

CORONAVIRUS AND CONSERVATION ISSUE

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 CORONAVIRUS, CONSERVATION AND THE
 ENVIRONMENT
 WILL BIOSPHERE EXPEDITIONS SURVIVE THE PANDEMIC?
 CORONAVIRUS & SURVIVAL APPEAL
 CAMPAIGNS & MORE





WELCOME



to the twelfth issue of the annual Biosphere Expeditions Magazine.

You can guess what the topic of this issue is: coronavirus. The pandemic is the biggest challenge by far we are facing in a generation. It has affected us and nature everywhere around the planet. My opening words last year were "the undeniable crisis our planet is in demands more action and activism. It demands a radical rethink of how we run our lives, societies and the way we treat our planet". Little did I know then how sharply the virus will bring all of this into focus. Our local conservation partners are fighting for survival because of it. We are fighting for survival too, with no citizen science expeditions since February 2020 and none on the horizon for the next few months at least.

But fight me must and fight we will. So this issue is about what we have done to support our conservation partners worldwide. How you have helped them continue their critical conservation work despite the pandemic. And it is also about what you can do to make sure there is a thirteenth annual Magazine in a year's time. For that is where we are. It's live or die, boom or bust.

See you on the other side!



Dr. Matthias Hammer Executive Director



UBERUNS ELECTRONS

Citizen science | ethical adventures | wildlife conservation

One has the power to change this. We are mindful of nature and empower people through citizen science and hands-on wildlife conservation. We are a non-profit, visionary, award-winning and ethical conservation organisation. We are a member of the IUCN and the UN's Environment Programme. Working hand-in-hand with local biologists and communities, we champion change and protect nature. And we succeed - the creation of protected areas on four continents is just one example.



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

Bürgerwissenschaft | nachhaltiges Reisen | ethische Abenteuer | Artenschutz

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

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

Actions participatives | voyage durable | aventure éthique | protection des espèces



No otre planète est en crise – jamais encore la nature n'a autant été en danger. Chacun a le pouvoir de changer les choses. Nous en avons conscience, et c'est pour cela que nous donnons les moyens nécessaires aux hommes de la préserver, au travers d'actions participatives et scientifiques, sur le terrain. Nous sommes une organisation à but non lucratif, visionnaire, plusieurs fois récompensée, éthique et durable, qui vise à promouvoir la protection de la nature. Nous sommes également membres de l'IUCN (Union internationale pour la conservation de la nature) et du programme des Nations Unies pour l'environnement. Nous travaillons main dans la main avec les communautés et les biologistes locaux. Nous incitons au changement et protégeons la nature. Nos efforts sont couronnés de succès : la création d'espaces protégés sur l'ensemble des quatre continents est juste un exemple de tout ce que nous avons réussi à accomplir. Rejoignez-nous et donnez de votre temps. Partagez notre vision d'une planète préservée. Quel que soit votre âge ou vos compétences, faites compter votre voix et participez à une mission pour la préservation de la nature pendant une semaine ou plus. Partez avec nous vers des endroits magnifiques et reculés. Développez vos connaissances et rencontrez des personnes du monde entier, qui ont la même volonté que vous. Participez concrètement à la préservation de la nature. Ensemble, agissons pour le bien de notre planète car notre futur en dépend.



He went on to be an expedition science co-ordinator for projects in Tanzania, the Philippines and Fiji, and is now undertaking campaign and policy work in planning and developing Marine Protected Areas in the UK. He has been the Reef Check co-ordinator for the Maldives since 2005 and has thus far led three expeditions to undertake surveys inside and outside Marine Protected Areas on the islands. Jean-Luc has 800 dives clocked up since he trained to be a marine biologist 20 years ago. He currently works with NGO Plateau Perspectives in environmental conservation with a number of citizen science research projects. He is also a parttime lecturer at the American University of Central Asia in the Environmental Management Department. In 2014 he found out about Biosphere Expeditions' work in Kyrgyzstan and signed up as a placement. After two years of volunteering with Biosphere Expeditions, he decided to jump in with both feet and joined the team in 2016.



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EDITORIAL

PUBLISHER Biosphere Expeditions info@biosphere-expeditions.org EDITOR Matthias Hammer, Kate Silverthorne

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

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EXPEDITIONS WORLDWIDE

AZORES (Portugal) Whales, dolphins, turtles

COSTA RICA Leatherback turtle

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GERMANY Wolf

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ARMENIA Leopard, lynx, bear, wolf

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SWEDEN Brown bear

MALAWI Elephants, cats & African biodiversity



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Expeditions

TIEN SHAN (Kyrgyzstan)



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THAILAND Asian elephant



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MALDIVES Coral reef & whale shark



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ARABIA (UAE) Oryx, wildcat, sand fox & others



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KENYA Big Five & others



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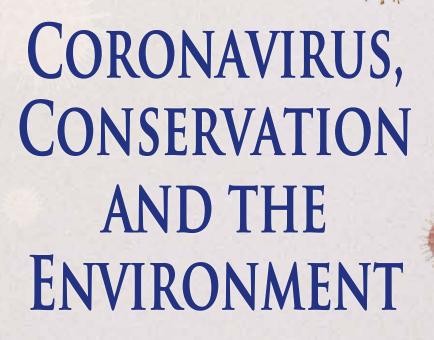
SOUTH AFRICA Leopard, caracal & biodiversity



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The Covid-19 pandemic has spread around the world, killing hundreds of thousands of people and infecting millions.

How did it start?

What impact will it have on the environment, ecosystems, wildlife and conservation efforts around the world?

What will come after?

What does it all mean for Biosphere Expeditions and will it survive the crisis?





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Coronavirus

ow did it all start?

A growing body of research points to a direct link between the destruction of nature and disease outbreaks — spotlighting the role of protecting and restoring nature in preventing future pandemics. It is likely that the coronavirus that causes the respiratory disease Covid-19 originated in bats. From there

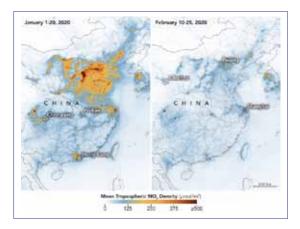
it may have spread from pangolins to humans. It is known that it has affected tigers in a zoo in the USA and also occurred very recently, in a mutant form, at a mink farm in Denmark.



So it is clear that the virus can jump between species and this is where one of the main problems may lie. As the global wildlife trade persists and human activities expand deeper into tropical forests, humans are increasing their exposure to wild animals and the diseases they carry. When mining and logging degrade or destroy wildlife habitats, animals are forced into different or smaller areas and are more likely to become stressed or sick. They are also more likely to come into contact with people and domestic animals, driving the transmission of disease from wildlife to humans. We know that wildlife species threatened by exploitation or habitat loss are more likely to be sources of disease, and new research suggests that outbreaks of animal-borne illness will become more frequent due to the accelerating destruction of nature. This is why many scientists now argue that protecting nature is vital to escape an 'era of pandemics'.

How has Covid-19 affected the environment and emissions?

The worldwide disruption caused by the Covid-19 pandemic has resulted in numerous impacts on the environment and emissions. The global reduction in modern human activity, such as the considerable decline in planned travel, has been called the "anthropause"



Change in NO₂ levels in China in early 2020. $\ensuremath{\mathbb{C}}$ Earth Observatory

by some and has caused many regions to experience a large drop in air and water pollution. In China, for example, lockdowns and other measures resulted in a 25% reduction in carbon emissions and a 50% reduction in nitrogen oxide emissions. In the first month of lockdowns, China produced approximately 200 million less metric tonnes of carbon dioxide than the same period in 2019, due to the reduction in air traffic, oil refining and coal consumption. The drop began in Wuhan and slowly spread to the rest of the world. However, the drop did not achieve an air quality of the standard considered acceptable by health authorities. Other pollutants in the air such as aerosol emissions remained. In Europe, the European Space Agency observed a marked decline in NO2 emissions from cars, power plants and factories in the Po Valley region in northern Italy, coinciding with lockdowns in the region.

Overall, daily global carbon emissions during the global lockdown around the world in early April fell by 17% and could lead to an annual carbon emissions decline of up to 8%. This would be the biggest drop since World War II.



Change in CO₂ levels worldwide during the first lockdowns.

Societal shifts caused by the Covid-19 lockdowns, such as widespread telecommuting, the use of virtual conference technology and working from home, may have a more sustained impact beyond the short-term reduction due to lockdowns. Despite this in May 2020 the concentration of carbon dioxide in the atmosphere was the highest ever recorded in human history. So whilst the pandemic has undoubtedly resulted in a brief respite in emission levels - indeed Earth Overshoot Day in 2020 took place more than three weeks later than in 2019 - the consensus amongst scientists is that humankind would need to reduce its emissions below lockdown levels basically forever, if we want to see a genuine emissions decline in the atmosphere. In other words, the pandemic has perhaps shown us the way forward and that emissions reduction is indeed possible. But it has also shown us that a sustained, systemic change in how humanity powers and feeds itself, travels and works is required for a substantial impact on global warming.



A healthy temperate forest in Europe

People returning to rural areas may put more pressure on nature and spread the disease further, as areas depending on tourism also suffer.

The fossil fuel industry

A report by the London-based think tank Carbon Tracker concludes that the Covid-19 pandemic may have pushed the fossil fuel industry into "terminal decline" as demand for oil and gas decreases while governments aim to accelerate the clean energy transition. It predicts that an annual 2% decline in demand for fossil fuels could cause the future profits of oil, gas and coal companies to collapse from an estimated €39tn to €14tn. However, according to Bloomberg New Energy Finance more than half a trillion € worldwide are currently intended to be poured into high-carbon industries. Preliminary disclosures from the Bank of England's Covid Corporate Financing Facility indicate that billions of £s of taxpayer support are intended to be funnelled into fossil fuel companies. According to Reclaim Finance, the European Central Bank intends to allocate as much as €220bn to fossil fuel industries. Needless to say, such short-sighted subsidies and efforts to prop up the continued burning of fossil fuels are anathema to a carbonneutral future.



Covid-19 could hasten the fossil fuel industry's swansong. But feckless subsidies remain.

How is Covid-19 affecting nature?

There is a misperception that nature is "getting a break" from humans during the Covid-19 pandemic. Instead, many rural areas in the tropics are facing increased pressure from land grabbing, deforestation, illegal mining and wildlife poaching. People who have lost their employment in cities are returning to their rural homes, further increasing the pressure on natural resources while also increasing the risk of Covid-19 transmission to rural areas. Meanwhile, there are reports of increased deforestation in Asia, Africa and Latin America. Illegal miners and loggers are encroaching on indigenous territories, which could expose remote indigenous communities to the virus. Areas that are economically dependent on tourism face reduced resources as tourism has ground to a halt. At the same time, illegal mining for gold and precious stones in Latin America and Africa is on the rise, as prices spike and protected areas are left unguarded.

Wildlife

Fish prices and demand for fish have decreased due to the pandemic and fishing fleets around the world mostly sit idle. Some scientists have argued that fish biomass will increase due to the sharp decline in fishing, and projected that in European waters, some fish such as herring could double their biomass. However, as of mid-2020, signs of aquatic recovery remain mostly anecdotal.

As people stayed at home due to lockdown and travel restrictions, sea turtles were spotted laying eggs on beaches they once avoided (such as the coast of the Bay of Bengal), due to the lowered levels of human interference and light pollution. In the United States, fatal vehicle collisions with animals such as deer, elk, moose, bears and mountain lions fell by 58% during March and April.



Leatherback turtle coming onto a beach in Costa Rica to lay eggs.

Conservationists expect that African countries will experience a surge in bush meat poaching. Matt Brown of the Nature Conservancy said that "When people don't have any other alternative for income, our prediction – and we're seeing this in South Africa – is that poaching will go up for high-value products such as rhino horn and ivory." In addition, experts fear that the Southeast Asian countries' attempts to deregulate wildlife hunting and breeding may create a new pandemic.

Deforestation and reforestation

Pandemic disruptions provided cover for illegal deforestation operations. This was observed in Brazil, where satellite imagery showed deforestation of the Amazon rainforest surging by over 50 percent compared to baseline levels. At the same time, unemployment caused by the Covid-19 pandemic facilitated the recruitment of labourers for Pakistan's 10 Billion Tree Tsunami campaign to plant 10 billion trees – the estimated global annual net loss of trees – over the span of 5 years.

Protected areas are suffering

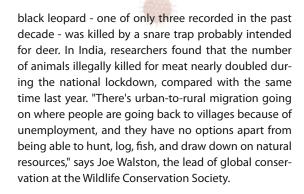
In numerous marine parks, rangers' salaries can no longer be paid, critical scientific monitoring has ground to a halt, and illegal fishing appears to be on the rise. Many terrestrial protected areas are likewise experiencing an uptick in bush meat poaching, much of it likely driven by people out of work. In May 2020, in Sri Lanka, a rare



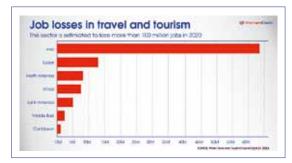


The Seychelles has created marine protected areas bigger than Germany in exchange for debt relief.

Coronavirus



To make matters worse, a "cataclysmic decline in funding" has hit Africa's protected areas especially hard, according to Kathleen Fitzgerald, a lead in the Africa division of Conservation Capital, a company that develops business-driven solutions for conservation. According to a paper Fitzgerald and her colleagues published in July in Nature Ecology and Evolution, Covid-19 caused booking declines of 75 percent or greater for nine out of ten African tour operators, threatening millions of jobs and potentially leading to the shrinking or downgrading of the most heavily affected protected areas. The story at Biosphere Expeditions is no different, with all citizen science elements of projects suspended since late February 2020.



Projected job losses in the tourism industry due to Covd-19.

Across the world, national parks and other protected areas find themselves similarly stressed. Bush meat poaching is on the rise and if the crisis continues, there will be lasting declines of wildlife populations and possibly even local extinctions of some species. Still, there are those to choose to be more optimistic, such as Enonkishu conservation manager Rebekah Karimi (where the Biosphere Expeditions Kenya project is located) in hoping that the pandemic will lead to a more resilient and sustainable system of conservation funding in the future, with a diversified revenue stream that includes domestic tourism, carbon credits, payments for ecosystem services, and conservation trust funds.

In some places, this is already happening. In a scheme commonly referred to as a debt-for-nature swap, for example, the Seychelles sold \in 20 million of national debt to the Nature Conservancy and private philanthropists in exchange for creating two new marine protected areas that, collectively, are bigger than Germany. Kenya has the world's first externally validated REDD+ program, which generates revenue from carbon credits for private con-

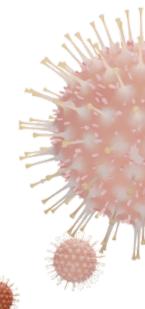
servancies, community land, and Chyulu Hills National Park. "There are great examples of funding alternatives that have been developed in Africa," Fitzgerald says. "We need to focus on scaling those up."

Protecting nature to protect humankind

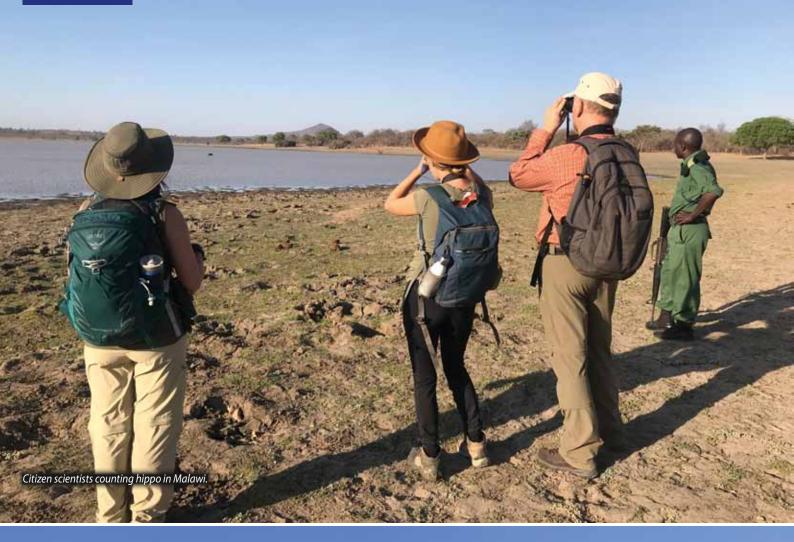
Conserving wild places and their fauna and flora around the world is not just for the benefit of wilderness and wildlife either. From a selfish point of view, it will also help humankind. The pandemic exemplifies the direct link between human health and ecological health, something experts have known and warned about for decades: Although only a small fraction of China's 1.4 billion residents are involved in the wildlife trade, the country is one of the world's largest markets for wildlife. The Chinese wildlife industry was also the source of the recent deadly coronavirus SARS. So when news broke that the trade had unleashed yet another disease, a widespread backlash from Chinese citizens ensued. According to Peter Li, an associate professor of East Asian politics at the University of Houston–Downtown, many people were "boiling with anger" after learning that the country's relatively small group of wildlife traders and consumers had once again jeopardised the interests and health of the entire country, just as they had done with SARS. Partly in response to public anger, the Chinese government enacted a temporary nationwide ban on the consumption of terrestrial wildlife. Politicians and conservationists in China and beyond celebrated the news. Scott Roberton, director of counter-wildlife trafficking for the Wildlife Conservation Society's Asia programme said: "What China is doing is encouraging, in that they're potentially taking a lead globally on policy to prevent future outbreaks."

Real change requires sustained momentum, however, and China's may already be slowing. At the time of writing, China had yet to codify its temporary ban on exotic meat into law, and legal loopholes still abound for wild animals used for traditional medicine, killed for fur, or kept as pets. The country did remove pangolin scales from its official pharmacopoeia of traditional medicine - yet it did not ban their use outright and still lists them as ingredients in certain concoctions. The government continues to promote bear bile as a treatment for Covid-19. "Unfortunately, the changes we are seeing today, in all likelihood, will revert back with 'normalisation' of the situation," predicts Saket Badola, head of Traffic India.

On the more positive side, the London School of Economics in July 2020 reported that a study had shown that people are more likely to support wildlife conservation policies and donate to wildlife charities when the spread of Covid-19 is linked to the human depletion of nature.



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Humanity is at a crossroads now. Our response to the pandemic will determine the course of the next few decades.



And after Covid-19?

Fatih Birol, executive director of the International Energy Agency, states that "the next three years will determine the course of the next 30 years and beyond" and that "if we do not [take action] we will surely see a rebound in emissions. If emissions rebound, it is very difficult to see how they will be brought down in future. This is why we are urging governments to have sustainable recovery packages."

In the transport sector, the pandemic could trigger several effects, including behavioural changes – such as more teleworking, teleconferencing and changes in business models – which could, in turn, translate into reductions of emissions from transport. On the other hand, there could be a shift away from public transport, driven by fear of contagion, and reliance on single-occupancy cars, which would significantly increase emissions.

In wildlife conservation through tourism, both the positive and negative effects of wildlife tourism are well established. While negative pressures associated with tourism appear to be currently reduced at many wildlife tourism situations, most of the rapidly disseminated on-line reporting on the loss of tourism revenues is signalling "down the track" threats to wildlife because tourism funds a lot of conservation and helps to protect wildlife. However, at the same time, the Covid-19 pandemic is considered to be a watershed moment in global awareness about the trade in wildlife and especially in relation to the fate of endangered species such as pangolins. Eventual outcomes will depend on individual country situations and the motivation and lasting engagement of local communities. In terms of wildlife trafficking there is some hope in South East Asia, but tourism operators and conservationists in Africa have reported that a longer-term recession of wildlife tourism will lead to poaching losses of valued wildlife.

Despite this somewhat negative reality there are many examples where the overall impacts of wildlife tourism

are positive and lend hope for environmental, social and economic sustainability. The drop in wildlife tourism associated with the Covid-19 pandemic, will in all probability, compromise conservation work, increase the threat to wildlife populations and jeopardise the integrity of wildlife tourism programmes. The location, nature and extent of the aftermath will only become apparent in years to come. One possible positive outcome is in those situations where tourism is currently poorly managed, especially in combination with over-tourism, where is scope for environmental recovery and the possibility to re-assess how a protected area and attendant wildlife tourism could be managed into the future.

Assuming there is no critical damage in the first place, the resumption of tourism can end up with two possible scenarios at opposite ends of the spectrum. At the negative end, tourism "players" and protected area managers do not reflect on previous conditions and the way that tourism and the environment were managed and things go on as before. Given this possibility, and particularly after the impact of Covid-19, we could end up with a new baseline of damaged conditions, further losses of habitat and depleted populations of wildlife at many locations. The nature and quality of wildlife tourism that ensues from this situation is likely to be poorer, less satisfying and left in an even more vulnerable situation than it was before Covid-19.

At the positive end of the spectrum, post Covid-19, we reach a new awareness of the vulnerability of species and the tourism upon which it is dependent for survival. This provides a realistic platform for increased funding for tourism management and conservation with the aim of protecting ecosystems vital for sustainable tourism and economic growth. From this scenario, a more secure future for wildlife, better quality ecotourism and greater visitor satisfaction can be realised.

And, provided we make it to the other side of this crisis, this is certainly where Biosphere Expeditions will want to be.



Will the end of the pandemic mean a new beginning for tourism?



Coronavirus



Will Biosphere Expeditions survive the pandemic?

Biosphere Expeditions is still here, albeit with all hatches battened down in an effort to survive the storm. Here's an interview with our founder and executive director, Dr. Matthias Hammer, about the situation in December 2020.



BE Will Biosphere Expeditions survive this pandemic?

MH The honest answer is that I do not know for certain, but probably. We've made contingency plans A, B, C, D etc., but even the best plans are pointless if we run out of money. The contributions that our citizen scientists make constitute the lion's share of our income. Of course,

this has collapsed to almost zero since March and it does not look like it will be coming back anytime soon. Vaccines are on the horizon, but even those will not be a "silver bullet" that will bring a swift end to the pandemic and a return to normal. Some experts even say we should expect masks and social distancing to be in place for another 2-3 years. I also doubt that many people will have the inclination or funds to travel in 2021. Of course, this presents a huge challenge to what we do.

There are some grant and other support schemes that we have applied for, including furloughing some of our staff, but if the pandemic continues well into 2021, as we now expect it to do, with no or very few expeditions happening in 2021, then survival will start to become a tough struggle indeed. But we are optimists by default, backed by good planning, and we are also fighters.

BE What is the outlook for expeditions in 2021?

MH Early on during the pandemic we suspended all citizen science elements of our 2020 expeditions and concentrated on continuing our conservation work with local partners and staff, and supporting our local partners in this time of crisis through our coronavirus appeal.

We are not expecting there to be many expeditions with citizen scientists in 2021. In fact, we recently postponed our Arabia and Kenya expeditions, planned for January and February 2021, for a year to 2022. I expect many other expeditions to follow suit. If conditions are favourable, we may be able to run the odd expedition in Europe later in 2021, but our honest assessment is that not much else will be possible in 2021. It may not even be possible to run any expeditions at all in 2021. For now, however, our 2021 expedition dates remain on our website and in this Magazine. Watch the website for the latest information and updates. If there are enough people to run an expedition and if we decide we can reasonably do so, then we will run expeditions as planned - for conservation, for our local partners, for our citizen scientists and because we strongly believe that conservation work must continue despite, and perhaps even because of this crisis.

BE Tell us more about the coronavirus and the survival appeals

MH We initially ran a coronavirus appeal from April until December 2020. This appeal was about supporting our local conservation partners worldwide, who were hard hit by lack of funding and helpers. It raised \leq 50,000! I was amazed by the generosity of people and would like to say thank you to all donors here. What we achieved through the coronavirus appeal is covered in detail on pages 24-25, but in a nutshell we were able to continue many of our projects on a community basis, enable our scientists to continue their research work and even support some new projects. Thank you again to all who gave so generously to make this possible.

In December, we then switched to our survival appeal, which is about getting Biosphere Expeditions through the crisis and tough months ahead. We are asking for €18,000 to help us survive the crisis and avoid redundancies. We were buoyed by an initial and very generous kick-start donation of €7,500 by a single donor and funds have been coming in steadily since then. More information and a donation form is on our survival appeal page <u>www.biosphere-expeditions.org/appeal</u>. If you are reading this and can help, please do, so that there can be an annual Magazine next year, which means that Biosphere Expeditions will have survived the crisis. It really is that serious, so any help is appreciated.

BE If someone wants to sign up for a 2021 expedition now, how does that work under pandemic conditions?

MH Good question. Basically things will be handled very flexibly so that nobody misses or loses out. How exactly it all works is described on our terms & conditions page, but in summary we of course realise that forward planning is very difficult at the moment. In practice this means that if we cannot run an expedition if the coronavirus situation does not allow us to do so at the time, then we will offer an alternative date to everyone signed up already and apply deposits paid to this new date, which will usually be around the same time the year after. The same applies if we do not have enough people signed up to an expedition to be able to run it. In addition to the option of deferring to the same expedition at a later date, we will also offer those already signed up the option to sign up to any other expedition in our portfolio for up to two years after the original expedition date. As I have said, these deferment terms will be handled very flexibly so that nobody misses or loses out. This means that those already signed up for an expedition can take whatever time they need to tell us which expedition they would like to defer to, should this be necessary. If we do need to defer, we will tell everyone in good time, which means two months or more in advance.

The virus is both a chance and a challenge

As the coronavirus pandemic has a stranglehold on the planet, travel plans have had to be cancelled everywhere. Even those where people help nature conservation projects during their holiday time as citizen scientists.

BE What else can people do to help?

MH You mean apart from donating to our <u>survival appeal?</u> The two other helpful things to do are to join our <u>Friends</u> (see page 58) or join an expedition - European ones are probably the best bet (see pages 27-51).

If you come out at the other end, what do you think will change for Biosphere Expeditions and the world at large?

MH That's a big question! Most importantly, we must not forget that an even bigger global crisis is lurking behind all the suffering, disruption and economic hardship of the coronavirus pandemic: climate change. I really hope that our experiences with the international lockdowns help the environmental cause. For example, many people living in cities will have noticed cleaner-smelling air, calmer, safer roads and bolder wildlife. This offers a subjective glimpse of what a greener world might be like to live in. On the objective, data-driven side, estimates say that pandemic slowdown will reduce global CO₂ emissions for 2020 by 8%. If we are to limit global warming to less than 1.5°C above pre-industrial temperatures, as stipulated in the Paris Agreement, we would need to reduce emissions by this amount each year for the coming decades. I hope the pandemic has shown us that it can be done and how!



For Biosphere Expeditions, I hope that people will come back to conservation with renewed vigour and with a greater sense of how important nature is for our well-being, but not just that. That we need nature to survive, but that nature does not need us. The pandemic continues to be a humbling experience. I hope our relationship with nature will be marked by more humility and less greed with its destructive consequences.

Peter Laufmann of <u>German nature</u> <u>magazine "Natur"</u> spoke to Biosphere Expeditions' Executive Director Dr. Matthias Hammer.

PL The coronavirus pandemic seems to be giving nature some breathing space. That must please you as a nature conservationist, right?



MH Of course! I am very happy about nature being given a chance to recover for a change, instead of the continuous assault of the last few decades. There is also the hope that humanity as a whole will stop to ponder for a while. That we realise it is possible to work from home, to fly around less, etc.

PL What's the situation like in nature conservation?

MH Well, for us, for our citizen science / wildlife conservation expeditions, the effect is of course that we won't be able to carry out any projects in 2020. But that is the lesser of two evils. The bigger evil is the situation of our local partners.

PL How come?

MH It is much worse for our local partner organisations. In the developed world, we can apply for state aid. But our local partners are in a difficult situation. In their countries, there are by and large no such programmes. And much of their income has disappeared. For example in Enonkishu, a conservancy in Kenya, their main income is the fees that tourists pay when they come into the reserve. This has dropped to zero practically overnight, so they now have a real challenge on their hands to keep paying their rangers and other staff. And if no rangers are being paid, how do they fight poaching? Not only that: the increasing poverty through the crisis also increases the pressure from poaching as cash-strapped people go in search for bushmeat, for example.

PL So what does this mean?

MH There are two sides to the pandemic: it's both a chance and a challenge. On the one hand, it's a chance for nature to recover because there are no visitors. In the Red Sea, for example, the water is clear and the reefs are recovering, as the ecosystem has remained largely left in peace, because of course there are no divers or tourists causing disturbance. On the other hand, the lack of money is a real problem, as I explained earlier. Conservation costs money. PL How can we counteract this? Both on a large scale and you with Biosphere Expeditions?

MH We are a relatively small organisation. Our influence is correspondingly small. At best we can do something on the ground with our partners and bring money and, of course, manpower to advance their conservation projects. But since this has ground to a halt, we ran a fundraising campaign for our local partners (see page 24-25 for more information) and managed to raise €50,000. I was delighted with how generous people were despite, and perhaps because of, the crisis. For our partners this really was a godsend in their hour of need.

PL How does Biosphere Expeditions deal with the fact that there are now those calling for a fundamental change in the way we travel?

MH Air travel itself is of course bad for the environment. There is no question about that. If there are no contrails in the sky, everyone has a basic understanding that this must be good for the planet.

PL How does Biosphere Expeditions deal with this dilemma?

MH We have several approaches. First, it is a fundamental ambition of ours to eliminate ourselves in the long run. In other words, we want to advance projects to a point where we are no longer needed. Take Oman, for example: via expeditions there for eight years, we have established a non-profit organisation (www.reefcheckoman.org), which is now entirely run by locals. The reef research that we have done with volunteers is now under their leadership. Point two is that we encourage our participants to offset their carbon footprint. I am aware that this is also under criticism, but as part of the mix, I believe it is a positive thing. We as an organisation naturally compensate for the CO_2 our activities produce as well. Thirdly, we must not forget that the alternative to tourism is often the chainsaw, total overfishing, poaching, etc. In other words, nature conservation takes place because there's an economic

benefit for local people of intact wildlife and wild places. This is what we conservationists call the 'what pays, stays' principle, whether it is via safari tourists or through citizen science projects. It's too short-sighted to reduce everything down to CO₂ exclusively, although we must keep an eye on this.

PL How will the pandemic influence your citizen scientist projects?

MH That's a difficult question to answer (see also interview on page 20). The crisis will be with us for a long time; years rather than months. We have contingency plans in case expeditions are still impossible right through to 2022. How people's behaviour will change... I wouldn't want to predict this as this is not my area of expertise. But I do hope that the desire to do something useful in your holiday time will keep increasing in people. This was already evident before the pandemic and will hopefully get a further boost now.

PL Is this the end of tourism?

MH I am afraid not. As soon as lockdown restrictions are relaxed, people will by and large fall back into old habits. Still, it would be nice if humankind could become significantly more mindful through this crisis.

PL What should politicians do to support nature conservation and environmental protection in times like these?

MH On no account lower environmental standards! Under no circumstances save the big polluters. The money that is saved by not bailing out destructive corporations should be put to good use elsewhere in combating climate change, the other and more dangerous challenge humanity faces, and preventing destruction of wildlife and wild places. We need the planet as the basis of all life and economic activity. Because on a run-down planet, there will be no life worth living and no economy to speak of.



"We lost the battle against the poachers this year"

The coronavirus pandemic shows how important international citizen science has become in conservation

As hypercapitalism and its proponents increase their grip on the planet, funding for conservation projects has been slashed in recent years. In its stead, international citizen science has become increasingly important as a dual stream of data and funding. An example of this is Biosphere Expeditions, but here too the effects of the Covid-19 crisis have become apparent in a scientific report of the NGO's sea turtle conservation project in Costa Rica. International citizen scientists are critical to the success of the project there, which in 2019 saved 67% of leatherback and green turtle nests from poachers at the Pacuare beach study site on Costa Rica's Caribbean coastline. In 2020, without international volunteers helping due to the pandemic, this number has dropped to around 45%. "This means we lost the battle against the poachers this year", says conservation biologist Dr. Matthias Hammer, the NGO's founder and executive director.

Elsewhere around the planet, in the German federal state of Lower Saxony, where we work in wolf conservation, the NGO has seen a drop of at least 50% in data collection due to the lack of international citizen scientists. "This means that we will know much less about wolf numbers, packs and ecology in the area", says Hammer. Because hard data are the basis for making fact-based strategic conservation decisions, these may have to be delayed or based on insufficient evidence this year.



"And this is even before we talk about funding and economic incentives created by citizen science projects", says Hammer. Projects provide funding for rangers, research and other conservation activities year-round. In addition, citizen scientists need to be fed, housed, guided, etc. This creates income and economic incentives for local communities, based on intact nature. "This is especially important since it is now clear that the destruction of nature causes pandemics", Hammer adds.

But there is a silver lining. People are starting to realise that citizen science is a powerful tool for tackling conservation challenges. "When we started 20 years ago, we were often belittled and looked down upon", says Hammer. "This has changed over the years and it seems that Covid-19 has really made people sit up and realise the power and potential of citizen science. So the virus is both a chance and a challenge", concludes Hammer.

Amidst the gloom, a conservation success story three years of Reef Check Oman



It is three years since Reef Check Oman was founded by Omani graduates of the Biosphere Expeditions placement programme in 2017. Reef Check Oman is an Omani endeavour run by Omanis for Omanis. The organisation's goal is to preserve the country's coral reefs, which are not only beautiful, but also the foundation for local livelihoods, sustainable tourism and traditional ways of life. And it has been doing just that.



In the past three years Reef Check Oman has achieved several historic milestones: it conducted the first-ever community-based reef survey near the capital Muscat in early 2017. Later that year Oman's first two Reef Check Trainers took on a leading role as citizen scientists in the country's reef conservation efforts. Since then the organisation has delivered presentations at Sultan Qaboos University in Muscat and trained more Omani divers to survey reefs.

Jenan Al Asfoor, the organisation's founder, says: "In Oman, we are blessed to have a beautiful coastline of over 3,000 km. With this comes a big responsibility of protecting our coral reefs, which sustain the livelihoods of many coastal communities and also bring tourism to our shores. It is up to us as Omanis to do this and Reef Check Oman is there to play its role by empowering divers to help survey and protect our reefs. The more people we have, the better, so I encourage everyone in Oman to join us, whether they are divers or not. If you are a diver, we will teach you how to survey and protect reefs. If you are not, there are many other ways you can help. Just get in touch via our website www.reefcheckoman.org".

Dr. Matthias Hammer, Executive Director of Biosphere Expeditions, says that he is "delighted to see Reef Check Oman thrive like this. This is exactly what our placement programme seeks to achieve: empowering local people and communities to survey and protect nature in their own backyard. Because intact nature is very often the bedrock for people's prosperity, well-being and way of life, local people are best placed to do what is needed. I congratulate Jenan Al Asfoor and her compatriots for this very impressive effort."

Coronavirus Appeal



The coronavirus crisis affects us all in 2020. All citizen science for 2020 had to be deferred from March onwards and only two out of a dozen expeditions had a citizen science element to them. Therefore, our partners were and are hard hit by lack of funding and citizen scientist helpers. Yet we were determined that conservation efforts continued despite, and even because of, the very difficult circumstances. This is why we ran a coronavirus appeal from 1 April to 1 December 2020 - to help get our local conservation partners through this crisis. The appeal raised close to €50,000 from 162 donors. Here is a summary of what the funding has achieved so far:

In the **Azores (whales & dolphins)** our scientist Lisa Steiner was able to be out on and off the water from April to the end of the season in November. She has a written a <u>detailed blog</u> of what she saw and the data she could collect through the support of the coronavirus appeal.

"The funding from Biosphere Expeditions allowed me to get to sea and document that, for a second year in a row, the number of baleen whales passing by in the spring was lower than it had previously been. I only documented a few blue whales, one humpback and one fin whale, during April/May. There were also fewer Risso's dolphins, one of the resident species. Sei whales, however, were regularly present throughout July, August, September and even into October. 2020 was a very good year for sperm whales. I was able to document several of the 'regular' groups of sperm whales and take over 100 different sperm whale ID photos. I also logged the resident bottlenose dolphins several times - in September with a couple of new calves – as well as false killer whales. Finally there were lots of spotted, common and striped dolphin, sometimes displaying incredible aerial activity. It's all in the blog. My sincerest thanks



to Biosphere Expeditions and those who supported their coronavirus appeal!"

Lisa Steiner Expedition scientist, Azores

In **Germany (wolf)**, a small community expedition took place in July and there is also a <u>blog</u>. The community expedition walked about 250 km, covering 15 cells of the pan-European 10 x 10 km grid and collecting 163 wolf signs. From this they were able to glean evidence of seven wolves, amongst them one known breeding female. Three individuals were new to science, which is exciting. "Thank you so much to Biosphere Expeditions, its coronavirus appeal and all donors towards our community expedition in Germany. Without the funding provided by the appeal, and in the absence of a citizen science expedition in the summer of 2020, there would have been no data collection and we would have had a big gap in our knowledge about wolves in our study area. Instead we were able to get out into the field, producing some exciting results. Thank you for making this possible despite the challenging circumstances."

Peter Schütte Expedition scientist, Germany



Peter Schütte (left) with a community expeditioner

In the **Tien Shan (snow leopard)**, our community camera trapping team have done very well to capture more snow leopard photos and to run a <u>community expedition in September</u>, collecting valuable data in the absence of our annual citizen science expedition. This meant we could produce a <u>combined 2019/2020 research report</u> showing snow leopard presence and making conservation recommendations.

"On behalf of Ilbirs Foundation and myself, I would like to express our heartfelt gratitude to Biosphere Expeditions for providing financial support for wildlife monitoring and environmental protection in collaboration with local communities, despite the fact that the pandemic is growing worldwide and the world is facing a very difficult situation. I express my solidarity with the fact that Biosphere Expeditions is continuing its work this way, providing opportuni-



ties to all worldwide conservationists in protecting wildlife around the globe."

Askat Dabyrovich Ilbirs Foundation, Kyrgyzstan

In **Costa Rica (sea turtles**), the project continued with just the local leaders, one research assistant and the biologist. The nesting season has finished and the research station is closed until next year, when our partners are hoping to reopen it again in time for next season, pandemic permitting. The green turtle season in 2020 was slow, for reasons that are not known but not because of the pandemic, with just a few nests. Because of this, the success rate of saving nests from poachers was almost 100%! For leatherbacks, the hatchling numbers were similar to previous seasons. The eventual poaching rate was around 40-50%, depending on the month. This is higher



than in years with citizen science support, but is still very good, given the very difficult circumstances.

A leatherback hatchling on the way to the ocean AT Alter

In the **Maldives (coral reefs)**, our local partner has instigated a <u>new coral reef conservation project</u> using coral nurseries to grow baby corals.

In **Kenya** (African biodiversity), we <u>empowered local commu-</u> <u>nities through technology with great success</u> during the last international expedition that ran just before the pandemic hit and have <u>published the report</u> of this already.

"Enonkishu is thriving as far as the wildlife goes. There were eleven lions, four wild dogs, and Kisaru, the cheetah, just on one walk last Sunday. It looks like Kisaru is pregnant again and



sticking around to have her cubs in Enonkishu for a second year in a row, which will be fantastic", says conservancy manager Rebekah Karimi.

Kisaru cubs

In **Thailand (elephant)**, our partners are working hard, and are succeeding, to get their local study herd of elephants through the crisis, plus those animals that are returning to the forest with their mahouts because they cannot make a living during lockdown. There are now 50+ elephants around the mountain villages or deep in the forest with their mahouts and food is running low, but fundraising has helped to buy extra fodder to sustain the animals through the crisis.

"Your tireless efforts for fundraising have helped us to continue to provide for our elephants. Our community has also assisted us to care for the many elephants that have had to



return to our area for the crisis period. Every donation has contributed to this and has ensured our survival over these difficult times. Thank you to everyone who has contributed."

Kerri McCrea Expedition scientist, Thailand In **Armenia (leopard, bear, wolf)**, the community expedition was planned for November, but had to be cancelled when the war in Nagorno-Karabagh, which is too close for comfort to our study site, broke out. By the time a peace treaty was signed in November, winter had come to the high mountains and plans had to be postponed to 2021.



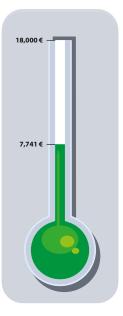
Khustup mountain in winter

Updates on other projects will be provided via <u>https://blog.</u> <u>biosphere-expeditions.org/category/coronavirus/communi-</u> <u>ty-expeditions-2020/</u> as they become available. Thank you again to all donors who made these community projects possible.

Survival Appeal

FIRST WE HELPED OUR LOCAL CONSERVATION PARTNERS. NOW IT'S TIME FOR OUR OWN SURVIVAL APPEAL.

Funds raised as of 12 December 2020

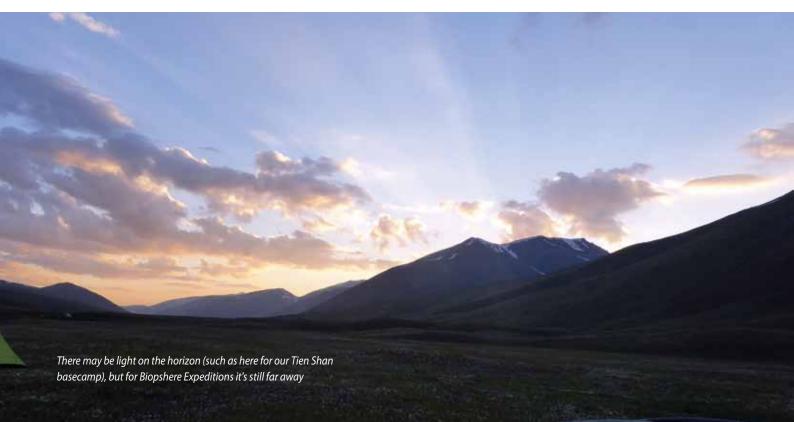


Our coronavirus appeal from 1 April to 1 December 2020 was all about getting our local conservation partners through this crisis. The appeal raised close to \in 50,000 and an overview of what this money has achieved so far is on pages 24-25.

Although there is now light at the end of the pandemic tunnel with several vaccines about to be rolled out (as of early December 2020), restrictions are likely to be with us well into 2021 and beyond, mainly because vaccine rollout across the world is going to take well over a year, perhaps even two or three. This means that on top of the near total loss of income in 2020, it will still take some significant time until expeditions are up and running again, let alone back to something approaching normal. In fact, we do not expect operations to approach something near normal until well into 2022, perhaps even later. All this means that after the coronavirus appeal for our local conservation partners, it is now time to think about Biosphere Expeditions' survival in these very testing times. Please help us survive the crisis, whilst also avoiding redundancies. For this we need an additional \in 18,000 to get us safely through 2021. At the time of writing \notin 7,741 of donations has already been received towards this. So please help us survive the crisis by giving to this survival appeal. All donations, large or small, are very welcome and highly appreciated.

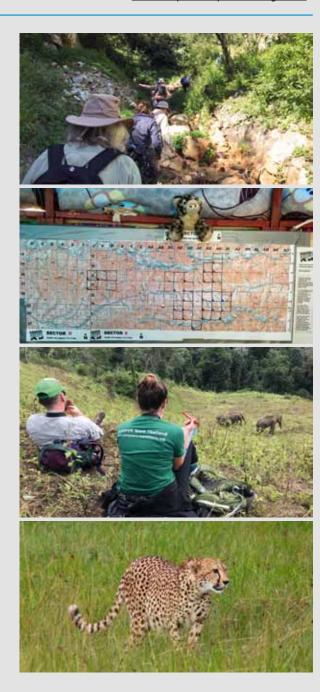
Donation page www.biosphere-expeditions.org/appeal

Depending on your country of residence, your donation may be tax-deductible (for example donations to our US 501(c)(3) charity, or our German e.V. charity, where we can issue tax-deductible receipts). If you have any questions about tax-efficient giving, please just get in touch via info@biosphere-expeditions.org.





The early expeditions of Arabia and Kenya have already been deferred to 2022. For the rest, it remains to be seen whether they can run or need to be deferred too. We of course realise that forward planning is very difficult at the moment. This is why we are handling signups and deferment very flexibly so that no one misses or loses out. Full details about this are on <u>www.biosphere-expeditions.org/terms</u>.





ARABIA - United Arab Emirates

in cooperation with

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

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

Expedition contribution	Duration	Dates	Meeting point
€ 1640	8 days	8 - 15 Jan 2022	Dubai
	The second		

Due to the coronavirus pandemic, there are no 2021 dates for this expedition.

More info www.biosphere-expeditions.org/arabia



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RMENIA







ARMENIA



Surveying biodiversity: Leopard, lynx, bear, wolf and other species of the Khustup mountains in the Zangezur biosphere complex

This mountain biodiversity survey will take you to the remote, spectacular and beautiful Khustup Mountains in the Zangezur Biodiversity Complex of Armenia. There you will record leopards, lynx, bears, wolves, ibex, birds and other indicators of biodiversity in an effort to assist local NGOs and authorities in their work of wilderness and wildlife protection. You will be working as part of a small international team from a tent base camp at 1,980 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. A true expedition-style base camp, off-road driving and the breathtaking high mountains make this a challenging, but very rewarding expedition.

Expedition contribution	Duration	Dates	Meeting point
€2380	13 days	20 Jun - 2 Jul 2021	Yerevan
€2380	13 days	4 - 16 Jul 2021	Yerevan

More info www.biosphere-expeditions.org/armenia













AZORES - Portugal

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

This whale, dolphin and turtle conservation 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. You will photograph sperm, blue, fin, Sei, humpback and minke whales, as well as bottlenose and Risso's dolphins you come across and record them for local and international monitoring databases. You will also listen to whale and dolphin vocalisations. If sea conditions allow, you may also capture loggerhead turtles in the open ocean using nets and then measure, tag and release them as part of an international tagging programme. All this in an effort to elucidate the animals' life histories and migration patterns across the oceans and assist with the formulation of effective conservation and management strategies. You will spend the day on a modern catamaran research vessel out at sea and your evenings and nights at an historic and comfortable guesthouse in the town of Horta on Faial Island.

Expedition contribution	Duration	Dates	Meeting point
€1840	10 days	21 - 30 Mar 2021	Horta, Faial Island
€1840	10 days	1 - 10 Apr 2021	Horta, Faial Island
€1840	10 days	12 - 21 Apr 2021	Horta, Faial Island

More info www.biosphere-expeditions.org/azores

COSTA RIC

COSTA RICA

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



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

Expedition contribution	Duration	Dates	Meeting point
€1840	8 days	3 - 10 May 2021	San José

More info www.biosphere-expeditions.org/costarica



GERMANY

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

This wolf volunteering 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, as well as 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 historic and remote manor house hotel with all modern amenities, right on the edge of the Lüneburg Heath.

Expedition contribution	Duration	Dates	Meeting point
€1930	7 days	26 Jun - 2 Jul 2021	Bremen
€1930	7 days	3 - 9 Jul 2021	Bremen

More info www.biosphere-expeditions.org/germany



KENYA













KENYA



Beyond the big five: Defending the Kenyan Maasai Mara from biodiversity loss

This African wildlife conservation project will take you to the world-famous Maasai Mara, one of the natural wonders of the world, where you will monitor and defend its biodiversity. Species to be monitored include leopard, lion, cheetah, elephant, buffalo and a host of ungulates such as giraffe, zebra, eland, impala, wildebeest, as well as other flagship African species. You will be working as part of an international team, based at a very comfortable field station with all modern amenities. You will be covering ground in off-road vehicles and on foot, and conducting wildlife monitoring activities such as camera trapping, target species searches, transect and species identification work, as well as data entry. All this in an effort to ascertain population diversity and abundance, and to work with local people and communities to find successful strategies for coexistence with wildlife in this iconic African landscape.

Expedition contribution	Duration	Dates	Meeting point
€ 2940	13 days	13 - 25 Feb 2022	Nairobi
	1 A	2024 1	

Due to the coronavirus pandemic, there are no 2021 dates for this expedition.

More info www.biosphere-expeditions.org/kenya

MALAWI











ho BAN



MALAWI



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

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

Expedition contribution	Duration	Dates	Meeting point
€2680	13 days	12 - 24 Sep 2021	Lilongwe
€2680	13 days	26 Sep - 8 Oct 2021	Lilongwe

More info www.biosphere-expeditions.org/malawi

in cooperation with

MALDIVES

marine

THE R. P. LEWIS CO., LANSING MICH.

- pre pr

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

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

Expedition contribution	Duration	Dates	Meeting point
€2480	7 days	28 Aug - 3 Sep 2021	Malé

More info www.biosphere-expeditions.org/maldives

MALDIVES





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2





SOUTH AFRICA



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

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

Expedition contribution	Duration	Dates	Meeting point
€1990	13 days	5 - 17 Dec 2021	George

More info www.biosphere-expeditions.org/southafrica

SWEDEN

in cooperation with

Beautiful Brown bears: Studying bears in the quintessentially Scandinavian woodlands of Dalarna Province

This Swedish bear citizen science expedition will take you to the picturesque and quintessentially Scandinavian countryside of Dalarna province in Sweden to help study and protect the local brown bear population. Working in small teams, in flat or gently rolling hill terrain of heath, forests and wetlands, you will find and document bear winter dens and summer day beds when the bears are away (you will be able to tell this from their GPS position or collar signals). Detailed knowledge about dens and denning behaviour is important, because it helps to avoid human-bear conflict and provides important population, reproductive and other ecological information that is critical for successful bear conservation.

Expedition contribution	Duration	Dates	Meeting point
€19 <mark>70</mark>	8 days	19 - 26 Jun 2021	Mora

More info www.biosphere-expeditions.org/sweden









THAILAND

Plane Specification

in cooperation with



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
€1890	9 days	8 - 16 Nov 2021	Chiang Mai

More info www.biosphere-expeditions.org/thailand

HAILAND

TIENSHAN













TIEN SHAN - Kyrgyzstan



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

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

Expedition contribution	Duration	Dates	Meeting point	
€2540	13 days	12 - 24 Jul 2021	Bishkek	and a
€2540	13 days	26 Jul - 7 Aug 2021	Bishkek	
€2540	13 days	9 - 21 Aug 2021	Bishkek	

More info www.biosphere-expeditions.org/tienshan



Next to expeditions, our campaigns are the other big part of what we do for the planet

n the first 20 years of our existence we were focused on citizen science and wildlife conservation. We will continue with this focus, but this, we feel, is no longer enough. The undeniable crisis our planet is in on so many fronts - from environmental destruction to pandemics, all through greed and overconsumption - demands more action and activism. It demands a radical rethink of how we run our lives, societies and the way we treat our planet. Because sitting on our hands is simply not an option any more. We have a moral duty to act if we want to be able to look our grandchildren in the eyes.

Below are the details of three of our five main campaigns (the other two, our coronavirus and survival appeals, are covered on pages 24-26):

- Top Ten Tips on decency in wildlife volunteering and how to beat the charlatans (also see www.biosphere-expeditions.org/10tips)
- Twenty Tips on how to be (radically) green (also see www.biosphere-expeditions.org/20tips)
- Do more for the planet, yourself and Biosphere Expeditions (also see www.biosphere-expeditions.org/domore)

Top Ten Tips

on decency in wildlife volunteering and how to beat the charlatans



TOP TEN TIPS Choosing a wildlife volunteering experience This is what you should look out for

 Reputation, reputation, reputation: has the organisation won awards or accolades, who are they associated with, what is their philosophy, do they write & publish their results and where the second se hat's their safety record.

Qualified & proven experts, group leaders should be led by qualified & proven should be well qualified and all staff should be well briefed on risks and safety issues.

Where does your money go: good organisations will always publish clear information that shows how your money is spent.

Proper follow-through: a good organisation will, through updates and reports, keep you informed about how the project progresses even after you've left.

5. What will you get out of it: be clear about what you want to get out of the experience - training, self-development, an adventure - then check whether the organisation is clear in communicating what's on offer for you.

6. Community involvement and benefit: understand a project's relationship to the local community and make sure that the or-ganisation is properly embedded with local efforts and people

More details at www.biosphere-expeditions.org/toptentips

does the community benefit, have they given consent for work to be carried out, how have they been involved. Is there training for locals, scholarships, capacity-building, education, etc.

Your fellow participants: understand the profile of the people that will share your trip by checking the organisation's website and social media sites.

8. In the field: check that the organisation is clear & transpar about what will be happening day to day, the accommodati food and other logistics, and also what is expected of you.

Captive animals: if the experience involves captive animals. facilit be very clear on the purpose of the captive facility, where the ani-mals come from and whether it is part of a reputable programme.

Intels connention and whether it is part of a reputable programme.
10. Handling animals: steer clear of organisations that en-courage handling of captive wild animals for anything other han essential veterinary or neo-natal surrogate care. If it should only be for essen-tial research & conservation work and following strict animal welfare guidelines.



Volunteering has come in for a rough ride in the past, and often rightly so. These days it is hard to find a worthwhile volunteering experience that achieves tangible benefits. The market is full of profit-driven, unscrupulous operators, which do little for local wildlife at best and are harmful to it, and local communities, at worst. The worst examples include bogus animal sanctuaries and fake orphanages.

Fortunately it's not that hard to look behind the glitzy fronts. The best way to avoid the charlatans is to ask the right questions. For example: is the operator a non-profit organisation or a profit-driven business? What is the rationale for involving volunteers (what will they do exactly, where and when)? What will be the outcome and how will local people and/or wildlife benefit? Does the organisation have any achievements it can list, any awards or other accolades? Is it transparent in its finances and structure? A handful of pointed questions such as these will, in most cases, separate the good from the bad from the downright ugly.

Our Top Ten Tips will help you to ask the right questions. They are for those looking for a citizen science vacation, wildlife conservation holiday or gap year experience that is beneficial not only to themselves, but also for the wildlife and communities that they will encounter.

20 TIPS on how to be (radically) green

Here are our Twenty Tips - from the light green of what we should all do as a bare minimum, to the dark green rejection of neoliberalism and the fallacy of endless growth, to joining the revolution that is gathering pace.

See <u>www.biosphere-expeditions.org/20tips</u> for more details and clickable links with background information and examples.

★ CATEGORY 1 - LIGHT GREEN

This is what we should all know and do, because it's easy, does not cost much (or actually saves money) and is better for the planet. There really is no excuse for not doing this and be at least light green.



Food - NO WASTE, less/no meat and regional/seasonal

Western societies and their food suppliers in particular waste an astonishing amount of perfectly good food (up to a third!). Try to minimise food waste at home and do not fall prey to "best before" rip-offs, which are aggressively promoted by the food industry to increase sales and profits. Also, reduce your meat intake drastically or go vegetarian for a few days a week (or completely). There's a host of reasons why – health, climate change, carbon footprint, world hunger, compassion for animals, etc. Or go entirely plant-based (vegan) – with a few precautions, this can be even healthier, more compassionate for animals and better for the planet. Finally, eating regional and seasonal food is healthy, kind to your budget and kinder to the planet through reducing supply chains and carbon footprint. It's a no-brainer.

What Biosphere Expeditions does: All our expeditions are vegetarian, as are events and other things we organise as an NGO. We buy almost exclusively regional and seasonal food on our expeditions in order to support local economies and reduce our impact. We do the same at our events.



There are <u>many ways to do this</u>; most of them are easy and much of this is about creating new habits that are kinder to the planet (and your budget).

What Biosphere Expeditions does: On our expeditions and administrative locations, we have strict energy saving policies and regimes.



Just like saving energy, this is about changing habits and there are hundreds of tips available online.

What Biosphere Expeditions does: Just like with energy, our expeditions and administrative locations have water saving policies and regimes.



USE eco-friendly cleaning products in your house

Many cleaning products contain chemicals that are extremely harmful to the environment and its inhabitants, including humans. <u>Eco-friendly cleaning products</u> are an easy alternative and solution.

What Biosphere Expeditions does: We work hard to purchase eco-friendly cleaning products wherever they are available and encourage our partners (e.g. expedition accommodation and assembly points) to do the same.



USE eco-friendly hygiene products

The <u>Campaign for Safe Cosmetics</u> has created Skin Deep, a searchable online database of cosmetics and personal care products where you can check your sunscreen, shampoo, deodorant, shaving cream and more for toxic ingredients.

What Biosphere Expeditions does: We encourage expedition participants (and staff) to bring only eco-friendly/biodegradable personal hygiene products on expedition.



Say <mark>NO</mark> to bottled water

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The Independent (a UK broadsheet newspaper) has called bottled water one of the <u>"biggest scams of the century"</u>. Just don't do it in regions where tap water is a perfectly safe alternative. Buy a non-plastic refillable container instead.

What Biosphere Expeditions does: Bottled water is a big no-no on expedition. Where local water is not safe to drink, we use large, re-usable containers instead wherever possible.



DON'T use disposable tea/coffee cups

The billions of disposable coffee cups thrown away each year are a <u>waste of resources</u> <u>and harm forests</u> in particular. Say no to the throwaway culture and switch to <u>reusable</u> <u>coffee cups</u> instead.

What Biosphere Expeditions does: We simply don't use throwaway cups.

20 TIPS

★★ CATEGORY 2-GREEN

This category is a darker shade of green. It requires more of an effort, but not much more. It is really what we should all do. It is where changing unsustainable habits of a lifetime starts and where we can turn the tide, because many small actions can add up to a movement. Take these as your first steps towards what comes next: being dark green (see points 18-20). Because really, that's where we all need to be if our planet is to make it through its current crisis.



REDUCE the amount you print

The <u>environmental impact of paper</u> is significant. At the same time it's <u>easy to reduce</u> <u>paper use</u>.

What Biosphere Expeditions does: We have gone largely paper-free in our administration; on expedition we do use more paper (datasheets, field guides, safety information, etc.), but we minimise this and recycle wherever possible.

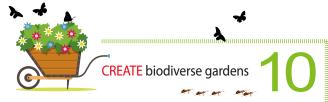


RECYCLE more -

check the domestic recycling system that you can use and use it well

Your local area administration will have details on its recycling scheme. Use it and make doubly sure you don't just throw away <u>toxic household waste</u> such as batteries, paints, oils, etc., but dispose of them properly.

What Biosphere Expeditions does: Our administration locations are on full recycling schemes; on expedition we use whatever recycling scheme is available locally and take home with us the most toxic waste (batteries etc.) to be disposed of properly there.



Biodiversity is under threat like never before, populations of insects, birds and other species are collapsing at unprecedented rates, a recent <u>UN report</u> talks of unprecedented decline with species extinctions increasing. There is no doubt that our planet is now in the midst of its <u>sixth mass extinction of plants and animals</u> - the sixth wave of extinction in the past half-billion years. It may all sound like doom and gloom, and it is serious, but there are things you can do in your backyard to stem the tide and <u>create a garden for native biodiversity</u>. Leave lawns uncut and allow native plants to populate areas of your garden — weeds are only a matter of definition! Give them and other native plants a home and allow your garden to go wild. Nature conservation really does begin in your backyard!

What Biosphere Expeditions does: We tackle the problem from the other end, by not having centralised office space, which needs buildings that destroy green spaces. Instead we work with existing business centres around the world and run a highly decentralised operation with people working from home (or in the field) for the overwhelming majority of their time. We encourage staff and partners to create as many green spaces as possible and educate them about biodiversity gardening.



The more that protected areas are used, the bigger the incentive for governments and individuals to work to keep them intact. And joining organisations that care for wilderness will give them money, motivation and a voice to talk to government – a membership organisation of one million (the <u>Royal Society for the Protection of Birds in</u> the UK is one example) will be listened to by politicians who want to stay in power. The more people we have supporting nature conservation organisations, the better.

What Biosphere Expeditions does: We work with nature conservation organisations around the world and we <u>help to create protected areas and empower local people and</u> <u>organisations to care for them</u>.

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Whether it is a local litter pick or helping the local school with a bit of wildlife gardening, your help will be much appreciated. And if you can't do the more physical tasks, try offering to help with tasks that you have skills in, such as talking to people at local shows or writing articles or distributing leaflets.

What Biosphere Expeditions does: We are one of those organisations, but there are <u>many, many more organisations</u> out there that need, deserve and will appreciate your support too.

20 TIPS

SUPPORT conservation as an armchair citizen scientist



Help out with conservation work without leaving your own home. The <u>Zooniverse</u> <u>website</u> is a great place to start. Zooniverse is the world's largest and most popular platform for citizen science, people-powered research. The research is made possible by volunteers — by now over a million people

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around the world who come together to assist professional researchers with <u>great</u> <u>success</u>. Their goal is to enable research that would not be possible, or practical, otherwise, and they have many different types of research that you can help with. Many projects have produced unique <u>scientific results</u>, ranging from individual discoveries to classifications that rely on input from thousands of volunteers. Click on the 'Nature' projects to get a sample of the wildlife research that you can get involved with.

What Biosphere Expedition does: Citizen science is also what we are all about, but ours is on the more active, hands-on side of the spectrum (although we have some <u>home-based projects</u> too). The whole spectrum is important and armchair citizen science, <u>when done well</u>, is just as valid as expeditions in remote and challenging locations.

SUPPORT wildlife surveys via citizen science apps

There is a host of citizen science apps to make records of things that you see in nature when you are out and about. A lot of conservation organisations now produce their own apps to help monitor a variety of species. The apps usually walk you through the survey process and how to identify different types of animals, so you can learn as you go. Some good examples from the UK are <u>Mammal Tracker</u> and <u>Bee Count</u>, but there are many available. And of course apps extend well beyond nature monitoring. For example, <u>citizen activism through air quality monitoring apps</u> has helped tackle air pollution across Europe. So there is much for you to get involved in!

What Biosphere Expeditions does: See point 13 above.

Be more ACTIVE in local nature conservation



Volunteer at your local nature park or reserve and help support organisations that look after our wild places. Many organisations will train volunteers to undertake physical work such as scrub removal or tree planting, as well as organising surveys of different species, so go along to your local nature organisations and see

if you can take part in some invasive plant removal or a butterfly survey, or help count frogs, birds or a myriad of other species.

What Biosphere Expeditions does: Just that, only in more remote and challenging places abroad.

MAKE your holiday count



Combining conservation with your holiday is a growing trend. Combining some time away from work or domestic chores with a great outdoors experience is good for our mental health as well as the environment. NGOs such as <u>Blue Ventures</u>, <u>Operation Wallacea</u> and Biosphere Expeditions organise trips to many places around the world in support of scientists working in remote and challenging places so that you can work alongside them and help them out in the field. Remember not to fly, if at all possible, or, if you have to, make your flight really count!

What Biosphere Expeditions does: Combining citizen science, wildlife conservation and a different kind of holiday is the bread and butter of what we do. There are also many other organisations offering these kinds of experiences. But be aware that there are lots of charlatans amongst them, so check out our <u>Top Ten Tips</u> on how to choose an experience that's great for you and for the planet.

LEARN more about the crisis our planet is in so that you can instigate change and become an advocate for nature



Just search the internet for <u>"sixth extinction</u>" or <u>"climate change</u>" or <u>"planetary crisis</u>". Much is being written about this at the moment — and for good reason. It's good that the world is waking up to what is happening and you can be amongst those spreading the word, often in informal ways. So arm yourself with facts about the current state of nature and the most effective ways that people can help.

What Biosphere Expeditions does: We are part of this process and on our 20th anniversary have added activism, such as this campaign, to what we do for nature. In our first 20 years we were focused on citizen science and wildlife conservation. This is no longer enough, because the <u>undeniable crisis our planet is in</u> demands more action and activism. It demands a radical rethink of how we run our lives, societies and the way we treat our planet.

20 TIPS

★★★ CATEGORY 3 - DARK GREEN

The sixth extinction, climate breakdown, coronavirus pandemic and general crisis our planet is going through are serious, threatening nature and our lives as we know them today. So we must be serious too and this category demands commitment. And indeed, we need nothing short of a revolution if we are to come out of this intact as the human stewards of our planet. It may seem like a long shot now, but remember that things always seem unchangeable right up to the moment when a revolution starts and society flips from one state to the next. With this dark green category, you are putting yourself on the right side of history and you will have an answer when the next generation asks you what you did to prevent our planet from sliding into disaster.

ASSESS your carbon footprint and act



Human demands on the earth are now well beyond unsustainable. It is estimated that by 2030 (and this is not far away) the world will need 30 percent more water, 40 percent more energy and 50 percent more food if it continues

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on its current trajectory. This is disastrous and things will need to change, especially in our western world of high impact and consumerism. Focusing on your personal carbon footprint is a good place to start. Use one of the many calculators (e.g. WWF, Carbon Footprint, C2ES, Earth Day) and, most importantly, act on their recommendations on how to reduce your footprint. Walk and cycle more, use public transport, become vegetarian or vegan, only use aeroplanes when you have to (and when you do, make your flights count), take offset action, etc. Be mindful of your actions and research what you personally can do to reduce your footprint.

What Biosphere Expeditions does: We have strict procedures to minimise our carbon footprint and offset what is left with <u>Climate Care</u>. We encourage our staff, expeditioners and partners to do the same. We make them aware of the concept of carbon footprint too and take action ourselves. Our expeditions have all been vegetarian for a while anyway.

REJECT the destructive and disastrous ideologies of neoliberalism and continuous growth



You might not even know what neoliberalism is, but it is the elephant in the room. Financial meltdown, environmental disaster and even the rise of Donald Trump and his and Boris Johnson's disastrous handling of the coronavirus pandemic - neoliberalism has played its part in them all. This ideology has failed us and the planet and has given rise to destructive corporate power. It is the largest Ponzi scheme in Earth's history and no longer fit for purpose. It is connected to the irrational and irresponsible idea that we can have endless growth on a finite planet - in fact it needs this impossible fantasy to keep it alive. Reject it! Reject it in favour of doughnut economics, whereby social and ecological factors are equally respected. At the moment, one (social progress such as better health, jobs, and education) is built on the sacrifice of the other (ecological systems). With doughnut economics the two can thrive together. Elect politicians who support doughnut economics, buy from firms who build the concept into their business strategies and support campaigns that promote human welfare within planetary limits. Arm yourself with facts and be an activist in educating people about destructive neoliberalism and its healthier alternatives.

What Biosphere Expeditions does: We reject neoliberalism in our economic policy and act accordingly. We reject continuous growth and in the end we want to make ourselves redundant by empowering local people and communities. We educate those around us through campaigns like this.



JOIN THE REVOLUTION!

It has been argued that only rebellion will prevent ecological collapse, and we tend to agree. So get politically active! Tell your politicians and leaders what you think and ask

them to do more of the things you care about. Join revolutionary organisations based on peaceful resistance and civil disobedience (such as Eradicating Ecocide, Client Earth and Fridays for Future), because facts about our ecological crisis are incontrovertible and sitting on our hands is simply no longer good enough. We need 3.5% of the population to reshape society and we have a duty to act to save our planet from sliding into destruction, if we want to be able to look our grandchildren in the eye! Be on the right side of this revolution and join us now!

What Biosphere Expeditions does: We have joined the revolution and we are taking action, because our planet needs all the help it can get. Join us now!



Whether you are back from an expedition and want to do more, or interested in lending a hand, there is more you can do for the planet, for yourself and for Biosphere Expeditions. Here's how.

The full text with explanations, background, references and links is also on <u>www.biosphere-expeditions.org/domore</u>

BE (radically) **GREEN**



The <u>undeniable crisis our planet is in</u> demands more action and activism. It demands a radical rethink of how we run our lives, societies and the way we treat our planet.

<u>Our 20 tips on how to be (radically) green</u> go from the light green of what we should all do as a bare minimum, to the dark green rejection of neoliberalism and the fallacy of endless growth, to joining the revolution that is gathering pace as we speak. Turn to page 55 or to <u>www.</u> <u>biosphere-expeditions.org/20tips</u> to see our tips in detail.



SPREAD THE WORD

www.biosphere-expeditions.org/domore#words

Help us to help wildlife and people across the world by spreading the word. Word of mouth is by far the best way to get people excited. Talk to your family, friends, and colleagues about your experience and encourage them to join in too.

Social media

Share your experience, comments, pictures and videos on your social media and ours. This really does help to spread the word about us and our conservation work.

Testimonials

Independent reviews are very important for us, not just for those thinking about joining an expedition, but also for our staff, scientists and partners who draw great motivation and encouragement from them. So we would be very grateful if you could write a review on our <u>Facebook review page</u> and/or on <u>GreatNonProfits</u>.

Hold events & talks

Host an event for us in your neck of the woods, or give a presentation. Examples include holding a drinks reception in a local pub, a dinner party at your home, a talk/ presentation 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 presentations, as well as postcards and brochures that you can hand out at your event. In addition, a staff member of Biosphere Expeditions may be able to attend with enough prior notice.

Work with your local 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 storage of high resolution photos and broadcast quality HD films, so please <u>contact us</u> if you need pictures or film clips to illustrate your story or if you would like help with your press release or media work.

Blogs

Are you a blogger? If so, why not create a blog about Biosphere Expeditions and/or your expedition experience and link it through to us. This will also help to get the word out there. If you do create a blog, make sure you let us know about it, so we can link back to you.

Picture & video sharing sites

Videos and pictures work really well in getting people's attention. If you are putting your expedition pictures or videos on a sharing site such as Instagram or YouTube, then please also make sure you link through to us or tag your pictures to Biosphere Expeditions as this will also help to spread the word.

Video diaries

We would like to build up a library of expedition team members' personal video diaries. There are no limits to your creativity other than we ask that your final cut is no longer than 6 minutes.

CONTRIBUTE YOUR TIME & SKILLS www.biosphere-expeditions.org/ domore#skills



B We always need people with skills who can help us out. Examples are skills in the outdoors, accounting, graphic design, IT, social media, research, etc.

JOIN THE FRIENDS OF BIOSPHERE EXPEDITIONS www.biosphere-expeditions.org/friends

The Friends of Biosphere Expeditions are people who feel passionate about providing continuous 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.

If you can't take part in a full-blown expedition 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 become a Friend of Biosphere Expeditions today!

Help us to support critical wildlife conservation and research projects across the globe from a monthly membership fee starting at $\in 10 \mid \pm 10 \mid US\$12 \mid AU\$15$. 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).

To join the Friends, just send us an e-mail. We will then sort out the rest together.

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.

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 Biospheresupported 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.

Friends' activities 2020

We were poised for more placements and activities when the pandemic hit. With no expeditions running from March 2020 onwards, no placements or other activities took place. Instead we battened down the hatches, financially and otherwise, and are riding out the storm. To help our conservation partners around the world, we started the coronavirus appeal (see pages 24-25) and focused our energies on this. Friends' funding and activities will resume when expeditions do, hopefully sometime in 2021.



DONATE

www.biosphere-expeditions.org/domore#donate

5 Our work on the ground of course continues after you have left. If you would like to donate to a particular expedition or Biosphere Expeditions as a whole, then please get in touch. We can then discuss how and what tax benefits you may receive.

Depending on your country of residence, your membership fee or donation may be tax-deductible (for example membership fees or donations to our US 501(c) (3) charity, or our German e.V. charity, where we can issue tax-deductible receipts or German "Spendenbescheinigungen"). We also have a page on *employer match-giving and personal taxation*, which you may want to check.

In-kind donations

You may have laptops, GPSs, video cameras, binoculars or other items to give away, which we or our partners can use. 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.









RAISE FUNDS www.biosphere-expeditions.org/ match-giving#fundraising

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 relevant people in your company? You may have a Corporate Responsibility Manager, or an Environmental Manager or a Communications or Sustainability Manager who may be able to help you.

Direct fundraising

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 longlasting contribution to our wildlife conservation work worldwide.

JOIN AN ETHICAL CITIZEN SCIENCE PROJECT

Locally

Volunteer at your local nature park or reserve and help support organisations that look after our wild places. Many organisations will train volunteers to undertake physical work such as scrub removal or tree planting, as well as organising surveys of different species, so go along to your local nature organisations and see if you can take part in some invasive plant removal or a butterfly survey, or help count frogs, birds or a myriad of other species.

Abroad

Combining conservation with your holiday is a growing trend. Combining some time away from work or domestic chores with a great outdoors experience is good for our mental health as well as the environment. NGOs such as <u>Blue Ventures</u>, <u>Operation Wallacea</u> and Biosphere



Expeditions organise trips to many places around the world in support of working in remote and challenging places so that you can work alongside them and help them out in the field. Remember not to fly, if at all possible, or, if you have to, make your flight really count!

USE OUR AFFILIATES NETWORK



www.biosphere-expeditions.org/affiliates

You can also support Biosphere Expeditions through the affiliates network. Whatever the affiliate and our arrangement with them, commissions and perks gained from you using their services will always be ploughed back into our research and conservation work and to benefit our local partners wherever possible.





IMPRESSIONS FROM THE FIELD







































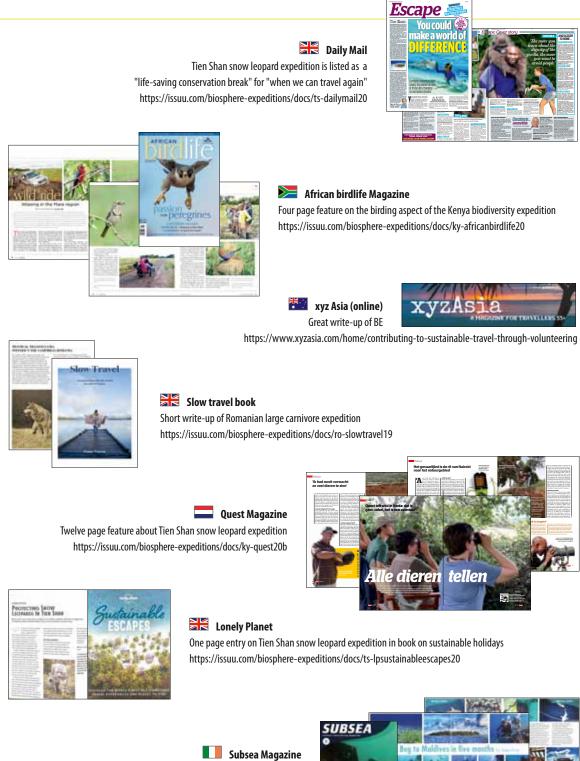








MEDIA CLIPPINGS 2020



Four page feature of Maldives coral reef expedition https://issuu.com/biosphere-expeditions/docs/mv-subsea20





CONTACT US www.biosphere-expeditions.org/offices

Australia © 1800-708261 saustralia@biosphere-expeditions.org France © 01-53170820

france@biosphere-expeditions.org

Germany © 0931-40480500 Straight Stra

Ireland © 01-9695263 [®] ireland@biosphere-expeditions.org

North America © 310-9097449 Some northamerica@biosphere-expeditions.org

UK © 01603-251760 [≪] uk@biosphere-expeditions.org

www.biosphere-expeditions.org



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

Officially accredited member of







– UN Environment Programme

International Union for the Conservation of Nature
 European Citizen Science Association