EXPERIENCING SVALBARD'S WILDLIFE







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- a guide for excursions in Svalbard's natural environment

With contributions from

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The Norwegian Polar Institute is Norway's central governmental institution for management-related research, mapping and environmental monitoring in the Arctic and the Antarctic. The Institute advises Norwegian authorities on matters concerning polar environmental management and is the official environmental management body for Norway's Antarctic territorial claims. The Institute is a Directorate within the Ministry of Climate and Environment.

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	An arctic skua attacks an intruder who has come too close to its
	nest or chicks. If this happens to you, duck, and then leave the
	area calmly, but as quickly as is feasible.
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Objectives

This guidebook provides some advice to visitors that are stepping out into Svalbard's nature. It is hoped that this information can help people to minimize disturbance to wildlife and simultaneously ensure their own safety. This little guide describes how to behave during encounters with the most common mammals and birds in Svalbard.

Everyone who visits Svalbard is obliged to acquaint him- or herself with the existing reg-ulations and adhere to them. The advice herein is based on a lot of experience and knowledge, but no guidelines can be folowed blindly: visitors must make independent assessments of what constitutes proper conduct in a given situation in which they find themselves (keeping in mind current regulations). Safety is everyone's own responsibility. Adherence to the advice presented herein is no guarantee against midhaps, but hopefully the advice herein will decrease the likelihood of accidents happening. But, it is important to note that there are always risks during encounters with wild animals, especially large ones such as walruses and polar bears.

Gjelder hele Svalbard

Polar bears can turn up anywhere, anytime in Svalbard. Signs like this one near Longyearbyen warn of polar bear danger. Photo: Øystein Overrein, Norwegian Polar Institute

Show consideration

All human activities in Svalbard's natural environment (photography, filming, research and close encounters with wildlife) can lead to disturbance of birds and mammals. The primary goal of visitors must be to make any potential disturbance as small as possible.



Encounter with walruses on Purchasneset on Lågøya. Visiting tourists and guides are showing exemplary behaviour, maintaining a suitable distance from the animals and not surrounding this resting group. Photo: Norwegian Polar Institute



Take care and keep your distance; then you will get most enjoyment out of the little auks on the talus slopes. Their nests are in and under rocks so walking in these areas should be avoided. Photo: Kim Holmén, Norwegian Polar Institute

Svalbard's environmental regulations

The Svalbard Environmental Protection Act sets the limits for all activities in Svalbard's natural environment.

The purpose of the Act is:

"...to preserve a virtually untouched environment in Svalbard with respect to continous areas of wilderness, landscape elements, flora, fauna and cultural heritage " (§ 1).

Important excerpts:

The Svalbard Environmental Protection Act includes its own duty of care principle: "Any person who is staying in or operates an undertaking in Svalbard shall show due consideration and exercise the caution required to avoid unnecessary damage or disturbance to the natural environment or cultural heritage" (§ 5), moreover: "No person may hunt, capture, injure or kill fauna or damage eggs, nests or lairs unless so authorized by the provisions of this chapter" (§ 30).

The Act also states: "No person may use ship sirens, fire shots or produce other loud noises less than one nautical mile from a seabird colony during the period 1 April to 31 August" (§ 30).

Concerning polar bears there is a ban on "...to lure, pursue or otherwise seek out polar bears in such a way as to disturb them or expose either humans or polar bears to danger." (§ 30).

A special regulation stipulates that dogs must be on a leash from 15 May to 15 August. Polar breed dogs must be leashed year-round.

"All access and passage in Svalbard shall take place in a way that does not harm, pollute or in any other way damage the natural environment or cultural heritage or result in unnecessary disturbance to humans or animals." (§ 73)

Travel restrictions can be imposed in specific areas during all or part of the year to protect the natural environment. (§ 75)

The main principle driving the formulation of the advices given is that human presence should not cause animals to change their behaviour.

Potential effects on animals

When humans travel in areas where there is wildlife, there is potential to disturb them. How well an animal tolerates disturbance varies depending on factors such as the season and the animal's age, sex and reproductive and health status.

In most situations where humans appear suddenly near wild birds or other animals, the animals will flee from the intruder. Exceptions include polar bears and walruses, which can react by attacking humans.

Studies have shown that large animals tend to flee farther than small ones when disturbed and that animals in flocks tend to react at greater distances. Females with young tend to be more sensitive to intrusion than other age and sex classes in most species.



Litter left behind by humans can harm wildlife in Svalbard. This Svalbard reindeer has managed to get its antlers entangled with wire. Photo: Eva Fuglei, Norwegian Polar Institute

Immediate reactions to disturbance can include:

Behavioural changes – such as birds abandoning their nests, changes in feeding patterns – or physiological changes such as increased heart rate and altered hormone levels.

Frequent disturbance of an "easily frightened" species in an area can force them to stop using this area.

Physical injuries, for example, marine mammals can be cut by propellers or injured in other ways via collisions with boats.

Long-term effects of disturbance can include:

Reduced capacity to build up necessary energy reserves during the short arctic summer.

Animals can die if the disturbance is severe or long-lasting.

Populations can decline in abundance if a heavily perturbed area is important for their reproduction or survival.

How animals react to disturbance depends on:

How the person causing the disturbance behaves.

How predictable the disturbance is. Frequency and extent of the disturbance factor(s).

Time of year (disturbances during nesting and rearing of young have the greatest risk of causing damage)

Examples:

Reindeer that are in good shape react more to disturbance than reindeer in poor physical condition. Healthy animals can afford to spend more energy on flight than weak animals with smaller energy reserves.

When common eiders or geese leave their nests because of intruders, the eggs are vulnerable to arctic foxes, glaucous gulls and arctic skuas.

How to behave during encounters with various animals

Polar bear

The Svalbard Environmental Protection Act has strict regulations about how to behave in encounters with polar bears (see page 8), regardless of whether the meeting takes place on land, in the pack ice, on ice floes or in open water. Seeing a polar bear in its natural element is for many the crowning moment of a visit to Svalbard, but unfortunately, the rules are often bent to achieve such sightings. When a polar bear changes its behaviour because humans are nearby, the red line has been crossed. When people and bears get too close, it is common that the polar bear must be frightened away with a flare gun. In the worst case, the bear may attack and the only alternative is to shoot it in self-defence.

Polar bears are often unafraid and inquisitive; they are also unpredictable. They are top predators and all other animals can be viewed by them as potential prey. Unaccompanied young bears, and emaciated old bears, are the most problematic animals In the summer when the food supply is limited, starvation can drive bears to come uncomfortably close to people. People should always keep in mind that polar bears are really fast runners and can cover a distance of 30 metres in just three seconds!

Important safety precautions:

Always be prepared to meet polar bears – even near settlements.

Avoid close encounters with polar bears. Keep a safe distance away, and plan an escape route when the bear is still at a distance – in case.

Avoid areas with fresh bear tracks when skiing or snowmobiling, or if you see tracks in the summer.

Before going ashore from a boat, carefully scan the landing area with binoculars for polar bears. If you spot a bear, or if the area is difficult to survey, cancel the landing.

Do not go ashore on small islands where polar bears are often found in the summer.

Do not set up camp in areas where polar bears often pass by: close to the shore, close to the fronts of glaciers, near ravines or in narrow valleys. Make sure that your line of sight is unobstructed in all directions from your camp.

On arriving at a cabin or camp, take an extra loop around the area by snowmobile or on foot before settling in to ensure that sleeping bears have not been missed in your intitial check.

Use warning systems such as tripwires (placed at two levels) or guard dogs or take turns doing polar bear guard duty.

It is advisable to have polar bear guards on duty at all times when people are asleep anywhere in Svalbard away from the main communities.



Inquisitive polar bears that approach cabins, camps and other places where humans are present should be frightened away while they are still at a good distance. This mother with cubs is being scared off before she comes within 100 metres of people. In this case, the flare hit the ground in front of the bear, just as it should. But one needs to be careful that you do not shoot in the air above or behind the bear as it might frighten the bear towards you. Photo: Øystein Overrein, Norwegian Polar Institute Polar bears have an acute sense of smell and are attracted by the odour of food. Store your food a good distance away from your camp, in bear-proof packages (e.g. metal cases or hard plastic barrels). Avoid cooking inside the tent. Outside you have a better view and your tent will smell less. Do not discard food waste anywhere near your tent or cabin.

Always keep an eye on polar bears in your vicinity. If you are in a group, gather close together. Retreat and leave the area occupied by a bear (or bears) as quickly as possible.

If the bear starts to approach, keep it in view and make noise. Shouting, clapping your hands, or revving your engine may be enough to make the polar bear go away. If this is not sufficient, prepare to use your signal pistol, or flare. Shoot a flare on the ground between you and the bear. The first shot should, if possible, be fired when the bear is at a distance of 150-200 metres away. Repeat this behaviour if the first attempt does not have any effect.

If a polar bear starts "hunting" you, retreat quickly from the area. If there is a cabin in the area, take refuge in it until the danger has passed.

If you are snowmobiling, keep your engine running and drive away from the polar bear. Revving the engine may scare the bear off. If all attempts to frighten the bear away are unsuccessful, retreat is impossible, the bear attacks making shooting at short range, in selfdefence, the only way out is:

Shoot the bear with a large-calibre rifle (or shotgun with slugs). Aim at the shoulder or chest. A large-calibre revolver can also be used, but only by trained marksmen. Never aim at the head. Shoot until the bear lies still. When a polar bear is shot, the Governor of Svalbard's office must be informed immediately. The dead bear and the area around it must be left untouched for police investigation.

Remember:

Always carry scaring devices and weapons when travelling outside the settlements in Svalbard. Have shells in the magazine but not in the chamber of the rifle. The weapon must be powerful enough to take down a bear and the ammunition must be suitable. All visitors that are going to carry weapons (for themselves or for a group) should practice shooting, ideally with the actual weapon you are going to have with you, before your trip. In the winter the weapon must be free from oil and all other lubricants to avoid malfunction.



Seeking out polar bears in ways that might disturb them is prohibited. These tourists have come too close to a female and her cub. Use a telescope and observe undisturbed bears behaving naturally - from a distance. Photo: Magnus Andersen, Norwegian Polar Institute

Walrus

Walruses are popular attractions in Svalbard. These animals are relatively accessible and are not very afraid of humans. However, be aware that walruses can move quickly in water and if they attack, their tusks and immense bodies pose a significant threat (e.g. they can injure you, puncture inflatable boats and overturn kayaks). Although walruses look quite friendly, even comical, some of them are predators of seals, and attacks on humans have taken place.

Important safety precautions:

When travelling by kayak or inflatable boat you are advised to take the boat ashore if walruses show up in the area. Avoid areas where walruses are swimming – they can attack without warning.

Diving should be avoided if there are walruses anywhere nearby in the water.

- Walruses can be easily disturbed by boats or even by human on foot. Observe the animals at a distance with binoculars to see if the group is calm before approaching.
- Never drive a boat back and forth in front of beaches where a walrus group has hauled out.
- Disembark from small boats at least 300 m away from any group that you plan to visit and approach only from the leeward side to



Walruses in water like these can appear harmless and lethargic, but they are unpredictable and can be grouchy; their tusks and bodies pose a threat, especially to travellers in kayaks and inflatable boats. Photo: Geir Wing Gabrielsen, Norwegian Polar Institute

- minimize the risk of scaring them. In this way you will approach the animals from downwind.
- •Stay together as a group and approach the animals slowly from a single direction.
- Avoid creating a silhouette against the horizon and do not encircle a walrus group.
- Never go between a walrus herd and the water. This blocks the animals' retreat and makes them uneasy; it also puts you in danger of being run-over.



If the walruses begin to lift their heads and show signs of anxiety, stay still and when they calm down, carefully move back a bit. Richardlaguna, Prins Karls Forland. Photo: Kim Holmén, Norwegian Polar Institute



Keep some distance from bearded seals on ice floes to avoid disturbing them. This image was taken with a strong zoom lens. Photo: Lise Øvrum, The Governor of Svalbard

- Stay quiet keep conversations and motor noise to a minimum. Always be observant of how the animals are reacting.
- Stop at the first sign that you are causing any distress (even if the distance is great) and pull back.
- Males are usually much more tolerant of human presence than mixed flocks and may allow people to approach as close as 30 m. Herds that include females and calves are much more nervous: maintain a distance of at least 150 m from such groups. Panic in mixed herds can lead to calves being crushed to death. Similar distances are also recommended if you are approaching walruses on ice floes.

Bearded seal

The bearded seal gives birth on small freefloating pieces of sea ice in May. Boat traffic during this period has the greatest potential to cause disturbance. Bearded seals are less common than ringed seals, but they are sighted more often during the summer because they stay close to shore and often haul out on ice floes.

Reducing the risk of disturbing bearded seals:

- In May, people travelling by boat should keep their distance from females with pups on ice floes. At other times of year it is safe and enjoyable to observe bearded seals lying on the ice if you approach slowly, keep noise to a minimum and keep a reasonable distance away. Stay on the side of the ice floe where the seal can see you. If there are several boats, do not encircle the seal(s).
- If the seal begins crawling with its flippers, rolls over on its stomach, lifts its head or looks into the water, these are clear signs that you have come too close and should move farther away.

Ringed seal

The ringed seal can often be seen on the ice in fjords when the pups are born, from mid-March to May. In the summer these seals are observed only rarely. When ringed seals are sighted in the summer, they are often on ice floes near islands or glacier fronts. If you get too close they will quickly take refuge in the water. But, they occasionally approach small boats inquisitively, before diving and disappearing once they have checked out the intruder (so keep your cameras ready).



Ringed seal on sea ice during the birthing season. It will dive into the water quickly if you come too close. Photo: Christian Lydersen and Kit M. Kovacs, Norwegian Polar Institute

Reducing the risk of disturbing ringed seals:

- Ringed seals are particularly vulnerable to disturbance from mid-March to June, when they are on the ice. The rest of the year they spend most of their time in the water, where they are less vulnerable.
- When snowmobiling on sea ice in the fjords in spring, avoid routes that run in front of glaciers near broken ice and leads. Also avoid glacier ice with snowdrifts; ringed seals dig their birthing lairs in such drifts and can easily be disturbed.
- Seal pups lying on the ice should always be left alone. They are not abandoned. Their mother's feed them during the nursing period. It is important that you do not move the pup. If you move it, the pup may be abandoned by the mother.
- In the spring, particularly in nice weather, lots of ringed seals can be seen basking on the sea ice in bays and fjords. When travel-

ling by snowmobile, dogsled or on skis, move slowly when you are in an area with ringed seals and keep some distance.

• During the moulting period (June) the ringed seal prefer not to enter the water; they like to sun bathe and stay warm and dry – it speeds up the moulting process. So it is nice if you keep your distance.

Harbour seal

The harbour seal is mainly found on the westcoast of Spitsbergen with the highest densities around Prins Karls Forland. These are social seals that often occur in groups. The harbour seal gives birth to a single pup on shore in the intertidal zone.



Harbour seals usually rest on rocks and islets. This is also where this species gives birth. Photo: Christian Lydersen and Kit M. Kovacs, Norwegian Polar Institute

Reducing the risk of disturbing harbour seals:

- Keep your distance from islets with harbour seals on them in June when they are giving birth. Mothers and pups risk becoming separated if the group is frightened into the water. The most important birthing areas occur within bird sanctuaries where access is prohibited from 15 May to 15 August. The ban on access and passage extends to 300 m offshore in these areas.
- Groups of harbour seals hauled out on shore outside the birthing season are easily frightened. They will usually not allow groups of people to approach very closely,

though they sometimes tolerate individuals. Nonetheless, you should stay at least 100 m away to ensure that you will not cause distress.

• Harbour seals sometimes come close to small boats. If you are in this lucky situation, put your engine into neutral so the propeller does not harm the seal (and just enjoy the encounter) – harbour seals some times try to play with the propeller!

Whales

White whales, narwhals and bowhead whales are endemic to the Arctic. In the summer you may also come across other baleen whales such as minke whales, fin whales, humpback whales or blue whales, as well as several species of toothed whales, including killer whales, sperm whales, northern bottlenosed whales or white-beaked dolphins.

Reducing the risk of disturbing whales:

- Whales are normally easy to spot at a distance in calm weather because of their blow (the cloud of mist that they exhale when they come to the surface to breathe after a dive). If you approach in a boat it is advisable to come in from the side, behind the whale, slow down to 5 knots and then move parallel to the whale do not chase it at speed or cross its path. Never go closer than 100 m in a ship or 30 m in a small boat.
- Some whales like humpback whales, minke whales and white-beaked dolphins – are inquisitive and will often investigate boats that are moving slowly or lying still. Let the whale take the initiative. Other species – such as white whales and nar whals – are easily frightened at engine noise. Make as little noise as possible; stop your engine or ideally put it in neutral. If you are quiet, you will have a much greater chance for any of the whales coming close to you.



Minke whale searching for food. Photo: Kim Holmén, Norwegian Polar Institute

Arctic fox

Arctic foxes are often perceived as trus-ting and unafraid, but they are usually wary, particularly when they have pups (May-August). Foxes that live near settlements, cabins and camps grow accustomed to humans, and if they are fed, they gradually lose their fear. Particularly in the winter, when little food is available, the arctic fox can be quite bold. The general rule is never give arctic foxes anything edible, because this will alter their natural behaviour.

A fox barking/yelping/warning from its den is signalling that you are too close. It will protect its den and its pups, and during the denning time foxes are most sensitive to disturbance. In August the pups become less tied to their den and may venture out on their own, covering great distances. Throughout the winter and the dark season, arctic foxes search constantly for something to eat. Lack of food and low temperatures make the foxes vulnerable to unnecessary disturbance.



An arctic fox that associates humans with food will grow successively bolder. Never give foxes anything edible! It changes their natural behaviour. Photo: Winfried Dallmann, Norwegian Polar Institute

Important safety precautions:

- Arctic foxes can carry rabies and fox bites can be dangerous to humans.
- If you find a fresh, dead fox the Governor must be notified. Only trained experts should handle foxes that have died for no apparent reason.



Arctic fox pups at their den. If you are lucky enough to experience this, it is best to watch the pups from a distance with binoculars. This image was taken with a telephoto lens during den monitoring. Photo: Øystein Overrein, Norwegian Polar Institute

Reducing the risk of disturbing arctic foxes:

- Avoid going near denning areas between mid-May and mid-August. Stay 500-1000 m away from the den, depending on the terrain. Dens are often located near the shore close to bird cliffs.
- If you happen to stray into a denning area with pups, leave slowly and quietly the same way as you came.
- Never feed an arctic fox. Feeding can make the foxes tame and dependent.
- Never set up camp near a fox den. The minimum distance should be about 1000 m.
- If fox pups appear in the camp, just leave them alone. They will often just return to their den.
- If a denning site is frequently disturbed, the parents are likely to move the entire litter to a secondary den. This den is often of poorer quality than the primary den and the move itself may pose a threat to the pups' survival.
- Dogs are stressful for foxes and must therefore never be allowed to approach an inhabited arctic fox den.
- It is recommended that you stay at least 500 m away from arctic fox dens in the denning season. The risk of disturbance will be reduced if you follow the bottom of the valley when skiing or snowmobiling in April and May, because dens are normally located up in the slopes.



It costs Svalbard reindeer a lot of energy to dig through the snow to graze in the winter. Do not scare animals away from such feeding sites or approach them. Give them a wide berth. Photo: Hallvard Strøm, Norwegian Polar Institute

Svalbard reindeer

The Svalbard reindeer is normally quite tolerant of people, but its reaction to human presence varies depending on how we move (whether on foot, skis or snowmobiles), how we approach them (speed, direction, etc.), in addition to the season, weather, conditions in the terrain, the animal's health, age and sex and so forth. Females with new-born calves can be very stressed by people. In areas where people routinely travel, reindeer often become habituated to human presence.

Svalbard reindeer need energy to reproduce and to survive the winter, and they spend

most of the day grazing. If the animal must flee over long distances, energy will be lost. Unnecessary energy expenditure is particularly serious in late winter and spring, when the reindeer are most emaciated, and still are in their thick winter coat. Stressed reindeer can become overheated. People sometimes forget that at this time of year, the reindeer have dedicated a lot of time and effort to dig down through the snow layers with their forelegs to access food which often are covered by solid ground ice.



Male reindeer provide great photo opportunities, but if you get too close you will frighten them. Photo: Erlend Lorentzen, Norwegian Polar Institute

Reducing the risk of disturbing reindeer:

- Avoid disturbing females with calves in June-July.
- Sit down and let reindeer come to you. Reindeer (especially young animals) are often inquisitive and readily investigate whatever they have in front of them, particularly if they have the wind behind them and they cannot identify you by smell.
- Let the reindeer graze, rest and ruminate in peace. They need as much time as they can get to fatten up before the long hard winter. Any disturbance may lead to unnecessary energy expenditure.
- If you see a reindeer with trawl-net, wire or other foreign objects in its antlers and it is clear that the animal is suffering, the Governor should be notified immediately.
- Animals that have become entangled in trash (or each other's antlers) can sometimes be set free. This must be done carefully, by people with experience in handling reindeer (they can kick or you may be injured by the antlers).
- Snowmobiles, dog teams and skiers can accidentally disturb Svalbard reindeer. If you observe reindeer in your path, slow down and drive/ski calmly in a curve around the animal(s). If the animals start running, come to a complete halt and wait until they are far away or have stopped running. Only then should you move slowly onwards.
- If possible, avoid staking out ski trails, dogsledding routes and snowmobile tracks through terrain where reindeer have important grazing grounds in winter and spring.

Common eider and geese

In May, tens of thousands of geese arrive on Spitsbergen. They gather on snow-free ground to graze before continuing to their breeding grounds. Vårsolbukta near Bellsund and Adventdalen are important resting areas. At this time of year the geese are extremely sensitive to traffic and other disturbances.

During the summer, eiders and geese often nest together on small islands, rocky islets and promontories. In some places, eiders nest close to human dwellings or dog yards. Geese often nest beneath bird cliffs, in moraines or near brinks along the shore, as well as in ravines and gorges. Traffic in these places will frighten the birds away from their nests.

Pink-footed geese are more likely to abandon their nests than barnacle geese or brent geese. Female pink-footed geese will flush at 20-60 m, males leave the nest at even greater distances. Eggs in unguarded nests are often plundered by arctic foxes, glaucous gulls and arctic skuas. Studies done on pink-footed geese in Sassendalen showed that 35% of the nests were plundered because of disturbance by humans.



Female common eider on her nest. The female will not leave the nest unless you come very close, but human presence is stressful anywhere close to the nest. Photo: Geir Wing Gabrielsen, Norwegian Polar Institute

Reducing the risk of disturbing ducks and geese:

- Do not disturb geese in their important resting areas in the spring. Snowmobiles should detour around these gathering points. Avoid going ashore or traversing these areas containing flocks of geese in June and July.
- If you inadvertently frighten a goose or an eider away from the nest, cover up the eggs with down and leave the area the same way you came quickly but calmly.
- Never enter nesting or resting areas with a dog. Dogs stress the birds.
- In July and August, eiders and geese moult. During this process they drop their old wing feathers and are unable to fly for some time. At this time adult birds gather with



An arctic tern will attack if you come too close to its nest or chicks. Do not strike out at the bird, simply hold a stick or some other object above your head to distract it, while you calmly move out of the area. Photo: Stein Ø. Nilsen, Norwegian Polar Institute

the chicks of the year. Keep your distance from moulting flocks, whether boating at sea or hiking on land. These groups of birds are not always near the water, they can be found in wide valleys such as Sassendalen and Reindalen. Moulting flocks flee from intruders at significant distances (≥ a kilometre) because they are so vulnerable when they cannot fly.

Waders and Svalbard rock ptarmigan

Nesting waders or ptarmigans will often stay on their nests and not flush until your foot is about to land on their nest, so tread with care. Some species such as purple sandpipers will try to lure you from their nests by running away, dragging their wings and pretending to be injured. (The common eiders and arctic skuas also use this trick.) If you have frightened a bird away from its nest, please retreat. You might also follow the "injured" bird out of the area. If the disturbance continues, there is a danger that eggs or chicks will be lost to predators.



A female Svalbard rock ptarmigan on its nest. You should always be careful to avoid scaring birds off their nests. If the ptarmigan leaves the nest, egg thieves will seize the opportunity. Keep a safe distance. Photo: Erlend Lorentzen, Norwegian Polar Institute



A researcher on the bird cliffs at Ossian Sars observes the birds from a suitable distance. Photo: Kim Holmén, Norwegian Polar Institute

Arctic skua, great skua and arctic tern

Arctic and great skuas nest in widely dispersed pairs spread across the tundra while arctic terns nest in colonies of variable size. But, these species all give clear warnings if you come too close to their nest or colony. They will first screech, and then they will "dive-bomb" intruders. The arctic skua sometimes pretends to be injured. Attack-mode is intended to drive away the intruder – be it an arctic fox, a reindeer or humans – and protect the nest or chicks. Hold your hand (or a stick) steadily above your head and carefully leave the area the same way you came. Do not attempt to strike the bird.

Cliff-nesting birds/seabirds

Black-legged kittiwakes, fulmars, puffins, Brünnich's guillemots, common guillemots, ivory gulls and many other species nest close together on bird cliffs. The little auk also nests in colonies, but in steep, often scree slopes. Visitors should always stay to the edges of colonies and avoid intrusions that make the adult birds leave the ledges. If breeding birds leave their nest in a hurry, it may lead to loss of eggs or chicks. Glaucous gulls patrol the colonies and quickly help themselves to unprotected eggs and chicks.

Reducing the risk of disturbing seabirds:

- Keep some distance (at least 30 m) if you approach a bird cliff from below or from the side. Avoid approaching a bird cliff from above; your sudden appearance might cause birds in the upper parts of the cliff to flee in panic.
- Colonies should ideally be observed with binoculars or telescope from a suitable vantage point, such as a hill to one side of the colony.
- Keep a respectful distance (at least 30 m) in areas where bird cliffs can be approached by boat too. A good rule of thumb is to stop before the first birds start to show signs of uneasiness and always drive the boat at low speed to minimise noise.
- Give flocks of birds on the water beneath bird cliffs a wide berth. They feed, rest and bathe in these areas.
- In late July/early August, Brünnich's and



Large mixed flock of common and Brünnich's guillemots at Bjørnøya. Give such concentrations of birds some space. Photo: Harald Steen, Norwegian Polar Institute



Beneath bird cliffs, boats should keep a good distance both out of consideration for the birds, and also to avoid the danger of falling rocks and ice. Photo: Øystein Overrein, Norwegian Polar Institute

common guillemot chicks jump from the nesting ledges and glide down to the water with one of their parents. Stay away from the cliffs and the water below the nesting cliffs at this time. Also, try to avoid moving around on land below the bird cliffs containing these species at this time. Boats should stay away from the water immediately below the cliff too. If disturbed, chicks may be separated from their parent(s), and they will be easy prey for glaucous gulls and arctic foxes.

Important safety precautions:

Falling rocks are a constant hazard under bird cliffs, so avoid these areas for safety's sake.

Recommended additional reading

- Norwegian Polar Institute Polar Handbook No. 13 "Birds and mammals of Svalbard" www.npolar.no
- Norwegian Polar Institute Polar Handbook No. 14 "Cruise handbook for Svalbard" www.cruise-handbook.npolar.no/en/
- Svalbard rules of common sense http://svalbard.net/en/Svalbardrules
- Polar bears in Svalbard http://brage.bibsys.no/npolar/bitstream/URN:NBN:no-bibsys_ brage_11544/1/PolarbearsFolder.pdf
- Guidelines compiled by AECO (Association of Arctic Expedition Cruise Operators) – www.aeco.no



Svalbard's natural environment is fragile. Snowmobile traffic should keep to the bottoms of valleys and follow established routes. Photo: Øystein Overrein, Norwegian Polar Institute

Enjoy your visit to Svalbard, while respecting the beautiful wilderness and its natural inhabitants.

EXPERIENCING SVALBARD'S WILDLIFE

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