# Norway – Alpine Flowers of the Gol Plateau

Naturetrek Tour Report

1st - 8th July 2023







Pyramidal Saxifrage



Scarce Copper



One-flowered Fleabane

Tour report & images by Jessica Turner



Naturetrek Mingledown Barn

Wolf's Lane

Chawton

Alton

Hampshire

**GU34 3HJ** 

UK

T: +44 (0)1962 733051

Tour Participants: Jessica Turner (leader) with eight Naturetrek clients

### **Summary**

The Gol Plateau of west-central Norway offers a variety of habitats: meadows, open woodland, moor, arctic heath and bog, plus the rocky slopes of Skogshorn, a local mountain. We enjoyed soft greens and greys of the abundant willows, contrasting with the dark-blue of Northern Wolf's-bane. Many of the plants are diminutive, such as the locally abundant, delicate pink Twinflower, reportedly Linnaeus's favourite flower, Lesser Twayblade and Bog Cranberry. A wonderful mass of lichens added extra interest. Venturing further afield, we sampled 'Norway in a Nutshell', the fascinating Flåm railway, and the dramatic beauty of a couple of branches of the mighty Sognefjord, with mighty waterfalls and the white spikes of Pyramidal Saxifrage visible on the cliffs. Common Cranes were regularly in the field behind the hotel, joined by a young Elk, Mountain Hares and Roe Deer on occasion, while other birds seen included Siberian Jay, Bluethroat and Brambling. When the sun appeared, we also enjoyed the butterflies, including Scarce Copper and Cranberry Blue. Excellent hospitality, delicious food and great company all added up to an extremely enjoyable week – even the unexpected extra day! My thanks to all the group for your enthusiasm, spotting and identification skills.

Day 1

Saturday 1st July

Fly Heathrow to Oslo - Transfer to Kamben

Five group members met Jessica at Heathrow Terminal 3 for the 1.10pm BA flight to Oslo Gardermoen, where we landed at 4.15pm. Having collected our bags, we met up with two other group members who had flown from Manchester but had enjoyed a few days in Oslo, and our final member, from Belgium. We were then collected by Morten, the brother of Martin, the co-proprietor of the hotel. We quickly loaded our luggage into the vehicle and made our way out of the airport and onto the E16, the main route to Bergen, enjoying the hot afternoon sun. En route we enjoyed the colourful patches of Large-leaved Lupin (*Lupinus polyphyllus*), Ox-eye Daisy (*Leucanthemum vulgare*), Rosebay Willowherb (*Epilobium angustifolium*) and the extensive forests of Norway Spruce (*Picea abies*). We also noted a Hooded Crows, a Common Buzzard on a pole, Barn Swallows and Fieldfares. Our route took us north-west from the capital, bypassing Jevnaker and Hønefoss, and we took a short break at a café in Sokna, where ice creams were welcome. We drove along the shore of the long Krøderfjorden and on along the Hallingdal river, seeing a family of Canada Geese and a Grey Heron.

We passed through Gol and up on to Golsfjellet and the Kamben Høyfjellshotell, our base for the week. Many of the verges were bright with Wood Crane's-bill (*Geranium sylvaticum*). We reached the hotel at about 8.30pm, and were welcomed by Elin, the co-proprietor. We left our bags and enjoyed a delicious dinner, during which Jessica outlined plans for the following days. A single Common Crane was in the field behind the hotel, and the views were beautiful in the evening light. Afterwards, most of us were ready for our beds, after a long day of travel.

Day 2

Sunday 2nd July

Hallingen - Skutuset - Brautemo

Our first full day of the tour was spent exploring the boreal forests of the Gol Plateau. Sadly, the day dawned grey, and the rain started, continuing for most of the day. We met for a delicious breakfast at 8am, making our picnics

from the fare on offer. We left the hotel at 9am and we were driven by Martin the short distance down the track towards Hallingen, where he dropped us at the beginning of path 351, from where we would walk to the settlement of Skutuset. Clear-felling Forestry works had changed the early part of the path somewhat, but we found plenty of Northern Wolfsbane (*Aconitum septentrionale*) coming into flower, Small Cow-wheat (*Melampyrum sylvaticum*) and the delightful, delicate Twinflower (*Linnaea borealis*), as well as Oak Fern (*Gymnocarpium dryopteris*) and the white stars of Chickweed Wintergreen (*Lysimachia*, formerly *Trientalis*, *europaea*). In an open bog we recorded Bog Cranberry (*Vaccinium oxycoccos*), which we noted growing mainly on the raised, mossy hummocks, Bog Rosemary (*Andromeda polifolia*) and Marsh Lousewort (*Pedicularis palustris*).

We continued along the path, looking for blue markers (a rather challenging feat), through the understorey of Bilberry (Vaccinium myrtillus), Bog Bilberry (V. uliginosum), Cowberry (V. vitis-idaea), which was flowering well, and occasional Crowberry (Empetrum nigrum). Other species included One-flowered Wintergreen (Moneses uniflora), Alpine Speedwell (Veronica alpina) and Interrupted Clubmoss (Lycopodium annotinum). We found five different orchid species: a group of Coralroot Orchids (Corallorhiza trifida), the tiny Lesser Twayblade (Neottia cordata), and Frog Orchid (Dactylorhiza viridis), as well as Heath Fragrant Orchid (Gymnadenia borealis) and Early Marsh Orchid (Dactylorhiza incarnata subsp. pulchella). In a more open area, we found a beautiful bank of Heartsease (Viola tricolor), with mainly purple flowers, and Highland Cudweed (Omalotheca norvegica), with some Herb Paris (Paris quadrifolia) around the remains of Spruce. Three Siberian Jays were a treat to see.

In another wet area, we found Large Bitter-cress (*Cardamine amara*), Scottish Asphodel (*Tofieldia pusilla*) and more Common Butterwort (*Pinguicula vulgaris*), as well as Starry Saxifrage (*Micranthes stellaris*) and Hairy Stonecrop (*Sedum villosum*), and there was a fabulous display of Twinflower on a cut tree stump. The rain had eased, so we had our lunch in relatively dry conditions, before making our way out onto a minor road at the small hamlet of Skutuset. A handsome male Brambling showed well, we saw a Western Yellow Wagtail of the grey-headed Scandinavian race *thunbergi* and a Redwing sang from a tree-top. A roadside wood held the white-flowered Plane-leaved Buttercup (*Ranunculus platanifolius*), Whorled Solomon's-seal (*Polygonatum verticillatum*) and more Herb-Paris.

From Skutuset we turned south, on an increasingly challenging path downhill towards the tiny settlement of Brautemo. The path led, passing through more boreal forest littered with lichen-covered rocky outcrops interspersed with more wet flushes, mires and streams. Unfortunately, the rain restarted, and the path, tricky in places with fallen trees, was often very wet underfoot, and we had to cross several streams, swollen with the wet weather. There were plenty of Elk droppings, and some of the group saw two Mountain Hares. The abundance and range of lichens was fantastic, among them Star Reindeer Lichen (*Cladonia stellaris*) looked like masses of pale grey cauliflower heads, while *Bryoria fuscescens* looked like tufts of Elk hair caught on twigs. We found Cloudberry (*Rubus chamaemorus*) in flower, Alpine Bartsia (*Bartsia alpina*) and more Heath Fragrant and Early Marsh Orchids. We were glad to reach the road, seeing Northern Bedstraw (*Galium boreale*) and a Willow Warbler, while we waited for Morten to collect us. Back at the hotel, we spread all our wet gear out to dry where possible, appreciating the heating in our rooms. After a break, we met to complete our checklists and enjoy an excellent dinner.

Day 3

Monday 3rd July

#### Skogshorn

The forecast for the whole week was unsettled, but the forecast for today was slightly better (less wet), so we agreed that we would head to Skogshorn, the highest local peak at 1728 metres above sea level. The morning was grey

and drizzly, but when we met for breakfast, Elaine reported a sighting of a Mountain Hare and, even more excitingly, a male Elk walking across the field below the hotel at about 7am. As we were finishing breakfast, we saw the Hare again, much closer.

We set off at 9.30am, with Morten driving us around the edge of Golsfjellet, along the shore of Tisleifjorden, down to the Hemsedal road and north-east under the sheer face of Skogshorn, to the car park, which was the starting point for our walk. The weather was mainly dry and looked brighter, and en route, we saw two Cranes in a field and a Common Sandpiper on the lake shore. As we set off, we noted a fine clump of Harebells (*Campanula rotundifolia*), which are larger here in Norway, with a complex pattern of polyploidy (multiple copies of genetic material) resulting in some very robust plants. We also compared Common and Small Cow-wheat (*Melampyrum pratense* and *M. sylvaticum*) and found Rock Catchfly (*Atocion rupestris*). The path ran above a stream, with plenty of taller Mountain Birch (*Betula pubescens* subsp. *pumila*, a northern subspecies) and some Spruce (*Picea abies*) as well as Downy Willow (*Salix lapponum*) and Woolly Willow (*Salix lanata*). Steps along the path, to reduce erosion, are massive boulders which were laid by Nepalese sherpas. We explored a wet area, finding Heath Spotted Orchids (*Dactylorbiza maculata*), good patches of Bog Rosemary, Cranberry and Common Sundew (*Drosera rotundifolia*).

As the path rose, the vegetation became lower with Dwarf Birch (Betula nana) and Dwarf Juniper (Juniperus communis var. saxatilis). We found pale-yellow Lapland Lousewort (Pedicularis lapponica), Marsh Violet (Viola palustris), Mountain Heath (Phyllodoce caerulaea), and Cloudberry, amongst other species, and saw Meadow Pipit, Willow Warbler, Redwing and Reed Bunting. Further up, there was a snow patch and the vegetation became more prostrate and ground-hugging, with Dwarf Willow (Salix herbacea), Common Crowberry (Empetrum nigrum), and Alpine Bearberry (Arctous alpina) already in fruit. We started to find patches of Training Azalea (Kalmia procumbens), with a few flowers. Unfortunately, the building cloud produced a downpour of heavy rain and hail, and the paths became streams and rivers, so we decided the best course was to descend. Inevitably, as we reached the lower part, the rain stopped, but we did not feel inclined to start upwards again, so ate a late lunch at an enormous wooden picnic table. We had good views of a male Brambling.

Back down at the bottom, the river was now a torrent and being monitored by officials. While we were waiting to be picked up, we noted Dwarf Horsetail (*Equisetum scirpoides*) and Northern Rockcress (*Arabis lyrata* subsp. *petraea*) and Lesser Whitethroat was seen. We also found a longhorn beetle identified as Small Poplar Borer: there is a newly described subspecies which only eats Downy Willow, which the beetle was on. We returned by another route, back over the dam.

We met later to update our lists, with a Crane in the field, as well as House Martins, Swifts, Swallows, White Wagtails and Fieldfare behind the hotel. Stuart and Viv, who had explored locally, reported Wheatear, Bullfinch, and Geranium Argus butterflies on the Wood Crane's-bill. Sun and showers gave a beautiful rainbow as we enjoyed another excellent dinner.

Day 4 Tuesday 4th July

Norway in a Nutshell': Gudvangen - Flåm - Myrdal - Gol

Today we went on the 'Norway in a nutshell' excursion. After breakfast at 7am, during which we saw the Crane and a Mountain Hare, we left at 8am for Martin to drive us to Gudvangen. Two Cranes were close to the road as

we left. We drove up Hemsedal, seeing more Cranes, a couple of Grey Herons and flowering Marsh Marigold along the river. The road climbed at the top of the valley, with verges gold with Bird's-foot Trefoil (Lotus corniculatus), and Roseroot (Rhodiola rosea) on rocky cliffs with lovely scenery to the pass at 1135 metres. We then dropped down to the Laerdal valley, taking the old road along the river to Borgund, where we stopped briefly to look at the magnificent, old stave-church, which dates from around 1180 and it is one of the most complete remaining examples of these medieval buildings. A female Pied Flycatcher was behind the visitor centre, and Andreas also saw Twite. We stopped further down the road to admire Pyramidal Saxifrage (Saxifraga cotyledon) with its large flower spike, also seeing Oblong Woodsia (Woodsia ilvensis), Common Polypody (Polypodium vulgare) and Common Burnet-saxifrage (Pimpinella saxifraga). The last part of the drive took us through several long road tunnels, including the longest in Europe at nearly 25 kilometres.

We arrived in Gudvangen, immediately boarding the ferry for our midday sailing, which was rather busy. The electric boat is almost silent, and we enjoyed the beautiful scenery of the UNESCO-designated Nærøyfjorden, a branch of Sognefjord, accompanied by Common Gulls and seeing Black Guillemots on the water and in flight. We could also see a lot of flowering Pyramidal Saxifrage on damp cliffs and some dramatic waterfalls. A herd of goats was grazing on the sheer fjord edges. We then turned into Aurlandsfjorden, reaching the busy village of Flåm at 2pm. Here we enjoyed hot drinks and finished our picnics, before exploring independently. Some enjoyed the scenery and people-watched or went shopping and watched the view and people, while others wandered round the back of the bay. A Common Gull chick was on a rock by a small pool bordered by Meadowsweet (Filipendula ulmaria), Purple Loose-strife (Lythrum salicaria) and Common Skullcap (Scutellaria galericulata), and Oystercatchers and Blue Tit were also seen.

We met again at 3.30pm in preparation for our journey on the famous Flåm Railway. Completed in 1940, this unique railway took 20 years to build, and climbs 864 metres in 20 kilometres to Myrdal, with lovely views. When we paused at the half-way point to allow the descending train to pass, we noted Ostrich Fern (*Onoclea*, formerly *Matteuccia*, *struthiopteris*), native here. We also stopped at the mighty Kjossfossen: the Kjoss Waterfall, in spate, with clouds of spray blowing over. Plenty of Roseroot (*Rhodiola rosea*) was growing on the cliffs here. It was rather grey and drizzly at Myrdal, but we could see down the valley as we waited for the mainline train from Bergen to Oslo. The train was comfortable and efficient, the sun came out, and we were able to enjoy the stunning scenery in the evening light, the many lakes shining blue. From Finse, the highest station on the route at 1222 metres and with no public road access, we could see the Hardanger Glacier, as well as other snow patches in the mountains. The train gradually dropped along the length of Hallingdal, with lovely views of the river and Mute Swan and Common Sandpiper being seen.

We arrived at Gol at 7.30pm, being met by Martin, and were back in Kamben by 8pm, going pretty well straight to dinner. The sun was on two Cranes in the field, and we looked at them through the scope, having some excellent views. Afterwards a Twite perched briefly on the balcony outside the lounge. Andreas, out for an evening walk, saw a Yellowhammer and, excitingly, flushed a female Capercaillie from a tree not far from the hotel.

#### Day 5

### Wednesday 5th July

#### Solseter to Gol

This morning dawned grey but not wet and early sightings included Bullfinch, Greenfinch Siskin and Fieldfare. After another delicious breakfast and with picnics made, we left at 9am, Martin driving us to the little settlement

of Solseter, half-way between our hotel and Gol. The verges here were bright with Heartsease pansies (*Viola tricolor*) and several plants of the primitive fern Moonwort (*Botrychium lunaria*) were found.

We took the path down to the town of Gol, which crosses the main road a couple of times. The early part of the route was through more semi-open forest, and we looked at now-familiar species. There was a fine stand of Large-leaved Lupins (*Lupinus polyphyllus*) and we had good views of a Willow Warbler, as well as looking at the various galls on Aspen leaves (*Populus tremula*). We then met some very wet woodland but managed to cross the stream safely and dropped down again to the road. In the layby we looked at Melancholy Thistle (*Cirsium heterophyllum*), Marsh Bedstraw (*Galium uliginosum*) and sedges including Black, Prickly and Pale (*Carex nigra*, *C. muricata* and *C. pallescens*). The next section held carpets of very fine Common Spotted Orchids (*Dactylorhiza fuchsii*), Common Wintergreen (*Pyrola minor*) and One-flowered Wintergreen (*Moneses uniflora*). We emerged into an open area where tree-felling had taken place, leaving a few standing Scots Pine (*Pinus sylvestris*), where we were delighted to see a pair of Black Woodpeckers.

The habitat changed to a series of meadows and track verges with species such as Caraway (Carum carn), Meadowsweet (Filipendula ulmaria), Meadow Vetchling (Lathyrus pratensis) and more flowering Northern Wolf'sbane. A family group of Whinchats were flitting between posts and butterflies included a magnificent male Scarce Copper, Mazarine Blue, and Green-veined White, with a heavy dusting of grey on the veins on the wing undersides. Two beetles photographed were the Longhorn Alosterna tabacicolor (common in the UK), and Dead-nettle Leaf Beetle. A little further on, Common Blue, Common White Wave and Argent & Sable were added, and we found Lesser Butterfly Orchid (Platanthera bifolia). We had lunch in an open area along with Dark Green Fritillary, Red Admiral and Small Tortoiseshell butterflies and a Roe Deer ran across the path. Common Hawkers were patrolling and occasionally perching, and we enjoyed some ripe Wild Strawberries (Fragaria vesca), as well as flowering Common Tansy (Tanacetum vulgare), and added Green-underside Blues to our butterfly list and a Brassy Tortrix moth. We also found some Sticky Catchfly (Viscaria vulgaris). A party of Parrot Crossbills were in a pine tree on the edge of a clearing.

The last section of the path narrowed, with mossy boulders and we eventually found a flowering spike of Creeping Lady's-tresses (*Goodyera repens*) and added some Solomon's-seal (*Polygonatum multiflorum*) in a clearing. The path emerged on the outskirts of Gol, where we saw more Scarce Coppers and a Red Admiral. From here we walked into the town, where we enjoyed a hot drink and the chance for a little shopping. There was a heavy but shortlived shower while we waited to be met by the hotel minibus.

We met before dinner to discuss the day, with Stuart and Val, who had again explored more locally, reporting a flock of eight Cranes and later two pairs flying low overhead and also heard. A fairly distant lake held five Curlew as well. Over another excellent meal, we saw a Roe Deer in the bottom field, as well as a Crane and Swifts hawking over the meadow.

Day 6

Thursday 6th July

Skutuset – Syningen – Kamben; Storefjell

We woke to a grey morning and a mainly wet day, so the plan was to walk locally in the morning with our picnic in the dry of the hotel. We left at 9.30am and were dropped by the small hamlet of Skutuset that we had touched on the first day. Mistle Thrush was seen, as well as parties of Siskins. We walked up the road in light rain, and then

set off in a northerly direction, along the track leading to Syningen, a small hill which is a local viewpoint at 1031 metres above sea level. A broadwalk made for easier crossing of boggy areas. Our path rose towards the hill, and we paused to look at some rocks, where we found the tiny, hairy Oblong Woodsia, and Annual Stonecrop (Sedum annuum), with its reddish leaves and yellow flowers. We then made our way to the summit, where plants included plenty of Alpine Bearberry (Arctuous alpina) with berries on the north face, Dwarf Willow (Salix herbacea) and Black Alpine Sedge (Carex atrata). The rain had eased but the wind was cold, so we moved down to where it was more sheltered. A Redwing was seen, and we noted Round-leaved Wintergreen (Pyrola rotundifolia) and later patches of Common Wintergreen (Pyrola minor). There were a few Frog Orchids (Dactylorhiza viridis) in the grass, and a Silverstudded Blue was photographed, hanging on a grass leaf.

The path ran through partially felled, open scrub and woodland, emerging onto a gravelled road edged by ditches where we found Starry Saxifrage (*Micranthes stellaris*) and Yellow Saxifrage (*Saxifraga aizoides*), the latter still in bud. We noted the many building plots and new cabins in this area. We were unsure whether we would be permitted to walk on the road which led to Storefjell, as it was closed for a cycle race, but were pleased to discover we were allowed to proceed with caution (it would have been a long wait or diversion!). Roadside bogs held Early Marsh Orchid (*Dactylorhiza incarnata* subsp. *pulchella*) and Scottish Asphodel (*Tofieldia pusilla*), while the ditches held Marsh Lousewort (*Pedicularis palustris*) and Common Butterwort (*Pinguicula vulgaris*), as well as several plants of Grass-of-Parnassus (*Parnassia palustris*). In a rocky area by a stream, we added both Alpine Fleabane and Dwarf Fleabane (*Erigeron borealis* and *E. uniflorus*), Rock Speedwell (*Veronica fruticans*) and Alpine Milk-vetch (*Astragalus alpinus*) with purple-and-white flowers.

We then took the track leading up to the hotel, seeing Bullfinch, Siskins feeding on Dandelion seedheads, large numbers of young Starlings, White Wagtails and Andreas spotted a Common Redstart. The rain then became extremely heavy, and we were glad that it was not too far back to the hotel. When we had dried of a little, we met for lunch in the lounge, with Elin providing some welcome hot drinks and delicious, freshly cooked Waffles. As the rain continued, most had a quiet afternoon. Later on, it cleared, and a couple of the group went with Jessica up the track towards Storefjell. Two distant Mute Swans gleamed white in the afternoon sun, and a Yellowhammer sang from a barn roof. The rain-washed views were magnificent. We took a path round a small lake, noting Willow Ptarmigan droppings and Fox scat. A Lesser Whitethroat was seen, and a new plant was Hare's-foot Clubmoss, also called One-cone Clubmoss or Arctic Stag's-horn Clubmoss (*Lycopodium lagopus*). This has only fairly recently been recognised as a separate species (Stag's-horn Clubmoss usually has pairs of cones).

Round the hotel, a Spotted Flycatcher had been seen and the Fieldfare youngsters had fledged from the nest in the tree behind the some of the rooms. As we went in to dinner, a young Elk was at the bottom of the field behind the hotel, and we all got good but distant views in the evening light. Later on, a Roe Deer was seen again.

Day 7 Friday 7th July

Grønlie - Krististølen - Gomobu - Vasetstølen

Today we travelled north, out to Grønlie, the furthest of any of our local daily excursions. Due to the logistics with other groups, we had an early start, with breakfast at 7am and leaving at 8am. The Crane was in the hotel field, and we saw three others in a field nearby. We reached Grønlie, where we were dropped in the small viewpoint car park about 9am, enjoying the views of snowy mountains in the distance. We set off along a track towards the hamlet of Krististølen, with early sightings being Meadow Pipit, Northern Wheatear and a Bluethroat which showed briefly

but well. We then took a path over a rocky outcrop, finding some droppings of Willow Ptarmigan, patches of Trailing Azalea (*Kalmia procumbens*), again mainly over, Mountain Heath and Alpine Clubmoss (*Lycopodium*, formerly *Diphasiastrum*, *alpinum*), before we dropped down onto the sub-arctic heath. As well as more Meadow Pipits, we saw a Reed Bunting, as well as a resting Small Pearl-bordered Fritillary. The heath was dominated by Dwarf Birch in the drier areas. Wetter areas were dominated by Common Cotton-grass (*Eriophorum angustifolium*) with some Hare's-tail and Scheuzcher's Cotton-grasses (*E. vaginatum* and *E. scheuchzeri*) and *Sphagnum* mosses. The path passed a large lake, with Marsh Lousewort (*Pedicularis palustris*) in very boggy areas, and more Lapland Lousewort (*P. lapponicum*) in slightly drier habitat. Due to the recent wet weather, parts of the path were decidedly squelchy!

A real delight was a male Hen Harrier, hunting over the heath and bog; possibly a first for this trip; we had excellent and extended views of this iconic bird. Today more butterflies were on the wing, and we added Cranberry Blue, Mazarine Blue and Pearl-bordered Fritillary, along with a Scotch Burnet moth with a very hairy body. A small darkgrey and cream moth, brilliantly camouflaged on a Dwarf Birch twig was the Tortricid *Phiaris bipunctana*, the larval foodplants of which are *Vaccinium* species. Common Hawker dragonflies were on the wing too, and as we approached a small hill, we encountered numbers of Brilliant Emeralds. Here we saw a Willow Warbler and added Smooth Ground Beetle, another moorland species. As we dropped down towards a stream, we came across a patch of Alpine Bartsia (*Bartsia alpina*) and the pretty Yellow Wood Violet (*Viola biflora*). We had our picnic by the stream, enjoying this delightful location and with some paddling in the chilly water.

As we neared the edge of the heath at Gomubu we saw a Moorland Clouded Yellow butterfly. We walked through the settlement, with Geranium Argus butterflies on the Wood Crane's-bill (*Geranium sylvaticum*) and Heath Fragrant Orchids (*Gymnadenia borealis*) on the verge. We then took a footpath down to the lake at Vasetstølen. On a streamside rock we found a patch of Drooping Saxifrage (*Saxifraga cernua*), nicely in flower, along with more Alpine Speedwell (*Veronica alpina*). A female Pied Flycatcher was feeding round a summer house. At the lakeside we found a good number of plants of the large lousewort Moor-King (*Pedicularis sceptrum-carolinum*), sadly this year all still in bud, as well as some flowering Cuckooflower (*Cardamine pratensis*). The lake held a couple of Tufted Ducks, as a Crane soared high overhead.

We had some time before we would be collected so, after refreshments, we explored the lakeside further, individually or in small groups, with sightings including hybrid Downy x Dwarf Birch (*Betula x intermedia*), more Cranberry and Bog Rosemary, a family of Mallard with ducklings and Tree Sparrow. Small Heath and Large Wall Brown were among the butterflies. Martin arrived to collect us at 5.15pm and drove us back by another moorland route with magnificent views. After updating our lists, we enjoyed our final excellent dinner together. Afterwards one of the waiters, Stefan, entertained us on the piano: a lovely conclusion to the day.

### Day 8

## Saturday 8th July

#### Kamben to Gardermoen

When those flying to Heathrow went to check in on Friday evening, we discovered that our flight had been cancelled and we were rebooked 24 hours later, on Sunday evening. The Manchester flight was still scheduled, and so we travelled to Oslo Airport as planned. Our last morning dawned fine and sunny, and birds noted included Redpoll, Twite, Yellowhammer and Crane. We had breakfast at 8am and were ready to leave at 10.30am, saying thanks and goodbye to Elin. The hotel buses were in use elsewhere, so we travelled by coach, driven by Ingemar and taking the route via Valdres and Aurdal, with more wonderful scenery to enjoy. We stopped at midday for a break at Nes i Årdal, most of us sitting on rocks by the river for our picnics. A lovely male Yellowhammer posed

nearby, and we also saw Whinchat, Reed Bunting, Great Tit and Canada Geese. We continued along Lake Sperillen, where we glimpsed three Black-throated Divers on the water.

We arrived at the airport at 2.15pm, thanking Ingemar and saying our farewells to Stuart and Val who had a late-evening flight to Manchester (which was diverted due to UK thunderstorms), and Andreas who was staying on in Oslo. The rest of us located the BA agent who was very helpful and quickly produced vouchers for a hotel, food and transfers. The hotel was a short bus journey away, and we discovered that it backed onto an area of forest with a lake and was a Landscape Protection Area. We spent the rest of the afternoon relaxing and exploring, with sightings including Red Squirrel and Nuthatch, with Arctic Tern, Great Crested Grebe and Tufted Ducks on the lake, and signs of Beaver on the margin. There were many ripe Bilberries and other plants included Lily-of-the-Valley (Convallaria majus). We met up later for a tasty buffet dinner.

Day 9 Sunday 9th July

#### Gardermoen

We decided to stay local for our unplanned extra day, meeting for breakfast at 8am and then checking out of our rooms at 10am, leaving our luggage in the hotel store. The weather was hot and sunny, as we followed the paths from the hotel through the forest to the lake. From an open grassy area surrounded by trees, we saw a pair of Bullfinches, Spotted Flycatchers and a juvenile Mistle Thrush. Near the lake, Blue and Great Tits and a juvenile Reed Bunting were round a feeder. The lake marginal flora included White Water-lily (*Nymphaea alba*), Yellow Water-lily (*Nuphar lutea*), Yellow Iris (*Iris pseudacorus*) and Common Club-rush (*Schoenoplectus lacustris*), over which hawked Downy Emerald and Brown Hawker dragonflies. A group of seven Goldeneye were asleep on the water, which also held Coot and Great Crested Grebe families. A smaller lake felt very remote, with large numbers of the same species of dragonflies and a Blue Damselfly. An extensive marginal plant was Water Arum (*Calla palustris*), with a few remaining white spathes, and we noted a Brown China-mark moth, which has an aquatic larva. Siskins were overhead and we noted a number of dead Smooth Ground Beetles on the path. We ate our picnic in the shade before returning to the hotel to collect our bags and head back to the airport.







Lapland Lousewort

#### Receive our e-newsletter

Join the Naturetrek e-mailing list and be the first to hear about new tours, additional departures and new dates, tour reports and special offers. Visit <a href="https://www.naturetrek.co.uk">www.naturetrek.co.uk</a> to sign up.

#### Social Media

We're social! Follow us on Facebook, Twitter and Instagram and be the first to hear about the launch of new tours, offers and exciting sightings and photos from our recently returned holidays.



www.facebook.com/naturetrekwildlifeholidays

www.twitter.com/naturetrektours

www.instagram.com/naturetrek wildlife holidays

### **Species lists**

#### **Plants**

Note: This list follows the nomenclature and taxonomic amendments based on DNA analysis made by the APG IV working group and supported by the Royal Botanic Gardens, Kew and the Missouri Botanic Garden, among others. Later updates follow Kew's Plants of the World Online

| Common name                         | Scientific name                   | trip | Location             |
|-------------------------------------|-----------------------------------|------|----------------------|
| Lycopodiaceae                       | Clubmoss Family                   |      |                      |
| Lycopodium annotinum                | Interrupted Clubmoss              | 2    | Hallingen - Brautemo |
| Lycopodium lagopus                  | One-coned / Arctic Stag's-horn C. | 6    | Storefjell           |
| Lycopodium alpinum                  | Alpine Clubmoss                   | 6    | Syningen             |
| Equisetaceae                        | Horsetail Family                  |      |                      |
| Equisetum fluviatile                | Water Horsetail                   | 7    | Vasetstølen          |
| Equisetum palustre                  | Marsh Horsetail                   | 2    | Hallingen - Brautemo |
| Equisetum sylvaticum                | Wood Horsetail                    | 2    | Hallingen - Brautemo |
| Equisetum pratense                  | Shady Horsetail                   | 2    | Hallingen - Brautemo |
| Equisetum arvense                   | Common Horsetail                  | 5    | Solseter - Gol       |
| Equisetum scirpoides                | Dwarf Horsetail                   | 3    | Skogshorn car park   |
| Ophioglossaceae                     | Adder's-tongue family             |      |                      |
| Botrychium lunaria                  | Moonwort                          | 2    | Hallingen - Brautemo |
| Cystopteridaceae                    | Bladder-fern Family               |      |                      |
| Gymnocarpium dryopteris             | Oak Fern                          | 2    | Hallingen - Brautemo |
| Aspleniaceae                        | Spleenwort Family                 |      |                      |
| Onoclea (Matteuccia) struthiopteris | Ostrich Fern                      | 4    | Flåm - Myrdal        |
| Woodsiaceae                         | Woodsia Family                    |      |                      |
| Woodsia ilvensis                    | Oblong Woodsia                    | 4    | Borgund Old Road     |
| Athyriaceae                         | Lady-fern Family                  |      |                      |

| Common name                           | Scientific name          | trip | Location                    |
|---------------------------------------|--------------------------|------|-----------------------------|
| Athyrium distentifolium               | Alpine Lady-fern         | 3    | Skogshorn                   |
| Athyrium filix-femina                 | Lady-fern                | 6    | Skutuset - Kamben           |
| Thelypteridaceae                      | Marsh Fern Family        |      |                             |
| Phegopteris connectilis               | Beech Fern               | 3    | Skogshorn                   |
| Dryopteridaceae                       | Buckler-fern Family      |      |                             |
| Dryopteris expansa                    | Northern Buckler-fern    | 5    | Solseter - Gol              |
| Polypodiaceae                         | Polypody Family          |      |                             |
| Polypodium vulgare agg.               | Common Polypody          | 4    | Borgund Old Road            |
| Pinaceae                              | Pine Family              |      |                             |
| Picea abies subsp. abies              | Norway Spruce            | 2    | Hallingen - Brautemo        |
| Pinus sylvestris                      | Scots Pine               | 4    | Norway in a Nutshell        |
| Cupressaceae                          | Juniper Family           |      |                             |
| Juniperus communis                    | Juniper                  | 2    | Hallingen - Brautemo        |
| Juniperus communis subsp. alpina      | Dwarf Juniper            | 4    | Kamben - Borgund, high alt. |
| Nymphaeaceae                          | Water-lily Family        |      | - 3                         |
| Nymphaea alba                         | White Water-lily         | 9    | Gardermoen                  |
| Nuphar lutea                          | Yellow Water-lily        | 9    | Gardermoen                  |
| Araceae                               | Arum Family              |      |                             |
| Calla Palustris                       | Water Arum               | 9    | Gardermoen                  |
| Tofieldiaceae                         | Scottish Asphodel Family |      |                             |
| Tofieldia pusilla                     | Scottish Asphodel        | 2    | Hallingen - Brautemo        |
| Juncaginaceae                         | Arrowgrass Family        |      | 5                           |
| Triglochin palustris                  | Marsh Arrowgrass         | 2    | Hallingen - Brautemo        |
| Melanthiaceae                         | Herb-Paris Family        |      | -                           |
| Paris quadrifolia                     | Herb-Paris               | 2    | Hallingen - Brautemo        |
| Orchidaceae                           | Orchid Family            |      | -                           |
| Neottia cordata                       | Lesser Twayblade         | 2    | Hallingen - Brautemo        |
| Goodyeara repens                      | Creeping Ladies Tresses  | 5    | Solseter - Gol              |
| Corallorhiza trifida                  | Coralroot Orchid         | 2    | Hallingen - Brautemo        |
| Platanthera bifolia                   | Lesser Butterfly Orchid  | 5    | Solseter - Gol              |
| Gymnadenia borealis                   | Heath Fragrant Orchid    | 2    | Hallingen - Brautemo        |
| Dactylorhiza viridis                  | Frog Orchid              | 2    | Hallingen - Brautemo        |
| Dactylorhiza incarnata ssp. pulchella | Early Marsh Orchid       | 2    | Hallingen - Brautemo        |
| Dactylorhiza fuchsii                  | Common Spotted Orchid    | 5    | Solseter - Gol              |
| Dactylorhiza maculata                 | Heath Spotted Orchid     | 3    | Skogshorn                   |
| Iridaceae                             | Iris Family              |      |                             |
| Iris pseudacorus                      | Yellow Flag              | 9    | Gardermoen                  |
| Asparagaceae                          | Asparagus Family         |      |                             |
| Convallaria majalis                   | Lily-of-the-Valley       | 9    | Gardermoen                  |
| Maianthemum bifolium                  | May Lily                 | 2    | Hallingen - Brautemo        |
| Polygonatum verticillatum             | Whorled Solomon's-seal   | 2    | Hallingen - Brautemo        |
| Polygonatum multiflorum               | Solomon's-seal           | 5    | Solseter - Gol              |
| Juncaceae                             | Rush Family              |      |                             |
| Oreojuncus trifidus                   | Three-leaved Rush        | 3    | Skogshorn                   |
| Juncus filiformis                     | Thread Rush              | 3    | Skogshorn                   |
| Juncus bufonius                       | Toad Rush                |      | =                           |
| Juncus alpinoarticulatus              | Alpine Rush              |      |                             |
| Juncus articulatus                    | Jointed Rush             |      |                             |
| Juncus biglumis                       | Two-flowered Rush        |      |                             |

| Common name              | Scientific name           | trip | Location             |
|--------------------------|---------------------------|------|----------------------|
| Juncus triglumis         | Three-flowered rush       |      |                      |
| Juncus castaneus         | Chestnut Rush             |      |                      |
| Luzula multiflora agg.   | Heath Woodrush            | 6    | Skutuset - Kamben    |
| Luzula spicata           | Spiked Woodrush           |      |                      |
| Luzula sylvatica         | Great Woodrush            | 2    | Hallingen - Brautemo |
| Luzula pilosa            | Hairy Woodrush            |      |                      |
| Cyperaceae               | Sedge Family              |      |                      |
| Eriophorum angustifolium | Common Cotton-grass       | 2    | Hallingen - Brautemo |
| Eriophorum vaginatum     | Hare's-tail Cotton-grass  | 2    | Hallingen - Brautemo |
| Eriophorum scheuchzeri   | Scheuchzer's Cotton-grass | 3    | Skogshorn            |
| Trichophorum alpinum     | Cotton Deergrass          | 6    | Skutuset - Kamben    |
| Trichophorum cespitosum  | Northern Deergrass        | 2    | Hallingen - Brautemo |
| Schoenoplectus lacustris | Common Club-rush          | 9    | Gardermoen           |
| Schoenus nigricans       | Black Bog-rush            | 6    | Skutuset - Kamben    |
| Carex muricata           | Prickly Sedge             | 5    | Solseter - Gol       |
| Carex canescens          | White Sedge               | 2    | Hallingen - Brautemo |
| Carex panicea            | Carnation Sedge           | 2    | Hallingen - Brautemo |
| Carex demissa            | Common Yellow Sedge       | 2    | Hallingen - Brautemo |
| Carex pallescens         | Pale Sedge                | 5    | Solseter - Gol       |
| Carex atrata             | Black Alpine Sedge        | 6    | Syningen             |
| Carex nigra              | Common Sedge              | 5    | Solseter - Gol       |
| Carex pauciflora         | Few-flowered Sedge        | 3    | Skogshorn            |
| Poaceae                  | Grass Family              |      |                      |
| Melica nutans            | Mountain Melick           | 5    | Solseter - Gol       |
| Agrostis capillaris      | Common Bent               | 5    | Solseter - Gol       |
| Poa nemoralis            | Wood Meadow-grass         | 2    | Hallingen - Brautemo |
| Phleum pratense          | Timothy                   | 2    | Kamben               |
| Phleum alpinum           | Alpine Cat's-tail         | 3    | Skogshorn            |
| Avenella flexuosa        | Wavy Hair-grass           | 5    | Solseter - Gol       |
| Deschampsia cespitosa    | Tufted Hair-grass         | 5    | Solseter - Gol       |
| Festuca rubra agg        | Red Fescue                | 3    | Skogshorn            |
| Festuca ovina            | Common Sheep's Fescue     | 3    | Skogshorn            |
| Dactylis glomerata       | Cock's-foot               | 5    | Solseter - Gol       |
| Ranunculaceae            | Buttercup Family          |      |                      |
| Thalictrum alpinum       | Alpine Meadow-rue         | 2    | Hallingen - Brautemo |
| Trollius europaeus       | Globeflower               | 2    | Hallingen - Brautemo |
| Aconitum septentrionale  | Northern Wolf's-bane      | 2    | Hallingen - Brautemo |
| Caltha palustris         | Marsh-marigold            | 4    | River banks          |
| Ranunculus acris         | Meadow Buttercup          | 2    | Hallingen - Brautemo |
| Ranunculus platanifolius | Plane-leaved Buttercup    | 2    | Hallingen - Brautemo |
| Grossulariaceae          | Gooseberry Family         |      | -                    |
| Ribes rubrum             | Red Currant               | 2    | Hallingen - Brautemo |
| Saxifragaceae            | Saxifrage Family          |      |                      |
| Micranthes stellaris     | Starry Saxifrage          | 2    | Hallingen - Brautemo |
| Saxifraga cotyledon      | Pyramidal Saxifrage       | 4    | Borgund Old Road     |
| Saxifraga aizoides       | Yellow Mountain Saxifrage | 6    | Skutuset - Kamben    |
| Saxifraga cernua         | Drooping Saxiifrage       | 7    | Near Vasetstølen     |
| Crassulaceae             | Stonecrop Family          |      |                      |
| Sedum acre               | Biting Stonecrop          | 2    | Hallingen - Brautemo |
|                          | <u> </u>                  |      |                      |

| Common name                 | Scientific name           | trip     | Location              |
|-----------------------------|---------------------------|----------|-----------------------|
| Sedum villosum              | Hairy Stonecrop           | 2        | Hallingen - Brautemo  |
| Sedum annuum                | Annual Stonecrop          | 6        | Skutuset - Kamben     |
| Hylotelephium maximum       | Large Orpine              | 5        | Solseter - Gol        |
| Rhodiola rosea              | Roseroot                  | 4        | Flåm - Myrdal         |
| Droseraceae                 | Sundew Family             |          |                       |
| Drosera rotundifolia        | Common Sundew             | 3        | Skogshorn             |
| Fabaceae                    | Pea Family                |          |                       |
| Lupinus polyphyllus         | Large-leaved Lupin        | 1        | Roadsides             |
| Anthyllis vulneraria agg.   | Kidney-vetch              | 7        | Grønlie - Vasetstølen |
| Lotus corniculatus          | Bird's-foot Trefoil       | 3        | Skogshorn             |
| Vicia cracca                | Tufted Vetch              | 5        | Solseter - Gol        |
| Vicia sepium                | Bush Vetch                | 7        | Vasetstølen           |
| Vicia sylvatica             | Wood Vetch                | 5        | Solseter - Gol        |
| Lathyrus pratensis          | Meadow Vetchling          | 5        | Solseter - Gol        |
| Trifolium repens            | White Clover              | 2        | Hallingen - Brautemo  |
| Trifolium pratense          | Red Clover                | 2        | Hallingen - Brautemo  |
| Astragalus alpinus          | Alpine Milk-vetch         | 6        | Storefjell            |
| Rosaceae                    | Rose Family               |          |                       |
| Filipendula ulmaria         | Meadowsweet               | 1        | Roadsides             |
| Sorbus aucuparia            | Common Rowan              | 2        | Hallingen - Brautemo  |
| Amelanchier ovalis          | Snowy Mespilus            | 5        | Solseter - Gol        |
| Rubus chamaemorus           | Cloudberry                | 2        | Hallingen - Brautemo  |
| Rubus idaeus                | Raspberry                 | 2        | Hallingen - Brautemo  |
| Rubus saxatilis             | Stone Bramble             | 2        | Hallingen - Brautemo  |
| Potentilla argentea         | Hoary Cinquefoil          | 5        | Solseter - Gol        |
| Potentilla norvegica        | Ternate-leaved Cinquefoil | 2        | Hallingen - Brautemo  |
| Potentilla erecta           | Tormentil                 | 2        | Hallingen - Brautemo  |
| Comarum palustre            | Marsh Cinquefoil          | 5        | Solseter - Gol        |
| Sibbaldia procumbens        | Procumbent Sibbaldia      | 7        | Grønlie - Vasetstølen |
| Fragaria vesca              | Wild Strawberry           | 2        | Hallingen - Brautemo  |
| Geum rivale                 | Water Avens               | 2        | Hallingen - Brautemo  |
| Geum urbanum                | Wood Avens                | 4        | Flåm                  |
| Alchemilla alpina           | Alpine Lady's-mantle      | 2        | Hallingen - Brautemo  |
| Alchemilla glabra           | Smooth Lady's-mantle      | 6        | Skutuset - Kamben     |
| Ulmaceae                    | Elm Family                |          |                       |
| Ulmus glabra                | Wych Elm                  | 4        | Borgund Old Road      |
| Urticacae                   | Nettle Family             |          |                       |
| Urtica dioica subsp. urtica | Common Nettle             | 2        | Hallingen - Brautemo  |
| Betulaceae                  | Birch Family              |          | 3                     |
| Betula pendula              | Silver Birch              | 4        | Roadsides in west     |
| Betula pubescens            | Downy Birch               | 2        | Hallingen - Brautemo  |
| Betula x intermedia         | Downy x Dwarf Birch       | 7        | Vasetstølen           |
| Betula nana                 | Dwarf Birch               | 2        | Hallingen - Brautemo  |
| Alnus glutinosa             | Alder                     | 4        | Norway in a Nutshell  |
| Corylus avellana            | Hazel                     | 4        | Flåm - Myrdal         |
| Celastraceae                | Spindle Family            | <u> </u> |                       |
| Parnassia palustris         | Grass-of-Parnassus        | 6        | Skutuset - Kamben     |
| Oxalidaceae                 | Wood-sorrel Family        |          |                       |
| Oxalis acetosella           | Wood-sorrel               | 5        | Solseter - Gol        |

| Common name                | Scientific name               | trip | Location              |
|----------------------------|-------------------------------|------|-----------------------|
| Hypericaeae                | St. John's-wort Family        |      |                       |
| Hypericum tetrapterum      | Square-stalked St.John's-wort | 2    | Hallingen - Brautemo  |
| Violaceae                  | Violet Family                 |      |                       |
| Viola canina ssp ruppii    | Mountain Heath Dog Violet     | 2    | Hallingen - Brautemo  |
| Viola palustris            | Marsh Violet                  | 3    | Skogshorn             |
| Viola epipsila             | Northern Marsh Violet         | 2    | Hallingen - Brautemo  |
| Viola biflora              | Yellow Wood Violet            | 7    | Grønlie - Vasetstølen |
| Viola tricolor agg.        | Heartsease                    | 2    | Hallingen - Brautemo  |
| Salicaceae                 | Willow & Poplar Family        |      |                       |
| Populus tremula            | European Aspen                | 5    | Solseter - Gol        |
| Salix reticulata           | Net-leaved Willow             | 6    | Syningen              |
| Salix herbacea             | Dwarf Willow                  | 3    | Skogshorn             |
| Salix lanata               | Woolly Willow                 | 3    | Skogshorn             |
| Salix starkeana            | a Mountain Willow             | 2    | Hallingen - Brautemo  |
| Salix lapponum             | Downy Willow                  | 2    | Hallingen - Brautemo  |
| Geraniaceae                | Geranium Family               |      |                       |
| Geranium sylvaticum        | Wood Crane's-bill             | 2    | Hallingen - Brautemo  |
| Onagraceae                 | Willowherb Family             |      |                       |
| Epilobium hirsutum         | Great Willowherb              | 1    | Roadsides             |
| Lythraceae                 | Purple-loosestrife Family     |      |                       |
| Lythrum salicaria          | Purple-loosestrife            | 4    | Flåm                  |
| Brassicaceae               | Cabbage Family                |      |                       |
| Noccaea coerulescens       | Alpine Penny-cress            | 3    | Skogshorn car park    |
| Thlaspi arvense            | Field Penny-cress             | 5    | Solseter - Gol        |
| Arabis lyrata ssp. petraea | Northern Rock-cress           | 3    | Skogshorn             |
| Capsella bursa-pastoris    | Shepherd's-purse              | 5    | Solseter - Gol        |
| Turritis glabra            | Tower Mustard                 | 5    | Solseter - Gol        |
| Barbarea vulgaris          | Common Winter-cress           | 6    | Skutuset - Kamben     |
| Cardamine amara            | Large Bitter-cress            | 2    | Hallingen - Brautemo  |
| Cardamine pratensis        | Cuckooflower                  | 7    | Grønlie - Vasetstølen |
| Polygonaceae               | Knotweed Family               |      |                       |
| Bistorta vivipara          | Alpine Bistort                | 2    | Hallingen - Brautemo  |
| Oxyria digyna              | Mountain Sorrel               | 4    | Flåm - Myrdal         |
| Rumex acetosella           | Sheep's Sorrel                | 2    | Hallingen - Brautemo  |
| Rumex acetosa              | Common Sorrel                 | 2    | Hallingen - Brautemo  |
| Rumex longifolius          | Northern Dock                 | 5    | Solseter - Gol        |
| Caryophyllaceae            | Pink Family                   |      |                       |
| Spergularia rubra          | Sand Spurrey                  | 5    | Solseter - Gol        |
| Sagina procumbens          | Procumbent Pearlwort          | 5    | Solseter - Gol        |
| Stellaria alsine           | Bog Stitchwort                | 7    | Grønlie - Vasetstølen |
| Stellaria graminea         | Lesser Stitchwort             | 5    | Solseter - Gol        |
| Dichodon cerastoides       | Starwort Mouse-ear            | 3    | Skogshorn             |
| Viscaria viscosa           | Sticky Catchfly               | 5    | Solseter - Gol        |
| Silene vulgaris            | Bladder Campion               | 2    | Hallingen - Brautemo  |
| Silene dioica              | Red Campion                   | 2    | Hallingen - Brautemo  |
| Atocion rupestre           | Rock Campion                  | 3    | Skogshorn             |
| Amaranthaceae              | Pigweed Family                |      |                       |
| Chenopodium album          | Fat-hen                       | 5    | Solseter - Gol        |
| Primulaceae                | Primrose Family               |      |                       |

| Common name                    | Scientific name          | trip | Location             |
|--------------------------------|--------------------------|------|----------------------|
| Lysimachia europaea            | Chickweed Wintergreen    | 2    | Hallingen - Brautemo |
| Ericaceae                      | Heath family             |      |                      |
| Pyrola minor                   | Common Wintergreen       | 2    | Hallingen - Brautemo |
| Pyrola rotundifolia agg.       | Round-leaved Wintergreen | 2    | Hallingen - Brautemo |
| Moneses uniflora               | One-flowered Wintergreen | 2    | Hallingen - Brautemo |
| Calluna vulgaris               | Heather                  | 2    | Hallingen - Brautemo |
| Kalmia procumbens              | Trailing Azalea          | 3    | Skogshorn            |
| Phyllodoce caerulea            | Blue or Mountain Heath   | 2    | Hallingen - Brautemo |
| Arctostaphyllos uvaursi        | Bearberry                | 5    | Solseter - Gol       |
| Arctous alpina                 | Alpine Bearberry         | 3    | Skogshorn            |
| Andromeda polifolia            | Bog Rosemary             | 2    | Hallingen - Brautemo |
| Vaccinium oxycoccos            | Bog Cranberry            | 2    | Hallingen - Brautemo |
| Vaccinium vitis-idaea          | Cowberry                 | 2    | Hallingen - Brautemo |
| Vaccinium uliginosum           | Bog Bilberry             | 2    | Hallingen - Brautemo |
| Vaccinium myrtillus            | Common Bilberry          | 2    | Hallingen - Brautemo |
| Empetrum nigrum                | Common Crowberry         | 2    | Hallingen - Brautemo |
| Rubiaceae                      | Bedstraw Family          |      |                      |
| Galium boreale                 | Northern Bedstraw        | 2    | Hallingen - Brautemo |
| Galium palustre agg.           | Marsh Bedstraw           | 5    | Solseter - Gol       |
| Galium verum                   | Lady's Bedstraw          | 5    | Solseter - Gol       |
| Galium mollugo                 | Hedge Bedstraw           | 5    | Solseter - Gol       |
| Galium aparine                 | Cleavers                 | 4    | Flåm                 |
| Boraginaceae                   | Forget-me-not Family     |      |                      |
| Myosotis laxa ssp caespitosa   | Tufted Forget-me-not     | 2    | Hallingen - Brautemo |
| Plantaginaceae                 | Plantain Family          |      |                      |
| Linaria vulgaris               | Common Toadflax          | 3    | Roadsides            |
| Plantago major                 | Greater Plantain         | 2    | Hallingen - Brautemo |
| Veronica officinalis           | Heath Speedwell          | 5    | Solseter - Gol       |
| Veronica alpina                | Alpine Speedwell         | 2    | Hallingen - Brautemo |
| Veronica serpyllifolia         | Thyme-leaved Speedwell   | 2    | Hallingen - Brautemo |
| Veronica fruticans             | Rock Speedwell           | 6    | Skutuset - Kamben    |
| Veronica chamaedrys            | Germander Speedwell      | 5    | Solseter - Gol       |
| Digitalis purpurea             | Foxglove                 | 1    | Roadsides            |
| Scrophulariaceae               | Figwort Family           |      |                      |
| Verbascum nigrum               | Dark Mullein             | 4    | Roadsides            |
| Lentibulariaceae               | Bladderwort Family       |      |                      |
| Pinguicula vulgaris            | Common Butterwort        | 2    | Hallingen - Brautemo |
| Lamiaceae                      | Dead-nettle Family       |      |                      |
| Prunella vulgaris              | Selfheal                 | 5    | Solseter - Gol       |
| Thymus praecox                 | Wild Thyme               | 5    | Solseter - Gol       |
| Origanum vulgare               | Wild Marjoram            | 4    | Flåm                 |
| Ajuga pyramidalis              | Pyramidal Bugle          | 2    | Hallingen - Brautemo |
| Scutellaria galericulata       | Skullcap                 | 4    | Flåm                 |
| Galeopsis tetrahit             | Common Hemp-nettle       | 5    | Solseter - Gol       |
| Orobanchaceae                  | Broomrape Family         |      |                      |
| Pedicularis Iapponica          | Lapland Lousewort        | 3    | Skogshorn            |
| Pedicularis palustris          | Marsh Lousewort          | 2    | Hallingen - Brautemo |
| Pedicularis sceptrum-carolinum | Moor King                | 7    | Vasetstølen (in bud) |
| Melampyrum pratense            | Common Cow-wheat         | 3    | Skogshorn            |

| Common name               | Scientific name            | trip | Location              |
|---------------------------|----------------------------|------|-----------------------|
| Melampyrum sylvaticum     | Small Cow-wheat            | 2    | Hallingen - Brautemo  |
| Euphrasia frigida         | Upland Eyebright           | 6    | Storefjell            |
| Euphrasia sp.             | Eyebright                  | 5    | Solseter - Gol        |
| Bartsia alpina            | Alpine Bartsia             | 2    | Hallingen - Brautemo  |
| Rhinanthus agg.           | Yellow Rattle              | 2    | Hallingen - Brautemo  |
| Campanulaceae             | Bellflower Family          |      |                       |
| Campanula rotundifolia    | Harebell                   | 3    | Skogshorn             |
| Menyanthaceae             | Bogbean Family             |      |                       |
| Menyanthes trifoliata     | Bogbean                    | 2    | Hallingen - Brautemo  |
| Asteraceae                | Daisy Family               |      |                       |
| Cirsium vulgare           | Spear Thistle              | 4    | Flåm                  |
| Cirsium heterophyllum     | Melancholy Thistle         | 5    | Solseter - Gol        |
| Carduus crispus           | Welted Thistle             | 5    | Solseter - Gol        |
| Saussurea alpina          | Alpine Saw-wort            | 6    | Storefjell (in bud)   |
| Taraxacum agg.            | Dandelion                  | 2    | Hallingen - Brautemo  |
| Lapsana communis          | Nipplewort                 | 4    | Gudvangen             |
| Crepis tectorum           | Narrow-leaved Hawk's-beard | 5    | Solseter - Gol        |
| Scorzoneroides autumnalis | Autumn Hawkbit             | 3    | Skogshorn             |
| Hieracium alpinum agg.    | Alpine Hawkweed            | 3    | Skogshorn             |
| Hieracium umbellatum      | Leafy Hawkweed             | 5    | Solseter - Gol        |
| Pilosella lactucella      | -                          | 5    | Solseter - Gol        |
| Tussilago farfara         | Common Colt's-foot         | 5    | Solseter - Gol        |
| Senecio vulgaris          | Common Groundsel           | 5    | Solseter - Gol        |
| Antennaria dioica         | Mountain Everlasting       | 2    | Hallingen - Brautemo  |
| Omalotheca norvegica      | Highland Cudweed           | 6    | Grønlie - Vasetstølen |
| Omalotheca supina         | Dwarf Cudweed              | 3    | Skogshorn             |
| Erigeron borealis         | Alpine Fleabane            | 6    | Grønlie - Vasetstølen |
| Erigeron uniflorus        | Dwarf Fleabane             | 6    | Grønlie - Vasetstølen |
| Solidago virgaurea        | European Goldenrod         | 2    | Hallingen - Brautemo  |
| Artemisia vulgaris        | Common Mugwort             | 5    | Solseter - Gol        |
| Matricaria discoidea      | Pineappleweed              | 5    | Solseter - Gol        |
| Achillea millefolium      | European Yarrow            | 2    | Hallingen - Brautemo  |
| Tanacetum vulgare         | Common Tansy               | 5    | Solseter - Gol        |
| Tripleurospermum inodorum | Scentless Mayweed          | 5    | Solseter - Gol        |
| Leucanthemum vulgare      | Ox-eye Daisy               | 2    | Hallingen - Brautemo  |
| Viburnaceae               | Viburnum Family            |      |                       |
| Sambucus racemosus        | Red-berried Elder          | 4    | Flåm                  |
| Caprifoliaceae            | Honeysuckle Family         |      |                       |
| Lonicera caerulea         | Blue-berried Honeysuckle   | 5    | Solseter - Gol        |
| Linnaea borealis          | Twin-flower                | 2    | Hallingen - Brautemo  |
| Knautia arvensis          | Field Scabious             | 5    | Solseter - Gol        |
| Valeriana excelsa         | Elder-leaved Valerian      | 5    | Solseter - Gol        |
| Apiaceae                  | Carrot Family              | -    |                       |
| Anthriscus sylvestris     | Cow Parsley                | 2    | Hallingen - Brautemo  |
| Pimpinella saxifraga      | Common Burnet-saxifrage    | 4    | Borgund Old Road      |
| Carum carvi               | Caraway                    | 2    | Hallingen - Brautemo  |
| Heracleum sibiricum       | Siberian Hogweed           | 5    | Solseter - Gol        |
| Angelica sylvestris       | Common Angelica            | 5    | Solseter - Gol        |
|                           | 25                         |      |                       |

| Common name                     | Scientific name      | trip | Location             |
|---------------------------------|----------------------|------|----------------------|
| LICHENS:                        |                      |      |                      |
| Bryoria fuscescens              | Dark threads'        | 2    | Hallingen - Brautemo |
| Cladonia coccifera              | Red Elf-cup          | 2    | Hallingen - Brautemo |
| Cladonia rangiferina            | Reindeer Lichen      | 2    | Hallingen - Brautemo |
| Cladonia stellaris              | Star Reindeer Lichen | 2    | Hallingen - Brautemo |
| Ophioparma ventosum             | Blood spots'         | 6    | Skutuset - Kamben    |
| Usnea dasypoga (U. filipendula) | -                    | 2    | Hallingen - Brautemo |
| FUNGI                           |                      |      |                      |
|                                 | Morel sp.            | 2    | Hallingen - Brautemo |
|                                 | Ink-cap sp.          | 2    | Hallingen - Brautemo |
| Leccinum scabrum                | Brown Birch Bolete   | 2    | Hallingen - Brautemo |

Birds (H = Heard only, S = Signs, I = Introduced)

|                              |                            | July 2023 |            |             |             |            |            |            |            |            |  |
|------------------------------|----------------------------|-----------|------------|-------------|-------------|------------|------------|------------|------------|------------|--|
| Common name                  | Scientific name            | 1         | 2          | 3           | 4           | 5          | 6          | 7          | 8          | 9          |  |
| Canada Goose - I             | Branta canadensis          | ✓□        |            |             |             |            |            |            | ✓□         |            |  |
| Mute Swan                    | Cygnus olor                |           |            |             | ✓□          |            | ✓□         |            |            | ✓[]        |  |
| Mallard                      | Anas platyrhynchos         | ✓□        |            |             |             |            |            | ✓□         | ✓□         | ✓[]        |  |
| Tufted Duck                  | Aythya fuligula            |           |            |             |             |            |            | ✓□         |            | ✓[]        |  |
| Common Goldeneye             | Bucephala clangula         |           |            |             |             |            |            |            |            | ✓[]        |  |
| Willow Ptarmigan             | Lagopus lagopus            |           |            |             |             |            | S          | S          |            |            |  |
| Western Capercaillie         | Tetrao urogallus           |           |            | H?          | ✓□          |            |            |            |            |            |  |
| Common Pheasant              | Phasianus colchicus        |           |            |             |             |            |            | ✓□         |            |            |  |
| Common Swift                 | Apus apus                  | ✓□        | ✓□         | ✓□          | ✓□          | ✓□         | <b>√</b> □ | ✓□         |            |            |  |
| Common Cuckoo                | Cuculus canorus            |           |            | Н           |             |            |            |            |            |            |  |
| Common Wood Pigeon           | Columba palumbus           | ✓□        | ✓□         | ✓□          | ✓□          | ✓□         | <b>√</b> □ | ✓□         | <b>√</b> □ |            |  |
| Eurasian Coot                | Fulica atra                |           |            |             |             |            |            |            |            | ✓[]        |  |
| Common Crane                 | Grus grus                  | ✓□        |            | <b>√</b> □  | <b>√</b> □  | ✓□         | <b>√</b> □ | <b>√</b> □ | <b>√</b> □ |            |  |
| Great Crested Grebe          | Podiceps cristatus         |           |            |             |             |            |            |            | <b>√</b> □ | ✓[]        |  |
| Eurasian Oystercatcher       | Haematopus ostralegus      |           |            |             | ✓□          |            |            |            |            |            |  |
| European Golden Plover       | Pluvialis apricaria        |           |            |             |             |            |            | <b>√</b> □ |            |            |  |
| Eurasian Curlew              | Numenius arquata           |           |            |             |             | ✓□         |            |            |            |            |  |
| Common Sandpiper             | Actitis hypoleucos         |           |            | ✓□          | ✓□          |            |            | <b>√</b> □ |            |            |  |
| Black-headed Gull            | Chroicocephalus ridibundus |           |            |             |             |            |            |            | ✓□         |            |  |
| Common Gull                  | Larus canus                |           |            |             | ✓□          |            |            |            |            |            |  |
| European Herring Gull        | Larus argentatus           |           |            | ✓□          |             |            |            |            |            |            |  |
| Arctic Tern                  | Sterna paradisaea          |           |            |             |             |            |            |            | <b>√</b> □ |            |  |
| Black Guillemot              | Cepphus grylle             |           |            |             | <b>√</b> □  |            |            |            |            |            |  |
| Black-throated Diver         | Gavia arctica              |           |            |             |             |            |            |            | <b>√</b> □ |            |  |
| Grey Heron                   | Ardea cinerea              |           |            | <b>√</b> □  |             |            |            |            |            |            |  |
| Hen Harrier                  | Circus cyaneus             |           |            |             |             |            |            | <b>√</b> □ |            |            |  |
| Common Buzzard               | Buteo buteo                | ✓□        |            |             |             | <b>√</b> □ |            |            |            |            |  |
| European Green<br>Woodpecker | Picus viridis              |           |            |             |             | ✓[]        |            |            |            |            |  |
| Siberian Jay                 | Perisoreus infaustus       |           | <b>√</b> □ |             |             |            |            |            |            |            |  |
| Eurasian Magpie              | Pica pica                  | ✓□        |            | <b>√</b> □  | <b>√</b> □  | ✓□         | <b>√</b> □ | <b>√</b> □ | <b>√</b> □ | ✓□         |  |
| Western Jackdaw              | Coloeus monedula           | ✓[]       |            |             |             |            |            |            | <b>√</b> □ | <b>√</b> □ |  |
| Hooded Crow                  | Corvus cornix              | ✓□        |            | <b>√</b> [] | <b>√</b> [] | <b>√</b> □ | <b>√</b> □ | <b>√</b> □ | <b>√</b> □ |            |  |

|                          |                          | July 2023 |            |            |     |            |            |            |            |     |  |
|--------------------------|--------------------------|-----------|------------|------------|-----|------------|------------|------------|------------|-----|--|
| Common name              | Scientific name          | 1         | 2          | 3          | 4   | 5          | 6          | 7          | 8          | 9   |  |
| Northern Raven           | Corvus corax             |           |            | <b>√</b> □ |     | <b>√</b> □ |            |            |            |     |  |
| Coal Tit                 | Periparus ater           |           |            |            |     | <b>√</b> □ |            |            |            |     |  |
| Eurasian Blue Tit        | Cyanistes caeruleus      |           |            |            | ✓[] | <b>√</b> □ |            |            |            | ✓□  |  |
| Great Tit                | Parus major              |           |            |            |     | <b>√</b> □ | ✓[]        | ✓[]        | <b>√</b> □ | ✓[] |  |
| Barn Swallow             | Hirundo rustica          | ✓□        | ✓□         | ✓□         | ✓[] | <b>√</b> □ | ✓[]        | ✓[]        | <b>√</b> □ | ✓[] |  |
| Common House Martin      | Delichon urbicum         |           |            | ✓□         | ✓□  | <b>√</b> □ | ✓□         | ✓□         | ✓□         |     |  |
| Willow Warbler           | Phylloscopus trochilus   |           | <b>√</b> □ | <b>√</b> □ | ✓□  | ✓[]        | ✓□         | ✓□         |            | Н   |  |
| Common Chiffchaff        | Phylloscopus collybita   |           |            |            |     |            |            |            |            | Н   |  |
| Eurasian Blackcap        | Sylvia atricapilla       |           |            |            |     | <b>√</b> □ |            |            |            |     |  |
| Lesser Whitethroat       | Curruca curruca          |           |            | ✓□         |     |            | ✓□         |            |            |     |  |
| Eurasian Nuthatch        | Sitta europaea           |           |            |            |     |            |            |            | <b>√</b> □ |     |  |
| Common Starling          | Sturnus vulgaris         |           |            |            |     | <b>√</b> □ | ✓[]        | <b>√</b> □ | <b>√</b> □ |     |  |
| Song Thrush              | Turdus philomelos        |           | Н          |            |     |            | Н          | Н          |            |     |  |
| Mistle Thrush            | Turdus viscivorus        |           |            |            |     |            | ✓[]        |            |            | ✓[] |  |
| Redwing                  | Turdus iliacus           |           | <b>√</b> □ | ✓□         |     |            | ✓□         |            |            |     |  |
| Common Blackbird         | Turdus merula            | √[]       | <b>√</b> □ | ✓□         |     | ✓[]        | ✓□         | ✓□         |            | ✓□  |  |
| Fieldfare                | Turdus pilaris           | ✓[]       | <b>√</b> □ | ✓□         | ✓□  | ✓□         | ✓□         | ✓□         | <b>√</b> □ |     |  |
| Spotted Flycatcher       | Muscicapa striata        |           |            |            |     |            | ✓□         |            |            | ✓[] |  |
| European Robin           | Erithacus rubecula       |           |            |            |     | <b>√</b> □ |            | ✓□         |            |     |  |
| Bluethroat               | Luscinia svecica         |           |            | ?          |     |            |            | ✓□         |            |     |  |
| European Pied Flycatcher | Ficedula hypoleuca       |           |            |            | ✓□  |            |            | ✓□         |            |     |  |
| Common Redstart          | Phoenicurus phoenicurus  |           |            |            |     |            | ✓□         |            |            |     |  |
| Whinchat                 | Saxicola rubetra         |           |            |            |     | ✓□         |            |            | <b>√</b> □ |     |  |
| Northern Wheatear        | Oenanthe oenanthe        |           |            | ✓□         |     |            |            | ✓□         |            |     |  |
| Eurasian Tree Sparrow    | Passer montanus          |           |            |            | ✓□  |            |            | ✓□         |            |     |  |
| House Sparrow            | Passer domesticus        | ✓[]       | <b>√</b> □ |            | ✓[] | <b>√</b> □ |            |            |            |     |  |
| Western Yellow Wagtail   | Motacilla flava          |           | <b>√</b> □ |            |     |            |            |            |            |     |  |
| Grey Wagtail             | Motacilla cinerea        |           |            |            |     |            |            |            |            | ✓[] |  |
| White Wagtail            | Motacilla alba           | ✓[]       | <b>√</b> □ | <b>√</b> □ | ✓[] | <b>√</b> □ | <b>√</b> □ | <b>√</b> □ | <b>√</b> □ | ✓[] |  |
| Meadow Pipit             | Anthus pratensis         |           |            | ?          |     | ✓□         |            | ✓[]        |            |     |  |
| Common Chaffinch         | Fringilla coelebs        |           | Н          | Н          | ✓[] | Н          | ✓[]        |            |            |     |  |
| Brambling                | Fringilla montifringilla |           | ✓□         | ✓□         |     | ✓□         |            |            |            |     |  |
| Eurasian Bullfinch       | Pyrrhula pyrrhula        |           | ✓□         | ✓□         | ✓□  | ✓□         |            |            |            | ✓□  |  |
| European Greenfinch      | Chloris chloris          |           |            |            | ✓[] | ✓□         | ✓[]        | Н          |            |     |  |
| Twite                    | Linaria flavirostris     |           |            |            | ✓□  |            |            |            | ✓□         |     |  |
| Common Redpoll           | Acanthis flammea         |           |            |            |     |            |            |            | ✓□         |     |  |
| Parrot Crossbill         | Loxia pytyopsittacus     |           |            |            |     | ✓□         |            |            | _          |     |  |
| Eurasian Siskin          | Spinus spinus            | ✓[]       | <b>√</b> □ | ✓[]        | ✓[] | ✓[]        | ✓[]        | ✓□         | <b>√</b> □ | ✓□  |  |
| Yellowhammer             | Emberiza citrinella      | _         |            | _          | ✓[] | Н          | ✓□         | Н          | ✓□         |     |  |
| Common Reed Bunting      | Emberiza schoeniclus     |           |            | ✓[]        |     | • •        |            | ✓[]        | ✓□         | ✓□  |  |

### Mammals (S = Signs)

|                       | May 2023            |   |     |     |   |     |            |   |     |   |
|-----------------------|---------------------|---|-----|-----|---|-----|------------|---|-----|---|
| Common name           | Scientific name     | 1 | 2   | 3   | 4 | 5   | 6          | 7 | 8   | 9 |
| Mountain Hare         | Lepus timidus       |   | ✓[] | ✓[] |   |     |            |   |     |   |
| Eurasian Red Squirrel | Sciurus vulgaris    |   |     |     |   |     | S          |   | ✓[] |   |
| European Roe Deer     | Capreolus capreolus |   |     |     |   | ✓[] | <b>√</b> □ |   |     |   |

| Elk             | Alces alces  |  | <b>√</b> □ | ✓□ | S | ✓□ |  |   |
|-----------------|--------------|--|------------|----|---|----|--|---|
| Eurasian Beaver | Castor fiber |  |            |    |   |    |  | S |

# Amphibians

|             |                 | May 2023 |   |   |   |   |   |    |   |   |
|-------------|-----------------|----------|---|---|---|---|---|----|---|---|
| Common name | Scientific name | 1        | 2 | 3 | 4 | 5 | 6 | 7  | 8 | 9 |
| Common Frog | Rana temporaria |          |   |   |   |   |   | ✓□ |   |   |

### Butterflies

| Common name                | Scientific name       | May 2023 |   |     |   |     |            |     |   |   |
|----------------------------|-----------------------|----------|---|-----|---|-----|------------|-----|---|---|
|                            |                       | 1        | 2 | 3   | 4 | 5   | 6          | 7   | 8 | 9 |
| Green-veined White         | Pieris napi           |          |   |     |   | ✓[] |            | ✓[] |   |   |
| Moorland Clouded Yellow    | Colias palaeno        |          |   |     |   |     |            | ✓[] |   |   |
| Scarce Copper              | Lycaena virgaureae    |          |   |     |   | ✓[] |            |     |   |   |
| Green-underside Blue       | Glaucopsyche alexis   |          |   |     |   | ✓□  |            |     |   |   |
| Silver-studded Blue        | Plebejus argus        |          |   |     |   |     | <b>√</b> □ |     |   |   |
| Cranberry Blue             | Plebejus optilete     |          |   |     |   |     |            | ✓[] |   |   |
| Geranium Argus             | Eumedonia eumedon     |          |   | ✓[] |   | ✓[] |            | ✓[] |   |   |
| Mazarine Blue              | Cyaniris semiargus    |          |   |     |   | ✓[] |            | ✓[] |   |   |
| Common Blue                | Polyommatus icarus    |          |   |     |   | ✓[] |            |     |   |   |
| Red Admiral                | Vanessa atalanta      |          |   |     |   | ✓[] |            |     |   |   |
| Small Tortoiseshell        | Aglais urticae        |          |   |     |   | ✓[] |            |     |   |   |
| Dark Green Fritillary      | Speyeria aglaja       |          |   |     |   | ✓[] |            |     |   |   |
| Pearl-bordered Fritillary  | Boloria euphrosyne    |          |   |     |   |     |            | ✓[] |   |   |
| Small Pearl-bordered Frit. | Boloria selene        |          |   |     |   |     |            | ✓[] |   |   |
| Small Heath                | Coenonympha pamphilus |          |   |     |   | ✓[] |            | ✓[] |   |   |
| Large Wall Brown           | Lasiommata maera      |          |   |     |   | ✓[] |            | ✓□  |   |   |
| Large Skipper              | Ochlodes sylvanus     |          |   |     |   | ✓[] |            |     |   |   |

### Moths

| Common name               | Scientific name     | Shaded Broad-bar  | Scotopteryx chenopodiata |
|---------------------------|---------------------|-------------------|--------------------------|
| A black-and-white Tortrix | Phiaris bipunctana  | Argent and Sable  | Rheumaptera hastata      |
| Brassy Tortrix            | Eulia ministrana    | Latticed Heath    | Chiasmia clathrata       |
| Grass moth spp            | Crambidae           | Common Heath      | Ematurga atomaria        |
| Brown China-mark          | Elophila nymphaeata | Common White Wave | Cabera pusaria           |
| Scotch Burnet             | Zygaena exulans     | Silver-Y          | Autographa gamma         |

### Other Invertebrates

| Common name           | Scientific name        | Smooth Ground Beetle             | Carabus glabratus          |  |  |
|-----------------------|------------------------|----------------------------------|----------------------------|--|--|
| Common Blue Damselfly | Enallagma cyathigerum  | Bee Chafer                       | Trichius fasciatus         |  |  |
| Common Hawker         | Aeshna juncea          | a metallic Long-horned<br>Beetle | Gaurotes virginea          |  |  |
| Brown Hawker          | Aeshna grandis         | A Long-horned Beetle             | Alosterna tabacicolor      |  |  |
| Brilliant Emerald     | Somatochlora metallica | Seven-spot Ladybird              | Coccinella septempunctata  |  |  |
| Downy Emerald         | Cordulia aenea         | Dead-nettle Leaf Beetle          | Chrysolina fastuosa        |  |  |
| cf. Grass Mirid Bug   | cf. Stenodema holsata  | Poplar Beetle                    |                            |  |  |
| Midge sp.             |                        | <u> </u>                         | Chrysomela populi          |  |  |
| Mosquito sp.          |                        | Small Poplar Borer               | Saperda populnea lapponica |  |  |
| St. Mark's Fly        | Bibio marci            | Nursery-web Spider               | Pisaura mirabilis          |  |  |
| Wood Ant              | Formica rufa           | Galls on Aspen caused by:        |                            |  |  |
| Ant sp.               |                        | Gall midge in petioles           | Contarinia petioli         |  |  |
| Red-tailed Bumblebee  | Bombus lapidarius      | Dipteran causing leaf-roll       | Dasineura populeti         |  |  |
| Buff-tailed Bumblebee | Bombus terrestris      | Mite causing leaf spots          | Phyllocoptes populi        |  |  |
| Bilberry Bumblebee    | Bombus monticola       | Birch Velvet Leaf Gall           | (bright pink)              |  |  |
| Common Carder Bee     | Bombus pascuorum       | caused by mite                   | Eriophyidae                |  |  |







Brilliant Emerald