passion and reefs are under threat from climate change, pollution, development and other impacts. Reefs are a beautiful asset of our country, but because they are underwater not many people realise their importance. We need to increase understanding for our reefs and must protect them, not just because they are beautiful, but also because they provide income through tourism, protection from storms and form the basis of fishermen livelihoods around the coast."

Dr. Matthias Hammer, founder and executive director of Biosphere Expeditions, adds: "This is exactly what we need: local people surveying their own reefs and pressuring their own government so that reefs can be better protected and passed down to the next generation, as well as safeguard livelihoods and traditions, for example of fishermen or those depending on income through tourism."

Reef Check Maldives: www.reefcheckmaldives.org
Reef Check Oman: www.reefcheckoman.org

Friends activities 2017

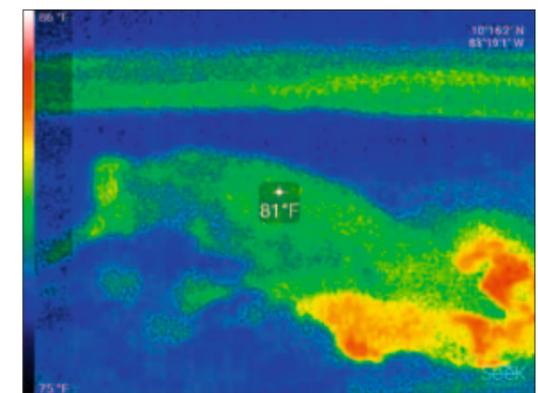
The focus of the Friends on capacity-building with local people through the Biosphere Expeditions placement programme (see next page) continued in 2017 and scored its biggest success so far (see left column). In addition the Friends supported wolf ambassadors in Germany and purchased camera traps for the expeditions in Arabia, Germany, Sumatra, Thailand and Tien Shan, as well as a heat seeking camera for the Costa Rica expedition.



Wolf ambassador
Bärbel Wittor



Camera trap picture
from Arabia



Leatherback turtle
nesting as seen through
a heat seeking camera

Placement programme

The Biosphere Expeditions placement programme (see www.biosphere-expeditions.org/placements) offers free expedition places to nationals or residents of the expedition host country in order to build capacity and careers, train the next generation of conservationists, empower communities and community-based conservation efforts and ensure that local knowledge is brought to the expedition teams through local participants as well as local scientists and staff.

Below are some examples of expedition placements in 2017.



The placement programme is kindly supported by the Anglo-Omani Society, Vascutek, the Rufford Foundation, as well as a fund-raising campaign via GlobalGiving, and supplemented by the Friends.



Valeria Quesada Phillips, Costa Rica



"I wanted to come on the expedition as I think it is so sad with poachers of turtles and I wanted to help change this. I feel very strongly about the power of one. We can make a difference as individuals. I have had the best time, getting to know so many nice people and sharing the same conservation goal. Also, learning about different cultures and languages. The experience was amazing! I hope to use this in my work with environmental education. I believe we need environmental education; we need to teach the new generations so they can make a difference. I am anxious to spread the word and do environmental education in my community to help keep sea turtles safe. Thank you so much to Biosphere Expeditions for the experience, it has been fantastic, I cannot stop smiling!"

Yrskeldi Emilbekov, Kyrgyzstan



"I want to express my deepest gratitude for such programme for placements, so that I explored a new sphere of activities and came much closer to what is called 'expedition'. Biosphere Expeditions team is doing a great work for our community, not only in terms of conservation of ecosystem, but also in terms of inner tourism itself. A lot of expedition participants said that they will come again to another expedition or visit Kyrgyzstan again. It means a lot for our society, not only because of economic development, but cultural exchange and networking."



Ahmad Ainun Najib, Indonesia

"It was awesome that I can spend my two weeks with Biosphere Expeditions. I learned many things from this research expedition and met the awesome people who are involved."

Thanks to Biosphere Expeditions for giving me chance to join this program, which will be great for my future. Always keep up the nice work!"



Adam Saneez, Maldives

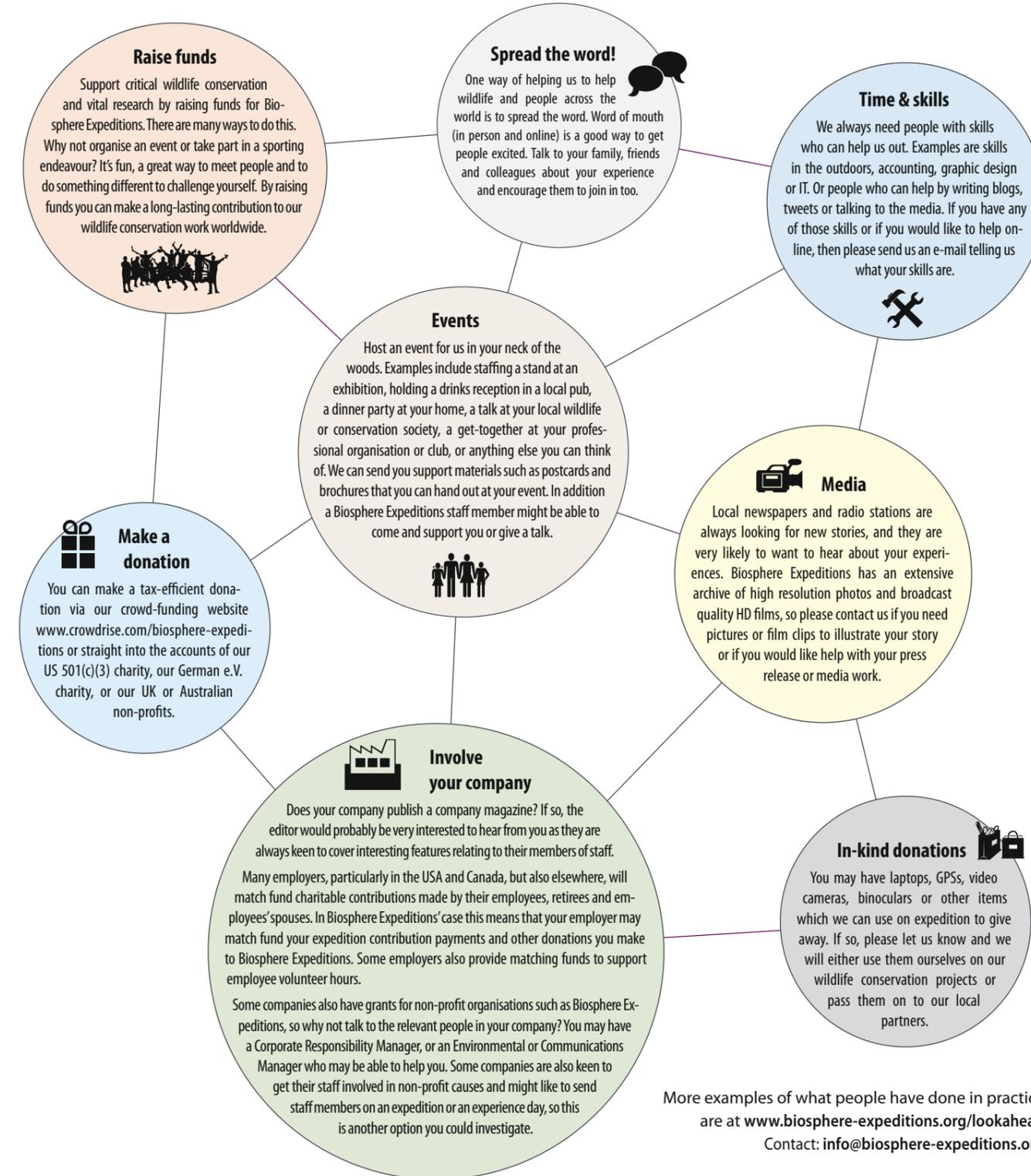
"It was a wonderful learning experience, finding out about best methodology, limitations to and how to collect reliable data. I also learnt about other Biosphere Expedition projects going on in other regions of the world. I am truly amazed by the conservation works done by Biosphere expeditions. It was a pleasure and an inspiration to work alongside Dr. Hussein Zahir, a local coral expert who has done valuable research works of coral reefs of the Maldives. We can now continue the survey works of the Maldives by surveying the reefs in different areas of the Maldives and training more locals to conduct Reef Check. Together we can monitor and mitigate the damages faced by the reefs. Creating public awareness among the locals is the key for coral reef conservation."

projects going on in other regions of the world. I am truly amazed by the conservation works done by Biosphere expeditions. It was a pleasure and an inspiration to work alongside Dr. Hussein Zahir, a local coral expert who has done valuable research works of coral reefs of the Maldives. We can now continue the survey works of the Maldives by surveying the reefs in different areas of the Maldives and training more locals to conduct Reef Check. Together we can monitor and mitigate the damages faced by the reefs. Creating public awareness among the locals is the key for coral reef conservation."



The Look Ahead network

There are many ways of getting involved with Biosphere Expeditions. Joining an expedition is one; joining our Look Ahead programme is another. We are building an amazing network of people - have a look at how people have helped; we hope it gives you some inspiration. Then see which one is for you and get in touch.



More examples of what people have done in practice are at www.biosphere-expeditions.org/lookahead
Contact: info@biosphere-expeditions.org

NEWS & VIEWS

NEWS & VIEWS

**Ida Vincent
IN THE HIMALAYA**

Expedition leader Ida Vincent (second left), recovering from major lung surgery as a result of a rare type of lung cancer, has climbed Ama Dablam, a 6,812 meter tall peak, as part of an all-women climbing team, sponsoring a local female Sherpa (first left), a job that women rarely get, so that she could be part their team and develop her career in the male-dominated climbing industry in Nepal.



**Rainer Springhorn
IN THE HIMALAYA**

Expeditioner Rainer Springhorn has taken part in a research expedition to Sagarmatha National Park in Nepal.



**Dr. Alan Lee
QUEST TO PROTECT
TORTOISES**

Our South Africa expedition scientist Dr. Alan Lee, together with Matt Macray, discovered the lethal threat electric fences pose to tortoises in South Africa. He has been campaigning ever since, making farmers aware of the impact of their fences and the grave threat they pose to tortoises. The expedition played a pivotal role in making this important discovery.



**Neil Goodall
IS ON TEN**

Neil Goodall in 2017, by participating in the Costa Rica and South Africa expeditions, has made it into the eclectic group of expeditioners with ten or more expeditions. Welcome to the Decaders, Neil! Your eleventh expedition is on the house.

UN "Champion of the Earth"

Friends, supporters and staff of Biosphere Expeditions got together to nominate our founder and executive director Dr. Matthias Hammer for the UN's highest environmental award. He says he's "humbled by the very kind idea and messages of support". We wish him luck for the selection procedure.



Catherine Edsell ON WOMEN

Expedition leader Catherine Edsell has given a TEDxLondon talk to 1,500 people about how expeditions, focusing primarily on women, can give you a new lease of life. Catherine has also had an article published in the September edition of Geographical Magazine about 'The Matriarch Adventure', an all female expedition tracking desert elephants in Namibia, which she designed and led. Catherine is also involved with the 'Women Adventure Expo' event for women explorers at the Royal Geographical Society in London.



**Biosphere Expeditions at the
TOURISM FOR TOMORROW
AWARDS**

In what is probably the biggest accolade to date in its 18 year history, Biosphere Expeditions was one of three finalists in the Environment category at the April 2017 World Travel & Tourism Council "Tourism for Tomorrow" awards.

In a glittering Oscars-style ceremony in Bangkok, finalist were called "the very best in sustainable travel", a "force for good that tourism can be for the environment", "examples of distinction, passion and achievement", "outstanding examples of people taking major steps in transforming...and the very best that is happening in tourism in our world".



Talking about the Environment category finalists, Fiona Jeffry, Founder & Chairman, Just a Drop and Chair, Tourism for Tomorrow Awards, said that this was for those "who actually improve the natural environment through their operations. They promote biodiversity, conservation, minimise the use of scarce resources and look to invest in green technologies. The best in this category are spearheading behavioural change amongst consumers, staff and suppliers."



**Dr. Jean-Luc Solandt AT
CORAL REEF
CONFERENCE**

Our "very own" Dr. Jean-Luc Solandt addressed a very large coral reef conference at Oxford at the end of 2017

with a presentation entitled "Through all the gloom, signs of resilience in Maldives reefs". A copy of the presentation is at www.biosphere-expeditions.org/reports > Other publications



**May triggers Brexit
BIOSPHERE EXPEDITIONS MOVES TO IRELAND**

Theresa May triggered Article 50 on 29 March 2017, setting the UK on its path out of the EU. Biosphere Expeditions has moved its HQ from the UK to Ireland to stay in.

On 24 June 2016, within a few hours of the UK's Brexit vote, Biosphere Expeditions' executive director Dr. Matthias Hammer issued a statement announcing the move, saying that it "came down to a choice of visions of the kind of world we want to live in. Do we want to exist in a world where nationalistic interest, attitudes of 'them and us', suspicion and fear of the unknown – be it people or challenges – rule the day? History has told us where this leads. Or do we want to live in a world of collaboration, common visions, shared values, working towards a greater good, compassion and kindness? For us the answer was always obvious." By the time you read this, the Biosphere Expeditions HQ will have moved to Dublin.

More on Brexit and how this will affect you is at <https://biosphereexpeditions.wordpress.com/category/brexit-ireland/>

PUSHING BACK for wolves

Hunters and landowners in Germany are campaigning against the return of the wolf and citizen science. We push back in an open letter to the president of the hunting association. Read the letter on www.biosphere-expeditions.org/news (9 October 2017)



© Theo Grantjens

NEWS & VIEWS

GENUINE CONSERVATION from genuine results

Here are some highlights from the expedition reports published in 2017



414 nesting activities of leatherback turtle, 525 of green turtle and 22 of hawksbill turtle were recorded in **COSTA RICA**. 220 clutches were relocated to the custom-built hatchery. Poaching continues to be a problem and must be addressed by government, but we are helping to keep species alive whilst pressuring decision-makers.

There is shocking bleaching, Crown-of-Thorn infestation and overfishing threatening the reefs in the **MALDIVES**. We have issued a stark warning that the equitable provision of high quality reefs and their resources will further diminish unless drastic actions are taken by government to address the lack of management measures that are pushing reefs in the Maldives to the brink of collapse.

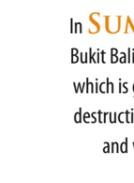


In the **AZORES** a remarkable 244 sightings of eleven different species of cetacean and one species of turtle were recorded during the expedition period. This shows impressively how conservation through research can work for an archipelago that has gone from whale hunting to watching - from consumption and destruction to conservation and livelihoods based on intact nature.

In stark contrast to the Maldives, coral reefs around **TIOMAN (MALAYSIA)** showed encouraging resilience to the 2015/16 global bleaching event. However, highly-priced marine life collected for the food and curio trades continue to be either absent, or were recorded in very low numbers. We are working on enforcement of existing Marine Park laws to protect fish no-take zones, better coastal development planning, reduction of tourism impacts, as well as better waste management and sewage treatment systems with our local partner Reef Check Malaysia.



In **PERU** the expedition documented horrific levels of encroachment, illegal logging and biodiversity loss in the wake of the recently completed Interoceanic Highway, which now connects Peru and Brazil, and has opened up previously remote areas of the Amazon rainforest to unregulated, rampant exploitation. If Peru wishes to see long-term sustainable economic growth, it must protect its rainforest resources.



In **SUMATRA** we report good tiger habitat in Bukit Rimbang Bukit Baling Wildlife Reserve (BRBBWR), including a good prey base, which is great news on an island almost wholly taken over by highly destructive palm oil interests. Tiger presence is reported anecdotally and we will continue to camera-trap and protect them together with our local research partner WWF Indonesia.



NEW Scientific publications

Our Sumatra tiger expedition scientist **Febri Widodo** has co-authored a paper on "Tigers and their prey in Bukit Rimbang Bukit Baling: Abundance baseline for effective wildlife reserve management".

Dr. Rita Bento, who was once our Musandam coral reef scientist but has since moved onto in Brazil, has published two papers on the coral reefs of the Arabian Peninsula.

Dr. Alan Lee, our South Africa expedition scientists, and his MSc student Matt Macray have published articles on "The shocking truth about electric fences" and continue to campaign on the issue to protect tortoise populations in southern Africa.

Our executive director **Dr. Matthias Hammer** has co-authored a paper on how "Multiple methods increase detection of large and medium-sized mammals: working with volunteers in south-eastern Oman".

Dr. Hammer, in collaboration with our coral reef expert **Dr. Jean-Luc Solandt**, has also published a paper on "Bleaching patterns and capacity building for Maldives conservationists during Reef Check expeditions".

Access to all publications is via www.biosphere-expeditions.org/reports

NEWS & VIEWS

Four happy BIOSPHERE CONSERVATION STORIES that came out in 2017



HIGH-IMPACT CITIZEN SCIENCE - The **Arabia** expedition reports says that "the citizen science efforts instigated by Biosphere Expeditions

in the Dubai Desert Conservation Reserve (DDCR) are ideally suited to research projects that require a large area to be surveyed in a short period of time" and further that "data gathered by the expedition alerted DDCR management to several conservation issues and also allowed for informed, fact-based management decisions to be made in a show-case of how the work of citizen scientist volunteers can aid the efforts of conservation professionals."



WORLD CONSERVATION FIRST - The **South Africa** expedition completed a world first - capturing a Hottentot buttonquail bird (Turnix hottentottus). The expedition also worked successfully on leopard (cats

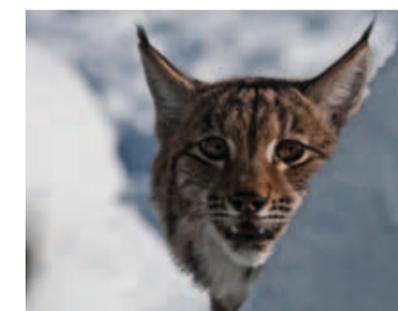
and tortoises), caracal, African wildcat and other species in a bid to mitigate conflict with farmers and thereby contributing significantly to both humans and wildlife benefitting from each other and thriving side by side. The expedition scientist Dr. Alan Lee is "delighted with the expedition and of course the buttonquail capture. I have been mist-netting and ringing birds since 2011, with over 7,000 birds caught, and this was the first Hottentot buttonquail, not just caught by me, but by anyone, anywhere. Clearly it would not have been possible without the collective efforts of the Biosphere Expeditions team. It was a highlight for this expedition. Our teams want to contribute to worthwhile conservation science, but perhaps never imagined they could achieve a world first".

The **Azores** whale & dolphin expedition, now in its 14th year of collaboration with marine biologist Lisa Steiner, observed a **SPERM WHALE 29 YEARS AFTER SHE WAS FIRST SEEN** swimming in



the Azores as an adult in 1987! This is the longest recorded re-sighting of a sperm whale. Also sighted during the most recent expedition were a couple of blue whales that had been seen previously, one in 2006 & 2013, and the other in 2010. Lisa Steiner says that "photo ID projects of whales take time to bear fruit, so it is great to have Biosphere Expeditions in for the long haul. We are now generating some amazing results from our efforts. Inter-annual matches of these migrating giants show that they tend to move along the same corridors year after year. Matching some of these animals to breeding grounds or feeding grounds gives us clues as to how these whales are split into separate stocks. And the icing on the cake, for me, is identifying an individual sperm whale ten times over the last 29 years; that is absolutely incredible."

STABLE POPULATIONS of lynx, wolf & bear in **Slovakia** expedition study site - the latest expedition report of the Slovakia lynx, wolf & bear expedition to the Vel'ka Fatra National Park confirms that the Lubochnianska valley continues to support large carnivores, which have disappeared from most of their former ranges across Europe due to hunting and habitat destruction.



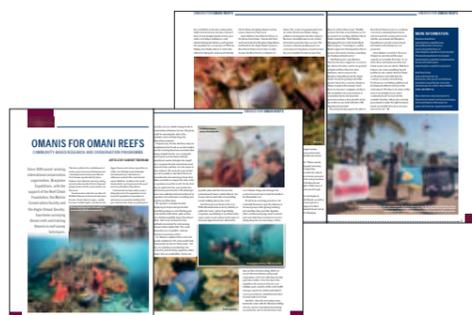
MEDIA

CLIPPINGS 2017

Biosphere Expeditions is in the media a lot. Below is a selection.
A full overview is on ISSUU at <http://issuu.com/biosphere-expeditions>

 **Anglo-Omani Society Review**

Four page feature about Musandam coral reef expedition and community-based conservation efforts
<https://issuu.com/biosphere-expeditions/docs/aos17>



 **Der Spiegel**

Two page article about our Germany wolf expedition
<https://issuu.com/biosphere-expeditions/docs/de-spiegel17>



 **Biorama**

Five page feature about Germany wolf expedition
<https://issuu.com/biosphere-expeditions/docs/de-biorama17>



 **TAZ**

Two page article about our Germany wolf expedition
<https://issuu.com/biosphere-expeditions/docs/de-taz17>



 **abenteuer & reisen**

Biosphere Expeditions' work is mentioned in a critical piece about Maldives resort development
<https://issuu.com/biosphere-expeditions/docs/mv-abenteuerreisen17>



MEDIA

CLIPPINGS 2017



 **Geographical**

Six page feature about Germany wolf expedition and rewilding in Europe
<https://issuu.com/biosphere-expeditions/docs/de-geographical17>

 **National Geographic Traveller**

Short mentions of our snow leopard expeditions in Altai & Tien Shan
<https://issuu.com/biosphere-expeditions/docs/ts-ngtravelleruk17>



 **EDA Magazine**

Short article about the establishment of community-based Reef Check groups in Oman and the Maldives
<https://issuu.com/biosphere-expeditions/docs/eda17>



 **Tierwelt**

Six page feature about Tien Shan snow leopard expedition
<https://issuu.com/biosphere-expeditions/docs/ts-tierwelt17>



 **Unterwasser**

Six page feature about Musandam coral reef expedition
<https://issuu.com/biosphere-expeditions/docs/mu-unterwasser17>



 **Krant van de Aarde**

Short mention of Sumatra tiger expedition in Dutch travel special (Krant van de Aarde)
https://issuu.com/biosphere-expeditions/docs/su-krant_van_de_aarde17



MEDIA

CLIPPINGS 2017

 **Universum**

Twelve page feature of wolves in Lower Saxony with the expedition mentioned on the sidelines.
<https://issuu.com/biosphere-expeditions/docs/de-universum17>



 **National Geographic Traveller**

Four page feature about Arabian desert species expedition
<https://issuu.com/biosphere-expeditions/docs/ar-ngtravelleruk17>



 **Discover Wildlife (BBC Wildlife)**

Four page feature about South African leopard & biodiversity expedition
<https://issuu.com/biosphere-expeditions/docs/sa-discoverwildlife17>



 **Tauchen**

Five page feature about Tioman/Malaysia coral reef expedition
https://issuu.com/biosphere-expeditions/docs/my-tauchen18_7a07348014a486



 **Wanderlust**

Six page feature about Germany wolf expedition and rewilding in Europe
<https://issuu.com/biosphere-expeditions/docs/de-wanderlust17>



CONTACT US

www.biosphere-expeditions.org/offices

Australia ☎ 1800-708261

✉ australia@biosphere-expeditions.org

France ☎ 01-53170820

✉ france@biosphere-expeditions.org

Germany ☎ 0931-40480500

✉ deutschland@biosphere-expeditions.org

Ireland ☎ 01-9695263

✉ ireland@biosphere-expeditions.org

North America ☎ 1800-4075761

✉ northamerica@biosphere-expeditions.org

UK ☎ 0870-4460801

✉ uk@biosphere-expeditions.org

www.biosphere-expeditions.org



Biosphere Expeditions is an international non-profit conservation organisation registered in Australia, England, France, Germany, Ireland and the USA.

Officially accredited member of the International Union for the Conservation of Nature.



Officially accredited member of the United Nations Environment Programme's Governing Council & Global Ministerial Environment Forum.



Cover picture:
International cooperation to cross a river in the Tien Shan mountains of Kyrgyzstan, on the Biosphere Expeditions snow leopard expedition.

© Dietmar Denger www.fotografiedietmardenger.com