

## BREN's Baikal Special

Welcome to this special Baikal edition of the British Russian Eco-cultural Network newsletter. This issue is dedicated to providing a varied selection of stories about Baikal, the world's largest freshwater lake, situated in southern Siberia.

The articles illustrate the richness of Baikal for local inhabitants over the centuries, but also how today the lake is threatened by natural resource exploitation in and around it. Katy Harris tells the uplifting story of how public opinion contributed to

President Putin's decision to reroute an oil pipeline away from Baikal's shoreline. Mandy Haggith explains how the Baikalsk Pulp and Paper Mill is a source of ongoing pollution into the lake and surrounding regions. Finally Eva Heitzmann tells of how her first adventure in Zabaikalsky National Park, Ust Barguzin, resulted in her moving to Baikal three months later to live with her new husband.

Lake Baikal is one of the world's greatest natural treasures. It is important that more people become familiar with the value of and the threats to

this magnificent lake, so we can all contribute to preserving its special qualities for future generations. BREN hopes this issue will assist in raising awareness about Baikal and that you too will understand its importance to life on earth.

#### Contact

Feja Lesniewska & Heather Stacey  
 BREN Co-ordinators  
 Feja: feja@brenweb.org  
 Heather: heather@brenweb.org  
 or info@brenweb.org  
[www.brenweb.org](http://www.brenweb.org)

## Baikal – Pearl of Siberia

Lake Baikal is a huge expanse of water clean enough to drink and sufficiently oxygenated to support life right to the deepest cavernous parts where the hydrothermals bubble up from the earth's core. Baikal is a very special place for many reasons; all of which inspire wonder and amazement whether you read about, hear about or are lucky (or determined) enough to visit what the Buryats, the first settlers in the Baikal region, call the Holy Baikal Sea.

Lake Baikal is located near the city of Irkutsk in Eastern Siberia. It was formed more than 25 million years ago, some scientists say by the movement of two tectonic plates. These plates are still moving and are thought to cause the lake to continue to expand by approximately 2.5cm per year. At 1,620m deep, Baikal is not only the oldest lake on the planet, but also the deepest. Its volume is 23,600km<sup>3</sup>, this accounts for approximately one fifth of the world's unfrozen freshwater.

Apart from these staggering facts, Baikal has many more sparkling gems up its watery sleeve. Commonly known as the 'Pearl of Siberia', this



phrase reflects its purity, its richness of wildlife, its stunning location and its place in the hearts of the Siberian people.

Baikal has more endemic species (over 1,200) than any other body of freshwater. Among them is the nerpa seal which is the only mammal in Lake Baikal. It is a mystery how the seals came to inhabit a freshwater lake in the middle of the Asian continent, as zoologists believe their nearest relatives live in the northern arctic regions. The nerpa has a beautiful pelt as well as thick layers of fat to keep it warm. It lives on another species endemic to Baikal – the golomyanka – which it dives as deep as 300m to catch. The golomyanka, a very oily fish, primarily inhabits the lower levels of the lake and has one very peculiar feature. If the fish swims to the surface, exposure to sunlight can cause it to decompose, leaving behind fat, oil and bones.

Between the 6th and 11th centuries a Turkic tribe, the Kurikans, inhabited the Baikal shores, the lower reaches of  
*continued on page 2*

the Selenga river, the Tunkinski valley region and the valleys of the Barguzin, Angara and Lena rivers. In the early 13th century Mongol tribes settled on the eastern and western shorelines. The Buryat nation formed at the end of the 17th century. The Buryats were shamanistic in their beliefs. Their most sacred site is on Olkhon Island in Lake Baikal (pictured on p. 1), where the Buryat people were the first human settlers. 'Olkhon' means windy/sunny in the Buryat language. Legend has it that the first shaman was born there.

There are many myths and legends surrounding Lake Baikal, not least because it seems to have a personality all of its own: temperamental, charming, and moody. One well-known Buryat tale sees Baikal as an old, powerful man who had 336 sons (the number of rivers flowing into the Lake) and one daughter, the beautiful but headstrong Angara (the only river to flow out of the Lake). She enraged him by refusing to marry the feeble Irked, preferring the mighty Yenisei (Russia's longest river). The old man chained her up but

one stormy night she slipped her bonds and fled north to her lover. As she ran her furious father hurled a huge boulder after her. She got away, but the rock remains on Olkhon Island to this day. It is referred to locally as the Shaman Stone and is visited by hundreds of people every year on their way to the southern shores of Baikal.

For more information:  
[www.baikal.eastsib.ru](http://www.baikal.eastsib.ru)  
[www.irkutsk.org/baikal](http://www.irkutsk.org/baikal)  
[www.bww.irk.ru](http://www.bww.irk.ru)

# Pipelines, people and politics

*Plans for a new Siberian oil pipeline to run along Lake Baikal's shoreline were changed after popular protest earlier this year. Katy Harris outlines the full story.*

**T**ransneft, Russia's state oil pipeline monopoly, plans to build the world's longest oil pipeline (over 4,000km) from Taishet in Eastern Siberia, via Skovorodino to the Pacific Ocean, where an oil terminal will be constructed. Transneft claims the pipeline will have the capacity to pump up to 80 million tonnes of oil a year to markets in Asia, mostly to Japan. In spring 2006 it was decided to pursue a pipeline route passing just 800 metres from the northern shore of Lake Baikal, within the boundary of the UNESCO World Heritage Site which includes much of the watershed basin of the lake.

Such close proximity to the shore would mean that any significant oil spill from the pipeline would pump thousands of tonnes of oil directly into the lake and surrounding rivers, jeopardising the unique Lake Baikal ecosystem. The company would have very little time to respond to such an emergency. The oil spill threat is exacerbated by high levels of seismic activity locally. The pipeline proposal states that the pipeline is safe in earthquakes of nine degrees on the MSK-64 scale, yet the area has regularly experienced earthquakes of 10-11 degrees.

Over the last few years, regional NGO Baikal Wave has been monitoring large-scale industrial developments throughout Irkutsk Oblast, including the development of the Kovytko gas field and the proposed gas pipeline that would cut through the Tunka National Park at the southern tip of Lake Baikal to reach the Chinese border. Their experience in Kovytko suggests

that when areas of largely untouched boreal forest are opened up for oil and gas development, uncontrolled exploitation and environmental degradation usually follows. New roads allow access for poaching and illegal logging, and the construction contractors brought in by oil and gas companies, operating in remote areas where no-one observes their actions, often do not adhere to environmental laws or even to the guidelines set out by the companies themselves. An oil pipeline at the northern end of the Lake would be likely to result in similar problems. This is in addition to any direct environmental impact caused by the project and the threat of oil spills already mentioned.

Lake Baikal, which hosts three National Parks and three State Nature Reserves, is not only a unique and beautiful wilderness landscape, it is also extremely difficult to build in, due to mountainous terrain, the extreme winter climate and the high risk of earthquakes. In January 2006, 43 out of 51 scientists on a Russian State Environmental Impact Assessment Committee vetoed the proposed route due to high seismic risk, the likelihood of oil spills and the close proximity to Lake Baikal. Russia's Federal Service for Environmental, Technical and Nuclear Supervision (Rostekhnadzor), in charge of approving the project, decided to extend the period of review rather than accepting the result. The review committee was expanded to include 34 extra experts recommended by Transneft and then split into three, with each group given a third of the

pipeline route to review. This meant that only one third of the committee reviewed the controversial middle section routed past Lake Baikal. At this second sitting, only 27 experts declared the route unacceptable, allowing it to be approved by the committee. This is a clear demonstration of how environmental impact assessment laws can be circumvented.

However, the pipeline project had caught the attention of the public, both locally and internationally, and citizens' groups were quick to condemn the decision. Baikal Wave had monitored project plans since they were first proposed and was influential in attracting public attention to the issues and providing detailed information to the media and other interested parties. On 18 March a demonstration of around 5,000 people took place on the streets of Irkutsk (the largest in many years). Similar protests took place in Moscow and over 30,000 people signed an internet petition.

However, Russian political decision-making processes are highly centralised. Jennie Sutton of Baikal Wave wrote in February, "It is only with the intervention of the Prime Minister or the President that construction could be halted now." Yet even in Russia's harsh political climate, public opinion and active campaigning can be instrumental in effecting change and on 27 April the miracle happened: President Putin ordered the pipeline plans to be altered and routed away from the shore of the Lake. This was a real victory for civil society (although Putin may have had other motives too!)

as well as a glimmer of hope for the future of Lake Baikal.

In June 2006 Transneft announced a longer but less mountainous route some 400km to the north of the Lake, a move supported by environmentalists. However, the battle is not over. A final decision is yet to be made on what the exact route of the pipeline will be and plans for environmental and social impact alleviation are still to be formed. Along with other civil society groups, Baikal Wave is using its previous experience of organising 'citizens' environmental impact assessments' and involvement in public hearings to follow developments and ensure that laws are respected and the views of local people are heard

Since the 1999 Lake Baikal Law, the Russian State has been looking at a proposal to create a protected Natural Territory (*Prirodnaya territoriya*) around Lake Baikal, an extremely positive measure which will strengthen existing laws on protection of the lake and its surroundings. The Irkutsk regional administration, as well as Baikal Wave and other local activists, are pressing for the boundaries of the 'central ecological zone' of the territory to follow those of the World Heritage Site, in order to maximise the level and

scope of protection. So far the response to their requests has been positive and it seems the proposal may well be approved.

In a climate where environmental laws exist but are frequently not followed and large companies, both Russian and international, have a great influence on governmental decisions through their economic power, the work of concerned citizens to ensure that their voices are heard and proper procedures are followed is vital in ensuring conservation and long-term sustainable use of natural landscapes

and resources. NGOs such as Baikal Wave, despite serious under-funding, are successful in making a difference and creating a more sustainable future.

*Katy Harris, with thanks to Jennie Sutton for assistance*

Further information:  
[www.baikalwave.eu.org/Eng/index-e.html](http://www.baikalwave.eu.org/Eng/index-e.html)

[www.pacificenvironment.org](http://www.pacificenvironment.org)

## Other pipelines around Baikal: the southern routes to China

**S**uggestions to alter the borders of the Tunka National Park, south of Lake Baikal, in order to allow construction of oil and gas pipelines for export to China were rejected in 2003, due to lack of benefit to local inhabitants and environmental hazards including high mountain terrain and seismic risk. Now there is a proposal for a gas pipeline in the same place for local use. Baikal Wave expressed concerns that altering borders of protected areas for development violates Russian conservation laws and that, once national park borders are changed, a flood of similar pipeline developments could follow. Baikal Wave is instrumental in demanding and attending public hearings to ensure that environmental laws are considered and enforced.



# A dangerous experiment for Baikal

## *Will Baikalsk Pulp and Paper Mill*

### *ever clean up its act?*

**B**aikalsk Pulp and Paper Mill is one of the most notorious polluters on the planet, with a dreadful record of nearly 40 years of dumping chlorine effluent in Lake Baikal. It is in a glorious location, nestled among dramatic, snow-covered, taiga-forested mountains rearing up from the lake's southern shore. A protected forest immediately to the east is fumigated by the steam plumes from the mill's red-and-white striped chimneys and from a thinner, blacker chimneystack that spews sulphurous grey fumes into the air-stream over the lake.

Baikalsk is a typical mill town, most of whose inhabitants work at or are dependent upon the mill. It owns the ski resort, the taxis and most of the shops, and it runs the buses, funds the school and, most controversially, handles the town's sewage. Chlorine from the mill limits the efficacy of the biological treatment process,

resulting in e.coli pollution of the lake, but close the mill and the town will pump raw sewage into this precious ecosystem. An independent municipal waste treatment plant for the town is desperately needed.

As part of a four-month global journey researching a book on paper called *Paper trail*, I visited Baikalsk in February 2006. Lake Baikal is a symbol of the vast volumes of fresh water that are abused by the global paper industry. One of the thrills of my trip was to walk out on to the ice and see the bubbles breathed out by this vast, unique ecosystem, believed by the local Buryat people to be a living organism.

Getting into the mill was not so easy, but with a lot of help from Baikal Wave, I spent a somewhat surreal afternoon listening to mill employees attempting to persuade me that life thrives on the warm effluent belching

from their lake-bed pipe. The mill takes 90,000m<sup>3</sup> of water from the lake every day and produces a similar volume of effluent consisting of suspended solids of sulphur, chlorine and sodium compounds which is pumped back into the lake at 11-14°C, 100m out, at a depth of 40m.

Jennie Sutton of Baikal Wave, who has been campaigning to stop this pollution for decades, says: "The mill is one of the sources of negative impact in the lake and it's a very serious source. The mill's impact is felt on the floor of the lake over a significant area that is now incomparable with the rest of the lake in terms of damage and disappearance of species. It is mostly endemic species that have suffered. There is also air pollution that is partly the mill's. Around 90 per cent of the air pollution comes from local sources and that includes the Baikalsk mill."

The chief technician, Elizivieta Pavlovana Tarakanovskaya, wearing a substantial blue hat like a big cornflower on her head, told me that the mill makes 'strategically important varieties of cellulose', which as far as I can gather means viscose and cardboard. It produces 200,000 tonnes of pulp each year, the equivalent of all the paper used by a large British city such as Glasgow.

The mill was built in 1964 to make viscose for aircraft applications, but shortly after it began production, better synthetic alternative materials became available. These days its products are mostly sold to the Chinese textile industry, through the mill's Moscow-based parent company Continental Management.



The timber for the mill is 90 per cent pine and comes from Irkutsk, Krasnoyarsk, Chita and even further north. The cost of transporting wood to the mill is increasing and supply is a big issue: areas close to the mill are logged out. Jaakko Pöyry (the world's biggest forestry consultancy firm, based in Finland, and a notorious engine of pulp mill developments around the world) estimates that wood will need to travel 500km to keep the mill supplied. Wood comes entirely by rail since transportation by water has been banned. In the past, many logs were accidentally dumped into the lake when rafts of larch and pine being transported across the lake broke up in storms: pine floats but larch is dense and sinks to the bottom where the logs rot, using up oxygen from the water.

The mill's pollution of the lake took on national significance in the late 1980s, when a breakout of canine distemper decimated the endemic population of seals, the nerpa. Organochlorine contamination (chemicals like dioxins and polychlorinated biphenyls (PCBs)) from the mill was blamed for the seals' susceptibility and there were calls for the mill to be 'reprofiled': either closed down or modernised. The mill responded with a crazy scheme to pump waste water through a pipeline up over the mountains to the Irkut River and on to the Angara. This pipeline proposal led to big public demonstrations. Jennie Sutton says, "Many people think that the environmental movement in the Soviet Union arose here at Baikal because of the pulp and paper mill, though I believe there are also other pretenders to this glory. Anyway, the pipeline was never built. It was a hare-brained idea from the start."

A less hare-brained scheme received the support of UNESCO, when Baikal became a World Heritage Site in 1996. The new plan was to work towards an eventual phase-out of pulp production, beginning with a shift to a closed-loop production and an end to using chlorine for bleaching. This shift, however, has never happened. Instead there have been years of wrangling and abortive projects involving the United Nations Industrial Development Organisation, the European Union, the Finnish government, Jaakko Pöyry and the World Bank.

Three years ago, Baikalsk pulp and paper mill changed hands and it is now owned by Oleg Deripaska, an aluminium tycoon. Under the new ownership the World Bank is once again preparing to offer credit to the



mill for a 'modernisation programme' and Jaakko Pöyry is once again writing the script. A closed-loop system is promised by 2007, recycling water and returning none to the lake, though this will reduce water consumption by less than half and all of the current liquid emissions will be steamed off as air pollution. The new plant will, I was assured by the chief technician, include a separate municipal waste system.

Scientific studies have found that human mothers' milk in a lakeside village is very high indeed in PCBs, but the mill's ecologist, Elena Grosheva, staunchly denied that Baikalsk mill has anything to do with these organochlorine levels, though she admitted that "chlorine bleaching is the most dangerous part of this industry" and revealed that the closed-loop system may simply shift the problem of chlorine pollution of the water to the more dangerous one of air pollution by dioxins. "This residue

they are planning to burn, it must be at more than 1000°C otherwise it is very dangerous", she said.

It is revealing to compare Jennie Sutton's precautionary attitude: "If you compare the changes over these 40 years with the lake's 20 million year history, we should be afraid of the impact we can make", with Elena Grosheva's bullish view of the lake's resilience. "Lake Baikal is very big and very stable", she told me. "It has a very good inbuilt water treatment mechanism. For 40 years this mill has been working and we have had a very good experience of monitoring and investigating the ecological impact. It's a very good ecological experiment." Experiment? But what if that experiment has gone wrong? There is only one Lake Baikal.

Mandy Haggith  
[hag@worldforests.org](mailto:hag@worldforests.org)

# Zabaikalsky adventure

In summer 2003 I travelled to Lake Baikal in Siberia with two friends. We wanted to do some work during our trip in order to get to know the people and to be left with a real and meaningful memory of the area. We heard of the organisation Great Baikal Trail which builds hiking trails in national parks with the help of local and international volunteers

After our final university exams and a struggle to get visas, we set off. We travelled from Berlin to Moscow by bus and then to Ulan Ude on the Trans Siberian Railway. We were interested in the landscape and the Russian railway travelling culture. Indeed it made a big impression on us, especially how long five and a half days really is.

Our journey from Ulan Ude to Ust Barguzin was by no means straightforward. We never really knew where we were going, what we were waiting for or that the taxi-bus that would take us to the National Park would take six hours.

After arriving in Ust Barguzin we stayed a few days with some local villagers, who fed us fantastic food. Eventually we managed to find the Zabaikalsky National Park ranger who took us to the project site. We drove for an hour through the wilderness and waited in a small bay for a motorboat which, after another hour's journey, brought us to a beach at the edge of the forest where we set up camp.

The two National Park members did their best to organise an effective working group with 40 people and far fewer work tools. The path we were meant to build already existed right along the shoreline, but we set about hacking away the undergrowth with saws, axes and bare hands. Several times we cleared the beach of rubbish.

Particularly fascinating was the make-up of the group: Americans, Canadians, Russians, French, Spanish and Germans. Among them were linguists, photographers,

environmentalists, craftspeople, teachers, students, pensioners and hippies. During the work, which sometimes took us far from camp, we got to know each other well, shared provisions and swam in the lake. We watched sea eagles and squirrels and heard wolves howling in the forest. Some people found the food difficult and everything, from bread to chocolate bars, had to be brought in from miles away. We were surrounded by forest and water. We had contact with the National Park office by radio and occasionally a boat would arrive with provisions. Someone had brought



a ball, so we organised volleyball tournaments in the evenings. It was mostly too windy for frisby, but chess games were good in all weathers. By the last day we were accustomed to the pace of life and not at all flustered by the fact that a ship was arriving to pick us up at an unspecified time. We had a farewell party and already started to miss life without a clock.

Three of us stayed on for a second two-week project which involved around 15 people from Russia, Belgium, Slovakia and Germany. The trail route was straight through the mountains. We were completely exhausted by the evening and hungry all the time. Our surroundings rewarded us with surprising mountain views and plenty of mushrooms and berries. When we camped near a river we fished for our supper and on some days we rested and cleared the path behind us that we'd cut. We didn't see any bears, but we did see their tracks. Sometimes the only

bridge across the river looked totally unreliable, but there was no time to worry. The Russian participants had obviously been used to such problems since childhood and they happily helped us and slowed their pace to allow us to keep up. We took turns at kitchen duty and soon all nationalities got used to unfamiliar food. At some of the stopping places there were small wooden huts which were cosy when it rained as they had a stove. There was also a visitors' diary in one and we left behind a few tins of meat, of which we seemed to have unending supplies in our rucksacks. The last two days we

spent in the bay with hot springs, met other tourists and waited for the boat home.

It struck me how well we all managed with difficult situations, as understanding each other was problematic. With time I began to put aside my restlessness and ambition to reach goals and began to look around me and take things in. Sun, clouds, water and sand were our living space. I began to appreciate the people around me in a new way. Maybe it was

because of the special atmosphere at the camp that I met my future husband while I was there and, within three months of leaving Siberia, I returned. Now we live in Ust Barguzin. We're building a house and a pottery. Life here is certainly unusual and the pace is slow. The Siberian winter lasts six months, but in summer it is hot, up to 40 °C. We are both working with tourists and go out on trips as often as possible. Sometimes at night I can hear the waters of Lake Baikal lapping.

*Eva Heitzmann, originally from Berlin, lives in Ust Barguzin with her husband Andrei Razuvaev. Eva can help organise homestays in the village and can be contacted at: [zabaikal@burnet.ru](mailto:zabaikal@burnet.ru)*

*For more information on volunteering with the Great Baikal Trail projects see: [www.greatbaikaltrail.ru/index\\_en.html](http://www.greatbaikaltrail.ru/index_en.html)*

# News in brief

## Look East news

**L**ook East is moving forward! We are currently in the process of registering as a charity. Our Siberian Wilds roadshow was back at the UK's Big Green Gathering festival this summer for a second year running. This year our stall was better than ever, with attractions including a geodesic dome and Siberian forest tea.

Look East has recently set up the 'Fund for Lake Baikal'. The aim of the fund is to support grassroots environmentalists in their work to protect the lake. All donations received will go directly to Baikal Environmental Wave in Irkutsk.

Also, in the autumn we will be running a study visit to the UK for 17 young representatives from across Europe. They will come from countries including Russia, Armenia, Georgia, Ukraine, the Czech Republic and Turkey. During the visit the group

will visit West Devon Environmental Network (WestDEN) and several environmental organisations in Bristol.

The participants are all representatives of youth environmental organisations in their own countries. Funded by the EU Youth Programme, via the British Council, the theme of the study visit is 'Building sustainable futures: youth participation in Local Agenda 21 projects'. We will report back on how the visit goes in the next issue of the newsletter!

For more information contact:  
Katy Harris and Steph Ward  
[info@lookeast.org.uk](mailto:info@lookeast.org.uk)  
[www.lookeast.org.uk](http://www.lookeast.org.uk)  
WestDEN [www.westden.co.uk](http://www.westden.co.uk)

## New Sakhalin Project

**L**iving Earth Foundation is running a joint project with Sakhalin State University to build the capacity of local and regional government on the island to deal with sustainable development issues. As well as sustainable development, the course covers methods of community involvement and stakeholder engagement and aims to build trust and dialogue between different sectors.

The project is established as part of the Partners for Environmental Cooperation in Europe network ([www.pece.co.uk](http://www.pece.co.uk)). It is hoped that the project will lead to a wider programme of similar courses across the island and build on the work of the university to establish a department of sustainable development.

For more details visit  
[www.livingearth.org.uk](http://www.livingearth.org.uk)

## Bringing magic to Beslan

**I**n November 2005 Simon Joseph, who works for the British-Russian business and culture organisation Eventica, took time off and got together a merry band of interactive performers to bring some joy to the children of Beslan. The events were timed just after the first anniversary of the atrocious attack on Beslan's No.1 school in September 2004 in which 331 people died, of whom 186 were children. Here are a few of Simon's impressions

"We had a fantastic group of three people who couldn't have been matched more perfectly, though they had never worked together before: Pablo ('Pablito'), who is now the world's most famous Spanish acrobat (at least in Beslan), Robbie T. (a.k.a. Koldun Kavkaza, or the 'Wizard of the Caucasus') and the heart, soul and

conscience of our group, Devilstick Peat.

We must have performed for about 2,000 children in the seven schools we visited, including the two brand new ones which have absorbed the victims of the siege. We saw a few schools outside Beslan as well, in very poor and neglected areas, and we left most of them a lot happier than we found

them – at least for a little while. The atmosphere in each and every school was truly amazing and the kids were wonderful. Without a doubt, they gave as much back to each of us as they 'took', if not more."

Simon Joseph  
[Sa\\_joseph@hotmail.com](mailto:Sa_joseph@hotmail.com)





# Lake Baikal ice

## An exploration in sound

As illustrated by the range of articles in this special Baikal edition of the BREN newsletter, Lake Baikal is a source of fascination for many different people and for many different of reasons.

It has long been a destination for scientists from a variety of disciplines and it is a place of myth and legend going back centuries. However, what must be one of the most unusual perspectives on Lake Baikal is provided in a sound recording.

Peter Cusack recently produced a CD of Baikal's ice sounds comprising 20 tracks.

"I have long wanted to visit Baikal, but finally decided to do so after chancing upon a brief internet reference to the mysterious ice sounds to be heard from autumn to spring. My trip to the lake's more accessible southern tip took place in April/May

2003, specifically to record the sounds of the ice break-up.

"Although the melting process takes weeks there are a few days when the ice finally disappears and the lake becomes water again. It is a very spectacular and moving transformation. I have not seen nature operating on such a vast scale before. It was a magnificent and humbling experience."

One track on the CD is Falling In, an underwater recording of a man accidentally falling through a soft spot in the ice.

"Sound travels extremely well underwater and this was recorded from about half a mile away. As the ice nears the final melt cracks and weak patches begin to form, making it increasingly hazardous to walk on.

"Luckily he managed to scramble out. An hour later we met him. He was a telephone engineer who lived,

while working, in a van beside the lake. He offered us tea and a chance to warm up in front of a hot wood stove. His trousers were drying nicely on a line."

Another track, Floating Icicles Rocked by Waves, was recorded underwater.

"When melting the thick ice splits vertically into long icicles, which remain packed together in floes. At the edge they fall, or cascade, into any open water and float in millions on the surface. The wind and waves jostle them together creating this wonderful sound that is so characteristic of the place and time of year."

For more information on Peter's work, please contact him at [pcusack@btinternet.com](mailto:pcusack@btinternet.com)

## Support BREN

To receive this newsletter regularly and support the activities of our members contact us at the address below. We are always pleased to receive articles, updates or other information for forthcoming newsletters

British-Russian Eco-Cultural Network  
Address: PO Box 28458, Edinburgh, Scotland, EH4 1ZH  
Email: [info@brenweb.org](mailto:info@brenweb.org), Website: [www.brenweb.org](http://www.brenweb.org)  
We look forward to sharing your Russian passion!