



BIG CAT CONSERVATION

THE FUTURE OF WILDLIFE TOURISM

20 11 Jule Second



WELCOME WILLKOMMEN BIENVENUE

INSPIRING CONSERVATION

B iosphere Expeditions is a multi-award-winning not-for-profit wildlife conservation organisation. We offer hands-on volunteer expeditions, an adventure with a purpose, for everyone.

Biosphere Expeditions is for people from all walks of life who want to help support and conserve the biosphere that we all live in. Biosphere Expeditions gives people a way to harness their enthusiasm and put it to good effect by coming to work on conservation projects simply using the money and time that they would have spent going on an ordinary holiday. You can join for anything from a taster day to one or several weeks on expedition and at least two-thirds of your expedition contribution will go directly into the wildlife conservation project, funding it long-term and sustainably.

Experience conservation in action

Come with Biosphere Expeditions on a conservation project to beautiful and interesting parts of the world, experience conservation in action, and work alongside field scientists to safeguard our biosphere's wild animals and places.

Safe, fun and open to all

Our three key themes are safety, science and satisfaction, because our core belief is that you will work best when you are safe, well looked after, well rested and having fun. Our projects are open to all, there are no special skills (biological or otherwise) required to join as all necessary skills will be taught on the expedition, and there are no age limits whatsoever. Participants are people from all walks of life, of all ages, looking for an adventure with a purpose. Teams are small and there is a dedicated expedition leader with the expedition at all times.

FASZINATION NATURSCHUTZ

B iosphere Expeditions ist eine mehrfach ausgezeichnete, gemeinnützige Naturschutzorganisation, die es Laien ermöglicht, an echten Forschungsexpeditionen teilzunehmen.

Biosphere Expeditions ist für alle, die aktiv zum Schutz einzigartiger Natur und gefährdeter Tierarten auf unserem Planeten beitragen möchten. Mit einer Expeditionsteilnahme bieten wir allen die Chance, Zeit und Geld in einen Urlaub mit Sinn zu investieren und tatkräftig mit anzupacken. Von einem Schnuppertag bis hin zu einer oder mehreren Wochen auf Expedition – die Teilnahmemöglichkeiten sind vielfältig. Dabei garantieren wir, dass mindestens 2/3 Ihres Expeditionsbeitrags direkt in das jeweilige Naturschutzprojekt fliessen, zur Sicherung einer nachhaltigen und langfristigen Finanzierung.

Naturschutz aktiv und hautnah erleben

Entdecken Sie mit Biosphere Expeditions schöne, entlegene und einzigartige Flecken dieser Erde, arbeiten Sie zusammen im Feld mit Wissenschaftlern und helfen Sie dabei, Lebensräume, Fauna & Flora zu bewahren.

Etwas für Alle, Sicherheit und Spass inklusive

Wir legen grossen Wert darauf, dass alle auf Expedition sich sicher und wohl fühlen. Deshalb steht jedem unserer kleinen Forschungsteams ein Expeditionsleiter von Biosphere Expeditions zur Seite. Was Sie für die Feldarbeit wissen müssen, lernen Sie vor Ort - Vorkenntnisse oder spezielle Fähigkeiten sind nicht erfordertlich. Unsere Teilnehmer kommen aus der ganzen Welt – eine bunte Mischung quer durch alle Bevölkerungsschichten und jeden Alters, verbunden durch den Wunsch, ein Abenteuer mit Sinn zu erleben.

CONSERVATION INSPIRANTE

B iosphere Expeditions est une organisation sans but lucratif travaillant pour la conservation de l'environnement, qui a reçu de nombreux prix et qui propose des expéditions volontaires de terrain, une aventure ouverte à tous qui a du sens!

Biosphere Expeditions s'adresse à tous les publics, à tous ceux qui souhaitent apporter soutien et protection à la biosphère dans laquelle nous vivons. Biosphere Expeditions leur offre une façon de concrétiser leur enthousiasme et d'en faire bon usage en allant travailler sur des projets de conservation. Et tout cela pour le montant financier et le temps qu'ils auraient consacrés à des vacances classiques. Vous pouvez nous rejoindre, que ce soit pour un week-end ou pour plusieurs semaines et les deux tiers au moins de votre contribution à l'expédition iront directement au projet de conservation de la vie sauvage auquel vous participez, le finançant ainsi à long terme et de façon durable.

Expérimentez la conservation en action

Participez à un projet de conservation avec Biosphere Expeditions dans un lieu magnifique et passionnant sur notre planète, expérimentez la conservation en action et travaillez aux côtés de scientifiques sur le terrain pour sauvegarder notre biosphère, les animaux et les lieux qui la composent.

Sûr, amusant et ouvert à tous

Nos trois thèmes clés sont sécurité, science et satisfaction, parce que notre credo est que vous êtes le plus efficace lorsque vous êtes en sécurité, bien entouré, bien reposé et prenant du plaisir à ce que vous faites. Nos expéditions sont ouvertes à tous, aucune connaissance particulière n'est requise (en biologie ou autre), tout ce qui vous sera nécessaire est enseigné sur place. De plus, il n'y a pas de limite d'âge. Les participants viennent de tous horizons, de toutes classes d'âge, à la recherche d'une aventure ayant du sens. Les équipes sont réduites et ont leur propre chef d'expédition qui est présent en permanence.



ABOUT US

The backbone of Biosphere Expeditions: meet the staff

Biosphere Expeditions employs a global team of wildlife enthusiasts who all contribute to the success of the organisation: expedition leaders, scientists, field-based and administrative staff. Their roles are as diverse as their backgrounds, but they all share a love of the outdoors and wildlife. Here are just three of them and more can be found at <u>www.biosphere-expeditions.org/staff</u>.

Kristina Killian is the resident biologist for the big cat expedition in Namibia. She loves the field work and gets a kick out of finding fresh signs of big cats. According to Kristina, the three most important



things to bring on an expedition are enthusiasm, an open mind and a jar of Nutella. She's passionate about field work and likes to see her team members tired, but happy and satisfied after a good day's work.

Kristina was born in Germany, but has travelled and worked in Spain, Chile, Australia, Argentina and Namibia. She studied biology at Hamburg University where her main research interests were the ecology and behaviour of mammals and their conservation. When she's not working, she enjoys sport and photography. One of her passions is training horses and participating in competitions around Europe.

Anyone who has signed up for an expedition with Biosphere Expeditions recently is likely to have been in touch with **Kate Curnow**. She manages the database, collates the team members' paperwork and answers enquiries. Most questions are easy to answer and come up regularly, but some do make her chuckle. She recalls an enquiry from a couple who made a request for a large bed on camp and wanted to know whether the food on expedition was more hamburgers and hot dogs, or authentic local style food.



Kate is Australian-born and raised, which explains the crow's feet and love of sunshine. She's optimistic that wherever you go, sunglasses and a hat might come in handy. Kate is also a global nomad, having seized the opportunity to live in several corners of the world. "Embrace what the world has to offer and don't be afraid to take the leap" is her motto, which she is actively following. Kate's work is mostly office-based, but flexible when it comes to hours and location, which helps her to balance work commitments with raising two children. She enjoys the outdoors and wildlife, and loves to head out to an expedition or to be involved in some way, or with helping to set one up.

"A man with contradictions and many talents who knows how to get the best out of a group," is how a team member described the expedition leader **Andy Stronach** after yet another successful snow leopard expedition in the Altai Mountains. Andy has led the Altai and Peru expeditions for many years and is praised as a true leader with a passion for nature, sense of humour and inspiring approach to his work. He is also an artist with an eye for beauty and detail, a great photographer and a dancer of the Argentine tango.



Before working with wildlife, the Scotsman studied engineering and flew aircraft for the Royal Air Force. His love of wild places, exploration and learning about wildlife through tracking and observation then took over and he has done surveys of wild plants, birds and mammals in many corners of the world. "I love looking for signs of animals as you can build up a detailed picture based on your findings. I once found the tracks of a wolf coming across an adult and juvenile ibex, chasing them down a valley and then catching the juvenile; a fantastic story re-built purely from marks found on the ground", Andy explains.

Due to a rare allergy to offices, Andy is almost always found outdoors.

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EXPEDITIONS & PROJECTS



TASTER DAYS

UK

New Forest National Park (June 2011) Broads National Park (July 2011) www.biosphere-expeditions.org/tasters

AUSTRALIA

Melbourne (October 2011) Sydney (October 2011) www.biosphere-expeditions.org/tasters

SCHNUPPERTAGE DEUTSCHLAND

Nationalpark Unteres Odertal (Juli 2011) Nationalpark Eifel (August 2011) Nationalpark Berchtesgaden (September 2011) www.biosphere-expeditions.org/schnuppertage

1-WEEK PROJECTS

AZORES (April 2011)

Fascinating creatures of the deep: studying whales, dolphins and turtles around the Azores archipelago in the Atlantic Ocean. | <u>www.biosphere-expeditions.org/azores</u>

SLOVAKIA (January-February 2012)

True white wilderness: winter lynx, wolf & wildcat tracking in the Carpathian mountains of Slovakia. | www.biosphere-expeditions.org/slovakia

MALDIVES (September 2011)

Little & large: surveying and safeguarding coral reefs & whale sharks of the Maldives archipelago. | <u>www.biosphere-expeditions.org/maldives</u>

MUSANDAM (October 2011)

Underwater pioneers: studying & protecting the unique coral reefs of the Musandam peninsula within Oman & UAE. | www.biosphere-expeditions.org/musandam

WESTERN AUSTRALIA (November 2011)

Beach combing for conservation: monitoring flatback turtles along the stunning coastline of Western Australia. | <u>www.biosphere-expeditions.org/western-australia</u>

2-WEEK EXPEDITIONS

ALTAI (July-August 2011)

Mountain ghosts: snow leopards and other animals in the mountains of the Altai Republic, Central Asia. | www.biosphere-expeditions.org/altai

BRAZIL (May 2011)

Lost world: studying jaguars, pumas and their prey in Brazil's Atlantic rainforest. www.biosphere-expeditions.org/brazil

HONDURAS (March 2011)

Diving in a Caribbean paradise: safeguarding the coral reefs of Cayos Cochinos, Honduras. | <u>www.biosphere-expeditions.org/honduras</u>

NAMIBIA (January-March & July-November 2011) Big cat conundrum: the challenge of protecting leopards, cheetahs and caracals in the Khomas Hochland of central Namibia. | <u>www.biosphere-expeditions.org/namibia</u>

OMAN (February-March 2011) The elusive and unknown cat: arabian leopard in the desert mountains of Dhofar, Oman. | <u>www.biosphere-expeditions.org/oman</u>

PERU (June 2011) Icons of the Amazon: jaguars, pumas, parrots and peccaries in Peru. www.biosphere-expeditions.org/peru

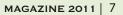
WORLDWIDE

WESTERN AUSTRALIA

TASTER DAYS

AUSTRALIA

ALTAI





PAST AND FUTURE 2011

Kathy Gill, Biosphere Expeditions' Strategy Director, looks at some of the important issues for 2011

What do you mean I have to pay to work? 99

He was a friendly-looking man in his early fourties who had stopped to enquire about the wildlife conservation work that was displayed in 10 foot high posters around our stand at the travel show. It must have been sometime in January 2001. He looked genuinely confused by this concept. Surely if he was willing to volunteer his time, and indeed pay for his own airfare, then the rest must be covered by someone else?

At this time there were only a handfull of organisations offering people the chance to contribute directly to conservation in foreign places in their normal holiday time. There were plenty that offered longerterm experiences as part of the student market, but few that were open to people with limited time.

Wildlife conservation on the Azores: the islands are densely populated and infrastructure is in place. In those days I would spend a lot of my time talking about why it costs someone money to offer their time, whereas now, I am pleased to say, I spend most of my time talking about what is achieved with the



resources that we are able to mobilise. I talk about what the work is and what it achieves in terms of habitats protected or animals saved, and not why people have to pay to do it. The reality of the cost of conservation is much better appreciated.

We are in what is currently deemed as a growth market, with people's interest in wildlife (both observing and conserving) having grown rapidly over the last few years. The messages from the tourism industry are that people are more and more interested in 'doing' as well as 'seeing'. This growth in the market means that there has been an increasing number of operators offering opportunities to 'put something back'. There are so many new organisations doing this that I don't even recognise some of the names. The issue that this raises for us, and for everyone looking to volunteer in support of wildlife, is that it is very difficult to know who the bona fide operators are, and who is just brokering experiences that benefit no-one but the people selling them. I have already spoken to a number of people in the industry about this issue and 2011 will see a major focus on working towards industry standards and spreading the word about how to spot a good operator.

The input that wildlife tourism in general makes towards conservation has been a recent theme in discussions with the media and with conservation industry colleagues. There is an ongoing debate over the balance between keeping wilderness wild, which means keeping people out of it, and actually seeing some relatively wild areas as assets for people to appreciate, learn and make a living from. The latter involves the acceptance that these areas are no longer truly wild - that they are part of an economic infrastructure. If we believe in 'what pays, stays' then we must accept that allowing local people to benefit financially from their natural resources is the best way to ensure that they are protected. The places that we go to with Biosphere Expedition teams vary substantially between these two types. An area, which is densely inhabited by people is the Azores, but whilst staying on the islands we are able to survey part of the largest wild area left on the planet, the ocean. Biosphere Expeditions has been taking survey teams to the Azores to study whales and dolphins for eight years, working with a scientist who has been studying them for nearly twenty years. On the Azores we stay in a town in a small hotel and utilise a boat that during a different time of the year is used for whale watching

tourists, so basically the infrastructure is all there and the environmental impact of our presence is minimal, compared to some areas where there is no infrastructure in place.

TWENTY YEARS AGO AZORIANS HUNTED WHALES. NOW THE ISLANDERS BENEFIT FROM THE WHALES IN A DIFFERENT WAY AND ACTIVELY WORK TOWARDS THEIR PROTECTION.

It is more important for the economic well-being of the local community to protect these animals – a great example of the 'what pays stays' principle in action.

At the other end of the 'wild' spectrum, we do go to some areas where no international tourists go, such as the Altai mountains. Going to these wild places is a privilege that all who come with us appreciate. We go in with a tent-based camp for a set period of time to do an important piece of work, and when we leave, we make sure that we leave nothing behind. Undertaking conservation surveys in this way is cru-



cial to enhance our understanding of these areas, but I would never advocate building hotels and developing an infrastructure somewhere like this. Truly remote areas such as this should be kept as unspoilt as possible. Our work in the Altai is arguably more intrusive than our work in areas such as the Azores, but I believe that both are crucial. Unless we study and understand these areas, we cannot know how to support them most effectively.

I will finish on an ambitious desire that I have to do with wildlife reporting. In the UK we have seen a rise in the super-dramatic wildlife expedition documentary – high drama at every turn, but with a story that, if told in more normal tones, would still be a wonderful tale. I would like wildlife programmes to become more real. I know this goes against the current trend in a lot of things, but if people can see the realities of wildlife conservation on their TV screens, then I'm sure they will appreciate the somewhat slower and more real pace of life in the field. So if anyone would like to make a new wildlife series along these lines, I would be very interested in having a chat C. Wildlife conservation in the Altai mountains: a truly remote area where no tourists are allowed to go (because of the proximity of the Mongolian border).

TASTER DAYS

UK:

NEW FOREST NATIONAL PARK BROADS NATIONAL PARK

AUSTRALIA:

MELBOURNE · SYDNEY



Field walk

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

Taster days are a standard $\pounds 65 \mid A\$95$ per person. We will credit $\pounds 50 \mid A\$75$ back to you if you subsequently join one of our expeditions or projects.

More at: www.biosphere-expeditions.org/tasters

Our taster days were honoured in The Independent on Sunday's "Best Holiday for Green-Minded Travellers" list. Below: using a compass (Broads National Park) Bottom: trying out research equipment (Nationalpark Berchtesgaden)







NATIONALPARK UNTERES ODERTAL NATIONALPARK EIFEL NATIONALPARK BERCHTESGADEN

CHNUPPERTAGE DEUTSCHLAND



Top: canoe expedition (Nationalpark Unteres Odertal) Bottom: using binoculars and spotting scopes (Nationalpark Berchtesgaden)



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

Alle Schnuppertage kosten einheitlich €65 pro Person. Falls Sie sich nach dem Schnuppertag für die Teilnahme an einer Expedition oder einem Projekt entscheiden, schreiben wir Ihnen €50 davon wieder gut.

Mehr unter: www.biosphere-expeditions.org/schnuppertage

Unsere Schnuppertage wurden im Merian-Buch Einmal im Leben Als eines von "100 unvergesslichen Die Lust am Reisen Reiseabenteuern" aufgeführt.

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BIOSPHERE

Places to go: Berchtesgaden National Park

By Malika Fettak, Biosphere Expeditions' Operations Manager Germany

In 2008 Biosphere Expeditions introduced taster days in collaboration with various national parks to its portfolio, because there was a clear demand for dipping into what it's like to be on expedition with us closer to home. One of the taster day destinations is the iconic Berchtesgaden National Park in the Bavarian Alps in Germany and since 2008 more than sixty people have taken part in this high mountain taster day experience.

The Bindalm - an Alpine pasture, that is still in use.



Overview map of the wedgeshaped Berchtesgaden national park showing the core zone (green), the temporary activity zone (orange) and the permanent activity zone (yellow).

The green line marks the national park's boundary, the red line marks the border to Austria.

Numbers show the location of the three valleys: Klausbach valley [①], Wimbach valley [②] and Koenigssee valley [③].

t the edge of the Northern calcareous Alps, the national park, part of the Berchtesgaden Alps, pushes like a wedge towards Austria. Three deep valleys, highly dissimilar in character, and their massifs, mark the topography of the park's high mountain range. Here nature reserves do not end at national boundaries and the Berchtesgaden national park and the adjacent Salzburg Alps protected area in Austria are linked.

The park's history

The Berchtesgaden National Park was established in 1978 as the third stage of a protected area, which is now 80 years old. In 1910 an early nature reserve prototype, the Berchtesgaden Alpine Plant Protection Area was created. When early Alpine tourism began to develop at the turn of the century and when collecting flowers was a real trend, plant protection became nature protection.

The 21,000 hectare Koenigssee Nature Reserve was established after the First World War, in 1921, for the purpose of protecting plants and animal species. Traditional forestry and Alpine farming, hunting and fishing were allowed to continue. The perimeter of the protected area did not change with the establishment of the national park, except for the Northern boundary facing a residential zone. At the same time a "buffer zone" of about 25,000 hectares was set up. In 1978 a new conservation strategy, favouring the national park concept, was the key step that led to the national park in its present shape.

Land use

After the foundation of an Augustinian monastery in Berchtesgaden at the beginning of the twelfth century, tenant farmers began to settle in the region. Soon the small valleys could no longer provide for the ever-increasing population, who had to seek additional sources of income in wood-carving and salt-mining. Salt was produced between Berchtesgaden and Schellenberg as early as the twelfth century. All areas suitable for agriculture had been cleared by 1500. At the beginning of the seventeenth century human impact advanced further into the mountains, so that by the end of the eighteenth century almost every piece of forest land was being exploited and cattle grazed everywhere except on the steepest slopes. This was the principal reason why Northern mixed forests gradually changed into spruce forests.

2

A new development began with Napoleonic secularisation in 1803 and the annexation of Berchtesgaden to Bavaria in 1810. The Bavarian kings, in between building fairytale castles, used to come in the summer for their holidays and in the autumn for hunting – Berchtesgaden thus became fashionable. This and the work of artists made Berchtesgaden increasingly well-known, contributing to the development of tourism as the main source of income for the local people. In recent years more than 2.5 million overnight stays per annum have been registered and almost half of local employment is now in the service industry.

story



Koenigssee valley

The Koenigssee valley was created along a natural break in the rock. A river chiseled its way into it, forming a V-shaped valley. It obtained its present shape during the ice ages; a mighty glacier that stretched far into the Alpine foothills chiseled out a U-shaped valley with a 200 m deep basin. The melting glacier filled the bowl with water, forming the iconic, picture-perfect Koenigssee.

For varying reasons, the use of Alpine pasture land has declined in the past 150 years. At present, only twenty-three Alpine pastures are still in use, fifty having been abandoned recently. The erstwhile royal court excessively hunted red deer and chamois, which adversely affected the regeneration of the mixed mountain forest. Today the scale of game browsing is monitored by ground vegetation monitoring. Winter feeding stations have been installed in various places to keep game off the developing tree shoots in late autumn, winter and spring.

Animal life

Animal life in the national park and its vicinity reflects the landscape and the various human activities over a number of centuries. As in most of Western Europe the bear, wolf, lynx and bearded vulture have gone. The last bear was killed in the eighteenth century, the last lynx in the early nineteenth. Although the area offers enough space for top predators, the den-



sity of human settlements is a big problem for reintroduction. Only time will tell whether humans and predators can learn to live side-by-side again in the Berchtesgaden Alps.

Species of vertebrates and a few invertebrates living in the national park and its "buffer zone" have been recorded in a dedicated catalogue. This catalogue includes 92 species of birds, many of them on the red list of protected species. Sixteen



species of amphibians and reptiles have been counted, as well as 15 species of fish. Twenty-six of the 50 mammal species observed or assumed to exist in the region are classified as endangered species.

Conservation tasks within the Berchtesgaden national park

Even though traditional types of utilisation have discontinued, various important nature conservation tasks still remain. The main task of the national park is undoubtedly to protect the core zone from human interference, thus allowing for the area's long-term natural recovery. Within the activity zone, ancient rights held by local families still allow pasture and fishing. Although this undoubtedly interferes with the character of a national park, it includes the important task of conserving local heritage and traditions.

Scientific research, such as long-term surveys of flora and fauna, are vital for a better understanding of nature development within the protected areas. As knowledge is gained, it helps to increase the effectiveness of nature conservation measures, not only within national park areas.

Leisure activities are welcome within the national park's activity zone, but are yet another source of





Wimbach valley Klausbach valley

Lying between the craggy massif of the infamous Mount Watzmann of German folklore fame and the cliffs of the Hochkalter, Wimbach valley stretches about 12 km from North to South. The main features of this impressive mountainous terrain are its steep cliff faces, its 300 m high scree slopes and its deeply carved gorge. The Klausbach valley was formed by a mighty glacier roughly 10,000 years ago. When that glacier dumped its 'gravel-tongue' in the valley as it melted, the valley obtained its present box-like, flat-bottomed shape.

environmental pressure. The national park service keeps impact low by providing information as well as policing of rules. Traditional activities, such as hiking, can cause damage, including erosion. As new leisure activities emerge, the national park service surveys and regulates new kinds of sports equipment, for example the use of mountain bikes away from forest paths.

Last but not least, environmental education is an important component of the mixture. Numerous information materials, such as brochures, books, films, etc., are provided free of charge and visitors are invited on a regular basis to join guided tours with a national park ranger. More information is at www.nationalpark-berchtesgaden.bayern.de.

Collaboration with Biosphere Expeditions

Inspiring conservation – this slogan describes perfectly what a taster day in Berchtesgaden is all about. A traditional rustic wooden hut, provided by the national park authorities, serves as base for the day. The morning is spent there learning about field research and trying out research equipment. In the afternoon the team goes on a field walk with a national park ranger. "I have learnt much more about nature & conservation in the last few hours, than within the last couple of years" is a comment we hear often in the evening. So come and join us on a taster day, whether it's at Berchtesgaden or any other location around the world! (www.biosphere-expeditions.org/tasters)



Left: guided tour with a national park ranger Right: taster day team



1-WEEK PROJECTS

AZORES (whales & dolphins)

MALDIVES (coral reef & whale shark) MUSANDAM (coral reef)

ur 1-week projects are true wildlife research and conservation expeditions. They last 7-9 days and offer you opportunities to explore fascinating parts of the world, not quite as remote as the 2-week expeditions. You will have a lifetime adventure and get truly hands-on, working in wildlife conservation out in the field with local scientists and people.

1-week projects start from £980 | €1110 | US\$1530 | AU\$1580.

More information: www.biosphere-expeditions.org/projects

Pictures from top to bottom, left to right: whale shark | onboard data collection | tracking lynx and wolves sperm whale fluke | counting turtle eggs Australian flatback turtle | collecting samples | underwater data collection

Our Azores whale & dolphin project was honoured in the "Top Ten Outdoor Pursuits" list in the Independent on Sunday, in the "Best Ten Wildlife Holidays in Europe" list in the Guardian and in Islands magazine Voluntourism Blue List where it won the THE INDEPENDENT

"Best in Sustainable Travel" award.



Our Slovakia project was honoured in the "Best New Trips" list in the National



Geographic Adventure magazine.



Our Musandam coral reef project in Oman was honoured in The Independent's "Best Activity and Adventure Breaks" list and in Travel + Leisure's "Best Save-the-Earth Trips" list.



SLOVAKIA (wolf & wildcat)

WESTERN AUSTRALIA (Australian flatback turtles)







Slovakia

Australia



Musandam



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The Maldives – A climate change indicator, and the need to survey!

By Dr. Jean-Luc Solandt, marine biologist and expedition scientist.

S traddling the equator 700 km southwest of Sri Lanka, the Maldives consist of 26 atolls formed from coral growth over ex-

tinct submarine volcanoes and mountains. The islands are formed from sand accumulated from natural erosion of surrounding reefs and none lies more than 6 m above sea level – a true maritime nation.









A HISTORY OF THE COUNTRY

With Arab, Indian, Sri Lankan and East Asian influences in history, culture and language, the nation of the Maldives is historically a nation of seafaring cultures. The islands are populated by around 300,000 people of which about a third live on the capital island of Male' and nearby islands. 28% of GDP comes from tourism, with fishing (predominantly for tuna) being the second biggest generator of revenue (at least 15% of GDP). The first two tourist resorts opened in 1972 and there are now over 100.



MALDIVES -Is it still a paradise?

More than almost any other nation on Earth, the Maldives simply has to have healthy reefs. It is literally built on them, and requires reefs to support the infrastructure and the homes of the islanders, and provide the protein for the entire nation's diet.

Until the mid-1990s the dominant fishery in the Maldives was for tuna, largely offshore, which didn't actually impact at all on the reefs (apart from gathering some bait fish such as fusiliers and damselfish). Up until the late 1990s there was practically no large-scale impact on the health of the reefs of the islands. Since these times, however, things have changed. There has been a dramatic rise in the number of tourist resorts, which impact on the coralline islands directly through construction and modification of nearby marine habitats, but also more significantly because of the resulting increase in demand for reef fish for consumption by guests. Tourists also want to fish for reef fish during their holidays, which also adds to the pressure on reef systems, particularly in those reef areas where the density of resorts is relatively high. Similarly, there has been a considerable increase in demand for reef fish from foreign markets, particularly Asia, that has resulted in the development of export markets for commercial reef fish (particularly grouper, large snapper and emperor species).

Alongside this relatively new pressure on the reef fish, the coral bleaching event of 1998 (and to a lesser extent in 2010) has caused wide-scale mortality of shallow water reefs. This widely reported incident – caused by the El Niño event - was a wake-up call to the politicians of the vulnerability of low-lying coral islands such as the Maldives,



Eagle ray (left), puffer fish (right).

that not only have concerns over the increase in sea-level rise from thermal expansion and the melting of the polar ice-caps, but now recognise that the corals themselves are becoming stressed via increased sea surface temperatures, and could already be suffering from ocean acidification.

Recovery of the reefs since 1998 has been patchy, with some areas recovering rapidly - especially the fast-growing table and branching Acropora corals that dominate shallow waters. But of great concern is the widespread loss of slow-growing 'massive' corals (often the size of a small house) that built up the coral ecosystem of the Maldives over thousands of years. New 'massive' coral colonies have recruited since 1998, so all is not lost, but their growth rate is very slow.

A NEED TO CONSOLIDATE AND EXPAND

Since 2005 and our surveys of post-tsunami damage to the reefs of the Maldives, the Marine Conservation Society (MCS), for whom I work, has set up permanent 'reef health' monitoring stations at three sites to record coral cover, reef damage, and numbers and types of reef fish. The information from these reports has already been provided to the global coral reef monitoring programme, Reef Check, and has been included in an international report on the status of tsunami impacted countries in 2005 (go to http://www.mcsuk.org/marineworld/habitats/ maldive+coral+reef+surveys). Our findings were that the damage to the Maldives from the tsunami, although considerable for the human population, was negligible to the reefs, with only isolated pockets being structurally damaged.

We have also been successful at monitoring fish populations inside and outside current Maldivian Marine Protected Areas (MPAs). This work - carried out in collaboration with the University of York, England – has resulted in a presentation at the International Marine Conservation Congress in 2009, and the data were sent to the Marine Research Centre in the capital, Male'. The work detailed that there was little difference in fish populations inside and outside Marine Protected Areas of the Maldives, and that there was a relatively significant absence of predatory reef fish in all the reefs of the central atolls, and that their size, when present, was relatively small.

WHAT WILL BIOSPHERE EXPEDITIONS' Collaboration bring to our work in the Maldives?

In the past, it has been difficult for the MCS to undertake regular surveys using Reef Check, or carry out more specific coral fish population assessments, because getting to the islands is difficult, as is getting around them once there.

We have been reliant on the goodwill of dive operators to get a berth on board live-aboard vessels, and train the odd resort here and there. These operators have been willing to support our survey dive schedule, when it fits in with them taking tourists to visit regular dive sites. This way of working for Reef Check in the Maldives wasn't sustainable, led to big gaps in surveys, and in many



Reef life

instances, meant that permanent monitoring sites were not surveyed on a regular basis.

We now have the opportunity with Biosphere Expeditions to develop a much more comprehensive dataset on the health and resilience of Maldivian reefs. Not only will we be able to regularly visit our three widely dispersed permanent monitoring stations, but we will also set up new sites, and record fish populations inside and outside existing MPAs. Furthermore, we will be undertaking a "Coralwatch" survey of coral reef health in collaboration with the University of Queensland in Brisbane, Australia, and also providing a photographic record of coral reefs that can be analysed in depth (species of hard and soft coral and sponge) by specialists based at the Marine Research Centre in the Maldives. So there is much more that we can and will do, and it will be increasingly possible to accomplish our goals for monitoring by collaborating with Biosphere Expeditions.

Hawksbill turtle



Dr. Jean-Luc Solandt is a Londoner with a degree in Marine Biology from the University of Liverpool. After graduating, he spent a year diving on the Great Barrier Reef assisting field scien-



ng, he spent a year diving on the Great Barrier Reef assisting field scientists in studies on fisheries, and the ecology of soft corals and damselfish. He returned to the UK and enrolled in a Ph.D. on sea urchin ecology in Jamaica, based both in London and Jamaica.

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.





ALTAI (snow leopard) **BRAZIL** (jaguar & puma)

ust as our 1-week projects, our 2-week expeditions are true wildlife research and conservation expeditions, but they last 12-14 days and tend to go further afield to remote and beautiful locations all across the planet to work on fascinating flagship species.

2-week expeditions start from £1220 | €1390 | US\$1940 | AU\$1970.

More at: www.biosphere-expeditions.org/expeditions

Pictures top to bottom, left to right: camel herd in the Altai mountains wildlife in Namibia | setting up a camera trap | telemetry | base camp Oman observation hide | base camp Brazil | data recording study area Altai | study site Oman | surveying a Caribbean reef

Our Altai snow leopard expedition was honoured in the National Geographic Traveler "Tours of a Lifetime" and in BBC Wildlife



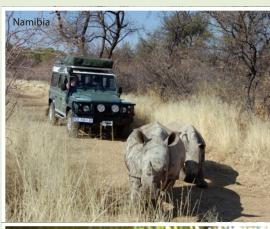
responsibletravel.com

Holidays" lists. Our Caribbean coral reef dive expedition in Honduras was honoured in a book entitled "Once in a lifetime"

magazine's "Top Ten Conservation

(*Einmal im Leben*) by well-known German travel publisher Merian as one of "100 unforgettable travel adventures" (*100 unvergessliche Reiseabenteuer*).

Our Peru Amazon biodiversity expedition was honoured in responsibletravel.com magazine's "Top Responsible Holiday" list.







2-WEEK EXPEDITIONS

HONDURAS (coral reef) NAMIBIA (leopard & cheetah) **OMAN** (Arabian leopard) **PERU** (jaguar, puma & parrots)











Oman





HOW VOLUNTEERS CAN WITH BIG CAT CONSER

An overview of current trends in cat conservation by Dr. Marcelo Mazzoli



onservation has become a serious business and one of the most controversial conservation subjects is biological conservation - what happens in the real world - the politics, laws, community participation and needs, human behaviour and beliefs - the practicalities.

What cat conservation leaders say

There is a good amount of information on the biology of cats. But what about conservation guidelines and effectiveness of measures taken? There has been a trend towards 'making choices', to protect only part of our biodiversity. This view is mostly based on the use of limited resources by conservation institutions, which is legitimate. This view, however, does not take into account the existence of local funds.

The Florida puma recovery is a good example of a local effort financed with local funds. Many scientists would argue that it is a waste of money to save the Florida puma, as it is just a subspecies of a nonendangered species. But this was Florida's money. If they had not employed it to save the puma, they would not have used this money to save a cat species elsewhere! Nor would specific cat conservation technology have been developed (in this case, transfer of embryos). If we aim to save just the larger, more 'viable' populations, we'll lose all the others!

Conservationists from a scientific background find it a challenge to figure out real-world solutions. They argue that large cats can only be saved if people receive proper education. It makes sense, but there is no time for generic education. People need practical education in how to save species. Will our education have any positive effect? Consider also beliefs. In traditional Chinese medicine, for example, tiger bones and parts are strong medicine. Is there an alternative to guards holding machine guns to protect Sumatran tigers, as is done now? Sure there is. If you educate the decision-makers in China they can pass laws to enforce the prohibition in trade of tiger parts!

OK, then volunteering can make a difference?

The conservation success of a volunteering project depends on its implementation. The idea of having people from all over the world, with different backgrounds, working to collect information on an en-

HELP VATION

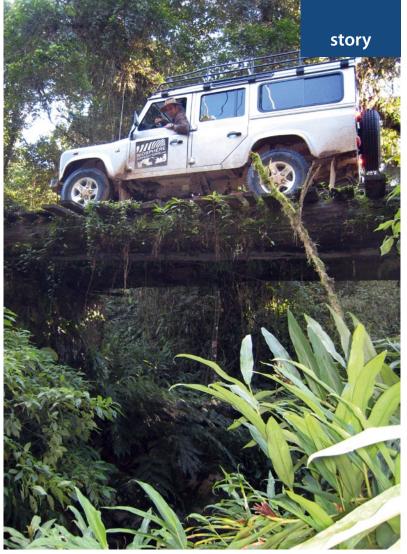
dangered species is in accordance with the conservation book: share responsibilities, cooperate, broadcast the conservation issue by reaching a worldwide audience, generate reliable and useful conservation information, produce reports with conservation guidelines, mobilize local people for the cause, create situations for capacity-building for local managers.

On the ground, however, how can we expect a group of people that have never performed tasks in the wild to produce something tangible in terms of conservation?

EXAMPLES OF VOLUNTEER EXPEDITIONS FOR CONSERVATION OF BIG CATS BRAZIL • OMAN • PERU

B razil: My main experience with volunteer expeditions began in Brazil. This was a result of a joint project between the organisation I represent, 'Projeto Puma', and Biosphere Expeditions. The aim of the joint project is the conservation of jaguars in one of the most threatened ecosystems in the world and a top biodiversity hotspot, the Brazilian Atlantic Forest. Within this ecosystem, we targeted the largest remaining patch, the 'Serra do Mar' mountain range.

Considered near-threatened as a species in the IUCN Red List of threatened species, the jaguar is very rare in this ecosystem. This is a typical case requiring local effort to restore its populations. Jaguar conservation is also significant to the integrity of this endangered ecosystem, and to the genetic pool of the species as a whole. The species will not have a



chance in this area unless it somehow manages to make a comeback. When the project began, I had already witnessed a recovery of the puma in southern Brazil, so I was optimistic. The study assessed habitat integrity for jaguars, and as a result revealed the core areas most important for their conservation. Our planned task was then to draw the attention of managers and decision-makers to the importance of conservation of these areas.

We have worked since 2006 to find out that much of what was judged jaguar habitat is, in fact, a border area around a core area, with low or no jaguar presence, despite apparently pristine forest. It was a typical case of an empty forest or perhaps half-empty forest.

Seen so far as 'generally threatened' or 'vulnerable' to extinction, local jaguar populations may in fact be critically endangered. We are the only organisation working in the area that has systematic information of the wildlife status over a wide geographical area. This information is now being requested for use by public environmental agencies, to prioritise management and conservation of key jaguar areas. We hope that the model may spread to other areas of the ecosystem. This has already started, as Projeto Puma has been requested by a local university to set up an expedition in another important area of the Atlantic Forest.

Heading for base camp in search of jaguars, puma, and ocelots.

In partnership with Biosphere Expeditions, we are also advising local stakeholders on forest management issues and on other benefits from habitat conservation, such as reduced emissions from deforestation and degradation (REED) projects, management of non-timber products, and implementation of private protected areas.

Back to the low numbers of jaguars, what will volunteers see and experience during the expedition if the chance of seing a jaguar is low?

We not only analyse jaguar presence, but also record all the mammals we can, mainly by tracks and camera-traps. Track records are as good as sightings in understanding patterns of occupation, recolonisation and extinction. This assessment gives a snapshot of the population of the forest in the areas we sample. For example, we found no evidence of tapirs in the National Park adjoining our current base camp, but we found tapir tracks on every trail we currently walk nearer to the core areas. Tapirs have disappeared from the National Park due to lack of protection and are present near our base camp because they have been protected by private initiative. Further from our base camp into the core areas, we find not only tapir, but also whitelipped peccary herds, one of the main 'dishes' on the jaguar menu. By knowing what wildlife exists in each site, we then know where the core areas are and which areas need the most attention. We are also able to provide targets for recovery of areas where species are missing.





Arabian leopard, critically endangered, camera-trapped in the mountains of Dhofar, Oman. Photo kindly provided by the Oman Office for Conservation of the Environment (Diwan of Royal Court).

man: The Arabian leopard is listed in the IUCN Red List of threatened species as critically endangered, the highest level of threat. Our Oman expedition found reduced evidence of the leopard, but we did record plenty of information on the presence of its prey and other indicator species. With that information we were able to deduct that the area, although only occasionally reached by monsoon rains, had a great deal of mammalian diversity, with species there that have become uncommon in many other areas.

Local herders reported that leopards used to attack their herds in the past, but not any more. According to them, herding practices and location have remained the same. Fewer losses combined with reduced evidence of leopard presence show that leopards have reduced in range. With plenty of records of prey species in the area, a suspicion arose that leopards may have been partially wiped out by herders. A gap in the knowledge about livestock depredation by Arabian leopards, however, needed to be addressed. The dataset collected by volunteers was so complete that I was able to convert it into a scientific publication in the journal 'Zoology in the Middle East', following the one-month survey.

One of the many tapirs camera-trapped in the Brazil study area. Young tapirs are jaguar prey. The species has been wiped out from vast areas of their previous range in southern Brazil, where it is now considered rare.

Peru: The Amazonian forests of Peru, in the Department of Madre de Dios, are located in the western Amazon, one of the most biodiversity-rich areas in the world.

Biosphere Expeditions has been working in the area for over eight years, and has accumulated a large dataset on densities of a variety of mammals. The study area, located by the Las Piedras River, had been subjected to selective logging up until 2002. Biosphere Expeditions has sampled precisely during this recovery period. Results show an increase in sightings of many species, such as spider monkeys, which seem to be more sensitive to selective logging, taking longer to recover.

My aim was to establish a preliminary study design for the larger cats (puma and jaguar), including which questions to address during future expeditions. I found out that the study area was currently a concession for ecotourism and for the sustainable harvest of Brazil nuts.

Results were quite surprising, as big cats were recorded on a daily basis. In one instance, team members went for a night walk and when they came back they spotted, in the middle of their path, a peccary that had just been killed!

Sustainable logging

The value of sustainable selective logging for conservation is yet to be recognised by countries,



which harbour the last of the world's rainforests. A forest left unmanaged will inevitably be invaded and logged unsustainably, and finally used for pasture or crops. But even stands of planted forest, when adequately managed, may be habitat for

Expeditions to the concession forests of Peru may be the first initiative to unravelling the pros and cons of logging concessions for large cats, as it is conducted in-country. It will help spread management practices that are promising for the future of our forests. This is the type of information that managers and decision makers need.

large cats and other sensitive species.

PROJETO PUMA is a Brazilian-based, non-profit NGO, primarily aimed at the conservation of species and habitats. Besides organising expeditions and being a partner organisation of Biosphere Expeditions, it provides environmental consultancy for forest certification, species and landscape management, and implementation and supervision of updated undergraduate and higher education courses in Biological Sciences.



Dr. Marcelo Mazzolli, founder and Director of the institution, has been an advisor for the IUCN Cat Specialist Group since 1997 and a member of the High Conservation Value (HCV) Network's advisory board for forest management. He coordinates a post-graduate course in Sustainable Development and Environmental Management and has taught zoology, ecology, biodiversity monitoring and management, evolution and paleontology. Major publications include articles on Arabian leopard, jaguar and puma.

More information on Dr. Mazzolli's work and on Projeto Puma is at www.projeto-puma.org.



FEEDBACK

TEAM MEMBERS

Congratulations for the Biosphere Expeditions *idea and the way the staff carries it through with their enthusiasm. I came across you on the internet by chance and your information materials and the way my questions were answered persuaded me to dare come on the Brazil expedition. Once in the field my expectations were more than fulfilled. The team was great, as was the food and I gained a real insight into how wildlife research and conservation works on the ground. I'll be back!"* Helmut Schnellinger

More at www.biosphere-expeditions.org/feedback

MEDIA

C I am back from Oman and I have to say that it was one of the most interesting stories I have ever covered. I have to admit that I was sceptical at the beginning, but the way the team was led by the Biosphere Expeditions' staff and the way the research was conducted have impressed me a lot. Now I am really glad that organisations such as Biosphere Expeditions exist, who offer real hands-on conservation experiences for laypeople, which benefit the participants and the local wildlife conservation efforts. As far as I am concerned it was just a brilliant experience within a great set-up!" Martin Amanshauser, travel journalist.

SCIENTISTS

We are always looking for help to do as much research as we can in order to increase our knowledge of our natural resources and how to manage them sustainably. Working with Biosphere Expeditions gives us a great opportunity to do this on our coral reefs. On top of that there is intense cultural exchange leading to greater cross-cultural understanding, so there are multiple benefits for the archipelago of Cayos Cochinos."

Adonis Cubas & Italo Bonilla, Cayos Cochinos Marine Natural Monument, Honduras.

G Biosphere Expeditions' initiative was crucial in initiating our jaguar and puma conservation programme in the Atlantic rainforest of Brazil.



Without them this programme would not exist. Their approach is a perfect match between research and conservation and we are delighted to work with them." Dr Marcelo Mazzolli, Projeto Puma, Brazil.

LOCAL PEOPLE

6 My name is Emil Respaevich Sanzarakov and live in the village of Kurai in the Republic of Altai. I am a student at school and help my father look after sheep, goats and cows. Instead of hanging around in the village with my friends dur-



ing the summer holidays, I now work for Biosphere Expeditions, helping with the running of base camp and guiding in the mountains. The work helps me to see and learn about my country as I do not normally have the opportunity to travel and see places. I enjoy meeting people from

6 My name is Aldo Ramirez Mejia. I am 21 years old and



from the local community at Lake Sandoval. While I finish my studies in Puerto Maldonado, I work with the Tambopata Macaw Project studying macaws and claylicks, which is supported by Biosphere Expeditions. Traditionally, my family has fished, farmed and hunted, but thanks to Biosphere Expeditions and its ecotourism

& ACHIEVEMENTS

There have been a great many very tangible outcomes from Biosphere Expeditions' work. Here are just a few:

• Fewer lions, leopards and cheetahs killed in farmer-NAMIBIA predator conflict in Namibia.

> Declaration of a national park in the Ukraine, protecting a unique steppe area jutting into the Black Sea and as such a stop-off point for many migratory birds, as well as a haven for fauna (e.g. birds & wolf) and flora (it boasts amongst other things Europe's

UKRAINE biggest orchid field).

- Declaration of a protected area in the Altai Republic, Central Asia, which provides the habitat for a number
 ALTAI of endangered species including the snow leopard.
 - An active role in saving 50 wolves from being declared legitimate hunting targets in the Bieszczady mountains in Poland. This was achieved by providing accurate information on the predator numbers and by influencing the local authorities who re-

POLAND versed their decision to cull wolves.

- Our recommendations for the management and protection of jaguars have been incorporated into national and **BRAZIL** state-wide jaguar action plans in Brazil's Atlantic rainforest.
 - Inclusion of guidelines for boat behaviour at clay licks in the Tambopata Reserve management plan. Guidelines are needed because unsustainable forms of farming, logging and tourism are threatening the PERU natural habitat in the Peruvian Amazon.
 - Our recommendations for the management and protection of the coral reefs of the Cayos Cochinos marine protected area in Honduras have been incor-

HONDURAS porated into the managing authorities' action plan.

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

More at www.biosphere-expeditions.org/achievements





Geing here in the Altai as a travel journalist, this was one of the most exciting jobs I have ever had. Everything was perfect, the scenery, the team, the Russian supporters and especially the expedition leader who did a really good job."

Uli Benker, travel journalist.

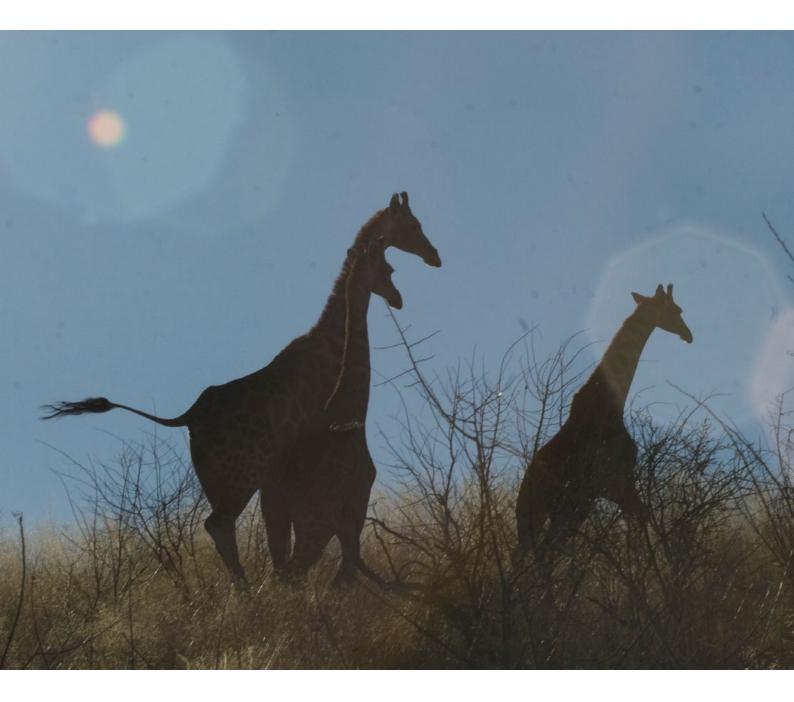
other countries and improving my English. The money I earn is important for me to help support my family and also to feel independent. When I leave school, I hope to go to university; I also hope to continue working with Biosphere during the holidays." Emil Respaevich Sanzarakov, Kurai village, Republic of Altai.

and conservation opportunities, I have been able to dedicate my time to my interest with the local wildlife with which I grew up, rather than hunting it. Thank you very much."

Aldo Ramirez Mejia, Lake Sandoval community, Peru.

NAMIBIA: TURNING FARMLAND INTO CONSERVATION

Building up a research station at Ongos in Namibia by Dr. Ulf Tubessing



AREAS



ith roots (of German origin) going back five generations, one can surely say that I am firmly anchored in Namibian soil. My fascination with our abundant wildlife and nature goes back to my childhood, when I spent most of my free time roaming the Namibian bush.

Shortly after completing my veterinary studies in 1983 I joined the staff of the Veterinary Faculty Onderstepoort, South Africa as lecturer in small animal internal medicine. Even though I thoroughly enjoyed the high-tech academic environment, after nearly ten years "the call of the bush" became overpowering and resulted in me returning to Namibia, where I worked in a mixed animal hospital.

I soon became more involved in wildlife medicine and worked closely with various conservation organisations such as the Cheetah Conservation Foundation (CCF) and the Smithsonian Institute. National Geographic TV accompanied me on a couple of outings and thus "documented" cheetah, leopard and giraffe capture and translocation actions as well as work I did on a family of leopards with serious brain affliction producing a number of shows that aired globally.

In 2003 I managed to realise my dream of buying into a farm. I purchased the stunningly beautiful farm Ongos (100 km² in size) near Windhoek and, by removing internal fences and ranching infrastructure, converted the cattle ranch into a game ranch. Since I am also heavily involved in game capture and translocation work, I made the reintroduction of large numbers of game to the farm a priority. Today Ongos is well stocked with most species endemic to the area.

Game ranching has, over the past two to three decades, contributed greatly to conservation in Namibia. Numbers of game on private farmland (comprising 43% of the countries' surface area) have more than tripled and are exceeding those in Namibian national parks. Since Namibian national parks are under severe tourism pressure (even moderate tourism pressure impacts significantly on arid habitats) and with Namibia's increasing popularity as a tourist destination, there is a great need to increase the total area under conservation in Namibia. Due to budget limitations and pressing sociological needs, our government does not view the addition of more land for conservation purposes a priority. This then places the responsibility (and opportunity) of future expansion of conservation land into the hands of the private sector.

As a conservationist and consultant to game ranchers, I believe that the current private sector efforts fall way short of their potential in fulfilling their conservation role. Most farms are game-fenced, (fragmenting the habitat), individually managed and ecologically speaking small (between 5,000 -10,000 ha in size), each only representing a limited number of habitat types. Some farmers group together, forming so-called conservancies. Unfortunately competition and the individualistic nature of the farmers, results in few, if any, of the commercial conservancies being managed as one economic or unfragmented ecological unit.

Farmers concentrate all or a large portion of their "farming" activity on game ranching, mostly for

trophy hunting, photo safari purposes and to some extent the breeding of endangered (thus expensive) species. Due to a paucity of knowledge and understanding of natural processes, many techniques applied to both game (highly diverse, indigenous species with different needs) and habitat management are extrapolations from livestock (usually a single introduced species with well specified needs) farming practices. Needless to say, suboptimal management is the order of the day.

As a result I decided to use Ongos as an initial site to start/support research projects and to collect information pertaining to judicial game ranch management. Important to me is that the research conducted is practically oriented and will yield in-

> formation that will make a meaningful contribution towards our understanding of natural processes and thus aid in sound game ranch management and conservation.

> o help us achieve this goal we partnered up with Biosphere Expeditions, who have a great track record of supporting conservation-oriented research through responsible eco-tourism. With pooled resources (our tented lodge and camp research centre), jointly sponsored researcher and Biosphere Expeditions' equipment (volunteers and funding), we devote time and effort to research as well as education activities focused on finding solutions to specific wildlife and habitat management issues affecting private farmland in Namibia. Some of these are:

Using a telemetry antenna to locate collared animals



African leopard



Taking school children out in the field | data collection | the new research station at Ongos

HUMAN/PREDATOR CONFLICT

Much is known about predator ecology in national parks, where predation on game is accepted as part of management and not seen as a conflict situation. To minimise stock losses, stock ranchers have a couple of predator-friendly management tools (e.g. penning livestock at night, making use of Anatolian shepherd dogs, etc.) at their disposal.

Game ranchers often have a low predator tolerance. This is due to predation on rare and expensive game species often resulting in severe financial losses (some species, e.g. sable and roan antelopes are worth in excess of 20,000 Euros!). We are currently investigating the predation habits and ecology of leopards (and, to a lesser extent, other predators) on commercial farmland in the hope that a better understanding of leopard ecology in this setting will enable us to devise management techniques, which will reduce the risk of predation on rare and expensive game species and thus minimise human/predator conflict.

HABITAT AND PREY BASE MANAGEMENT

Without a well managed and preserved habitat, survival of all species is at risk. We are thus monitoring a number of parameters (game numbers, species composition, habitat degradation indicators, etc.) in an attempt to identify management indicators and strategies that will be useful for both the preservation/restoration of habitat and species (genetic composition, optimal species composition and game density, animal health, etc.).

LIVESTOCK-WILDLIFE DISEASE INTERFACE

In recent years there have been a number of serious disease outbreaks in wild animals that are directly attributed to the relentless human encroachment on conservation areas (e.g. high mortality rates caused by canine distemper virus infections amongst lions in the Serengeti due to domestic dog/lion contact). The close proximity of Ongos to the Katutura township near Windhoek makes this the ideal setting to monitor such disease risk in the wild predators and, if needed, to devise management strategies before major damage occurs.

EDUCATION PROGRAMMES

These programmes - predominantly targeting school children - aim to promote appreciation of nature amongst Namibians. We believe that increasing awareness of the inherent value (both aesthetic and financial) of nature will go a long way towards more responsible utilisation of natural resources (firewood, water, etc.) and also give scholars an insight into potential career options involving nature and conservation.

DEVELOPMENT OF MANAGEMENT MODELS

I consider it a priority to identify and develop possible financial and management models through individual game ranchers, which see the overall benefit in "dropping fences" (and thus habitat fragmentation) between adjacent game farms so that greater areas can be managed as continuous ecologic units to the benefit of both humans and nature. The pinnacle of my dreams is the establishment of a greater Windhoek nature reserve of at least 50,000 ha in size including Ongos as a nucleus.

Without the aid of dedicated partners, researchers and sponsors, the above aims will largely remain dreams. Even though we have only just started, I believe we are on track towards achieving these goals. For this I thank Biosphere Expeditions and all the participants visiting our programme as well as Kristina Kilian (our researcher & Biosphere Expeditions' employee) and all those people who have contributed their time and resources towards this project.



FRIENDS

Become a member of the Friends of Biosphere Expeditions



My name is Steve Tredwell and I am a diving enthusiast. After having joined Biosphere Expeditions' dive projects in Honduras and Oman, I became a life member of the Friends and my £500

membership fee was used to create an educational colouring book for children in Honduras, on marine resources and how to protect them. For me it was great to see that 100% of my membership fee went straight into a conservation project and I really liked being kept updated by Biosphere Expeditions.

My name is Sven Strohschein and I am from Hamburg in Germany. It was and is a great experience to be part of Biosphere Expeditions, even if it is 'only' as a Friend or an expedition team member. My memories include being woken up by elephants browsing trees just a metre away from where I was sleeping, witnessing a lion hunt in the middle of the night and talking to local people, discussing their problems face-to-face, all in a way you normally just see on television! Each time I join a Biosphere Expeditions team in the field it is



definitely an all-time experience for me and I am very happy and proud to also support their work through my membership of the Friends and by helping with media enquiries in Germany.

"The Friends of Biosphere Expeditions have helped us tremendously in 2010 by funding the entire cost of two computers. These new machines will be used for research data entry and analysis of photo-identification pictures of our study species. They will also improve the facilities for team members on future expeditions in 2011, our 8th consecutive year of study and partnership with Biosphere Expeditions."

Dr. Lisa Steiner, Azores, Portugal.

"With the Friends of Biosphere Expeditions' donation we will be able to keep the buoy system up and running that demarkates our marine protected area. Thank you so much for this!"

Adrián E. Oviedo, Executive Director, Honduras Coral Reef Foundation

We have helped to finance a field research station in Peru. This too is used by research bodies year-round as a centre for conservation & research, providing training for researchers, as well as employment for the local community.

In Oman we have purchased camera traps

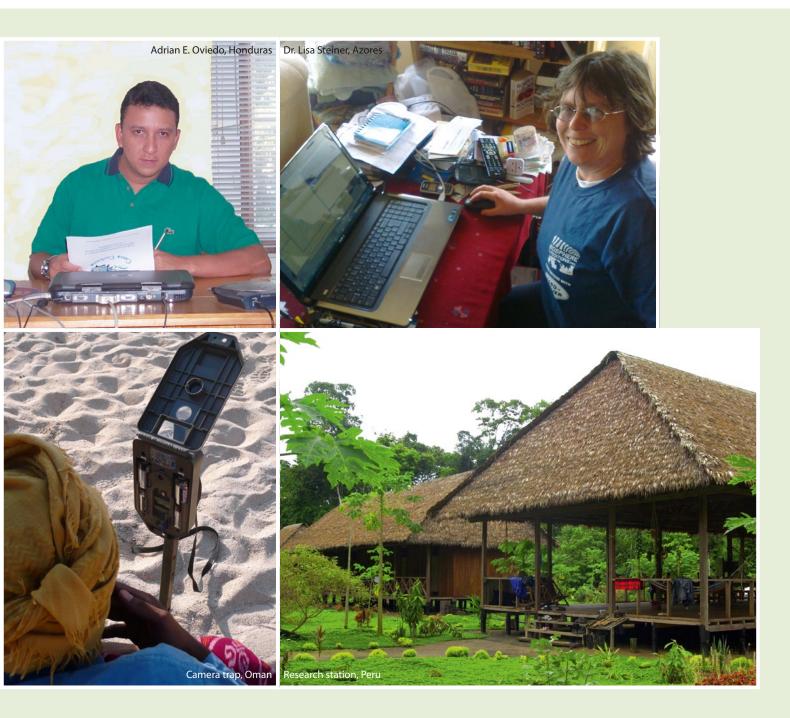
to help local researchers in their Arabian leopard conservation work. We have also funded an Omani ranger to join our Caprivi expedition as part of his training.

On our Honduras coral reef expedition we have purchased buoys and markers to delineate the protected area and to make clear where the no-fishing zones start.

On many of our expeditions & projects, we have produced and distributed information and educational materials to local children and adults, about the importance of wildlife, natural resources and how to protect them and their livelihoods. f you can't take part in a full-blown expedition or project yet, or if you have already been with us and would like to stay involved, or if you would simply like to be part of what we are doing, then why not become a Friend of Biosphere Expeditions today? Help us to support critical wildlife conservation and research projects across the globe for a membership fee starting from a monthly $\pounds 6 | \notin 7.50 | US\$10 | AU\$12.50$.

As a Friend of Biosphere Expeditions your benefits will include expedition and event discounts, the Biosphere Expeditions magazine & brochure, first notification and preference for last-minute expedition places, news and updates on how your membership fee is making a difference to our conservation work in the field, and much more. More information and a joining form at:

www.biosphere-expeditions.org/friends





LOOK AHEAD

More at: <u>www.biosphere-expeditions.org/lookahead</u>

e created the "Look Ahead" campaign early in 2010 to harness the great potential we saw in people offering their help after they had come across Biosphere Expeditions or had been on expedition with us. "What else can I do" was a question often asked and Look Ahead was our response. After only one year, the results have surprised even us and below are just a few examples. We are building an amazing network of people as we speak. Have a look at how people have helped - we hope it gives you some inspiration. Then come and join our Look Ahead network.



I'm Axinja Munkel from Germany, a veteran of three expeditions with Biosphere Expeditions. My post-expedition enthusiasm and excitement after Altai, Oman and Namibia lead to a request from my colleagues at the Bayer Schering Pharma to write about my adventures for the employer

magazine. Later the feature was also published on the company's intranet.

My name is David Warnock. I was inspired by the Biosphere Expeditions snow leopard project in the Altai, and decided to give a talk in my local church hall in Cal-



lander, Scotland. Not only did I share my expedition photos and re-live the experience, but I also managed to educate people about conservation, raise money for the Snow Leopard Trust and deliver key messages about the need to take climate change and other environmental issues seriously.



Sibylle Gabler from Germany giving a talk about her and her husband's travels to Oman and their experience on the Oman expedition at the Schropp books & maps store in Berlin.





and spread the word!



Germany and my day job is with German VOX TV producing wildlife-related shows as an executive producer in the natural history unit. I came across Biosphere Expeditions as part of my job and then went on filming their expeditions in Namibia and Oman. I was so impressed

My name is Jan Biekehoer from

with Biosphere's approach and philosophy that I volunteered my skills in movie production and PR and I am now happily helping them out in just that. It's a great way for me to stay connected with wildlife-related issues in the field and put my skills to good use for a good cause.



I'm Anne Schroedter from Germany and I joined the Azores whale and dolphin project in 2010. Straight after, I joined the Friends of Biosphere Expeditions and when I recently had two laptops to give away I thought of Biosphere Expeditions. One of them is now going to the turtle project in Western Australia,

which is somewhat strange since that very laptop had been to Western Australia with me before! For the second one Biosphere Expeditions is currently conducting another assessment of need and will then send it to another conservation project.

My name is Jane Orton, and I am a freelance travel writer, conservation enthusiast and occasional intrepid explorer!



I have supported Biosphere Expeditions' efforts by writing articles on the Altai and Peru expeditions for an online magazine. This was a great way to generate publicity for Biosphere Expeditions and it also helped me – I am now trying to establish myself as a freelance travel writer and having these publications to put on my CV has been a real plus. My name is Alan Hoffberg and I first joined Biosphere Expeditions in 2003 on an expedition to the Peru Amazon. Now residing in Florida and a retired multiskilled businessperson by trade, I have helped Biosphere Expeditions



ever since in North America by contributing my time and skills in multiple ways. For example, I obtained the United States government 501(c)(3) non-profit/charitable status for the organisation and, wearing my trained accountant hat, maintain the accounting records and financial reporting for the North America operations. I have also done several interviews with the North American press when they wanted to talk to a former expedition team member.

My name is Serge Thebault and I am a vascular surgeon in France. Cathy, my wife, and I did our first expedition with Biosphere Expeditions to Namibia in 2008 and we have been back there in 2010. After our first experience, I joined the Friends of Biosphere Expeditions and then got talking to Kathy Gill about helping to set up a project in France. Now we are talking to the government, NGOs and other people in our country (my neck of the woods is the Pyrénées) in an effort to find a conservation project that would benefit from having Biosphere

Expeditions on board. I also talked to my business partners and have so far managed to raise 1000 Euros for Biosphere Expeditions. It's great to know this will go directly to a good cause that we can be directly involved in and we hope to extend our involvement as our time allows in the future.





THE FUTURE OF WILDLIFE

As part of a yearly networking event held by responsible travel.com, one of Biosphere's directors was asked to be part of a panel of wildlife tourism experts to discuss how wildlife tourism has developed and what the important issues for the future are.

t is interesting for Biosphere Expeditions to be included in a debate like this, as our mantra on expedition is 'this is not a holiday', and we do not see ourselves as part of the tourist industry. Having said that, people do use their holiday time and their holiday money to come and work with us, so we can see why the industry included us ...

A GROWING MARKET

Within the travel industry, wildlife tourism is a growing market – this was something that all could agree on. It is, in fact, the fastest growing sector of the tourist industry and over recent years this has attracted the set-up of many new organisations with the purpose of helping people to get all over the world to enjoy (and sometimes support) the wildlife that exists there. People were warned to beware of operations that are just there to make money for themselves and that do not make a positive contribution to the wildlife or the local areas to which they go.

MANAGING EXPECTATIONS

There is a greater awareness of the damage that we are doing to our environment and the growing sense of an appreciation of nature. This has meant wanting to see wildlife in its natural state and not

Close encounters with wildlife cannot be expected at every turn on a real research expedition. This picture was taken by David Kamholtz in Hervey Bay, Australia, and was the winning photo in a recent Facebook photo competition.



simply through TV documentaries or zoos, and also wanting to help to protect some of the animals and environments that are under greatest threat. The important aspect here is that when people travel to have wildlife experiences, that they come with realistic expectations and that organisations who take them do not try to give people experiences that are not 'authentic'.

There are wonderful wildlife documentaries that move and inspire people, but sometimes they also encourage people to believe that animals will be jumping out at them every minute and that the jungle or the savannah, or whichever habitat it is, will be a pristine wilderness devoid of people. Wilderness has been romanticised and it is time for a better understanding of the place of people in natural landscapes to be shown in documentaries.

TOURISM

SUPPORTING LOCAL PEOPLE

Wildlife tourism has also become more and more important as a way to support local communities and fund conservation. When tourists become interested in an area because of its wildlife, they not only go to the area and help create jobs through staying in hotels, buying local food and local souvenirs, but they also often pay quite large park fees or other payments that ideally go directly to conservation management. The importance of this is twofold. It means that local people will value their wildlife as a source of income and this means that they are more inclined to protect it. It is no good asking people to stop hunting animals for food or to sell parts of them for supposed medicine or as curios, if this means that people are much less well off. We cannot ask people to put themselves at risk for the sake of the wildlife around them. There needs to be a clear financial benefit for local people in protecting wildlife as ultimately this is how long-term conservation will work.

THE POSITIVE IMPACT OF ECOTOURISM

Ecotourism, if it is well managed, can be a powerful tool for communicating science and teaching people about the environment and wildlife. 'Citizen scientists' are needed to fill gaps in knowledge and to gather information about species and habitats. There aren't enough scientists to do the work, so volunteers are needed!

The panel closed in agreement about the value people place on an 'authentic' travel experience. Travelling that helps people to learn about habitats, wildlife and people, and allows them to exchange ideas with people abroad were highly valued.



For better or for worse, wildlife is often romanticised. This picture was taken by Jiri Haurelijuk whilst tracking the famous Susa group in Virunga, Democratic Republic of Congo. It was one of the runners-up in Biosphere Expeditions' recent Facebook photo competition.



RESPONSIBLE TRAVEL AW Biosphere Expeditions highly commended

Biosphere Expeditions has been highly commended in the prestigious Responsible Tourism Awards 2010. The awards, hailed as the toughest yet by the founder Justin Francis, were handed out at the World Travel Market in London. Biosphere Expeditions took the accolade in the 'Best Volunteering Organisation' category after impressing a panel of 13 judges, chaired by Professor Harold Goodwin, who heads up the International Centre for Responsible Tourism in the UK.

ommenting on Biosphere Expeditions the judges said; 'Biosphere has continued to show its strength in combining strong tourism experiences with solid scientific research. Their commitment to transparency sends a clear message about the value of volunteering, where 66 per cent of a volunteer's money goes directly to the project.'

In 2010 almost 1,800 individual nominations were made for the Responsible Tourism Awards in 13 categories. Biosphere Expeditions' Strategy Director Kathy Gill said; 'We are delighted that our achievements have been recognised by the high-profile judging panel, and feel that we share this honour with everybody who has been with us on expedition. Thanks to the commitment, hard work and financial contributions of our team members we are able to make a difference in wildlife conservation.'

The awards were handed out by Justin Francis, Managing Director of responsibletravel.com, organisers and founders of the awards. Francis, who was also on the judging panel, said about the winners: 'Their successes and pioneering spirits are remarkable and the very real and authentic experiences they have created set responsible tourism apart. They are the leadership, the inspiration that the industry needs.'

> Neil Goodall, Rhys Powell from the Namibia Tourism Board, Steffan Stringer and Aino Forsti-Smith from Biosphere Expeditions celebrated the organisations' success at a drinks reception at the World Travel Market.



awards

ARDS 2010:



The award was presented to Kathy Gill, Biosphere Expeditions' Strategy Director by Justin Francis, Managing Director of responsibletravel.com.





Some awards we have won over the last few years:

Responsible travel Best for Protection of Endangered Species Highly commended (International award scheme based in the UK)

Association for Conservation Conservation Award

Award by the European Outdoor Group for conservation projects involving direct citizen action. (European award scheme based in Switzerland)

Umwelt-Online-Award

(Environment-Online-Award)

German government prize awarded to businesses and organisations with an online presence who have displayed excellence and best practice for the environment.

(International award scheme based in Germany)

BBC Wildlife

Top Ten Conservation Holidays Listing for Altai expedition (UK magazine)

National Geographic Traveler

Tours of a Lifetime Award for Altai expedition (International award scheme based in the USA)

Merian

Unforgettable travel adventures

Listing as one of "100 unforgettable travel adventures" (*100 unvergessliche Reiseabenteuer*) for our taster weekends and our Honduras expedition (German travel book publisher)

P.M. Magazin

Top Holiday For Nature

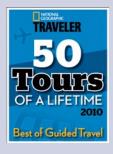
Listing in the category "Where can I do something for nature during my holidays?" (*Wo kann man im Urlaub etwas für die Natur tun*?) (German magazine)

















THANK YOU DANKE MERCI



B iosphere Expeditions is proud to network with and be supported by many partners, who are crucial to our success and provide invaluable support to critical wildlife conservation across the globe. Biosphere Expeditions has achieved a lot with their continued support, for example new protected areas, improved management plans in rainforest areas, reduced human/predator conflict and capacity building in local communities (see page 29).

big thank-you goes to the FRIENDS OF BIOSPHERE EXPEDITIONS. From their donations and membership fees we can fund extra conservation activities and investments, through their help we can spread the word about Biosphere Expeditions, and we can pass their in-kind donations on to our local partners. In 2009/2010, for example, we invested into building a research station in Namibia, supported our whale scientist so she could attend an international conference, bought or passed on muchneeded equipment such as laptops and camera traps, helped our partners in Honduras delineate their marine protected area through marker buoys, and created educational materials for many of our projects around the world.

LAND ROVER, makers of the original outdoor vehicle, provide essential offroad expedition vehicles, sponsorship and other back-up.





SWAROVSKI OPTIK, a world leader in precision optical instruments supports Biosphere Expeditions with binoculars, telescopes, range finders, image intensifiers and optronic devices, as well as sponsorship and other back-up.

MOTOROLA, makers of radio and other communications equipment, provide all important rugged and reliable communication tools such as



handheld and vehicle radios, mobile and satellite phones, as well as sponsorship and other communications and logistical in-country back-up.

GLOBETROTTER AUSRÜSTUNG, COTSWOLD, SNOWGUM & REI

www.Globetrotter.de

These outdoor retailers support Biosphere Expeditions in Germany, UK, Australia and the USA respectively by supplying essential outdoor and expedi-



tion equipment, running events and promotions and assisting expedition team members in kitting themselves out for their adventures. *mtc*, Namibia's premier mobile phone network operator, is providing support for our large cat project in Namibia. This support, amongst other things, includes SIM cards for our GSM/GPS collars, allowing us to track leopards, cheetahs and caracals using the mobile phone network.



FORD MOTOR COMPANY CONSERVATION & ENVIRONMENTAL GRANTS

Through the help of their grant programme, we can build capacity and add value by training and educating local Omani rangers and people and purchasing much-needed camera traps for our research work.



Through the help of **SIX SENSES RESORTS** & **SPAS**' grant programme, we can run outreach and education programmes aimed at Maldives & Omani children and fishermen about the value of marine resources and how to protect them and local livelihoods.



STORMSAVER is the UK market leader in rainwater harvesting and supports Biosphere Expeditions' project in Namibia (where water supply is a serious issue) by providing educational materials and courses for local children on sustainable living and water use.

COTSWOLD

SNOWGUM









IMPRESSIONS

FROM









THE FIELD





Frequently Asked Questions

Before people join one of our expeditions, they naturally have many questions. Here are some of the more common ones with our answers.

More at: www.biosphere-expeditions.org/faq



Is it for me?

First of all, if you are not sure, then simply join one of our taster days, which are for those who would like to dip into expedition life at home first, before committing to the real thing. Taster days will give you a unique insight into what it's like to be in the field with Biosphere Expeditions assisting scientists with wildlife research and conservation. Or come to one of our events to speak with us in person.

The people who then commit to join us in the field are those who care enough to become actively involved, those who want to come home and tell their friends not just what they saw, but also what they have done about it. Our experiences are real scientific research expeditions, not package holidays, and the way they are run reflects this. You will be living, breathing and sleeping on expedition air, working and sharing in our vision. And if you go to your bed tired out after a day's work, then that will only make the experience more enriching, the memories stronger, and the sense of fulfilment more real. So if you are looking for an adventure with a conscience and a sense of purpose, unlike any tourist or ecotourist will ever have, then Biosphere Expeditions is for you.

Am I too old/young/unfit?

Not in a million years! We are all about being inclusive, so you are never too old or too young, or not fit enough. Have a look at the experiences we offer and pick one that you think is realistically achievable for you. If you are in any doubt, contact us for more details on what it's going to be like and for advice on whether it will be right for you. Oh, and just to put your mind at rest, our oldest expedition team member so far was 87.

Do I need special skills and/or fitness?

There are no special skills (biological or otherwise) at all required to join our expeditions and there are no age limits whatsoever. If you are disabled, please contact us to find out about the suitability of the experience of your choice. If you are healthy and enjoy the outdoors, your fitness level will be sufficient in most cases.

What's the accommodation and level of comfort like?

On our projects and expeditions across the world, the accommodation we use is always locally owned and varies between very comfortable African guest farms, to Amazon lodge research centres, to full blown expedition base tent camps. Whatever the accommodation, we never run 'hardcore' survival courses or anything of that sort. We feel strongly that our team members need to be well fed and comfortable in order to be motivated and efficient research assistants!

Will I be safe?

Yes. Although we are not in the business of controlling nature and expect you to take some responsibilities, safety is our top priority. Our three key watchwords are 'safety, science, satisfaction', in that order. We always have emergency procedures and backup systems in place and each new proposal we receive is put through a stringent safety test before it is added to our portfolio. Biosphere Expeditions has an excellent safety record and it may also come as a surprise to you that statistically expedition life is no more dangerous than normal life at home and certainly far less dangerous than doing DIY! Achieving the expedition's research aims is important, but it cannot be considered successful unless it is also conducted responsibly, safely, harmoniously, and with regard for the environment.

Where does my money go?

The contribution you pay towards your 1-week project or 2-week expedition will go towards advance planning (reconnaissance, team recruitment and logistical support), direct field costs (such as your transport, board and lodging, paying the local scientists and helpers such as cooks and porters, and paying your expedition leader), post-expedition work (the expedition report, scientific publications and other means of making the results known to science and the public), towards supporting the research project itself (which without your help could not be long-term and sustainable), and towards administrative and communication backup. On average at least two-thirds of your contribution will benefit the project directly and locally, the rest will go towards administrative back-up, as well as researching and setting up new expeditions. Within six to twelve months after your expedition you will receive an expedition report with full details on how your expedition contribution was spent on running the expedition and supporting its research work. The expedition report will also show you the fruits of your labour by detailing scientific findings, conclusions and resulting actions. You can see examples of expedition reports at www.biosphere-expeditions.org/reports.

How much does it cost and when do I pay?

Contributions vary between expeditions, projects and taster days, so please check the ones you are interested in by looking at our website. To reserve your place on an expedition or project, you need to send us a £300 deposit. To take part in a taster day a contribution of $\pounds 65 / \pounds 65 / AU \$ 95$ is due to reserve your place. It's as easy as that and the quickest way of doing it is online via www.biosphere-expeditions.org/join. For expedition and projects, the balance of your contribution will be due four weeks before the expedition or project starts.

What happens to the research data I collect and the conservation work I do?

We pride ourselves in our scientific output. Within six to twelve months of the end of your 2-week expedition or 1-week project, you will receive a report with full details on all conservation work done, the data collected, how this information was used and what the results were. This report will be made available to the public, the scientific community and relevant decision-makers in an effort to let the objects of your study and as many people as possible benefit from the work you have done. Where applicable, results will also be published in scientific journals. The report will also contain a detailed budget on how exactly your contribution was spent. So within a year at most, everything will come full circle for you and you will be able to see how your support on the two main levels of data collection and funding has made a difference.

How do I join a team and how do I pay?

Select an experience and a date, check availability on <u>www.biosphere-expeditions.org/availability</u>, then send us your deposit (£300 for a 2-week expedition or 1-week project) or full payment (£/€65 or AU\$95 for a taster day) to reserve your place. It's as easy as that and the quickest way of doing it is online via <u>www.biosphere-expeditions.org/join</u>. For 2-week expeditions or 1-week projects the full balance will be due four weeks before your experience starts (or immediately if it does within four weeks).

If you have any other questions please do not hesitate to contact us and we will be happy to help!



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