

An Extraordinary Journey for Planetary Society Members to Newly Discovered

Warming Island, GREENLAND

Led by Explorer Dennis Schmitt

September 16-27, 2008

Dear Members:

We invite all Planetary Society members who are explorers at heart to join this extraordinary journey of discovery led by modern-day explorer **Dennis Schmitt**.

This fall, from **September 16-27, 2008**, we'll join Dennis as he returns to East Greenland, and to his amazing discovery from the fall of 2005—a three-finger-shaped island in **East Greenland's Liverpool Land**, which was totally unknown until it recently emerged from beneath the great Greenland ice sheet. It was discovered by Dennis on a voyage 400 miles north of the Arctic Circle in September 2005.

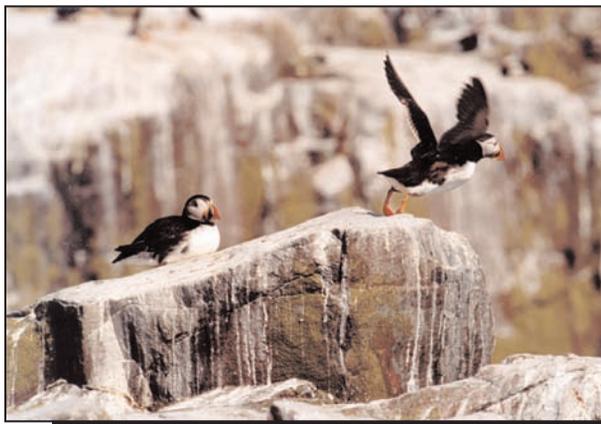
In the fall of 2006, Dennis and a small expedition team returned to the island by helicopter and spent a week camping on a glacier, climbing peaks, hiking, exploring, and surveying the animals and plants. The Aurora Borealis was awesome above glacier fields edged by rugged peaks.

In satellite photos from 1985, the island is totally locked in ice, and it appears to be part of the mainland. In just 20 years, the ice that tied it to the mainland has disappeared, and a striking island of rugged rocks steeply plunging into the ocean has emerged!

The island is a compelling indicator of the rapid speed of global warming—now named "**Warming Island**" by Dennis' expedition team—and is attracting global attention from major newspapers worldwide including the New York Times!

On this voyage, you will be among the first to see this spectacular island on an outstanding itinerary in Iceland and East Greenland.

Our journey will begin in **Reykjavik, Iceland**, with a flight to **Akureyri** where we will board the 50-passenger expedition



vessel, M/V *Aleksey Maryshev*, and sail north across the Denmark Strait and above the Arctic Circle to the coast of East Greenland.

Our voyage will pass through an area rich in marine life. Blue whales, the largest animal that has ever lived on Earth, feed in the rich waters, and orcas (killer whales), white-beaked dolphins, and many sea birds may be seen.

We will have a full day to explore the area around Warming Island and to learn from Dennis about his team's discoveries. En route, we will have a complete lecture program on board ship, and you will have an opportunity to talk with Dennis about his other explorations in the Arctic, from the Bering Straits to the northern tip of Greenland.

We will then head south to explore the coast of East Greenland, including **Scoresby Sund**, the longest fjord in the world. At **Cape Hofmann Halvø**, we will look for musk oxen in the wild. Remains of remote Inuit villages will be of interest—all against the unbelievable setting of the stunning glaciers and peaks of coastal Greenland. It is an ideal time to see the Aurora Borealis.

Our journey will also include intriguing volcanic and historic locations in Iceland. We will learn about the history of one of the world's oldest democracies, see the original "Geysir" which all the world's geysers are named after, and view Gullfoss falls!

We invite you to join us on this wonderful adventure of discovery!

Sincerely,

Dr. Louis Friedman
Executive Director



Warming Island Itinerary

Days 1/2 USA to Reykjavik & Akureyri, Iceland

Expedition members fly from Boston or Minneapolis to Reykjavik, Iceland, and arrive at Leif Erikson International Airport on the morning of Day 2. Make a direct flight connection to Akureyri, on the northern coast of Iceland. See the town then board our expedition vessel, *M/V Aleksey Maryshev*. In the early evening we leave Iceland and sail west towards the Denmark Strait. Welcome on board and dinner. B,L,D

Day 3 The Denmark Strait

On our first day at sea, we will sail north through the Denmark Strait. We'll have introductory lectures and begin our observations at sea. Between lectures, you may join the expedition staff on deck or on the bridge to look for marine life. This is a good area for spotting blue whales, the largest animal that has ever lived on Earth. It is believed that there are 600 or so blue whales (out of a world population of around 6,000) in the North Atlantic. We may also see orcas (killer whales), and are almost certain to see fulmars, kittiwakes, gannets and rafts of common guillemots and razorbills. In the afternoon, we will cross the Arctic Circle and continue north, perhaps seeing white-beaked dolphins, humpback whales and minke whales. B,L,D

Day 4 The Coast of Greenland & Warming Island

In the morning we may spot our first icebergs as we approach the east coast of Greenland, passing the huge cliff faces of Kap Brewster. We will continue to sail along the coast of Liverpool Land, until we reach the newly discovered island, recently named "Warming Island" by explorer Dennis Schmitt, which some 10 years ago was still a peninsula connected by glacier to the mainland. Now we can circumnavigate it and make a zodiac excursion along the newly formed glacier front, where in the past there was only glacier ice. Nearby on Janus Ö—we will look for warm springs. In the night we sail into Scoresby Sund—the largest fjord in the world—making our way along the ragged and glaciated Volquart Boons Coast, a good place to look for seals. B,L,D

Day 5 Scoresby Sund

This morning, we'll continue along Scoresby Sund, taking a zodiac cruise along a glacier front at the Volquart Boones Coast, which is lined with basaltic mountains. Later we will land on Danmark Ø, where there are the remains of an Inuit settlement abandoned around 200 years ago. The circular "tent rings" of stones indicate the



summer houses, while the winter houses can be seen closer to a small cape. The sites are excellently preserved, allowing entrances and even bear-proof meat caches to be identified. There are also grave sites. B,L,D

Day 6 Cape Hofmann Halvø

We will go ashore at Cape Hofmann Halvø, a reliable spot to look for musk ox feeding on meadows of sedges and Arctic willow stems and leaves. We may also spot rock ptarmigans and, at sea, Great Northern divers. The landscape here is particularly beautiful, especially during autumn when

the dwarf willow and dwarf birch change color. Arctic blueberry and crowberry add their own colorful touch—and the berries are tasty too! Later, we will come close to huge icebergs and may also see ringed seals, as well as distant views of musk ox on shore. In the evening we will sail through the fjord enjoying the contrast between the warm autumnal colors of the vegetation on shore, backed by huge dark mountains, and the cold blue of the icebergs. B,L,D

Day 7 Sydkap—Scoresby Land

On our way to Sydkap in Scoresby Land in the morning, we will encounter huge icebergs, some over 100 meters high and more than a kilometer in length. Most of the bergs are grounded as the fjord is only about 100 meters deep here. We will land near Sydkap to view the remains of the Thule culture winter houses. As many as 20 people lived in these tiny houses, hunting Greenland whales and using their vertebrae to build the houses. We may also land at Gurreholm on Jameson Land. The landscape here is gently undulating, but the climate is harsh—sometimes snow lies throughout the summer. Despite the cold, some animals—musk ox and collared lemmings—survive on the meager vegetation. The lemmings are preyed upon by the Arctic fox. B,L,D

Day 8 Ittoqqortoormiit

We will land in Ittoqqortoormiit, the only settlement in Scoresby Sund with about 500 inhabitants. At the post office you can buy stamps for your postcards, see the colorful houses, or just wander around to see the sled dogs and the drying skins of seals, musk ox and polar bear. After lunch we will sail south, passing the amazing landscape of the Blosseville Coast where groups of harp seals can be spotted among the ice floes. B,L,D

Day 9 Nansen Fjord & Gunnbjørns Fjeld

Visit the mouth of Nansen Fjord where we will spot Gunnbjørns Fjeld. At 3,700 meters, it is both the highest peak in Greenland and the highest mountain north of the Arctic Circle. If we cannot sail into Nansen Fjord due to glacial ice, we may sail into Mikis Fjord, bounded by steep cliffs. Depart back across the Denmark Strait.

Day 10 At Sea to Reykjavik

We will have the whole day at sea en route to Reykjavik. This will offer opportunities to look for large whales and seabirds migrating,

and, at night the Aurora Borealis (Northern Lights) will dance and shine in the night sky! B,L,D

Day 11 Mid-Atlantic Ridge & Geysers

This morning, our ship will arrive in Keflavik, the port in Reykjavik. We will disembark and visit some of the great sites of Iceland. These include the famous Geysir, which gave its name to all erupting hot springs worldwide, but which has now ceased erupting! Nearby is the equally famous Strokkur ("butter churn" in Icelandic), which spouts every three minutes. We will also visit the beautiful waterfalls at Gullfoss and the historic Pingvellir (or "assembly plain") where Icelandic democracy was founded in 930 A.D. It is also the site where the Mid-Atlantic Ridge reaches the surface, the true joining point of Europe and North America. Also tour the geothermal plant, Hellisheidi. *Hotel Leifur Eiriksson*. B,L

Day 12 Reykjavik to USA

Morning at leisure in Reykjavik. Transfer to the airport for the flights home. B



About the Ship

The *M/V Aleksey Maryshev* is a modern and comfortable expedition vessel which provides comfortable accommodations for 50 passengers. The vessel measures 66 meters (210 feet) in length, 12.8 meters (42 feet) in breadth, and has a draft of approximately 3.5 meters (12 feet). Displacement is 2000 tons.

The ship has comfortable cabins as follows:

Type A: Cabins with upper/lower berths. Passengers in these cabins use shared showers and toilets just outside the cabins. These cabins have wash basins and windows.

Type B: Cabins with upper and lower berths. These cabins have their own private shower/toilet and windows.

Type C: Superior cabins with windows, with lower double and single berths and their own shower/toilet.

The *M/V Aleksey Maryshev* is well suited for expedition cruising, has an open bridge policy, and good open deck viewing areas. She has a full complement of Zodiac rafts (rubber inflatable landing craft), which will enable landings and wildlife viewing opportunities in otherwise inaccessible areas. A dining room serves international cuisine from European chefs; there is also a comfortable lounge/bar/lecture room. The ship also has a sauna, laundry, and infirmary.



Reservations

#1044

Yes! I/We want to join the **Warming Island, Greenland Expedition led by explorer Dennis Schmitt, September 16-27, 2008**, offered by **The Planetary Society & Betchart Expeditions Inc.** Please reserve _____ space(s) on the expedition. As a deposit, I/we have enclosed a check for \$_____ (\$1,000 per person), payable to Betchart Expeditions Inc. Trust Account.

Name(s): _____ Age ____ Sex ____

_____ Age ____ Sex ____

Address: _____

City _____ State ____ Zip ____

Phone: H (____) _____ W (____) _____

Citizenship: ____ USA ____ Canada Other: _____

Member (please circle):

Planetary Society AAAS Sigma Xi ACS

Accommodations aboard the *M/V Aleksey Maryshev* are per person based on twin share of cabin plus air fare from Boston or Minneapolis (please indicate 1st, 2nd, and 3rd choice):

___ Type A: Cabin with share bathroom facilities\$5,745

___ Type B: Cabin with private facilities\$6,495

___ Type C: Superior cabin with private facilities\$7,495

Roommate Preference:

___ Twin ___ Single ___ Twin Share ___ with a friend *or*

___ Nonsmoker ___ Smoker ___ assign a roommate

Signature: _____ Date: _____

Signature: _____ Date: _____

**Please Mail To: Warming Island, Greenland Expedition
Betchart Expeditions Inc.
17050 Montebello Road, Cupertino, CA 95014-5435**

Costs & Conditions

Expedition Fee: Per person for 12 days, based on twin share of cabin on board *M/V Aleksey Maryshev* plus air fare of \$750 per person plus tax from Minneapolis or Boston to Reykjavik and Akureyri with return from Reykjavik:

Type A: Cabin with share bathroom facilities\$5,745
(Upper/lower berths, with washbasin, and window)

Type B: Cabin with private facilities\$6,495
(Upper/lower berths with window)

Type C: Superior cabin with private facilities\$7,495
(Cabin with window, double lower berth,
and single lower berth)

Singles: We encourage singles to register on a "twin share" basis. Your twin share rate on board ship is then guaranteed, and we will assign a roommate for you (Type A or B cabins only). Should you desire single accommodations, single occupancy is available in Type A or B cabins only at 1.7 times the per person cruise fare.

What to Expect: This expedition is planned for the travel enthusiast who would enjoy exploring Iceland and East Greenland aboard the comfortable expedition vessel *M/V Aleksey Maryshev*. This expedition will allow you to discover first-hand recently discovered Warming Island in East Greenland, and the rugged beauty of Iceland and Greenland, *at the optimal time of year for accessibility and the Aurora Borealis*. Whales are predictably seen; other wildlife is elusive. Expect daytime temperatures in the 20's to 40's, often with a sea breeze. Walks during shore excursions will be short, and may be over damp or uneven terrain, glacial ice, or snow. *The itinerary is subject to changes that may arise due to weather or sea conditions which are beyond our control.* The ship's captain has the final word on the vessel's itinerary; such decisions will be made in the best

For reservations, please contact

Betchart Expeditions Inc.

17050 Montebello Road, Cupertino, CA 95014-5435

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

Fax: (408) 252-1444

Email: marisa@betchartexpeditions.com



interest of the safety of the passengers and the vessel. With this in mind, you will have a once-in-a-lifetime voyage of discovery and adventure. (No smoking in vehicles or on board ship, except on the aft deck please.)

Expedition Fee Includes: Accommodations in Reykjavik (1 night); 1 breakfast and 2 lunches in Iceland; group transfers; 9 nights accommodations on board ship; meals, lectures, zodiac and shore excursions on board *M/V Aleksey Maryshev*; port fees and taxes; baggage handling; leadership, administration.

Expedition Fee Does Not Include: Air fare; (quoted separately); 2 meals in Iceland; tips to ship's crew or naturalists; any personal items such as alcoholic beverages or soda, radio communications while on board ship, laundry, independent transfers, passport, travel insurance; or foreign airport departure taxes.

Air Fare: Air fare quoted is based on group flights on IcelandAir, Minneapolis or Boston to Reykjavik and Akureyri with return from Reykjavik. AIR FARES ARE SUBJECT TO CHANGE.

Reservations, Deposits & Payments: To reserve a space, please call **Betchart Expeditions Inc.** telephone **(800) 252-4910** or **(408) 252-4910** or email marisa@betchartexpeditions.com. Mail the completed reservation form and your check with deposit of \$1,000 per person to: **Betchart Expeditions Inc., 17050 Montebello Road, Cupertino, CA 95014-5435.**

Cancellations & Refunds: The initial deposit for this expedition is refundable up to 120 days before departure less a handling fee of \$500 per person. There will be no refund for any cancellation after the 120-day period unless your place can be resold, then only the handling fee of \$500 is withheld. There are no refunds for unused meals, accommodations, or other expedition features. Trip cancellation insurance will be available. Emergency evacuation insurance is required.

Aurora Borealis

In the fall, the Northern Lights or Aurora Borealis sweeps across the night sky – white, yellow, green, and red – in a state of eternal motion. The Northern Lights are ideally seen against a clear, dark night sky; hence, this is an ideal time to be here. The North Geomagnetic Pole for Earth is a point just north of Thule in northwest Greenland. Solar winds penetrate the atmosphere, creating the dazzling display. The east coast of Greenland is a perfect distance away for the appearance of the Northern Lights. They appear at a height of about 100 km, and have the shape of a moving curtain or points radiating from a single dot. Traditional mythology says they are "the souls of the departed playing ball with walrus skulls in the sky."

Responsibility: Betchart Expeditions Inc. and The Planetary Society act only as agents for the passenger with respect to transportation and hotels and exercise every care possible. Operation of the ship is solely the responsibility of Oceanwide Expeditions. The *M/V Aleksey Maryshev* is registered in Russia. 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, acts of God, or other causes beyond our control. All such losses or expenses will have to be borne by the passenger, as our rates provide for arrangements only for the time stated. We reserve the right to substitute another leader of similar expertise or to cancel 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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