

Friends of



Newsletter 2008



INSIDE

- ▶ **SPAIN: Lammergeier & climate change**
- ▶ **NAMIBIA: Sustainable development & local capacity building**
- ▶ **ALTAI: Helping to create one of the world's largest protected areas**
- ▶ **And more...**



**First Choice
Responsible
Tourism Awards**

In association with:
responsibletravel.com
The Times
World Travel Market
Geographical Magazine

WINNER
"Best
Volunteering
Organisation"



**Virgin Holidays
Responsible
Tourism Awards**

in association with
responsibletravel.com
The Times
World Travel Market
Geographical Magazine

**HIGHLY
COMMENDED**
"Best for
Conservation of
Endangered Species"



BEST

"Best Holiday for Green-Minded Travellers"
& "Top Ten Outdoor Pursuits"



A welcome from Martyn Roberts, President of the Friends of Biosphere Expeditions.

I'm delighted to welcome you to the latest edition of the Biosphere Expeditions newsletter, which you have received as one of the exclusive benefits of becoming a Friend.

Having recently returned from slot 1 of the new Caprivi expedition in Namibia, I started reflecting on what a wonderful time we had. What made it such a good expedition with great potential? The answer came to me when I recalled an interview we had done in one of the local conservancies that make up the area in conjunction with the two National Parks. The farmer we had been talking to was really keen for us to get the scientists to move the project nearer to his farm so that he and his neighbours could benefit more from its presence in the area. It was as simple as that. The locals really wanted to support the expedition and see it do well. They are some of the poorest people in the world and the economic benefit it brings to them does make a real difference. Not only were we helping preserve the wildlife and biodiversity of this unique region by doing all the usual scientific research activities, but we were also building a long term and more optimistic future. By involving local people and giving them a real stake in the success of the project we are ensuring long term prosperity for them and greater protection for the wildlife and its environment. If that wasn't enough I'm delighted to report that base camp itself is a model of sustainable development, being constructed mostly from renewable materials sourced locally with a strong emphasis on recycling.

My first expedition back in 2002 took me to another part of Namibia. Looking back at that I can now see how far Biosphere Expeditions has progressed and improved in those few short years. By being a Friend, you help make this happen

2008 has been another great year for Biosphere Expeditions – new projects in Spain and Caprivi, taster weekends in Europe, and a new office in Australia, plus our usual on-going work. I do hope you enjoy hearing about all these and the rest of the stories in the newsletter. Remember none of this would have been possible without your support.

Martyn Roberts

CONTENTS

Message from the President	1
Flagship event – November 2008	2
Opening the Australia Office	3
Taster weekends in Germany	4/5
Our new project in the Spanish Pyrenees	6



Hanyini research station, Caprivi	7
Leopard capture	8/9
Oman reccee	10
Altai: One of the world's largest protected areas	11
Jaguar elusive	12/13
Friends status report & accounts	14
Bits and pieces	14



FLAGSHIP EVENT – NOVEMBER 2008 by *Katie Green, ex-team member*

We were very pleased to run the first of what are likely to be annual events at the beautiful Wetland Trust centre in Barnes, London, on 1 November 2008. The centre is in what used to be a water works site and it is now the only man-made area that is a SSSI (a designation that gives it protection as a Site of Special Scientific Interest) in the UK.



Looking out of the large windows from the room that we were using for the day, you can see a wonderful expanse of water with an array of birds wintering on it, beautiful green margins for nesting and foraging, and just behind all this the tower blocks of London standing on the horizon. We were in an oasis of biodiversity in the heart of a major capital city.

The centre was the venue for a great day. There was an open invitation to ex-team members and people who had never been with us before, and there were plenty of each. People mingled and chatted during extended coffee breaks, over lunch and during the walk around the centre that was organised by the centre wardens. In between these informal times we had talks from Kathy Wilden, one of the Directors of Biosphere, who gave us an entertaining outline of the beginnings of the organisation, some of the stories from the expeditions and her view of what was next. We also had a great run-through of some of the gadgets that were used on expedition by Malika Fettak, one of the core staff in the German office and an expedition leader, and we were able to use radio telemetry gear, GPSs, spotting scopes and many other 'toys'. Malika also demonstrated how hard it is to get a good picture with a camera trap by placing the camera on the stairs and taking pictures of us as we arrived, and then showing us the pictures later – various pictures of an empty staircase, the back of people's shoes, the top of a head, and a couple of excellent close ups. It really brought it home how difficult it was to get a good shot, and Tessa McGregor, one of Biosphere's big cat field scientists, explained that it was usual for it to take up to 2 years to get the sort of shots that we all see in wildlife documentaries.

In the afternoon we felt very honoured to have a short talk from Hadi Al Hikmani, an Omani who has worked with Biosphere on the Arabian leopard expedition for a number of years. He talked about his childhood as the son of a camel herder and his awakening to conservation by a white man coming to study the animals that lived near his family's encampment. He explained the importance of the interest of strangers and urged everyone to keep getting out to remote places and helping in wildlife conservation efforts. Hadi was followed by a talk from Mark Adlington, who is a renowned wildlife artist, about how he works. He showed a short film about what he does and how he manages to capture the movement of animals by working from life and doing a lot of quick pictures. There were some lovely pictures and photos, not least the rescued leopard cub that thought it would have a go at 'this art-thing' and was shown having a go at some painting with a brush in its mouth.



The afternoon was rounded off with a talk and discussion led by Hilary Bradt, the pioneering publisher who started Bradt publishing and has led the way in travel guides to remote destinations. She was honoured in the Queen's birthday list this year for her work on responsible tourism and she gave a very interesting talk about how to travel in a positive way. The discussion that she led was very thought provoking about how we can all travel better – it was interesting to hear the range of ideas and thoughts that came out and to realise that there are many ways to help. She particularly mentioned the 'stuff your rucksack' idea which encourages people to take simple supplies out to charities in the destinations that they are going to. There is a website, unsurprisingly it is www.stuffyourrucksack.com, where you can find out what charities are at your destination and what they need, then all you have to do is take what you can.

After the end of the day, the evening was given over to our former team members, for a candle-lit reunion dinner where the wine flowed and many stories of far-flung places were told. We eventually had to be asked to leave as the venue was closing and people were still talking. I believe the chat continued late into the night for some – very reminiscent of expedition life. ♦

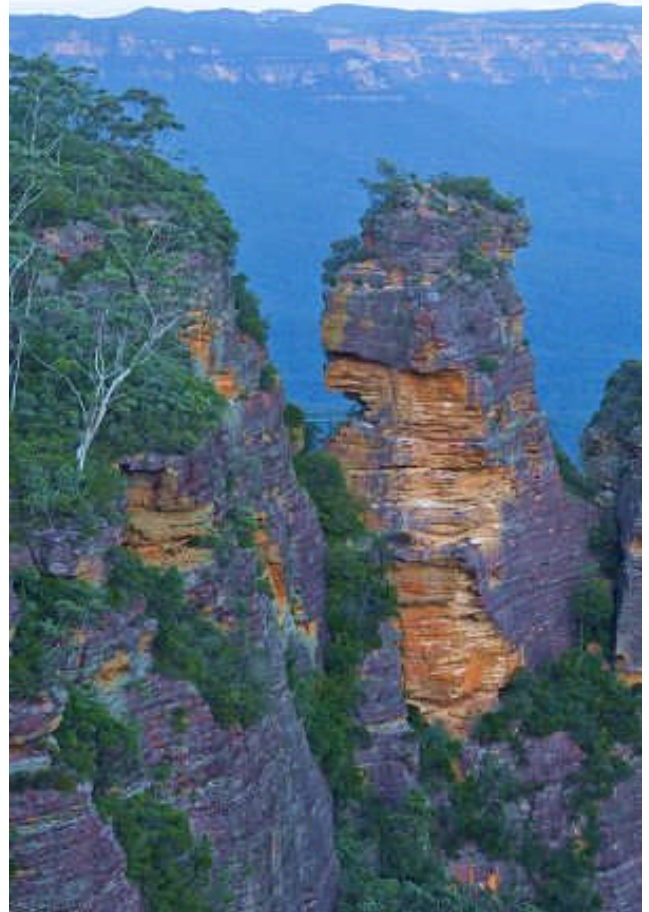
OPENING THE AUSTRALIA OFFICE NEW EXPEDITIONS IN AUSTRALIA

by *Dr. Matthias Hammer*,
founder and Managing Director

From Oman (see page 10) I flew south to Australia arriving in Melbourne mid-October. I have been here ever since, working with Sarah Low, who will be in charge of the Australia office, to get everything ready for opening on 3 November, training Sarah, recruiting a PR agency, researching Australia taster weekends, meeting with Land Rover and generally finding our feet in this new market. Exciting times here, although I am still trying to get used to the idea of spring in winter and Christmas at the beach...



Our Australia office opened on 3 November and I have been in Australia all of November, mainly working on PR and researching taster weekends for Australia, which will now be happening at Lake Eildon National park in Victoria and the Blue Mountains National Park in New South Wales (see www.biosphere-expeditions.org/tasters-australia for full details). We've appointed a PR agency here and they are now working the media, making a start with radio. So I have given quite a few radio interviews (www.biosphere-expeditions.org/matthiashammer > Radio) and we are now switching to newspapers and magazines. The first short interview appeared in Melbourne's "The Age" and the Sydney Morning Herald recently.



The Blue Mountains. The name comes from the blue haze that can be seen on most days. The blue haze comes from the millions of Eucalypt trees growing in the National Park and continuously exuding microscopic oil droplets, which, suspended in the air, create the familiar blue haze.

I have also been in meetings with Land Rover to secure their local support in Australia. We are also about to sign up www.snowgum.com.au as our official outdoor retailer and partner in Australia. It all looks good, but signatures on a contract are still outstanding, so keep your fingers crossed. I have also built very positive relationships with the Oman Tourism Board in Sydney who knew about us and are very happy that we now have an office in Australia too.

Finally, I have started to build a network with other organisations, universities and people connected to conservation in Australasia. There's a promising contact with expedition potential in Papua New Guinea working on tenkiles (tree kangaroos), a koala scientist from Victoria (one of the Australian states), an archaeologist in New South Wales working with aboriginal communities on finding ancient rock art and conducting biodiversity surveys in very remote Walami National Park, a tiger contact in Indonesia, and coral reef contacts in Micronesia and Palau. Let's see where this takes all us....♦

TASTER WEEKENDS IN GERMANY

by *Malika Fettak*,

Operations Assistant and expedition leader

For many it's a big step to sign up for an expedition. Am I fit enough? Will I be able to handle the equipment? Will I get the science? A chance to try it out would be the answer - providing an opportunity to step into the world of Biosphere Expeditions for two days. "You won't know until you try" – the idea of Taster Weekends. The concept is simple: A short introduction, risk assessment, training on the equipment and research work, run as typical expedition days in partnership with local National Parks.

National Park Unteres Odertal, July 2008

Founded in 1995 the National Park Unteres Odertal is a wetland paradise stretching 60 km on both sides of the river Oder (the border between Germany and Poland). Our base is the Oder Hotel outside the town of Schwedt, located right behind one of the dykes. Surrounded by fields and forests, it's the perfect starting point for a range of activities.

camera traps. Time flew by as we did some practical training outside in the hotel grounds. When we met again after our lunch break, everybody was keen to go for the field excursion, sort out personal and group equipment and head off into the wild.



Field walk and practicing equipment



Recording data of a dog track

In true expedition manner we met those who had already arrived the night before at the hotel bar for a chat. The official start was the next day at 09:00. After introducing ourselves and Hilmar, a guide from the National Park and our "scientist" on the ground, we went through safety procedures and research equipment, such as GPS, compass, telemetry and

Starting at the Hotel, Hilmar guided us along narrow paths, through forests and along grain fields. From time to time we stopped to listen and learn about local flora and fauna. We looked for birds using binoculars and searched for animal signs and tracks. We found wild boar hair, where an animal had had a scratch at a tree trunk, and nuts opened by a squirrel. We practised filling in datasheets, taking GPS readings and used our compasses to take a bearing of a dog track.

After a stop at the National Park information centre, we were off again searching for radio collar signals. We knew that collared animals were in the area – a cute little zebra and a fluffy snow leopard, sitting somewhere in a tree, waiting to be found by our team members. When we turned on the telemetry equipment, we had – what a surprise – two signals coming from different directions. So we split up into two groups, each bearing down on a signal. Heading straight towards the signal we left paved roads, crossed fields, climbed fences and made our way through the bush. Both animals were found – some sooner, some later ☺ Needless to say, that the tracked route on our GPS didn't look like a straight line at all. Already late for dinner we completed the activities of the day and set up a couple of camera traps on the way back to the hotel.

After dinner two points were left on the agenda. Team members enjoyed a full presentation of Biosphere's expeditions and projects worldwide followed by one more held by Hilmar including detailed information about the area we would explore the next day. The official programme ended by 22:00 but most of the expeditioners were still seen much later at the hotel bar.



Canoe expedition

Surprisingly two team members turned up next morning at 06:30 to join us on an early morning walk collecting the camera traps – impressive expedition spirit. For all of us later another exciting activity was waiting for us: exploring the National Park using canoes, which is only allowed for a short period of the year and if accompanied by an authorised guide. We all learnt how to handle a canoe and, feeling confident, we entered the National Park - it felt like stepping into another world. Gliding through reed beds, moving without making a sound and exploring nature in a different way. We stopped for lunch under big alder trees and were back at the hotel in the early afternoon, ending the day with some off-road driving in our expedition Land Rovers and bringing to a close a great weekend enjoyed by all – some so much that many took that plunge and signed up for an expedition.



National Park Berchtesgaden, October 2008

Located in the southeast of Germany the National Park Berchtesgaden is the only German National Park in the Alps. Its highest peak is the Watzmann (2962 m), the second highest peak of the country. Our base is the very quaint and traditional-style hotel Rehlegg in Ramsau, complete with dirndl-clad staff. As usual we started with introductions on Saturday morning and training on the equipment, packing up after lunch

and driving a few kilometres to the Klausbachtal, one of three wide valleys of the National Park.

With us was Sepp, our local ranger from the National Park. He grew up in this area and boasted a very distinctive Bavarian dialect alongside a huge amount of knowledge about nature and wildlife. We spent a couple of hours walking and listening to Sepp's explanations about history, geology, fauna and flora. The rare and elusive radio-collared zebra and snow leopard made their appearance again and the day ended with dinner and presentations.



Field walk upwards the Wimbach valley

Three team members went out early the next morning when it was still dark outside, using their head torches to find and collect the camera traps. Having filled our lunch boxes during breakfast, we packed up the equipment and our personal gear to spend the rest of the day outside. Sepp guided us through the Wimbachklamm, a spectacular mountain gorge and upwards in the Wimbach valley. We crossed boulder fields, found animal tracks, filled in datasheets and used all the equipment we brought. We stopped to set up tripods and spotting scopes to observe an eagle's nest. We had a picnic lunch and very much enjoyed the quiet and peaceful area. While the sun was still shining, we had fantastic views of the mountains, with the Watzmann right in front of us. Another great day on a taster weekend and more people keen to take the plunge in future. ♦



Observing an eagle's nest

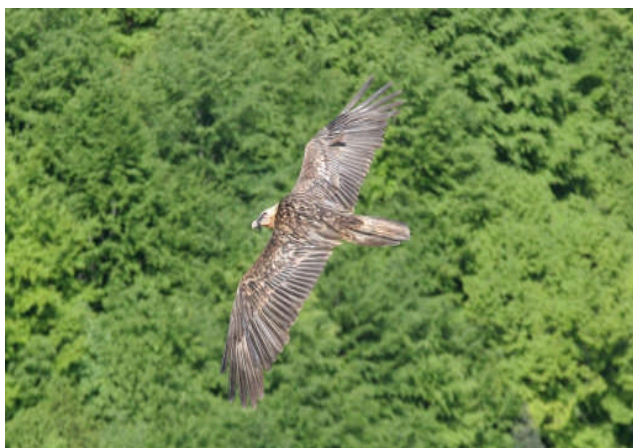
**OUR NEW PROJECT
IN THE SPANISH PYRENEES**
by *Claudia Krejci*, Operations Manager Germany

Our new project in Spain is all about birdlife in the Pyrenees. In the mountains of Northern Spain we monitor the effects that climate change has on endangered lammergeier populations as well as capercaillie and snow partridge (ptarmigan).



Observation point / checking nesting sites

The expedition work is quite multifaceted, as those who are up for a bit of adventure and long walks in the hills can join the research above the tree line to observe the snow partridge. While those who want to have it a little easier can stay in the lower parts to observe the lammergeier from a hide or an observation point and get face to face with them.



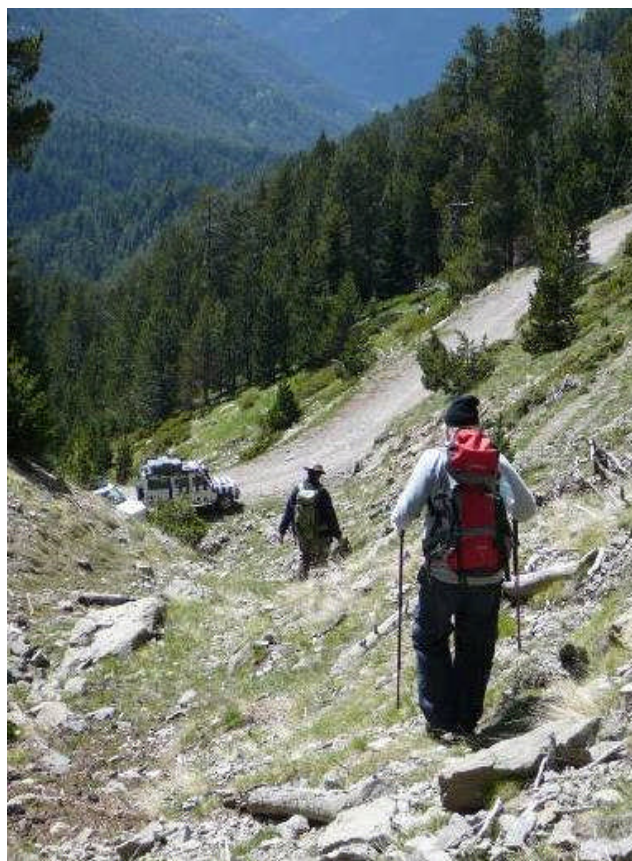
Pre-adult Lammergeier

Climate change is one of the most critical global challenges of our time. Capercaillie and ptarmigan all serve as indicators of an intact ecosystem and information on the distribution of ptarmigan is particularly useful as a local indicator for climate change in the Pyrenees. Cold winters and snow partridges go hand in hand and as such it is important to record any reduction in their numbers so that adequate conservation measures can be taken.



Base: An old mountain farm house,
with its own toilets and showers

Oscar Diez, our scientist on this project, remembers the time when he was a young boy and the snow line was much further down than today and he also says that he can almost watch the snow drawing back to the peaks. When someone actually tells you about this in his own words and drawing from his own experience, it really brings home the immediacy of the problem and the gravity of the challenge. So learning more about it first-hand and contributing in a small way to tackling the problem in this spectacular part of our planet is what really makes this expedition doubly worthwhile and the wonderful experience it was for me. ♦



HANYINI RESEARCH STATION – A MODEL OF SUSTAINABLE DEVELOPMENT & LOCAL CAPACITY CREATION

We are delighted to be announcing the opening of the Biosphere Expeditions Hanyini Research Station in the Caprivi region of Namibia. The station was built by our local scientists, Julia Gaedke and Francois de Wet of the Wildlife Community & Development Fund (WCDF) and funded by Biosphere Expeditions through a very simple, but effective model.



Entrance to the Hanyini Research Station showing individual twin bed huts for expedition team members, staff and other researchers.

Biosphere Expeditions provides an interest-free loan to the scientists and this loan is then paid back over the years with the scientists providing “free” accommodation for Biosphere Expeditions' research teams until the loan is paid back.

That way we generate capacity, local jobs and facilities and in the end our scientists have a research station that belongs to them for their research & conservation work, generate income from and provide employment for local people. A "win/win situation" for everyone concerned.

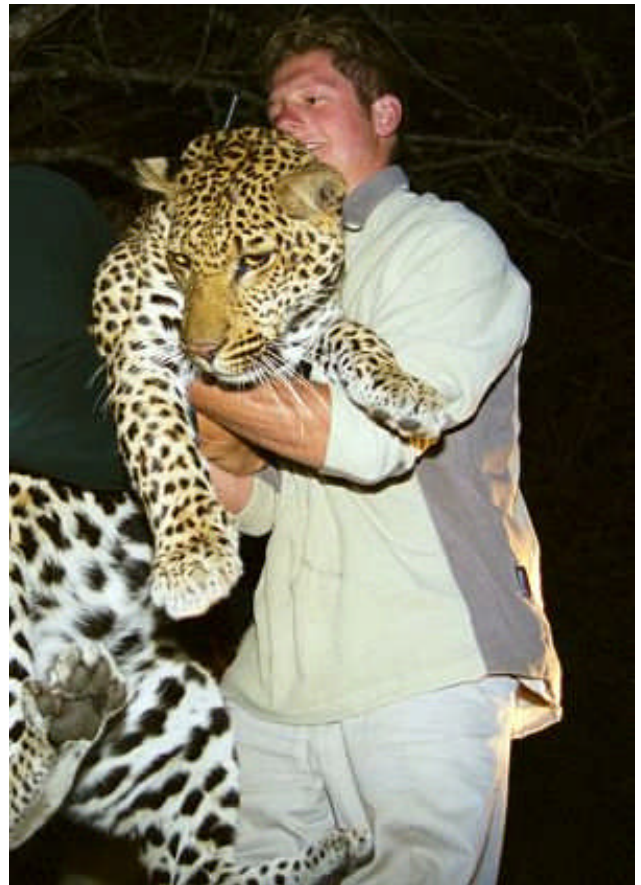


The communal area of Hanyini Research Station with kitchen, equipment storage, presentation and relaxation space.

Situated right on the border of Mamili National Park, the Biosphere Expeditions Hanyini Research Station boasts 14 twin room huts, an office, a kitchen & communal area, showers, toilets, stores & a workshop and elephants migrating past on an almost

daily basis. It is built from local materials using local labour exclusively on community land in the Caprivi region of Namibia and provided employment for 25 local people during its construction phase and now 12 for its day-to-day running. Local resources are not touched as the station is self-sufficient in its power generation, biological sewage treatment and has its own water source and biological filter system.

The station will serve as the base for Biosphere Expeditions' Caprivi expedition and negotiations with universities and NGOs are under way to also make the station one of their research bases.



A radio-collared leopard.

Kathy Wilden, a Biosphere Expeditions Director, says, "We at Biosphere are immensely proud to be involved in this project and to have our name on this beautiful research station. It will stimulate research, provide local employment and help secure the future of conservation in and around Mamili National Park. This park, the Caprivi expedition's main study area, is directly adjacent to famous wildlife hotspots such as the Okavango and Chobe National Park in Botswana, but it is rarely visited by foreigners at all and as such is one of the last true wilderness areas left in southern Africa. We are delighted to be well placed now to make sure that this wilderness is protected and enjoyed in a sustainable way for future generations." ♦

LEOPARD CAPTURE

by *John Rawnsley*,
team member Caprivi expedition



Having loaded the Land Rover pick-up with capture gear, food, vehicle recovery equipment, overnight gear and ourselves (Francois the scientist, Edmore the vet, Martyn and myself the guest research assistants) we set off into Mamili National Park to look for animals on our list of study species (lion, leopard, cheetah, hyena, wild dog) and to try and dart one or more to fit radio collars.



We soon come across a large herd of around 300 buffalo, which would no doubt attract the attention of the local lions, so we cast around looking for lion spoor and soon come across tracks of a pride of four heading in the general direction of the herd. A passing troop of baboons is also quite excited about something, so we feel we are getting close. But we lose them in the growing gloom. We then set about systematically quartering the area, stopping only for a quick dinner and to fire up the spotlight when it got dark. We go on for several hours finding a number of small cats (wild cat and serval). Then Martyn finds the eyes of another cat with the spotlight which we think is another serval, but Francois spots its tail which gives it away. It is a small leopard, a juvenile and because it is not so clued up it sits and watches us. Edmore and Francois prepare the dart gun and discuss how to get closer. There is so much thick undergrowth including mopane which we cannot drive through.



Edmore does the driving whilst Francois tries to line up a clear shot and Martyn operates the spotlight. In the light of an almost full moon I can see the leopard clearly using my binoculars and much better than with the Russian night sight we have brought along. Francois tries a shot, but it misses and the leopard runs behind a nearby tree. I can see it looking round the tree and curiosity gets the better of it and it comes round to sit in front of the tree to watch us. We work to get closer and whilst I monitor the leopard with binoculars, Francois reloads the dart gun. This time the dart finds its mark in the shoulder and the leopard is startled and runs. It takes us a heart stopping 30 minutes to find it driving up and down the area dodging thorn bushes and mopane groves. Francois spots her by a termite mound and she is still partly alert, so he prepares another dart and approaches on foot to fire it from close range. But it bounces off bone and does not inject. No more darts.

Edmore prepares a syringe with a top-up dose and asks us to wave torches around in front to distract her whilst he goes round behind to administer the immobiliser drug manually. Francois thinks the leopard is young enough to still be with its mother and he is nervous she may be nearby so he sends me back to the Land Rover to turn the spotlight on and search the area. There are eyes approaching from the direction we drove up so I wave the light around in front to discourage their owner from coming closer while we wait for the drug to take effect and bring the leopard over to the car.



We put her on the tailgate of the Land Rover and Edmore checks her over, and declares her old enough to collar (but the collar will need changing in around 3 months). So we start taking and writing

down her vital statistics. Overall length is 166 cm (which in the excitement is written down as 66 cm, oops). I use my camera to take photos of her spot patterns (for leopards a unique identifier such as human fingerprints or retinal patterns) and dentition (she has a full set of teeth), and Francois fits the collar. She is named FLE1 (female leopard number one). Edmore notes that she has lice and finds evidence of mange on her ears. He takes blood samples. She is already showing signs of the drug wearing off, so we check we have all the data sheet filled in, take the final photos of her with the team members and leave her on the ground, pack up the equipment and withdraw a short distance to give her protection from other predators as she recovers. The eyes are still watching us from 50 meters and the outline of a larger leopard is clearly visible.



Francois has recovered two of the used darts, so we contemplate also darting the mother. But she is much less naive than the cub and every move we make to get within range she counters and retreats deeper into the bush, always just out of shot. We think she is only hanging around because of the cub, who is now back on its feet and recovered. After a while we decide to give up and let her go this time. With her cub collared, she will be easier to find another time using telemetry and hopefully on better ground.

It is around 2:30 am and we are all elated at what we achieved so when Francois asks what we want to do. We decide sleep is out of the question, so let's go find those lions. It is now quite chilly on the back of the pickup and I am shivering, but we carry on

searching, only turning the car towards home around 4 am, but searching all the way back.

Around 6:30, just after dawn, we come across a small elephant family and try to drive across their path to reach the camp. The matriarch doesn't like that and immediately starts to charge. Francois spins the car around drives flat out back the way we came. She chases us for what seems like an age before deciding we've learnt our lesson. We turn back and head towards camp again, this time without incident and check back in just after 7 am.



A busy 15 hours. Our leader Peter complains because we didn't phone ahead to announce our success.



The next day Edmore, when checking the data sheet, notices that the body length is anomalous at 66 cm. The tail is 69 cm long and the body length is from nose to tip of the tail! Fortunately we have a photo of the leopard on the tailgate and there are protective strips of metal at regular intervals, so I can lay out a piece of string on the tailgate where she lay to create a virtual leopard and measure that. It comes to 166 cm.

Francois and Edmore are dedicated professionals. Martyn and I didn't have the same stamina and the cold got to us both towards the end of the night. It was a privilege to have been with them and to have assisted where we could. And I won't ever forget the feel of that warm soft fur as I put my hands under her tummy to help lift her down onto the ground. ♦

OMAN RECCEE

by *Kathy Wilden, Director*

Oman – land of swirling sands, incredible Sheikhs' palaces, the Arabian Gulf, the Empty Quarter, the Straits of Hormuz..... What a fantastic place for a new expedition.

A reccee for a new expedition is a great and exciting thing. An idea has been proposed, the scientists are keen to get important work done, but we don't know if the logistics will stack up and how a potential project will work on the ground. Enter one of the Directors of Biosphere Expeditions who has to get out there. And I've been lucky enough to get a diving reccee in Oman...



This project is beginning in a way that it is a little different to our usual approach. Normally a scientist will approach us with an idea for work that they would like our help with, they submit a full research proposal and we then discuss the logistics. However, in this instance we received a grant from HSBC to undertake a marine survey around the coast of Oman, something that a number of scientists had said would be an important piece of work, but as yet, we do not have a research methodology and little is known about parts of the area that we want to cover. This reccee is therefore not only to look at the logistics, but, more importantly, to bring together some of the top scientific minds in this field so that the best protocol can be established and the greatest benefit be derived from our teams.

It is at a baking harbours-edge in Khasab that the group for the reccee first meet. We make a mixed ensemble, standing on the cement next to our dhow and shaking hands over the kit-bags, boxes and dive gear that make up our expedition kit. The group consists of: myself; Matthias, our Managing Director; Jon, the Oxford University marine biologist who leads our Honduras coral reef diving expedition; Suhail, who works for our sponsors HSBC and, as a recently qualified diver, he represents our guinea-pig team member; Michel, a professor at Oman's main university and the man who has just written *the* book on the coral reefs of the Arabian peninsula; Rita, who is a marine biologist working out of Dubai and Oman; and, finally, another leading marine biologist, Gregor,

who has come all the way from Los Angeles and his base as the Chief Executive of Reef Check (the global coral reef database that our data will feed into).



The team spends the next four days with talking, diving, eating, data gathering, data entry, more diving, more eating and a lot more talking. The scientists debate the taxonomy of the array of corals that we see, Gregor talks everyone through the standard Reef Check methodology and the local biologists suggest various adaptations for the local environment which are debated and discussed further. Suhail and I, as the only non-scientists, spend a lot of time asking questions and having things very expertly explained to us. Suhail also gives us some wonderful anecdotes about life in Oman, and, oddly, life in Southampton, England, where he has recently visited and where he says it rains a lot!!

The food on board is amazing and we all put on several pounds. The boat moves at speed around the coast so that we can 'bounce dive' (these are 15 minutes dives) and cover as many sites as possible in the time. Divers are dropped off in pairs to undertake quick patch surveys, they are then collected and the boat moves on to the next bay. Gregor is amazed at the quality of the corals here and likens them to some of the best he has seen any where in the world (and he has been to a lot of places!).



At the end of all this the scientists are all agreed on the methodology, the logistics are sorted with local partners, and a new project is ready to launch. All that is left to do are a few press interviews about our trip and we are on our way to our respective homes. The expedition will be in October 2009 and I'm already looking forward to joining the boat with the first team (check out www.biosphere-expeditions.org/musandam). ♦

ALTAI: HELPING TO CREATE ONE OF THE WORLD'S LARGEST PROTECTED AREAS
 by *Claudia Krejci*, Operations Manager Germany

This year we were able to announce that the ministry for nature conservation of the government of the Altai Republic has initiated further moves to declare the Salyugem region, which is within our research area, a natural reserve and to establish a new protected area for snow leopards along these mountain ridges. This is another big step towards the major goal of creating one of the world's largest protected areas in the Russian federation, also enclosing the Altai Republic.



Conservation and nature protection has a long tradition in Russia. As early as 1954 the Russian Federation joined UNESCO and nowadays there are 23 sites inscribed on the World Heritage list, eight of which are natural sites. Russia also boasts 37 biosphere reserves in UNESCO's MAB program (Man and the Biosphere), an idea that has evolved since 1974. The two classic protection categories in Russia are the Zapovedniki (strictly protected areas) and the Zakazniki (wildlife refuges). The Zapovednikii are areas of greatest protection, in which no operations or utilisations are allowed as well as no interference with the natural processes.



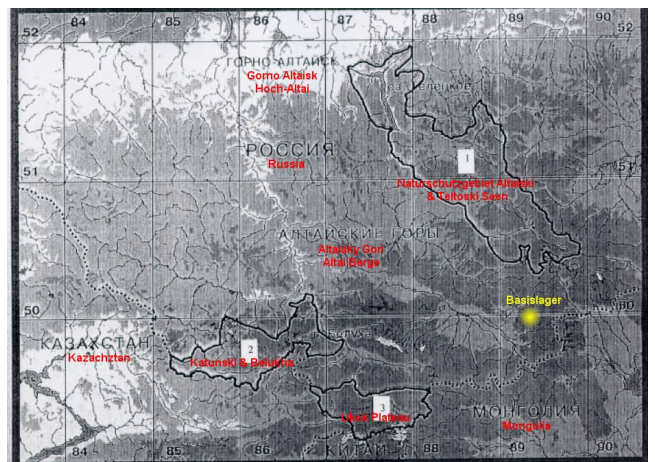
Usually there is a core zone which is surrounded by a buffer zone. They are mainly managed by the department of nature protection of the

Russian government and have a budget and an infrastructure of their own. These areas comprise about 2% of Russia's territory and there are about 99 Zapovedniki, two of which are within the research area of our expedition. The Zakazniki usually only have temporary confinements on economic operations and utilisation. They mainly serve the protection of natural ecosystems, rare and endangered plants, animals as well as fossils and in

most Zakazniki hunting of specific endangered species are prohibited. There are about 4065 Zakazniki in Russia and they have no administration of their own, but are managed by regional or federal authorities. They are often used for resettlement of endangered or rare species.

Our research area is located in the Altai-Sayansky bioregion and in the west of this region the two Zapovedniki Katunsky and Altaisky are sited. Katunsky was established in 1991 and therefore is quite young. It is about 1500 sq km in size and has the largest glacier systems of Siberia with 148 single glaciers. In the steppes one of the greatest plant diversity regions can be found and the higher mountains are one of the most important habitats for snow leopards. Altaisky, on the other hand, is one of the oldest Zapovedniki, which was created in 1932 and was the sole Zapovednik until 1976. More than 20% is free of vegetation and covered by snow and ice.

The Salygum, the region which will be turned into another protected area, is just next to our base camp and in between Katunsky and Altaisky; our base is in the shadow of the Salygum ridge. The area around the Salygum ridge will then belong to the category of Zakazniki.



For five years now our research teams have helped to collate important data on the presence or absence of the snow leopard, about its habitat and prey species and also about the biodiversity in our research area. Together with data from other teams (such as those from WWF), it serves the ministry for nature protection as a basis for discussion with the government and parliament. As in many other places, all of this takes time, and it will take until around Christmas when the discussion will be brought before parliament. The indicators are good that in the end we can say we helped to create another protected area in the Altai.

Watch this space and keep your fingers crossed... ♦

JAGUAR ELUSIVE

by *Erin McCloskey*,
Operations Manager North-America

Tracking jaguar and puma under bromeliad-laden jungle foliage of the Atlantic Rainforest, a small team of international volunteers with Biosphere Expeditions is assisting local biologists in efforts to conserve a previously unstudied area of the Mata Atlantica in Brazil, and the rare species that survive within it.

Volunteer wildcat-stalkers are taking part in the first-ever concerted conservation project of the yet-unstudied populations of jaguar (*Panthera onca*) and puma (*Puma concolor*) in the most southern range of Brazil's Atlantic rainforest. Dr. Marcello Mazzolli is the lead biologist on the research expedition. When asked about his research, Mazzolli's eyes light up. "No-one else is doing this kind of work, which in one way is surprising, since jaguar and puma are two important flagship species for this very threatened habitat. But then again it's not surprising, as working in this remote and challenging environment, chasing two elusive species is not really everyone's cup of tea. But that's exactly what makes it unique and a great reward for those who are prepared to put in some effort".



Accessing the remote study site tucked up in the hills is part of the adventure. To be surmounted by steep hills, rocky passes and deep muddy ravines that only a 4x4 could conquer. Wooden bridges are crossed or where a bridge is too damaged, washed out or never existed, rivers are triumphantly traversed. The expedition Land Rovers seem to take every obstacle in their stride, although a machete or two comes in handy to clear overhanging or fallen branches. After a couple of hours the research team arrives at camp with a new definition of potholes and a new appreciation for the paved roads back home. Seeing the people who live high in the hills walk all day to the nearest village and back, the uphill journey with a large load of supplies on their back, makes the team grateful that the supplies for the expedition are brought by Land Rover. They are also grateful for the amount of fruit and vegetables that grow in the jungle, such as oranges, papaya, manioc and covey among others, which freshly accompany the dry goods brought in.



Jungle Hotspot

Outfitted with compass, GPS and data-collection sheets, the teams split into groups of three or four on reconnaissance missions to find evidence of the great cats amongst the diversity of life in the jungle. Beneath a dense canopy that shades the ground — and the heads of team members — is an Eden of bromeliads, birds-of-paradise and ground-spreading blankets of pink, white, red and purple impatiens celebrated by a chorus of frogs and birds. The study site is adjacent to the Saint-Hilaire/Lange National Park and reaches to the mangrove lowlands along the Atlantic coast. Declared a UNESCO World Heritage Site in 1999, most scientists rank the Atlantic rainforest as one of the top three priorities for global conservation efforts. The Atlantic forest ecosystem is recognised by the IUCN (International Union for the Conservation of Nature) as one of the most unique habitats on Earth and one of the world's "hotspots" of biodiversity — over 400 vascular plants per hectare, half of which are endemic, 215 identified species of mammals, 73 endemic, and out of a total of 183 species of amphibians, 91.8% are endemic. Regrettably, 171 out of 202 species of vulnerable status in Brazil are from the Atlantic forest, which has been reduced to less than 8% of its extent at pre-colonial times because of intensive human occupation, beginning with sugar cane plantations in the 1500s and later coffee plantations. Today, small villages exist in the hills, but for the most part, the study area is part of the untouched residue, wild and remote.





The research team skips from grassy to rocky patch around the track trap they have set up in a prime swath of trail. They quickly learn to identify the tracks of various rainforest species: raccoon, with its long human-like fingers, tapir, with feet so large they are unmistakable, fox, with its triangular sharply nailed toes, and ocelot, with its pretty feline paw. Finding daily abundance of both peccary and tapir was promising and one morning, the discovery of puma track was cause for celebration — a swim in the river followed by some caiperiña back at camp! Camera traps are also set up on high-traffic wildlife trails and motion detectors snap photos over the course of several days and nights. The treks to find the best locations for these cameras are infused with speculation and conjecture as discussions unfold as to where you would wander, if you were a peccary, a tapir, puma or jaguar. The pace of the trek increases with anticipation when retrieving the camera and finding the camera hidden by one of the other teams is a true treasure hunt — in the course of the expedition, peccary, tapir, ocelot and puma were all recorded but the jaguar continued to be elusive.

Will the cat come back?

One of the few remaining jaguar populations in Brazil is believed to survive in this broadleaf rainforest, though the population is extremely reduced, estimated to be 200±85 individuals distributed in small and disconnected sub-populations. Protecting this southernmost isolated population is vital as it contains the source population from which jaguar numbers could be re-established by connecting it to other source populations, which are found hundreds of kilometres inland. Data Mazzolli has collected show the ongoing process of jaguar extinction in Brazil.

“Once jaguar used to roam all over southern Brazil down into Santa Catarina state and elsewhere”, says Mazzolli, “but sadly they have gone from these places and are receding by roughly a degree of latitude per decade. The puma is still clinging on as it’s more adaptable. But it too is struggling. It is expeditions such as these, which will grab people’s attention and make them listen. The mere fact that we are here with people from all over the world, taking an interest, already makes a big difference in changing people’s hearts and minds. We involve them in the work and show them

ways that cats and people can co-exist. If pumas and jaguars are to have a chance in the future, this is the only way forward. Involving local people in global conservation efforts!” When talking about this, Mazzolli’s passion is both obvious and inspiring for both local people and foreign expedition team members alike.

Results of several enquiries in villages neighbouring the mountain ranges pointed to the presence of jaguars; to guarantee that they have a better chance of survival the project aims to identify, restore and protect prime habitat areas where jaguar still range and to promote ecotourism to increase the value of fauna and flora for local people. It has also begun to establish an information network with universities, environmental agencies and private stakeholders to monitor jaguar records in the animals’ recent historic range and build a rescue network for attending livestock depredation incidents with conditional compensation for losses to prevent poaching — commercial exploitation for their skins is no longer a factor since the jaguar was placed on the CITES list and trophy hunting made illegal in Brazil, but jaguars still face local extirpation at the hands of farmers who perceive the cat as a threat to livestock. There is also significant poaching of peccary, desired prey of jaguar and puma, and the palmito tree (*Euterpe* spp) that is felled for its heart that is eaten in salads in South America and beyond, the fruit of which is açai (ah-sigh-ee) and relished by peccary and tapir in this spider-eats-fly scenario: the more açai, the more peccary and tapir, which means more jaguar. With cooperation between farmers and government agencies and the managers of public and private reserves, economic initiatives are being proposed to export the more sustainable and profitable fruit (and also newly recognised by health experts for high antioxidant and fatty and amino acid content) and map potential connectivity to create a wildlife corridor.



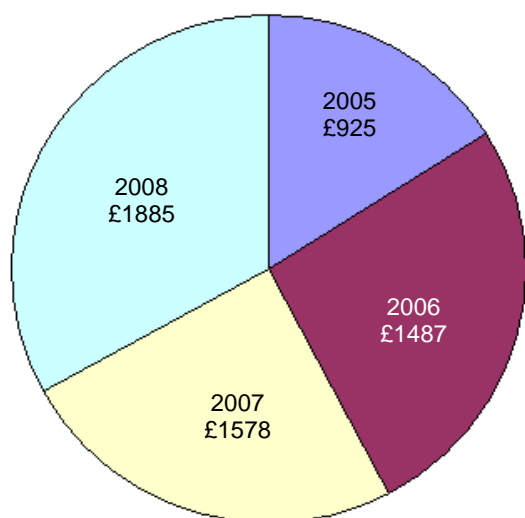
The data that this team and subsequent teams gather will help build up the picture of what is happening here, and, with luck and some determination, will lead to increased support for this incredible stretch of pristine forest and the living world that is within it. ♦

FRIENDS STATUS REPORT & ACCOUNTS

The Friends of Biosphere Expeditions were created in August 2005 as a non-profit society in response to requests from expedition team members to stay involved and up to date. Martyn Roberts, a veteran of now six expeditions (Namibia, Altai, Brazil, Slovakia & Azores), was a driving force in their creation and became the Friends' first President, a post he still holds today.

Soon after the Friends' creation, the first two members joined up on 9 August 2005. Today we have more than 50 members, hailing from the UK, Germany, Austria, Australia, Canada, the USA, France and Kyrgyzstan. There is about an equal split between those who have been on expedition with us before and those who have not, so we are managing to convince both sides of the fence.

To date we have raised £5875 through membership fees (see below). Almost 100% of this is currently sitting in a society endowment fund and we do not deduct any administrative fees, as the Friends are run on the back of existing Biosphere Expeditions staff time and resources.



Funds generated through the Friends 2005 – 2008.
TOTAL £5875.

With our threshold of £5,000 reached, we will now begin to ask scientists and partners to submit small grant applications, which we will assess internally and externally for their merit before making small grants, for example to train up local staff, build local capacity, purchase essential research and conservation equipment, etc. The first grant of this type was awarded recently when we supported our scientists in the Azores with a grant of £225 to help them travel to a scientific conference to present their and our results on whale and dolphin research.

In the next newsletter we will of course keep you updated on the Friends finances and other grants that we make over the course of 2009. ♦

BITS AND PIECES

In 2008 we launched our three-tier approach and now have **three “legs” to stand on** – 2-week expeditions, 1-week projects and taster weekends.

2008 has been a record year. Each office broke its previous record of number of people recruited, with the UK more than doubling its intake and Germany tripling it! The German-speakers from Germany, Austria and Switzerland have for the first time overtaken the British in number of team members. This is largely due to the PR success we have enjoyed in Germany in particular. Thank you to everyone who helped make 2008 a record year.

The **Slovakia project** scientist has retired due to health reasons and we are looking to continue our work there in 2010 with a successor scientist.

2009 will also be a sabbatical year for our **Brazil expedition**, as we are changing the time of year we conduct our research in. The expedition will return in May 2010.

The **new website launched** at the end of 2007 and has been operational for a year. It was received very well and was a major contributor to our record year of 2008.

PROGRAMMES IN 2009

Oman (2-week expedition)

Arabian leopard | January-February 09

www.biosphere-expeditions.org/oman

Honduras (2-week expedition)

Coral reef | March 09

www.biosphere-expeditions.org/honduras

Azores (1-week project)

Whales & dolphins | April 09

www.biosphere-expeditions.org/azores

Spain (1-week project)

Lammergeier & climate change | June 09

www.biosphere-expeditions.org/spain

Altai (2-week expedition)

Snow leopard | June-August 09

www.biosphere-expeditions.org/altai

Caprivi (2-week expedition)

Big cats | August-November 09

www.biosphere-expeditions.org/caprivi

Musandam (1-week project)

Coral reef | October 09

www.biosphere-expeditions.org/musandam

Brazil (2-week expedition)

Jaguar & puma | May-June 10

www.biosphere-expeditions.org/altai

Taster weekends run throughout the year in the UK, Germany and Australia

www.biosphere-expeditions.org/tasterweekends



Friends newsletter © Biosphere Expeditions
Thank you to all contributors & editors

To join the Friends, see www.biosphere-expeditions.org/friends or contact
UK: 0870-4460801, uk@biosphere-expeditions.org
Deutschland: 07127-980242, deutschland@biosphere-expeditions.org
France: 01-53170820, france@biosphere-expeditions.org
North America: 800-4075761, northamerica@biosphere-expeditions.org
Australia: 1800-708261, australia@biosphere-expeditions.org