

Ice-Diving

Explore the Russian underwater world in the White Sea

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The White Sea has sublime water clarity. It forms indescribably beautiful ice and peculiar fantastical ice shapes. The water temperature hovers around 0-10°C and nurtures plenty of marine life, which makes the White Sea one of the best spots in Europe for ice-diving.

Located about 1200 km (800 miles) north of St. Petersburg, in the Arctic region of the far northwestern part of Russia, the White Sea is an inland sea that stretches

540 km from north to south and covers approximately 91,000 square kilometers. It is an inlet of the Barents Sea. In the winter, the White Sea is covered with ice from December until April. It is a perfect place for ice diving.

At Nereis Dive Center in Chupa, located on the Karelsky Shore of Kandalaksha Bay, divers use snowmobiles to race to various dive sites on the frozen sea. Sledges full of diving tanks are transported across the lambent snow and ice while cold northern wind whips divers' ears which are defrosted in warm folding-houses at the dive site. Everything for the pleasure and comfort of divers is provided.



The White Sea shore line is a spectacular gallery of natural ice sculptures in the winter





INSET: A diver prepares to explore the underwater world under the icy surface

LEFT: nature's ice sculpture

RIGHT: A sunstar lifted from its watery bed

BACKGROUND: snowmobile tracks on the frozen snow-covered surface of the White Sea

The main attraction in this scenic land is the White Sea. There is a serene beauty in winter, with the sea's undulating coastline where glacier movement has carved the landscape, fishing boats frozen along the shore, weather-worn cabins with wood smoke rising from their chimneys and the clinking silence above the ice-covered bays.

The fauna of the sea is reflective of the

temperate to arctic climate. Life thrives in a vivid and peculiar underwater world. Rocks are covered with soft corals, actinia and hydroids. Cracks in between stones reveal lots of starfish, crabs, shrimps, hermit crabs and sleeping fish. Among the fish species are lancet fish, rockfish, flounder, herring and cod.

White whales, seals, Greenland seals, sea-hares can also be spotted at the

White Sea. The white whale is actually classified as a dolphin in Russia, even though Europeans consider it part of the whale family. Unlike dolphins, the white whale has active joints in the neck area that help it to easily turn its head.

Above water, one can spot squirrels and hares, bear, wolf, lynx, deer and elk. Bird watchers can find hazel-grouse, black-cock, partridge, wood-grouse,

ducks, sandpipers and nesting ember geese at various times of the year. Deep and extensive forests of coniferous trees cover the region and filter the air. It is amazingly clean and fresh air.

Dive sites

A variety of dive sights and wrecks can be reached by one of the dive center's cutter ships within an hour or more from

the base. Depending on the dive site and your qualifications, you can see a range of things, such as flat bottom landscapes with large kelp, sheer walls with actinia, ascidium, soft corals and bryozoa, small sea-urchins and White Sea crabs, lots of small sea animals, starfishes and a grotto.

Divers reach depths from 15 to 35 meters. The deeper the dive, the darker





ABOVE: Light bursts through cracks in the surface ice creating an eerie frozen translucent roof over head



A diver gets ready to take the plunge in the first ice-dive of the day

and colder it gets, so appropriate gear is a must.

Wreck divers can explore a sunken fishing seiner on a shallow dive where numerous fish such as lancet fish, cod, rockfish, flounder, and small fishes make their home. Following are some of the most interesting dive sites to explore.

Chernyshov Island

(OSTROV CHERNYSHOV)

Ten to 15 minutes from the dive center is a dive site where soft corals grow densely along a rocky cape extending from a sandy precipice. Depth is 30-35 m. There are lots of ascidians and starfishes.

Deer Island Shipwreck

(OSTROV OLENIY)

At 18 m, there is a shipwreck near Deer Island 30 minutes from the center. The wreck stands upright on its keel. Divers can explore the interior of the ship.

Korovya Varoka (the rock)

(KOROVYA VAROKA – MATERIK)

Here, divers find wolf fishes, anemones, soft corals, shrimps, sea spiders, snails, mollusks and sea urchins. A wall leads to a heap of big stones with holes where the wolf fishes live. At 20m, a precipice drops to about 30-35 m beyond which lies a sandy bottom.

White Sea

Kartesh Cape

(MYS KARTESH)

This dive is made from a cutter moored to a rock at a location near the Marine Biology Station of the Academy of Science where there is a beautiful stream. Divers follow a stone precipice below which wolf fishes make their home in a bunch of large boulders. Sea anemones populate the area, and at 22 m, there are densely packed soft corals growing on the smooth slime bottom. Depth ranges from 30-35 m.

Sidorov Island

(OSTROV SIDOROV – MEZHOSTROVYE)

Another dive made from a cutter at a location one and half hours from the dive center, divers explore a strait between two big islands. One can dive there even during a storm. On the Sidorov Island's side there is a good stand. At 3-4 m depth, one will find lots of small fishes and a vertical wall leading to a depth of 18 m where ascidians and sponges grow. A bit further along, one can find wolf fish, cod, crabs and shrimps living at a stone precipice with big stones and holes. The maximum depth is 25 m.

Keret' Island – Dry Rock

(OSTOV KKERET – SOOHAYA SKALA)

Listed as "an ideal diving site for beginners and wives," this location takes 40 minutes to reach by cutter from the dive center. At a stone precipice, divers can find lots of holes with wolf fishes. From 20 m, divers explore a sandy



RIGHT: Gear and divers are transported to the dive site by snowmobile





White Sea

◀ Sunlight filters through various layers of ice creating a canopy of light gleaming through a golden glass-like ceiling.

▶ A delicate nudibranch is one of the many small creatures to be captured on macro photography at the White Sea.

▼ Nereis Dive Center is actually built on and around the hull of a ship renovated to house comfortable rooms, restaurant and dive center facilities

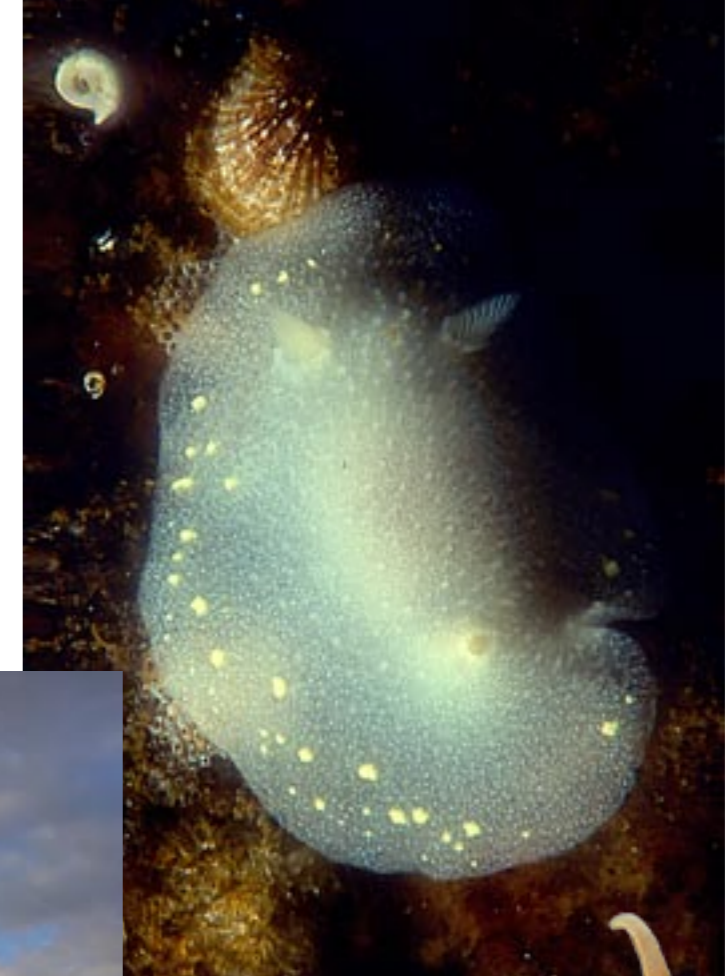


PHOTO BY PETER SYMES



COURTESY OF NEREIS DIVE CENTER



PHOTO BY PETER SYMES

bottom covered with different types of starfishes. Directly below the moored cutter at 3-5 m, there is a beautiful carpet of anemones, which grow on a vertical wall.

Kishkin Island – The Cave

(OSTROV KISHKIN – GROT)

About two hours from the center, divers can enjoy cave diving at Kishkin Island. A vertical wall leads to a protruding rock at 20-22 m, which marks the entrance to the underwater cave. The cave's ceiling is covered with a carpet of anemones and soft corals. As one continues through the cave, the ceiling lowers and the walls narrow. At the end of the cave, depth meas-

ures 35 m. The walls have cracks in them where divers can find sleeping perches hiding. The exit can be seen from all points in the cave, which has a length of 20m. Vertical walls flank the right and left sides of the cave entrance. The cutter moors to the rock above the cave.

A Day in the Life of the Ice Diver

The daily routine involves a casual but satisfying schedule. Divers get up in the morning, go upstairs to the dining hall to have a hot breakfast of crepes, bread and marmalade, oatmeal, coffee or tea and special dishes prepared with fresh catches from the White Sea. After breakfast, staff



ABOVE: A hand-drawn map shows the geography and some of the attractions around Nereis Dive Center
INSET: one of the many large anemones found thriving in the White Sea

COURTESY OF NEREIS DIVE CENTER



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and divers load their gear onto transport vehicles and drive across the ice to the dive site. Putting into sea and getting to the dive site usually takes about one and a half to two hours. It is also possible to dive close to the base, thereby saving time in transportation.

Then, there is the first dive, lunch at the island, second dive if desired and off you go back to base to a warm shower and a short snooze on a comfy bed in your cozy room at the hotel before it is time for dinner at the dive center's restaurant.

Of course, after dinner one must partake of the local customs and bond with one's fellow dive buddies by sitting together and sweating in the beautifully constructed Russian birchwood sauna on the ground floor of the center. Divers swap stories about diving the sea, and interest-



ing anecdotes and tips are shared.

Personal accounts

Nobody tells a story better than those who experience ice-diving for themselves. Here are a couple personal accounts from local divers to give you a glimpse into the wonders of the White Sea ice-diving experience.

Michael Vedekhin

Today, we went on a long trip to Cape Kartesh for a whole day. Snow scooters rode easily across the deep-frozen snow. Most of the way we rode through forest and finally found ourselves at the mouth of the Keret River. We were really amazed with the beauty of the non-freezing rapids, bright sun and blue sky. We ventured out to Chupa Bay on the White Sea where a friend of mine caught sight of several seals lying on ice blocks in the distance.

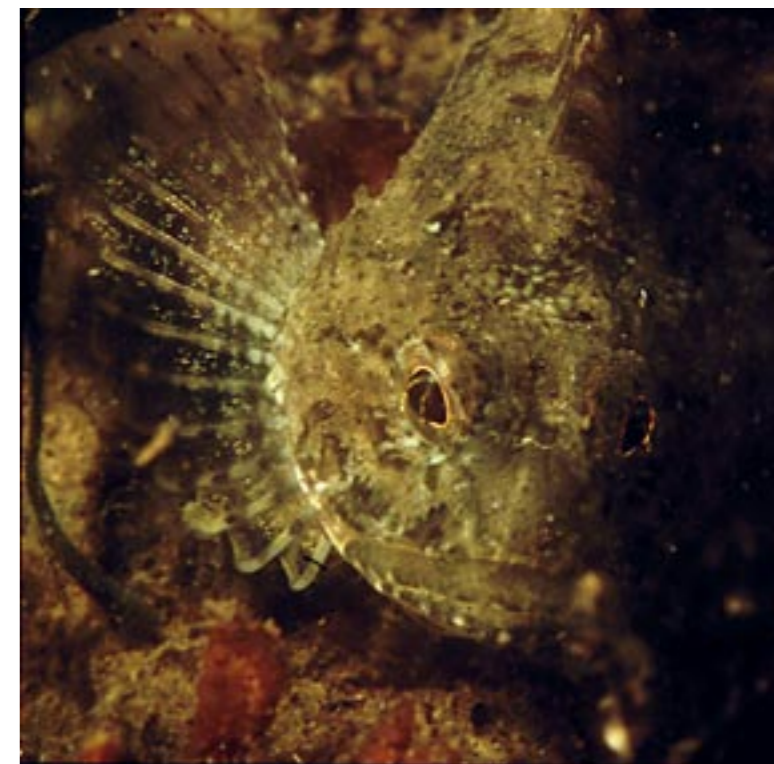
At Cape Kartesh, the support team welcomed us – five people from the maintenance staff. The lanes were made, safety-lines were prepared, diving tanks and gear were waiting for the divers. Nearby there was a small, warm and comfy house. To say that we liked that dive is to say nothing! It was absolutely unbelievable and gorgeous!

Above all, there was the great visibility, which was more than 30 meters. The crystal clear waters gave us an opportunity to

take in a view of an absolutely fantastic landscape – stony conglomerations with ledges, laminaria seaweed gardens to a depth of five meters, And, starting at 20 meters – a beautiful precipice (nobody knows how deep it is). From my position – I was almost at the end of the safety line – I could easily see other lanes and divers near them. Moreover, comparatively thin ice (25 cm) and bright sun striking through it makes wonderful enigmatic lighting effects. But the thing I really enjoyed was the shoreline. You cannot get the same view from the surface, but here there was an indescribable line of small and large pieces of ice broken up that created great patterns.

According to the computer, the water temperature here was about minus 1-20°C. That is why after 40 or 50 minutes in the water, one can feel a little bit cold.

After ascending to the surface, everybody felt amazed. We went to the house to warm up and have something to eat, and then hastened to make the next dive. There are so many things to look at



CLOCKWISE FROM TOP LEFT: Soft coral, Nudibranch, Stauromedusae, Sculpine
INSET: Sea devil



features White Sea

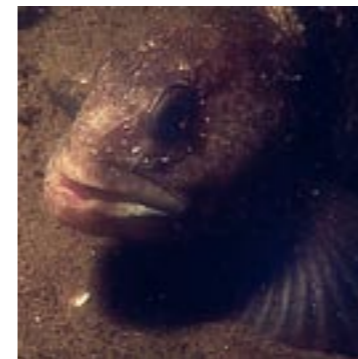
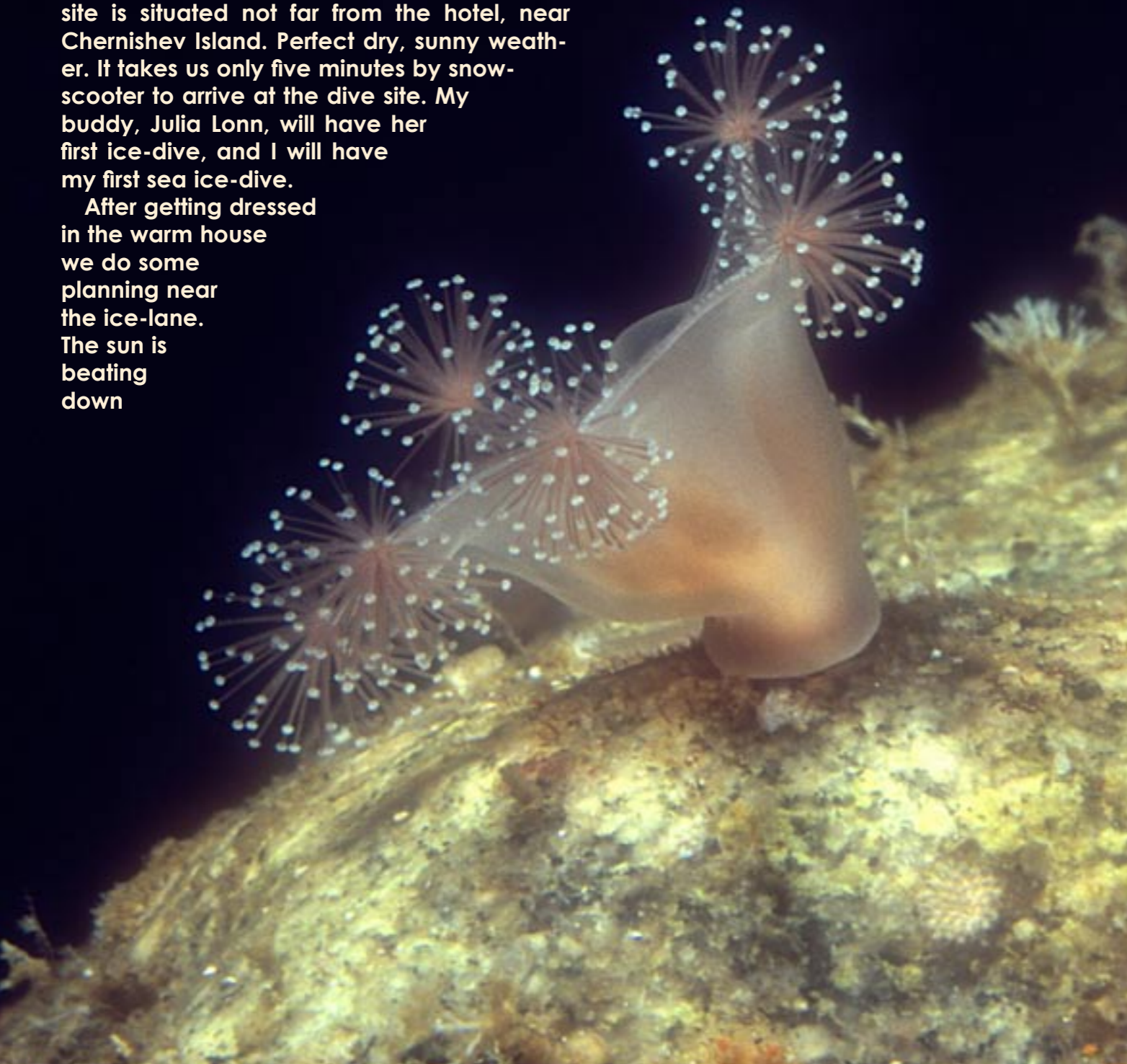
underwater! It was a really perfect, amazing and unusual dive.

Alexandra Vlasova

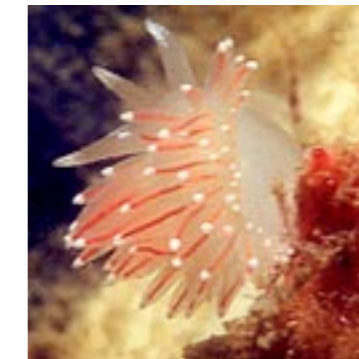
March 8 is International Women's Day. Let's celebrate this day with an ice-dive! The dive site is situated not far from the hotel, near Chernishev Island. Perfect dry, sunny weather. It takes us only five minutes by snow-scooter to arrive at the dive site. My buddy, Julia Lonn, will have her first ice-dive, and I will have my first sea ice-dive.

After getting dressed in the warm house we do some planning near the ice-lane. The sun is beating down

unmercifully. The snow is sparkling and the water attracts us with its incredible clarity. We are seated at the ice-lane edge and start descending quickly while trying to take our first breath underwater.



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Going deeper along the wall and paying close attention to the kelp, one can see plenty of life around – starfish, actinia, polyps and soft corals. The purpose of this dive is not to go too deep, but to make an exploration of the ice (as much as possible). Because of ebbs and flows, the ice along the shore cracks and breaks, making underwater hummocks and small grottos. Sunshine is coming through the ice-cracks and shimmers with lots of colors. Air bubbles traveling inside the ice intensify the impression. We are so delighted! Let's have some fun. Turning upside down we show each other figure skating. Unfortunately time is up and we have to ascend.

On the surface, the guys from the support group salute us. Well done, ladies! We get changed, go back to the hotel and have a hot sauna. Fabulous, unforgettable memories, good friends and excellent vacations.

Requirements

There are some things divers need to know and prepare before coming to the Nereis Dive Center for the ice diving experience including specific equipment requirements, certification requirements and special services available at the center.

It is recommended that divers be certified with one of the major dive education schools such as CMAS, PADI, NAUI or IDD. Divers are encouraged to bring their own dry suits, regulators (DIN or YOKE), BCD, fins, mask and snorkel.

There are convenient and very effective equipment drying rooms at the center, two compressors and a decompression chamber. It is possible to upgrade your qualification and get your next CMAS certificate at the dive center. One can also dive individually with an instructor.

The hotel, which was built by the owner-dive master, Yuri Borakov, and opened on July 15, 2003, offers double rooms, hot water, sauna and three meals a day in the hotel's restaurant. With a friendly and personable staff, the Nereis Dive Center and Hotel is the most comfortable and practical way to go when taking on the adventure of ice-diving in some of the most beautiful and awe-inspiring wilderness of the great northwestern arctic region of Russia.

As Nereis Dive Center is located in Chupa, a small Russian village with visible remnants of the Soviet past and multi-generational peasant life, visitors are treated with the greatest care and pride. All the staff are local and wish to share their joy in the natural beauty and culture of their region with divers from all over the world.

Not only will divers enjoy the natural beauty of the area and the White Sea, but divers will also experience the warmth and hospitality of the Russian people, their age-old customs and delicious hearty home-cooked meals, traditional folk song and dance, lively discussions and Russian wry wit and humor, as well as lots of the best caviar and vodka available to wandering adventurers on the planet. **Nostrovia!** ■



CLOCKWISE FROM LEFT: Stauromedusae, Wolf fish, Nudibranch, Tube worm, Grotto decorated with soft coral

fact file

White Sea, Russia



ABOVE: Map of Chupa and surrounding area
INSET: Location of White Sea in relationship to Europe

X-ray mag



History After 200 years of Mongol domination in the 13th-15th c., the Principality of Muscovy, which was established in the 12th c., was able to emerge and gradually expand with the conquest of surrounding principalities. The Romanov Dynasty continued the expansion across Siberia to the Pacific in the early 17th c. Territorial conquest continued with the Russian Empire through to the 19th c. The devastation left by the two World Wars led to the overthrow of the royal family in 1917. Soon Lenin and Communism came to power at the formation of the USSR. Russian dominance of the Soviet Union was strengthened by Stalin at the cost of millions of lives. Stagnation in the economy and society followed until Gorbachev introduced glasnost (openness) and perestroika (restructuring) in the 80's. Swift changes led to the splintering and fall of the Soviet Union in 1991. A struggle to establish a democratic political system and market economy has occupied Russia ever since. Recentralization of power and erosion of some democratic institutions have occurred under President Putin while guerilla conflict in Chechnya still plagues Russian leadership.

The important port on the White Sea is Arkhangelsk. For much of Russia's history this port was Russia's main center of international maritime trade. Norwegian and Russian sailors, merchants and fishermen interacted in the region of the White Sea during the 18th and

19th c. During Soviet rule, the port became an important naval and submarine base and the White Sea was closed to Norwegians by 1918. The 1990's saw a reopening of the sea to Norwegian and other western scientists, plus trade and tourism.

Government: federation
Capital: Moscow

Geography 17,075,200 sq km; Northern Asia bordering the Arctic Ocean, between Europe and the North Pacific Ocean. Regions west of the Urals are included with Europe; Terrain: broad plain with low hills west of Urals; vast coniferous forest and tundra in Siberia; uplands and mountains along southern border regions; Coastline: 37,653 km; Resources: wide natural resource base including major deposits of oil, natural gas, coal, many strategic minerals, timber; Formidable obstacles of climate, terrain, and distance hinder exploitation of natural resources; largest country in the world in terms of area but unfavorably located in relation to major sea lanes of the world; despite its size, much of the country lacks proper soils and climates (either too cold or too dry) for agriculture; Mount El'brus is Europe's tallest peak.

An inlet of the Barents Sea, the White Sea is located on the North Western coast of Russia. Karelia lies to the west of the sea and the Kola peninsula lies to the north.

Climate ranges from steppes in the south through humid continental in much of European Russia; subarctic in Siberia to tundra climate in the polar north; winters vary from cool along Black Sea coast to frigid in Siberia; summers vary from warm in the steppes to cool along Arctic coast.

Population The population of Russia is 143,782,338 (2004 est.). Ethnicity: Russian 81.5%, Tatar 3.8%, Ukrainian 3%, Chuvash 1.2%, Bashkir 0.9%, Belarusian 0.8%, Moldavian 0.7%, other 8.1%; Religion: Russian Orthodox, Muslim and other religions.

Currency Russian ruble (RUR). Exchange rates: 10 RUR = .27 EUR / .36 USD. **Language** Russian

Diving maximal depth of the White Sea (340 m); salinity varies from 0‰ in estuaries to 30‰ in places exceeding 200 m. Surface salinity in open sea is about 25‰. Upper water layer ranges 12-15°C and are inhabited by boreal spe-

cies. Deep sea areas are occupied mainly by arctic fauna.

What to see: Anemones, large soft coral, huge starfish and sunstars, but the enormous Russian sea kelp is seasonal and can only be seen in warmer weather. Dry suit required.

A deco-chamber is located at Nereis Dive Center in Chupa.

Travel Agency/Dive Center

Penguin Travel
www.penguin.dk
Nereis Dive Centre
www.nereis.spb.ru

Web sites

Russian Tourism
www.russiatourism.ru
St. Petersburg
www.saint-petersburg.com
Hermitage Museum
www.hermitagemuseum.org
White Sea Biological Station
www.zin.ru/wsbs

Books

White Sea Ecology & Environment
V. Berger and S. Dahle, eds.,
Zoological Institute - Russian Academy of Sciences, \$34 USD
Akvaplan-niva, Tromsø, 2001.
www.akvaplan.niva.no ■



Day 1 Depart from your local airport. Arrive in St. Petersburg. A guide meets you at the airport after visa and customs

check and drives you to your hotel in St. Petersburg. The day and evening are for your own sightseeing plans.

Day 2 The first half of the day is for your own sightseeing. Around 3pm, the guide comes to pick you up at your hotel and drives you to the train station where you take the Murmansk train around 3:45pm. You have quarters in the first class sleeper car. A host comes with small lunchboxes and serves tea and coffee. The train also has a restaurant car.

Day 3 Just after noon, the train arrives in Chupa. Staff from Nereis Dive Center picks you up in their minibus and drives about 40 km to the dive center-hotel. On arrival, you receive a little snack and a tour around the center. Relax in room.

Day 4 Breakfast at the center's restaurant. Dive trip with boat: First dive, lunch break, second dive optional. Return for dinner at the hotel.



Day 5 Breakfast. Dive trip with boat: First dive, excursion to a little old village Keret of Pomors. Then lunch at a tranquil spot and a second dive. Return for dinner at the hotel.

Day 6 Breakfast. Dive trip with boat: First dive, then a little hike on one of the small islands where the guide talks about the nature of the area. Lunch follows in a tranquil spot and a second dive. Return for dinner.

Day 7 Breakfast. Dive trip with boat: First dive, excursion to the White Sea Biological Station. Lunch follows in a tranquil spot and a second dive. Return for dinner at the hotel.

White Sea Ice-diving

Day 8 Breakfast. Dive trip with boat: First dive, excursion to see wild birds, lunch break at a peaceful spot, second dive. Return to hotel for dinner. After dinner concert with local musical performing group.

Day 9 Return to St. Petersburg: Breakfast at the dive center-hotel and a quick morning dive if desired. Depart dive center around 2pm on the minibus to the train station at Chupa. Take the night train back to St. Petersburg.

Day 10 Arrive in St. Petersburg around mid-day. You are picked up and taken to your hotel. The day and evening are yours for your own activities.

Day 11 Departure from Russia: You are picked up at your hotel in the middle of the afternoon and driven to the airport where you take a flight back to your local airport.

Trip Extension: St. Petersburg is a city to explore and experience! You can arrange for more sightseeing days in the city prior to or after the dive trip to the White Sea.

Penguin Travel is the Blue Horizons' agent for air travel to Russia.

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Blue Horizons Expedition & Dive Club
www.bluehorizons.dk

