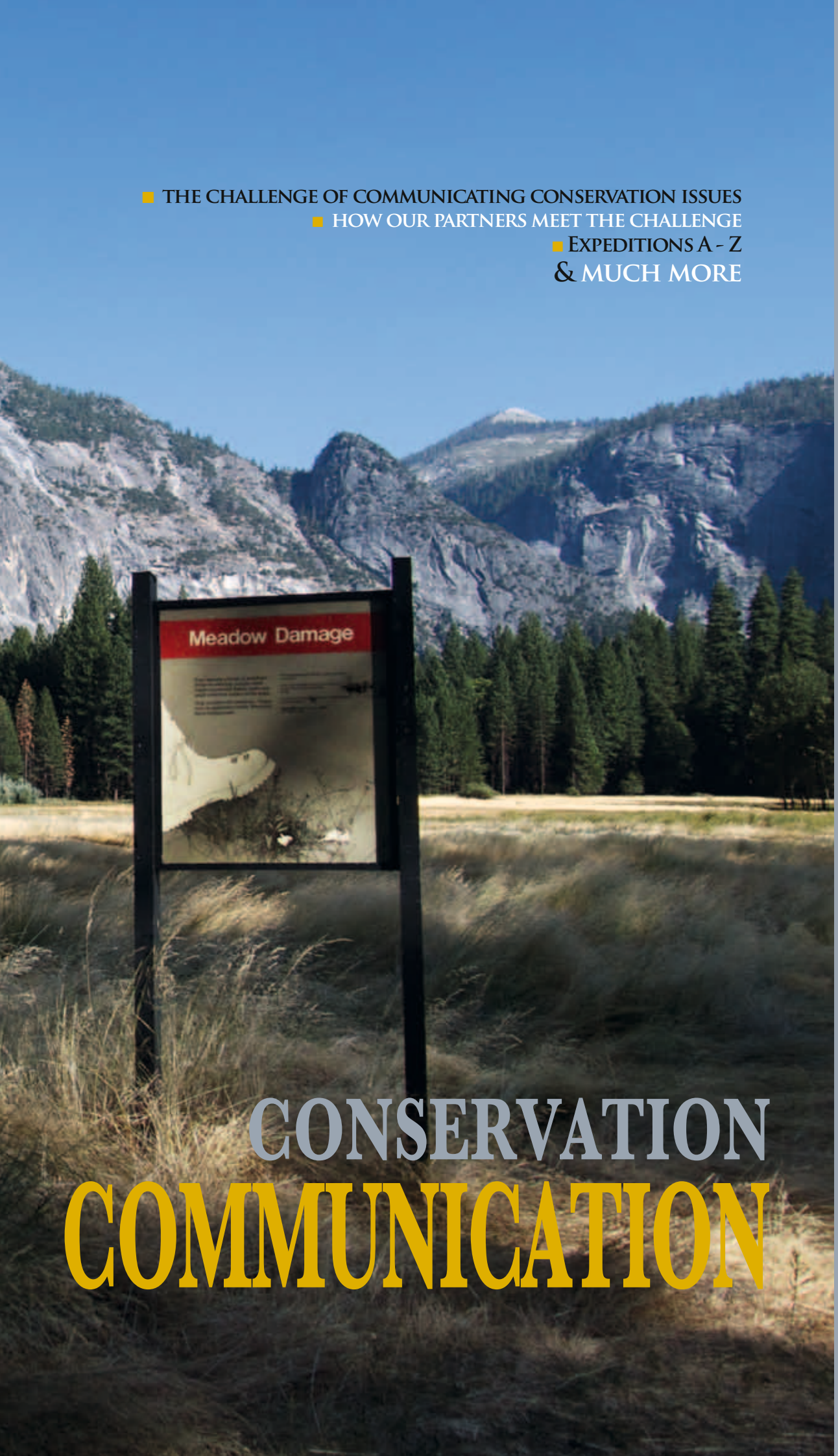
BIOSPHERE EXPEDITIONS.ORG

- THE CHALLENGE OF COMMUNICATING CONSERVATION ISSUES
- HOW OUR PARTNERS MEET THE CHALLENGE
- EXPEDITIONS A - Z

& MUCH MORE



CONSERVATION COMMUNICATION

magazine 2017

Welcome

to the eighth issue of the annual Biosphere Expeditions Magazine.
In last year's Magazine we already touched upon the subject of conservation communication. In this year's Magazine, conservation communication now takes centre stage, as we explore the topic in more depth. We do this with the help of our partners and friends, talking about their challenges and opportunities, as well as our own. On top of this, we showcase our expeditions again so that the Magazine can serve as a point of reference for the year. And of course we cover news from our alumni, partners and friends, and chart the development of Biosphere Expeditions as a whole.

I hope you enjoy the read and find some inspiration for joining us in 2017, if you can.



Dr. Matthias Hammer
Founder & Executive Director

about us • über uns • á propos

Artenschutz fördern – damit Natur profitiert

Biosphere Expeditions ist eine gemeinnützige, mehrfach ausgezeichnete Naturschutzorganisation und Mitglied des IUCN und des Umweltprogrammes der UN. Wir sind überzeugt, dass erfolgreicher Naturschutz auf Zusammenarbeit basiert. Engagieren auch Sie sich als Teilnehmer in unseren Natur- und Artenschutzprojekten weltweit. Ob jung oder alt, werden Sie Laienforscher für ein bis zwei Wochen oder auch länger.

Wir arbeiten wissenschaftlich mit Blick auf die lokalen Erfordernisse. Dabei konzentrieren wir uns auf langfristig angelegte Projekte, die klare und vor allem erreichbare Ziele haben. Freiwillige Helfer aus aller Welt arbeiten Hand in Hand mit Feldforschern und den Menschen vor Ort für den Erhalt der Artenvielfalt. Die Schaffung eines Schutzgebietes für Schneeleoparden im Altai ist nur ein Beispiel aus der jüngsten Vergangenheit.

Biosphere Expeditions ist Mitglied des IUCN (International Union for the Conservation of Nature) und des Umweltprogrammes der Vereinten Nationen (UNEP). Zahlreiche nationale und regionale Regierungen setzen unsere Empfehlungen zu Natur- und Artenschutzschutzstrategien um. So haben wir zur Schaffung von Schutzgebieten auf vier Kontinenten beigetragen. Außerdem fördert Biosphere Expeditions die Ausbildung von Fachkräften und schafft damit lokale Kapazitäten. Forschungsergebnisse werden regelmäßig in Fachzeitschriften und anderen Medien weltweit publiziert.

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

Biosphere Expeditions est une organisation à but non lucratif, plusieurs fois primée et membre de l'IUCN et du Programme des Nations Unies pour l'Environnement. Pour nous une conservation réussie de l'environnement est un effort collectif d'individus, donc venez nous rejoindre sur un de nos projets portant sur la faune et l'environnement partout dans le monde. Que vous soyez jeune ou vieux, devenez un citoyen scientifique pour une ou deux semaines, ou plus.

Les bases de notre travail sont la science et les besoins locaux. Nous sommes attachés à des projets de conservation durable avec des buts clairement définis sur des thèmes cruciaux que l'humanité a le pouvoir de changer. Des volontaires du monde entier travaillent main dans la main avec des biologistes et les communautés locales afin d'obtenir des résultats positifs pour la biodiversité – la création d'une zone protégée pour les léopards des neiges dans l'Altaï en est l'un des exemples les plus récents.

Biosphere Expeditions est membre de l'UICN (Union Internationale pour la Conservation de la Nature) et du Conseil d'administration/Forum ministériel mondial sur l'environnement du Programme des Nations Unies pour l'Environnement (PNUE). Nos réalisations comptent également l'adoption par plusieurs gouvernements nationaux ou locaux et par des ONGs de recommandations de plans de conservations et de protection d'espèces ainsi que la création de zones protégées sur quatre continents, des publications (scientifiques et grand public), ou bien le renforcement des capacités, la formation et l'éducation à travers le monde.

Advancing wildlife conservation – for nature, not profit

Biosphere Expeditions is an award-winning not-for-profit conservation organisation, and a member of IUCN and the UN's Environment Programme. For us successful conservation is the collective effort of individuals. We invite everyone to join us on our wildlife and wilderness projects all over the world. Whether young or old, become a citizen scientist for one or two weeks, or more.

The foundation of our work is science and local need. We focus on sustainable conservation projects that target clearly defined, critical issues that humankind has the power to change. International volunteers work hand-in-hand with local biologists and communities to drive positive outcomes for biodiversity - the creation of a protected area for snow leopards in the Altai is just one recent example.

Biosphere Expeditions is a member of the IUCN (International Union for the Conservation of Nature) and of the United Nations Environment Programme's (UNEP) Governing Council & Global Ministerial Environment Forum. Achievements include the implementation of our conservation recommendations and species protection plans by numerous national and regional governments and NGOs, the creation of protected areas on four continents, scientific and lay publications, as well as capacity-building, training and education all over the world.





Picture © Dietmar Denger



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36 New GERMANY expedition



17 Communicating environmental issues: HOW OUR PARTNERS MEET THE CHALLENGE

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

The backbone of Biosphere Expeditions:

meet the staff



LISA STEINER
is the expedition scientist for our Azores whale, dolphin and turtle project, and has worked with Biosphere Expeditions since 2004, which makes her our second-longest-standing scientist after Volodymyr Tytar (see 2015 Magazine). Lisa graduated in biology/marine science in 1988 from the University of Miami and joined the IFAW (International Fund for Animal Welfare) cetacean research vessel "Song of the Whale" two weeks later, which at the time was based in the Azores. Since then Lisa has spent all of her summers working on cetaceans around the Azores and at other times has also studied them in Alabama, Hawaii, Cape Verde, Bermuda, Scotland and Madeira. She has published numerous research papers on cetaceans.



IDA VINCENT
is the latest addition to our team of freelance expedition leaders, having trained on the Costa Rica turtle expedition and then led the Sumatra tiger expedition in 2016.

Ida grew up in Sweden and lived in Australia for ten years before moving to Seattle in the US, where she has been based for the last five years. Ida trained as a marine biologist with degrees from the University of Queensland and Murdoch University. And Ida has worked in Madagascar, Papua New Guinea, the Philippines, Australia and the US's Pacific Northwest. Ida's other passion is mountains and she is a climb leader and instructor with Seattle Mountaineers. Ida also enjoys photography, painting and writing. She has published both scientific journal and magazine articles about alpine climbing and has just finished her first novel (see page 61).

EDITORIAL
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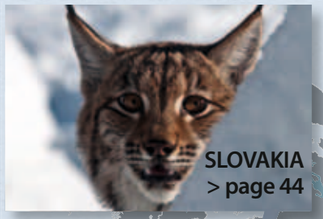
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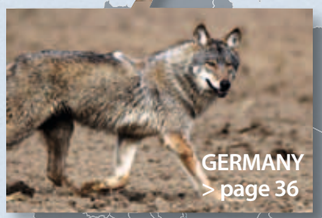
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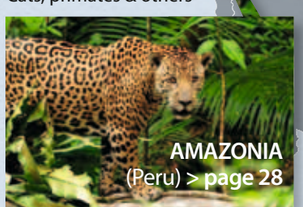


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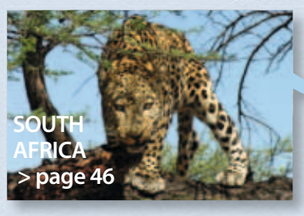


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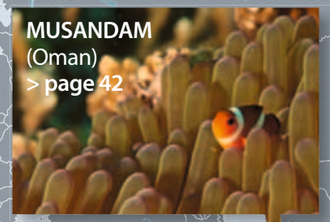
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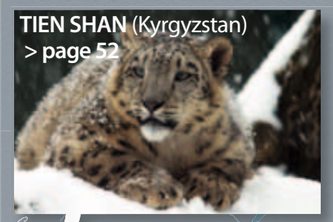
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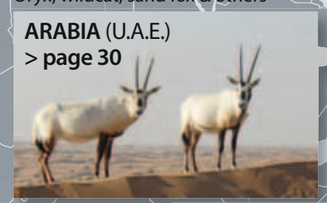
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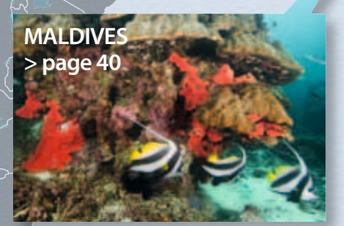


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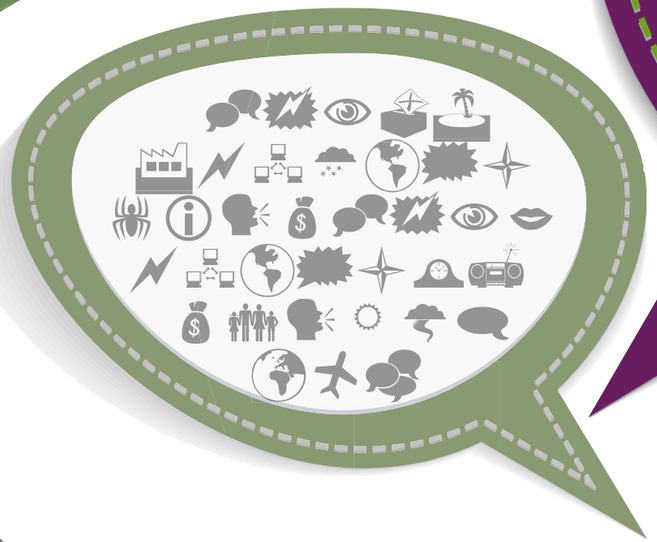
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My daughter must think her mother a bit of an idiot:

Communicating environmental issues

By *Kathy Gill*





It's May in the UK and we are a handful of days into a period of weather that in England we refer to as 'a heatwave'. My car computer told me yesterday that it was 26.5 degrees centigrade and at nine this morning it is certainly building to something that feels very warm. I walk with my 11-year-old daughter to school in the morning and she says, "So, is this global warming then?" The answer I give is vaguely technical, in that I say something along the lines of, "Not really, it's just May and this is a patch of warm weather", but then, realising that I should say a bit more about this crucial subject, I go on to say something at an increased level of vague techie-ness, something like "Of course global warming isn't about our weather necessarily getting warmer (but it is of course, I'm confusing climate change with global warming again), it's more about it getting more stormy and less predictable… although temperatures will get warmer of course…" Having clearly confused both her and myself, but also feeling that I had exhausted my knowledge on all necessary aspects of the debate, I stop talking. She is either fully satisfied with my clear communication, or realising that her mother is a bit of an idiot, my daughter moves the debate on in the best possible way and asks a question about our dog. I think I need to work out a limited number, say three, key messages on climate change (see info box on page 16), so that I can be part of the communication solution and not part of the problem…

Split people from nature

But how does one do this? How should organisations and communication professionals do this? It is difficult to begin to talk about nature and the way it is communicated without first doing the one thing that may well be the cause of a lot of our problems today – we need to uncouple the idea of 'people' from the idea of 'nature', as if we were not a part of it. This separation - whether you think it is a hierarchical belief of humans being special in some way (religion has obviously played its part in this), or a separation of our abilities to think being superior to the way other life forms think - the separation itself is the cause of a lot of our difficulties in communicating about environmental issues.

These issues have been viewed in the recent past as an 'us' versus 'them' debate. 'Us', the humans, have, through our greed, been causing the destruction of 'them', all other life on earth. The saviours in this narrative are the monastic brotherhood of conservation organisations and environmentalists, berating the people for their creeping abandonment of nature. So the only way to be a hero in this story is to be a conservationist - everyone else is a baddie - and nobody wants to be a baddie, so the only solution is to reject the story.

We have to develop other narratives to help people feel they are part of the solution, not (just) part of the problem. And stories are the most effective medium to get complex issues across. Stories carry people on a



Pioneering post-war conservationist Bernhard Grzimek said that communication about nature should be "two-thirds entertainment and one-third education".

journey: there is a problem, a struggle and a resolution. They learn about the what, when, where, why and who of the story, and if the story is a good one, they feel as if they have been on an emotional rollercoaster. The story needs to be framed in a way that they understand, in a way that they can associate with – because we cannot escape the fact that we do not see the world as it is; we see it as we are. Writing these stories is the challenge of communicating nature effectively; to encourage pro-environmental behaviour and to reinforce the care of our planet. In the words of pioneering post-war conservationist Bernhard Grzimek, communication about nature should be "two-thirds entertainment and one-third education".

From Darwin to global warming: Using facts and figures

The two key issues in nature communication today, biodiversity loss and man-made climate change, first came to the world's attention through the work of scientists who uncovered changes and anomalies that pointed towards problems in our environment. It was the scientific community who first raised these issues, agreeing that there were patterns and a clear direction of travel if people did not change the way they behaved. They researched further and compiled increasing volumes of data on both subjects. This feels like the way Darwin had to approach the announcement of his theory on evolution and the publication of his seminal work, 'On the Origin of Species by Means of Natural Selection'. Darwin was very aware of the denial that publication of his theory would bring. He knew that the largely god-fearing population in Western Europe in the 1800s was not going to accept that people were anything other than creations of the Christian god, made in his image, and certainly not related to chimpanzees. Darwin spent many years compiling sufficient data so that he could deliver a water-tight, unarguable theory that he himself was happy with and that would force acceptance from his peers. Darwin voyaged on The Beagle between 1831 and 1836, he published his journal from the voyage in 1839, but it was not until 1859 that 'The Origin of Species' was published – over 20 years after his understanding of evolution was first developed. It would not even have been published then, had it not been for a fellow scientist (Alfred Russel Wallace) telling Darwin that he was close to publishing a very similar theory.

Today evolution is an undisputed fact amongst scientists, but of course there are large sections of the population who still reject evolution. The scientists of today have a similar problem in relation to communicating climate change. When they started to release the information to the world, telling the rest of us non-scientific people that there was a problem, unsurprisingly, they told us in the way in which they were used to communicating. They explained it thoroughly, using all of the data, showing us the variations, the probabilities and the extrapolations, giving us a properly balanced view

of the data. There were graphs – lots of graphs – and all the necessary detail to allow us to see the full picture.

But people do not generally work very well with lots of numbers and graphs. It was too complicated. And in a properly scientific way there are many words used by scientists, which engender a lack of confidence in the statements, words such as 'uncertain' and 'unclear', which are the cracks that allow great holes to be prised into their conclusions by popular culture and the aptly named 'non-believers' or 'climate change deniers'. What they fail to understand is that all science is based on theory. It is a way of thinking that encourages people to embrace confusion and the state of being wrong, because this is what drives people on to new discoveries. A scientific theory is only an idea that has not yet been proved to be wrong. However, the use of words that express this paradigm signal to people outside of scientific circles that the thoughts are unreliable. Couple this sense of unreliability with a message that people do not want to hear (you are the baddie and you need to change your behaviour) and it is unsurprising that climate change is an issue that has been very difficult to get across to everyone.

Scientists and NGOs have not been the only ones communicating the message about climate change. It has been interpreted and conveyed by journalists too. All of them have worked hard to define the issue in terms that we can understand and that mean something to the majority of us who are not immersed in the subject. To do this, the message has to be simplified. Press articles are not the length of science papers and nobody would read them if they were. Shortening and simplifying the message helps to ensure that the public becomes aware of an issue that would otherwise be buried in a science journal for years. But this way of communicating not only focuses our attention on something; it can also limit our understanding and can, however inadvertently, skew our view of a subject. Forty years on

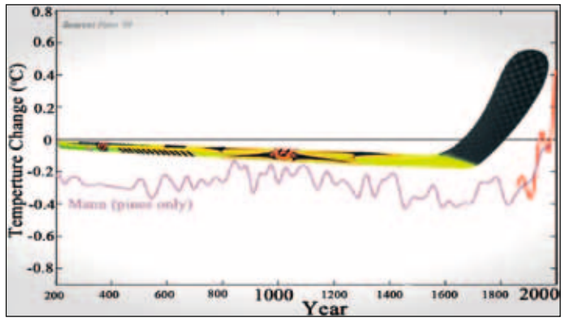
Communicating about nature and conservation is a complicated, difficult business.

See how the organisations and people that Biosphere Expeditions works with meet the challenge on pages 17 – 23.

from Wally Broecker's scientific paper, 'Climate Change: Are we on the Brink of a Pronounced Global Warming?', it could be argued that the term 'Global Warming' has set the mission to respond to the problem back by decades. People's responses to this phrase have been confused – how many of us have heard people saying that they would not mind if their locality was a bit warmer, and 2 to 5 degrees centigrade of increase does not sound like a lot. It has also been said by a US Senator that the term Global Warming is much scarier to people than Climate Change, making the point that words are interpreted very differently by different people.

The fact remains that journalists need headlines and short explanations to complex issues, but this does not necessarily ensure comprehension, let alone an effective call to action. Over-simplification can lead to skepticism when people realise that there is more to a debate than has been presented. It seems that effective communication is on a spectrum from short and simple, through complex enough, on to completely impenetrable.

The famous 'hockey stick graph', which was originally presented as convincing fact-based evidence of man-made climate change in 1999, but has since become an oft-quoted 'proof' by 'climate change deniers' of how 'climate alarmist' scientists are trying to mislead the public.



Communicating locally

About a year ago, I set up a debating group, Wild Words, whose sole aim is to bring people together who are from all backgrounds and whose only common feature is their active support for nature, whether as artists, economists, conservation workers, amateur naturalists, students, or whatever. All of these people make up the local conservation community, giving their time to support nature in many different ways. The group meets once a quarter and has an expert speaker who introduces a topic to the group. This speaker only talks for 20 minutes and then a chairperson facilitates the discussion around the room. The only purpose is to talk. Communicating about nature is the point. People are asked not to declare which organisation, if any, they are from,

only to talk about what they know, what they believe, and what they have experienced. This allows people to stand apart from the views of their employers or political affiliations, to talk from their hearts about their own beliefs. The sharing of ideas from many different perspectives in a non-threatening environment has proved instrumental to some illuminating discussions and has given people new ideas to consider and adopt as they see fit.

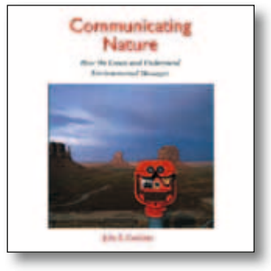
We are trying, in a small way, to find a way for people from all and any (and no) discipline to talk to each other. These are people who are interested in the same outcomes, but who rarely come across each other and even more rarely manage to collaborate to achieve outcomes. It provides a space for people simply to communicate about things of importance to our environment. It allows a sharing of ideas, networking opportunities, and a group of people who leave better informed about things that they care about than when they arrived. This sort of activity works very well on a small scale, with the best debates happening when around 20 people come, but they can also be up-scaled to allow many people to join the debate.

Valuing nature

Talking to some people about nature involves discussions of spirituality, connection and well-being, but increasingly over the last couple of decades the conversations with policy-makers in particular have been about valuing nature in a monetary way. It is difficult not to have an automatic response of concern that decision-makers seem only to be able to value something if they can describe it in financial terms. Nature is being viewed from a totally human perspective, how is it of use to us, and how much money it would cost to replace if it was lost. This approach started off as quite a blunt instrument: The Ecosystem Services (ES) approach (as it is called) involved putting a financial value on the benefits that nature provides to people. It has been an economic-driven model of how to demonstrate the importance of nature to people, but moves over recent years have built on this and are beginning to offer a much more complex description of the value of nature. Current research work in this area is looking at how well-being and health can be factored into the model in a more sophisticated way, something that can only improve the way that our governmental systems view the value of nature.

Academic approach to communicating nature

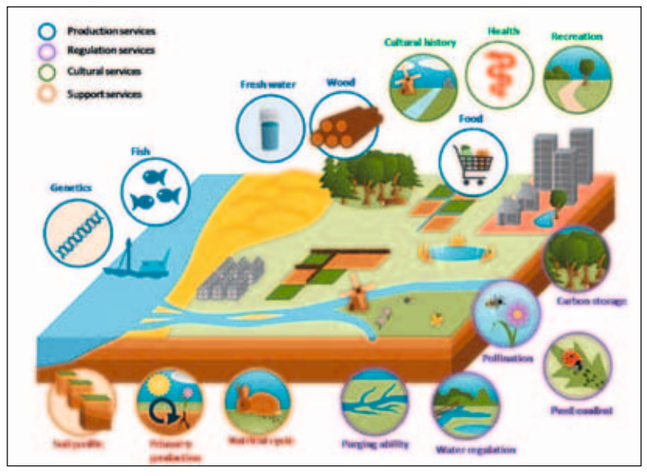
There are thousands of papers and many good books on the academic study of communicating nature. Julia Corbett's book, 'Communicating Nature: How we Create and Understand Environmental Messages' gives a good description of the breadth of the subject. Her chapters explore and develop the premise that environmental communication is expressed in values, words, actions and everyday practices; individually interpreted and negotiated; historically derived and driven; embedded in a dominant paradigm that believes the environment exists first and foremost to serve humans. It is intricately tied to pop culture, particularly advertising and entertainment, and is framed and reported by the media in a way that generally supports the status quo; mediated and influenced by social institutions such as government and business.



It is a complex area and much of what is communicated is done informally, such as the way in which landscapes are depicted in films or YouTube videos, and for each individual the context for each communication will be different depending on their childhood experiences, culture or geographical/social place in the world.

Much research has been done on decision-making and creating pro-environmental behaviours, and it is now understood that the relationship between knowledge, attitude and behaviour is complex and not very strong. Awareness of an issue has little effect on pro-environmental behaviour. Add to this the constraints on individual action imposed by a social structure based on ever-increasing growth and consumption, and it can be seen that effecting change through communication is very difficult.

Examples of ecosystem services.



People tend to shy away from messages of despair. There needs to be hope and action that can be taken. People like cute and funny pictures of animals, but not dead ones, and even the sight of a cute photo of a polar bear is beginning to have a negative effect as people associate the species with despair over climate change, and they switch off. Generally people can take on board new messages, but they will not act in ways that put them out too much. One academic says that we are now living in the 'Buyosphere' where people go shopping for instant happiness. Things that take a long time to supply gratification are a very difficult thing to convince people to do. And even well thought-through campaigns do not always have the intended results: one involved an energy company sending information to its customers comparing their energy consumption with 100 similar properties in their neighbourhood. If their bill was low in comparison, they were sent big smiley faces. The campaign did have a very small positive impact on consumption, but it was also found that some people with the lower bills took this as permission to raise their consumption, not a consequence that had been anticipated.

On the whole it has been found that a good approach is to show that pro-environmental behaviour is 'normal', as people are more happy to do something if most people are doing it – after all as social animals we are hard-wired to fit in with social norms.

The connection between environmental leanings and political persuasion has been found to be a strong one. People who are conservative are less likely to be environmentally focused. Sitting in conferences with people who work in environmental NGOs demonstrates this very strongly if you can get a show of hands for political leaning – very high percentages of left-wing supporters. So we, as environmental communicators, need to start talking to conservative people, and we need to speak their language, something that we have not proved very good at in the past (we covered this in some depth in the 2016 Magazine). We need to understand our target audiences more thoroughly, not just talk to people like ourselves, thereby preaching to the converted. Key questions are what motivates these other people, what is in it for them and what words do they associate with (and, importantly, not associate with)? For example, conservatives care about their 'landscapes', but they are not excited by words such as 'environment', 'ecology' or 'planet'. We need to think more carefully about messages and target them at the specific audiences that we are talking to.

So how do we communicate about nature in a way that moves people to act in a more environmentally-friendly way (the articles after this give some examples of how our partners do this)? And once they have carried out one action, say volunteering, what else can they be persuaded to do? The info box on page 16 gives a selection of the useful ideas that George Marshall has in his book.



It's not hard to decide which picture will be more appealing to most people.



We need to stop just talking amongst ourselves, thereby preaching to the converted. We need to talk to others too.





Three messages on climate change
(for children and deniers)

1. The years 1983 to 2012 have been the warmest 30 years in the last 1,400 years (technically I should add 'probably' but I don't think I'm going to – we know enough).

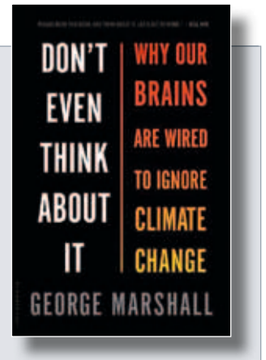
2. There has been a massive loss of ice (the size of Canada and Alaska combined) over the last two decades, from both ice sheets and glaciers.

3. Two degrees. Limiting the global temperature rise to two degrees centigrade (from the mid-nineteenth century) is the widely accepted target to avoid 'dangerous' changes. In 2015 governments agreed to aim for the more challenging limit of 1.5 degrees centigrade. This gives us an amount of carbon (a carbon budget) that can be released into the atmosphere whilst avoiding the worst impacts of climate change, which include impacts on ocean acidification, water availability and our ability to produce enough food for our needs.

Conclusion

There is a sense of campaigning, of not being mainstream, when we talk about communicating nature. We are looking to inform and persuade, to try to encourage people to take nature more seriously and to make its contemplation more central to their everyday lives. With the growth of the global middle class, it is important to encourage our increasingly urbanised and relatively well-off population world-wide to turn away from an economic paradigm based on continued growth, and towards one based on social justice and environmental sustainability. A real contemplation on what makes people happy, not just rich, also needs to happen, building on the work of the Bhutan government's Gross National Happiness indicators and the 2012 United Nations high-level meeting on 'Happiness and Wellbeing: Defining a New Economic Paradigm'. Bringing nature and the environment into mainstream thinking is the task of the next few years. Without it we will cause increasingly dangerous levels of damage to our environment, with those least able to help themselves being at greatest risk. We must continue to reach out to people, to encourage their involvement and the actions of governments and global organisations. By working to communicate about this imperative, we may help to animate the currently undisturbed. May the heroes awaken from forgetfulness! ■

How to communicate about the environment
(from George Marshall's book 'Don't even think about it: Why our brains are wired to ignore climate change'):



1. Be wary of creating distance between a person and an environmental problem. Emphasise how serious the problem is now.

2. Our sense of loss looks backwards rather than forwards, and research suggests that people are more motivated to restore lost environmental quality than improve current environmental quality. So communicate lost community/values/purpose or lost ecosystems/species/beauty. The rewilding movement is an interesting example of this, where future work is framed as restoring a wildness that has been lost from the past.

3. Find people or organisations that your audience know and trust. Messages from these people will be well received.

4. People respond to stories, so try to frame communications with recogniseable actors, motives, causes and effects.
Stories often need goodies and baddies, but try to make the stories more 'heroic quest' than battle, so the enemy could be our internal weaknesses, rather than an outside group. Humans may be the baddies, but we must also ultimately be the saviours.

5. We need to talk about cooperation rather than unity, so that people with different views can come together without impacting on their identities or having to become more like each other.

6. We need positive visions with opportunities to act that will effect change.

7. Actions that reinforce our sense of belonging to our social group are very powerful. Emphasise that actions taken for the environment make us proud to be who we are.

8. Encourage new communicators who are able to tell their personal stories with emotional honesty and who can emphasise the qualities that create trust, i.e. independence, values and accountability.

How our partners meet the challenge
of conservation communication



RICHARD HARRINGTON is Head of Communications at the Marine Conservation Society, the UK charity for seas, shores and wildlife. An MSc-qualified marine biologist, the move into the world of public relations and communications was a personal choice to make a practical contribution towards a better marine environment with people at the heart of it. Prior to joining MCS, he set up a management plan for an island Voluntary Marine Nature Reserve in North East England, a site which is now part of an official Marine Conservation Zone.



Samporna Islands

Looking beyond the surface

In our marine world, the sea's surface (we have only recently been able to see beneath it without drowning in the process) has been the big barrier to conservation. But the underwater realm is now well and truly visible to us through SCUBA, television and remote technology. The effects of our growing exploitation and wastefulness are better documented than ever before, too.

So, no excuses - we should be making more progress in marine conservation than we are. But how can people be made aware that they are able, and indeed may want, to make a change for the better? That's where the need for communication comes in.

Starting with the not-so-good, I've always been intrigued by propaganda; the concept that agencies can strategically influence a public's psyche to gain an upper hand, especially in times of hostility. It has been used very recently in the UK in calling for voters to remain in or leave the EU. The results were not pretty! And NGOs can be tempted to simply broadcast messaging through press releases, leaflets and lectures with much the same vain hope - that a war can be won by informing people with a version of 'the facts'.

But in order to mobilise support, you need to convey your message in a way that is clear, understandable and really interesting to a wide audience. I love the old adage "If you don't say something clearly enough for other people to understand it, you probably don't understand it well enough yourself!" We need to be clear, and we must make sure that what we say is strong enough to be shared, commented upon, and generally picked up by the proverbial average person in the street. It needs to have a chance to make a difference in a noisy world.

But when it comes to the crunch of achieving change on the ground and underwater, relations have to be built with those who can make the changes for the better. When dealing with an individual or a group of like-minded people, you need to invest time to hear their views, and find out what makes them tick.

In the Semporna Islands Project, where Dr Liz Wood of the Marine Conservation Society helped set up several beneficial locally-led projects, including a marine park, the key to success was active engagement and knowledge-sharing. This involved events that included art on the islands, marine life identification, resource mapping, 'build your own reef' and many more. The project continues in the hands of local staff.

In the UK, too, a process to protect a large enough area of sea to be worthy of the name "network" has been in train for six or seven years. In England specifically, where the government's official (and extensive) process of 'consultation' left as many people unhappy with the outcome as it satisfied, we have worked to show that bringing the views of people who are genuinely interested and involved in some of the sites in question can actually help lead to steps forward (see https://vimeo.com/150885111).

When communicating with a public audience, on a mass scale or as individuals, we need to give that audience an action they can take to achieve a change. It isn't good enough to promote doom and gloom - the hashtag #oceanoptimism is a great one to keep in mind and a key to conservation communication. ■



MAGALI MARION
is the head scientist for the Costa Rica turtle expedition, working for our project partner Latin America Sea Turtles (LAST). Magali has a Bachelor of Science in Environmental Sciences obtained from the University of South Brittany and a Masters Degree in Engineering of Coastal Ecosystems, obtained through the University of La Rochelle, both in France. Magali is committed to the protection of the turtles of Pacuare and firmly believes in community involvement to change mindsets about poaching.

No hablo ingles! – turtle conservation communication in rural Costa Rica

Communicating efficiently on a community-based project is the key to meeting long-term goals, establishing a trust-based relationship with local stakeholders and reaching out to potential donors and decision makers.

But how many obstacles stand in the way of success? Foreign NGOs established in local communities need to understand the subtleties of local culture in order not to hurt sensibilities and local customs. In our remote project area on the Caribbean coast of Costa Rica, in the rural community of Pacuare, communication is a both an opportunity and a challenge on a daily basis.

How do you communicate efficiently with a community composed of people who are poorly educated and show significant distrust towards foreign NGOs? Especially when that distrust has been generated by too many promises made by opportunists wanting to make a quick buck and establishing so-called conservation projects in the area that usually do not even last a year.

Sometimes imitating the local lingo and slang is a way to approach people and make them feel at ease so that the social differences are broken down and bridges built. Fancy words are definitely not the way forward with the locals and create an obvious social gap with small rural communities. Communication with law enforcement bodies and government, on the other hand, requires a more 'upscale' vocabulary.

Conservation is now an industry and like in many other business sectors, the competition is fierce, especially when it comes to donations. You should try the tedious exercise of writing a grant proposal! I feel that my biology background is no match for communication specialists and even though I know my cause is important, how can I present it so that I can obtain the funding that will help me to sustain the project for another year?

How do I persuade the government that the area where we are working is an important nesting habitat for critically endangered turtles and that it is indeed worth protecting? How do I convince local stakeholders that a turtle is worth more alive than dead? That if they want the community to grow and flourish, they should work towards turtle protection and conservation, not eradication? How do I encourage international volunteers to come to our project, because without them, it would simply close down due to lack of funding and manpower? And finally, what do I need to say so that all these people choose our project, our cause, over the thousands of other conservation projects running in the world?

Every cause is important, and because of the overwhelming numbers of species declining and other conservation issues around the world, I feel that social media platforms are flooded by petitions and donation requests. When I start looking, my mind spins.

I know there is no magic answer. My experience has taught me that efficient communication is based on solid data collected over time, on relationships built over many years, and on consistency. Set your goal and focus on it, because if you work in conservation, you are in for a while, since changes will not happen overnight. Instead it will take years of patient dialogue with every single stakeholder, hundreds of hours of writing grant proposals, and thousands of hours on the beach collecting data and protecting turtles one by one in order to reach your goal. ■





Prof. MARCELO MAZZOLLI
an ecology professor in Brazil and founder of NGO Projeto Puma, has been involved with Biosphere Expeditions for many years, as expedition scientist and adviser for expeditions and scientific publications. Together with our founder and executive director Dr. Matthias Hammer he has written an internationally recognised manual for terrestrial research expeditions with volunteers, as well as numerous scientific papers on the subject, including papers arising out of expedition work.

Multilayered communications in conservation volunteer organisations

Communication in conservation volunteering is multilayered, sometimes complicated, and may be fraught with difficulties and therefore hard to navigate. It starts with:

Recruiting volunteers

This process requires messages that may involved some marketing speak, which unfortunately often means empty promises. What is communicated may not be what is delivered. Volunteers may be misled to believe that conservation and research are related to activities such as caring for animals, without any evidence that such animals are part of any conservation or rehabilitation project. One of the worst cases is breeding farms for canned hunting masquerading as lion care (and cuddle) centres, as exposed by www.cannedlion.org and the recent documentary Blood Lions (www.bloodlions.org).

Part of delivering the message of conservation is also to warn volunteers that such unethical schemes exist, and that volunteers must go through a learning process to educate themselves about what conservation is and which organisations work with genuine conservation objectives. Showing results and accolades are a legitimate part of the marketing of ethical organisations, but building a solid reputation takes quite a lot of time, and can be an unfair disadvantage to those that play by the rules. It should result in a lasting payoff in the mid and long-term, of course, provided that organisations are delivering their message clearly to the 'right' public.



Lion cuddleing is not conservation (Source: cannedlion.org)

Scientist to volunteers

Conservation often requires some type of research that volunteers get involved with. So scientists have to be recruited, many of whom are ill-prepared to create study designs that take into account the participation of volunteers who need to be educated and trained rapidly. This requires transmission of knowledge from scientist to volunteer and is a crucial aspect of a successful volunteer-based venture. Transmission comes in two ways: initially during the training of volunteers and then later by keeping them aware of results achieved during the expedition. Their training continues as each day is reviewed with volunteers learning from each other, and from their successes and mistakes.

Scientist to scientific community

Conservation usually depends on scientific results. Good study design means research questions are answered or hypotheses proved or disproved (for example "Are tigers still present in the area and, if so, where?"), which in turn informs management recommendations (for example "In order to protect tigers, upland areas away from humans need to be protected better"). Results are accredited when they go through external peer-review while being considered for publication in scientific journals. Good science is only recognised as such when it has gone through this process. If a conservation-oriented volunteer organisation is serious about its purposes and about the contribution volunteers are able to make to science, it has to have its house in order - from clever study design to good data to rigorous analysis to excellent science writing and communication skills. Which brings us back to the start: good communication on all levels. Only those that have gone through attempts to publish in high quality scientific journals know that it is not something that is quick or easy to achieve. Publishing a scientific paper can be regarded as the ultimate achievement of good science and there are very few organisations out there that have published science with data collected with the help of volunteers. Biosphere Expeditions is one of them. ■



Snow leopard cubs © Zoo Neunkirchen



HANNA PFÜLLER
works in NABU's PR department and has been with the conservation NGO since 2014. Her training is in media, communications, politics and psychology and she is a masters graduate of the Freie Universität Berlin.

Revealing the secret of the mountains: NABU's snow leopard webcam as a conservation communication tool

Ghost of the mountains – that's what the Kyrgyz people call the snow leopard, because of their solitary and elusive nature. Mostly alone and perfectly camouflaged, they live a secret life in the high mountain ranges of Central Asia. Therefore it is not surprising that in far-away Germany, snow leopards are not well known to the general public, let alone the threats they face. There are only a few of these beautiful predators left in the wild. Poachers hunt them for their unique fur, as well as for their body parts which are highly prized in the traditional Chinese medicine market. Another threat is their declining habitat: global warming, the expansion of infrastructure and increasing livestock farming all contribute to the degradation of their home.

In order to raise awareness for this fascinating animal in Germany, NABU (Naturschutzbund = Nature conservation alliance) declared 2016 the year of the snow leopard and ran a communications campaign. Stirring emotions was a key component of the campaign: we told exciting stories to raise awareness, thereby triggering greater interest and enthusiasm. Those interested were then provided with more information on the species and the need for support.

But how do you raise the visibility of an animal, which lives far away and is virtually invisible even in its home countries? For us the answer was a webcam. With the help of a live stream, NABU brought this rare big cat directly into German living rooms. For months, viewers were able to observe the life of snow leopards via three webcams installed in a German zoo. People could familiarise themselves with animals that are usually out of reach, and through this they became interested in their situation in the wild. Three weeks after the start of the webcam project, the birth of two young snow leopards was broadcast,live, resulting in a surge of attention. Viewers were able to follow the young snow leopards' development over the following months at any time of the day.

During the campaign we talked a lot about the webcam on social media and on our website www.NABU.de, creating a host of opportunities for the internet community to 'interact' with the species. We posted weekly summaries with video clips and diary entries from the zoo's education manager about the snow leopards' adventures during the week. We also provided information about the species' situation in the wild. A naming competition allowed viewers to become actively involved. We were also able to win political and popular support for this project: German Environment Minister Dr. Barbara Hendricks became a personal sponsor of the two young snow leopards and thus attracted additional and much-needed political attention in Germany.

The webcam caused record-breaking clicks. Thousands of viewers observed the big cats and received our messages about their plight in the wild and the conservation efforts needed. For us it was certainly a showcase in how conservation communication can work well. ■



LISA STEINER
is a cetacean biologist and expedition scientist of the Azores whale and dolphin expedition since 2004.



Tiger Temple – this is not conservation.

Keep it simple, keep it small and let big strides grow from little steps

The biggest challenge in conservation communication is that there are a lot of conflicting messages out there. It is important to educate people so that they can tell the difference between what really works and what is spin, designed to tug at the emotions to get donations or volunteers. A good example of this is the Tiger Temple in Thailand, which has just had its tigers removed for abusing them, instead of protecting them. Many tourists flocked there, because the conservation image projected by the temple overshadowed the reality. Unfortunately many people who love animals want to have a hands-on experience and it is usually this type of experience, which is only beneficial to the operators of the project and not the animals involved.

The movie Blackfish has forever changed the way many people see orcas in captivity. With just one film, orcas in captivity may become a thing of the past, at least in the developed world. The problem is that in Russia and China this message does not seem to be getting across, and captive cetaceans are on the increase. Change takes time and usually needs to start small.

I have met a few people over the years (not many thankfully) who have been whale watching in Iceland or Norway and then gone for dinner in the evening and been talked into trying whale meat! When asked why, they say they just wanted to try it and it doesn't make a difference. How wrong they are. This 'innocent' activity continues to drive the market for whale meat in these countries. Hopefully others, after hearing these stories, will make better choices when they go on holiday. It is the same with people who buy scrimshaw (carvings of whale teeth or bone) when they say that the whales are not being killed now, so what is the harm? What happens when the stockpiles run out? Where will new supplies come from? Getting people to see what harm can come from small things is important.

One of the easiest things for me to show people is how easy a turtle can be confused between a plastic bag and a Portuguese man of war jellyfish. At the surface, the jellyfish look just like plastic bags. In fact many people think that they are plastic bags, before it is pointed out that they are looking at jellyfish! After that, I believe many people switch to re-usable bags for shopping.

The most important thing is keeping the message simple. It is important to make people feel that they can make a difference and that they do not have to do everything all at once. Start small, change one habit at a time - such as turning the water off while brushing teeth, lathering up in the shower, or turning appliances off at the socket instead of leaving them on standby. Then work on changing bigger things as time goes by.

One supermarket campaign sums up conservation communication in a nutshell "Every little bit helps"! ■



PETER LAUFMANN
is a writer, book author,
journalist and an editor
of German "Natur" Magazine.

Goldfish have better attention spans than humans

Communication, information and education are critical parts of nature conservation. But few people are interested in mere facts alone. Conservationist have to catch people's attention in a world full of temptation, diversion and lack of interest. Here are some hints on how this can be done.

Eagles are lazy and stupid birds. A goldfish has a longer attention span than a human being. Nobody is interested in the conservation of biodiversity. What do these sentences have in common? They are bait and you are the angler. And for stories related to nature and conservation, the bait needs to be especially good.

Our planet is not in good shape. Climate change, the extinction of species everywhere, dirty air, water, soil, genetically modified foods, burning rainforest… The situation is terrible. But we are asleep at the wheel. Where there should be burning barricades and revolutions for nature, there is indifference. After all, there is the internet, Netflix, Facebook, news, chats, information everywhere. If you want to inform people about the environmental crisis happening right now, you need to understand that you have to compete with crises in Europe, the Middle East, with blockbuster films, advertising, cooking shows, celebrities and beauty tips.



Another challenge is that, understandably, most people want to relax in their spare time. After a day's work there is little incentive to do more work on a difficult subject, such as environmental problems, which are very often complicated. So if you do not suck people into your story within the first few lines, you will lose them. A recent study shows that people today have an average attention span of eight seconds. In other words, they need a new stimulus every eight seconds to keep them focused. A goldfish can focus for nine seconds…

But not all is lost. Here is what I do.

Do not use technical terms. Never, ever. Biodiversity, sustainability, phenotype are useless words in the real world. They are good enough for scientific papers and boring university lectures, but ask ten people during your next visit to the bakery. You will be lucky to find one who can tell you what sustainability means.

Keep your story simple. You do not need ten arguments to write something about climate change. Two or three are fine. People will remember one. Explain complicated facts with easy sentences and words, and people will understand it. These sound like platitudes, but it is easy to be complicated and much harder to write about complicated issues with easy words.

Your story must amuse and entertain people. Human beings like to talk. Give them something to pep up their small talk. An interesting fact, something strange, surprising, unusual. Like the example with the eagle. It is easy to write about the king of the sky, the majestic bird, blah blah… But highlight a new fact, an unknown behaviour, a different angle and it will help you to convey the message.

A flagship animal or an interesting person in your story will help you to get the reader on the hook. And you have to work hard to keep them there. It does not matter whether you are a journalist or a conservationist. If you want to present a subject to the public, you need to be able to grab the reader's attention.

And finally, the editors in the newsrooms are your first readers. You need them. And they are overworked and flooded with information too. Make it easy for them to love your story. Attract them with an interesting fact and amazing pictures. And remember: It is not possible to save the world with one article. Every little story is a stepping stone to inform people about the wonders of our planet, how we endanger them and what to do about it. ■



Dr. Gregor Hodgson is the Executive Director of Reef Check, a reef conservation charity with volunteer-based data collection protocols, which Biosphere Expeditions follows on all its diving expeditions. Dr. Hodgson is a coral reef ecologist, who received his bachelors in 1979 from the University of California, Santa Barbara and his PhD in zoology in 1989 from the University of Hawaii. After a career in science spanning some 25 years, he founded and now runs Reef Check from Los Angeles.

What would happen if all the world's coral reefs died? How would it affect me?

These two questions are often asked whenever our science-based coral reef non-profit tries to engage with the public for fundraising or just to explain why it is important to conserve coral reefs. Naturally, most people view the world through their own personal experiences. Most people are not SCUBA divers and most have never had a personal experience with a coral reef. As a scientific organisation, we cannot make up stuff and the reality is that nobody knows what will happen if all the coral reefs in the world die. We may find out sooner than we like, if global warming keeps killing them at the rapid rate it did in 2016.

So we try to answer this question by highlighting the fact that coral reefs are the second most biodiverse ecosystem on earth. They have a high socio-economic value to a billion humans for food and coastal protection. But all of this information is somewhat esoteric if you live in a land-locked location, a thousand miles from the nearest reef. So we have found that what does connect with people is the fact that the most powerful drug used to fight childhood leukemia was derived from a Caribbean sponge. Everyone knows about cancer and most have had a personal experience with someone in their family suffering from cancer. So they can connect with this idea based on their personal experience. In addition, we can add that there are about 20 anti-viral, anti-cancer and anti-microbial compounds derived from coral reef organisms now in medical trials. Imagine losing the next BIG cure for cancer or HIV, because we allow all that biodiversity to die? As Sylvia Earle so nicely puts it, we should treat the oceans (and their reefs) as if our lives depended on them, because they do. ■



ROUND-UP

Executive director Dr. Matthias Hammer reviews the year of post-truth 2016 and looks ahead to 2017

In the 2016 round-up we asked whether we were boring, preaching to the converted and talking to the wrong people. We talked about the liberal versus the conservative worldview and how we could talk to the (unconverted) conservatives about the value of nature and its conservation. And we talked about the rise of cynicism about voluntourism in particular and politics in general. We even had pictures of Sarah Palin and David Cameron asking how we could talk to them!

Post-truth feelings over facts – and the pushback needed

Writing this in November 2016, after votes for Brexit and Trump, one is inclined to despair. But this is exactly what we must not do. There are now plenty of studies to show that Trump and Brexit were voted in, amongst other things, on a wave of populist anti-establishment and anti-intellectual feeling. There is a strong case that, in America and elsewhere, there is a shift towards a politics in which feelings trump (pun intended) facts more freely and with less resistance than used to be the case. Helped by new technology, a deluge of "facts" and a public much less given to trust than it once was, some 'news' outlets, politicians and public figures are getting away with a new depth and pervasiveness of falsehood. If this continues, the power of truth (and therefore science) as a tool for solving society's problems could be lastingly reduced.

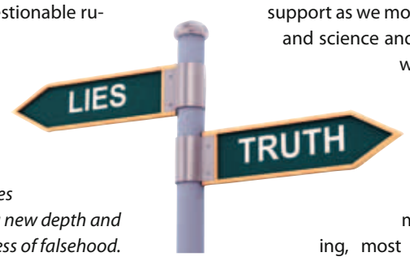
So what does this mean for communicating conservation messages, the topic of this Magazine, especially in this age of 'post-truth' (the disconcerting Oxford Dictionary word of the year 2016), in which the institutions of old, so-called 'gatekeepers', which allowed some level of consensus over what is true (schools, science, the legal system, the media) are being brought down? Breaking the gatekeepers is one thing that populism seeks to do. Discredit the gatekeepers to create the conditions for the trust-only-your-prejudices world of president elect Trump. Yet gatekeepers would be in much less trouble without the second big factor in post-truth politics: the internet and the services it has spawned. Nearly two-thirds of adults in America now get news on social media and a fifth do so often, according to a recent survey by the Pew Research Centre, a polling outfit; the numbers continue to grow fast. On Facebook, Reddit, Twitter or WhatsApp, anybody can be a publisher. Content no longer comes in fixed, edited formats and in bundles, such as articles in a newspaper, that help establish provenance and set expectations; it can take any shape - a video, a chart, an animation. A single idea, or 'meme', can replicate shorn of all context and devoid of facts or truth, like DNA in a test tube. Data about the spread of a meme have become more important than whether the meme is true and based on facts.

Selling our vision of a better, healthier, happier world

In this context of post-truth and post-facts, it will be even harder convincingly to convey our science- and fact-based messages. But there is simply no alternative. Yes, 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 in my opinion this would be selling out to the post-truth approach of lies, bigotry and prejudice. As we have pointed out before, people who come from the humanities and science, as 'us greenies' tend to do, have a view that if you present the facts quietly to people, they will make rational judgements and change. But this is not true. As eminent linguist George Lakoff has said: "The people on the other (post-truth) side, they understand how the brain and public opinion really works. So they talk about values and moral narratives and imagery". I believe we have to do this too and beat the post-truthers at their own game, with the crucial exception of our stories being led by facts, rather than pure fiction or fabricated lies. Kathy Gill, in her conservation communication article (starting page 10) and our partners in their conservation communication examples (from page 17), show us a way forward.

Moving forward and achieving together

And this moving forward together is another important point. We can't do this alone. We need like-minded partners to do so. Especially because, weakened by shrinking audiences and advertising revenues, and trying to keep up online, mainstream media have increasingly become part of the problem. "Too often news organisations play a major role in propagating hoaxes, false claims, questionable rumours and dubious viral content, thereby polluting the digital information stream", says Craig Silverman, editor of BuzzFeed Canada, in a study for the Tow Centre for Digital Journalism at the Columbia Journalism School. So reliable, like-minded partners is what we need, and have. They are mainly from the world of NGOs and Foundations, and so perhaps they should be, sharing in our values and belief in science-based answers to real world problems, unshackled from the pressures of the neoliberal corporate obsession with profits and impossible endless growth on a finite planet. Some small-scale corporate relationships remain (see partner box). Whatever their backgrounds, we are grateful for their support as we move forward together based on facts and science and a non-corporate approach to our world to find real solutions to real problems.



In the post-truth world, some 'news' outlets, politicians and public figures are getting away with a new depth and pervasiveness of falsehood.

And when we look at those real solutions, it is all but doom and gloom. Our list of achievements (see next page) keeps growing, most recently through our placement

Today our biggest partnerships are with like-minded NGOs and grant-giving bodies

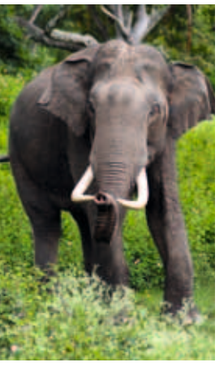
But some corporate partnerships remain



"Feelings are much like waves. We can't stop them from coming, but we can choose which ones to surf".
Jonatan Mårtensson



Our job remains to sell our idea of a better, healthier, happier world, even if post-truth culture has made this harder.



programme and concomitant community-based conservation efforts really taking off. Our news is not all bad either (see pages 61 - 63)!

13 is our lucky number

Looking ahead to 2017, we have two exciting additions to our expedition portfolio. A wolf expedition in Germany and elephants in Thailand. This brings our expeditions to 13 for 2017. And since we do not believe in hearsay, scaremongering or fairy tales, but are firmly rooted in real-world truth and science, this is not bad news either, but just the opposite! ■



Biosphere Expeditions'

ACHIEVEMENTS and how citizen scientist volunteers have brought them about

Protected area creation

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.

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).

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.

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'.

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.

Capacity-building and community-based conservation

Our placement programme for local people has taken a leap forward in 2016 and empowered community-based conservation efforts in the Maldives and Oman. Go to page 58 for more details.

Wildlife and wilderness management & protection

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.

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.

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.

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.





EXPEDITIONS A-Z





AMAZONIA



Return to Las Piedras

LATEST NEWS

September 2016 saw the return of Biosphere Expeditions to Las Piedras Biodiversity Station after a five-year absence to re-evaluate the status of jaguar, primate and macaw abundance in this species-rich conservation concession on the Rio Madre de Dios. Biosphere Expeditions first came to this remote corner of Amazonia in 2002 to explore the biodiversity of the area and conducted surveys every year, gathering repeat data on an array of animals, their relationship with their habitat and the effect of human impact on their abundance, with an aim to assess the biodiversity value of the site. In returning in 2016, the expedition was instrumental in documenting the intense pressures that this wilderness is under from hunting, illegal logging and rampant land invasions with associated deforestation and impacts on keystone species: ironwood, macaws, white lipped peccary and jaguar. It has also instigated a police investigation into the illegal logging activity north of the study site.

AMAZONIA - Peru

AT A GLANCE

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

This expedition 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 observing macaws from hides 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
£1380	7 days	3 - 9 Sep 2017	Puerto Maldonado
£1380	7 days	10 - 16 Sep 2017	Puerto Maldonado

More info **www.biosphere-expeditions.org/amazonia**

Study species:
Jaguar, puma, parrots, peccaries









Expeditions

ARABIA

Pictures © Wouter Kingma

ARABIA - United Arab Emirates

AT A GLANCE

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, 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 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.

Expedition contribution	Duration	Dates	Meeting point
£1440	8 days	21 - 28 Jan 2017	Dubai

More info **www.biosphere-expeditions.org/arabia**

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









Increased number of oryx sightings in the Dubai Desert Conservation Reserve

LATEST NEWS

Twelve expedition participants from four different countries took part in this project in 2016 to evaluate the oryx and gazelle population in the Dubai Desert Conservation Reserve (DDCR). The research work also involved setting live traps to capture rodents, as well as the endangered sand fox and Gordon's wildcat. 130 fox dens were also checked and several new dens were reported. 39 of 42 observation cells (an area of 2 x 2 km) were surveyed throughout the 227 km^2 reserve. Over 400 oryx, almost 140 mountain gazelle and about 50 sand gazelle were recorded by the expedition. The rare lappet-faced vulture was spotted on several occasions too, once in great numbers when a fresh carcass was found. Greg Simkins, head of the DDCR, called it "another very successful expedition and showcase citizen science project, which helps us greatly with our year-on-year conservation work". The report is due to be published in December 2016.



Expeditions



LATEST NEWS

Sperm whale re-sighted after 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

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

AT A GLANCE

Study species:
Whales and dolphins, loggerhead turtle









This expedition will take you to the remote and spectacular Azores Archipelago in the middle of the Atlantic Ocean to study whales, dolphins and loggerhead turtles. 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. 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.

Expedition contribution	Duration	Dates	Meeting point
£1390	10 days	26 Mar - 4 Apr 2017	Horta, Faial Island
£1390	10 days	6 - 15 Apr 2017	Horta, Faial Island

More info **www.biosphere-expeditions.org/azores**

AZORES

COSTA RICA

COSTA RICA

AT A GLANCE

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 know 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
£1480	8 days	8 - 15 May 2017	San José

More info **www.biosphere-expeditions.org/costarica**

Study species: Leatherback and other sea turtles







LATEST NEWS

Numbers game to save leatherback turtles

During the 2016 inaugural expedition to the Caribbean coast of Costa Rica, expedition participants patrolled the 7 km stretch of beach in front of the Pacuare research station each night and brought a total of 15 clutches of eggs to the hatchery, amounting to 1057 eggs. Also during this time participants released 353 leatherback hatchlings into the sea, but not before weighing and measuring them in "a moving and very hands-on experience that I will never forget" according to expeditioner Alan Hoffberg from the USA. All in all, and given the statistics of leatherback survival in the open seas, this should result in two nesting females returning in 15 years time. This may not sound like much, but as expedition scientist Magali Marion says, "for a dwindling population of fewer than 4,000 leatherback turtles on the Caribbean coast, every single one counts."



Expeditions

GERMANY

GERMANY

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

AT A GLANCE

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 and 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
£1580	7 days	17 - 23 June 2017	Bremen
£1580	7 days	24 - 30 June 2017	Bremen
£1580	7 days	8 - 14 July 2017	Bremen
£1580	7 days	15 - 21 July 2017	Bremen

More info **www.biosphere-expeditions.org/germany**

Study species: Wolf



LATEST NEWS

Is Germany ready for the wolf?

After an absence of about 150 years, wolves started returning to Germany in 2000 from Poland via former East Germany. By 2006 they had reached the former West German state of Lower Saxony. And now they are attracting citizen scientists from all over the world, with Biosphere Expeditions launching its wolf expedition in 2017. "The waiting list was over 100 people", says the project's field scientist Peter Schütte. "I am delighted that the project has had such an excellent start. I expected people from Germany, sure, perhaps from other parts of Europe too, but we now have volunteers from the USA, Singapore, India and even Australia joining our wolf conservation efforts. It is great to see how much support there seems to be worldwide for the return of wolves to Germany".



MALAYSIA

AT A GLANCE

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 liveaboard 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
£1640	8 days	15 - 22 Aug 2017	Singapore

More info **www.biosphere-expeditions.org/malaysia**

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





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 scientists 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."



MALDIVES

MALDIVES

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

AT A GLANCE

Study species: Whale shark & coral reef

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' spectacular 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.

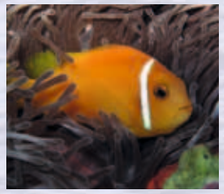
Expedition contribution	Duration	Dates	Meeting point
£1770	7 days	15 - 21 Jul 2017	Malé
£1770	7 days	22 - 29 Jul 2017	Malé

More info **www.biosphere-expeditions.org/maldives**









Dark clouds and silver linings over the Maldives

LATEST NEWS

The 2016 expedition revealed a worrying reduction in the amount of Maldivian live coral over the past year. Expedition scientist Dr Jean-Luc Solandt says that "our surveys showed a clear pattern, with reefs inside atolls being the worst affected." But there is a silver lining too: "What gives us hope is that the last big bleaching event in 1998 was hotter, longer and more severe, and many reefs recovered good coral growth within seven years", says Solandt. Biosphere Expeditions executive director Dr. Matthias Hammer adds: "It is not all doom and gloom. Where officialdom is failing, civil society and committed Maldivians are thankfully stepping in. Ever since Biosphere Expeditions started running its annual research trip to the Maldives in 2011, it has educated and trained Maldivians in reef survey techniques as part of the Biosphere Expeditions' placement programme. This culminated in the first-ever all-Maldivian reef survey in November 2014 and other community-based conservation initiatives since then, the latest in March 2016. Shaha Hashim, for example, has taken part in several expeditions and is now training her compatriots in reef survey techniques and setting up community-based conservation programmes. So there is hope yet!"



MUSANDAM

MUSANDAM - Oman

Underwater pioneers: Studying & protecting the unique coral reefs of the Musandam peninsula within Oman & United Arab Emirates

AT A GLANCE

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.

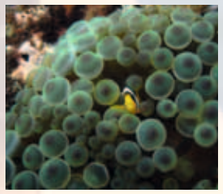
Expedition contribution	Duration	Dates	Meeting point
£1580	7 days	24 - 30 Sep 2017	Dubai

More info **www.biosphere-expeditions.org/musandam**

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









Musandam in its eighth year

LATEST NEWS

2016 saw the eighth annual coral reef survey of the Musandam Peninsula with fifteen divers from all over the world (Canada, France, Germany, Oman, the UK and USA). Dr. Jean-Luc Solandt, the expedition's chief scientist, summarises the expedition: "Many sites hosted large numbers of snapper, way in excess of 1,000 per kilometer square, which is encouraging. But the average size of them is quite low, which indicates overfishing. Grouper (hammour) numbers are reasonable, but again size ranges are small due to overfishing, which is a worry, since only larger groupers can breed and produce more fish. But the discussions we had with fishermen are encouraging. They have been told about and are respecting the Khor Hablain 'closed area', declared in 2013 with our help, where only line fishing is now permitted. We commend the government of Oman for its foresight in closing such a large area of the Musandam for all but line fishing. This will surely help with the conservation of fish stocks and coral reef health around Musandam. And after all, good conservation management is essentially good overall management."



SLOVAKIA

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

AT A GLANCE

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
£1330	7 days	5 - 11 Feb 2017	Bratislava
£1330	7 days	12 - 18 Feb 2017	Bratislava

More info **www.biosphere-expeditions.org/slovakia**

Study species: Lynx, wolf, bear





LATEST NEWS Stable populations of lynx, wolf and bear

2016 saw the fifth year of this expedition to the Vel'ka Fatra National Park. The study site in 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. The expedition runs when the valley slopes and trails are usually covered in snow providing a canvas on which the tracks and trails of the large carnivores are painted. Participants in 2016 came from Germany, Slovakia, Sweden, Switzerland, Australia, the UK and USA. They walked a total of 460 km along 33 transects, covering 26 (2 x 2 km) grid cells. Expedition scientist Tomas Hulik described this as "a really great effort, which has resulted in the recording of 32 wolf signs, five lynx signs and four bear signs, as well as the collection of six wolf scat and urine samples, which can be used for DNA analysis. "The findings are written up in a report and presented to the government's national park and national forestry departments to help inform estimates of large carnivore numbers in Vel'ka Fatra National Park and thereby aid their conservation.



Expeditions

SLOVAKIA

Expeditions

SOUTH AFRICA

SOUTH AFRICA

Carnivores of the Cape Floral Kingdom: Surveying Cape leopards, caracals and other species in the fynbos mountains of South Africa

AT A GLANCE

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, caracal 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. All this in an effort to mitigate human-wildlife conflict and create a sustainable future for all.

Expedition contribution	Duration	Dates	Meeting point
£1840	13 days	1 -13 Oct 2017	George

More info **www.biosphere-expeditions.org/southafrica**

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









World first in conservation

LATEST NEWS

The 2016 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, thereby contributing significantly to both humans and wildlife benefiting 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, and do, contribute to worthwhile conservation science, but perhaps never imagined they could achieve a world first".



SUMATRA

SUMATRA - Indonesia

Forest flagship: Researching & conserving critically endangered Sumatran tigers in Rimbang Baling Wildlife Sanctuary, Sumatra, Indonesia

AT A GLANCE

This Sumatran tiger conservation project will take you to the Indonesian island of Sumatra to survey critically endangered Sumatran tigers and the largely uncharted and fascinating rainforest setting in which they are struggling to survive. You will be working as part of an international team from a comfortable traditional timber house expedition base inside the forest. You will be covering ground on foot and in boats, looking for tracks, kills, scats and the animals themselves, and setting camera traps. You will also work with local people on capacity-building and creating local incentives for tiger conservation. All this in an effort to mitigate human-wildlife conflict and create strategies to ensure the survival of the critically endangered Sumatran tiger into the future.

Expedition contribution	Duration	Dates	Meeting point
£1980	13 days	30 Jul - 11 Aug 2017	Pekanbaru
£1980	13 days	20 Aug - 1 Sep 2017	Pekanbaru

More info **www.biosphere-expeditions.org/sumatra**

Study species: Sumatran tiger, Sunda clouded leopard, tapir





LATEST NEWS Tough tiger job in Sumatra

The site of the 2016 expedition, Rimbang Baling Wildlife Reserve, is a breeding ground for tigers. Camera traps captured a tigress with three cubs, and as such it is deemed to be extremely important tiger habitat. "Nearby Tesso Nilo National Park used to be the most important and densely populated tiger habitat in Riau Province", explains expedition scientist Febri Anggriawan Widodo, "but in 2005 encroachment started by illegal palm oil plantations with the government turning a blind eye. Today the established national park covers 83,000 hectares. However, only 20,000 hectares of forest remain, as illegal plantations are rife inside the park. The estimated tiger density dropped from 0.89 tigers per square kilometer in 2005 to zero in 2013. We are fighting hard to avoid the same fate happening to Rimbang Baling, which is now the most important tiger habitat left in Riau Province. By surveying the rainforest and educating the communities in and around the reserve, we hope to prevent detrimental tiger habitat loss", continues Widodo and concludes "please come in 2017 as we need all the help we can get for our fight for tiger survival".



Expeditions

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
£1580	9 days	23 - 31 Oct 2017	Chiang Mai
£1580	9 days	3 - 11 Nov 2017	Chiang Mai

More info **www.biosphere-expeditions.org/thailand**

Study species: Asian elephant



LATEST NEWS Brand-new expedition

This expedition is brand-new on the Biosphere Expeditions portfolio as of November 2016. Kerri Mc-Crea, the local scientist, says: ""Asian elephants are endangered and in a steep population decline due to poaching and habitat degradation, as well as fragmentation leading to human-elephant conflict. Captive elephants are often kept in inadequate conditions and little research has been done on wild animals living in dense forests. Support from Biosphere Expeditions to carry out research on natural elephant behaviour is therefore crucial and will benefit both captive and wild elephant populations." Kathy Gill, co-founder and strategy adviser of Biosphere Expeditions, adds: "We are excited to be helping Kerri and her team. This is a new one for us too with homestays in a remote hill tribe village and quite close interactions with the elephants, so it will be interesting to see how this is will be taken up. We hope it will be really popular, because it is such worthwhile project and deserves our support."

TIEN SHAN

TIEN SHAN - Kyrgyzstan

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

AT A GLANCE

This expedition 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.

Expedition contribution	Duration	Dates	Meeting point
£1890	13 days	10 - 22 Jul 2017	Bishkek
£1890	13 days	31 Jul - 12 Aug 2017	Bishkek
£1890	13 days	14 - 26 Aug 2017	Bishkek

More info **www.biosphere-expeditions.org/tienshan**

Study species: Snow leopard, argali, ibex, marmot


© Martin Forster



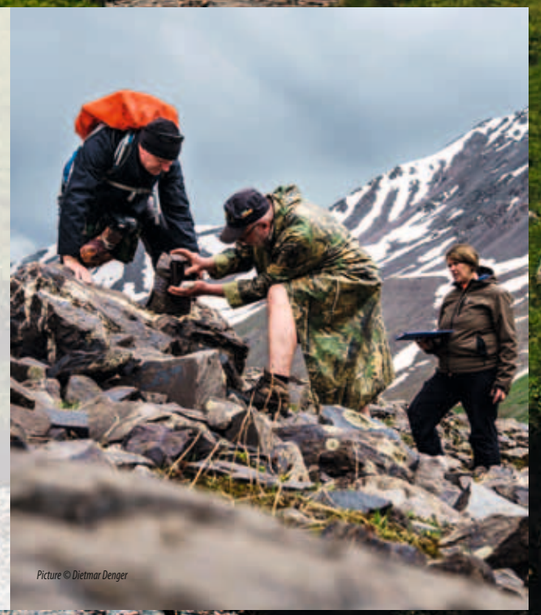




LATEST NEWS

Snow leopard captured on a camera trap for the first time

The third snow leopard expedition to the Kyrgyz Tien Shan mountains yielded conclusive proof of snow leopard presence in the Kyrgyz Alatoo range, where an animal was captured by photo and video trap. The expedition also found a fresh snow leopard's kill, which shows a very clear pattern and example worthy of publication of how snow leopards kill and consume their prey. "All together this has been the most successful year ever here in the Tien Shan", says expedition scientist Dr. Volodymyr Tytar, "and it also shows the value of good science and tenacity. The results of interviews with the herders during the first year identified suitable snow leopard habitats. In the second year, we homed in on those and our snow leopard distribution model was defined. And finally this year those places identified by the model were targeted to produce these fantastic results. Now our job in 2017 is to find more evidence of the elusive cats and start developing conservation measures in collaboration with the local herders and people."


Picture © Dietmar Denger

EXPERIENCE DAYS in the UK, USA & Australia

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.

	UK	USA	Australia
Experience day contribution (per person)	£65	US$95	AUS$95

We will credit AU$75 | £50 | US$75 back to you if you subsequently join one of our expeditions.

More info **www.biosphere-expeditions.org/experience**

Dates & locations

Australia
Melbourne - October 2017*
Sydney - October 2017*

UK
New Forest National Park - June 2017*
Broads National Park - June 2017*

USA
Minnewaska National Park, NY - May 2017*
Lory State Park, CO - May 2017*
King's Canyon National Park, CA - May 2017*

*Experience days are always on a Sunday from 09:00 to 17:00



EXPERIENCE

SCHNUPPERN



SCHNUPPERTAGE in Deutschland

Wo Schnuppertag draufsteht, ist auch Schnuppertag drin: Verbringen Sie einen unterhaltsamen Tag mit uns und schnuppern Sie rein in das Feldforscherleben und Mitforschen bei Biosphere Expeditions. Unsere Schnuppertage finden in einigen der schönsten Nationalparkflecken Deutschlands statt. Als Teil eines kleinen Teams erlernen und probieren Sie Seite an Seite mit einem Naturführer und Ihrem Expeditionsleiter Techniken und Fertigkeiten im Natur- und Artenschutz aus. Dazu gehört der Umgang mit dem GPS, Navigation mit GPS oder Kompass, Arbeit mit Kamerafallen und Radiopeilsendern für Wildtiere, Spurenlesen, Ausfüllen von Datenblättern, etc. Obendrein lernen Sie selbstverständlich auch den Nationalpark kennen; seine Fauna, Flora, Geschichte und Naturschutzaktivitäten. Am Ende Ihres Schnuppertages werden Sie also nicht nur viel über den Nationalpark wissen, sondern auch einen sehr guten Eindruck davon haben, wie es ist, mit uns auf Expedition zu sein

Schnuppertag Beitrag einheitlich für alle Veranstaltungsorte: **€65** (pro Person)
Falls Sie sich nach dem Schnuppertag für die Teilnahme an einer Expedition entscheiden, schreiben wir Ihnen €50 davon wieder gut.

Mehr Info **www.biosphere-expeditions.org/schnuppertage**

Termine & Veranstaltungsorte

Nationalpark Niedersächsisches Wattenmeer - April 2017*
(Norderney)

Nationalpark Kellerwald - Juli 2017*

Nationalpark Unteres Odertal - Juli 2017*

Nationalpark Eifel - September 2017*

Nationalpark Berchtesgaden - September 2017*

*Alle Schnuppertage finden jeweils sonntags von 09:00 bis 17:00 Uhr statt

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

Biosphere Expeditions has won the following AWARDS & ACCOLADES

Skål International Sustainable Tourism Awards
Winner of the category "Countryside and wildlife" (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 UK) (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 **"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**

get involved

The Friends of Biosphere Expeditions

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 acrosss the globe for a membership fee* starting from a monthly £8 / €10 / US$15 / 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.



Friends activities 2016

In 2016, the Friends continued to concentrate on capacity-building with local people through the Biosphere Expeditions placement programme. This programme (see **www.biosphere-expeditions.org/placements**) now makes places available on all expeditions for local people and is supported by the Friends, the Rufford Foundation, as well as a successful fundraising campaign via GlobalGiving. Testimonials from placement winners are shown below.



Tariq Zeyad Subhi Shaar,
Arabia expedition 2016

"I would like to thank the people at Biosphere Expeditions for the great opportunity they gave me to take part in the Arabia expedition. It has been a wonderful and ineffable experience that affected me both on the professional and personal levels. Being out there in nature with awesome people who are eager to save the wildlife of my Arabian home was incredible. I could see the passion in their eyes and the love for the animals, which encouraged them to walk under the sun for hours to collect data. There is no better way to learn more about animals, their behaviour, habitat, numbers…etc. other than going out to the field and work. My skills and knowledge have dramatically increased and the expedition opened my eyes to the level of effort conservationists exert to protect the animals - very inspiring indeed. The natural world is very beautiful and needs our protection. We need to make sure that the coming generations can enjoy wildlife as much as we do now. Hopefully more and more people will join Biosphere Expeditions to make a difference. Finally, I would also like to thank every member of my team for their kindness and love. Thank you again for giving me this chance, which will help me pursue a career in conservation and wildlife in the future."



Karolína Skřivánková
Slovakia expedition 2016

"This expedition has been a great learning experience for me. Not only have I met wonderful people with similar interests and gained lots of knowledge to pass on, but I also learnt a lot about the environment of the place I live in (which sadly, I did not know before). Even seeing the tracks and guessing what the animal could be doing was exciting. I am really grateful for the opportunity to take part in this expedition and I hope the effort of the people involved will continue. It's definitely worth it. I loved nature before I took part in this expedition, but now I feel like I got a real 'insider' look and found out about environmental issues in Slovakia (such as legal deforestation in national parks) that I did not know about before. I think that I also gained some hope in humanity (or at least that not all people are destructive members of the only species whose extinction would make the planet thrive after all...). I will try hard to help to spread the word to more people and try to ignite a spark of interest about the place we live in."

The Friends also supported Peter Schütte to attend a two-part course on wolf monitoring in his native Germany (read more about Peter on page 63).



Finally, the Friends supported the purchase of camera traps for the expeditions to Arabia (conserving desert species), Amazonia (biodiversity study) and South Africa (leopards).

Placement programme

The Biosphere Expeditions placement programme (**www.biosphere-expeditions.org/placements**) offers free expedition places to nationals or residents of the expedition host country. The aims of the programme are to train the next generation of conservationists, help them in their careers in conservation and empower community-based conservation efforts.

The placement programme is kindly supported by the Rufford Foundation, the Waterloo Foundation, the Anglo-Omani Society, Vascutek, the Friends of Biosphere Expeditions and all the individual donors that responded to our 2016 fundraiser.



Jessica Salas, Costa Rica
turtle expedition 2016

"This opportunity was amazing, not only for the experience shared with incredible people and to practice my English. This experience will also help me with my career as a marine biologist, because I learnt a lot about turtles and I really enjoyed to see the process with the baby turtles. It makes me understand why we do this 24/7 job."



Hadi al Hikmani,
Arabian leopard expedition,
Oman, 2006-2011

"My work on Arabian leopard conservation began with the Oman Office for Conservation of the Environment in 2002 and from 2006 until 2011 I assisted Biosphere Expeditions in survey work on the Arabian leopard and prey species in Oman. Through my work with Biosphere Expeditions, I had the chance to meet people from different cultures from all over the world and I also gained invaluable information & experience on how to conduct conservation research by working with experienced scientists from Biosphere Expeditions. Through the Office for Conservation I then studied for a first conservation degree in the UK, something I always dreamed of. I followed this with a Research Masters and I am now doing a PhD on Arabian leopard genetics at the Durrell Institute of Conservation and Ecology (DICE), University of Kent. When I finish my PhD, I look forward to continuing my work on the conservation of the Arabian leopard back home in Oman."



Dominique Stadler,
Azores whale & dophin expedition 2016

"I would like to thank Biosphere Expeditions for letting me join their programme on cetacean research in the Azores. It has been a great experience to study these incredible animals that are swimming by just in front of the place I live, but usually don't have the chance to see. I will write a report on the expedition for my study subject "Sea operation methods and laboratory". Furthermore, a link will be published on the Master's Facebook homepage. I will also write an article for the local journal "Fazendo" about our experience on the expedition."



Tim Polaszek,
Musandam coral reef
expedition 2013

"I wanted to let you know that the expedition I joined you on in Oman in 2013 had a huge impact on what happened afterwards for me. I am now studying for a Masters in environment and resource management, with a focus on ecosystem services in Amsterdam. One of my recent projects was on Marine Protected Areas and how to achieve Aichi and Durban biodiversity targets in the Netherlands. Personally, my main focus will be on how to improve global environmental governance and policy, and how we can incorporate natural capital into the day-to-day language of politics and economics."

Maldives

After five years of the placement programme in the Maldives, over 20 Maldivians have been trained as Reef Check EcoDivers and five to Reef Check Trainer level. Reef Check is a methodology that allows volunteers to survey for and record reef health and as such it is ideally suited for community-based conservation. EcoDivers can conduct surveys and Trainers can train others to qualify as EcoDivers.



The most active Maldivian has been Shaha Hashim (of the Maldivian NGO Gemana) who has trained her compatriots and so far has undertaken three local Reef Check surveys independent of the annual Biosphere Expeditions surveys. Another placement graduate, Rafil Mohammed, was intimately involved in a Reef Check survey of Velassaru house reef, getting local media to cover the event and undertaking key marketing (online advertising) and promotion (T-shirts were printed).

Another local NGO, the Maldives Whaleshark Research Programme (MWSRP), now has one of its staff members (Iru Zareer) trained as a Reef Check Trainer and can undertake surveys and training of Maldivian and MWSRP volunteers at Dhigurah Island, the location of the Mamigili Whale Shark Marine Protected Area.

The Maldivian placement programme and continuous involvement of committed and exceptional individuals such as Shaha Hashim has been instrumental in building capacity to such an extent that individuals involved have been able to use the experience to gain employment in local jobs in marine conservation.



Oman

In Oman, where Biosphere Expeditions runs another coral reef conservation expedition, we are trying to follow the successful Maldives model (see above). In 2016, three more Omanis (Jenan Alasfoor from Muscat, as well as Ali Saleh Ibrahim and Waleed Alkaabi, both from Sohar) came on the expedition. All three qualified as Reef Check EcoDivers and can now conduct reef surveys anywhere in the Indo-Pacific, including in Oman. This brings the total number of Omanis trained over the years up to seven - including divers from the Ministry of Environment and Climate Affairs, and the Environment Society of Oman - in what Biosphere Expeditions hopes to be the start of an all-Omani community-based survey effort. Biosphere Expeditions' executive director Dr. Hammer said that *"Biosphere Expeditions has been very successful in setting up such a community-based programme in the Maldives and we are very hopeful that Oman will now follow suit".* Ali Saleh Ibrahim adds that *"the knowledge I have gained participating in this expedition will help me to go further with my interest of protecting the underwater environment. Now I am ready to start my first independent Reef Check together with other Biosphere Expeditions placement graduates and I plan to do this in the coming months. I really appreciate Biosphere Expeditions' efforts to save coral reefs in my country and thank them for giving me the opportunity of a placement on the Musandam expedition, and putting Oman on their world map of conservation expeditions."*



Rahat Yusubalieva, Tien Shan snow leopard expedition 2015 & 2016

Rahat shared her knowledge and experience on environmental training sessions in the rural schools of Kyrgyzstan's Batken province, the most south-west and remote part of the country bordering on Tajikistan. Trainings of trainers (TOT) sessions were conducted in the villages of Andarak and Iskra in Batken province. Participants included school students of grades 7 to 10, as well as teachers of biology and geography. The sessions focused on ecosystem conservation, management of water, forest, land and pasture resources in relation to climate change impacts.

Participants discussed how local ecosystems have changed in the last two decades and how people can conserve them. The goal of the TOT was to inform local educational institutions on the current state of the environment and methods of conservation, as well as for local community members to reflect on how they are influencing their own environment and to integrate their own observations and new scientific knowledge into the school curriculum. The TOT also covered the snow leopard, its habits, prey animals, threats to its survival, as well as the historical and cultural meaning of the snow leopard for the people of Kyrgyzstan. A documentary film "Irbis, legends of snow covered mountains" was shown and followed by a discussion. Participants were also informed on research findings by Biosphere Expeditions in West Karakol and Kyrgyzstan's action plans for snow leopard 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.



Spread the word!
One way of helping us to help wildlife and people across the world is to spread the word. Word of mouth (in person and online) is a good way to get people excited. Talk to your family, friends and colleagues about your experience and encourage them to join in too.

Events
Host an event for us in your neck of the woods. Examples include staffing a stand at an exhibition, holding a drinks reception in a local pub, a dinner party at your home, a talk at your local wildlife or conservation society, a get-together at your professional organisation or club, or anything else you can think of. We can send you support materials such as postcards and brochures that you can hand out at your event. In addition a Biosphere Expeditions staff member might be able to come and support you or give a talk.

Time & skills
We always need people with skills who can help us out. Examples are skills in the outdoors, accounting, graphic design or IT. Or people who can help by writing blogs, tweets or talking to the media. If you have any of those skills or if you would like to help online, then please send us an e-mail telling us what your skills are.

Raise funds
Support critical wildlife conservation and vital research by raising funds for Biosphere Expeditions. There are many ways to do this. Why not organise an event or take part in a sporting endeavour? It's fun, a great way to meet people and to do something different to challenge yourself. By raising funds you can make a long-lasting contribution to our wildlife conservation work worldwide.

Media
Local newspapers and radio stations are always looking for new stories, and they are very likely to want to hear about your experiences. Biosphere Expeditions has an extensive archive of high resolution photos and broadcast quality HD films, so please contact us if you need pictures or film clips to illustrate your story or if you would like help with your press release or media work.

Involve your company
Does your company publish a company magazine? If so, the editor would probably be very interested to hear from you as they are always keen to cover interesting features relating to their members of staff.

Many employers, particularly in the USA and Canada, but also elsewhere, will match fund charitable contributions made by their employees, retirees and employees' spouses. In Biosphere Expeditions' case this means that your employer may match fund your expedition contribution payments and other donations you make to Biosphere Expeditions. Some employers also provide matching funds to support employee volunteer hours.

Some companies also have grants for non-profit organisations such as Biosphere Expeditions, so why not talk to the relevant people in your company? You may have a Corporate Responsibility Manager, or an Environmental or Communications Manager who may be able to help you. Some companies are also keen to get their staff involved in non-profit causes and might like to send staff members on an expedition or an experience day, so this is another option you could investigate.

In-kind donations
You may have laptops, GPSs, video cameras, binoculars or other items which we can use on expedition to give away. If so, please let us know and we will either use them ourselves on our wildlife conservation projects or pass them on to our local partners.

Make a donation
You can make a tax-efficient donation via our crowd-funding website www.crowdrise.com/biosphere-expeditions or straight into the accounts of our US 501(c)(3) charity, our German e.V. charity, or our UK or Australian non-profits.

More examples of what people have done in practice are at **www.biosphere-expeditions.org/lookahead**

NEWS & VIEWS

Dr. Jean-Luc Solandt HAS BEEN BUSY

Our coral reef specialist and chief scientist for the Maldives and Musandam expeditions, Dr. Jean-Luc Solandt, has been busy. In the coral reef realm, there was great interest in the areas we surveyed in the Maldives and the condition of the reefs two months post-bleaching. He submitted a successful abstract for a Rufford conference in Sri Lanka (see page 63), where our work will be presented by our in-country partner Dr. Hussein Zahir. In the UK, Jean-Luc ran and developed a workshop with many EU NGOs to inform them on how to use the EU Habitats Directive to hold their governments to account properly to manage and protect their fishing marine protected areas (MPAs). The subsequent workshop in Brussels in September was attended by nine countries and many NGOs. A legal toolkit was developed as part of this work. Jean-Luc has also been involved in developing a UK-wide website on all domestic MPAs, with a rating on their management.



TOUGH GIRL Catherine Edsell

Expedition leader Catherine Edsell was part of the 'Oceans: marine and underwater projects' panel in this year's Explore conference at the RGS (Royal Geographical Society), as well as a speaker at the Women's Adventure Expo in Bristol. Catherine was also interviewed by Wise Oceans about what inspired her to work in marine conservation and by Tough Girl Challenges about how to balance family life, adventure and leading conservation expeditions.







PUBLISHING by Ida Vincent and Craig Turner

Expedition leaders Ida Vincent and Craig Turner have been active in publishing. Ida has just published her first novel "Mountain Murder" (available on Amazon), a mountaineering murder mystery set in Seattle, Poland and Pakistan. Craig is a contributing photographer to the new Planet Earth II book (available on Penguin and Amazon).

Biosphere Expeditions IN THE FRAY TO STOP OIL DRILLING in famous Virunga gorilla park

Biosphere Expeditions was one of over 60 environmental and tourism groups who in a powerful joint statement have called for UNESCO and the governments of Uganda and the Democratic Republic of Congo to reach a deal to stop new oil drilling licences from being awarded in Virunga National Park and the surrounding area. A new oil licence, for which the Ugandan government is currently inviting bids, could have a devastating impact on the UNESCO World Heritage Site.





Kathy Gill's NEW VENTURE

One of the founding directors of Biosphere Expeditions has started up another not-for-profit, this time helping British wildlife. The new organisation, Wild Days Conservation (www.wilddaysconservation.org), takes people on holidays in the protected areas of England to help with habitat management work and wildlife surveys for some of the top conservation organisations in the country. People will learn about different habitats and species and help in their conservation alongside experts from organisations such as the RSPB and the National Trust. Kathy says that "after years in the bush abroad, it is really interesting to study the wildlife closer to home. It has been a fascinating process setting up the partnerships with conservationists here in the UK. Funding has been slashed recently and the UK conservation bodies are very much in need of our teams of volunteers. Nobody has offered the Biosphere model in the UK before and we've made a good start this year with a lot of media attention".

Kathy is still involved with Biosphere Expeditions too and we wish her well for Wild Days.

News & views

NEWS & VIEWS



Wildlife symposium
TIGER SHOWCASE

Our Sumatra tiger scientist Febri Anggriawan Widodo delivered a presentation entitled "Voluntourism in action for conservation of the Sumatran tiger in Rimbang Baling Wildlife Reserve, Sumatra" at the 3rd International Wildlife Symposium at Lampung University in Indonesia.



Dr. Alan Lee's YEAR

Dr. Alan Lee, our South Africa scientist, had a gruelling South African summer 2015/2016 surveying the Cape Fold Mountains for the Endangered fynbos endemic bird: the Hottentot buttonquail. The survey involved more than 270 km of formal transect through rugged terrain, but resulted in the submission of the first publication documenting the status of the species. Alan was also nominated Editor-in-chief of Ostrich: African Journal of Ornithology. This was followed by attendance at the Fynbos Forum conference, where he picked up the prize for the best poster, documenting work at the Biosphere Expeditions study site at Blue Hill Nature Reserve. On the Biosphere Expeditions South Africa expedition itself, the team managed a world first by capturing and releasing the first Hottentot buttonquail ever! Alan was then off to Senegal for the 14th Pan-African Ornithological Conference to present work on the bird-ring data being collected in and around the fynbos. In between all of this he has also had three articles accepted for publication in scientific journals, based in no small amount on work supported through his partnership with Biosphere Expeditions.



Lisa Steiner's 2016 PUBLICATIONS

2016 was a productive year for marine biologist Lisa Steiner of our Azores Whales Dolphins & Turtles Expedition. In December 2015 she travelled to San Francisco for the Society of Marine Mammalogy conference, with some assistance from the Friends of Biosphere Expeditions. Over 3000 people working with marine mammals attended the conference. She presented a poster on the movements of immature female sperm whales around the North Atlantic. She was also co-author on two other posters presented there: one on blue whales and another on humpback whales. In addition, she was a co-author on posters that were presented at the European Cetacean Society Conference in Madeira: one on sperm whales another on humpback whales, a third on baleen whales photo-ID and a fourth on blue whales. Finally, an article on True's beaked whales in Macaronesia, on which she is a co-author, has recently been posted as a pre-print in the journal PeerJ.

TWO BIG ACCOLADES for Biosphere Expeditions



Biosphere Expeditions has won two more awards:
The prestigious **Skål International Sustainable Tourism Award** (Countryside & Wildlife) at the 77th Skål World Congress in Monaco. In their laudation the judges said that Biosphere Expeditions "brings together science and tourism, nature and people in a holistic, harmonious and inspiring way" and further that Biosphere Expeditions "scored highly in every category and therefore shows impressive commitment towards all aspects of conservation and sustainability".



Biosphere Expeditions' founder and executive director Dr. Matthias Hammer was made a **"Hero of the Reef"** at a gala dinner in Los Angeles, California. The annual awards are presented by the Reef Check Foundation, a US non-profit that brings together community groups, government departments, academia and other partners to educate the public about the coral reef crisis and rehabilitate damaged reefs worldwide using ecologically sound and economically sustainable solutions.

Dr. Gregor Hodgson, founder and executive director of Reef Check, in his laudation called Dr. Hammer "an outstanding individual who has done so much for reef conservation worldwide; and not just reefs, but also lots of other marine and terrestrial species and habitats. This award is therefore richly deserved, as our planet's wild animals and places owe him a big thank you."

Hammer and Gill are "delighted and humbled by this latest haul of awards" and "gratefully accept them on behalf of all the staff, friends, supporters, helpers and volunteers that make Biosphere Expeditions the driving force in conservation that it is today. These two awards are a reflection of their joint commitment and as such belong to all of them. Thank you very much to Skål and Reef Check for recognising us and our achievements in wildlife conservation."

NEWS & VIEWS



Peter AND THE WOLVES

Our Germany wolf scientist Peter Schütte is a member of the "Lower Saxony wolf network", which is concerned with tasks such as monitoring of the wolf population, educational work and above all the protection of livestock. On the latter topic, Peter founded the workgroup "horse and wolf", because there are great reservations and fears among farmers and livestock owners about wolves. One result of the group was a guide for horse owners (www.pferdundwolf.de) on how to co-exist with wolves. Peter has also organised various field trips, events and lectures on how to avoid conflict with wolves and attended a course (with the support of the Friends of Biosphere Expeditions) on how to document wolf tracks and signs at the renowned LUPUS Institute for wolf monitoring and research. More activities are planned in 2017, including the inaugural wolf monitoring expedition with Biosphere Expeditions.



Alvin AND THE REEFS

Reef Check Malaysia is in the third year of a long-term project called Cintai Tioman. This project aims to build resilience towards the effects of climate change, of coral reefs and the community on Tioman. A large portion of the project focuses on issues on land such as waste and sewage management, as well as education. The project set up a recycling system on the island, promoted environmentally friendly tourism standards among dive operators, snorkel guides and resorts, ran education programmes with the local school, coral restoration projects and reef health monitoring. The latter is where Biosphere Expeditions come into the picture. For three years now Biosphere Expeditions has been involved with Reef Check surveys around Tioman island. The data collected not only help Reef Check Malaysia to track and monitor reef health around the island, but the data are also shared with the Department of Marine Parks Malaysia, who are the managers of the Tioman Marine Protected Area. Alvin Chelliah of Reef Check Malysia says: "It is easy to get volunteers who want to come and help for a day or two, but these kinds of volunteers usually lack skills and do not have the time to be trained. It is one thing to get 30 people for a weekend, but it's a whole other thing to get ten people that are willing to come, get trained, do some hard work and collect good data for science. This is exactly what Biosphere Expeditions have done for this project. The Cintai Tioman project has another two years to go and we are looking forward to continuing our partnership with Biosphere Expeditions."



Matthias AND TV – OR NOT

Our executive director's desperate attempts at becoming the next Bear Grylls on German TV - despite the obvious differences in age, looks and body - bombed in spectacular fashion in Iceland. Paired with two celebrities, one very nice, the other a Simon Cowell character from a German dance show, Matthias was unable to cope with the pressure and told "Simon" and the production team what he thought of the charade. Needless to say that the programme was never even screened after that. Crying in a corner after the event, Matthias was heard sobbing "but I really wanted to be famous; what am I going to do with my autograph cards now?!" Please request them from infamous@biosphere-expeditions.org to make him feel better.



Hussein AND THE CORALS

Dr Hussein Zahir has been to a science conference in Sri Lanka to present our findings about Maldivian corals. Inner atoll reefs in central Maldives are showing signs of stress from bleaching (including the 2016 event), disease, increased predation by coral-eating molluscs (Drupella sp.) and are prone to being overgrown by invasive sponges. By contrast, outer reefs appear to more resilient, as found by our 2016 annual survey expedition. Disease is also starting to be more prevalent and commercial fish are more absent from surveys. Thank you to the Rufford Foundation for supporting our work in the Maldives.



News from our EXPEDITION REPORTS

In SLOVAKIA, there are now stable populations of lynx, wolf and bear in our Veľká Fatra National Park study site.
Our SUMATRA report concludes that there are no tigers near humans in the lowlands, but good quality tiger habitat throughout. Nineteen mammal species of interest were recorded, including six artiodactyl tiger prey species, as well as clouded leopard, leopard cat, agile gibbon and the siamang.
In SOUTH AFRICA, the expedition takes place on Blue Hill Nature Reserve, a recently established protected area where land management changed from agriculture to biodiversity conservation in 2009. The expedition showed that this conversion has brought overall positive effects and a recovery of wildlife, including the presence of leopard and caracal.
In TIEN SHAN, the expedition photo-trapped its first snow leopard, providing proof that snow leopards still roam the Kyrgyz Alatoo range, where they should be protected.
Our MUSANDAM (Oman) coral reef report showed that the reefs are in a good state and that a recently created marine protected area (with the help of Biosphere Expeditions) is being enforced. But problems remain with overfishing and unregulated development.

MEDIA

CLIPPINGS 2016

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



Mountain Pro Magazine
Five page feature about Slovakia lynx, wolf and bear expedition
https://issuu.com/biosphere-expeditions/docs/sk-mountainpro16



Lonely Planet Traveller
Short mention of Biosphere Expeditions as a voluntourism organisation.
https://issuu.com/biosphere-expeditions/docs/lonelyplanettravellerd16



MCS Magazine
Three page feature about Maldives coral reef expedition
https://issuu.com/biosphere-expeditions/docs/mv-mcsmagazine16



National Geographic USA
The Costa Rica turtle expedition was honoured in National Geographic's "100 places that will change your life"
https://issuu.com/biosphere-expeditions/docs/cr-ng_100_places_that_will_change_y



Apothekenumschau
Four page feature about Arabia expedition
https://issuu.com/biosphere-expeditions/docs/ar-apothekenumschau16

MEDIA

CLIPPINGS 2016



Abenteuer & Reisen
Eleven page feature about Sumatra tiger expedition
https://issuu.com/biosphere-expeditions/docs/su-abenteuerreisen16



Book "100 Punkte Tag für Tag"
Biosphere Expeditions is mentioned as a showcase for ethical tourism
https://issuu.com/biosphere-expeditions/docs/100_punkte_16



David Jones Magazine
Biosphere Expeditions is one of three showcases in an ethical travel article
https://issuu.com/biosphere-expeditions/docs/davidjonesaustralia16



Wanderlust
Seven page feature of tien Shan snow leopard expedition
https://issuu.com/biosphere-expeditions/docs/ts-wanderlust16_6f2b38d9bac9c1



Tauchen
Six page feature about Maldives coral reef expedition
https://issuu.com/biosphere-expeditions/docs/mv-tauchen16



Unterwasser
One page interview with Dr. Matthias Hammer
http://issuu.com/biosphere-expeditions/docs/su-diepresse14

MEDIA

CLIPPINGS 2016



Abenteuer & Reisen
Fourteen page feature of Tien Shan snow leopard expedition
https://issuu.com/biosphere-expeditions/docs/ts-abenteuerreisen16



Tierwelt
Double page spread about Biosphere Expeditions
and its Slovakia large carnivore expedition
https://issuu.com/biosphere-expeditions/docs/sk-tierwelt16



Geographical
Seven page critical article about the Maldives
with Biosphere Expeditions as a positive example
https://issuu.com/biosphere-expeditions/docs/mv-geographical16



Geographical
Biosphere Expeditions is mentioned as a positive example in a critical article about voluntourism
https://issuu.com/biosphere-expeditions/docs/geographical16



Universum Magazin
Twelve page feature about Sumatra tiger expedition
https://issuu.com/biosphere-expeditions/docs/su-universum16





Cover picture:
Conservation communication in Yosemite Valley, California, in the shadow of Half Dome.
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Biosphere Expeditions is an international non-profit conservation organisation registered in England, Germany, France, Australia and the USA.

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