



EXPEDITION DIARY Altai 2010

By Andy Stronach & Kathy Wilden

22 June

Dear Altai expeditioners

This is the first diary entry for the 2010 Biosphere expedition to the golden mountains of Altai in search of snow leopard.

This is just a quick note from Andy & I to let you know that we in the midst of preparing for this year's Altai expedition and about to head off to Novosibirsk where we look forward to seeing you.

We will be e-mailing more once we have taken possession of the Land Rovers, made sure the Russian mobile is still working, re-stocked supplies, etc. and things are all set up for your arrival.

For now, just a quick word about the 2009 expedition report and the 2010 base camp location. Our scientist Volodya has only just managed to finish his draft report and we have not had time to make this into a full-blown Biosphere Expeditions report. Please could you all berate Volodya once you meet him and tell him to hand in his report a lot earlier next time :) For now and so that you have the latest information, please find attached the draft reports for you to study and learn by heart before you arrive ;)

Finally, about the base camp. Those of you who have been to the Altai before, know our tried and tested camp location. This year we were hoping to change location to open up more survey areas, but it's been a very harsh winter, even by Siberian standards, and several roads and bridges have not survived. Our scouts also tell us that there's also still a lot of water in the rivers. All this means that we will be in our normal, tried-and-tested (and also very beautiful) location for slot 1. We will also use slot 1 to scout out other locations and then move base in between slots. Or we may not - it all depends on what the situation is like when we get there. A good example of expedition life - and the 'stay flexible' motto...

I hope your preparations are going well and you all have your paperwork in place! We look forward to seeing you at the Hotel Sibir in due course.

Kathy Wilden
Strategy Director
Biosphere Expeditions

23 June

Kathy Wilden and myself meet at Heathrow airport in London and jet off to Moscow, the aircraft groaning under the weight of our bags full of equipment for the expedition. It's taken a long time to prepare; in Russia, unexpected events are the norm (which is all part of the fun), but hopefully we have most eventualities covered so that we can spend our time in the mountains. It would be great if everyone who is coming on the expedition could make sure they have everything on the kit list so we can just get stuck into the fieldwork.

Since I was last there, Moscow's Sheremetyevo airport seems to have been completely re-built and it is thankfully, far more user friendly and less time consuming. Unlike previous times I have been at Sheremetyevo I did not need to change terminals between my international and domestic flights; I don't know if this always applies, but check before you go rushing off to a domestic terminal.

23 June

We had an overnight flight to Novosibirsk and the early morning, as we descended was stunningly beautiful. There was a very thin layer of mist at ground level stretched out like silk with woods and small groups of birch trees bathing their heads in the warm morning glow, magical.

We checked into Hotel Sibir and then commenced on a day filled with getting our two brand new Land Rovers (which we will need to take great care with), getting the paperwork sorted out, buying snow chains, etc. etc.

In the evening we interviewed some students, the best of which will be joining us on the expedition on studentships. They will assist us in our work, gain experience and let others know about snow leopards, nature conservation and the work we do. This should be a great opportunity for a bit of cultural exchange too.

24 June

More shopping for medical supplies (please make sure you all have a good personal medical kit with you), batteries, duct tape, more tape (every good expedition needs lots of tape!), etc. etc.

I have a mobile phone for expedition use, the phone number is +7 983 308 0124, please note that this is a different number from previous years. This number should only be called in cases of emergency and please be aware that due to the expedition working in remote areas, it is probable that you will not get me and a reply will normally take a considerable time.

I look forward to meeting everyone on slot one; I will be in the reception area of Hotel Sibir at 1930 on Sunday evening where I will brief everyone on the journey to base camp. After, if you like, we can go all for a meal at a local restaurant. It will be great to meet you all at last and set off for the Golden Mountains, can't wait!

26 June

Spent the day shopping in Novosibirsk and taking one of our Land Rovers to the garage. The Land Rover lost power occasionally and cut out twice, hopefully it was just dirty fuel that should eventually flush out, however, the mechanics had it all hooked up to computers to give it a thorough check before we head off.

27 June

Happy birthday to Novosibirsk, happy birthday to Novosibirsk...

Kathy headed off with Oleg to Gorno Altisk so she can meet with university personnel tomorrow. Volodia, our expedition scientist, arrived from Kiev this morning, soon after, he, Masha, Mila and I went to meet Alexander of the Siberian Environmental Centre. We discussed the work he and we were doing, how we could help each other, other NGO's working in the area; all very interesting and useful. Afterwards, we went for a walk in the botanic gardens where I was savaged by mosquitos and a few fairly large trees had been savaged and felled by beavers; impressive.

In the evening I met all of team 1, sorted out paperwork and then we all went out for a meal together which was a great opportunity to start to get to know everyone.

Got back to the hotel afterwards just in time to get a great view of the city's birthday celebration fireworks, spectacular!

28 June

Happy birthday to me, happy birthday to me....

With everyone packed and ready to go, we were first into the dining room for breakfast when the doors opened. After a breakfast big enough to last us the entire expedition, we set off in our Land Rover and mini bus. I drove the first section through the sometimes crazy drivers of Novosibirsk, till we reached the quieter countryside where Uwe and later Simone took over; I was delighted to see they were both competent and careful drivers. Lunch was at the honey market where we had piroshkis – very traditional Russian 'pies' filled with either potatoes, cabbage, liver or eggs and onions, all delicious. Dessert was bliny (pancakes) filled with either strawberries or cherries; wow, they were good :)

Soon after, we crossed into the Altai Republic and then into Gorno Altaisk where we met Kathy and Oleg. Here, we registered with the authorities, eventually..... and then continued to Mikhailovo where our driving for the day stopped and my birthday fun started. At dinner, Volodia produced some chocolate liquors which we shared and Madeline gave me a mountain of Toblerone chocolate which she had carried all the way from Switzerland, but even better, we danced Tango – didn't think that was going to happen in Altai! We rounded off a great day with a banya (sauna) and off to bed in the quiet of the countryside

29 June

Mikhailovo to base camp.

Headed off after breakfast, Uwe and Simone driving to get more practice with the Land Rovers before we start doing off-road driving. Driving up the Seminsky pass, the roadside verges were spectacular, filled with flowers. Though not fully out, there were butterballs, aquilegia, roses, bluebells, spirea, sauceria, ranunculus, rumex and with apologies to Christine for forgetting what she taught me, many others. When there is a wet spring in Altai, the wildflowers can later be absolutely spectacular, totally carpeting the land in great swathes of blues, yellows, oranges and purples; I think it may have been a wet spring :) We had great luck in seeing a golden eagle land right at the side of the road, only about 20m from the vehicles where it was eating a ground squirrel or souslik, amazing to be able to see it so close. We crossed the Chiki Taman pass, the second and final for the day, thereby crossing a sub bio-geographical zone boundary; the change was dramatic in the space of only a few kilometres: before the pass, lush and green whilst after, drier, rockier, browner. Before the pass the people were almost exclusively of European appearance, whilst after, Mongolian. Now, we are heading to Kosh Agach, the last town before we arrive at base camp, hopefully I'll be able to post this diary entry from there :)

30 June

Well, as you see, the Kosh Agach internet facility is as reliable as ever..... After arriving at base camp last night and being fed lovely soup by Nina, we all went to bed and slept like logs, despite the sub-zero temperatures. Because of the long and exhausting drive of the past two days, we had a late breakfast before getting stuck into the training day. First, Volodia took Claire, Anja and Madeline for a walk in the forest, looking for sign of animals, whilst Simone and Uwe learnt some off road driving with me. We practiced driving up and down steep and loose slopes, marshalling and crossing rivers and boulder fields. It was fantastic at the end of the training to watch Simone marshalling Uwe across boulders, round a sharp corner and finally up a steep loose slope close to the limits – very competent and impressive; we are in safe hands :)

We started the afternoon, with the health and safety briefing, then navigation (map, compass, GPS) and finally, Volodia completed the training day with a session on the science; what we plan to do, how we do it, why we do it and who uses what we produce.

1 July

Volodia went with Kathy, Simone, Uwe, Anja, Alexi, Anton and Oleg to a valley near the winter station to carry out the first survey of the expedition. The weather could have been a little better (it was pouring with rain and cold for most of the time they were out!) but they persevered with the survey and were rewarded with a fantastic display of wild flowers which are particularly good in this valley and particularly good in general this year. Meanwhile, Claire, Madeline, Masha and Anton went with me to survey the lakes in the steppe for birds, this went very well. As well as having much better weather than Volodia, there were lots of great birds such as black tailed-godwit, slavian grebe, white-winged scoter, citrine wagtail, demoiselle crane, teal, red-crested pochard, ruddy shelduck and black crane to name but a few.

2 July - Yurt interview

We woke to another very wet day so decided against heading up a mountain and instead set off to do some interviews at yurts. Yurt interviews are an integral part of the expedition survey methodology, where we interview locals to find out their views towards Snow Leopards and other animals and whether they have seen any. We set off up the Buguzon river valley; with Simone and Uwe at the wheels, we crossed the river with ease even though it was higher than normal and the river bed had been drastically altered with the spring melt water spates. A little further on, where it was very wide, the river bed was almost full of ice well over a metre thick. Abi and Gulinara are good friends of the expedition and I was disappointed to see their yurt spot by the river at the end of a very beautiful valley was unoccupied. Other yurt locations were similarly empty; I thought it and Volodia said that perhaps we would not find any yurts at all in the valley.... We passed many memories on the way; a pool on the river where we frequently saw locals fishing for the wonderful silvery grayling that fill the clean mountain rivers and a small standing stone carved with the face of a man from some unknown past.

All was not lost however and just past the petroglyph we spotted a yurt, the only trouble was how to get to it – it was at the other side of the river. After due consideration of water depth, size of rocks on the river bed, necessity of crossing and a whole host of other things we decided on plan B :-). Plan B materialised a couple of kilometres up the valley where there were two yurts; Claire, Simone, Volodia and I crossed a small river and went to one yurt whilst everyone else went to the other. We were greeted with great hospitality, which is wonderfully normal here. We were invited into the yurt and were given bowls of tea and lovely 'olive' bread onto which we spread a slice of cream – the thickest and tastiest cream ever :-). Volodia, being the only Russian speaker in our group wove all the questions we had for our interview into the conversation which was delightful.

Unfortunately, there was no-one at home at the other yurt, so after lunch, we all headed off, up a nearby valley to survey it. There was very little in the way of sign of animals, but the wild flowers were spectacular and we found a few big mushrooms which we brought back for Nina to work her culinary magic on.

On the way back, we stopped at Campii Petrovich's yurt and arranged to have dinner there on our last day. Campii was in the mood for a bit of bartering and offered us a bucket full of lovely, freshly caught grayling fish (which his kids were battering each other with) in exchange for 20l of petrol; unfortunately we didn't have any petrol - tenderized grayling could have been good!

3 July - Koshalu and Kosh Agach steppe lakes

On the steppe, around Kosh Agach, there are many small lakes, on which we have noticed birds as we whizz past en-route to base camp, but we have never surveyed them; this was the day. Claire, Madeline, Masha and I set off, binoculars and bird guides in hand. Just after passing Kokoria, on a telegraph pole, I noticed a small falcon, which turned out to be a Merlin, which got Claire all excited as she had not seen one before. Throughout the day, we covered the steppe from Kokoria to Kosh Agach and a little beyond, stopping at most of the myriad small lakes on the way. White-winged scoters are a rare duck with a pretty lumpy head; we have only seen these birds once before, but by the end of the day, we had seen around 20 dotted around the lakes, singly or in small groups.

Meanwhile, Volodia had taken the rest of the group up Koshalu Mountain which is by base camp. This is one of my favourite mountains in the area and the views from the top, over the steppe are spectacular. Fortunately, the weather was good and everyone had a great day, Volodia managing to spot a couple of Ibex too.

4 July - Base camp to Tapduair

Snow Leopards range over very large areas, so we need to do the same to survey them and the habitats that they may choose to live in. There are a couple of survey routes we can walk from camp, others start after a drive of perhaps an hour, but areas that are much further away require us to stay away overnight; Tapduair is one of these.

After breakfast, we packed the Land Rovers with the team, tents, a large pile of food and most importantly, Nina our magician/cook. We headed off round the mountain massif from our north-west side, to the eastern side with its amazing views of glacier and snow clad mountains of the Chichova range that mark the border with Mongolia. Just before reaching our overnight camp site, we stopped on a small hill top and had lunch in the sun, enjoying the panoramic views from Tapduair with its corniced peak and turquoise glacial lake filled valleys behind us, across the undulating green and gold valley in front of us, to beckoning Chichova and its tempting peaks and unknown treasures of wildlife.

On arrival at our camp, first order of business was to set up Nina's kitchen tent, however, the poles were missing..... Fortunately, poles from one of the other tents fitted some of the pockets, ever useful duct tape came into it's own and with the Land Rovers providing protection from the wind, we were in business.

In the afternoon, we surveyed a lake very close to camp. We found tracks of Argali nearby, around 6 animals, both adults and young; this was the first record of this endangered red data book species for the expedition this year, a great find. On the lake, there were a couple of families of Ruddy shelduck, along with their young; around 25 lovely little fluffy blobs paddling around in the middle of the lake, no more than a week or so old. A passing black-eared kite had a differing view of the chicks; around 25 lovely little fluffy snacks paddling around in the middle of the lake, with no more than a week's experience of escape and evasion. However, despite many passes where the kite tried to snatch a chick from the water, all that it got was a splash in the face as the chicks disappeared beneath; a gripping drama.

After dinner, we went to the top of a hill by camp to watch the sun go down over Mongolia. The views were spectacular, but even better, we found a dotterel and its chick on the hilltop which allowed us to approach very close. This wading bird was beautifully marked and had a fantastic burnt umber coloured breast; lying on the ground, I got some great photos of this wonderful bird with the Mongolian mountains in the background :)

5 July - Tapduair mountain

After an early breakfast, we split into three teams to survey the ridges and valleys of Tapduair's eastern side. Anton and Alexi went with Volodia up one ridge and found a group of about 12 Siberian Ibex. Claire, Madeline and Kathy headed up a valley with 3 beautiful turquoise glacial lakes and saw another group of about 9 Siberian Ibex. Simone, Uwe, Anja, Masha, Oleg and I went up the north east ridge. At the top of the ridge, I wondered if the Ibex in the valley below might be frightened up towards us by Madeline, Claire and Kathy, so I got us into a position where we could get a good close view of them if they came across the ridge at the saddle we were at. It almost worked, but unfortunately, Claire told us they crossed at the next saddle up the ridge from where we were, ho hum, next time maybe! We scoured Tapduair's cliffs for animals with our binoculars, but found nothing, so moved a little and searched the great valley to the north. Anja spotted some odd looking rocks which were in fact more Ibex, a big group of about 25. We watched the Ibex for around an hour as they moved from their resting depressions which we could see with the naked eye from about 2km away; light coloured patches against darker ground. Some Ibex moved from their resting slope to a stream to drink, others to a grassy area to feed, it was wonderful to be able to watch them undetected from our cliff top location and see them behaving naturally.

6 July - Bailukien lakes and Chornie mountain

Back at base camp and after one of Nina's enormous breakfasts, we waddled into the vehicles and set off to the north. With Simone and Uwe driving, we made good and safe progress, crossing the wide and fairly deep Bugozon river and then heading up Bailukien valley. Anja, along with Alexi and Oleg were to climb Mount Chornie – black mountain to scour it's slopes for signs of Snow Leopard or other animals, so they continued up the valley towards the mountain as we paused at one of the many lakes to check it for birds; some nice birds, but nothing exceptional. A couple of lakes further on however, we found a black-throated diver which is a red data book endangered species for Altai, so this was a great find. Further along the valley, the 'road' (!) got steadily worse and progress steadily slower, but there were fantastic flower fields along the way so no-one complained. Suddenly Uwe shouted 'Shrike', we all looked and got a brief glimpse of grey, black and white bird disappearing into the dwarf birch that covered the roadside slope; but the glimpse was enough to identify the bird which, this was lucky because even after spending some time searching, we never saw it again – a new species record for the expedition :)

At the valley's watershed, we stopped for lunch and then split into two teams. Along with Volodia, Anja, Claire, Madeline and Anton surveyed a valley, whilst Simone, Uwe, Kathy and I headed up a ridge. We had only gone 50m when we spotted lots of mole hills, unusual animals to find in this area that is so harsh in the winter. The next surprise was a couple of lizards, one of which I managed to catch and Simone managed to photograph. These were viviparous lizards, giving birth to live young as the climate here is too cold for reptiles that lay eggs. Next was a little gully that was full of sign from ptarmigan along with some of their pristine white feathers. Our ridge was steep and followed the edge of a cliff. On reaching the top, the views were 360 degree panoramic, giving us a huge area of good animal habitat to check with our binoculars, we spent lots of time checking, but surprisingly, found nothing, perhaps the two rifle cartridges we found on the way up had something to do with that.

7 July - Glacial lake valley survey

Volodia took most of the team up a valley nearby base camp; first the valley is filled with Siberian Larch, then this changes to shorter vegetation and finally to little vegetation and lots of rock. The team split high up the valley with most heading up to a hanging valley and it's glacial lake where a Lammergeyer Vulture and it's nest were seen on the cliffs above. Meanwhile, Volodia and Madeline continued up the valley where they disappointingly found a hunters hide built from stones. This position gave commanding views of the head of the valley...

Meanwhile, Kathy and myself headed off to the Taldura river valley, almost 100 miles from base camp, to check the access to what will hopefully be our base camp for slot 3. One route which would have given a shorter access route was impassible; at one point, to get to a bridge over a river, there was a huge river in the way! Another access route had a bridge that had been destroyed by the excesses of the Russian winter, however another route looks good with just one small river crossing which should be fine. This new camp is actually by the Jyelo river, a short distance from the Taldura river valley at the edge of a Siberian Larch forest and is every bit as beautiful as our current base camp. The habitat is very different though with big alpine mountains and valleys, much large forests, but no steppe.

8 July - Day off!

We all drove across the steppe to Kokoria to meet the history teacher for a day visiting archaeological sites, which are everywhere and to learn a bit about the people of Altai. We started at Kokoria's little museum which was very interesting, complete with a replica yurt, a bit prettified, but quite similar to the yurts we have visited. We were told about the animals, plants, rivers and mountains, all of which have spirits, like the Maral deer that is the spirit of the sun and how all Altaians respect all in the wild. We talked about threats to the wild and I in my naivety asked if there was anything we could do to help protect the wilds of Altai; Altai would look after itself I was told. White water rafters die, helicopter borne hunters who shoot animals from the air crash and die. There were artifacts from many different peoples, the Huns, the Sythians and many more.

We then drove for 15 min to two stone circles. A big circular pile of stones in the centre was a representation of the world and surrounding that and about 200m in diameter, the universe was represented by a circle of stones. The history teacher said that some tourists did not follow the rules; I asked what the rules were –'be quiet, that is all'.

Another 20 min drive and we were at a big stone stella, covered in petroglyphs; there was some writing that looked like runes, it said 'you are responsible for my death.' Another big stella about 3m high was of uncertain meaning, possibly an indicator of ownership of the land by someone, or possibly a border marker, one thing was certain, because of the square of stones around the stella, it was Turkic. Having returned the history teacher to Kokoria, we had lunch at a small hill where there were many ptroglyphs such as Maral, Ibex, men with bow and arrow and my favourite, three men in a boat. On the hill top, there was a big slab of rock that was covered with many, many petroglyphs, mostly maral deer with fantastical antlers; an absolute masterpiece.

Back at camp, a shower and a change into posh clothes before heading off to Campii Petrovich's yurt for dinner. On the menu was stewed mutton, the Altaian national dish which went down very well with everyone, except the vegetarians :) This was not a problem though as Nina had cooked something special for them and we just took it with us :)

Later, back at camp, there was some fine Russian champagne, a little vodka and many tall tales; a fantastic last day indeed.

9 July - Slot 1 team leave base camp and head for Novosibirsk

Having breakfasted and packed, we all got into the minibus which had miraculously managed to drive all the way across the rough steppe tracks to base camp and then we set off. I drove with Kathy in a Land Rover to Kosh Agach where we said our last farewells.

Slot 1 started off with very wet weather, but all was sunny in the end. Lots of survey work was completed and some great finds were made. Thanks very much to all team members for your hard work and dedication in the occasionally hard conditions. Same time next year? ;-)

10 July

Spent all day writing this diary.....

13 July - Slot two team arrive at base camp

After the second day of long driving, all slot 2 team members arrive at base.

14 July - Training day.

Had a good day filled with training; health and safety, off-road driving, map, compass and GPS navigation, science and survey methodology.

15 July - First survey day

After breakfast we all took a short drive to a valley a few kilometers from base. This valley is one of my favourites for wild flowers and with the wet spring this year, the flowers were spectacular; big swathes of blues in one little bowl, stream gullies full of orange trolius and whole mountainsides covered in yellow. Sharereh, Bergit, Alexandra, Yulia and I left the valley and headed up a hill that was bigger than it looked (!), but that gave us fantastic views to the Chichova mountains of Mongolia.

16 July - 'Little' Sailugem, Koshalu and Kunduyak river valley surveys

After a big breakfast, we split into 3 groups. With me, Sharerah, Bergit and Alexandra headed for Sailugem, a big horseshoe ridge that takes you up high, 3415 m to be precise. We started in larch forest and then onto the ridge that was our route for the rest of the day; though it was steep in places and always hard work, it was mostly straightforward with only one section of easy scrambling. At one of our many rest stops, err, I mean stops to look for animals, we spotted two Siberian ibex about 400 m from us, relaxing in the sun, apparently oblivious to our presence (we were all dressed in subdued tones of greens and browns) or unconcerned; probably the former.

Having struggled up to the summit :) we enjoyed the views of a wonderful turquoise glacial lake far below. Tapduair's hanging glaciers opposite us were stained red with the growth of algae and all around the rocks were covered with lichens of orange and yellow.

On the way down, looking across the wide and steep valley, we saw that the two Siberian ibex we had seen about 5 hours earlier were still reclining in the same spot; maybe I'll try Siberian ibex in my next life ;)

Meanwhile, on Koshalu mountain, along with Volodia were Eva, Nancy, Paul and Peter who saw one Siberian ibex and a rock ptarmigan with its chicks; along with the stunning views over the steppe, a wonderful experience.

The rest of the team went with Oleg up the valley behind base camp, rough ground and very hard going.....

17 July - Move to temporary camp

After breakfast, we packed our world into the Land Rovers and headed off. With Joanne driving, we made it across rivers and rough ground to Kolya's yurt where we gave him a few photos I had taken of his family during slot 1. Kolya gave us bread and cream, tea and cheese, wonderful hospitality that Viv, Madeline and especially Joanna were bowled over by :)

Everyone else headed for another yurt to interview the owners where Nina wanted to kidnap a young lamb; not really sure if that was a cute and fluffy inspired thing or whether she had plans to cook it for dinner :) Meanwhile, Peter started diversifying Biosphere's business, branching out into vehicle recovery by towing a small truck a short distance to the owner's yurt. The steel reinforcing bar that the truck owner had been using fell off, but the tow rope from our emergency box worked just fine. All was going well, then fear could be seen in Volodias eyes as he shouted speed up, we're being followed! ;)

18 July - Big mountain survey

From our temporary camp on the Tekelu river under the cliffs of 'Big' Sailugem, we split into two teams; with Volodia, Joanna and Sybille headed for the 'Argali' hills to the east where we have in the past seen these red data book endangered species, whilst everyone else went with me up 'Big' Sailugem. As with 'Little' Sailugem which we climbed a few days ago, which is a slightly lower summit, this was a ridge walk with amazing views and only occasional minor scrambling difficulties on the way. Approaching the bottom of the ridge, we saw a family group of rock ptarmigan with 4 or 5 chicks, beautiful. As soon as we were on the ridge, we found many fresh tracks of ibex; I estimated well over 20. Soon after, we found resting depressions of ibex, these depressions were about 80 cm by 50 cm where the animals had cleared away big uncomfortable rocks, leaving comfortable gravel to sleep on; we counted over 20. We found ibex poo; again only a few days old and everywhere tracks, sometimes a day or two old, sometimes perhaps a week old.

At just over 3200 m on the ridge, someone somewhere flicked a switch and the beautiful weather was gone. Dark clouds filled the sky, rain started and quickly became very heavy and the wind whipped up lashing us with sheets of rain. In the not too far distance there was thunder; time to leave the ridge. We easily descended a big scree slope that would have been a nightmare to ascend; around half way down, Viv shouted ibex; we all looked and no-one saw a thing. Had Viv been at her bottle of whisky again, perhaps the altitude/effort was messing with her brain, but she continued to claim the sighting. Eventually, after much scanning with binoculars, we spotted the lone male ibex about 300 m downhill from us, I will never know how Viv spotted that with the naked eye, incredible!

Having descended into the valley, the weather eased a bit, we still had some spare time, so I decided to go to the head of the valley, just felt like the thing to do. Sharereh, Peter and Eva headed back to camp, but everyone else came with me. As we approached the head of the valley, I said to Alexandra that I smelt ibex, Alexandra laughed; less than 100 m ahead there was a massive group of Siberian ibex – 29 of them! We all ditched our rucksacks and crawled on our bellies to get a good view of them, watching them for about 20 min before they got wind of us/spotted up and disappeared off up a slope and away into our memories; my best ibex experience ever ;)

With our Motorola radios, I called camp and arranged for one of our vehicles to come and pick us up at the end of the valley; the sun came out created a fantastic vivid rainbow, at the end of which was our taxi :) Back at camp, everyone was soaked, exhausted and very, very happy.

19 July - Small mountain survey and return to base camp

Today, we surveyed the lower valleys around Sailugem; eagle-eyed Viv again spotting Siberian ibex, this time a group of 19, disappearing over the horizon. Nancy found some stoats, racing around in their ever energetic manner. Meanwhile, Joanne, Sybille, Sharereh, Madeline and I drove round the mountain massif, scanning the cliffs as we went and stopping for lunch with panoramic views of the Chichova mountain range, just over the border into Mongolia; that was a long lunch ;)

20 July - Steppe lakes

Today we surveyed the lakes in the middle of the steppe for birds. Afterwards, we visited Marat, a local horseman/herdsman at his isle (log version of a yurt) nearby. Unfortunately, he was not in, but his wife was. Paul and Nancy, cattle ranchers from Kansas, showed her some photos of their animals and she was enthralled, scrutinizing every photo in detail and comparing with her own animals. The route back to camp took in the village of Kokoria where full use was made of the ice-cream selling facilities and we were lucky enough to see a wedding there too.

21 July - The day of the fox

Kamtitigem, a very steep-sided valley was our survey location today. Alexandra, Yulia, Paul, Birgit, Eva and I headed up the most gentle slope we could find to access the plateau above; perhaps gentle is not the best word, however, Paul now has some great stories and photos for his slideshows for his friends back home in Kansas :) On top, Alexandra disturbed a fox that shot off like a missile, however, we did later see probably the same one again. There are some 'rock forts' as Paul described them on top of the plateau, and perched on one of these, Birgit spotted two adult male Siberian ibex, complete with big black beards; these too disappeared off at top speed, not to be seen again, however.

Everyone else had walked up the valley to a group of three beautiful waterfalls surrounded by cliffs, amazing. On the drive back across the steppe to base, we saw lots of Demoselle cranes dancing on their long legs and flapping their broad wings; in the dramatic evening light, a spectacular sight. Back at camp, there was a nice inter-species relationship developing when a vole approached a marmot, touched lips and then ran off to its hole – playing hard to get!

22 July - Day off

Volodia took the team on a tour of the archaeological sites in the local area to see standing stones, stone circles, kurgan (tombs) and petroglyphs.

23 July - Slot 2 Team depart base camp

After breakfast, the team pack and Peter, Sasha and I drive them to Kosh Agach where we part :-(The end of a great slot!

Back at base camp, Peter, Emil, Sasha, Oleg, Nina and I pack base camp into two Land Rovers and one UAZ – it's amazing how much you can get into these vehicles if you try, and then drive 120 km to our new base camp location on the Jeylo river just off the Taldura river valley.

24 July - Setting up new base camp

Woke to a deep blue sky amongst our wonderful old larches; the weather was perfect for setting up our new base camp. Having decided on the layout, we spent the day erecting tents, digging toilets, etc., etc. However, our first task was a bit of river engineering; about 30 min with a few spades and we filled the dry stream by camp with lovely fresh water. It's amazing what you end up doing on expeditions :)

27 July - Slot 3 team arrives

Met slot 3 team members at Ortalik where we transferred from bus to our two Land Rovers and two local UAZ vehicles. After an interesting river crossing and towing one of the UAZs up a hill, we made it to base camp.

28 July - Training day

Woke to a rather dull day, but that soon changed - to a blizzard, well, sort of :) We spent the morning in our big mess tent, doing health and safety, survey methodology, science and navigation. In the afternoon we went for a walk in the woods by base camp, looking for sign of animals (tracks, scats, scrapes, etc.) and came back to camp laden with all sorts of mushrooms for Nina to cook. Not really sure what species the mushrooms are, but according to a Russian saying, all Russian mushrooms are edible; at least once :)

29 July - First survey day

Took the two Land Rovers to Kara Gyem pass, 6 km from base camp. The sky was unusually clear, crystal clear, so that we had amazing views of the Chichova mountains in Mongolia to the east, as well as all the way to the dramatic shark tooth 4500 m peak of Belucha, Altai's highest on the border with Kazakhstan.

We climbed to 3200 m and amazing views of glaciers. We were very lucky to see a Lammergeier vulture and no fewer than eight cinereous vultures – red data book endangered species. Eagle-eyed Keith spotted Siberian ibex on a ridge across the valley, a total of eight of these animals, which are one of the main prey species of snow leopard. Dotterel are wading birds that breed high on mountains and are only occasionally seen in low numbers, by the end of the day. We saw over 30! Probably some sort of dotterel conference was Volodia's conclusion. Just before we started our descent down a ridge towards base camp, we found some wolf scat, a fantastic find of these severely persecuted, wonderful animals.

30 July - Kara Gyem pass north

We drove the 6km from base camp to Kara Gyem pass with stunning views of glaciers under deep blue skies. Peter spotted a group of three Siberian ibex, whilst far below a group of six people packed their bright red tent, which was on top of a glacier, then started to ascend a vertical scree slope, heading for an even more vertical cliff of loose rock. Rather them, than me!

Brian, at 77 years old, did an amazing job throughout the day, making it up to over 3000 m. I hope I am that fit if I make it to that age :-)

31 July - Drive to Kara Gyem

Today I split the team into two. Half of the team stayed with Volodia at base camp to survey the local mountains and valleys. With me, Uli, Ritva, Keith, Stephen Loren and Emile headed for Kara Gyem in the company of Yana and Jenya, long standing friends of the expedition and owners of a heavily modified Land Rover with winches and enormous wheels everywhere.

Having crossed the Kara Gyem pass, we descended into a very deep and narrow valley with towering cliffs of orange and rust to the north and larch-covered slopes to the south. The 'road' such as it was, was frequently completely removed by the river and we had to make a total of 10 crossings on the way, Uli did a fantastic job of driving us safely.

We reached Kara Gyem meadow for lunch and everyone was speechless; completely full of yellow flowers. To either side of the valley were very steep rocky slopes with larch trees and at the head of the valley, enormous glaciers flowed down from precipitous peaks.

1 August - 20 km assault course

After breakfast, we set out to survey the Kara Gyem valley, all the way to the source of its river. Past the flower filled meadow, we walked through dwarf birch, then larch forest and after 4km reached the point where two rivers met; we branched right and followed the river north. Having walked only a very short distance, Uli found unusual tracks: feet with toes. But these were huge feet, far too big to be human and therefore, obviously yetti. We were trying to work out how to record yetti as there wasn't a box on the mammal tick list, when someone suggested they were in fact bear tracks – fantastic!

The previous valley was used by walkers to some extent, but this valley we were in now was not used by walkers and there were no human trails, only animal trails which appeared then disappeared. In the not very dwarf birch, going was tough but we were rewarded with successive flower filled meadows as we climbed, filled with yellows, blues, purples and swirls of Solomon's Seal flowers with their huge leaves.

All along the valley, there were massive amounts of sign of big animals; brown bear, elk, maral deer and ibex, more than I've ever seen before. Incredible! It was not a coincidence that the valley was probably the most remote and inaccessible spot I've ever been to as well.....

The head of the valley was amazing; massive hanging glaciers dropping down 1,000 feet to the valley and waterfalls plunging down to fill the river that raged by us through a narrow, deep canyon. That too was spectacular.

On the way back the rain came on and we got soaked; however, I radioed back to Emile at camp and when we arrived, as well as dinner, he had a sauna ready for us; what service. We all warmed ourselves and dried our clothes and after some discussion, decided that the essentials for a sauna were – binoculars, passport and socks.....

2 August - Kara Gyem to base camp

We woke to low cloud over the mountains, so I decided to head back to Base Camp whilst we still could – with rain, the river would rise and make crossings impossible. We made record time on the way back and on crossing the Kara Gyem pass, it was snowing behind us but Base Camp below us was in sun – 'Sun in the shire' as Stephen said. It felt good to be home again ;-)

Happy birthday!

3 August - Restaurant at the end of the universe (Kuskunor valley)

Drove to the Kuskunor valley in our two Land Rovers. Crossing the pass to the valley, we had fantastic panoramic views of the glaciers up the Taldura river valley and all around; breathtaking.

In Kuskunor, we split into two teams. Martina, Ritva, Keith, Joseph, Loren and Oleg walked back the 7 km to base camp over the mountains whilst the rest of us continued the drive to the head of Kuskunor. At the head of the valley, there was a deep ravine, which was a very definite stop for our driving and here there was a herder's hut. We were invited in and given bowls of lovely soup; customary and wonderful hospitality. After (second!) lunch we made a short exploration of the surroundings, seeing one ibex. This is an area we will have to return to and spend some time surveying in detail as it looks great for snow leopard and their prey.

On the way back, one Land Rover stopped; dirty fuel. We managed to drain it and get going again, but again it stopped and the fuel filter was totally clogged. We had to tow it through rivers, across bogs and very rough ground, breaking three tow ropes about 15 times. One river crossing had algae-covered rocks, which prevented us towing, so we winched the Land Rover across. Bit late for dinner...

4 August - Day off and petroglyphs

Everyone has been working hard during the expedition, so we're having a day off today. We went to a local site where there are lots of petroglyphs on top of a small hill in the Taldura river valley. Dating from a few thousand years ago, there were petroglyphs of many of the large animals of the area, such as ibex, argali, snow leopard and wolf as well as humans hunting them. Fantastic petroglyphs, blue skies and great views; the perfect day off. But some of the team just couldn't rest and we recorded mammals and birds on the way and at the site and on the way, including white-winged snow finch, which was a new record this year.

5 August - Last survey day

I had the joy of completing an inventory of the expedition kit as well as other exciting work, whilst the rest of the team abandoned me and headed off up into the mountains for the last time. Uli had her ibex spotting eyes on and found a big group of 15 as they crossed the horizon and into our memories.

After shower time, we went to a local isle (wooden version of a yurt) for dinner, the Altai national dish, stewed mutton. The pieces of meat were massive, hanging over both sides of the plates. We also had Kazak bread with cream and dvorak, a kind of delicious cottage cheese.

Back at camp, we spent our final night chatting around the fire and tangoing under the Milky Way...

6/7 August - Base camp to Novosibirsk

After breakfast, packed and drove the two hours to Beltir where we met our mini-bus which we took to Novosibirsk, along with our two Land Rovers. Spent the night at Michelovo before continuing to Novosibirsk, stopping at the honey market to re-fuel on piroshkis and bleny ;) Very sad that the expedition is coming to an end as I have finally succeeded in training the team; at one point I had no less than four ice-creams given to me ;)

And so ends the 2010 Biosphere expedition to The Golden mountains of Altai. For slot three, we moved base camp to a new location, the first move in the eight years the expedition has been running; this move went well and we have started to survey the surrounding areas. As well as areas grazed by sheep, goats and yaks, we found lots of very healthy habitat full of snow leopard snacks (large mammals!) and we have identified other promising areas for surveying next year.

Thanks to all team members for making this expedition possible and for all the hard work completed. I had a fantastic time, lots of adventures, saw lots of wonderful wildlife and beautiful scenery and meeting you all was lovely; same time next year?

Andy