

We invite you to join us as we explore the two finest natural areas in Russia, the Kamchatka Peninsula and Lake Baikal, and take the Trans Siberian Express from the Russian Far East across the vast taiga of Russia to Irkutsk and Lake Baikal.

Kamchatka is two-thirds the size of California, and includes several active volcanic corridors. It has been designated a UNESCO World Heritage Site. Twenty-nine of its 300 volcanoes are active, including the tallest on the Eurasian continent at 4,835 meters. There are hundreds of glaciers and scores of healing mineral springs. On Kamchatka, we will:

- Explore Petrpavlovsk, the capital, situated on lovely Avachinskaya Bay.
- Discover the ethnic settlement of Sosnovka.
- Fly by helicopter to see fabulous geologic wonders—geysers, steam vents, mud pots, and snow covered volcanoes, including the world famous Valley of the Geysers.
- Discover a profusion of flowering plants, many with medicinal value.
- Explore the moonscape at the base of Mutnovsky Volcano, and walk by cascading streams near Vilyuchinsky Volcano.
- Discover the salmon capital of the world.

We then fly to Khabarovsk, on the Amur River, where we will board the Trans Siberian Express for an adventurous two and one-half day journey across the great Siberian taiga to Itkutsk and Lake Baikal. We'll have Russian lessons on board the train and lectures, and enjoy the huge rushing rivers and vast taiga forests outside.

As we approach Irkutsk, the "Paris of Siberia," we will round the southern tip of Lake Baikal which extends for hundreds of miles to the north.

The Russian "Galapagos Islands," Baikal is the richest single location in Russia for endemism,



a fabulous reservoir of unique flora and fauna. It is the oldest and deepest lake in the world, and stores nearly 20% of the freshwater on earth.

Our visit to Irkutsk will include striking gold-domed churches and traditional wooden homes with blue and green shutters. We will also meet scientists at the Irkutsk Botanic Garden, and enjoy a special visit there.

We then continue north to the Maloye More of Lake Baikal, the "small sea," and ferry to Olkhon island, the largest island in the lake, which has a fine small museum, and is renowned for Shaman Rock. From Olkhon we will journey south by ferry to the village of Listvyanka near the outflow of the Angara River from the lake. Special visits to the Solar Observatory overlooking the Lake and Baikal Museum will be a treat.

Leading the expedition will be Dr. Victor Kuzevanov, the director of the Irkutsk Botanic Garden, and head of the public forum in Irkutsk. Victor is a treasured friend and expedition leader who will delight you.

We hope you will join us! Best regards,

Margaret M. Betchart President Betchart Expeditions Inc.

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For AAAS, Sigma Xi, and ACS

LEADERSHIP

Leading this expedition will be an outstanding scientist who works at Lake Baikal: **Dr. Victor Kuzevanov**, Director of the Botanic Garden of Irkutsk State University. Victor has led Lake Baikal Expeditions for us since 1994 to wide acclaim, including the 2004 Transit of Venus Lake Baikal Expedition and 2008 Total Solar Eclipse in Novosibirsk. In 2002, he explored Kamchatka and has been leading trips there since 2003.

Dr. Kuzevanov specializes in endangered Siberian alpine plants and is expanding the number of fruit and vegetable seeds available to improve the diversity, diet, and health of

Siberians. Joining him will be **Dr. Aleksey Golovko**, a Solar Astronomer. He will coordinate your visit to the Solar Observatory overlooking Lake Baikal.











ITINERARY

Days 1/2 USA to Anchorage & Petropavlovsk, Kamchatka

Group members depart on flights from the lower 48 to Anchorage to arrive July 22. Hotel. On July 23, all group members will depart on a flight from Anchorage to Petropavlovsk, Kamchatka at 7:30 a.m. We will cross the International Date Line.

Day 3 Petropavlovsk

Arrive in Petropavlovsk. Meet your Expedition Leader and transfer to your hotel. After lunch, begin your introduction to Kamchatka with a visit at the Museum of Regional Studies which is devoted to the history, flora and fauna, native people of Kamchatka, and their ancient culture. Learn about the discovery of this beautiful land by Russian explorers. On June 4, 1741, Admiral Vitus

Bering led his expedition from Petropavlovsk to open up Alaska and the Aleutian Islands. Welcome dinner. Petropavlovsk Hotel. L,D

Day 4 Sosnovka

Today, we will explore Sosnovka, a small settlement where the ethnic Itelmen people maintain their lifestyle much as it was hundreds of years ago. There is an ancient village site where excavations are on-going and producing beautiful artifacts. Meet with the elders and learn about the traditional lifestyle and their plans for their settlement and tribe. After lunch, visit the Institute of Agriculture to see the horticultural collections of woody plants at their experimental station. Virginia Hotel (2 nights). B,L,D

Day 5 Valley of the Geysers & Uzon Caldera

Today we'll fly by helicopter to these world famous sites. The 5 km long canyon at the Valley

of the Geysers is steeply sided with yellow weathered volcanic rock, with the winding Geysernaya River at the bottom. The geysers have periods of furious activity followed by inactivity. All of this is surrounded by small streams of cascading water, green meadows, a dwarf forest, and patches of snow on the mountains above. We will then fly to the picturesque Uzon Caldera, a massive collapsed volcano, 9x12 km across, with forests, marshes, lakes, and steaming mud pools. B,L,D

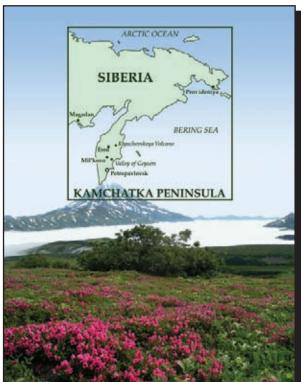
Mutnovsky Geothermal Station & Volcano

The volcanoes of Kamchatka created multiple ore deposits: mercury, lead, tin, gold, silver, and molybdenum. Sulfuric gases created deposits of elemental sulfur and we will see many samples of such creations when visiting thermal springs. Volcanoes are the giant chemical reactors that create pre-organic compounds and a substantial part of the water that we find in the seas, oceans, and rivers

> was brought to the surface of earth by volcanic activity. We will see the Geothermal Station and then walk in a valley with geothermal vents at the base of Mutnovsky Volcano. Geotherm Hotel (2 nights). B,L,D

Day 7 Gorely Volcano

We awake this morning to the sights and sounds of an active geothermal area, with steam vents, hot pools, and highly oxidized basic soils. We will walk and explore the area near Gorely Volcano, looking for wildflowers and singing birds proclaiming their nesting territories. We will explore the road that is generally lined with snow in the higher passes and we will stop to see the new growth of Kamchatka rhododendrons, gentians, anemones, and prostrate willows as the snow recedes. We will make stops at cascading streams, scenic overlooks, and flower filled meadows with massive Vilyuchinsky Volcano in the background. B,L,D









Day 8 Paratunka to Khabarovsk

This morning, we will explore the birch forests and meadows near Paratunka. Look for wildflowers and birds of interest. Then fly from the Kamchakta Peninsula to Khabarovsk in the Russian Far East. An attractive city on the banks of the Amur River, Khabarovsk is one of many cities established by fur trappers and traders from European Russia and the plains of Central Asia. *Hotel*.

Day 9 Khabarovsk & Trans Siberian Express

Vladivostock and Khabarovsk are the eastern end of the world's longest railway, the Trans Siberian Express. First planned in 1857, the railway was completed in 1916.

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It was the greatest engineering feat in the world at that time. Today, we will board the train to begin our two-and-one-



leisurely day. We will soon reach Birobidjan, the first village on our route, center of the Jewish Autonomous Region, and then Bira, Obluchje, and Arhara.

Days 10/11 Trans Siberian Express through the Great Siberian Taiga

During our adventure on the Trans Siberian Express, there will be about 30 stops along the way, from 2 to 20 minutes each. These are excellent opportunities to meet some of the local people. Bread, steaming potatoes, and other purchases may tempt you. A quick whistle and we must all quickly be back on board. Of special interest during our journey will be Russian lessons, bird watching from the train, and lectures by your expedition leader about the great Siberian world outside your window. Of great surprise to most Americans is how lush and beautiful the countryside is. In the taiga, firs, tamarack, clump birches, and pines predominate. Hawks, waterfowl, scenic vistas, meandering rivers, and small villages can be seen when not immersed in reading Dr Zhivago or sipping an excellent mug of Russian tea.

On the afternoon of Day 10, we will approach Ulan Ude, capital of the Buriat Autonomous Republic. Just to the west, the great Selenga River heads toward Baikal, creating a large delta and fantastic bird habitat. The Trans Siberian Express will continue along the edge of the delta and south shore of Lake Baikal, past the site of the former pulp mill. In the late afternoon, we will arrive in Irkutsk and transfer to our *Hotel*.

Day 12 Irkutsk-the "Paris of Siberia"-Baikal

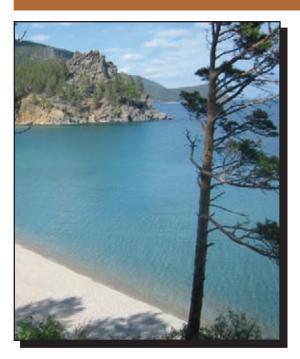
Irkutsk was founded as a Cossack fort and trading post in 1661. In the 19th century, the Decembrists were exiled here, bringing a high standard in education and the arts. The discovery of gold in the Lena basin in the 1880s brought wealth. Grand brick buildings were built beside the classic Russian wooden homes, creating the "Paris of Siberia" that we enjoy today. Irkutsk is situated on the Angara River which flows from Lake Baikal to the Arctic. We will have a city tour today including a special visit to the Irkutsk Botanic Garden to learn about their work with plant species unique to the Baikal ecosystem. In the afternoon, we will drive northeast of Irtkusk through taiga and steppe countryside to the "small sea" or Maloye More of Lake Baikal. Rustic accommodations.

Day 13 Olkhon & Khuzhir-Lake Baikal

We will awaken in this most sheltered part of Lake Baikal, the Maloye More and its many islands. The islands offer isolation for herring and mew gulls, great cormorant, North lapwing, little ringed plover, and red-breasted merganser. The protected coves with white sandy bottoms offer the warmest water in Baikal for swimming. Just across the Maloye More is Olkhon Island, the largest island in Lake Baikal. We will ferry to Olkhon Island for beautiful views of Lake Baikal, and a chance to visit picturesque Shaman Rock and the isolated village of Khuzhir. The village will give you a glipse of the life of the Baikal omul fisherman and their families. The omul is the mainstay of the Baikal fishery and lake commerce. There is an excellent small museum, with school adjacent. Overnight in Khuzhir Village.

Day 14 Olkhon Island to Listvyanka— Lake Baikal

Explore Olkhon Island this morning, then board the hydrofoil to travel from Olkhon Island along the shore of Prebaikalskiy National Park to the village of Listvyanka. Enjoy wonderful views of the lake as you go! Arrive Listvyanka, and transfer to a *Baikal Hotel* for a dinner in celebration of our journey to Kamchatka and Lake Baikal!





Day 15 Solar Observatory & Baikal Museum

This morning we will depart for the Solar Observatory high on a mountaintop overlooking Lake Baikal's sky blue waters, hosted by solar astronomer, Dr. Aleksey Golovko. We will then visit the Baikal Museum, situated on the lakeshore, to see the imaginative exhibits, including a pool for the Baikal seals or nerpa. Depart in the evening on a flight to Khabarovsk.

Day 16 Khabarovsk

Arrive Khabarovsk this morning and take a connecting flight to Petropavlovsk. Then fly to Anchorage across the International Date Line, arriving Anchorage at 5:50 am the same day (August 6). Take connecting flights to the lower 48.



RESPONSIBILITY

Betcharl Expeditions Inc., the American Association for the Advancement of Science (AAAS), Sigma Xi, The Scientific Research Society, and the American Chemical Society (ACS) act only as agents for the passenger with respect to transportation and hotels, and exercise every care possible. However, we can assume no liability for injury, damage, delay, loss, accident or irregularity in connection with the services of any airplane, ship, motorcoach, or any other conveyance used in carrying out the arrangements of the tour. We cannot accept any responsibility for losses or additional expenses due to delay or changes in air or other services, sickness, weather, strike, war, quarantine, terrorism, acts of God, or other causes beyond our control. All such losses or expenses will have to be borne by the passenger, as tour rates provide for arrangements only for the time stated. We reserve the right to substitute another leader of similar expertise or reserve the right to enacel any tour prior to departure, in which case the entire payment will be refunded with no further obligation on our part. The right is also reserved to decline to accept or retain any person as a member of the tour. No refund will be made for the unused portion of any tour unless arrangements are made in sufficient time to avoid penalties. The price of the program is based on current tariffs and rates, and is subject to change. Any tariff, exchange rate, or fuel increases will be passed on to participants. Baggage is carried at the owner's risk entirely. It is understood that the air ticket when issued shall constitute the sole contract between the passenger and the airline concerned. The airlines concerned are not to be held responsible for any act, omission, or event during the time passengers are not on board their plane or conveyance.

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Photos courtesy of David Morrison & Victor Kuzevanov.

Map by April Milne.

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Expedition, July 22-August 6, 2016, offered Travels, Sigma Xi & ACS. Please reserve a deposit, I/we enclose a check for \$ person) payable to Betchart Expeditions Inc. Tr	ed by AAAS space(s). As (\$1,000 per
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Please Mail To: Kamchatka & Lake Baikal 2016 Betchart Expeditions Inc. 17050 Montebello Road Cupertino, CA 95014-5345



AAAS Travels ACS & Sigma Xi Expeditions

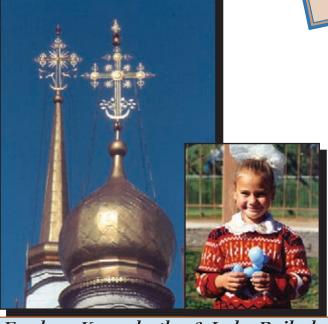
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FIRST CLASS



Explore Kamchatka & Lake Baikal including the Trans Siberian Express!
July 22-August 6, 2016

COSTS & CONDITIONS

Expedition Fee: \$5,995 per person plus air fare of approximately \$2,595 per person from Anchorage to Petropavlovsk and Khabarovsk with return from Irkutsk.

Expedition Fee Includes: Group airport transfers; motor-coach and helicopter; accommodations twin share; meals in Russia; entrance fees; baggage handling; tips to drivers and local guides; leadership, administration.

Expedition Fee Does Not Include: Air fare (quoted separately), personal items such as laundry, phone calls, snacks, alcoholic beverages; gratuity to leaders; visa fee; and personal insurance.

What to Expect: This expedition is planned for travel enthusiasts who would like to explore Russia's two finest natural areas, the Kamchatka Peninsula and Lake Baikal, and take the Trans Siberian Express from the Russian Far East across the vast taiga of Russia to Irkutsk and Lake Baikal. It is a wonderful ecological journey of discovery with leadership by an excellent Russian scientist. In Kamchatka, travel by coach and helicopter to the Valley of the Geysers. Travel by coach from Irkutsk to the Maloye More of Lake Baikal, then by ferry on Lake Baikal to Olkhon Island and Listvyanka and the Angara River (which flows out of Lake Baikal). The trip is planned for travelers with an appetite for adventure, learning, and discovery. (No smoking in vehicles, during lectures, or meals please)

Air Fare & Airline Ticketing: Air fare quoted is a special group fare from Anchorage including international flights and in-tour flights. All participants fly as a group. AIR FARES ARE SUBJECT TO CHANGE.

Accommodations: Are based on twin share with bath in first class hotels in the cities and in Listvyanka at Lake Baikal. One Kamchatka lodge has share facilities. On board the Trans Siberian Express, you are in twin cabins (with share facilities).

We have rustic wooden lodges at Olkhon Island and the Maloye More. *No singles are available on the train*. If you do not have a roommate, or we cannot provide one, you must pay the \$895 extra cost of the single.

Reservations, Deposits, and Payments: To reserve a place on this expedition, please mail a deposit of \$1,000 per person to:

Kamchatka & Lake Baikal 2016 Betchart Expeditions Inc. 17050 Montebello Road Cupertino, CA 95014-5435

Balance of land fee is due 90 days before departure.

Cancellations & Refunds: The initial deposit is refundable up to 90 days before departure less a handling fee of \$100 per person. There is no refund after the 90-day period unless your place is resold, then only the \$100 per person handling fee is withheld. There are no refunds for unused meals or other expedition features.

Questions: Please contact Marisa Eide, Betchart Expeditions Inc.,

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On the Web: www.betchartexpeditions.com

