



Diving in the Polar Regions

Aurora Expeditions has been operating diving adventures in the polar regions for more than 20 years. In fact, we were the first expedition cruise operators in the world to offer this ultimate polar adventure.

The experience of diving in the freezing waters of Antarctica and the Arctic, witnessing grounded icebergs and rare creatures seen by a select group of daring adventurers, is guaranteed to stir your soul and offer unbeatable memories, and stories to share and cherish.

'Getting out amongst it' is our philosophy, and that is exactly what we do. Weather permitting, you will dive while other expeditioners are doing their activities - kayaking, snorkelling, or exploring ashore.

Aurora Expeditions is proud to have some of the world's best divemasters guide our dive adventures. Our guides have dived all over the world and in some of the remotest and most challenging locations. Our dive experts are skilled at finding the best opportunities to dive, while taking into account the ever-changing weather and sea ice conditions. We aim to offer you the best quality dive experience while maintaining the highest safety standards.

Important note:

The main language used for our dive operation is English. For safety reasons, you must be proficient in English in order to participate in our scuba diving activity.

Required Experience

Our polar diving activity is not for beginners. You must be at least an Advanced Open Water Diver and Drysuit Specialty certified diver with at least 30 drysuit dives. You are also required to complete a minimum of 10 dives in the last 12 months, with a minimum of 5 of those dives in a drysuit. Before departure you must show an internationally accepted diving certificate, diver's log book and a current diving medical (no more than six months old) from your doctor confirming that you are in suitable physical health to participate in polar diving.

The initial dive will be a 'check-out' dive so each diver can check and adjust their weights and equipment. Before each dive, there will be a briefing about the location, the weather, ice condition and the procedure of the dive. For the advanced diver this is truly a unique experience. You will see amazing ice formations and marine life seemingly from another planet, such as the giant isopods and salps. Seals race fearlessly by, graceful in a way that's not possible above the surface. Take your time to explore and enjoy an environment few divers have ever experienced: kelp walls, sea snails, crabs, sea butterflies, jellyfish, squid, starfish, krill and various Antarctic fish.



Diving Procedure

Diving in these remote polar areas is not more dangerous than normal scuba diving. However, polar diving is more equipment and labour intensive. We always adhere to a philosophy of safety first.

There is no decompression chamber and only basic medical services on board. There is an onboard doctor to administer basic medical and first aid treatment, but Aurora Expeditions cannot accept risky ventures from any of our divers.

The dives will be conducted using a buddy system of two or three divers. If you are not travelling with a dive-buddy, don't worry we will pair you up with other divers on board. All divers are expected to have enough experience to read their compass, depth gauges and look out for each other in order to have a safe dive.

Diving is an equipment intensive activity but diving in polar regions requires an extensive amount of additional equipment because of the cold weather and water. A higher level of diving experience is required for the polar regions because of the remoteness of the location. Diving is no fun if you are cold and uncomfortable. 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.

If our divemaster feels that you do not meet the necessary experience, they have the right to exclude you from participating in the dive program (this decision will be made for your own safety and for the safety of the other divers). Please note that if you have been suspended from diving due insufficient experience, you will not be entitled to a refund from Aurora Expeditions. All divers are required to follow the instructions of the divemaster and guides at all times. All participants are expected to fully understand and accept the risks involved in polar diving and participate at their own choice.

Marine Life at the Dive Sites

The dive sites will vary from shallow ice diving, diving along a wall or around a grounded iceberg.

The maximum depth is 20 metres / 65 feet. The combination of sunlight and the extraordinary formations of ice cause an overwhelming, ever-changing spectre of colours, with a fantastic variety of shades and brilliance.

Diving in polar areas offers opportunities to witness spectacular ice formations in addition to interesting marine life. In the Antarctic and Arctic waters there is typical marine life such as sea squirts, squat lobsters, many species of starfish, spider crabs, soft corals, anemones, peacock worms, and dogfish. In Antarctica you may have the possibility to snorkel or dive with seals, penguins and whales.

Number of Dives

We plan to dive up to twice per day (except for days at sea), but an exact number of dives cannot be given. It all depends on ice and weather conditions. Voyage itineraries are only a guideline and safety is always the priority. Since this is an expedition to a remote part of the world, unpredictable weather conditions, availability of anchorages, wind conditions, and other factors beyond our control will always dictate when it's safe to make a dive. Exclusive Zodiac cruising will be offered if the conditions for diving are not suitable.

Booking allocation:

Each diving place is for one person only. All divers are required to bring their own personal equipment, be adequately certified, have proof of recent dives, and provide evidence of medical clearance from a doctor.



What to Bring

Please contact your airline about their luggage restrictions and request a special sporting goods allowance for your dive equipment prior to departure. All excess baggage is at your own expense.

- Drysuit
- Hood and gloves – adequate thick wet gloves (make sure they will keep your hands warm in near-freezing waters) or dry gloves
- Warm clothing to go under your drysuit, undergarments
- Regulators: two separate freeze protected regulators, two 1st stages and two 2nd stages. The cylinders we are using are 12 litre steel with dual outlet valves in “H” configuration compatible with DIN or yoke (INT) regulators.
- Submersible pressure gauge (SPG)
- Depth and time-monitoring devices or a dive computer
- Compass
- Buoyancy control device (BCD) including low pressure power inflator.
- Cutting implement/knife
- Torch
- Mask, snorkel and fins
- Quick release weight system (weights will be provided on board).
- Surface marker buoy and a spool or reel
- Surface audible signaling device, whistle or/and air horn.

Equipment Provided Onboard

On board we have two compressors, steel cylinders and lead weights. Cylinders we provide are steel 12.2 litres by Faber, with dual outlet valve, yoke and DIN compatible filled to 220 bar. Lead weights are available in 0.5, 1, 3 and 4 kilograms (1, 2, 6.6 and 9 pounds).

We also have a limited number of hire equipment available onboard. For an additional charge you can hire a hardware set consisting of:

- Full set of regulators
- Submersible pressure gauge (SPG) in a console with a dive computer and a compass
- Buoyancy control device (BCD), backplate and a wing style with continues adjustable harness
- Fins

Please let us know in advance if you wish to hire any equipment.

Important note:

Please do not bring equipment that you are unfamiliar with and have not tested on a dive. The polar regions are not the place to test out new equipment. It is a recommendation that you complete a few dives with all the equipment you will be using before coming on the trip. 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.



Expedition Cruising

We offer expedition cruises to remote polar regions where few travelers have been, and for this reason we occasionally need to adjust our 'itineraries' to take advantage of favourable weather and ice conditions, which are hard to predict and can vary greatly from day to day. Our flexible approach means we can alter the itinerary to take advantage of wildlife sightings and other one-of-a-kind opportunities.

We cannot guarantee that all dives and shore landings will take place or that they will include all the events we've outlined in advance. Embracing the unexpected is part of the excitement of expedition-style travel. A flexible approach and a sense of humour will make the voyage more enjoyable for you and for your fellow expeditioners.

Please note that Aurora Expeditions will not provide reimbursement or refund due to changes to the itinerary as a result of weather and ice conditions.

When changing the itinerary, we can assure you that the captain, expedition leader and divemaster will do their utmost to provide an alternative program, along the same lines as the originally planned cruise itinerary.

Staying Warm

Drysuit: In The Arctic and Antarctic, where the ocean water can be as cold as $-1^{\circ}\text{C}/30^{\circ}\text{F}$, a drysuit is the only thing that will keep you dry during a dive. The type of dry suit you use is not important so long as it fits you correctly and you are proficient in using it. If appropriate, bring a small drysuit repair kit.

Insulating Undergarments: The function of the undergarments is to trap air against your body to keep you warm. 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 type of material that helps wick any moisture away from the body. As the second and third layers you should wear thicker insulating material, such as fleece,

synthetic pile, thinsulate or similar. The one-piece jumpsuit style is the most common and comfortable configuration of dive wear, and is available in a variety of thickness depending on your drysuit and the water temperature.

Drysuit Accessories: If a hood is not attached to your drysuit you will need to bring one. A 5 to 10 mm neoprene hood with face and neck seal is recommended. Regular 5 to 7 mm neoprene semi-dry gloves or mitts may be used with any drysuit and are relatively easy to use. Three-finger mitts are warmer than five-finger gloves.

Post-Dive Clothing: It is important to bring a warm hat and gloves to wear before, and especially after the dive. You may also wish to bring a wind and waterproof spray jacket to keep the cold wind off your drysuit.

Diving Equipment

Regulator: Normal regulators will not function in sub-freezing water. You are required to bring two sets of regulators (2 x 1st stages and 2 x 2nd stages), 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. Avoid breathing from the regulator before submersion, except to briefly ensure it is functioning, but when doing so, exhale after removing the regulator from your mouth so as to avoid freezing the second stage with moisture from the 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 free flowing regulator to stop the free flow. Please make sure you and your buddy (or buddies) are assisting each other during the entire process. The dive must be aborted after the procedure is completed.



Face Mask

The type of mask you are using is not critical, we recommend using a standard mask. You may use a full-face mask if you prefer, but keep an extra standard face mask 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.

How to Book

If you are an advanced diver, have the required experience and would like to partake in our scuba diving activity on your voyage, please contact our friendly team to complete a Scuba Diving Activity Form. Our divemaster will review your form for suitability and experience before approving your diving spot.

Group Size

We limit our diving groups to a maximum of 6 divers per dive guide per Zodiac. While you are in the water your guide will be on board the Zodiac keeping a close eye on the group, ready to provide assistance and to give you advice and tips on how to maximise your experience on each of your dives.

Age Requirements

You should be 14 years of age or more to participate in our polar scuba diving programs. Please note the minimum age required to complete most Junior Advanced Open Water Diver courses is 12 years. Drysuit Diver specialty courses require a minimum age of 10 years.

For more information please contact your travel agent, or Aurora Expeditions on:

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