

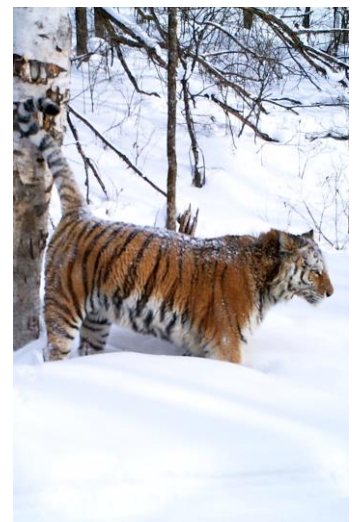


Siberian Tiger Winter Tour

Destination: Russia **Duration:** 14 Days **Dates:** 20th Feb – 5th Mar 2016

-  Experiencing having a mating pair of Tigers around the base camp for 7 days
-  Having the expert guidance of Alexander, a leading Russian tiger expert
-  Seeing 24 species of birds including winter resident birds such as Hazel Grouse
-  Being involved in a vital tiger census by counting tracks and setting camera traps
-  Hearing tigers roaring very close to the base camp one frosty morning
-  Exploring the immense Taiga forest that spans 2/3 of the northern hemisphere
-  Capturing a huge male tiger half climbing up a tree to scent mark it 3m up
-  Learning about the indigenous Udeghe people from one of their elders in Gvasyugi
-  A total of at least 5 different Tigers all being active within 5km of our base camp
-  Meeting Zhorik the injured but playful Tiger; rescued from a circus & living in Utyos



Tour Leader / Guides

Martin Royle (Royle Safaris Tour Leader)
 Alexander (Forest Reserve Director & Guide)
 Sergey (Base Camp Cook)
 Valeri (Transfer Vehicle Driver)
 Ivan (Base Camp Assistant & Fire Manager)
 Istmat (Base Camp Assistant & Cook)
 Viktor (Russian – English Translator)
 Eduard (Uytos Rehabilitation Centre Manager)

Participants

Mr. Ken Berry
 Ms. Ilka Rauch

Overview

Day 1:	Khabarovsk
Days 2-12:	Forest Reserve
Day 6:	Utyos Centre
Day 9:	Udeghe Village
Day 13:	Khabarovsk
Days 14:	Home / Khabarovsk
Days 15:	Home



Day by Day Breakdown

Overview

Tigers are most commonly associated with the tropical and subtropical forests and elephant grasslands of the Indian Subcontinent and South East Asia; however they used to range far and wide over the Asian continent. From Iran to Korea and Indonesia to Kazakhstan including most of Far Eastern and Central Russia; unfortunately over 93% of their historical range has been lost since the start of the 1900's (incredibly a reduction of 40% since 1990!). Most of the comprehensive decimation of the tiger's range has occurred in China where the tiger has a paradoxical role in the culture; both a revered and celebrated species; an animal integral to the creationist myths of Chinese religion and also one of the 12 animals of the Chinese zodiac. However this reverence is countered by a merciless hunger for tiger products; every part of the tiger is utilised by the Chinese in their traditional medicinal practises. From penis (for fertility) to whiskers (for asthma) and every part of the body in between the demand for tiger products is so lucrative that they have been hunted to the verge of extinction in China and now the demand has been met by poachers in other countries. The vast reduction of the tiger's numbers in China has led to a huge gap in the tiger's current distribution. Whilst still present in areas of South and South East Asia any map of the tiger's range will include a small shaded area along the Russian coastline just north west of Japan. This is the realm of the Siberian tiger (more correctly called the Amur tiger and in the local Udeghe language Amba); a forest that is covered in a blanket of snow and ice for 6 months of the year and then a rich and diverse temperate boreal 'jungle' in the summer. At first glance in the winter this seems like the last place that a tiger would be found, however they have spent a considerable amount of their evolutionary history in the forests of eastern and central Asia. The evolutionary history of the tiger starts in China and Java around 2 million years ago and at this time there were land bridges connecting Java to the mainland and the tiger quickly moved north and reached the Russian Far East, Japan and Korea around 1.5 million years ago. They remained here for some time, spreading west and as far as Turkey (for some reason tigers never made it further west and into Europe and they didn't cross the land bridge connecting Asia with the Americas). The tiger has is and always has been a truly Asian species, born and bred in this vast continent. It is ironic that the most closely associated country with the tiger (India) is the one that they arrived in the latest. Tigers only made it to India round 12,000 years ago, this is known because fossil evidence suggests that they never made it to Sri Lanka and Sri Lanka was attached to India via a land bridge until around 12,000 years ago. Since evidence of tigers has been found throughout India from around then it is clear that they would have made it to Sri Lanka if they had arrived when they were still connected. As tigers have spent most of their history in cooler climates they are more at home in the temperate forests than the sub-tropical ones of India, a fact that is highlighted by their dislike of the heat and their love of bathing in the heat of the dry season. So despite the Russian winter seeming so alien for a tiger to call home, they are very at home here and arguable more so than in India.

So it is here, in the frozen forests of Far Eastern Russia where our search for one of the most elusive and endangered animals in the world would take place. Whilst seeing a wild Siberian tiger is extremely difficult we would be helped in this task by Alexander and his team who run the 20,000 hectare reserve around 200km south of Khabarovsk. This reserve and the surrounding forests are home to a very high density of tigers (a density so high that it rivals densities in some of India and Nepal's most productive national parks); one of the main reasons for this high density of tigers is the prey base. Even though finding any wildlife in these forests in winter is tough there are lots of deer and wild boar around and whilst hunting occurs here (during hunting seasons) it has been less so than in other areas and so the numbers of prey still remains high. Our time in the reserve would coincide with one of the two annual censuses that are conducted in the reserve the numbers recorded here are vital in the ambitious yet achievable target to double the wild tiger numbers throughout their range by 2022); by counting the tracks and also by collecting pictures and videos of the tigers from remote camera traps the team are able to build a picture of the current population. The presence of adult male and females using the same areas are great and a litter of cubs is the perfect reward for many hours of tracing tracks in the freezing conditions. By spending time with the team in the reserve and becoming part of the tiger's continued fight for survival here you will be given a unique view into tiger conservation in a part of the world that is seeing genuine tiger conservation success. Most of the tiger populations around the world are decreasing, plagued with poaching and surrounded by huge and growing populations the tiger's days seem numbered in many countries they exist in. But in Russia the numbers are increasing, from around 40 in the 1940's to 450 or so today (320-350 adults with the rest being cubs and sub-adults). This is in part due to increased conservation since the 1950's when the first ever census of tigers (anywhere in the world) was conducted and the government realised the peril that the tiger was in, part the fact that Vladimir Putin loves tigers and has set up numerous new parks and reserves and has implemented new patrols and anti-poaching measures and also part that Russia is so vast and the population so low, that there are still places where wildlife can live in complete ignorance of people. As the wonderful and passionate Russian tiger specialist Dale Miquelle says 'Nowhere else do so many tigers live around so few people'. All of these factors contribute to an increasing number of tigers and with lots of forest habitat around there is scope for a vastly larger population here. But most of this incredible work is only possible with the help of people like us, the eco-tourist and that is what sets Alexander alone, his ideology



that eco-tourism here will provide enough income to support conservation and research and will also provide alternative income to the hunter that are currently the only people who pay the reserves for their use. So we would try and see if we could find a Siberian tiger, however this tour is about contributing to their continued survival and also to understand a very different tiger to the one that is usually covered in documentaries and books. To see huge tiger tracks in deep virgin snow is an incredible experience and one that will live long in the memory even if we are not lucky enough to catch a glimpse of the incredible and hardy animal that inhabits these frozen forests.



Day 1 Khabarovsk / Forest Reserve

Arrival

This morning Olga, Alexander and Maritn met Ken and Ilka at Khabarovsk train station as they arrived from Vladivostok. On arrival we then drove to Alexander's apartment as we would wait there for Viktor our translator and have some food and a briefing from Martin and Alexander. This is also a crucial time for Alexander to get together last minute things for the trip and for us to go to the nearby supermarket for any alcohol and snacks we would like to take with us. On this particular morning Alexander's car had sprouted an oil leak and so he had to go and get that taken care of first. Seeing Alexander in the city and confined to a small apartment is a little akin to seeing a tiger in a cage, his infectious enthusiasm comes out when you mention the tiger and the other wildlife of the taiga forest but when he is in the forest he comes alive and we couldn't wait to get into the forest so after Viktor had arrived and Alexander's car was fixed we met Valeri and another Alexander who would drive Ken and Ilka in an old Soviet era vehicle. The temperature today was -9°C and very unseasonably warm, the impact of this on the wildlife and tigers would not be known until we got there and started to travel around the forest. We left Khabarovsk at 12pm and arrived at the base camp at 3pm. Along the way we didn't see very much, of course some of the hardy winter birds were seen from the road, including a huge mixed flock of large-billed crows and carrion crows which roost along a section of road a few miles out of the suburbs of Khabarovsk. This is a commonly used roosting site and the 100 plus strong flock (or murder (the collective noun for crows)) looked imposing as they perched in the leafless almost lifeless trees either side of the icy road. The distinct lack of snow on the ground (there was a covering but very thin and unusual for February) was making spotting tiger tracks (or any other tracks) difficult. On the approach to the reserve from the village we passed the barren snow covered flat marshes and silver birch forests which marked the start of the taiga forest and the reserve. We did see some tiger tracks on the way into the forest which were from yesterday morning, we also saw some typical scent marking scrapes and also the full body impression of where the tiger had come and lay down in the road to have a little rest. Further up towards the base camp we found very fresh tracks, less than 2 hours old. We had passed a car recently and the tracks were on top of these and so we knew they were fresh. It was a male and female, a possible mating pair. There was a huge amount of activity including scrapes and scats. They were moving together along the road seemingly right to the base camp. Around 2km away from the base camp the mating pair's tracks left the road and headed into the forest. But these tracks were replaced by another tiger, another male whose tracks carried on down the road and left very close to the base camp. These tracks were not as fresh as the mating pair's. They were possibly the same tiger we saw tracks of earlier in the road, which were made yesterday morning. This amount of recent tiger activity so close to the base camp was incredibly encouraging and we were all very excited when we arrived at the base camp and were given a briefing about the base camp, met the base camp's staff and then dinner that Sergey (Alexander's son) had prepared for us; a wonderful selection of locally foraged and produced food. The vast majority of the food we consume in the reserve comes from the surrounding forest, during the hunting season the wild boar and roe deer are harvested and then stored in the natural deep freeze, the trout and salmon are all locally caught, all of the fruit and jams are collected from the forest as is the wonderful wild garlic condiment that is so typical of the Russian Far East. The other members of Alexander's team that we would be spending time with were Ivan and Istmat; we then had the traditional banya (Russian sauna and integral part of the culture here) explained, which we were welcome to each evening. After our meal we retired to our cabins for our first night in the Russian forest.

Day 2 Forest Reserve

Tiger Tracking

This morning was a very brisk -22°C and much more like the temperatures we would expect and indeed need in the Russian forests in the Far East in winter. We met in the camp dining room and had a hearty breakfast prepared by Sergey. The camp's resident Eurasian nuthatches were very active this morning (as they usually are) flying back and forth from the small feeders near the main cabins and their nest holes and also searching in between the



recently cut and chopped logs for firewood. These freshly cut logs are home to hibernating insects and beetle grubs which are welcome food for nuthatches. During and just after breakfast Ivan alerted to tiger's roaring around 2km away from the base camp. Martin heard the loud roaring, it sounded like mating activity but it was brief and had stopped by the time we tried to pinpoint where it was coming from. But it is very likely that the mating pair who had come down the road last night has spent the night near the base camp and were still around now. We also had some interesting news, a young dog that Alexander had been given the year before had given birth to puppies last night which was nice news.

Once we had got our cold weather gear on after breakfast we were given a guided tour by Alexander around the base camp. Throughout the tour and the following days the enthusiasm for the forest and its wildlife that Alexander has shines through and is not lost in translation. In fact there were many times when he would talk about tigers and the wildlife in the reserve and you would understand everything before Viktor had translated anything!

The camp itself had started life as a geologist's camp and in 1993 Alexander had taken over the base and wanted to do more biological research in the forest. No body knew the tiger population here when he first arrived and the numbers of wild boar and other ungulates were decreasing and the trend for all wildlife around here looked very bad. Since then Alexander has worked wonders in protecting the area and raising awareness and now the tiger numbers as well as the ungulates are increasing. One of the things that sets Alexander's base camp apart from other base camps in the forest is his better and larger cabins for tourism as well as a very nice banyan. We were shown these buildings as well as the other buildings. The idea being that he could feasibly run a research station here throughout the year and not just have some people here some of the time of the year as other base camps operated. As he showed us around the base camp he explained about the different trees and plants that are found in the forest and many of which he has planted in the base camp so that the camp can make the most of these species. As we were being shown around we were introduced to Alexander's favourite dog; Zidan; he is the father of Suscha's litter and Alexander's pride and joy. The dogs here are kept in cages as a precaution against tiger attacks. Tigers in Russia compete with wolves and they have evolved a seeming dislike for wolves and as a result all things canine. In the wild they would actively kill and try to disperse wolves from the forest (to reduce competition) and this can manifest itself in dog killing, which is not just distressing for the dog owner but can lead to a tiger spending too much time around a settlement where it may one day take a human or itself be killed. In fact many of Alexander's stories about tigers occurred within the perimeter of the base camp, including one where a tiger took one of his puppies from just 5m in front of Alexander as he stood in the entrance to the kitchen.

One of the most fundamental things that shines through at the base camp is that nothing is wasted, cigarette butts are saved and burnt as fuel, ashes from the fires are saved, mixed with salt and left as mineral salt licks for the deer at certain strategic locations in the forest and the tea leaves and tea bags are taken from the kettle and buried, these then attract worms that are used in the summer for fishing. It is very humbling to see people here live in harmony with the forest in a way that is so completely lost in most of Western society. We were shown the various cabins that are themed to particular animals in the reserve, *izybur* (wapiti), *medved* (bear) and *kaban* (wild boar) as well as the banya and how it works, the chicken coop, that provides fresh eggs and the big house that is usually only used in summer as it takes too much fuel to heat up sufficiently in winter. Alexander showed us the *Schistandra* vine which produces berries that are made into a delicious jam and also which roots are used to make tea with. We were also guided through some of the other plants that have been deliberately planted around the camp as their roots, leaves and berries are very good in a concoction of teas. One thing that is also very noticeable around here is the high presence of mistle-like parasitic plants that grow in clumps in the tree tops. Around one in 5 trees has one of these and Alexander explained that when a bird eats the berries of the mistle their faeces becomes very sticky so that when the bird defecates it sticks to the trunk or branch of a tree (without falling off and to the ground) this allows the seeds that are undigested in the dung then grow direct from faeces at the top of the tree. One of the most amazing plants that we were introduced to is the famous ginseng, the ginseng grows in this forest all over but amazingly only grows a new bud and leaves every 9 years, so it is understandably highly sought after by the local people and one of the two groups of indigenous peoples here (the Nanai) use lots of ginseng in their medicine. We were also encouraged to try the water direct from the frozen stream at the back of the camp and it is so cold, refreshing and delicious he claims he could bottle it and become very wealthy (however during our stay there was a problem with a microscopic aquatic crustacean (which had had a boom in population) and tainted the water a little), we collected water from another stream nearby once this was realised. He also explained about the old banya that he wants to convert to be a rescue shelter for orphaned bear cubs to hibernate over winter. Currently a neighbouring reserve is run by a bear scientist and he keeps many orphaned cubs over the first 2 winters before tagging them and releasing them to fend for themselves once they are sufficiently old enough. Another wonderful aspect of Alexander's knowledge and respect for the forest is born out of his love and compassion for the indigenous people who live in the forest and always have done. A little Buddha style wood carving has a great place in the base camp, this is Podi the Udeghe people's god of nature and rubbing his belly is good luck. Walking around a little snow started to fall, Alexander was telling us that last year no less than 13 cubs had been born and the numbers were increasing wonderfully. Near some wild grapes there was lots of Euraisan nuthatch activity around a Asiatic black bear nest up a tree.

After this introduction to the base camp and a small insight into the way that the local people use the plants here we headed out to further investigate the tiger tracks we saw yesterday; even before we got to these tracks we found more tiger tracks from very close to base camp. Alexander estimated that these tracks and the scrape that



we found were made by a large adult male tiger named Obor. Scrapes are another typical scent marking behaviour of tigers (and all big cats), they stand and move their hind feet in the substrate back and forth, raking up sand or soil into a small mound which they often leave some scat or urine in. As well as the visual sign of the scrapes and the mound, the urine and scat act as scent markers and the movement of the cats paws releases scent from inter-digital glands. This scent gland is particularly important for females looking to mate with males. As shown when females in heat increase their scraping rates when patrolling compared to when they are not in heat. He is known for using this area around the base camp every 2 weeks or so, but had not been around here for a while and so Alexander was pleased to have him back around and showing he is doing well. In the tracks left by Obor was some blood, this is likely to be an indication of a recent kill that was made or a small cut on his paw. But the amount of blood was very little (just a couple of drops) and so he would be absolutely fine. It is also possible that Obor is the male who was with the female and who we heard this morning roaring. We then found a female tigers set of tracks, once again this is likely to be the female who was with the male yesterday. The amount of scrapes and scent marking she was leaving in her wake is a very good indication that she is in heat and therefore probably the female who was with the male. It is very unlikely that she would tolerate another female in heat to be active within her territory. So it would appear that the mating pair had left each other. They tend to stay together for 2-3 days mating throughout that period and then disperse and with seeing Obor and this female's tracks on their own would indicate that the courtship has concluded. We made a quick stop along the way to check for large beetle grubs in a dead tree just off the road; we then carried on and collected SD cards from camera traps and changed batteries. Further along we found impressions of where the female had lay down on the road, also sat on the road and stretched out. The impressions in the thin snow cover showing off the wonderful impressions are a great insight into the unseen world of the tiger. Being able to visualise the tiger in the snow is a great way of further understanding the wildlife here and is often as close as we get to the tigers themselves. Of course it may not be Obor or the same female who was with the male last night, however Alexander can speculate (with good success) at the identity of tigers as he has a record of print sizes as well as pictures (for stripe identification) and maps of the tiger's known territories, so he would have a good idea of which female this was. Throughout the trip Alexander and his team would be guiding us along certain transect routes that they use twice a year to make the tiger censuses and he will be making a note of all animal tracks we see. The rare direct sightings along with track data and camera trap images and videos are all combined to produce an accurate summary of the tiger population in the reserve and surrounding forests and Alexander was also in charge of collecting the similar data kept by other reserve managers (although few – if any) are as dedicated and tiger friendly as Alexander, many use the forest reserves strictly as they were meant to be used which is to sell off certain trees to logging commissions and also selling hunting permits. These are things Alexander does seldom, he never allows logging and only sells a few permits as he does need the money to run his research, however he cuts short the hunting season by 2 weeks and never sells his full allocation of permits. This is one of the main reasons that the tiger numbers are so high in and around his reserve, there is more food (seeds and nuts) for the prey animals and so more food for the tigers (deer and wild boar). They seem to use the protection of his reserve as a nursery and the reserve acts like a heart, pumping out tigers to nearby forests. Here his work includes educating the other forest reserve managers on the importance of having a healthy forest and also the local people that the tiger is an important species and one that should be looked after and not persecuted.

Driving further down the road we saw several large 'nests' in the trees either side of the road. These nests were made by Asiatic black bears in the summer as they sleep in the trees as well as climb the trees to feed on tender leaves and buds at the top. This is a strange behaviour for the Asiatic black bear and the reason they spend so much time in the trees is the presence of tigers; that are predators of the bears. Obviously during the winter the Asiatic black bears as well as the brown bears that also live here are hibernating, but the reserve in summer and autumn is also the best place in the world to see this endangered bear species.

Other commonly seen tracks crisscrossing the road throughout our stay would be sable, Manchurian elk, wild boar, Siberian roe deer, hazel grouse, Eurasian red squirrel, hare species and various species of shrew and mouse who spent the winter in tunnels under the snow and make quick excursions in the open when crossing the road.

We then arrived at a carcass of a dead dog, it had been left here by hunters and has been attracting several scavengers including red foxes, raccoon dogs whose tracks were all over the place. When we arrived a northern raven was trying to get some of the frozen meat from the frozen carcass. But there was no evidence of a tiger coming along to have a piece of the frozen carcass. We then had a brief glimpse of a Eurasian red squirrel running away through the forest before we paid Valeri a visit. He lives at an old research station which is now his home as he 'guards' the area, and because he is here in his little wooden hut year around, probably sees more tigers than anyone else. They regularly walk past his house, mostly because he has had a habit of keeping dogs here and not looking after them and so they were regularly killed and eaten by tigers. So all of the tigers in the area know to make a pass by his house to see if there is an easy meal to be had. Since the 3rd in the last 2 years was killed because of his negligence Alexander told him he is not to be trusted with another dog and luckily he hasn't had one since. Alexander regularly meets with Valeri as well as all of the other residents and users of the forest in order to maintain good communications and also get an idea of any recent tiger movements or poaching activity; it is a great way to have many eyes in the forest. On this occasion Valeri hadn't seen any tigers recently and there were no fresh tracks around his base. But we did come across some of Alexander's friends who were having a BBQ in the forest and enjoying the weekend in the wilderness, in real Russian tradition we stopped and enjoyed



their company, exchanging stories and sharing their food and vodka before carrying on along the road to the big side of Little Ambine (small tiger mountain) whose other side is close to the base camp. This is a very good transit route for tigers and Ilka set up a camera trap here.

We then headed back to the camp for dinner as the sun was setting and darkness taking over. Later that night we went to Alexander's cabin and watched the videos and pictures from the camera traps we collected and changed today. They did show a male and female tiger walking close together near the base camp and the male was Obor, they were very active and between them made 9 different passes back and forth. With Obor even running after the female in one of the videos. We also saw that the afternoon we arrived at the base camp Alexander and Martin (in the second vehicle) were only 10 minutes behind Obor as he walked along the road.



Day 3 Forest Reserve

Tiger Tracking

With the temperature at -18°C we were in for another cold day, there had been around 2cm of snow over night and the sun was beginning to show through the clouds. We went for a drive again to check for any recent activity around where the tigers were yesterday. There was once again more activity and the tigers seemed to still be very active around here. Last night the dogs at the base camp were barking very loudly at around 2am, this is often a sign that they have seen or smelt a tiger approaching the base camp. The tigers are very clever and when they fancy an easy bit of food (which dogs are to a tiger) they approach settlements and camps such as ours and listen to where the dogs are barking, then they silently move around the base camp to another area and listen to hear where the dogs are barking. If the barking has followed the tiger then the tiger knows the dog is loose and therefore easy to catch, if the barking is always from the same place then the tiger knows it is in the cage and will leave the base camp and the dogs alone.

From the camera traps we looked at we had identified the three tigers who were around, it was Obor the large male, Buska was his mate. She is one of Alexander's favourite females and has raised at least 2 litters of cubs successfully. She most recently had a litter of 3 cubs who all survived to dispersal age (around 2 years old) and they had been regularly caught on camera traps over the last couple of years. The fact that she is now mating with Obor tells us that the cubs have left her to fend for themselves. We did identify the third tiger wrongly, it was not a small adult male but a large female called Rochelle. Their tracks were still around and they had been active around 5km from the base camp at some point last night. We also found fresh Manchurian wapiti tracks foraging near a clearing alongside the road. The wapiti scrape with their hooves to remove the snow from fresh grass and vegetation which they eat. They also peel off and eat the bark from trees during winter as there is not much other food around. We had more brief views of a Eurasian red squirrel and hazel grouse as we headed up Little Ambine, along this road (which is not often used during winter) we found tracks from a large male tiger, they were several days old and could have been from Obor before he found the female and started his courtship. The tracks followed the road all the way to close to the research centre, they went off the road and into the forest where we lost them. We carried on and checked out the dog carcass once again. There were once again many fresh red fox and raccoon dog tracks around, but no tiger tracks. We turned around and headed back to the base camp for lunch and a little rest before heading out again in the afternoon. This afternoon we went out with Alexander and Ivan in the snow mobiles to the creek nearby the base camp (around 5-6km away), this creek is frozen over in winter and it is a very good pathway for the tigers to use as they patrol their territories. There are several camera traps here which overlook some prominent scent marking trees and so we hoped for some good tiger sightings. But there were no fresh tracks along the creek. However we did find a new scent marking tree which was listing to one side, there were scratches on the tree which were around 3m up, on the underside of the tree. We couldn't figure out how a tiger had made these and so we set a camera trap up here as it could have been made by a huge tiger. We would have to hope that the tiger who made these very impressive scratches would come back at some point in the next few days.

Day 4 Forest Reserve

Tiger Tracking

This morning was much colder with the temperature at -35°C the clear skies had lasted all night and all of the residual heat had been lost over night, the night was also very bright and clear with strong moonlight reflecting from the snow and illuminating the forest in an eerie silver glow. The dogs had been barking again last night so there was a chance that the tigers were still around and close to the base camp. This morning after breakfast we took the snow mobiles and went deep into the forest to check another commonly used tiger route which ends at an winter cabin.



These cabins are located throughout these forest reserves and are free for hunters and trappers to use during winter. The hunter or trapper will be given a permit for a certain number of animals they can catch; whilst out in the forest they are welcome to stay at these cabins and they are kept in good repair. Along the road to the cabin we found tracks from Obor made last night, there was no longer any blood in his tracks and so the blood from his kill or a small wound had disappeared. Also around 500m away from the base camp there was signs of mating activity in the snow, lots of activity where the tigers had lay down, tussled with each other and there were also tracks from a female. So it was apparent that the courtship between Obor and his mate was not over and the noise from this mating clash was likely to have been what alerted the dogs last night. At the cabin we were taken off a little way into the forest to a natural mineral salt lick. These areas in the forest are important for the animals during winter as well as year around, they eat the salt rich earth to gain minerals which are lacking in their diet. During the winter Alexander leaves out ashes mixed with salt to help the animals out. This increases the survival rates of young animals during winter. Back at the cabin some bird seed was left out to attract some of the hardy species that stay around here year around. However today only a solitary marsh tit arrived.

We then came back to the base camp for lunch and then in the evening at around 5:30pm we left to collect some fresh water from a nearby stream and also check camera traps. Around the creek we found fresh mink tracks on the frozen stream, these rarely seen animals were brought here for fur farming and have now established large populations throughout Russia. The problem with this is that they are non-native American mink and tend to outcompete the native mustelid species such as Siberian weasels and pine martens. Around 200m away from the base camp we found tracks of our (now resident) mating pair of tigers on the road, they came out onto the road, walked a little way along the road and then back into the forest. They came out of the forest in the direction of the tracks we saw on the way to the cabin this morning. Clearly this is where the tigers had walked to after they left the pathway near the cabin. We collected the camera trap memory cards and saw a third tigers' tracks on the road. This is probably the second female, Rochelle, but we couldn't tell just from the tracks and would have to wait and see what the camera traps showed us. It was great to see that there were three tigers being so active around the base camp once again. On checking the camera traps we found that at 1:40pm today (when we were just a few hundred meters away at the base camp) Rochelle walked casually down the road without a care in the world. The mating pair had come past much earlier than that at around 5:20am this morning. This confirmed that it was the presence of the tigers that had caused the dogs to bark as they were barking at around this time this morning.

We still hadn't seen a tiger but with so much activity around the base camp we would always hope for better look in the coming days.



Day 5 Forest Reserve

Tiger Tracking

This morning the temperature was cold again at -34°C with the skies being very clear once again. Our day started the same way as the previous days, with so much tiger activity around the base camp we decided to scout out the same road and around the creek area for any more developments. Alexander was also a little concerned with this other female being around and whether this would cause a problem with the mating female. Today some of Alexander's friends who had been staying at the base camp over the weekend and enjoying a birthday celebration; would be leaving. So we said goodbye to them and headed down the road. Around 3km from the base camp we had more tiger tracks on the road and we also found some scent marking from last night. This was a new male, Achkarick so we now had 2 adult males and 2 adult females all within 5km of the base camp. This is why this reserve in winter is *the* place to come and try and see one in the wild. The tracks from Achkarick continued down the road scent marking along the way; and we followed them, passed some very fresh hare tracks. We then came to the tracks of three Manchurian wapiti who walked across the road, walked up the slope into the forest and then came running back out of the forest and darted across the road. Presumably the wapiti had walked up into the forest and smelt, heard or saw the tiger and bolted away. A little further down the road we saw tiger scat, full of wapiti hair and confirming that this male tiger had made a kill of a wapiti in the last 24 hours. But things just kept hotting up with this tiger activity as we then found female tiger tracks nearby, this was possibly Rochelle but we couldn't be sure. She scent marked against an upturned tree just off the road. Carrying on our scout of the road we saw lots more wapiti activity around the road and near an old logging camp which had been left abandoned for the last few months, but had left a clearing and made accessing the vegetation underneath the snow easier for the deer. We where then amazed to find very good and clear impressions of three different tigers lying on the road. A male, female and cub; this would make at least 5 different tigers being active on this road within the last few days. We measured the prints and body lengths to get an idea of the total size of the tigers; the male (Achkarick) had a paw width of 12cm and a body length of 1.85m; the female (confirmed as Rochelle) had a paw width of 10.5cm and body length of 1.55cm and



the cub had paws 9cm wide and a body length of only 1.25m. Rochelle's impression was particularly nice as she had her head, ears, tail, body and legs all clearly visible and even her paws pushed into the snow in the middle of road where she stretched her legs out whilst lying on her side. The snow had melted a lot underneath all of the impression, which showed us that the tigers had all stayed here for a considerable amount of time. We hoped that the camera traps would have captured some of these tigers as they walked down the road, but we wouldn't know until later today when we had chance to check the memory cards.

We then carried on to the dog carcass, once again there was lots of tracks around, but no tiger tracks. We did have a pair of azure-winged magpies trying to scavenge on the frozen carcass. We then turned around and headed back towards the base camp. It was stunningly beautiful today with crispy blue skies and the sun shining down into the forest. On the way back we had some glimpses of hazel grouse and tracks of a huge wild boar that crossed the road since we had driven down here earlier today. Then after lunch back at base we rested for a while and then in the late afternoon Sergey, Viktor and Ivan took Ken and Ilka down to the winter cabin so they could spend the night away in the peaceful surroundings of the forest. On the way back from the winter cabin Sergey, Viktor and Ivan found tiger tracks which were not there when they dropped Ken and Ilka off. This is by far the most tiger activity we have recorded so far in coming to this reserve and we still had numerous tigers very close to the base camp.

Day 6 Forest Reserve

Tiger Tracking

This morning it was warmer than the last couple of days and the thermometer was registering -20°C , there had been some light snow fall overnight (~1cm) and the sun began to break through the cloud in the late morning. We went to collect Ken and Ilka from the winter cabin at around 11:30am, so that they could fully enjoy the peace of being alone in the magical frozen forest. On arrival there we prepared a mini BBQ for lunch and had a little look around the cabin for tracks. We found some fresh wild boar tracks including a couple of piglets. Ken and Ilka didn't hear or see any animals during the night. However the most interesting thing about these tracks was that the wild boar tracks had some blood in them. This was a sure sign that a tiger (very likely the same tiger who Sergey, Viktor and Ivan had seen the tracks of last night on the way back from the cabin) had attacked the group of wild boar at some point in the last 24 hours. After this little snack we came back to the base camp, where Alexander had been analysing the camera trap footage and we were called to his cabin. We watched as the mystery of the giant tiger who scratched the tree was solved. It wasn't a giant tiger but Achkarick however this huge male pulled himself up on the underside of the tree to reach high up on the tree. The tiger using his incredibly powerful forearms to pull his massive bulk up the tree, hanging at a 45° angle upside down was amazing. There is no end to the amazing footage that Alexander's camera traps get and also the behaviours that we see from these tigers. Other camera traps showed that Achkarick was very active in and around the creek area and scent marking all over the trails. Presumably the scent of Obor who had been mating with the unknown female very nearby was the reason for this increased scent marking. Achkarick had not been around the reserve for some time according to Alexander so that is one of the reasons Obor is around and also why the high level of scent marking is being done. He needs to install his scent and dominance over his territory again.

Later this afternoon we went by snow mobiles to the forest behind the base camp to place some ashes, salts and pellets for the ungulates at a natural mineral salt lick. There were many tracks of deer (both Manchurian wapiti and Siberian roe deer) and wild boar all around the area, as well as tracks from Obor and the female. They were a few days old and were from when we heard them roaring in this direction. This is apparently where they had been spending a lot of their time during their mating courtship. We also found a large scat with wild boar hair in it, this was old and was probably made before they started to mate. We then returned to the base camp for dinner after a very good day with some excellent tiger activity and wonderful footage we celebrated with some vodka.



Day 7 Gvasyugi Village

Tiger Tracking & Cultural Sightseeing

This morning the temperature had gotten colder to -27°C and after breakfast we went to visit a local Udeghe village. In the world it is estimated that there are no more than 50 tribes who still live out their lives in as much of a traditional way as possible. In the Russian Far East there are two such tribes left in existence, the Nanai and the Udeghe. The Udeghe are more numerous and in the Khabarovsk Krai (district) there are around 600 (out of a total population of 2,000) and the village of Gvasyugi has a population of around 150. This village is of cultural importance as it is the home of Valentina, the village elder and one of the most prominent members of the Udeghe



culture. She has single handedly translated their language and alphabet into Russian and also published many books on the Udeghe language; in an attempt to save the language from extinction. She has also established the museum at the village and teaches the young women in the village the traditional and important beliefs and skills that would have otherwise been lost. Skills such as producing their stunning traditional dress and knowledge of how to perform their dances and songs were on the verge of being forgotten as the modern world, alcohol and other temptations start to have larger and larger impacts on their daily lives. The sad part is that once Valentina dies (she is 78) who will take this over, who will be the protector of the Udeghe's culture? It is hoped by Valentina, Alexander and Martin that if more people visit here for the tiger tracking and experience the wilderness as well as the Udeghe culture that the next generation will be value and profit in their culture and the surrounding forests. So that both are protected and secured into the future.

Driving along the forest roads to the village we would once again be looking for signs of tigers and other wildlife. Early on we found 3 nice wild boar tracks on the road and had great views of a hazel grouse. The bird had been sleeping on the snow just to the side of the road and we woke it up as we approached and the grouse casually walked out into the middle of the road allowing for great views. As part of Alexander's work we measured the snow fall at various points along the way to the village. Quite close to the village (2-3km) we found tracks from a male tiger which were around 2 days old and then alongside the road in a frozen river were the distinctive sides and tracks of a pair of Eurasian otter. They slide on their bellies across the snow to travel quickly across the frozen terrain. There was also a surprising amount of Siberian roe deer and Manchurian wapiti tracks along the main road too. We came across more tiger tracks along the mountain road which were around 4 days old. After we counted the many wild boar and deer tracks and took the measurements of the tiger paws we arrived at the village. The village was started in the 1930's when three local tribes merged and formed the permanent settlement. On arrival at the village we were immediately met Valentina and went to the library and school first; from here we went to the village hall where some of the local women donned their traditional dress and performed traditional dances and songs for us. Unfortunately with so few Udeghe people left and with the culture dying out without practising these dances for tourists and with the help of Valentina these dances and songs are likely to be lost forever. We were shown the wapiti dance which was used during the hunting season and includes a birch bark horn being blown. Another important dance we were shown was the bear and woman bridal dance. The relationship between bears and women and bears taking women as brides is one that is common and prevalent throughout Northern Hemisphere cultures. We were also treated to the song and dance of the sowing of their traditional dress and Valentina sang a lullaby from a fairy tale. The tale tells of a mother singing this lullaby day and night for 7 days and 7 nights and within this period the baby grew up. As well as the dancing and the songs we saw the traditional instruments such as the tambourine being used for many of the dances. We then lunched at the cultural centre a traditional meal of greyling soup with rye bread. The fish were caught in the nearby Khor River. We then had a tour of their museum, the museum is made up of two sections, first the outdoors section which contains traditional style buildings, store huts and a shrine. The use of bark as insulation, roofing and walls was particularly interesting and the little shrine was complete with an idol to the forest god Amba. Also in this small section was a very small cone shaped wooden hut that is where a woman would have traditionally gone to give birth. She would also stay there with her new-born baby (completely isolated from anyone else) for 2 weeks. Inside the museum (the second section) we were shown the traditional dress, some carvings, equipment such as spears, arrow heads, idols and masks. Also in the museum room were the very few and limited texts on the Udeghe people, including Valentina's own publications. They also included some interesting rock art information, from a cave in the north-east from the village which bears a striking similarity to rock art found in Hokkaido (northern Japan) and made by the Ainu people. The connections between the various tribal people and the relatedness of each is poorly understood and clearly more research is needed to understand the complex relationships between the people of Manchuria, Amur, Korea and Japan. We were shown the importance of the birch tree as most of the dishes, bowls and handicrafts are made from birch bark. Valentina also told us about the history of the Udeghe here and their shamanistic beliefs. We then left the museum and headed back to the base camp, snow started to fall on the drive back. We went back a different route so that we could top up on fuel, at the petrol station we saw one of Alexander's friends who told him of a tiger sighting he had on the main road in early February. Alexander took down the details of this sighting for his monitoring and we carried on back to the base camp. Around 7km away from the base camp we found fresh tracks of a tiger walking away from the base camp, we had perhaps scared the tiger off the road as we approached our headlights and engine noise would have alerted the tiger to our presence well before we would have come across it. We finally arrived back at the base camp well after dark and rested after a good long day.

Day 8 Forest Reserve

Tiger Tracking

Today the temperature was marginally colder than yesterday but at -29°C with clear skies all around. Today we went out with Ivan, Sergey and Viktor along the mountain road, this is a different side of the reserve we had not been to yet (as the tigers had been so prevalent around the other areas recently). But it was time to check for any activity on this side of the reserve and also to collect and check the camera traps. Along the way we would also leave for feed pellets for the ungulates, last year the winter was particularly bad with huge snowfalls which had caused a large die off of animals. So a little extra food (and the unseasonably warm winter) this year will all help to bump the numbers back up and also help the tigers as if their food does well they will do well also. We didn't go



very far today but within 100m of the camp we found tiger tracks from 2-3 days ago. We couldn't accurately measure the tracks and there are no camera traps around here so it would be impossible to tell exactly which tiger made these tracks. But it would likely to be one of the 5 tigers we knew as around the base camp and not a 6th! The highlight of this morning was a stunning set of tracks from a Eurasian lynx which walked down the road away from the base camp along the road for many kilometres.

After a break for lunch back at the base camp we headed further down along this mountain road and passed the border of Alexander's reserve and into the neighbouring forest reserve. We were coming down here not only to check the roads and camera traps for evidence of tigers and but also to check on the quality of this road, as this is the road that we would use to visit Utyos Rehabilitation Centre in the coming days. On the way we were shown the large beetle grubs that winter in the dry wood of trees, they can grow up to 15cm long and resemble witchita grubs from Australia, although they are not eaten here. We headed towards Alexander's favourite tree in the reserve, a stunning yew tree that is around 600 years old. Along the way towards the tree we found wapiti tracks along the road, also found today and walking all of the way from close to the base camp for several kilometres were tracks from a Eurasian lynx, these were on top of our tracks from this morning. This is probably a male lynx following the scent of the female lynx that we saw the tracks of this morning. We also had great extended views of a hazel grouse on the road and in the open. Along the way we changed several camera traps, we would check these later; as we climbed up the mountainous road we entered some pristine and primary taiga forest; in this area there are less silver birch and on the higher altitudes of this road are very good places to see the true taiga forest. The taiga forest is continuous for hundreds of miles to the north (until the Arctic tundra) and stretches from Scotland and Iceland through Scandinavia, Russia into Canada and even as far east and south as New England in the USA. Here at the reserve the taiga is at its most southerly and it mixes here with the more temperate Manchurian rain-forest that is more prominent along the Sikhote Alin mountains. It is this habitat that is preferred by the tigers and it is only here in the surrounding forests of the reserve; in the farthest north-west of the tigers distribution; that you get the tiger living in the taiga. It is this mixing of the forests here that results in the more Asian species such as tigers, leopards, Asiatic black bear, yellow-throated martens and musk deer sharing the same habitat as northern boreal species such as brown bears, Eurasian lynx, wolves, wapiti, sable and Siberian roe deer. Most of the forest that we have been travelling through since arriving at the base has been heavily logged in the past and the secondary forest growth is dominated by silver and 3 other species of indigenous birch trees, there is also the *Schisandra* vine, thorny aralia, oaks, walnuts, cedars and pine trees. The major difference in what is true taiga forest compared to the secondary birch dominated forest around here is that the most common tree is the larch and taiga has much higher tree diversity. The whole basis for the rich ecosystem here is founded in the presence of large seed bearing trees such as cedar, Manchurian oak, Manchurian walnut and Korean pine. These massive and slow growing hard woods were naturally the first to be targeted by the loggers in the 1950's-1980's and there are very few stands remaining. The odd Manchurian oak, Manchurian walnut or Korean pine still can be seen in the forest and Alexander has a small stand of Manchurian oak in his reserve that somehow remained unknown to the loggers. These acorns are the main source of food for the wild boar which is the number one prey animal for tigers. The whole ecosystem is dependent on the presence and mast success of these few species but in particular the tiger's continued survival is inextricably linked with the Manchurian oak. So seeing some areas of primary taiga forest is very refreshing and gives hope that the thriving tiger population here can continue to be thriving into the future. In this area the amount of Asiatic black bear nests in the trees are very high and there is one particular tree which is hollowed out and the usual hibernation spot for a bear during. The Asiatic black bears like to hibernate inside hollow trees and can squeeze into surprisingly small spaces, whilst the brown bears prefer caves and holes further up the hills and slopes. The black bears are also heavily preyed upon by tigers and tigers often check the hibernating trees for sleeping bears. Several of the more well-known hibernating trees can be found to have tiger scratch marks on the outside where tigers have attempted to get into the tree. We went to the big old yew tree and it is an amazing sight. Hidden away in a narrow valley the tree had somehow gone centuries without the wind, landslides, heavy rainfall, storms or logging taking it down. They are very valuable as a hard wood and Alexander is very proud to have this tree on his reserve and protected from loggers. On the way back we saw many sable tracks, old wild boar crossing the pathway as well as many shrew and mouse tracks coming out from their small holes under the snow and running over clear areas before the tracks disappear back into the tunnel on the other side of the path. We also found hazel grouse tracks, walking in the snow and scrapping away the snow to get at the vegetation underneath and depositing its pellets in neat little holes in the snow. A few hazel grouse feathers in the snow and some wing impressions marked where a raptor or owl had swooped down and grabbed the hazel grouse from the snow and took it away. We then left the area and headed back to the base camp for dinner.





Day 9 Utyos Rehabilitation Centre

Tiger Tracking & Sightseeing

The brilliant clear blue skies of the last couple of days continued today and the temperatures were stuck at -27°C once again. After breakfast at around 10:30am we departed for the Utyos Rehabilitation Centre, we would take the mountain road as yesterday, but today went further than the yew tree and continued to follow the lynx tracks from yesterday. They continued on for another 2-3 kilometres before turning off and heading into the forest. We also found tracks from a young tiger along the road, they were from around 4 days ago and hard to decipher anything more than the direction that the tiger was travelling in. We picked up from logs on the road that had been cut for firewood and delivered them to a nearby base camp before carrying on, Ilka spotted a pair of black grouse in the trees near this base camp, however they flew away pretty quickly and we didn't have the best of views. We then had good although quick views of 3 hazel grouse before finding female tiger tracks from 3-4 days ago and then a second tiger, this one a male, who had walked down the road and lay down next to the road. We measured the tiger and found him to be huge with a head and body length of 2.1m. This tiger carried on to the 'Post Office'.

This is the nickname of a rocky cliff located around 20km away from base camp and a location where nearly all of the tigers in the area and many that pass through sporadically visit to scent mark. Being one of the most prominent locations in the area for tigers to exchange information. When a tiger scent marks the act to people may seem rather trivial, scraping the soil or scratching a tree coupled with urination or defecating; however the scent released from inter-digital gland, anal glands and in the urine is full of hormones and pheromones. These chemicals last between 7-21 days depending on the conditions and can tell other tigers information such as the sex, age, dominance, physical fitness, reproductive state and also when the animal last ate (and possibly much more that we do not understand yet). This information allows animals of the same sex to avoid occupied territories and also know if the individual holding the territory is fit enough to repel an attack by a rival for the territory and it also tells individuals of the opposite sex of sexual receptiveness for mating. Alexander has camera traps set here and since March 2014 he has caught over 11 different tigers on the camera traps. This area may be single most important area in the whole northern Khabarovsk tiger's range for tigers. We were not sure how recent the tiger had been here and we hoped that the camera traps that Alexander had at the Post Office would provide the answer, so we climbed up to the cliff and collected the memory cards (putting in new ones). Melted snow at the cliff showed us that at least one tiger had lay down here for very long time. We continued on, coming along another otter slide alongside the road over the frozen river and then the tracks of Bucksa. She currently has three cubs who are 5 months old and the first tracks we saw were of her only, the cubs were presumably on their own waiting for her to come back with food. Alexander had heard of tracks from 2 days ago of all four tigers together, the mother with her 2 female and 1 male cub. So we were very confident that they were all still alive and doing well. A shrew came out of one of its tunnels and ran across the road before disappearing into the snow once again. Before we left the forest and continued our journey on the main roads we visited another base camp, this camp caters for rich Russian tourists wanting to have a break or hunt in the forest. Then just as we were leaving the forest we saw a small flock of Bohemian waxwings in a white birch tree, they were feeding on mistle berries and not at all fazed by us watching them. We then proceeded as the day was getting on and we wanted to enjoy some good time at Utyos.

At Utyos we would see the work being done by a handful of people in Far Eastern Russia (largely self-funded; although they do receive international support from various NGO's including the British based David Sheppard Wildlife Foundation and the Russian based Phoenix Fund), who dedicate their lives to protecting tigers that have come into conflict with humans, tigers that would ultimately face a certain death without any intervening help; and whilst here we would also be able to see one of these incredible tigers in the snow of the Russian Taiga forest. Along the way we would be visiting different tigers' territories and a couple of transects that are very valuable to the overall tiger censuses. After a short stop at the large village of Bitchoi to visit the shop we carried on. This is the largest village around here and we bought some drinks and snacks before heading off and travelling through several smaller and more traditional villages on our way to the rehabilitation centre, these villages were once thriving communities but since the fall of the Soviet Union the villages have been abandoned by the government and since then many of the farms have been bought by the Chinese and Koreans, during the summer growing season the owners bring their own Chinese labourers in and so the local people are left with even less space for growing, as well as less job opportunities and the spiral continues to deepen. Most of the crops grown here are potatoes and corn however in the winter these fields are pristine and snow covered. During the winter the major source of income for the local people is selling the cedar cones that they can find during the autumn. Interspersed between the villages were small stands of forest and we searched these stands of forest for birds such as eagles, buzzards, hawks and owls. But with no luck today due unfortunately. When we arrived we were introduced to the staff and manager. The centre was established by Vladimir Kruglov in 1991, Vladimir used to be employed to catch Siberian tigers alive using nothing but ropes and a large sack. These animals were sold to zoos and circuses and during his life he caught over 40 tigers like this. Then he caught one particular tiger for a circus but this tiger had a missing canine and the circus refused to take him. He was caught as a cub after his mother was killed by poachers however his injuries and missing canine meant that Vladimir could not risk releasing this tiger back into the wild. So he built a large enclosure on his land, this was the birth of the rehabilitation centre and from this he started to rescue other animals (tigers, bears, foxes, lynx and deer) any animals that were reported orphaned or injured on roads or by hunters were taken in by Vladimir with the aim of helping them recover or grow to independence age before being released into the wild. Some of the animals however are too badly injured or too dependent on people to ever be released and so they are kept at the rehabilitation centre and given as good a life as they can provide.



They also become very important ambassadors for conservation and education around here. The most famous of these was of course the tiger that started all of this, named Lyuti he was probably the most famous Siberian tiger in the world and also the most photographed, he also helped to raise much needed money for conservation and research into Siberian tigers during the 21 years he was kept at the centre. Vladimir himself died after a tree fell on him in 2005 and when Lyuti died in 2012 he was also buried with Vladimir and as is tradition in Russia the tombstones have pictures of the deceased on them. Vladimir's is probably the only tombstone in the world that has a picture of a Siberian tiger on it next to him. Before arriving at the centre we visited the small cemetery and saw the grave and beautiful tombstone. Since his death the centre is run by his son Erdo Kruglov, he was here with his wife to show us around and explain how the centre operates. Currently the centre is home to a huge male wild boar who was kept as a pet and is too used to people to be released now and two Siberian roe deer. Last winter (2014-15) they also has two Siberian tigers which had been caught as they were hanging around a village. They were caught at around 20 months old and were most likely orphaned by poachers. Without their mother around to make sure they take the correct prey (wild boar and deer) they are likely to take 'easier' prey such as livestock, dogs and possibly people. Being so close to a village the authorities decided that they are best captured and placed in the rehabilitation centre until they are old enough and conditioned to their natural prey and then released into a protected reserve far away from villages. This is where Utyos comes in, there are a couple of such centres in the Russian Far East but Utyos has the best record in terms of successfully rehabilitating tigers. It is always a risk when releasing a top predator into the wild, they sometimes get too used to people and seek them out, and they sometimes get too stressed out and do not live a normal wild life. However the alternative of leaving them involves a far higher chance of them coming into contact with people in a negative way. The general consensus with Siberian tiger rehabilitation is that is if it increases their chance of long term survival by a fraction of a percent then it is worth doing. These tigers (and all tigers that they are planning on releasing) are kept off display, they have the bare minimum human contact and are kept in enclosures around 1km away from the rest of the centre, the overall point is to make them hate people, the idea is that they do not have any happy memories about people and so when released they stay away from people as much as possible. Only by doing this will they stand a chance of living a good and long life in the wild. There is a live video feed from their enclosures and they can see the tigers and they are monitored 24 hours a day. The tigers are provided with live prey around once per month, so that they can hone their hunting skills and remain as wild as possible. They are also provided food that contains vitamins, medication and things that the tiger needs to ensure it is parasite free and healthy before release. These two tigers were released in the spring time and by all accounts have been doing well and there has been no further reports of them causing problems.

We then went to meet the famous tiger Zhorik. At nearly 6 years old this male tiger was a performing tiger in a the Kurgansky circus when it got a chicken bone lodged in its cheek, this wound became infected and the circus could not care for the animal and so the centre took custody of the tiger. The odds were definitely stacked against Zhorik making it as the infection was getting gangrenous, however with funding from the David Shepherd Wildlife Foundation and WWF, Utyos was able to operate on the cheek and jaw. With the expert help of a veterinarian team led by Dr. Karen Dallakyan and 19 operations later Zhorik now has perfect health and a life. He will never be able to be released into the wild, having been hand reared and being far too comfortable around humans as well as not being able to hunt (the results of the operations meaning that most of the left hand side of his upper jaw has been removed including all of the teeth on the upper left quadrant – this was because the infection had spread this far); however Zhorik now has an important role to play as he follows in the footsteps of Lyuti as an ambassador for all Siberian tigers. School children visit this centre and Zhorik is probably the only tiger that they will ever see and hopefully they gain an appreciation for this incredible animal and through the hard work that Erdo is doing here the next generation of Russians grow to love the tiger and its habitat and continue the upward trend of tiger numbers in this part of the world. With increasing numbers of tigers in Russia (bucking the trend from elsewhere in the tiger's range) and the abundant space and prey populations in the vast Russian wilderness this is probably the last hope that tigers have for their long-term survival. We enjoyed our time with Zhorik, it is hard to see a tiger of this size and power in an enclosure (around 1 acre in size) and even harder to see the disfigured face of the beautiful tiger. But when you consider the alternative fate of this individual and the need for heightened education and awareness the ends do justify the means here. With Zhorik being an ex-circus tiger he is very friendly to people and mock stalks us, charges and then jumps at the fence. All a show and wanting to play he shows us the behaviours that make the tiger such a formidable predator in the snow. Their huge paws acting like perfect snow shoes and their senses all focused intently on the target, it is remarkable how anyone would want to kill such an incredible animal but with more people joining tours like this in the future we can start to buck the trend in poaching by making alive tigers more valuable to local people, communities and economies than a dead poached individual. This is a long process but one that can be done, it has worked with mountain gorillas, whales and certain species of sharks such as great-white sharks and it should work equally well for tigers as well as other mammals like rhinos, elephants, jaguars, polar bear and many others. After around 45 minutes with Zhorik we left and had lunch with the Kruglovs. Around the rehabilitation centre there were many bird species around including Eurasian bullfinches, marsh tits, greater spotted woodpeckers, northern ravens and common magpies. We also found tracks inside the centre, firstly from Siberian weasel but also a male tiger. The tigers come straight into the reserve and it goes to show that the tigers live in and amongst villages around here. This is how they can get themselves in trouble with poachers and also how problems can arise by taking livestock and possibly (and very rarely) people.



We then had a late lunch at the centre before starting our return journey. On the way back we came across a pair of Northern goshawks being mobbed by northern ravens, the large raptors flying quick and low across the open fields before reentering the forest. The only other sighting of note from the long journey back (via the village) was of more tiger tracks, this time near the main road and the Khor River. Again showing that the tiger population here really can be found just about anywhere.



Day 10 Forest Reserve

Tiger Tracking

Today was a very clear day once again and the temperature was hovering around -26°C again; because Ken and Ilka had enjoyed their night alone in the winter cabin so much they had decided that they wanted to do that again. So we had a leisurely morning around the base camp and then at 11:30am we headed down to the winter cabin, checking the trail and camera traps along the way. We couldn't find any fresh tiger tracks along the way. Then on arrival at the winter cabin we set the fire going, unpacked the packed dinner for Ken and Ilka and prepared a BBQ for lunch and some traditional Russian forest tea. The root and berries of the *Schisandra* vine had been placed in the pot along with some chagga (a fungi that lives on birch trees and has good anti-carcinogenic properties) and boiled. This is a tasty tea and went down very well with the roasted wild boar. After lunch Ivan, Sergey, Viktor and Martin left Ken and Ilka to relax in the cabin and spend a nice night alone in the forest, surrounded by the wilderness and of course tigers.

Day 11 Forest Reserve

Tiger Tracking

This morning the weather was still very cold (-25°C) and we left Ken and Ilka to radio to us when they were ready to be picked up. We got the call at around 1:30pm and then had lunch back at the base camp. Catching up we heard that a few of the resident birds had paid visits to the cabins, but the one that Ken really wanted to see (which isn't that rare usually but none were around at the moment) is the eastern great tit. They also had a visit from a long-tailed birch mouse who would come out and feed on the seeds (for the birds) in the cabin. It is amazing that many of the larger animals hibernate (bears) and migrate (eagles) leaving the small rodents and tits to stay and ride out the hard winter here. The sun was out and the temperature was actually quite mild, around -5°C the afternoon and the birds were out in force today. We had great views of a female greater-spotted woodpecker around the base camp whilst having lunch. At twilight we would head out for a drive up and down the main road in and check for any fresh activity and of course hope to come across a tiger on the road. We carried on down the road a little further towards the village than we had been before and Alexander climbed a small hill so he could make a phone call. Ken and Ilka decided on staying on the road, and when Alexander got to the top of the small hill he told us that he had disturbed a sleeping male wild boar which ran off away down the other side of the hill and away into the forest. It was in general very quiet around the forest near the base camp at the moment and maybe the high amount of tiger activity earlier in the week had subsided as they had all left the immediate vicinity and went to patrol other areas of their territory. On the way back to the base camp we found fresh roe deer tracks and feathers and a little later the carcass of a hazel grouse on the road, this was not heard when we left and so an owl or raptor had just made this kill, but we couldn't find the culprit. Back at the base camp we found out that Sergey had seen the hazel grouse being killed by a northern goshawk as he was collecting some firewood out in the forest.

Day 12 Forest Reserve

Tiger Tracking

Today would be our last full day in the reserve and we feared that the tigers that had been so prevalent in and around the base camp over the first week or so had disappeared now and things were much quieter. The temperature had warmed up significantly and it is amazing that how much the temperature can vary day by day, today the temperature increased to -16°C this morning. There were clouds in the sky and this was part of the reason why the temperature was warmer, the heat being kept in the atmosphere by the clouds, instead of being lost into the stratosphere. At breakfast we watched as the Eurasian nuthatches were out in force as they collected the grubs from the chopped logs used for firewood. Ivan was busy (as ever) chopping wood and the nuthatches here the axes as a dinner bell. After breakfast we left and went to check out a natural mineral salt lick, whilst we were out Alexander told us that he had received permission from Moscow to capture the male tiger Obor. For around a year Obor had a wire snare around his neck. A snare that was probably set by poachers looking to capture a roe deer or musk deer (as it was not strong enough to capture a tiger and keep hold of it), but the wire had dug quite deep into his neck. At first the camera traps showed Obor to be struggling and losing weight, the cut on his neck was bleeding and it looks a very bad situation. So Alexander applied for permission to capture him with local vets and the Russian



Tiger Response Unit, remove the snare, give medical care to him and then release him back into the forest. But the bureaucracy in Russia meant that the paper work alone took months and months to get back to him. In this time Alexander worried about the health of Obor and when he had not seen him on camera traps for a few days he worried he had succumbed to infection or starvation as it seemed to affecting his ability to hunt. But by the time the paperwork came through Obor was doing very well. As we had seen on this trip he was mating (keeping hold of a female in oestrous from other males is not an easy task) and also hunting, as we had found his scats full of hair. He pictures on the camera traps showed that his was in good physical condition and the wound around his neck had healed well and there was no sign of infection or bleeding anymore. With it being winter again now the threat of new infection would be very rare, it as the first hot and humid summer that he had to get through without infection and he managed that. So now that he had permission he was delaying making the calls to his vet friend and getting the tiger trackers involved as the whole procedure to capture the tiger, sedate it and perform an operation (which is what would be needed now as the skin had now grown over the wire) would be life threatening to the wild tiger and incredibly stressful even if everything went well. As long as Obor was fit and healthy and living as a normal tiger Alexander was hesitant to disturb him, Martin and all at Royle Safaris agrees with this philosophy; and the good think now is that if Obor's situation changes then he has the permission to put a team together quickly and get the wire removed. But only in a life and death situation.

Along the way to check out the camera traps on the main road Viktor spotted a hazel grouse perched on the tree, we had great views of the bird as it sat there confident that its great camouflage had rendered it invisible. There were fresh tracks and scat on the road, possibly from the last 2 days. However it would have been hard to missed this scat, but then again we do sometimes miss things that in hindsight appear obvious. The tracks went into the forest and from here we mounted the snow mobiles and sledges and headed deeper into the forest towards the mineral lick. This is a beautiful part of the forest and we left some more salt out for the ungulates, there was lot sof evidence of wapiti having been around here feeding and also where some had lay down to rest. There were lots and lots of tiger tracks around here and clearly tigers had spent a large amount of time around this area. But it was very difficult to predict how old they are bit they were not very fresh. As the snow began to fall we went back to the base camp where our farewell feast was being prepared. When it was ready we enjoyed a wonderful feast before retiring to our rooms for our last night out in the frozen wilderness and home to the wonderful Siberian tiger.

Day 13 Khabarovsk

Travelling

With the temperature at -22°C we had our last breakfast at the base camp and packed up ready to leave at 11:00am. The drive back was largely uneventful with the only sightings of note being the large colony of large-billed crows along the road. Once we arrived back in Khabarovsk, we met up again with Olga, said goodbye to Alexander and the other drivers Alexander and Valeri; we checked into our hotels as Viktor booked us a table at a nearby restaurant for tonight. The rest of the afternoon was free for Ken and Ilka free to rest, shower and explore the city and Amur River banks and then in the evening we met up again with Viktor and enjoyed a nice Russian meal before heading back to the hotel. We all said our goodbyes tonight as Ken and Ilka would be staying on in Khabarovsk for a day before continuing their journey to Japan.

Day 14 Home

Departure

This morning Martin left his hotel for the airport in time to catch his return flight home.

Species List

Siberian Tiger Winter Tour / February 2016

Mammals (* = heard or signs only / CT = Camera Trap images)

	Common Name	Binominal Name
1	Vole species	<i>Arcanthis species</i>
2	Siberian roe deer	<i>Capreolus pygargus</i>
3	Manchurian wapiti	<i>Cervus canadensis</i>
4	Ussuri white-toothed shrew	<i>Crocidura lasiura</i>
6	Shrew species	<i>Crocidura species</i>
7	Manchurian hare	<i>Lepus mandshuricus</i>
8	Hare species	<i>Lepus species</i>
9	Eurasian otter	<i>Lutra lutra</i>
10	Eurasian lynx	<i>Lynx lynx</i>
11	Least weasel	<i>Mustela nivalis</i>
12	Siberian weasel	<i>Mustela siberica</i>
13	Sable	<i>Martes zibellina</i>
14	American mink	<i>Neovison vison</i>
15	Raccoon dog	<i>Nyctereutes procyonoides</i>
16	Tiger	<i>Panthera tigris</i>
17	Eurasian red squirrel	<i>Sciurus vulgaris</i>
18	Long-tailed birch mouse	<i>Sicista caudata</i>
19	Wild boar	<i>Sus scofra</i>
20	Asiatic black bear	<i>Ursus thibetanus</i>
21	Red fox	<i>Vulpes vulpes</i>

February									March				
20	21	22	23	24	25	26	27	28	1	2	3	4	5
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	*	*		*					*				

†Alexander

Birds (* = heard or signs only)

	Common Name	Binominal Name
1	Northern goshawk	<i>Accipiter gentilis</i>
2	Hawk species	<i>Accipiter species</i>
3	Long-tailed tit	<i>Aegithalos caudatus</i>

February									March				
20	21	22	23	24	25	26	27	28	1	2	3	4	5
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4	Bohemian waxwing	<i>Bombycilla garrulus</i>
5	Common redpoll	<i>Carduelis flammea</i>
6	Feral pigeon	<i>Columba livia</i>
7	Northern raven	<i>Corvus corax</i>
8	Carrion crow	<i>Corvus corone</i>
9	Large-billed crow	<i>Corvus macrorhynchos</i>
10	Azure-winged magpie	<i>Cyanopica cyanus</i>
11	Greater spotted woodpecker	<i>Dendrocopos major</i>
12	Black woodpecker	<i>Dryocopus martius</i>
13	Eurasian jay	<i>Garrulus glandarius</i>
14	Black grouse	<i>Lyrurus tetrix</i>
15	Eurasian tree sparrow	<i>Passer montanus</i>
16	Siberian jay	<i>Perisoreus infaustus</i>
17	Eurasian magpie	<i>Pica pica</i>
18	Grey-headed woodpecker	<i>Picus canus</i>
19	Pine grosbeak	<i>Pinicola enucleator</i>
20	Marsh tit	<i>Poecile palustris</i>
21	Eurasian bullfinch	<i>Pyrrhula pyrrhula</i>
22	Eurasian nuthatch	<i>Sitta europaea</i>
23	Owl species	<i>Strigidea species</i>
24	Hazel grouse	<i>Tetrastes bonasia</i>

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