

Spitsbergen

Polar Wilderness

A Greentours Tour Report

22nd June – 5th July 2005

Led by Chris Gardner

The following trip report is from a land-based trip (so comparable to the Alpine Garden Society tour in 2025) and a cruise (so comparable to the cruise in 2025)

Day 1 **UK to Norway**

After trouble free flights to Oslo we all either relaxed around the hotel or made brief visits into Oslo. Verges were full of naturalised lupins and vetches, whilst the bird life around the hotel was surprisingly diverse with Yellowhammer, Fieldfare, Great Tit and even a Black Woodpecker.

Day 2 **Oslo to Longyearbyen**

A Swift was flying around inside Oslo airport as we waited to fly on to Spitsbergen via Tromsø where we were able to see Oystercatcher, Grey Heron and Common Gull at the airport. What followed was a spectacular flight over the pack ice, vast glaciers, snow-ribbed ridges and flat topped mountains that made up Spitsbergen. The town of Longyearbyen was a curious sight, a mixture of colourful houses and coal mining facilities, with large timber pylons and huge coal heaps outside of town. In fact the town owed its existence to the coal mining industry, which still carried on today and tourism has been rather recently superimposed onto it.

From our comfortable hotel we could see up the valley to a small glacier and back to the sea. Immediately beside the hotel was Arctic tundra and we decided to look at this straight away, at least that was the plan until eagle-eyed Mary spotted the “Free waffles and coffee from 4pm” notice. That delayed things a little while we partook of delicious waffles and jam. In need of walking all of this off we explored the area behind the hotel, finding *Braya purpurascens*, bright yellow *Draba alpina*, *Saxifraga oppositifolia* in some fine colour forms from white to deep pink, *Saxifraga cespitosa*, golden-yellow *Ranunculus nivalis* burst from the damp mossy areas and delicate palest yellow *Papaver dahlianum* was on shingle ridges. Further down the road we found *Draba daurica* and *Draba arcticum*, *Cochlearia* and *Saxifraga cernua* in bud. Glancing up at the cliffs in front of us we could see occasional flocks of Little Auks whirring across the sky, these tiny scree-nesting auks are super abundant here. Another frequent sight was the Barnacle Goose and a pair were sat in close to the river that runs through the town not far from three Arctic Reindeer that were grazing contentedly on the short arctic turf, quite unperturbed by our photographic attempts. Most of group returned to the hotel as the wind had picked up and was quite cold, straight off the glacier. Alistair, Steve and I wandered further finding superb *Cassiope tetragona*, pretty pink *Pedicularis hirsuta* and *Potentilla hyperctica* in the tundra around town and by the sea Arctic Tern, Arctic Skua and Black Guillemot.

Day 3

Local glacier and Vestpynten

It was overcast but dry this morning as we headed up towards the Larsbreen glacier at the head of the valley. Kyre our guide was carrying the requisite rifle, an essential precaution anywhere outside of the town (Polar Bears have been seen this close to town) especially given that botanical exploration in the high arctic means a lot of time spent on the ground looking through lenses – not the best way to spot an oncoming ursid. There was some trepidation, as we had to ford a small glacial stream before we could search for flowers and unfortunately it was a slightly late season so the tundra looked a little barren. However, closer inspection revealed *Draba pauciflora* and *Draba micropetala* growing together and when Alistair, Steve, Jerry and I pressed on a little way towards the glacier we found *Draba subcapitata* growing on exposed areas. At least two Ptarmigan were seen quite well and there was a pair of Barnacle Geese nesting high on a cliff as flocks of Little Auk buzzed about. Dropping back down towards the town once again we passed recently melted flushes of vivid green moss and gravelly areas spattered with lovely mats of *Saxifraga oppositifolia*. After a short ride into town, I showed the group the *Pedicularis hirsuta* seen yesterday and then we had a tasty lunch in a café followed by a spot of map shopping in the Polar Institute.

The afternoon was spent among quite a different floral community. The area adjacent to the airport comprises sandy flats and shingle bars (a product of ice being crushed up against the shore) and here we found fine cushions of Moss Campion *Silene acaulis*, *Silene furcata*, *Potentilla pulchella*, *Ranunculus sulphurous* and *Minuartia rubella*. Eider were abundant and there was also a superb female Red Phalarope feeding in pool. Further on beside a luminous orange beacon we enjoyed the magnificent arctic panorama stretching across the Isfjorden bay with rows of snow-streaked peaks and immense glaciers, the impact somehow intensified by the glowering grey sky that seemed to sit almost on top of the land. Beside a small pool were two Purple Sandpiper and a male Dunlin, who suddenly rose up to give his display flight – a truly remarkable piece of behaviour in which he hovers for several minutes whilst uttering high pitched whistles, before plunging back down to the tundra. Behind the pool we found a colony of yellow *Saxifraga platysepala* a curious species with long bright red stolons. Also common were *Dryas octopetala*, *Draba alpina* and wonderful cushions of *Saxifraga oppositifolia*.

At Vestpynten (West Point) we stood beneath an expansive Little Auk colony and watched Glaucous Gulls sweeping across the screes hunting for the auks and one bird eventually flew off with a swollen crop stuffed full of two or three. In the sea a Bearded Seal was seen by a few and on the drive back we saw a pair of Long-tailed Ducks in a pond before reaching the hotel in time for ... you guessed it ... waffles.

Day 4

Hiorthamn

A little adventure was to be had today. Kyre took us to through what back streets Longyearbyen has, seeing an Arctic Fox besieged by Arctic Terns on the way, to a building full of expedition equipment. Here we were kitted out in bright orange encounter suits and warm waterproof boots. Next we boarded two zodiacs and drove across the bay (despite my piloting) to the old mining settlement of Hiorthamn on the other side of the bay. Here were many old buildings and rusting equipment (now a national treasure of course) from past mining exploits. Immediately above the foreshore were Oysterplant *Mertensia maritima* and among the tundra *Saxifraga platysepala*, *Saxifraga cespitosa* and *Saxifraga oppositifolia*. A boardwalk led across the soggy

tundra and we climbed up past the houses to the drier slopes behind where there were many superb Woolly Lousewort *Pedicularis dasyantha* a lovely species with pale pink flowers. From up here we enjoyed wonderful views of the arctic landscape.

Lunch among the driftwood was a little windy, but afterwards we walked along the coast towards a large plateau. There was a small colony of *Saxifraga hirculus* on the way and climbing up on to the plateau we saw several Reindeer and a pingo – a curious glacial feature produced by warmer water erupting through the permafrost, the tundra is heaved up and the water spills over and freezes, forming a dome.

It was by now quite windy so we returned to the boats and suited up, but had to wait one and a half hours before the wind eased enough for us to get back aboard our craft. Nonetheless we still made it back in time for you know what, enjoying lovely close views of Black Guillemot on the way.

Day 5 Bjorndalen and Plata-berget

The distant mountains across the bay were veiled in light mist this morning as we drove west, stopping once again at the Little Auk colony at Vestpynten. Climbing up a short way we gained good views of these diminutive birds sitting on the screes. Closer examination of the mossy scree revealed a number of plants with *Saxifraga nivalis*, *Saxifraga oppositifolia* including some lovely pale pink forms, *Saxifraga cernua*, *Saxifraga cespitosa*, *Draba lactea*, *Draba alpina* and tiny *Cardamine bellidifolia*. There were lovely combinations of these flowers all set among the grey and green mosses and lichen-encrusted stones. Before we left three Reindeer passed below us and in the fjord probably the same Bearded Seal reappeared briefly as big rafts of Eider floated on the calm water.

We continued onto Bjorndalen, a wide valley pierced by a braided river and flanked by steep-sided rocky fells. Parking at the disused mine, we walked out across the tundra across a mosaic of gravelly ridges and mossy willow-filled gullies, *Dryas* heath and snowmelt run-off. A male Ptarmigan allowed close approach and there was *Draba norvegica*, *Saxifraga cernua* in flower and the tiny *Ranunculus pygmaeus*. Lunch was in the comfort of a large tent sitting on reindeer skins where our attempts to make coffee with two old tin cans proved somewhat hit and miss.

After this there was nothing else for it but to head up to the intriguing ‘golf balls’. Actually a radar installation, this collection of white domes is used in part by the likes of NASA, but to me it was pure ‘Space 1999’. The views on the way up were impressive, stretching out across high arctic wastes of lichen covered stone and reindeer moss that also hid bizarre polygonal permafrost patterns (as yet unexplained by science). Even here *Papaver dahlianum* and *Saxifraga cespitosa* were making a go of it.

Day 6 Adventdalen

The magnificent broad valley of Adventdalen contains expansive areas of marshes and braided channels. We had barely cleared town when we stopped to check some waders (Purple Sandpipers) next to a sled dog kennel. As we watched them Kyre drew our attention to a super purest white adult Ivory Gull that was searching for scraps around the kennels - an exquisite

bird. Moving on a Red-throated Diver flew over a male Dunlin was displaying and then we found a pair of Pink-footed Geese together with a Spitsbergen rarity – a female Teal.

Up at Gruve (mine) number seven among the radar dishes it was rather windswept and cold but the views across the arctic were superb. I nearly trod on a female Ptarmigan on eggs (at least twelve) and she hopped about my feet in an attempt to lure me away. Descending to relatively warm climes we searched a wet vivid green wet flush, enriched by copious husky dung thrown out of the kennels nearby – not anyone's first choice location but ideal conditions for *Saxifraga hieracifolia*.

The road up towards Gruve five found us searching for a Svalbard forest, which we couldn't find, but there were eight species of saxifrage, with *Saxifraga cespitosa*, *Saxifraga oppositifolia*, *Saxifraga nivalis*, *Saxifraga cernua*, *Saxifraga platysepala*, *Saxifraga hirculus*, *Saxifraga heiracifolia* and tiny *Saxifraga foliolosa*. Makeshift nest boxes had been constructed around the various mining pylons and most were occupied by Snow Buntings. Meanwhile Kyre had marched on ahead as only he could and found the forest. It may have been only one-inch tall, but this small colony of Dwarf Birch *Betula nana* was the closest thing there was to a forest on Spitsbergen. Two Pink-footed Geese flew over and after lunch we found three Red-throated Divers resting beside a large lagoon. Further on were three lovely Red Phalaropes, Purple Sandpipers, Barnacle Geese and another rarity – a Redshank.

Back in Longyearbyen we visited an innocuous-looking slope where there grew a colony of gorgeous Boreal Jacob's Ladder *Polemonium borealis*, a refined blue-flowered plant with pinnate leaves. Alongside were many superb Mountain Avens *Dryas octopetala* in full flower, *Potentilla nivea* and fine reddish forms of *Saxifraga cespitosa*. Mary had found Polar Dandelion *Taraxacum brachyceras* a species with appropriately white flowers.

A few of us carried on to Vestpynten again (the rest were lured in by the waffles yet again) where we searched the big Eider rafts, finding at least five male King Eiders plus one or two Brünnich's Guillemot and Steve spotted our first Minke Whale heading out of the fjord. Around us was an incredible ice-blue sea and ever changing polar landscape that really is quite different and absorbing every day.

Day 7 Longyeargyen and cruise departure

We all spent the morning in and around town bathed in warm sunshine and the glacier at the head of the valley finally revealed itself. I took Steve, Mary and Jerry back to the Adventdalen marshes to look at stunning male King Eider I'd found earlier along with equally fine Red Phalaropes. After lunch March, Wallace, Norman and Dorothy departed for destinations south and I met up with Sheila, showed her some Svalbard flora and then met the rest of the group for a sunny coffee before we transferred down to the dock and boarded the boat.

A huge fog bank had appeared from nowhere in the fjord and pushed almost into town and although we departed in the sunshine we were soon plunged into dense cold fog. This didn't seem to bother the Fulmars that positively revelled in the rough conditions humming up and down the boat, flying so close and eyeing those daft enough to be on deck i.e. me. We also met up with a (thankfully) very rare species that evening the Great Auk (formerly thought to be extinct – largely due to a lack of mating opportunities and unsociable behaviour – but at least one was alive and well on board ship).

Day 8

Bay and Ny Alesund

A grey start to the day but clear and we soon sighted our first landfall complete with a sizeable glacier in July the fourteenth Bay. After a necessary briefing on safely boarding and disembarking the zodiacs (inflatable boats) we sped out towards some nearby bird cliffs passing Puffins and Great Skua. On the rocks were hundreds of Brünnich's Guillemot and a few Barnacle Geese, whilst higher up was a raucous colony of Kittiwakes. On the clifftops and slopes were verdant heaths coloured pink by wonderful displays of Moss Campion *Silene acaulis*. Closer examination on landing also revealed mosses, liverworts, along with carpets of Golden Saxifrage *Chrysoplenium tetrandrum*, many *Saxifraga hieracifolia*, *Saxifraga nivalis*, *Saxifraga cespitosa* and *Draba fladzinensis* all enriched by the ample fertilizer from above.

We continued across the bay in the boats seeing a juvenile King Eider and a small flock of Kittiwakes perched on a blue iceberg. Close up to the thirty-metre high, two-kilometre wide iceberg we saw fabulous patches of lapis blue ice, fissures and buckled iceforms set against the austere arctic sky. Suddenly a huge chunk of ice split from the glacier and crashed into the quicksilver sea.

Post lunch we arrived at Ny Alesund the most northerly settlement in the world (although now no longer a coal mine but a scientific research base) and spent the afternoon looking around the settlement. There were Barnacle Geese, Long-tailed Duck, ever vigorous Arctic Terns and a Black-backed Gull. Rolf the expedition leader recounted various stories regarding Amundsen (the underhand Norwegian polar explorer who thankfully never reached the North Pole – not even half the man Shackleton was) and other arctic explorers who had attempted to reach the pole from here by airship (the launch mast is still standing). The tundra around the settlement was coloured pink with *Saxifraga oppositifolia* and *Silene acaulis* stretching away to the distant glaciers and rocky slopes leading up to unseen peaks cut-off by the low cloud.

The ship headed further into Kongsfjorden from Ny Alesund and the scenery grew ever more impressive until we reached the immense glacier at the head of the fjord, a great wall of ice slicing between the multi-hued peaks. We 'hovered' in position for some time to soak up the scene before once again cruising past the settlement and out to sea.

Day 9

Amsterdam Island to Moffen

It was overcast again, but this was somehow appropriate for the grim recollections of whaling activities on Amsterdam Island. Where once many thousands of Bowhead Whales filled the fjord and surrounding seas, now only the remnants of blubber pots and a few old timbers remain along with an empty and silent landscape. It is still astonishing to consider that even way back in the sixteenth century mankind was capable of exterminating such a vast population of animals to the point where they will never recover – even four hundred years later.

On a lighter note there were Pink-footed Geese, Arctic and Great Skua and a curious Ringed Seal that came close in to shore to investigate us. Over on Danish Island we heard more on the history of failed Polar flights – quite frankly I don't know why they bothered. Most appealing though was the true story of the first man to the pole – not a testosterone fuelled Victorian, but an unknowing Russian seaman whose submarine surfaced there – apparently he is still alive and

was traced and told of his historic achievement. Among the debris (early explorers cared little for the mess they left behind) the dwarf form of Highland Saxifrage *Saxifraga rivularis* was abundant and there were patches of tiny *Ranunculus pygmaeus*.

After lunch we headed to Raudfjorden where the weather had cleared and we were bathed in sunshine, cruising across the languid waters in the zodiacs, enjoying more close up views of glaciers. We landed to climb a low hill for a great view of the high crystal clear scenery and sounds of the arctic or lack of. Setting off again we cruised close to two huge pinnacled bird cliffs, alive with Kittiwakes and Brünnich's Guillemots and on the snow below two Reindeer were cooling off.

Back on board and we set sail for the magical eighty degrees north line, to be found very close to Moffen Island and notable haul-out for the charismatic Walrus. Suddenly, as we neared the line two huge Walrus appeared close to the ship cavorting in the waves, all tusks, whiskers and knobbly blubber. Approaching as close as we were allowed (Moffen is a strict nature reserve) the ship stopped just inside the line and glasses were charged with very questionable Russian spirit. Fortunately we had ordered a more palatable bottle of bubbly instead. Indeed we were enjoying this so much that we didn't notice the deft approach of the Great Auk as he swooped or rather waddled past our unguarded bottle and unbelievably guzzled the last glass without asking!

Warm sunshine (for the arctic) bathed the route to Woodfjorden and a Minke Whale was seen briefly as we watched yet more fantastic arctic scenery glide past. Some of us even lasted long enough to witness the midnight sun – which looked much like the sun at four o'clock in the afternoon in Essex or anywhere else – except it was a lot colder.

Day 10 **Liefdefjorden**

A disappointing start to the day with only sensational landscapes with glaciers and brooding peaks stippled with occasional sunbeams to pass the time of day. Moving out towards the mouth of Liefdefjorden we took a zodiac ride to a small island smothered in *Saxifraga oppositifolia*. We were able to spend some time exploring the tundra and soon found *Draba oxycarpa* and *Draba corymbosa*, whilst tucked in behind a large rock was a clump of *Saxifraga svalbardensis*. Beside the shore were Red Phalarope and Long-tailed Duck. However, back aboard there was a brief sighting of the animal we had all come to see - the Polar Bear. Sadly only Jerry saw the bear from the bridge and by the time we had boarded our boats and travelled over to the location it had as bears are apt to do – disappeared. The wind was strong now as we bounced back to the ship, but as the arctic does, this all changed a few hours later when we anchored in a sheltered bay in full sun and the crew laid on a superb barbecue, surrounded by calm seas, crazy clouds and wilderness. The latter hours were a little hazy but Alistair's one-man party kept going.

Day 11 **81° North**

Ice. That was the objective today. Sea ice conditions were such that we were to push even further north towards eighty-one degrees (only five hundred and forty miles from the North Pole) and into the pack ice. As we progressed past the remote Souyane Islands we hit the first ice passing into denser floes, with great flat slabs of ice stretching to the horizon and broken by occasional open leads that the ship moved along. Here and there we saw the odd seal hauled out

and even a set of Polar Bear tracks. The highlight of the day though was the zodiac ride we were able to take, moving among the ice at close range, with fantastic formations of multi-year ice, blue ice caves, and clear views across this ethereal seascape. Auks were present as everywhere and there was also a very lost Ringed Plover. The only way was south from here and as we returned fog banks closed in and the weather changed yet again – the speed and frequency of such changes in the arctic is quite remarkable.

Day 12 **Mouse Bay and Summer Bay**

Our morning arrival at Mushamna (Mouse Bay) saw the group split into walkers and botanists. The botanist soon got to work finding many now familiar plants as well as *Potentilla rubicaulis* and lovely patches of *Ranunculus nivalis* thriving beside a snowmelt stream. I used our chaperone Elke to pose for some interesting photos (which came out okay –thank you Sheila) and then we wandered along the shore where two Turnstone showed themselves in fine summer plumage. There were also Arctic Skua, Red-throated Diver and Purple Sandpiper and in the shingle a colony of Oysterplant *Mertensia maritima*. From the shore we also caught sight of a Minke Whale as we crossed the water and were able to watch it well from the ship. One or two more individuals also appeared as we sailed out of the bay.

The weather was good today and it gave us the chance to explore an area near Summer Bay, where remains of the first ever visitors to Svalbard are to be found (Russian sailors). We passed through lovely bays and then visited two glaciers, the first supporting a large population of Black Guillemots in the surrounding water and the second a spectacular sprawling feature, a huge wall of ice with the sea in front clinking with melting brash ice. As we headed back to the ship a large dark lump on a small iceberg gradually became a juvenile Walrus and we enjoyed outstanding views as he sat somewhat nervously on the ice. The long ride back was executed in some style by Igor Karpov our boatman and the grandmaster of zodiac riding, leaving all other boats well and truly in his wake.

Day 13 **Prinz Carls Fjorland**

A fairly long zodiac ride on an overcast day saw us land on a long shingle beach on Prinz Carls Forland. The reason for the long ride was the shallow water, which the ship would struggle in and the reason for coming at all was the nine blubbery lumps on the beach a mile ahead. As we approached slowly we could see the odd tusk poking up and not much happened at all as they all slept on. Then one or two became restless and clambered over the others caused grunts and movement. Two animals finally decided to amble to the sea whereas the others carried on snoozing. In a pool behind us were five Red Phalaropes, but these scarcely got a look in as we all studied the blubber mountain in front of us.

It was our last excursion and the fog closed in for much of the last leg of our journey back to Longyearbyen, although when we arrived the sun poked out again lighting up the town.

Day 14 **Longyearbyen to Oslo**

Off the ship after breakfast, we still had time for a morning botanising and wandered in the direction of the airport, seeing a Red-throated Diver and finding several new plants including

tiny *Koenigia islandica*, *Ranunculus hyperboreus* and the nominate form of *Saxifraga rivularis*. Svalbard Poppies *Papaver dahlianum* and *Silene furcata* were very common and around the airport the tundra was alive with lovely white cushions of *Arenaria pseudofrigida*. Despite the brisk wind we carried on to the airport surviving the very aggressive Arctic Tern that lived there to find a good colony of bright yellow *Saxifraga hirculus* in flower on the flat tundra below.

We lunched in Longyearbyen and then boarded our flight to Oslo, Mary, Jerry and Steve carrying onto the UK straight away, whilst Alistair, Sheila, Audrey and I had a last night in Norway.

Day 15

To UK

Those of us that had stayed overnight now returned home, whereas I set off for the Swedish Arctic for a few days to enjoy the visual delights of Abisko National Park, and very pretty Swedish girls.

Systematic List Number 1 Flora

Longyearbyen = LYB

Field Horsetail	<i>Equisetum arvense</i>	Widespread
Variiegated Horsetail	<i>Equisetum variegatum</i>	Common on dry heath
Fir Clubmoss	<i>Huperzia selago</i>	Frequent on dryish heaths
Polar Willow	<i>Salix polaris</i>	Abundant
Dwarf Birch	<i>Betula nana</i>	Rare. Only found near Gruve 5
Alpine Bistort	<i>Polygonum viviparum</i>	Very common
Iceland Purslane	<i>Koenigia islandica</i>	Found in wet flush near airport. Probably overlooked elsewhere.
Mountain Sorrel	<i>Oxyria digyna</i>	Abundant
Teesdale Sandwort	<i>Minuartia stricta</i>	Dry flats near Summer Bay
Mountain Sandwort	<i>Minuartia rubella</i>	Scattered around LYB
Fringed Sandwort	<i>Arenaria pseudofrigida</i>	Dry flats next to LYB airport
Arctic Mouse-ear	<i>Cerastium arcticum</i>	Abundant
Arctic White Campion	<i>Silene furcata</i>	Widespread. Common in places e.g LYB airport surrounds
Moss Campion	<i>Silene acaulis</i>	Very common and widespread, abundant in places
Snow Buttercup	<i>Ranunculus nivalis</i>	Very common in damp places, near snowmelt, etc. Heart-shaped leaf base.
Sulphur-coloured Buttercup	<i>Ranunculus sulphureus</i>	Much scarcer than the previous species. Wedge shaped leaf base
Pygmy Buttercup	<i>Ranunculus pygmaeus</i>	Widespread in dampish sparse tundra
Svalbard Poppy	<i>Papaver dahlianum</i>	Very common and widespread. Lovely displays around LYB
Alpine Cress	<i>Cardamine bellidifolia</i>	Mossy tundra especially below bird cliffs. Scattered.
Polar Scurvygrass	<i>Cochlearia groenlandica</i>	Very common and widespread

Purplish Braya	<i>Braya purpurascens</i>	Only seen once next to the hotel in LYB.
Cushioned Whitlow-grass	<i>Draba corymbosa</i>	On tundra covered islands, but probably more widespread
Pale Whitlow-grass	<i>Draba oxycarpa</i>	Only seen on tundra covered island in Liefdefjorden
Polar Whitlow-grass	<i>Draba micropetala</i>	Scattered and widespread including LYB
Tundra Whitlow-grass	<i>Draba pauciflora</i>	Scarce and widespread. LYB
Golden whitlow-grass	<i>Draba alpina</i>	Very common and widespread – the most striking species in the genus here
Lapland Whitlow-grass	<i>Draba lactea</i>	Scattered e.g. Little Auk colony near LYB
White Arctic Whitlow-grass	<i>Draba fladzinensis</i>	Bird cliffs near July 14 th Bay
Rock Whitlow-grass	<i>Draba norvegica</i>	Scarce. LYB
Hemispherical Whitlow-grass	<i>Draba subcapitata</i>	Widespread on dryish rocky area not covered in snow in winter.
Snow Whitlow-grass	<i>Draba nivalis</i>	Widespread and scattered around LYB
Scree Whitlow-grass	<i>Draba daurica</i>	Scarce around LYB
Mealy Whitlow-grass	<i>Draba arctica</i>	Widespread
Purple Saxifrage	<i>Saxifraga oppositifolia</i>	Abundant with many good colour forms from white to deep pink. Coloured the tundra in places.
Hawkweed-leaved Saxifrage	<i>Saxifraga hieracifolia</i>	Scattered. Preferring nutrient rich sites near bird cliffs, husky kennels.
Alpine Saxifrage	<i>Saxifraga nivalis</i>	Very common and widespread in rocky tundra
Foliolose Saxifrage	<i>Saxifraga foliolosa</i>	Found in wet areas near Gruve 5 and near the airport
Yellow Mountain Saxifrage	<i>Saxifraga hirculus</i>	Good colony below the airport. Scattered elsewhere in dampish areas.
Drooping Saxifrage	<i>Saxifraga cernua</i>	Very common
Svalbard Saxifrage	<i>Saxifraga svalbardensis</i>	Only found once on an island in Liefdefjorden

Highland Saxifrage	<i>Saxifraga rivularis</i>	Dwarf form common on barren tundra e.g. Danish Island. Nominate form in colony near the airport
Polar Saxifrage	<i>Saxifraga hyperborea</i>	Only found once at Summer Bay
Tufted Saxifrage	<i>Saxifraga cespitosa</i>	Abundant
Polar Stoloniferous Saxifrage	<i>Saxifraga platysepala</i>	Widespread but not common around LYB
Dwarf Golden Saxifrage	<i>Chrysopenium tetrandrum</i>	Only below the bird cliffs at July 14 th Bay where very common
Turfed Cinquefoil	<i>Potentilla pulchella</i>	Common in dryish sandy places
Red-stemmed Cinquefoil	<i>Potentilla rubricaulis</i>	Scattered but maybe more common and missed elsewhere.
Svalbard Snow Cinquefoil	<i>Potentilla nivea</i>	Scattered
Arctic Cinquefoil	<i>Potentilla hyparctica</i>	Common and widespread in tundra, but not dry areas.
Mountain Avens	<i>Dryas octopetala</i>	Abundant
Arctic Bell Heather	<i>Cassiope tetragona</i>	Abundant around LYB
Boreal Jacob's Ladder	<i>Polemonium boreale</i>	Rare. Only two small colonies in LYB
Oysterplant	<i>Mertensia maritima</i>	Widespread. Colony on the side streets of LYB
Woolly Lousewort	<i>Pedicularis dasyantha</i>	Fine species. Scattered but good populations near Gruve 5 and at Hiorthamn
Hairy Lousewort	<i>Pedicularis hirsuta</i>	Much more common than the previous species.
Black Fleabane	<i>Erigeron humilis</i>	Only at July 14 th Bay bird cliffs
Arctic Dandelion	<i>Taraxacum arcticum</i>	Scarce. LYB
Reindeer Wood-rush	<i>Luzula wahlenbergii</i>	Widespread
Northern Wood-rush	<i>Luzula confusa</i>	Widespread
Polar Bear Sedge	<i>Carex ursina</i>	Hiorthamn
Polar Foxtail	<i>Alopecurus borealis</i>	LYB area.

Systematic List Number 2 Birds

Red-throated Diver	<i>Gavia stellata</i>	Widespread 6/14
Fulmar	<i>Fulmarus glacialis</i>	Very common 12/14
Grey Heron	<i>Ardea cinerea</i>	A bird at Tromso airport 1/14
Pink-footed Goose	<i>Anser brachyrhynchus</i>	Scattered with birds along Advendalen and on islands on the cruise 3/14
Brent Goose	<i>Branta bernicla</i>	3 birds flew past the ship en route to Moffen 1/14
Barnacle Goose	<i>Branta leucopsis</i>	Common and widespread 9/14
Teal	<i>Anas crecca</i>	A rare bird on Svalbard. A female along Adventdalen 1/14
Common Eider	<i>Somateria mollissima</i>	Very common 13/14
King Eider	<i>Somateria spectabilis</i>	Five males near Vestpyten, a pair along Advendalen and a juvenile in July 14 th Bay 3/14
Long-tailed Duck	<i>Clangula hyemalis</i>	Widespread 5/14
Rock Ptarmigan	<i>Lagopus muta</i>	Frequent around LYB 4/14
Lapwing	<i>Vanellus vanellus</i>	Tromso airport 1/14
Redshank	<i>Tringa totanus</i>	One bird seen along Adventdalen. Also at Tromso airport 2/14
Turnstone	<i>Arenaria interpres</i>	Fine summer plumages birds at Summer Bay 1/14
Dunlin	<i>Calidris alpina</i>	Frequent around LYB, including males displaying – wonderful 3/14
Purple Sandpiper	<i>Calidris maritima</i>	Very common and widespread 9/14
Red (Grey) Phalarope	<i>Phalaropus fulicarius</i>	Superb summer plumage females a regular sight 6/14
Great Skua	<i>Stercorarius skua</i>	Widespread on the cruise 4/14
Arctic Skua	<i>Stercorarius parasiticus</i>	Very common 12/14

Common Gull	<i>Larus canus</i>	Tromso airport 1/14
Great Black-backed Gull	<i>Larus marinus</i>	Rare. Only seen at Ny Alesund 1/14
Glaucous Gull	<i>Larus hyperboreus</i>	Abundant 13/14
Ivory Gull	<i>Pagophila eburnea</i>	Simply stunning adult at LYB dog kennel. Another seen from the boat by crew 2/14
Kittiwake	<i>Rissa tridactyla</i>	Abundant 13/14
Arctic Tern	<i>Sterna paradisaea</i>	Abundant and aggressive around nest sites 13/14
Little Auk	<i>Alle alle</i>	Abundant at colonies and in all waters 12/14
Brünnich's Guillemot	<i>Uria lomvia</i>	Abundant at bird cliffs and in all waters on cruise 10/14
Black Guillemot	<i>Cepphus grylle</i>	Common and widespread 12/14
Puffin	<i>Fratercula arctica</i>	Common in water and at cliff sites 5/14
Common Swift	<i>Apus apus</i>	One trapped in Oslo airport 1/14
Black Woodpecker	<i>Dryocopus martius</i>	An individual flew across the near the hotel at Oslo airport 1/14
Skylark	<i>Alauda arvensis</i>	Around hotel at Oslo 1/14
House Martin	<i>Delichon urbica</i>	Around hotel at Oslo 1/14
White Wagtail	<i>Motacilla alba</i>	Around hotel at Oslo and Tromso airport 2/14
Fieldfare	<i>Turdus pilaris</i>	Around hotel at Oslo 2/14
Redwing	<i>Turdus iliacus</i>	Around hotel at Oslo 1/14
Lesser Whitethroat	<i>Sylvia curruca</i>	Around hotel at Oslo 1/14
Great Tit	<i>Parus major</i>	Around hotel at Oslo 1/14
Jackdaw	<i>Corvus monedula</i>	Around hotel at Oslo 1/14
Magpie	<i>Pica pica</i>	Around hotel at Oslo 1/14
Tree Sparrow	<i>Paser Montana</i>	Around hotel at Oslo 1/14

Yellowhammer

Emberiza citrinella

Around hotel at Oslo 1/14

Snow Bunting

Plectrophenax nivalis

Common around LYB and tundra
elsewhere 10/14

Systematic List Number 3

Mammals

Arctic Fox	<i>Alopex lagopus</i>	Amazingly only one seen harassed by terns in LYB. 1/14
Polar Bear	<i>Ursus maritimus</i>	Equally amazingly only one seen on the cruise 1/14
Harbour Seal	<i>Phoca vitulina</i>	One seen on the last day 1/14
Ringed Seal	<i>Phoca hispida</i>	Occasional with one seen well at Amsterdam Island 3/14
Bearded Seal	<i>Erignathus barbatus</i>	Seen in Isfjorden, once quite close 3/14
Walrus	<i>Odobenus rosmarus</i>	Superb mammal – two seen close to boat, groups at Mofen and Prinz Carls Froland and a superb young animal on an iceberg 3/14
Minke Whale	<i>Balaenoptera acutorostrata</i>	Regularly seen from the ship (and one from land) with up to 3 individuals 4/14