

# See the Transit of Venus—the last one in your lifetime!

# SIBERIA & LAKE BAIKAL

This year, travel with The Planetary Society! • June 1-12, 2012

We invite you to join us for the extraordinary opportunity to see the **Transit of Venus, June 1-12, 2012**, as we explore **Siberia & Lake Baikal!**

Join us!... And watch Venus slowly pass across the disk of the Sun!—an amazing phenomenon first predicted by Johann Kepler in 1631 and an inspiration for the great voyage of Captain Cook in 1769!

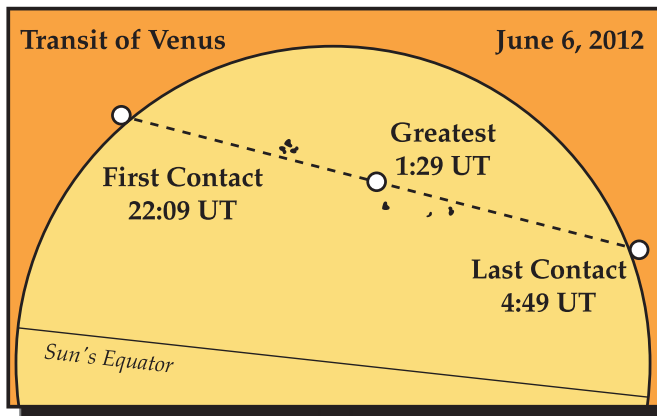
The Transit of Venus is extremely rare. The last one occurred in 2004. Due to the nature of the motion of Venus, the Transits of Venus occur in twos and the next one will be in 2125. After that there will be no others until 2175. So the June 6, 2012 Transit of Venus is a last-in-a-lifetime opportunity.

Our 12-day journey will begin in **Moscow** where we will discover the enchantment of Moscow's Kremlin, with its frescoed Archangel Cathedral, Armory Museum, political offices, and historic buildings. We will have a special visit to **Star City**, where Russia's cosmonauts and astronauts from many countries train.

We will then fly to **Irkutsk**, the "Paris of Siberia," with striking gold-domed churches and wooden homes with blue and green shutters.

The next day, we will go to the Lake Baikal Solar Observatory where we will observe the Transit of Venus! It is a great natural phenomenon and will be a never-to-be-forgotten experience!

The transit lasts for six hours and so we will aim to spend the afternoon at the observatory viewing it. Passengers



the Ushkanyi Islands, home to the "nerpa" seals of Lake Baikal.

Join us... as we discover the delights of Siberia and the Transit of Venus, which has fascinated astronomers for 380 years!

Sincerely,

Bill Nye, The Science Guy®  
Executive Director

may also wish to bring their own telescopes.

Afterwards, we will board M/V Vampilov, a comfortable ship with modest accommodations for 30 participants plus leaders.

We will venture more than 250 miles up Lake Baikal. The Russian "Galapagos Islands," Baikal is the single richest location in Russia for endemism, a fabulous reservoir of unique flora and fauna. Lake Baikal is the oldest and deepest lake in the world, and stores nearly 20% of the freshwater on earth. It contains more than 1,500 species unique to Baikal, and hundreds more endemics on the surrounding mountainsides.

Our visit will include Pribaikalsky and Zabaikalsky National Parks; Maloe More, the "small sea" and Olkhon Island, to visit the fishing village, school, and museum. We will walk along the marble headlands of Baikal's famous "Shaman Rock" and explore



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# Itinerary

## Days 1/2 New York to Moscow.

Depart New York's JFK International Airport for Moscow, arriving on Day 2. Transfer to the *Alfa Hotel* (2 nights). Enjoy an afternoon stroll to the Red Square and the fanciful St. Basil's cathedral, erected in 1561 and the most photographed cathedral in Russia. Welcome Dinner. D

## Day 3 Star City.

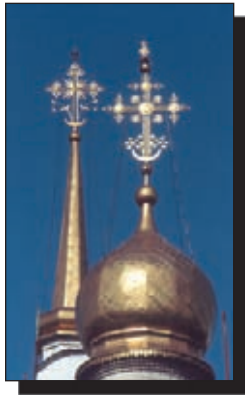
Today we will visit the center of the Russian space training program, the Gagarin Cosmonaut Training Center at Star City, just outside of Moscow. We will be welcomed by the staff and have an introduction to the facilities where Russian cosmonauts and other astronauts train before taking a space flight to the International Space Station. We will see the Neutral Buoyancy Laboratory and the 18-meter centrifuge to simulate G-loads. B,L,D

## Day 4 Kremlin to Irkutsk.

Today we will explore the splendors of the Czarist period in Moscow. We will visit the Kremlin, first built over 800 years ago and once the center for the Russian church as well as state. The Cathedral of the Assumption is the most outstanding of the Kremlin's older buildings, designed by an Italian master. Here coronations took place and important government announcements and solemn state ceremonies were performed. We will also explore one of Moscow's many superlative museums. Transfer to the airport for our evening flight to Irkutsk. B,L

## Day 5 Irkutsk—The "Paris of Siberia"

We will arrive in Irkutsk this morning. 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 River basin in the 1880s brought wealth; grand brick buildings were built beside the classic Russian wooden homes, creating the "Paris of Siberia" we enjoy today. We will have city tour, and then a special visit to the Irkutsk Botanic Garden to learn about their work with plant species unique to the Baikal ecosystem. Depart for our *Hotel* at Lake Baikal in late afternoon. B,L,D



## Day 6 Baikal Museum & Transit of Venus.

This morning, we will visit the Baikal Museum, situated on the lakeshore, to see the imaginative exhibits, including tanks for the Baikal seals. After lunch, we'll depart for the Solar Observatory high on a mountaintop overlooking Lake Baikal's sky blue waters, hosted by Dr. Golovko. We will see the Transit of Venus through the telescope at the Solar Observatory; however, passengers may wish to also bring their own telescopes. We will be able to watch Venus cross the Sun from the external ingress until the external egress.

We will board *M/V Vampilov* this evening, and begin our five-day ecological discovery of Lake Baikal. B,L,D

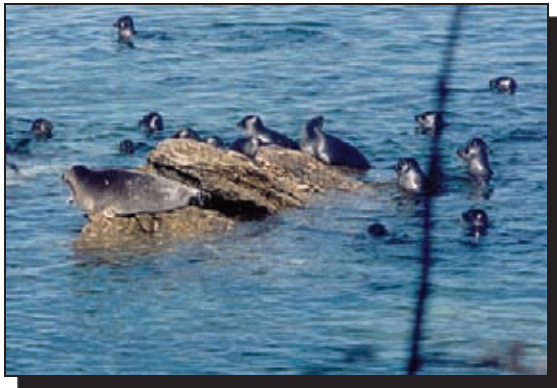
## Days 7/11 Lake Baikal Expedition.

During our journey on Lake Baikal, we will travel north for more than 250 miles, stopping at points of special interest along the shore:

- **Peschannaya Bay & Sagan-Zaba, Pribaikalsky National Park.** Peschannaya Bay lies along the coast of Pribaikalsky National Park. It is a sheltered bay with massive stone peninsulas at each end. We can walk the trails through Siberian pine forests. Nearby, Babuska (Grandmother) Bay has fine golden sand and another stone outcrop that offers commanding views. Also nearby are the petroglyphs at Sagan-Zaba. The incised figures of deer, fish, man, and archaeological remains give credence to the belief that the early inhabitants of this area were the ancestors of the first colonizers of North America.

- **Maloe More, Olkhon Island & Khuzhir Village.** We will awaken in the most sheltered part of Lake Baikal, the Maloe More and its many islands. The islands offer isolation for the herring and mew gulls, great cormorant, little ringed plover, and red-breasted merganser. These little frequented islands offer delightful walks, quiet coves and scenic vistas.

We will move north along Olkhon Island, the largest island in the lake, visit the picturesque Shaman Rock and the isolated



## Baikal

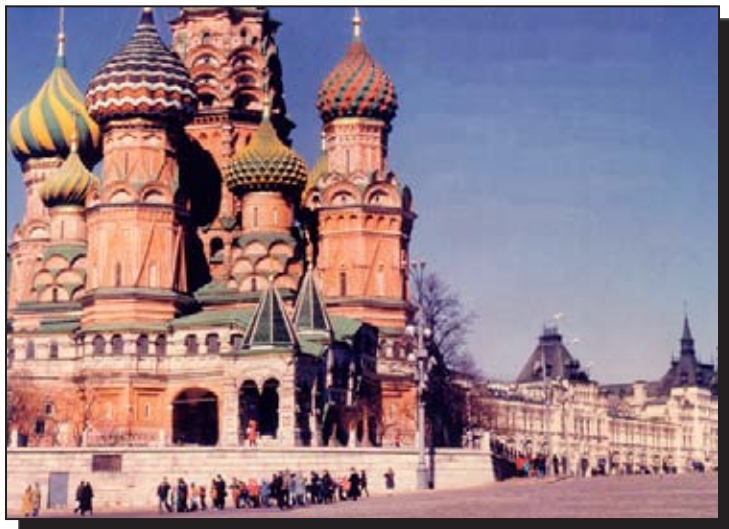


village of Khuzhir. The village will give you a glimpse of the life of the Baikal omul fisherman and their families. The omul is the mainstay of the Baikal fishery and lake commerce. There is an excellent small museum.

• **Chivyrkusky Bay in Zabaikalsky National Park.** Chivyrkusky Bay is sheltered by the Holy Nose Peninsula and protects numerous islands. The morning walk will be along sandy beach and then into dense taiga. The dry taiga will have the tallest pines and firs with many understory plants and little soil development. In the afternoon we will explore the wet taiga, with shorter trees, few understory plants, and massive development of sphagnum moss growing over a bog. The walk will be over soft spongy mosses. In the late-afternoon we will visit the geothermal hot pools at Snake Bay for a relaxing soak, take a plunge in Lake Baikal, and have a barbeque along the lakeshore.

• **Ushkanyi Islands, Zabaikalsky National Park.** The four Ushkanyi Islands rise above the Academic Ridge, two-thirds up the length of Baikal and protected in Zabaikalsky National Park. These marble islands are heavily forested with Siberian pines and firs and are the summer feeding and resting grounds of the “nerpa,” the world’s only freshwater seal. The main food of the nerpa are the golomyanka. The nearly transparent 10-inch long golomyanka is prized for its oil content. It is a deep water species surviving under great atmospheric pressure, near freezing temperatures, and in nearly total darkness.

• **Talanka & Aya Bays.** Talanka Bay lies below a taiga slope going up 4,000 feet to the bare pinnacles of the Barguzin Range. Behind the bay are sand dunes that were the ancestral home to neolithic man. This site has yielded many stone tools, fragments of earthenware and bones. Our visit will explore the site as well as the harsh environment of the dunes. We will see some



familiar forms stunted by the conditions and some plants restricted to the dry conditions of dunes. At mid-day, we will cross the lake and visit Aya Bay, a most picturesque location with a small village.

Our exact route will depend on weather and sea conditions and will be subject to change. The Russian scientists speak English to varying degrees and some use of interpreters is necessary. Return to Irkutsk and our *hotel* on the afternoon of Day 11 for a festive farewell dinner. B,L,D

### Day 12 Irkutsk to Moscow & USA.

Fly to Moscow and New York for the end of our adventure. B



## Leadership

*Leading this expedition will be outstanding scientists who work at Lake Baikal: **Dr. Aleksey Golovko**, a Solar Astronomer, and **Dr. Victor Kuzevanov**, Director of the Botanic Garden of Irkutsk State University. Both scientists have led Lake Baikal Expeditions for us since 1994 to wide acclaim, including the 2004 Transit of Venus Lake Baikal Expedition.*

*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.*

*Dr. Golovko studies the sun at an observatory in the Sayan Mountains and at Lake Baikal. He will coordinate viewing the Transit of Venus at the Solar Observatory overlooking Lake Baikal.*

## Costs & Conditions

**Expedition Fee:** \$5,995 per person plus air fare of \$1,150 plus tax per person from New York to Moscow and Irkutsk, round trip. Limited to 20 paying participants.

**Expedition Fee Includes:** Land and ship transportation, airport transfers; accommodations; most meals in Russia; entrance fees; baggage handling; leadership, administration.

**Expedition Fee Does Not Include:** Air fare (quoted separately), personal items such as laundry, phone calls, snacks, alcoholic beverages; tips to ship's crew and staff; visa fee; personal insurance; foreign airport departure tax (approximately \$20).

**What to Expect:** This expedition is planned for travel enthusiasts who would like to see the Transit of Venus and explore Moscow and Lake Baikal by ship on a five-day ecological journey of discovery, with leadership by Russian scientists. Travel by motorcoach and on board *M/V Vampilov*, with daily outings on foot at a leisurely pace suitable for learning and discovery. The trip is planned for travelers with an appetite for adventure, who can enjoy the camaraderie of exploring with a group and would like to see the Transit of Venus and learn about Lake Baikal and Russia. (No smoking in vehicles, on the ship, during lectures, or meals, please.)

**Air Fare & Airline Ticketing:** Air fare quoted is a special group fare with Aeroflot including international flights and in-tour flights. All participants fly as a group Moscow/Irkutsk, round trip. AIR FARES ARE SUBJECT TO CHANGE.

**Accommodations:** Are based on twin share with bath in first class hotels in Moscow and Irkutsk. We will explore Lake Baikal on board *M/V Vampilov*, a 40-meter ship with accommodations for two to a cabin with private bathroom facilities. The ship is "best available" for an educational voyage but is modest and is strictly for travelers willing to happily share the limited facilities for the opportunity to explore Lake Baikal. *Singles are available in hotels for \$695. No singles are available on the ship.* If you do not have roommate, or we cannot provide one, you must pay the extra cost of the hotel single.

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

**Transit of Venus & Lake Baikal 2012**  
**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,

*For reservations, please contact*

**Betchart Expeditions Inc.**

**17050 Montebello Road, Cupertino, CA 95014-5435**

Telephone **(800) 252-4910** or **(408) 252-4910**

Fax: (408) 252-1444

Email: [info@betchartexpeditions.com](mailto:info@betchartexpeditions.com)

On the Web: [www.betchartexpeditions.com](http://www.betchartexpeditions.com)

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.,**

Telephone: **(800) 252-4910** or **(408) 252-4910**

Fax: (408) 252-1444

Email: [Marisa@betchartexpeditions.com](mailto:Marisa@betchartexpeditions.com)

**On the Web:** [www.betchartexpeditions.com](http://www.betchartexpeditions.com)

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CST# 2036304-40

## Reservations

#1252

**Yes!** I/We want to join the **Transit of Venus & Lake Baikal Expedition, June 1-12, 2012**, offered by **The Planetary Society**. Please reserve \_\_\_\_ space(s) on the expedition. As a deposit, I/we have enclosed a check for \$ \_\_\_\_\_ (\$500 per person), payable to Betchart Expeditions Inc. Trust Account.

Name(s): \_\_\_\_\_ Age \_\_\_\_ Sex \_\_\_\_

\_\_\_\_\_ Age \_\_\_\_ Sex \_\_\_\_

Address: \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_ Zip \_\_\_\_\_

Phone: Home (\_\_\_\_) \_\_\_\_\_

Work (\_\_\_\_) \_\_\_\_\_

Email: \_\_\_\_\_

Citizenship: \_\_\_\_ USA \_\_\_\_ Canada Other: \_\_\_\_\_

Membership: \_\_ Planetary Society \_\_ AAAS \_\_ Sigma Xi \_\_ ACS

Accommodations Preference:

\_\_ Twin \_\_ Single Twin Share \_\_ with a friend or

\_\_ Nonsmoker \_\_ Smoker \_\_ assign a roommate

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**Mail To: Transit of Venus & Lake Baikal 2012**  
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