

EXPEDITION DIARY Azores 2009

By Ronald Seipold

23 June

This is the first diary entry for the 2009 Biosphere Expedition to the golden mountains of Altai in search of snow leopard.

Having travelled from my home in Scotland, I went to the Biosphere Expeditions HQ in Norwich, England, for a briefing and to collect some equipment. Amongst the equipment are two Gerber folding shovels. Although the Russians managed to put a man in space some years ago, they have still not succeeded in the tricky area of shovel design and the sturdiest ones I have been able to find in Russia are barely able to cope with soft blancmange, never mind the abundant rocky ground we have to deal with – hence the funny shaped bulges in my now rather heavy bag.

I'm looking forward very much to meeting you all and getting lots of work done surveying new areas. Please make sure you've got all the equipment on the list. You will not need good waterproofs often (for example). The weather is generally great, however, you will need good waterproofs occasionally to prevent getting soaked, hypothermic and ill. Prepare properly, swat up on the latest expedition report (<u>www.biosphere-expeditions.org/reports</u>) and then we will all have great adventures together in the golden mountains.

My next diary entry should come from Novosibirsk. I am off on a flight in a few hours. See you there soon :)

Andrew Stronach Expedition Leader

23 June - London to Moscow

Flew to Domodedovo where the transfer was straightforward; if you come through this airport, note that you will have to go through passport control first, collect your hold luggage and then go to departures. My flight to Novosibirsk left from area D, if you are missing any equipment, there is a shop here called 'Expeditions', coloured orange that does sell some stuff that may be useful – gloves, socks, cutlery, mammoth tusk carvings, you know, just the usual. However, please look on this as an emergency back-up and do get all your things before you leave.

24 June – Moscow to Novosibirsk

All the way, the sky never really got dark and there was always an orange glow to the north right throughout the night. Sunrise coincided exactly with the start of our descent and I wondered if I would get two sunrises in one day, but that didn't really happen; OK I know I was being greedy :)

Sergey, boss of Sibalp, our local logistics partner, drove me from the airport to hotel Sibir. At the airport I noticed signs for a bus from the airport into Novosibirsk that stops right outside hotel Sibir; 60 rubles rather than around 700 rubles for a taxi. If you do take the bus, it takes around 20 min to get to the only river, the Ob, which is massive. After crossing the Ob the bus goes through a tunnel and after another 200 m, turns left at traffic lights. After the turn, the hotel Sibir is 50 m further on and the bus has its first stop there.

After meeting Valentina, our translator, we went to get a SIM card for my phone; the number is +7-913-9899053 if calling from outside Russia. If inside Russia, you have to add an 8 (not a 0) at the beginning, so it becomes 8913-9899053. Please only call this number in emergencies and note that most of the time I will not be in mobile phone coverage, so do not expect a quick response.

Next stop was the Land Rover dealer where I received three lovely Land Rover Defenders and one lovely Land Rover Discovery; these vehicles have CD players, but no CDs, so please feel free to bring a selection for the two-day drive to base camp :)

Later, I met a couple of local journalists who interviewed me so they can write articles in local periodicals.

25 June - Novosibirsk

Gave a press conference at Land Rover today. Land Rover are kind enough to lend the expedition four vehicles every year; this year it is three Defenders and one Discovery and without this generosity, the expedition would simply be far too expensive to run. In return for this generosity, we take as good care of the vehicles possible, so that when they are sold after the expedition, Land Rover get a good price for them. That alone is a good reason to drive carefully, but as well as that, road surfaces are a bit unpredictable and local drivers are very unpredictable. In all other aspects of the expedition, I aim to get you very involved in the decision making process; in driving matters, I will be dictatorial. For reasons of safety, I will need you to drive as per Biosphere Expeditions rules so that we can all stay safe and so that we can spend our time, not fixing vehicles, but looking for snow leopards and Siberian ibex and argali and wolverine and Siberian chipmunk and golden eagle and steppe eagle and Altai falcon and manul and wolves and demoiselle cranes and gentians and geranium and...... :-)

26 June - Novosibirsk

I spent the day doing a whole variety of different things in preparation for the expedition such as printing and binding the latest Altai expedition report (which by now you have of course all studied ;) and printing datasheets for recording our sightings. Filled up the vehicles with diesel and prepared them. I spent rather a lot of time in phone shops trying to get my nice new complicated phone data services enabled, whatever that means. I am hoping to be able to send regular diary entries from near base camp with his new phone; we'll see – don't hold your breath!

I arranged a meeting with the Programme Coordinator for the Siberian Environmental Centre to see if we can support each others' work. It's great to work with local NGO's and pass them the data we have collected so they can get the most possible from it.

We will be leaving Novosibirsk 07:50 on Monday 29 June heading for Altai (don't panic Rob, I've not forgotten about you!). However, it would be great to meet you all the night before – Sunday 28th June in the reception area of Hotel Sibir at 19.30. We can have a quick chat about plans for Monday and if you would like, we can go out for dinner together so we can start to get to know each other. See you there slot 1!

27 June - Novosibirsk

Met with Anna and Ilya from the Siberian Environmental Centre and discussed how we could support each other's work. There are three main areas of interest. 1. Mining of mineral deposits and the associated destruction and pollution of land used by protected species as well as increased disturbance and poaching. We will look out for mining activities whenever we are out surveying. 2. Manul or Palla's cat. This cat is even more rare than snow leopard and is being studied by Anna, so we will ask locals about them as well as snow leopard when we visit yurts. 3. Raptors. Sibecocentre are particularly interested in raptors that are globally threatened or critically endangered and have a project to conserve them and study their taxonomy by DNA analysis of cells from discarded feathers. The data we routinely collect will be of use to them, as will feathers we find. It's great to be able to help these passionate scientists with only tiny additions to what we do in our normal snow leopard work anyway :)

28 June - Novosibirsk

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

Well, Novosibirsk reached the grand old age of 150 today, I on the other hand only look that old :)

I went shopping with Nina (our cook) to a market. There were many articulated lorries, many from Kazakhstan and Uzbekistan. All were lined up very close together with their rear doors open, with their cargo of fruit and vegetables piled high, it was hard to know there were lorries there at all! There were melons, cabbages, apples, apricots, tomatoes, cucumbers and plums. All were mouth-watering and fresh as can be. In the evening, I met the slot 1 team members in the Sibir lobby and after a briefing for the next day, we had dinner and a little celebratory Altai vodka to mark the start of the expedition. On leaving the restaurant, the fireworks display I had arranged for the team started; it was fantastic, rainbows of fire reflected in the new sparkly glass clad skyscrapers around us - magnificent! Someone suggested that the fireworks display was not for them, but for Novosibirsk 's birthday! That's gratitude for you! :)

29 June - Novosibirsk to Oost Cema

Up at 07.00, packed the Land Rovers, had an enormous breakfast and then set off for the golden mountains of Altai :) The road was busy, the local drivers were a bit crazy and the police were out in force......

Most of the journey was over flat arable ground with wildflower-filled roadside verges, but as soon as we crossed the border into Altai, hills and then mountains appeared.

We spent the night just outside Oost Cema at a beautiful spot by a small river. We had lovely new wooden chalets, complete with en-suite hot showers! Until a few years ago, only the biggest of cities had any kind of plumbing at all, never mind hot showers!

30 June - Oost Cema to base camp

Having left the playground of the Katun river valley that is crowded with people from Novosibirsk, the road to base camp was much quieter. We reached Kosh Agach at 16:00 where we took full advantage of the facilities of civilization and filled ourselves with ice cream :) Leaving the asphalt road behind, we passed the last village of Kokaria and crossed the steppe to base camp. Due to a wet spring, the steppe was green rather than brown and parched like last year; it's looking good for wildflowers this year. Got to base camp on the edge of the steppe, in a beautiful larch forest, under picture postcard snow capped mountains where we moved our stuff into our tents and settled in; it's great to be home.

1 July – Training

It was quite cold at night and our tents were covered with frost in the morning. Ernst got the expedition off to a great start by spotting a group of three Siberian ibex on the mountain by base camp. These animals were difficult to see; Ernst will be a great asset to the expedition! After breakfast in the mess tent, dodging the drops of melting frost as they fell when the sun rose, we started the training. Risk assessment first, science with Volodya and then off-road driving. Toby managed the steep hill descent much more quickly than anyone else; maybe we'll use a lower gear next time eh! Rob had fun with the failed hill climbs, getting lots of practice in so he's the expert there!

2 July - First survey day

Along with Isabella, Heike, Gunter, Ernst and Pete, I surveyed a valley near base camp. It was stunning, filled with great swathes of wildflowers in purple, vivid blue, yellow and orange. Spring has been late in Siberia this year and there were many hollows where the grass was dead as the snow had just melted; but in the pools of dead brown grass, beautiful pristine blue gentians had sprung, the vanguard of bountiful life in the short Siberian summer for that little patch of ground. But it was not the flowers that were the highlight for me. In the previous six years of the expedition, there has been only two sightings of snakes of any kind - vipers, by the end of the day, we had seen five! Fantastic! We have now re-named that survey route 'Viper Valley' :)

3 July - Travel to Tapduair

After breakfast we loaded up the Land Rovers with tents, food, firewood and field guides and headed off to Tapduair on the far side of our mountain range. It was difficult to find somewhere decent to stop for lunch, so in the end we had to settle for a hill top with 360 degree views of snow and ice clad mountains in Mongolia, silky steppe, Himalayan Vultures cruising by, lakes with ruddy shelduck, flowers all around and the most wonderful scent of oils from the herbs of the mountain.

After lunch I took over driving and as we had plenty of time I decided to demonstrate how to use the winch to recover a vehicle stuck in soft ground; that went very well.....

When we had set up camp and had dinner, we sat round the fire sang jolly songs and told jokes - Gunter was without a doubt the winner here and all through the night, uncontrollable laughter could be herd from Volodya's tent as he remembered the tale about Timbuktu..... :)

4 July - Tapduair

A big day on a big mountain got off to a fantastic start when David, Toby, Isabella, Steve, Volodia and I saw three badgers; at 2700 m, this was an unusually high record, as well as being the first record for the expedition; wonderful animals.

After scanning a cliff, I spotted a big stick nest with a small white fluffy thing in it. I scrambled up to it to find a young eagle chick; probably golden or possibly imperial, with all sorts of food remains such as ptarmigan, chough, grouse and ground squirrel: this was a restaurant with an amazing view!

At the head of the valley that Isabela, Steve and I had climbed, Isabella spotted a Siberian ibex, silhouetted against the snow. After scouring the surrounding area, we counted over 50 ibex, the biggest group by far ever seen by the expedition and a fantastic find as ibex are the main prey of the snow leopard.

Meantime, David, Toby and Volodia were doing just as well, with a sighting of 23 argali, again important for the snow leopard.

5 July - Bird lakes

After the exertions of Tapduair we had a more relaxed day today. After a long drive across the steppe and a crossing of the Bugazon river that focused our drivers' concentration, we arrived at a small lake. Being wet, there were lots of mosquitoes around :(so we doused ourselves in citronella before setting off. There were lots of beautiful birds, including citrene wagtails with pristine bright yellow heads and Demosielle cranes that were displaying to each other, jumping up into the air on their long elegant legs; wonderful.

After the lake, three of us went to see a man about a horse, Marat is the man and we have hired horses from him before. Biosphere Expeditions has been approached by a man who wants to join the expedition next year. Having found out a bit about him and what he has done, he is clearly not disabled, though he does have only one leg; I discussed with Marat the possibility of providing a horse for him so he too can help with the expedition. Meanwhile, Patricia, Heike and Steve had a gallop around the steppe, with varying degrees of horsemanship..... :)

6 July - Sailugem and glacial lake

Today, Patricia, David and I headed up Sailugem mountain whilst everyone else surveyed a nearby valley and glacial lake. My team started off in a beautiful larch and flower filled valley and almost straight away, we found fresh tracks, less than a day old, of an adult ibex that had come down the valley. We followed the tracks for about 1 km and then we found tracks of a young ibex along with those of the adult; but why was there no sign of the youngster further down the valley? We soon found the answer in a patch of soft mud; fresh tracks of wolf, the same age as the ibex tracks and it had been running. We followed the tracks of the three animals further up the valley, it looked like the chase had lasted for at least half a km.

Tracking does not always paint so clear a picture though; we also found a track from a big deer of some kind, or perhaps it was a pigmy hippo or maybe a tapir.... :)

At the head of the valley, we climbed up a rocky ridge and then a scree slope, a steep scree slope, a steep, loose, scree slope, a long steep loose scree slope..... Apparently I should apply for copyright for the phrase 'nearly there'...... :)

7 July - Travel to Kundictikul

Today, we made the long drive to Kundictikul by the Mongolian border. All our drivers did a fine job, negotiating rivers, boulder fields, steep slopes and soft ground. However, the only bridge on the way was too much of an obstacle with a gap of 4 m on the far side and a landing, a metre below onto boulders. We debated the merits of taking a good run at it to clear the boulders, Evil Knievel style, but we didn't have the spangly costumes, so decided against it and found somewhere else to ford the river instead.

After a final tortuous bit of driving, we arrived at Naran Gol river and lake where we set up camp, under the Chicachova mountains that marked the Mongolian border and that would be our aim tomorrow.

8 July - Chicachova mountains

Today we split up into three teams; with me were Patricia, Heike and Rob. We crossed the river by camp in the Discovery and then started our adventure for the day. Up one slope to a ridge, down the other side to a second river, a bit of acrobatics to cross and then we started on the mountain that was our objective. On the way up, we saw an Altai accentor, a rare bird only found in Altai, that was carrying grass to an almost complete nest. Leaving the scree slope, we scrambled up a rocky ridge - much less tiring and also more productive. We found fresh tracks of ibex as well as dust baths that Altai snowcock had used to clean themselves. Lunch was at the top of a cliff where we could look across the valley to see Toby, Peter, David and Volodia walking up the next ridge. The head of the valley below us was spectacular, with dramatic cliffs, a glacial lake and massive snow cornices. There were many ledges on the steep slopes and cliffs that would be favoured by snow leopard; we spent much time methodically scanning them all with binoculars and telescope, but did not see the elusive mountain ghost. We walked as far as a saddle just under the snowy summit where animals are most likely to cross between valleys and hence leave sign of their passing and we found old resting depressions, probably from ibex, but, discretion being the better part of valour, we left the steep snowy summit for another day.

On the way down we checked out an old nest, possibly of a vulture and looked for the nest of an Altai falcon we had seen earlier; we didn't find the nest, but we did surprise each other when we got within 3 m of the falcon before it flew off from the ground squirrel it was eating - wow!

9 July - Return to base camp

Our campfire from the night before was still smouldering as we had breakfast, we packed and then set off. We had driven all of 300 m when we were met by a team of five border guards in tactical formation, ready to stop us whether we wanted to stop or not; I decided we should stop :) I gave them our papers, which they checked along with our passports and once they were satisfied all was in order, they were very friendly and wished us good luck. Now you all know why we are so insistent about you sending in your paperwork!

On the way, we stopped at a couple of yurts to ask about snow leopard and other wildlife. Aidby was very friendly and helpful, telling us about a snow leopard he had seen, as well as an even more rare species, the manul or Palla's Cat. We left the yurt full of tea, Kazak bread and rhubarb jam and with a bag of cheese created specially to break your teeth!

Our route home took us through the valley of antiquities, so we stopped to see the burial tombs, standing stones, stone circles and a tree with a long-legged buzzard nest complete with two chicks - wonderful. A little further on, we stopped at a crag that had a steppe eagle nest with two chicks, then a crag with many petroglyphs and an upland buzzard nest with two chicks. We were all getting a bit overloaded with wonders by this point :)

Our final evening together at base camp was lovely as we shared tales of adventures past and planned over a vodka or two.

Many thanks to all the team members from slot 1; we successfully completed a lot of great survey work, thank you.

Now, Volodia our scientist will travel back to Novosibirsk with slot 1 team members and then meet slot 2 team members at 19:30 on Sunday, 12 July in the reception area of Hotel Sibir. For any team members arriving Monday 13 July, the expedition will depart from the front of Hotel Sibir at 8.00 sharp. If you should need to contact Volodia, his phone number is +79134540878. Note: this number is for emergency purposes only.

I look forward to meeting everyone on slot 2 at base camp Tuesday evening - your home in the mountains awaits you :)

14 July - Slot 2 arrives at base camp :-)

More driving and driving on the second day of driving from Novosibirsk to base camp, some loved it (Dorothy!) others got a bit fed up with it. Finally arrived at base camp at about 18:30 for dinner from Nina and wonderful hot showers from Amile.

15 July - Training day

After breakfast, we did the introductory talk and health and safety briefing. Next, Volodia did the science talk; snow leopards, survey methodology, how our data is used and how it fits into global snow leopard conservation. Navigation, use of maps, compass and GPS was next and after lunch, I did the off road driving course whilst Volodia took the nondrivers for a walk in the woods. Annie was the raptor pellet finding champion and Volodia was excited by the shrew jaw bones therein – ah well, it takes all sorts! For everyone else of a more normal disposition however, the highlight was seeing a fox cub playing in the sun – wonderful. Meanwhile, on the off road driving course, all was uneventful, which is just the way I like it. Everyone did well, negotiating steep slopes up and down, boulder fields and rivers with calm competence.

16 July - First survey day Mount Chornie (Black Mountain) and the Bailukem Lakes

All our newly qualified off-road drivers did a fine job of negotiating the difficult conditions, the Bugazon river on the way being quite high and near the limits, but we crossed it competently.

On arriving at Mt Chornie, we split into 2 groups, one, led by Volodia headed up the mountain, the other with me, headed round the mountain to a valley we had never surveyed before, that led to the border with the Tuvan Republic. All of 5 min after we left the mountaineers, the rain started, but being hardy mountain types, Volodia's team....immediately abandoned their task and retreated to the comfort of the Land Rovers :-) Meantime, my group made our way up the valley, stopping every so often to scan the mountainside looking for animals. At the end of the `track` we stopped, had lunch and then headed up the valley. The crag to the northwest that marked the boundary with the next region in Altai was high and impressive. There were many ledges and some caves which we peered into hopefully with our binoculars, but we didn't see anything peering back at us. The valley floor was filled with many wild flowers and under what was now a deep blue sky, it was beautiful. We saw no signs that humans had been in the valley; no tracks, no domestic animals etc. but also, there were no signs of ibex or argali, a bit unusual. However, there is always something special to be seen, and the find of the day was made by Sonya who found a very rare viviparous lizard with a lovely orange stomach.

The drive back along the valley was punctuated with frequent stops to take photos of the fields of wild flowers, in the early evening light and under the blue sky it was impossible to fail to make a stunning image.

17 July - Start of horseback expedition and overnight trip.

Last year I tried to reach an area of mountains north of Kosh Agach as we had had reports of snow leopard from there and the area looked great on the map. Volodia's computer modelling exercise too, had also highlighted the area as a 'red zone' which is very favourable for snow leopard. I tried to drive there from the east, but the road was appalling and I could not get close. Next, I tried accessing the area from the west along a road marked on my map; when I got there, there were15 foot high trees growing on the track. The only practical way to access the area is by horse. I arranged the hire of horses from Marat, a local herder/hunter and along with him, Claire, Arkady (Marat's helper) and myself headed off for four days to make an initial survey of the area and to see if further surveys would be practical.

We crossed the steppe, passed high red cliffs, went through a narrow rocky valley and into a flower filled valley with great swathes of edelweiss. At the top of a pass, Marat stopped and sprinkled the big rocky cairn with some fresh cow's milk for good luck on our journey. We passed small lakes with tufted ducks and Slavonian grebes in a wide green valley. A gentle descent in the next valley led us through the most beautiful woods I have ever seen. The trees were mostly Siberian larch, with a few pines, or cedar as they are known locally and they were quite widely spaced, leaving plenty of space and light for the most amazing woodland flowers. One area would be dominated with the blues of monk's hood and complimented with oranges of daisies, then the hue would subtly change to the blues of geranium, or of bluebells, but always, dazzling colour, delicacy and lush abundant life all around. For a long time, I have wanted to visit the world famous valley of flowers in India as it is supposed to be spectacular; now, I suspect it may be a bit of a let down for me.

We passed through an area of burnt forest, perhaps the result of a lightning strike, before arriving at our camp site by the side of a river. This was the most perfect of camp sites in a lush little flower filled meadow, surrounded by larch, fairy tale perfect!

Meanwhile, Volodia and the rest of the team set off for a 3 day expedition to the Tekelu river valley, driving up the river itself to get to a camp site.

18 July - Into the heart of the mountains.

After breakfast, we packed, loaded up the horses and set off. Yesterday, we had crossed a few rivers that I thought were pretty exciting, but nothing compared with the river crossing that started our day as we left camp..... As we headed up the valley, the trees thinned then disappeared, leaving us in a wide green valley with massive sheer cliffs to the west that I scoured for eagle eyries, unsuccessfully, and to the east, small crags on top of a high ridge. A small side valley led up into the heart of the mountains and it was here we were to leave Marat and the horses and continue on foot. At the foot of the valley, there was a small wooden hut where two herders lived and tended their flock of 300 sheep and goats. Whilst talking to them, on the ground, I noticed the skeletal hand of a bear, shot by the herders in protecting their animals. Claire and I left Marat and Arkady talking and drinking tea with the herders and headed off uphill. A small stream gully was still filled with ice from the winter and had been sculpted into sinuous curves. There was a small glacial lake, then a second larger turguoise one. The head of the valley was split by a rocky ridge with rocky corries left and right; it was up the ridge that we made our ascent. On the way up I saw a clubmoss, not actually a moss, but a primitive non-flowering plant; this was the first clubmoss I remember seeing in Altai and looked very similar to a species I know from Scotland, though it did have subtle differences. After a long slog up the rocks, we reached the summit plateau at 3333 m. The blue skies of the morning had gone and the clouds all around created spectacular lighting for the views out over the Kosh Agach steppe to the south west and the mountains and valleys all around. We started our descent down the other side of the mountain to our rendezvous with Marat down a narrow rocky ridge. We had barely set off when the weather suddenly changed and it started to hail, heavily. Only a few minutes later, we found tracks in the snow, unlike any I had seen before. I quickly took some photos before they filled with the hail; you could clearly see the paw prints, the length of the legs and the marks of the body, this was the trail of a manul or Pallas' cat, even more rare than the snow leopard and a fantastic find for the expedition. By now the weather had deteriorated even more, thunder and lightning had started. I could hear buzzing and my eyelashes were standing on end, a clear sign of serious electrical activity, this was no longer a safe place to be; we now hold the Altaian speed record for getting off a ridge. On the way down, the hail piled up, covering the ground, except for clumps of yellow flowers showing through, an unusual and beautiful sight. We arrived at 'ozyera adin' or the first lake to find Marat and Arkady sheltering in their tent, whilst a white-winged scoter, a bird not previously recorded by the expedition, flew past.

Meanwhile, in the Tekelu river valley, the rest of the team split into two survey teams, one headed up high onto a mountain whilst the other surveyed a mountain valley. The mountain group had a hard day, leaving at nine in the morning and only getting back at six, having endured rain and snow. Down in the valley, Thorsten in the other group made the find of the expedition; argali tracks with those of a snow leopard following behind! It has been a long time since we have found sign of snow leopard, so it was excellent to get this data. :-)

19 July - Glacial lakes

We had camped by the first lake in our valley, however there were four glacial lakes further up the valley; it was these we went to survey this day. The first glacial lake was interesting; where the water flowed into the lake, there was a rock field, but all the rocks were orientated to have their flat sides up and all at the same level, the result was an amazingly smooth flat surface that you could have driven an ordinary saloon car over, very strange. Around this area, the birds were wonderful, we saw a spectacularly red and pink rosefinch, new for the expedition, a white winged redstart and lots of Altai accentors – endemic to the area. The next lake was bounded on one side by a steep scree slope that disappeared straight into the depths of the lake – didn't look good for crossing at all and on the other side, by a steep slope, again plunging into the lake, but negotiated easily with a little scrambling. Glacial lake number three was up a hanging valley, so we passed it by, but on the way to the last lake, we started to find fresh sign of Siberian ibex and argali, both primary prey species of the snow leopard, as well as older sign in the form of two old ibex skulls. The final lake was as beautiful as the others and beyond, massive cliffs, at least 2000 feet high, was a very abrupt and spectacular end to the valley.

Whilst we had been surveying the glacial lakes, Marat had taken the horses further down the valley to where there was food for the horses, so we made our way there to join him. At the side of the river on the way, we made another great find, more Manul sign, this time faeces. Marat and our horses were at the other side of the river, so Arkady took a horse across to ferry us to the other side. Claire was first across, this was a good thing as when Arkady returned, we saw a viper at the water's edge which would have provoked a major incident had Claire been anywhere near it :)

Meanwhile, the rest of the team were having a day off work, starting with a long lie-in as it was pouring with rain. After a while the rain stopped, the sun came out and the team made their way back to base camp. In the afternoon, the team made a trip to some nearby petroglyphs and saw an upland buzzard nesting there with one big fat brown chick.

20 July - Return to base camp

We awoke to a misty wet morning. After breakfast, we crossed the river and headed down the valley through very spongy ground that the horses' hooves disappeared into with every step. We crossed the river near a small abandoned hut - that was interesting, deep water, big boulders, I was glad that was behind us. We traversed a meadow on the hillside, completely covered with yellow flowers, before descending to, yes, cross the river again. Marat checked all the horses and tightened their straps, not a good sign, then he got on his horse and headed for the river, and stopped. 'Nyet' he said, too much water. I was not about to disagree with the judgement of an expert, however, I did look for alternatives that might be acceptable to him. How about going back to the previous crossing and travelling down the other side of the river, 'nyet' the ground was far too soft and hazardous for the horses. I walked upstream and found somewhere that looked better that the other crossing. 'Maybe' said Marat, so I looked downstream for another option. I found a crossing that looked perfectly fine to me and on returning with Marat, he agreed, the only problem was how to get the horses to it! There were some fallen trees blocking the way as well as thick stands of willow, but after a bit of exercise with Marat's axe, we were there and then easily across the river. Another river lay across our track, but this was easily crossed too. Next, we made our way up a steep slope and from behind I heard a commotion, looking round I saw Claire on the ground – a small but clearly vital piece of tack had broken, dumping saddle, panniers and Claire onto the hillside. Fortunately, no damage was done.

The rain stopped, so we did too, making a fire for tea. I wrung out the water from my clothes and then dried them by the fire along with my toes; that felt good! The break from riding was great, but starting again was not so great! When we started to get near Marat's home, the horses realised where they were heading and quickened their already brisk pace; very fit horses!

At Marat's Isle, his home, we had more tea accompanied by bread and fresh cream – that tasted soooo good. The drive back to base camp was interesting as ever, especially when we saw a Demoiselle crane doing a broken wing distraction display, trying to lure us away from its chicks: wonderful, I've never seen that before.

Meanwhile, the rest of the team had been surveying a valley near base camp in heavy rain and were rewarded with a sighting of a maral deer; although we do sometimes find sign of these deer, sightings are extremely rare

21 July - Base camp to Sailugem National Park (proposed!)

After breakfast we loaded up the Land Rovers with tents and food and headed off for the proposed Sailugem National Park. Passing through Kosh Agach, Annie was amazed at the high fashion on display on the dusty streets of this harsh frontier town: high heeled stilettos, stockings and exposed mid-riffs mixing with rusty old Russian army lorries, log cabin houses and dirt roads.

After crossing the Kosh Agach steppe, we got to the Jezator checkpoint where our papers and passports were checked, this took a bit longer than normal as we had arrived at lunch time..... When underway again, we drove along a valley on the main road to Kazakhstan before heading east up a valley into the proposed Sailugem National Park. Though there was a track marked on the map, it was difficult to even see it on the ground. The way was rough, bumpy and at times boggy, but with Dorothy, Sonya and Thorsten driving we made good progress. Near the highest point of the valley and about 8 km from the Mongolian border, we set up camp. Woods marked on the map were either a cartographer's dream or the victim of a lumberjack's axe, but the views were fantastic with dramatic cliffs and snow fringed ridges to the west, rolling hills to the east and tantalizing Mongolia to the south; in the warm evening light they looked fantastic. After dinner we had a fantastic camp fire that warmed parts that even the Nescafe, condensed milk and vodka cocktails could not reach, and listened to what sounded like a cat calling (manul?) from a nearby gully.

22 July - Sailugem National Park survey.

We split into three survey teams, Sonya, Simon, Herwig, Joerg and I headed off west for an enormous walk up a 3400 m peak and horseshoe, whilst Barbara, Claire, Sonya, Thorsten and Rob surveyed a valley and Volodia headed for Mount Chornia (black mountain) with Dorothy, Annie, Martin and Marina. As my team climbed, we saw lots of sign of domestic animals, but mixed in were a few fresh tracks, only about a day old, of what looked like ibex. Then it started raining. It looked like it would be a passing shower, so we continued in the mist with our work; it was not a passing shower, however... We continued uphill, finding sign of ibex, but after about half an hour of horizontal rain and then hail, the novelty of it wore off and I decided we should head back, but taking a slightly different route to cover some new ground on the way. As we walked, we started to find resting depressions, usually difficult to attribute to a particular species, but these depressions had ibex faeces in them. Then Sonya suddenly pointed to something in front of us, further along the top of the cliff. We all looked round to see 11 ibex appear from the cliff face up onto the cliff-top. As

soon as they appeared, they took flight and ran off down hill and away. We were all delighted at seeing the ibex so close, about 200 m away. Then more ibex appeared, 28 of them, including eight young; these too ran off downhill. We couldn't believe our luck. Then, an adult and two young appeared, I asked everyone to stay perfectly still as the three ibex started walking along the cliff directly towards us! They got closer and closer till when they were about 80 m away they disappeared from sight behind a fold in the ground. I got everyone to sit down, and then again stay perfectly still. The ibex did not appear. We stayed there motionless for what seemed like ages, had they fled, had they stopped? Then they re-appeared about 50 m from us, the adult stopped and looked directly at us, but we all stayed perfectly still and eventually it continued its track towards us. At about 30 m from us, the three ibex headed off down the cliff, still unaware of or presence - a fantastic experience and great data for the expedition. Back at camp, the other teams had returned too, so we dried off and had lunch. Later, when the weather improved and the sun came out; Volodia and Herwig investigated the gully from where we had heard cat-like calling the night before, while Rob, Simon, Sergii, Annie, Claire, Martin and I drove to some lakes to see what birds they held – tufted duck, Slavonian grebe, whooper swan and pintail.

23 July - Return to base camp

Sonya, Herwig and I drove the Land Rovers out of the valley, negotiating the boggy ground, Sonya doing a great job of finding the best way. We stopped at an isle (wooden hut) and had a chat with Misha, a herder. isha was very friendly and chatted openly, telling us of the big herds of ibex and argali in the local area. Whilst he had not seen snow leopard, which he confirmed to be a holy animal, the man who tended the goats and sheep with him had, twice, on the mountain where we had seen ibex the day before. Misha gave us kefir - fermented cows milk and cheese - as we talked about changes in land ownership in Russia, school for his children and what it was like to live in the beautiful mountains with their chill winds.

Just before we re-joined the Kazakhstan / Altai international highway (!) we stopped at some Kurgin, burial tombs, and their standing stones. Further on, we stopped for lunch, just as we got onto the steppe, by some massive boulders that had some petroglyphs of ibex and other animals on them. After driving across the steppe, we had a short stop at Kosh Agach to stock up on essential supplies, in my case, ice-cream! We made good time and arrived at base camp around 16:00, so that after checking the Land Rovers for the long drive back to Novosbirsk and filling in the last datasheets, we were free to relax and enjoy the warm sun. A good time was had by all on the last evening, eating cake and consuming the essential supplies before we went to bed as it started to snow :-)

24 July - Base camp to Mikhailovo

After a team photo with the newly snow dusted mountains in the background, we were off; most sad to leave, others looking forward to a soft bed. We were all looking forward to a big lunch at the Chui Oozi restaurant, however, it was closed, so we had to continue to the café on top of the Chiki Taman pass.

25 July - Mikhailovo to Novosibirsk

An early start in the rain, stops at silver springs market, then the honey market where we sampled the worlds best pirozhkis - hot 'pies' filled with either potato, cabbage, meat or egg and onion and bliny - pancakes filled with fruit :-)

So, that's the end of slot 2, the weather was quite poor at times, but we still managed to get a lot of survey work completed. Thorsten's fantastic find of the snow leopard trail was the find of the expedition, but we'll see if we can outdo that during slot 3 or 4.

For those of you about to join slot 3, I will be in the reception area of Hotel Sibir on Sunday evening at 19:30 where I'll do a very short briefing for the travel to base camp and then we can all go out for dinner if you wish. Please bring your passport and immigration card as we will need to copy some details for the registration process in Altai. Please note that my posh new phone is no longer working, so, I've reverted to using my old but reliable phone +7 913 454 0878. Please only use this number for emergencies and if I'm in the field, replies may take a considerable time.

I'm looking forward to meeting all slot 3 team members.

27 July - Novosibirsk to Michelovo

On the long road, the police were making their presence felt. We had a lovely lunch of pirozhkis and blennies at the honey market and sampled some of the hundreds of varities of honey on sale.

28 July - Michelovo to base

Set off at 08:00 and enjoyed the quiet roads, beautiful scenery and lovely weather. Got all the drivers driving both the Discovery and the Defenders, so everyone is comfortable with them before starting the off-road driving tomorrow, all good. Crossed first the Seminsky pass and then the Cheki Taman pass that is the boundary of a sub bio-geographical zone. The vegetation was lush and green before, whilst more stunted and adapted for arid conditions after the pass. Likewise before the pass, most people were of European appearance, whilst after it, most had Mongolian features. We stopped at the confluence of the Katun and Chuya rivers where it is traditional to visit for good luck on your journey; pretty much guaranteed to see a snow leopard now then I guess :-)

29 July - Training day at base camp

We started the day with navigation – use of map and compass, GPS etc., then the health and safety briefing. Later, Volodia explained what we were aiming to do, how to carry out the surveys, what our data will be used for and how it will fit into global snow leopard conservation. After a lunch of wild mushrooms expertly cooked by Nina, Volodia took the non-drivers for a walk in the woods looking for animal sign; Georgina found a lovely raptor breast feather as well as sign of wolf and boar. Meanwhile, I did the off-road driving. We had some people who had never driven off-road before and others who do so every day for work; everyone did well and we are now ready to get stuck into the survey work. Laura and Nicola saw three ibex from base camp, it's been a while since we've seen any there.

30 July - Travel to Kara Gyem

After breakfast we loaded up the Land Rovers with tents, a mountain of food and most importantly, Nina to cook it for us; we then headed off towards Kara Gyem in the Aktru Mountains. Kara Gyem is a remote valley that is very difficult to reach, there is a road marked on the map, but last year, on heading for the valley, we found that the 'road' was extremely difficult, with many deep river crossings and boulder fields. Finally, the 'road' had been removed due to erosion, leaving an impassable cliff, or alternately a tortuous off road section through the forest over steep wet slopes, through narrow gaps between the trees and over inconveniently located boulders. Last year we walked the difficult section through the forest and got a glimpse of Shangri la beyond, this year I wanted to drive further, so we could survey the area properly.....

Having stopped at Kosh Agach for diesel and other supplies, we crossed the steppe, heading south west to Byelter, then along the beautiful Taldura river valley, before breaking out, up its steep sides and heading west. Nicola in the lead Land Rover doing some great driving up the steep loose slopes. As we ascended, the views opened up and became more spectacular with every corner we turned. There were high mountain valleys with scattered Siberian larch trees, old and knarled from the excesses of the climate, then there were high peaks with slopes of broken shale, rich in the colours of the lichens that covered them, then there were even higher peaks, dressed in snow-filled gullies and icy blue glaciers. The high point of our drive was a pass at almost 3000 m with views way out over the Kosh Agach steppe and the mountains of Mongolia to the east and down the Kara Gyem valley to the west, with mountains up to almost 4000 m diving down very steeply to the river below that lay ahead of us and which we had to follow. A patch of snow about 40 m wide lay across the track in front of us. Jenya and Yana, our friends from Novosibirsk in their Land Rover with two winches :-) had joined us for the trip and tried to cross the snow first. The snow was soft, heavy and deep and after some digging, pushing and a bit of winching we went for plan B, avoiding the snow and driving round it. As we descended, the 'road' at the bottom of the narrow rocky valley got steadily worse and we had to cross the river eight times as it steadily grew in size. All the crossings were serious; I drove the lead Land Rover whilst Martin and Uli drove the second and third ones, doing a great job of negotiating all the obstacles.

On the way, I noticed the fresh tracks of a quad bike heading for Kara Gyem, only a day old. It is unfortunate that not only wildlife conservationists, but also hunters can access the very few remaining areas that are difficult to get to and that hold a great wealth of wildlife.

Finding a rare lovely camp site in the narrow valley and with limited daylight left, I decided we would stop for the night. We got the tents up and sorted out and settled in amongst the larch and cliffs. Only a little later, Nicola came racing back into camp in a great state of excitement; she had seen a big whitish animal gracefully running down a gulley between cliffs, it was long and low with a long tail; everything that she described about it fitted with snow leopard. Nicola had watched film of snow leopard before the expedition and this animal moved just like she had seen in the film. We considered other animals, ibex, juvenile ibex that are light in colour, manul, fox, lynx; nothing else fitted. However, the sighting had been at a considerable distance so it was not possible to be absolutely certain it was a snow leopard, just pretty sure :-)

31 July - Kara Gyem first survey

The last bit of the journey to Kara Gyem included the tortuous section through the forest where the 'road' had been removed by the river. First, there was a very tight corner between two big rocks, with only just enough room to pass. Next was a steep section with very loose ground; momentum took us up the first half and we then towed each other up the last bit. Next was a short steep section of wet grass with a big rock in the middle. Then it was down the other side, a narrow gully filled with boulders a very tight corner at the bottom by a precipitous drop to the river below. With care, good marshalling excellent driving from Martin and Uli and a bit of time, we got all the Land Rovers past and onto a decent track beyond :-) After about 4 km, we arrived at Kara Gyem meadow, wow! The whole meadow was a sea of vellow euphorbia flowers with islands of deep purplish blue delphiniums, incredible. We set up camp at the edge of the meadow amongst the Siberian larch and Siberian pine trees; the view out of our tents, across the meadow, up the braided river and to the glacier clad mountains beyond was that of paradise. After lunch we split into two groups, Volodia surveyed back along the valley where we had come from and found his favourite - a viviparous lizard, whilst I went with Laura, Nicky, Uli, Jurgen, Mike and Sergii up the valley. There was a road marked on the map, but there was no sign of it on the ground so we went for option B. The braided river consisted of small shallow channels and some not so shallow channels, all spread out over most of the glacial valley floor and conveniently with an even hard bottom of smooth pebbles – with a little care, great for driving up. We drove 4 km up the river to where a stream joined it, here we started our survey. As soon as we got out of the Land Rover, I noticed big fresh animal tracks in the silt.

Unusually, the tracks which were from a cloven hoofed animal also showed clear impressions from dew claws, these were elk tracks, an animal never recorded by the expedition before - an excellent start to the survey. We headed up the very steep slope by the stream and found a huge amount of sign from maral deer, Siberian ibex, Argali as well as elk, this was an area extremely rich in wildlife. Nicola spotted a Siberian chipmunk, barely 15 m from us. In the tops of the Siberian pine trees, locally known as cedar, pronounced 'keder', were big purple pine cones containing delicious pine nuts; it was not only us who valued the nuts though, the nutcracker or 'kedrovka' flew from pine to pine making its distinctive call as it searched them out. We ascended to the top of the main slope and had fantastic views up to an impregnable castellated mountain with rock towers a thousand feet high above and the beautiful valley and our Land Rover almost directly below us.

1 August - Kara Gyem High in the mountains

After breakfast, we all set off together to survey a mountain. We drove up the river for a couple of km to our start point where we started walking uphill through thick larch forest. There had been a big forest fire there perhaps 20 years ago so that between the well spaced old burnt trunks, there were lots of closely packed young larch trees. The sky was blue and it was warm, but all the trees and other vegetation was laden with water from earlier rain; those at the front (me!) got soaked brushing off all the water walking through, but it didn't matter in the lovely weather. As with our survey yesterday, we immediately started to find lots of fresh sign of large mammals; maral, elk, ibex, argali, lots of bear, wolverine and best of all and a great find for the expedition, some old scat that is probably snow leopard. The hill was very steep and unrelenting, it was lunchtime only shortly after getting above the tree line to the hanging valley above Kara Gyem valley and our camp, but the views were, again, fantastic. A little further up the hanging valley, Volodia & co headed back for camp whilst Laura, Nicola and I continued on up to the top of the mountain. The vegetation thinned out till only slabs of shale covered the ground as we crunched our way up. Patches of snow directed our route and then we were at the top and I instantly had a new favourite view. The upper reaches of Kara Gyem valley way below held Kara Gyem forest that terminated with a massive cliff, waterfalls, hanging glaciers and then massive snow and ice covered mountains. In the evening light, the scene changed mood every few seconds, the three of us stood there watching a show for the gods, stunning. A 4 km long cliff on the north side of the mountain dropped straight down about 1000 m to another secluded and tantalizing valley; it was on top of this cliff top plateau we spent the night in our bivvy bags. We were extremely lucky with the weather; not a breath of wind, dry and clear - perfect.

And both Laura and myself saw a meteorite, the most spectacular one either of us had seen. Burning for a long time, the meteorite was like a giant firework, full of colours and energy, a great end to the day.

2 August - Kara Gyem last survey day

Woke to an amazing sunrise that was so wonderful I felt I couldn't do it justice with my camera, so instead, I went back to sleep. Woke up again at the far more civilized hour of 9 :-) and had tinned peas for breakfast that tasted just great. Given the amount of sign we had seen of animals at lower altitudes, I was surprised by the lack of it on the mountain top, I said 'I'm surprised that we haven't seen any sign of ibex here, oh look there's some ibex!' From my bivvy bag, I sat and watched a group of 14 ibex as I ate my tinned peas; it's a hard life :-) Then Nicola spotted a second group of 17 ibex; which group to watch, decisions, decisions.

We set off to survey the summit plateau, plodding through some thigh deep snow which was hard going, but we did find tracks of a wolf that had likewise been plodding through thigh deep snow. Eventually, we decided that the time had come to start the descent back to the Land Rover at the bottom of the mountain :-(From the plateau, we headed down the rocky then vegetated hanging valley. We stopped at the end of the hanging valley and scanned the forest below for animals, but saw none, I wondered how long we would have to wait to see a bear, considering all the fresh bear sign we had seen in the forest the day before and Nicola (being greedy having already seen a snow leopard) said she would really like to see a bear. Continuing down towards the tree line, I spotted movement, a large animal about 150 m away. I told Laura and Nicola and we stopped and watched. From the bushes emerged a massive adult bear. To my horror, both Laura and Nicola shrieked in excitement and delight. I shared the excitement and delight, but didn't care to share it with the bear that was racing around the hillside like a rather nimble battle tank. Brown bears are not supposed to be aggressive towards humans, but I didn't really want to test that, preferring to remain undetected by the bear. Fortunately, the bear did not hear us and we made a detour around it back to the Land Rover.

3 August - Kara Gyem to base camp

Breakfast at 07.00, packed up and set off back towards base camp. One of the Land Rovers had developed a fault, probably due to dirt in the fuel, so that it lost power, only managing to idle; this was not the sort of place you wanted this sort of fault, however, if we let the car sit with its engine off for a while, you could get around 20 seconds of power; I used the 20 seconds to negotiate serious obstacles like rivers whilst otherwise, Martin towed me. The now slick driving team negotiated the difficult off road section through the forest with great skill and professionalism, getting through in good time. After perhaps an hour of interesting towing, the fault in my Land Rover disappeared and the vehicle then worked perfectly again; perhaps dirt in the fuel had been drawn through the engine? Back in the Taldura river valley, we stopped for a late lunch by some petroglyphs, but no-one could summon up the energy to climb the hill to look at them. Through Byelter with its Olympic stadium :-) across the steppe, Kosh Agach, then back to base camp for a fantastic hot shower courtesy of Amile, dinner and bed. Good to be home.

4 August - Arzhan Buguzun Spa

Arzhan Buguzun Spa is a very popular place for people to visit. Doctors prescribe stays at the spa to treat various conditions. The variety of people who can be found there is great both in terms of where they reside as well as their socio-economic group. The people at the spa have lots of free time and little to do, ideal for us to carry out interviews. We met a man from the capital of Altai, Gorno Altaisk who visits the spa every year. It was heartening that as soon as we met, he started telling us about how important it was to look after the site and the land of Altai in general and that Altians considered the land and its wildlife to be holy.

On the way back to base camp, we stopped at a few yurts, but no-one was in. Eventually, we found a yurt with some men working outside with their goats. Boris, his Russian name, or Mahbat, his Altaian name was very friendly and helped us as much as he could, telling us about argali in nearby hills, however, he had never seen snow leopard.

5 August - Buguzon River headwaters survey

Took three Land Rovers to the headwaters of the Buguzon river where we split into two groups, Nicky, Uli, Jurgen, Arno and I headed up a ridge, whilst Volodia took everyone else up a valley. Just a few minutes after setting off, Jurgen spotted a group of 5 argali heading up the hill and over the horizon, they were all adults and all had massive spiral horns that must have weighed a ton. This was our first sighting of these impressive and rare, red data book listed animals this year. On the way up the ridge, we found lots of sign of argali in particular and also lbex. There were lots of fresh tracks and many resting depressions including ones that the Argali had used the night before. On reaching the ridge top, the views opened out so that we could see the mountain range around base camp, the Chichova mountain range on the order with Mongolia and the hills of the Tuvan Republic to the north west.

At the top of our mountain, we stopped for lunch just under the top of a cliff to shelter us from the chilly wind. It was clear and sunny and with my Swarovski telescope, I could scan the mountains for miles around looking for animals. Eventually I found a group of 22 ibex about 4 km away, it was great watching them butting heads. We descended the far side of our mountain a little and I spotted the five argali we had seen earlier that day, they were relaxing on a patch of snow, cooling themselves just like I've seen red deer in Scotland in the summer.

6 August - Steppe lakes bird survey

After breakfast, we headed off across the steppe to a group of small lakes to survey them for birds. On the way, we had to stop every few minutes as a succession of different birds appeared before us; horned lark, long-legged buzzard, cinereous vulture, lammergeyer, red-billed chough, demoiselle crane, etc. etc. etc. At the lakes, we doused ourselves in insect repellent and set off. There were lots of tufted duck with young, a well as pochard. There were grey heron and ruddy shelduck whilst waders included redshank, wood sandpiper and Temminck's stint. Nearby the lakes, we found a group of 19 Bactrian camels; these animals used to be domesticated, but since the fall of the Soviet Union, they have been abandoned and are now feral, roaming free and apparently behaving like the very few remaining wild animals.

We visited Marat, our friendly local horseman, but unfortunately, he was not in, so we continued to Kokoria to get some supplies for Nina as well as ice cream or two :-) On the way back to base camp, I, along with Nicky, Georgina, Uli and Mike checked a steppe eagle nest and found that it had one very large steppe eagle chick in it, almost ready to fledge. We collected feathers from the eyrie for the Siberian Environmental Centre for their DNA study of the raptor populations in the area.

Back to base camp, showered and got dressed for dinner and then we all headed off to Campii's yurt, a 20min drive from camp. We had arranged to eat with Campii who had cooked a lamb for us. Stewed lamb is the national dish of Altai, so that was what we had – except for the veggies amongst us we had potatoes and mushrooms that Nina had prepared and taken along with us. I have been reliably informed that the lamb was absolutely delicious and there was certainly enough of it, mountains of it in fact. We paid Campii and went back to camp, it's good to put a little cash into the local economy without distorting things.

Back at camp, the festivities of our last night were not over, as Nina produced a lovely cake which we ate as we chatted and shared a drink or two. A wonderful last day.

7 August - Base Camp to Michelovo

After breakfast, I went with Laura, Trish, Lisa and Jurgen to check another steppe eagle's nest, as they were a little miffed at having missed out on seeing one yesterday. Even better, this eyrie had two chicks in it, again almost fully grown and almost ready to fledge; a fantastic sight and more data for the Siberian Environmental Centre.

After group photos and fond farewells we set off, a last ice cream at our favourite ice cream shop in Kosh Agach and off along the M52.

At Michelovo, the girls were first into the banya (sauna), apparently it was still warming up, so they had to wait a bit and were given some magazines to read, car magazines. So there they were discussing the merits of various off road cars in the banya, all that was missing was a few pints of Stella :-)

8 August - Michelovo to Novosibirsk

The looooong drive back to Novosibirsk......

So, that brings to an end the third slot of this year's expedition. We succeeded in getting to and surveying the Kara Gyem area that has eluded us in the past and we found there a real little paradise. Much other excellent surveying with excellent finds was completed, so very successful overall. Thanks to you all for all the hard work and the laughs; I had a great time, hope you come back :-)

Slot 4; I'm looking forward to meeting you all and getting stuck into the work. I will be in the reception area of the Hotel Sibir at 1930 Sunday 09 August, I'll quickly brief you on the plans for getting to base camp, please bring your passports and immigration cards. We can then go or dinner somewhere if you would like that. Departure will be 08.00 Monday morning from the Hotel Sibir.

10 August - Novosibirsk to Michelovo

Some confident driving from Axel along with light traffic got us to Gorno Altaisk immigration office in good time. Speedy processing of our documents got us finished there in record time too so that we arrived at Michelovo with time to relax and explore a little. After dinner, we had a banya (sauna); wow, that was hot! Cooled off in the river for about 15 min and was still hot when I came out! Shared a wonderful, enormous, sweet melon and then danced the night away, Axel doing his Saturday night fever thing :-)

11 August - Michelovo to base

Long wait for a not too great breakfast :-(Long drive to a lovely big lunch :-) Short wait at Aktash for our paperwork allowing us to go to all sorts of lovely places :-) Very rare (red data book), very long necked bird (black stork) seen on the way :-) Very glad that's the last time I have to do that very long drive to an from Novosibirsk and will be very glad when we get home to base camp :-)

12 August - Training day

When the sun rose over the mountain to the east of base camp, our tents, wet with dew steamed like a sauna; a precursor to the beautiful hot day ahead. After breakfast, we did the risk assessment and then the navigation training using sun, maps, compass and GPS. Volodia, our scientist then briefed everyone on why we are dong the expedition, how we do it – the survey methodology, and what we do with the information when the expedition has ended – primarily how it fits into global snow leopard conservation, but also the other uses our data is put to. In the afternoon, Volodia went for a training walk with Rachel and Solveigh, finding sign of eight different mammals and seeing a beautiful Siberian chipmunk.

Meanwhile, I did the off-road driving training with Melanie, Verena, Axel and Thorsten; this went very well as we safely negotiated steep hills, up and down, boulder fields and rivers. With the training successfully completed, we are now ready to get stuck into the survey work.

13 August - Move to Akkol Valley

Loaded up the Land Rovers with tents and food for five days and set off. Our current and only base camp has served us well over the years, but now, having surveyed that area thoroughly; it is time to move base camp. Having done a few exploratory trips to the Taldura river valley area, we will look for a new base camp in that are; the first place we will check and that we are heading for today, is the Akkol valley. Our route took us through Kokoria, Kosh Agach, the Kosh Agach steppe, Belter and then up the Akkol valley. On the map, the valley looked remote and difficult to get to, which usually equates with healthy wild animal populations, however on arrival, we found a good track, not only to the valley, but all the way up it, excepting the last 6 km. On the way there were two lakes and very unusually for Altai, there was lots of sand around the lakes and up much of the valley. The valley sides were very steep, on the east especially where there was an almost unbroken cliff along the entire valley. We stopped where a stream flowed down the western valley side in a sheltered spot surrounded by dwarf willow and birch with a few scattered Siberian larch; with the cliffs as a backdrop the scene was spectacular. Having set up camp, we explored the local area with its waterfall and gorge. I scanned the eastern cliff and found a Lammergeier vulture nest, the first one I have ever seen and a great find as the bird is a red data book listed species for Altai.

14 August - Survey of Akkol Valley

Volodia with Solveigh, Rachel and Melanie headed west uphill to a lake whilst I along with Verena, Marina, Axel and Thorsten set off in the Land Rovers up to the head of the valley and Safeski glacier, Altai's second largest. We left camp, got round the corner, past a patch of mud where we explored the limits of the Land Rovers traction...., drove another few hundred metres before having to stop. We walked up the steep sided valley that had a braided river on the flat valley floor whilst small hanging glaciers clung to the slopes above us. We saw one disused eagle nest and there were remarkably few raptors in the valley. There were a few ground squirrels around, but this was really the domain of the pika, a relative of the hare. These animals were everywhere, darting around with mouths full of vegetation that they dry and then store for the winter ahead. We even saw two albinos, complete with red eves, I've never seen anything albino in Altai before. As we neared the glacier, the pleasant walk along the river turned into an assault course over boulder fields, but the views of the glacier and jagged peaks above that we had were well worth the effort in getting there. Unfortunately, even right at the head of the valley, there was sign of intense grazing from domesticated animals such as sheep and goats and there was no sign of ibex, argali, deer and certainly not snow leopard. Then, out of the clear blue sky, started to fall, snow! There was a cloud above one of the mountains and the snow must have blown from it but it was odd seeing the snowflakes against the blue sky. On the way back, we collected armfuls of wood for a fire; this was an excellent idea. After sunset, it got cold, but the fire was hot, we all sat round it filling in the datasheets and talking about meteorites - it's a long story :-)

15 August - Move to Jyelo valley forest

Woke in the morning to a winter wonderland. Our tents and everything around were covered with about 4 cm of snow; just enough for a good snowball fight :-) After breakfast we packed everything up and set off, along with hikers from Moscow who had been in the mountains for 20 days. On the way, I noticed the petroglyph of an ibex by the road, we stopped and explored further; we didn't find so many more in the short time we were there, but we did find one slab of rock that had around 15 large ad unusual petroglyphs of fox, ibex, possibly elk, possibly oxen and other ones that were too weird to identify at all. At Belter we dropped off the hikers and Nina got a few supplies; this was apparently a big event for the locals and Verena got lots of attention from a very enthusiastic lady who spoke a few words of German. Leaving the excitement of Belter behind, we headed up the Taldua river valley where we saw a group of about 25 bactrian camels foraging by the river. We got to a beautiful camp site by a larch forest with big patches of purple flowers all around; this might be our new base camp for next year....

16 August - Survey day

We awoke to tents stiff with ice, but soon it melted as the sun rose in a deep blue cloudless sky. We split into two groups today, Melanie, Marina and Volodia headed up the Jyelo river valley to the Bejerdu glacier, whilst Verena, Rachel, Axel, Thorsten and I headed up a mountain to the north of camp. A narrow stream gulley at the start of our climb had larch trees in it and there were many birds flitting around including brown accentors and a finch that I cannot find in our field guides, so identification will have to wait till I get home :-) Though our mountain was over 3000 m high, the terrain was not generally rocky; mostly gently and steeply rolling slopes covered with grasses, sedges and wildflowers. Apart from one mountain hare, which was great to see racing off, there were no wild mammals, but there was sign of heavy grazing by domesticated animals such as sheep, goats and sarlik (a cow, yak cross). Near the top of the mountain, we came across a big drift of snow, surviving from last winter and even better, it came complete with three Altai snowcock; big birds that made the most surreal out of place call I have ever heard as the flew off. Altai snowcock are very rare birds only found in the Altai mountain area and this was the first sighting we had had this year.

The views all around us were picture postcard. To the west, big snow and glacier covered mountains disappeared off to the horizon in a tantalizing, unbroken sea of peaks and to the south, the great length of Taldura river valley flanked by steep snowy slopes and ending in the mighty Taldura glacier, the biggest in Altai.

After lunch, we headed down a gully to the west and near the bottom; I had a new experience. Everyone just sat down, scattered around the hillside, then, without any discussion or planning, we lay down and had a snooze for a wee while; a spontaneous siesta! We continued downhill and from behind the hill, two adult lammergeier vultures appeared, and they were low. I've seen lammergeier before, but seeing them flying so close was amazing, they were massive. We watched them circle around us for a bit, wondered about lying down and playing dead to get an even closer look at them, but then they were gone.

The walk back to camp along the Jyelo river was beautiful, with scattered Siberian larch and juniper bushes. The evening was cold, but the camp fire was hot and we watched stars and sputniks for a while before heading for bed.

17 August - Taldura valley

We drove up the Taldura river valley today. The valley was as beautiful as it was long and it took us over three hours to drive up it. There was some hay making lower in the valley, all cut by hand with scythe – hard work. As we went further up the valley, the track ended and we had to drive up the river bed, Thorsten and Axel negotiating the rocks and water well. We had lunch near the end of the terminal moraine with fine views of the glacier above us. After lunch we walked further up the valley and Rachel spotted an ibex half way up a mountain on the far side of the valley, just before it disappeared out of sight; fantastic to see that these animals, one of the main prey species of the snow leopard is in the area. As we neared the foot of the glacier, snow started to fall and it was time to head back for camp, so reluctantly we headed back to the cars. As Nina had joined us for the day, Amile had prepared dinner for us and had a great big pot of excellent soup waiting for us on our return; a great end to a great day.

18 August - Return to base camp

We had breakfast and packed up camp in the most beautiful morning. Ephemeral frost on the red and orange leaves of autumn glistened in the sun for a few minutes, and then was gone forever. We headed back to base camp via the scenic route..... To the west of the Chagan Uzun river, between Belter and Chagan Uzun village, are mountains that we have never explored before, so we drove through the middle of them by way of a quick reconnaissance to see if they were suitable for snow leopard and hence future survey work. The whole area was very heavily grazed and unsuitable for snow leopard, but on talking to a herder called Karan, we were told that there were ibex as well as argali in the area; Volodia instantly conjured up plans for a winter expedition to survey these animals :-) The landscape was very different from the craggy mountains we have become accustomed to in Altai, the mountains here were gentle and rolling with few rocky outcrops. As we neared Chagan Uzun, any bits of exposed ground glowed in the bright colours of the mineral rich land that is in places mined here for polymetalic ores.

We arrived back at base camp very tired and ready for a shower and bed, however, our work for the day was not done. The stream by base camp where we get our water had completely dried up, so I had to drive to another river and fill barrels with water from there. When we did eventually get our long dreamt of showers, they were sooo good :-)

19 August - Survey of Kojalu

This was quite simply a perfect day, surveying a wonderful mountain with a great team of people. The weather was warm and sunny. The views from the top went on for ever and we could see most of the part of Altai we had surveyed over the years; the Chichova mountains on the border with Mongolia, Cornie, Black Mountain near the border with Tuva, the Kurai ridge, across the Kosh Agach steppe to the proposed Silugem National Park, Irbestu – Snow Leopard valley and the wonderful snow covered Chuya mountain range. At our lunch stop, across the valley, on a very steep craggy slope, I saw three ibex – a long way off but great to see. Later, on descending the mountain, we saw a second group of ibex, this time eleven animals, only the second time I have see two groups in one day. Then, Thorsten spotted another group of three ibex, probably the same group we had seen earlier in the day. Then..... Sergii spotted a single lbex; fantastic. The return to base camp along the valley was a little rough, but our welcome anything but. Marina and Melanie greeted us with slices of fresh melon that Rachel had bought, whilst Amile offered us a small glass of vodka; it's a hard life :-)

20 August 09 - Last day at base camp 2009

Rachel and Melanie went for a walk in the woods by base camp and found all manner of wonders including a wolf skull. Thorsten and Amile went hunting mushrooms and came back with a huge bag full that Thorsten prepared for dinner. Verena, Axel and Volodia drove to Kokoria and came back with a blanket full of ice-creams and yes, they won first prize in the foraging competition. Meantime, I checked and packed up all our equipment for the end of the expedition :-(A group of four little young stoats were exploring around Nina's kitchen tent, it was wonderful to see these inquisitive little animals racing around. Nina produced a fantastic cake for dinner and we shared a drink or two, with great company, into the evening.

21 August - Base Camp to Michelovo

Packed everything up and filled the Land Rovers with bags and boxes, the roof racks got the tables and benches. Left base camp for the last time, had one last ice-cream at Kosh Agach and started the long drive back to Novosibirsk.

22 August - Michelove to Novosibirsk

Drove the now all to familiar flat, straight road back to Novosibirsk for the last time to end Biosphere Expeditions' 2009 expedition to the Golden Mountains of Altai.

Many thanks to all team members for all the help and hard work. A very successful year; after 2008 where we found no sign of snow leopard, the sign we found this year and especially Nicky's sighting were fantastic. During slot 1 we finally made it back to the Chichova mountains on the Mongolia border after years of trying to get permission, that was quite an adventure. Slot 2 horse riding mini-expedition revealed a new area rich in wildlife and the slot 3 trip to Kara Gyem was paradise with many fantastic animal sightings. We have been looking for a new base camp for a couple of years and due to the work done during slot 4, I think we may have one (to be confirmed!), so that is excellent too. Thanks again to everyone, we couldn't do this without your hard work and determination, I had a ball :-)

Andrew Stronach Expedition Leader