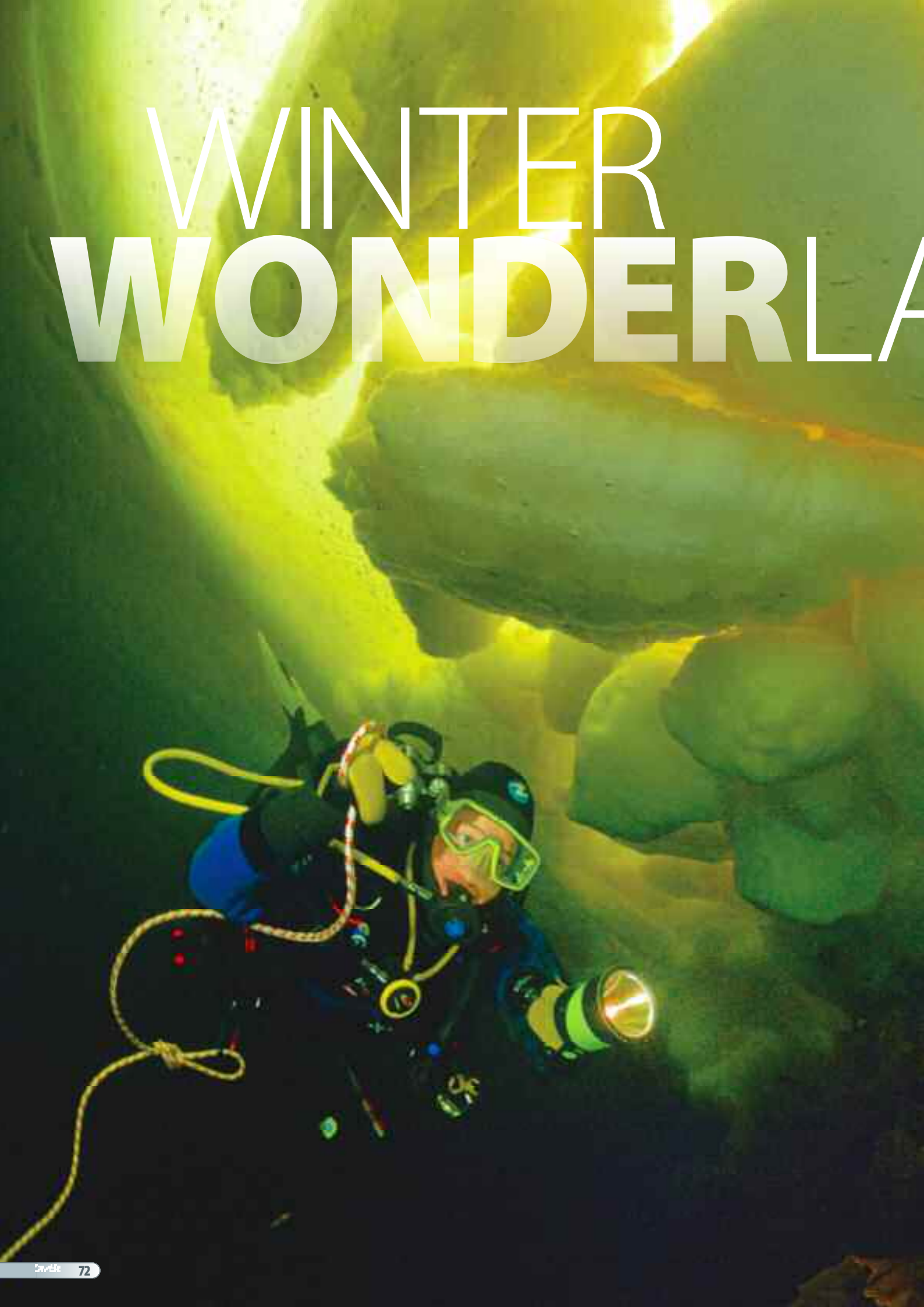
WINTER WONDERLA



AND

Just above the Arctic Circle on the rugged shore of the White Sea is a small Russian settlement called Nilmaguba. Bizarre creatures ranging from sea angels and Gorgon's heads to white whales can be found where an icy roof creates another world, says first-timer ELINE FEENSTRA. Photography by RENÉ LIPMANN

A WHITE LANDSCAPE glides beneath the sled that carries me. White fleeces of running dogs shimmer in the morning sun and their rhythmic footsteps alter the roaring engines of the snowmobiles. "Faster!" I shout, and the sled accelerates.

My back is being pushed deeper into the seat, and I strengthen my grip. It's a wake-up call that intensifies everything: the air, the colours and the endlessness of the world around me. I have reached a frozen sea: the White Sea.

ICE DIVING

We are on our way to the ice camp located near the shore. Heated huts are needed to make diving comfortable, because both the air and the water temperatures drop below zero. But it doesn't scare us – we can't wait to get in!

"From now on we call every hole a *mine*," commands our dive guide Natalia Chervyakova, her face split by a sly grin. "Mine" is the Russian equivalent for "hole in the ice", and it sounds ominous. This is my first mine. I have never been ice-diving before, so I am taking a two-day course.

Ivan Kronberg, my instructor, helps me to gear up. I feel comfortable and safe. After being rigged to his line, I'm good to go. Ivan is already in the water, filling up most of the hole.

"Ready?" he asks.

I nod heartily, my regulator already in my mouth. With a giant stride, I leap into what's left of the mine. Only when I am fully submerged do I again fill my lungs with air.

It's easy to find buoyancy, because the shallow bottom provides a good reference point. Natural daylight penetrates the frozen ceiling. I can see faces at the surface, framed by the top of our mine.

A tender monitors our dive; a rope connects me to Ivan. Communication between us is important. At first I feel limited by the rope, but then the surrounding world takes hold of me.

Boulders of ice reflect colourful light-beams into the green water. A small cave can be seen, crushed into the rocky shore. Yellow sand and reddish algae form a bright contrast.

A little tug on the line reminds me of my buddy. It makes me laugh; there is a reason why people dive with lines here. I turn to see Ivan – he is upside-down, his feet against the ice above us.

Pictured: Tidal forces that move the ice 2m vertically every six hours create amazing ice formations.

Below: Mobile huts on skis keep divers warm before and after the dive.

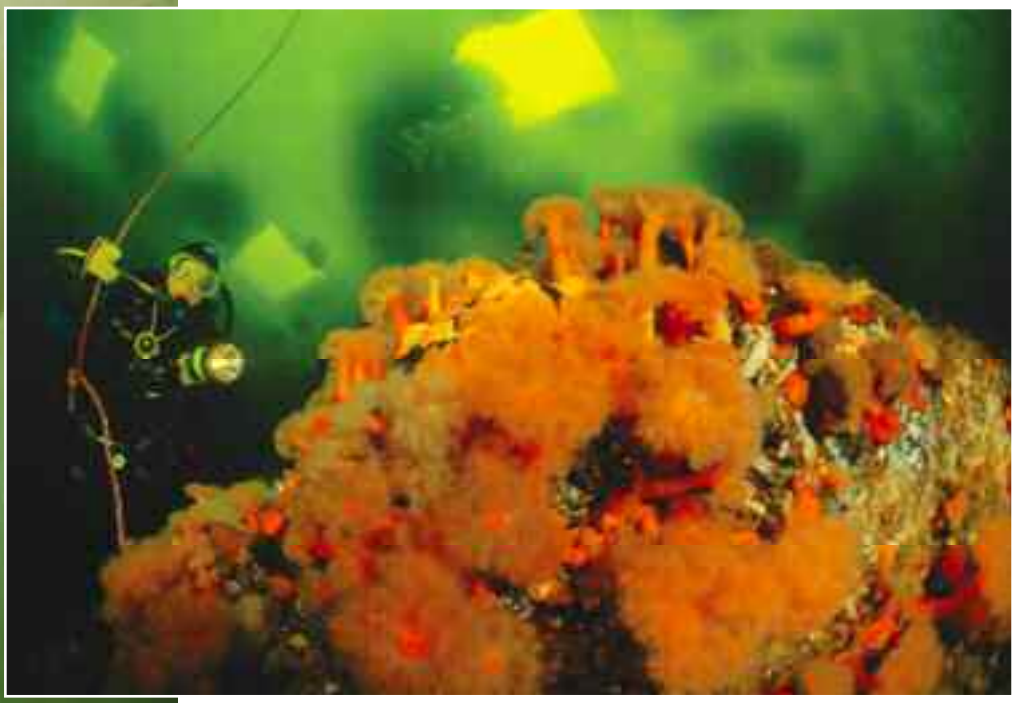
Before he allows me to do the same, I inflate my suit and stretch out my arms. Stuck to the roof, I bend my knees, and manage to push against the ice.

It's weird to breathe while inverted – regulators are not really designed for this. I can feel the bubbles streaming up against my suit. This is so cool!

FREEZING

Although I don't think ice-diving is any more hazardous than other types of recreational diving, it does require additional training, preparation and specialised equipment.

Getting familiar with the drysuits and heavy gear is fun in itself. Cold can have a restraining effect on divers. Fresh water freezes at 0°C, but salt water does not solidify until a couple degrees below! So we monitor carefully for signs of fatigue and hypothermia.



We carry two first stages, because freeze-ups are common. The short dive times mean that a first stage itself is unlikely to freeze, despite the layer of ice that forms on top of it. However, second stages do freeze, because the moist air from our lungs can freeze the lever that opens the system.

The air free-flowing out would be extremely cold, because of the rapid expansion, and a diver would struggle to breathe from it.

In such an emergency, we learn to switch to our alternative air source and isolate our primary source by closing the right valve on the tank.

Of course, a good buddy system is vital, and the course allows us to practise emergency procedures and communication with the surface. A pre-arranged number of pulls tells the tender to slacken the rope, or confirms that we are OK. If anything went wrong, the tender would be able to get you to the surface quickly.

Above: "Mine" is the Russian equivalent for hole in the ice.

Above right: Anemone Rock, a spectacular outcrop covered by anemones, reaches out from the slope of Big Cross Island.

Far left: It takes chain-saws, pick-axes and a lot of power to create a hole in the thick ice.

TIME MACHINE

The Arctic Circle PADI Dive Centre is located in Nilmaguba. The 400-year-old settlement is part of the Russian Republic of Karelia, but nowadays only a handful of residents live here year-round.

We had travelled via Helsinki to Kuusamo, a Finnish town not far from the Russian border and on by car, feeling as if we were going back in time with every mile we covered. It took a few hours to cross the 10m Russian border, where the paperwork is done by hand.

Unpaved roads carried us deeper into the frozen pine forests of Russia. Primitive settlements here consist of wooden houses no higher then one or two storeys, with livestock grazing outside in small enclosures.

In spring, the White Sea receives warm and nutrient-rich water from the North Atlantic through its connection with the Barents Sea.

Large fish such as bass, salmon and schools of herring come here to feed, and seals arrive to raise their young.

The sea is home to the beluga, also known as the white whale. These mammals have a distinctive bulbous forehead, and can grow to more than 5m in length.

In winter, the sea freezes over. Tidal forces create compression fractures near the shore edges, which results in exceptionally beautiful ice formations under water. As we arrived, a thick layer of snow covered the frozen sea.

The day we conduct our first ice dive, we feel so energised that we decide to walk back. The 15-minute snowmobile ride of this morning will take us over an hour on foot, but with no sled-tracks or footprints other than our own, the experience becomes totally different.

My mind empties. I look up. The sky is clear and the sun meets my smile. We stretch out our arms and fall backwards. This is a magical place.

ICE FORMATIONS

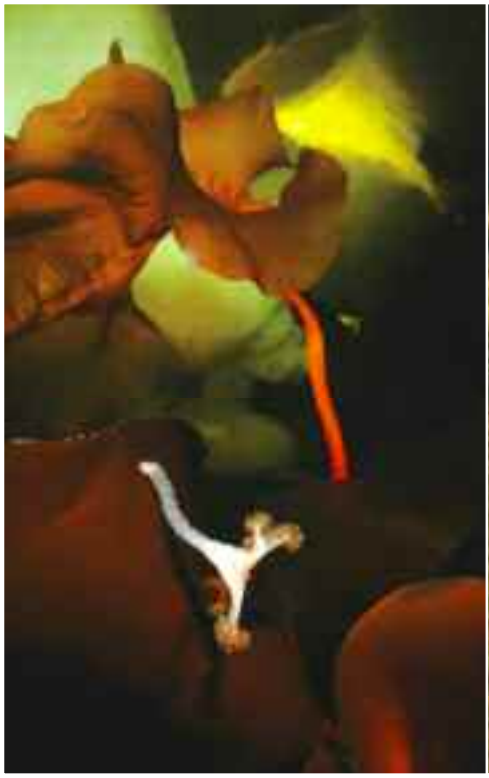
There is quite some biodiversity in the area, but the ice formations are the main attraction in winter. Biofilter Bay is a small inlet, sheltered on one side by sheer cliffs. It's known for its beautiful ice formations, although its name originates from the many filtering organisms that live here.

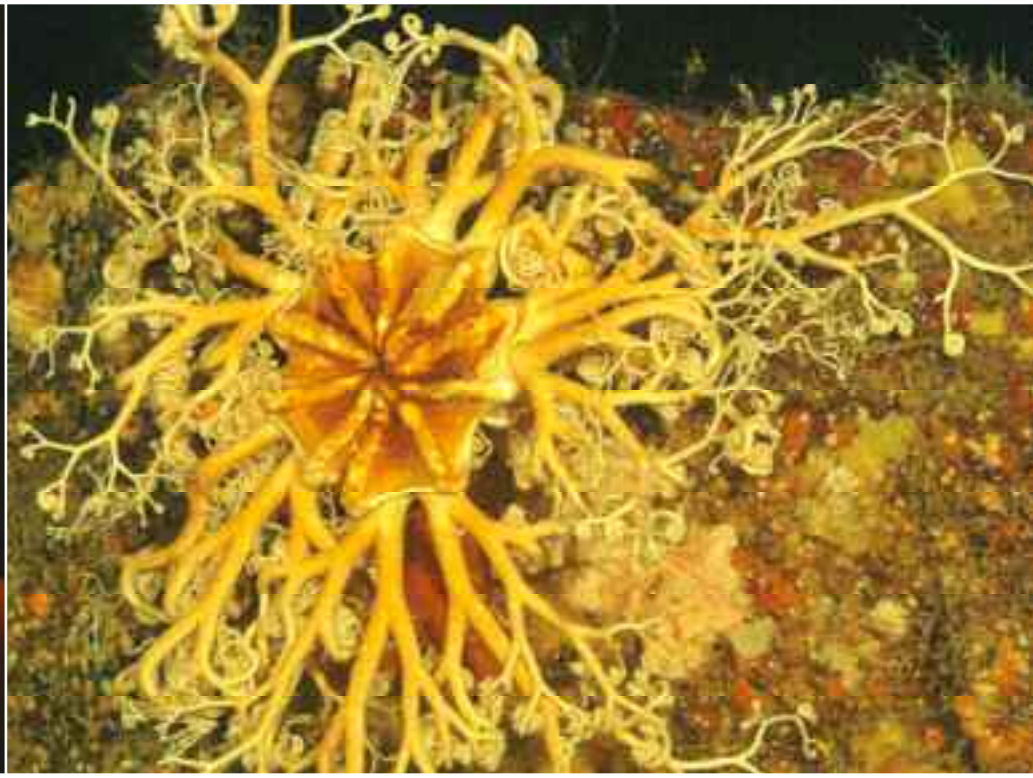
"Every six hours, the ice moves vertically by 2m," says Natalia. That sounds pretty destructive to me. Besides being a dive guide and instructor, Natalia has studied the area as a marine biologist, and her enthusiasm for everything that lives is infectious.

Her many years of diving experience make her a super pro, which makes me, in turn, feel quite confident. We gear up for the dive, and find ourselves half an hour later under the hut in which we had just had our briefing. I love that.

Where the ice meets the shore, we find our way through big blocks of frozen water crushed into the ceiling. Again, we are mesmerised by the tunnels and cave formations that form a small labyrinth for the creatures that live here.

Trapped bubbles enhance the light patterns for the sun, and it's a challenge





to capture this spectrum of light on film. Away from the shore, the water column takes on a greenish hue that fades into darkness.

A tiny creature known variously as a sea angel or sea butterfly pays us a visit. Wow! This free-swimming pelagic sea slug is fully transparent, and inside its body a little red heart beats.

You have to wonder how such a delicate creature can survive in one of the toughest environments on Earth.

ALIEN

Into our fourth diving day, we're ready for some deeper dives. It will be much darker, so we gear up with heavy lights.

As excited as I am, I am also a tiny bit nervous.

The slopes of Bolshoy Krestovy, also called Big Cross Island, vary in depth, because the coast-facing slope is much shallower then the seaside slope. Maximum depth is 25-30m.

Many boulders cover the bottom, but one large rock outcrop reaches the height of a three-storey building and is shaped – according to the dive team – like a dragon's tooth.

That it is called Anemone Rock comes as no surprise once you descend on it. Thousands of bright orange anemones form a blanket over the rugged seabed, and where anemones are absent, beautiful soft corals take their place in this thriving garden.

A rather bizarre creature catches my attention. *Gorgonocephalus arcticus*, nicknamed Gorgon's head, is a northern basketstar. From a central disc, five arms branch out into numerous coiled filaments. If I were to choose one species to describe as alien-looking, it would be this one.

Our second dive is to be a wreck dive, but before we're allowed down, we need to find a gateway. The mine has been frozen, so we need to make a new one, and it takes quite some energy to cross-section half-metre-thick ice.

Luckily we have been accompanied by the entire dive team, and they are eager to help. After testing the ice, a chain-saw is used to cut out a large square. Using pick-axes we shatter the ice into smaller blocks, but these are still so heavy that it takes the strength of four men to pull them onto the platform, where they also serve as markers for the mine.

Yaroslavets is a wooden fishing boat that lies 20-30m from Isle Ploshkin. The temperature feels colder at depth, and the darkness makes this a thrilling dive.

With no shore visible under water, our only reference from the wreck is the plain bottom and the psychedelic ice far above us. The randomly distributed mines tend to enlarge that distance.

It's a great dive, but because of the depth and cold, we can't stop for long.

BELUGA

Close to the dive centre, a confined space within the bay serves as a rehabilitation site for four beluga whales. They are being cared for, because the chances of them adapting to the wild again after years of captivity are remote.

Above left: This jelly-like creature, *Lucernaria quadricornis,* is usually found in tidal zones attached to algae.

Above right: A Gorgon's head basketstar consists of a central disc with five arms branching out into numerous coiled filaments.

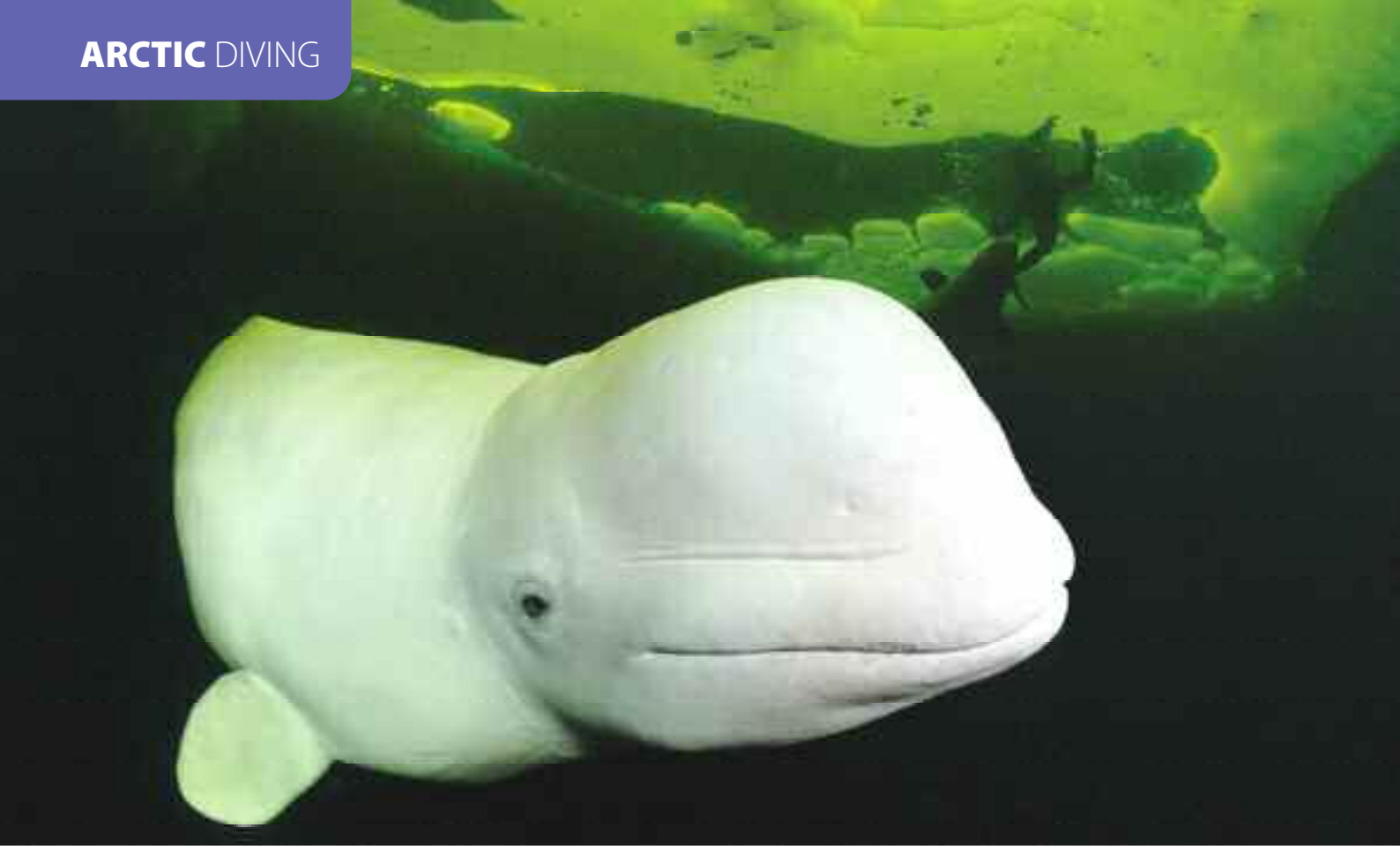
Below: The belugas were formerly in captivity, so are used to being fed.

Unfortunately white whales, like so many others, are a critically endangered species. The name beluga derives from the Russian *belaja*, or white. Their scientific name, *Delphinapterus leucas,* means dolphin without wings, because they lack a dorsal fin.

Loud noises are emitted from the water as we walk past. These whales make the strangest sounds. Three females, Matryona, Nilma and Pelageya, respond to their caretaker's call.

The larger male, Semyon, appears a little later, after trying to make an entrance. We are allowed to dive with the whales in the basin but we must not disturb them any more than necessary.

I am still adjusting the buttons of my video camera when Semyon rushes past me. His stroke is so powerful that it makes me tumble. He could easily have touched me, but he didn't.



I feel comfortable. Now it's my turn to make contact. But the whales are not to be played around with. Semyon is cheeky, as are the "little" females. Their skin feels rubbery and when I touch it they decide to teach me a lesson by opening their toothed mouths. Nice!

It's a mind-blowing experience to be in the water with these playful but kind-hearted animals. They are aware of their dominance in the water, and in some way of our fragility. They don't push it.

Later, after dark, I feel my own fragility in a different way. Barefooted, I walk into the white landscape, looking up to a sky full of stars. Steam rushes off me, because as I have just come from the *banya*, Russian for sauna.

It's overwhelming. The burning cold soon lets me know that it's time to head back. But before I make my dash, I take off my towel and take a leap into the fresh snow!

NA ZDOROVJE!

"Get in!" commands Alexandr Dmitriev, a Nilmaguba local. We have just returned from our last ice dive, and a group of people are waiting for us in several snowmobiles.

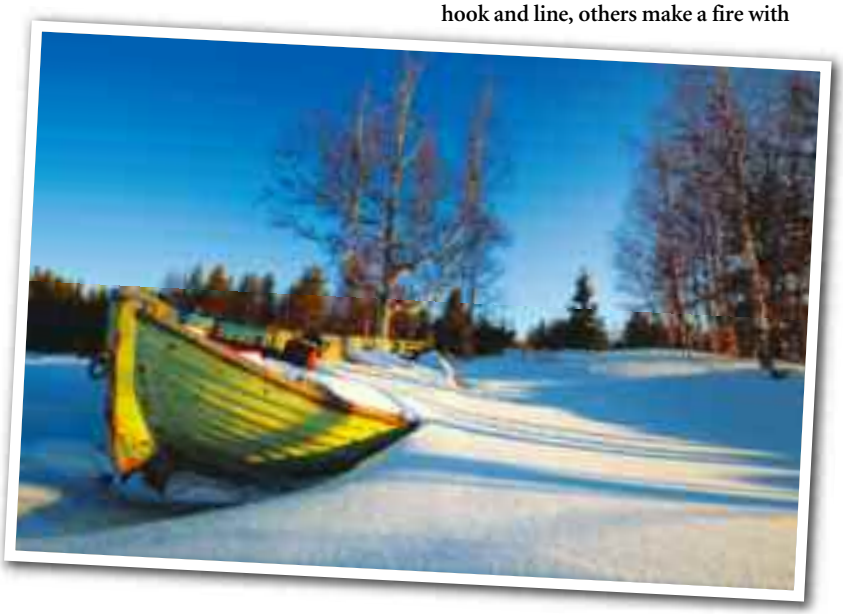
For minutes we race through a thick pine forest until we reach a frozen lake. It's time for ice-fishing!

While some of the locals teach me how to catch a fish with just a small hook and line, others make a fire with wood from the forest. The dogs run wild, and the children play in the snow.

We all get our turn to ride on the snowmobiles, and as the sun slowly sets, the fresh fish is being cleaned for the soup, and the vodka is poured.

"*Na zdorovje!*" is the toast, and we all take a shot.

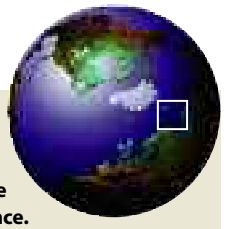
I feel the warmth of the vodka inside me, and look around. There is no place I would rather be than right here, near the shores of the White Sea.



Above: As the captivating beluga whale rushes past a diver, its eyes appear playful.

Below: A thick covering of untouched snow adorns the landscape.

FACTFILE



GETTING THERE ▸▸ Fly via Helsinki to Kuusamo near the Russian border. The dive centre can arrange a bus transfer to Nilmaguba. Or fly to Moscow and take a train to Chupa. Get a visa well in advance.

DIVING ▸▸ Arctic Circle PADI Dive Centre is part of Russia's largest dive operator, RuDive Group, www.ice-diving.ru

ACCOMMODATION ▸▸ The Arctic Lodge is a comfortable guest-house with twin rooms and private bathrooms. Russian food is served in a big dining room/lounge.

WHEN TO GO ▸▸ The dive centre offers diving in summer and winter, as well as ice-diving courses. Ice-diving takes place from February to April.

PRICES ▸▸ Basic room from 53 euros a night, including meals and beverages (two sharing). Ice-diving (two dives a day) is 137 euros a day, and a PADI ice-diving course, including three training dives, 373 euros. Group microbus transfer from Kuusamo from 90 euros per head, or train from Moscow from 230 euros. For a complete package, contact Waterproof Expeditions, www.waterproof-expeditions.com

TOURIST INFORMATION ▸▸ www.russia.com