



POLAR DIVING

GENERAL INFORMATION FOR PASSENGERS

- Divers must be experienced with cold-water, dry suit diving. We are aiming at 1-2 different dives per day (1x morning / 1x afternoon)
- Diving depends on local ice and weather conditions
- Oceanwide dive team leaders and guides are experts in their field, qualified and experienced
- We offer basic equipment on board (scuba tanks, compressor, weights, and other essentials), but divers must bring their own personal gear
- Please see our dates & rates for the diving supplement

It is Oceanwide's tradition to offer a cutting-edge adventure experience. Our thorough knowledge of the polar areas enables us to develop voyages combining nature cruises with diving expeditions, offering you the best dive sites in a fascinating world of ice. These polar diving cruises are true expedition-style trips. However, years of experience have taught us that there is no such thing as a guarantee about weather, wildlife, or ice conditions. There is also no such thing as a 'better dive site' or 'better period of time'. Every voyage is different than the previous one, and every year the ice and weather conditions are unpredictable.

In June of 1997, a group of 24 scuba divers from the Netherlands, Belgium, Germany, Switzerland, and the United States joined us for a special expedition: Ice diving in the Arctic waters of Spitsbergen. This successful exploration voyage was followed by an additional Arctic voyage in June, 1998, and a new challenge in November of the same year: the very first commercial Antarctic diving expedition to the Falklands and the Antarctic. The procedure of the dive operation, the descriptions of the dive sites, and the decisions about the period of time and itinerary are all based on many years of dive experience by Oceanwide professionals who have worked in the polar areas for research and filming.



What will you see while diving?

The dive sites vary from shallow ice diving, diving along a wall, from a beach, or from the Zodiac. The maximum depth is around 20 meters / 65 feet. The combination of sunlight and the often-extraordinary formations of ice cause an overwhelming, ever-changing spectacle of colors with a fantastic variety of shades and brilliance. While snorkelling or diving along the ice floes, you will be amazed and never forget these deep blue colors. In Antarctic and Arctic waters, we may observe typical marine life, such as sea squirts, squat lobsters, many species of starfish, spider crabs, soft corals, anemones, peacock worms, and dogfish as well as kelp walls, sea-snails, crabs, sea butterflies, various Arctic fish, shrubby horse-tails, jelly-fishes, and sea-hedgehogs. In Spitsbergen we may also dive with seals and can observe many walruses approaching the Zodiacs. When they are within close proximity of the Zodiacs, we may even try to observe these animals from under the water with snorkel and mask. But because of the possible danger, we will not dive with walruses.

ARCTIC DIVING (SPITSBERGEN)

Marine Life

In the Atlantic waters, we offer the regular Zodiac diving as well as wreck diving. The dives in the polar areas vary from shallow ice diving, where we dive near or under the ice-floes (approx. 9 meters, 30 feet) to shore diving, where we dive to approximately nine to 18 meters (30 to 60 feet). The combination of sunlight, sea water, and the often extraordinary formations of ice. As mentioned, we may also observe typical marine life, such as sea squirts, squat lobsters, and many species of star fish, spider crabs, soft corals, anemones, peacock worms, dogfish, kelp walls, sea-snails, crabs, sea butterflies, various Arctic fish, shrubby horse-tails, jelly-fishes, and sea-hedgehogs. In Spitsbergen we may also dive with sea lions.



ANTARCTIC DIVING

Antarctica and the sub-Antarctic Islands are some of the last unspoiled regions of the world. The mysterious White Continent, with its multi-colored ice caps, glistening glaciers, and towering snow-capped mountains, offers unparalleled scenery and photographic opportunities. Enormous numbers of penguins, whales, seals, and seabirds congregate in the food-rich waters along the Antarctic and sub-Antarctic shores.

Marine Life

During our Antarctic dive expedition, you may observe penguins from under the surface as well as sea lions and perhaps even leopard seals. The Falkland Islands are rich with krill (which is consumed by many species) and therefore interesting for finding marine wildlife. The dive sites will vary from shallow ice diving, diving along a wall, from a beach, or from the Zodiac. The maximum depth is around 20 meters / 65 feet.



CLIMATE IN THE ARCTIC & ANTARCTICA

The voyages in Spitsbergen are organised in the northern summertime, so it is not really cold. During this period, the sun shines 24 hours a day. Temperatures vary between 5 to 15°C (41 to 59°F) from June to September.

In the austral summer around the coasts of Antarctica, temperatures are generally close to freezing in the summer (December-February) or even slightly positive in the northern part of the Antarctic Peninsula. The temperatures in Antarctica vary between about -5 to 8°C (23 to 46°F). Together with a strong wind, these low temperatures can feel sub-zero. Warm and efficient clothing (and a flexible

attitude) are the best means to overcome these sometimes harsh circumstances. Although there can be bright skies with sunshine, the weather is often unpredictable. Catabatic winds caused by the icecaps and glaciers can pick up suddenly and are a fierce opponent for polar travelers. This might lead to the cancellation of planned landings, as excursions can only take place in safe conditions.

Program adaptations due to ice and weather

These diving voyages are true expeditions. Although we know the destinations in detail, each dive will be a surprising event. Please note that ice is not static but always in movement. This means that the actual situation (colors and marine wildlife) always depends on the conditions and formations of the ice. Personal expectations that are not met are not grounds for reimbursement.

Please also note that the itinerary in the Arctic, Antarctica, Falklands (Malvinas), and South Georgia is always dependent on weather and ice. It is always possible that because of the pack ice and drift ice, we have to change our sailing schedule. It is also possible that certain bays or fjords are closed because of ice. In such cases, we have to reroute our voyage. Possible alterations that relate to weather and ice conditions are not a reason for claims and reimbursements. When changing the itinerary, we can assure you that the captain, expedition leader, and dive team leader will do their utmost to provide a good alternative program along the same lines as the originally planned cruise itinerary, searching for the best dive sites in the area.

EXPERIENCE & QUALIFICATION

These voyages are not for beginners, but are meant for very experienced divers familiar with cold-water, dry-suit diving (at least 30 such dives). Before departure, you have to show an internationally accepted diving certificate and diver's logbook (and must include copies when completing your diver personal information form). The first dive of the trip will be a 'check' dive to try out your gear and weights, assuring our dive team leader that you have enough experience to participate.



If our dive team leader feels that any diver does not meet the necessary experience, they can exclude that diver from the dive program for their own safety. In this case, Oceanwide Expeditions cannot be held financially responsible and does not grant any claims. All divers are required to follow the instructions of the dive team leader and guides at all times. All participants are diving 100% at their own risk, which is also the case while on land.

Expedition Staff

Our expedition team consists of one expedition leader, guides / lecturers, and dive guides. All members of the team are experienced and have worked with us for many years. Every morning after breakfast, the passengers will be informed about the day's program (position of the vessel, general information regarding the area, itinerary, and the expected wildlife during the excursions). The excursions will be evaluated in the afternoon and after dinner. Occasionally, the expedition team will organise lectures, sometimes supported with slide shows to inform the passengers about various interesting features of the Arctic and Antarctic.

Dive Team Leader

Our dive leaders are highly experienced instructors assisted by one or two dive guides. The main language of all dive operations is in English unless otherwise stated.

DIVING OPERATION & PROCEDURES

Check dive: The voyage will start with a check dive so that all divers can get used to the cold water, try out their equipment, and determine the weights they need. Before each dive, there will be a briefing about the location of the site, the weather and ice conditions, and the procedure of the dive.

Dive buddy: The dives will be done on a 'buddy system' basis. The dive guide will not be in the water to accompany and lead the divers. The guides will stay on the surface for the divers' safety. The divers are expected to be experienced enough to read their compass and depth gauges, and to look after each other in order to have a safe dive. Buddy team setup is always a critical issue, so we let our divers match themselves as much as possible. In cases where divers have not paired up or where we are in doubt, dive guides sit down with divers and discuss their expectations and level of experience. We try to pair people so that similar interests, experience, and dive duration matches. If there is an uneven number of diving customers at some dives and no three-person group is feasible, the guides will come along.

Number of dives: We plan at least one to two dives per day, but an exact number of dives cannot be given. It all depends on ice and weather conditions.

Dive guide / diver: Eight divers per dive guide. Maximum number of diving passengers: 24.

Approach to dive site: The number of divers per Zodiac (six to seven divers) is normal practice. Always watch your valuable gear when embarking and disembarking the Zodiacs. Oceanwide Expeditions cannot be made liable for the loss of individual equipment.

Equipment: There is no need to store dive gear in the cabin. Upon arrival, our dive staff will show you where you can leave your dive equipment in allocated storage holds on the deck. Only take your regulator with you in your cabin. Every diver is expected to prepare his own equipment well in advance and prior to each dive. Bring your own spare parts for your regulators and dry suit in case of leakage or damage. The divers are expected to set up and carry their own equipment in and out of the Zodiac and sometimes up and down the gangway.

Currents: Water currents could be present anywhere and at any time. We haven't dived these sites often enough to know exactly where they might occur, but we always make sure one of our experienced dive guides drops in first and has a quick look before putting others in the water.

Visibility: A lot of pack ice often means flat water with clear visibility underneath. Little pack ice often means a lot of plankton blooms, because there is more daylight and more swells. The ice and weather conditions are different every year, of course, so there is no way to predict these conditions.

Drifting pack ice: This is a real hazard. If pack ice comes in while divers are underwater, it can be very hard to see people if they surface in the middle of it. Therefore it is very important to only dive around icebergs that are either hard aground or floating in water well clear of brash or pack ice. Many of the sites have slopes or faces that go much deeper than the 20 meters (65 feet) maximum limit for the divers. Divers must act responsibly and show self-discipline.



SAFETY FIRST!

Diving in these remote polar areas is no more dangerous than normal scuba diving as long as one important rule is adhered to: safety first! All divers looking for dangerous stunts or wanting to make deep dives are kindly asked to stay at home! There is no decompression chamber in Antarctica or the Arctic. Medical care in the polar regions is almost non-existent, and there is hardly any infrastructure. Although we have a doctor on board the vessel for first aid assistance, we cannot accept risky ventures from any of our divers.



POLAR DIVING EQUIPMENT

Important personal clothing and gear you must bring with you:

- Dry suit with hood
- Thick and warm underwater garment (two sets), dry gloves or adequate thick wet gloves (make sure they will keep your hands warm in sub-zero waters)
- Two separate freeze-protected regulators, because we dive with special bottles with two separate outlets. The tanks we are using are 12L steel tanks. They are fitted with a "Y" or "H" valve configuration, with DIN or Yoke (INT) adaptable connections
- Pressure gage

- Stabilizing jacket or some kind of BC with quick-release capability. Divers without BCD will not be allowed to dive
- Depth gage, watch, or computer
- Compass
- Knife and torch
- Mask, fins, and snorkel
- Weight belt (weights available on board)

USEFUL TIPS FOR DIVING EQUIPMENT

Regulator

Normal regulators will not function in sub-freezing water, as both the first and second stage will freeze. You are required to bring two sets of regulators (1st & 2nd stage), suitable for cold-water/ice diving. Some regulators can be fitted with an environmental seal kit; others come environmentally sealed from the manufacturer. To avoid regulator malfunction, regulators must be cared for properly before, during, and after diving. Regulators should be kept dry and warm before the dive, so store them in your cabin. Avoid breathing from the regulator before submersion, except to briefly ensure it is functioning. When doing so, exhale after removing the regulator from your mouth so as to avoid freezing the second stage with moisture from your exhaled breath. If during the dive your primary regulator freezes up and causes a free flow, you should switch to your back-up regulator and turn off the valve to the primary regulator to stop the free flow.

TIPS TO KEEP WATER OUT OF YOUR REGULATOR:

- Always open the cylinder valve briefly before mounting the regulator, to blow out any moisture from the orifice.
- When purging the regulator for removal, hold the second stage lower than the first stage so that water cannot drip back to the first stage after pressure has dropped.
- Remove the regulator carefully, so as not to allow ice or water to fall into the filter of the regulator.
- Dry the dust cap thoroughly before attaching it to the regulator.
- The dust cap must fit snugly before rinsing the regulator.
- Do not press the purge button while rinsing the regulator.
- Shake excess water from the second stage before hanging the regulator to dry.



Face Mask

The type of mask you are using is not critical. We recommend using a standard mask and regulator. You may use a full-face mask if you prefer, but keep an extra facemask handy in case your regulator free flows. It is best to avoid spitting into the mask for defogging, as this can freeze onto the inside of the mask. Commercial defogging agents work well for ice diving. Straps can also become brittle in cold weather, and it is highly recommended that you bring a spare strap and a spare mask.



STAYING WARM

Dry Suit

The only adequate protection from thermal exposure in the Arctic and Antarctica, where the water will be as cold as -1°C (30°F), is a dry suit. The type of dry suit you use is not important so long as it fits you, is waterproof, and you are comfortable using it. Neoprene dry suits have the benefit of having good stretch and extra insulation. Shell suits provide no extra insulation but are lighter and dry more quickly. Shell suits serve only to keep the diver dry and require extra layers of garments to be worn under the suit. If appropriate, bring a small dry suit repair kit.

Insulating undergarments

The function of the undergarments is to trap air against your body to be warmed. The colder the water, the more (or thicker) layers of undergarments are required. It is recommended that you wear two or three layers, depending on your suit. As the first layer, you should wear a set of polypropylene liners. This type of material helps wick any moisture away from the body. As the second layer, you

should wear thick insulating material, such as fleece, synthetic pile, thinsulate, or similar. As the final and outer layer, you may wish to wear a windproof shell. The one-piece jump suit style is the most common, and comfortable configuration of dive wear and is available in a variety of thickness depending on your dry suit and the water temperature.

Dry suit accessories

If a hood is not attached to your dry suit, you will need to bring one. A 7mm neoprene hood with face and neck seal is recommended. Regular 7mm neoprene semi-dry gloves or mitts may be used with any dry suit and are relatively easy to use. Three-finger mitts are warmer than five-finger gloves. Special dry gloves that deal against rings on the arm of the dry suit are available in the market. To prevent glove squeeze and to promote warmth, short pieces of surgical tubing or straws can be inserted under the wrist seals to provide a conduit for air to exchange from the suit to the gloves. This type of glove requires additional practice to use, as they can come off your hand if not used correctly.

Post-dive wear

It is important to bring a warm hat and some warm wind and waterproof gloves to wear before, and especially after, the dive. You may also wish to bring wind and waterproof spray jacket and pants to keep the cold wind off your wet dry suit.

The following items will be provided by Oceanwide Expeditions on board:

Compressor: On board we have a Bauer compressor (200 liters), 35 steel bottles of 12 liters each, 200 bar, with DIN and Yoke adaptable connections and two separate outlets. This will allow for the attachment of a primary and a secondary backup regulator, which allows for either regulator to be independently isolated if there is a malfunction or a free flow.

Weights: You will be provided with hard led weights and a belt. There are no ankle weights available. We do not have any rentals on board. Please make sure you check out all your dive gear before leaving. Bins are available for storage.

Setting up your gear

For redundancy in case of free flow caused by the cold water, two sets of regulators are needed: One standard sport diving regulator including one first stage (freeze protected) and two second stages, one pressure gauge, one inflator hose and one dry suit hose. You also need an extra freeze-protected first stage.



The two regulators are assembled like this:

You need two sets of regulators:



1st set includes:

Freeze-protected first stage Second stage (including hose)
Hose for BC



2nd set includes:

Freeze-protected first stage Second stage (including hose)
Hose for dry suit

IMPORTANT FINAL NOTES

- Diving is an equipment-intensive activity. Ice diving requires an extensive amount of additional equipment because of the cold weather, cold water, and remote locations. Diving is not fun if you are cold. Divers in cold water may have a higher air consumption rate, expend more energy, and can become more fatigued. Cold water also decreases a diver's ability to perform complex tasks that require manual dexterity.
- The snorkel is a vital part of the safety equipment and will often be used when snorkelling with seals, etc.
- Don't bring any new equipment on this expedition that you have not already tested in the water and are very familiar with. The polar regions are not the place to test out new equipment. Please make sure that you have done at least four or five dives with your new equipment. This will also allow you to fine-tune your buoyancy and trim characteristics, and make a note of how much weight you will need when diving with all your equipment.
- Please contact your airline about their luggage restrictions and request a special allowance for your dive equipment prior to departure. All excess baggage is at your own expense.
- Each diver is expected to prepare his own equipment well in advance of each dive. Bring your own spare parts for your regulators and dry suit in case of leakage or damage. The diver will have to



- carry his own equipment in and out of the Zodiac and sometimes up and down the gangway
- Get travel insurance! Participation on an expedition cruise is 100% at your own risk. In our travel documentation (specifically our personal information form for scuba diving), all passengers need to sign a liability statement in which they agree that Oceanwide Expeditions and dive staff are exempt from responsibility for personal injury and property damage, including the loss of items. Oceanwide cannot accept any liability claims.

A combination of nature and diving!

During the voyages, experienced dry-suit divers have the opportunity to explore the wildlife from below the surface of the water. Diving in Antarctica and the Arctic is fascinating, but the topside is exciting too. During the trip, with the prior approval of your expedition leader, you can choose to participate at any time in our thrilling land excursions and Zodiac cruises instead of diving. This combination characterizes the uniqueness of our voyages, which will certainly be the ultimate polar experience for you!

Our shore and near-shore activity

On board the vessels are Zodiacs that facilitate your safe approach to beautiful fjords, pack ice, and shore sites. We usually organize one morning excursion and one tour after lunch. The duration of the excursions may vary, but they normally take three to four hours. On land it is very important to follow the guidelines of the tour leaders. It is not allowed to leave the group. In the Arctic, for example, we must take the polar bear danger very seriously, as bears can show up everywhere and attack without warning. We also cannot touch, remove, or take plants, stones, feathers, or anything else from the environment or monuments. Disturbing the animals is likewise highly forbidden. Please be aware that some birds nest on the ground, so be careful where you walk and do not approach the nests. Be aware of the fact that when such a bird's nest is disturbed, it's extremely vulnerable. Glaucous gulls, skuas, and Arctic foxes are quick to grab the opportunity to feast upon unprotected eggs or chicks.

FREQUENTLY ASKED QUESTIONS

How deep do we dive?

The maximum depth we allow our divers to dive is 20 meters (65 feet). Many of the dive sites have slopes or faces that go much deeper than this, so divers must act responsibly and show self discipline.

What is the average visibility?

A lot of pack ice often means flat water and clear visibility underneath. Little pack ice often means a lot of plankton blooms, because there is more daylight and more swells. The ice and weather conditions are different every year, making it very unpredictable. Hence, it is quite difficult to gage visibility.



What about currents and drift dives?

Currents are specifically mentioned as a possible problem at some of the sites. Currents could be present anywhere, at any time. We will always check out the current before we go diving. We will not do drift dives. Drifting pack ice is a real hazard. If ice comes in while divers are underwater, it can be very hard to see people if they surface in the middle of it. Icebergs should be either hard aground or floating in water well clear of brush or pack ice.

Do I need a full face mask?

This is up to you and based on whether you are used to diving with a full mask or not. Many divers chose to dive without a full mask. Vaseline is a great help in protecting your face against the cold and freezing waters.

What type of gloves is best?

You can use a minimum of 7mm wetsuit gloves, otherwise we recommend dry-suit gloves.

Why do I need two regulators?

We dive with two separate outlets (DIN and Yoke connection), so in case of a free flow (freezing) of one of your regulators, you have the second regulator as a back-up.

Can I have one regulator with DIN valves & the other with ISO?

Yes, we have adapters on board that we can put in the valve to connect with an ISO regulator. The DIN connection will fit without the adapter.

Do I need to bring a waterproof bag to carry my smaller items?

It is handy to bring a waterproof bag to use while you are preparing your dive equipment on deck. In the Zodiac, it is best not to bring too much aside from your necessary dive equipment.

What is the water temperature?

Around the freezing point or a little below.

