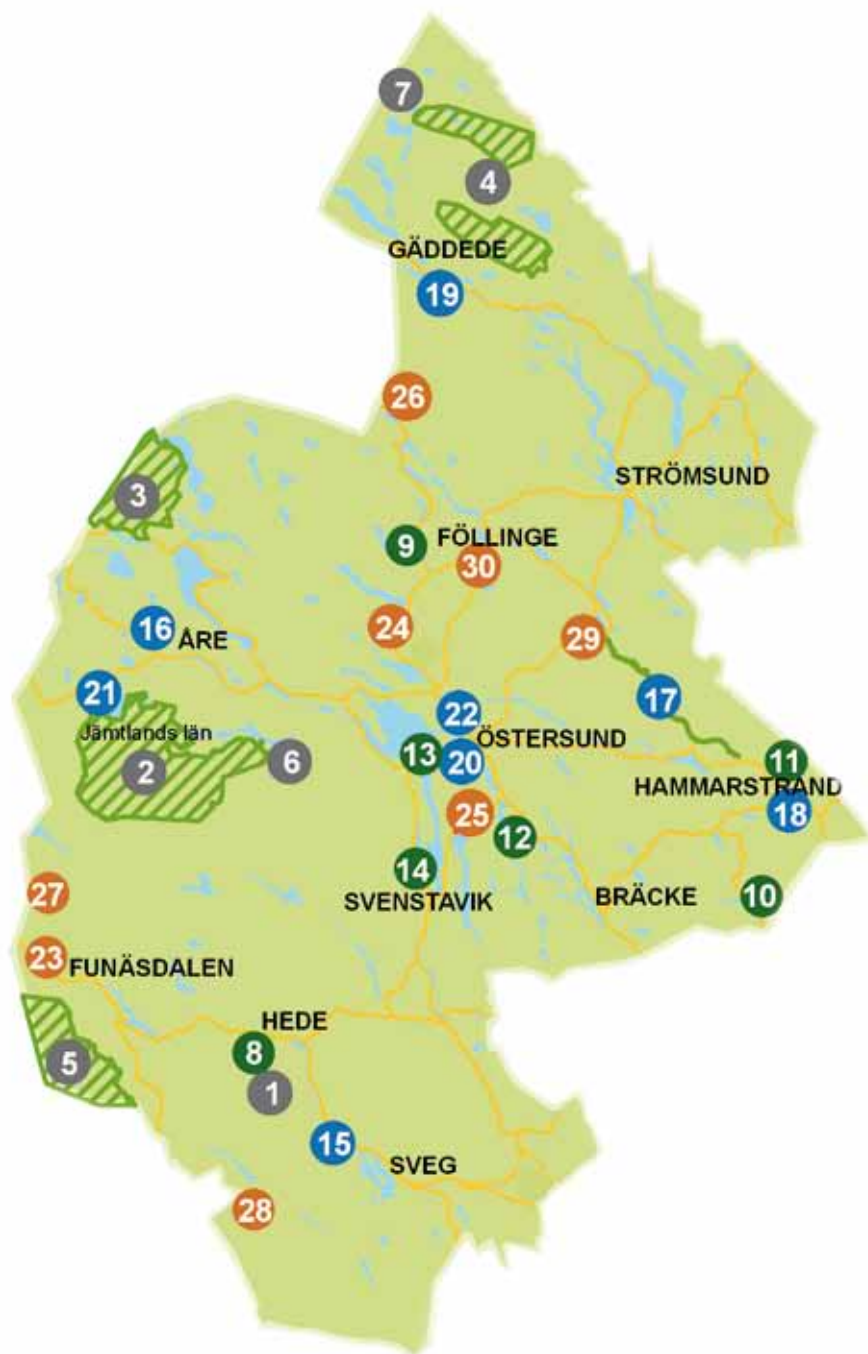




Visitor's Guide

30 protected areas in the County of Jämtland



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CHRISTOFFER BERGMAN

Welcome!

What is the best way to find Jämtland and Härjedalen's treasures? A good visitor's guide can help, and a little extra knowledge can make your outing even more successful. Let this brochure inspire you and help you find your way to new places! It has information and suggestions about what you can expect at the various sites. Is it the right location for a cosy picnic, do you need binoculars or a basket for collecting mushrooms? Wellies or walking boots? Can you take great grandma along, or a pram? Read the brochure and let it inspire you!

The county's countryside is one of its greatest assets and is there for everyone to experience and enjoy. The most valuable areas are protected as reserves or Natura 2000 areas. This brochure presents 30 of the county's natural areas that are most worth a visit. These include deep old-growth forests, stately mountains, watercourses, meadows, fields and flowering orchid fens. Some of them may be difficult to get to or to walk through. Others are suitable for people with reduced mobility or who have small children. This brochure provides guidance and tips to help you find just what you're looking for, regardless of whether it's pristine nature and adventurous walks or marked trails, organised picnic spots and toilet facilities.

It also offers a variety of well-known sites and more hidden treasures. Naturally, there are many more areas that are worth visiting, just as there is so much more to say about the places that are mentioned in the brochure. If you would like more information about the areas that are described in the brochure, or about other protected nature in the county, please contact the County Administrative Board or take a look at www.lansstyrelsen.se/jamtland/naturvard

Protection for areas and species

Protection for areas...

Nature reserves are the most common form of protection for natural areas. There are about 85 reserves in the county. Reserves may be created to preserve valuable environments or species, or to preserve areas for outdoor activities and recreation. They are often designed to protect nature and people's recreation opportunities, but some reserves are more suitable for outdoor activities while others are primarily for the protection of endangered species. This means that some areas are not as suitable for large numbers of visitors. The land in the reserve may be privately or publicly owned. If the land is to be transferred to state ownership, the landowner can receive compensation for it. Decisions regarding nature reserves are often taken by the County Administrative Board. It is also possible to form cultural reserves in order to protect valuable historic landscapes.

National parks are the strongest form of protection for natural areas. They must cover state land and it is the government that must make decisions regarding new national parks. National parks should be large, pristine areas that represent Swedish landscape types or unique areas of natural beauty that can provide significant experiences of the natural world. Jämtland has one national park, Sånfjället.

Natura 2000 is another term that you may come across in reference to nature conservation. This is a network of the most valuable natural areas, as seen from a European perspective. An area may be a Natura 2000 area without being a reserve. Each EU member state is responsible for protecting and maintaining its Natura 2000 areas. Jämtland has more than 200 Natura 2000 areas, most

of which are also reserves.

Remember that there are often special regulations for what is permitted or forbidden in protected areas of nature. The Right of Public Access may be limited. Regulations can be found on the signs at the various areas or on the County Administrative Board's website.

...and species

If extra protection is needed for a particular species, an animal or plant conservation area can be established by the municipality or the County Administrative Board. The most common form of animal conservation area is a bird conservation area. There may be a prohibition on entering these areas during the nesting period, for example. However, it is often possible to watch the birds from a distance, such as from a bird tower outside the area.

Protected status is another way of protecting individual species. Jämtland has about 70 different protected plants or animals. There are different degrees of protection. For example, in Jämtland you may not pick or dig up liverleaf and cowslips for commercial use, but you can make a posy for yourself.

Apart from the species that can be hunted during certain periods of the year, all wild birds and mammals are protected. This includes bats, hedgehogs, dormice and small birds. You may never trap, injure or kill these animals without a permit. There is no overall protection for other animals, but many species have a protected status. This applies to frogs, lizards, snakes and some rare butterflies.

The County Administrative Board's website has more information about protected species in Jämtland.



FAIRY SLIPPER: HANNA WALLÉN



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The Right of Public Access

A right for everyone

Everyone is welcome to spend time in the natural world, but you must show care and respect – to the environment, the flora and fauna, landowners and other visitors. Thanks to the Swedish Right of Public Access, you can roam freely through almost all of the Swedish countryside, but – don't disturb and don't destroy! In national parks and nature reserves there are often special regulations that limit the Right of Public Access. Each area has signs that display what applies there. It could be that you are not allowed to light fires or have an unleashed dog.

Walk, cycle, ride, ski

You can walk or ski almost everywhere in the countryside. You may cross fences and go through enclosed grazing land or similar, as long as you do not damage the fence or disturb the livestock. Close gates behind you so that livestock does not escape. Private roads may be closed to motor vehicles, but you may always walk, cycle or ride on roads if you are careful and do not cause any damage. You may ride freely in the countryside, but please think about the risk of damage to the ground. This means it is important to choose your route and avoid soft ground that is easily damaged. The Right of Public Access does not apply to gardens or plantations.

Picking berries and flowers

You may pick flowers, berries and mushrooms, but some plants and mushrooms are protected. These may not be picked. There may also be special regulations in national parks and nature reserves. You may not fell trees or break

branches on someone else's land. The Right of Public Access does not include digging up plants or gathering large amounts of lichens or mosses.

Dogs in the countryside

From 1 March to 20 August, dogs must be kept under strict control when they are in the countryside. In most cases, this means that dogs must be kept on a lead. Dogs must also be supervised at other times of the year, so that they do not follow game animals. In all national parks, and many nature reserves, dogs must be on a lead all year round. Dogs must also be kept on a lead on reindeer grazing land, except during hunts or if the dogs are used in reindeer husbandry.

Fires and camping

You may light campfires in the countryside, but it is important to choose a site where there is no risk of the fire spreading or damaging the ground or vegetation. You may take fallen cones and scattered twigs and branches as fuel for the fire, but you may not chop down trees or bushes, or take brushwood, branches or bark from living trees. In most nature reserves in Jämtland, lighting fires is only permitted at specially designated sites.

You may camp for one or two nights in the same place, but remember not to disturb the landowner or damage the environment. It is important to choose a campsite that is not near any dwellings. You should also choose to site your tent on ground that is not easily damaged, and not on grazing land, cultivated land or plantations.

Mountainscapes

The mountains are so much more than bare hillsides and high peaks, summit cairns and stony slopes. The forests close to the mountains and along the watercourses are green and shady. There are dense forests of mountain birch with traces of reindeer husbandry, both old and new. If you are observant, you can see the remains of fireplaces, milking pits or rings of stone that indicate that a "kåta", a Sami dwelling, used to stand in the clearing in the forest. There are also shielings and farms close to the mountains. In the forests you can find berries and mushrooms, and the waters often have fantastic fishing and rich birdlife. If you move quietly and carefully in the mountains, there is a chance that you will see bear, lynx, wolverine or Arctic fox. Some years there is a good chance of meeting a Norway lemming. They are an endemic species, only found in Scandinavia. Arctic foxes and various birds of prey, such as the long-tailed skua and snowy owl, are dependent on "lemming years". Many other birds nest on the expansive montane heaths and you may meet ptarmigan, wheatear and dotterel. The most common large animal that you will meet when you are out in the mountains

is the reindeer. The Sami conduct reindeer husbandry in large areas of the county. Please show them and their animals respect. The reindeer are particularly sensitive during the calving period in April-May and when they are being moved for marking or slaughter.

Sweden's mountains are old and eroded and many of the mountains in Jämtland have a soft, flattened silhouette. These are called "vålar" or "valar". Names like Vålådalen, Björnvålen and Sätervålen indicate mountains without proper peaks.

There are vast areas where you won't hear snowmobiles or see other people for days, as well as organised areas with cabins and well-trodden trails. Vålådalen-Sylarna-Helagsfjällen is one of the most famous and visitor-friendly mountain areas in the county, with its popular trails and mountain stations. There are other areas that are better suited to people who want to have the mountains to themselves. A few of the county's protected mountain areas are presented in the brochure. Other fantastic areas are Svenskådalen, Hotagen and Oviksfjällen.



LARS-GUNNAR WAGENIUS



KENNETH JOHANSSON

■ Sånfjället

Sånfjället is the perfect place if you want to spend a sunny autumn day bear watching. The county's only national park was founded in 1909, partly to protect the bears, and now has one of Sweden's densest bear populations. An attentive walker can see tracks in the form of droppings or demolished anthills in the forests around the mountain and, if you're lucky, you may see a bear looking for berries on the slopes of Medstöten or Korpflyet.

Sånfjället's famous silhouette is visible from a great distance. You don't need to climb the mountain to enjoy the scenery here! Old-growth spruce forest

and the flat pine heaths around the foot of the mountain are both beautiful and interesting to walk or ski through. Spruce, pine and mountain birch cling to the slopes. Above an altitude of 900 metres the slopes are bare, barren and stony.

Apart from bear, wolverine and lynx are also found in the area. They are shy and difficult to see, but tracks in newly-fallen snow have a story to tell. Above the mountain, golden eagles and rough-legged buzzards hover and down in the forest you could startle Siberian jay, capercaillie and elk.

During the shielings' heyday, at the





KRISTOFFER SIVERTSSON

end of the 19th century, there were a number of shielings around the mountain. Now there is only one left, Nyvallen. The livestock continue to graze freely in the mountain forest and the meadows are mown.



You can visit Nyvallen shieling in the summer and get an insight into life on a shieling. If you want to see bears, you have the best chance to do so in late September, when the berries are ripe. There are a number of summer and winter trails in the national park. Most of them start at Nyvallen and Nysäteren, natural starting points. Here there are wheelchair-friendly picnic spots and information about the national park. Nyvallen has the most information about Sånfjället. They have wheelchair-friendly exhibition about the national park, which is open during the summer.

GETTING HERE: There are a number of different ways to get to the national park. In the summer it is easiest to get in via Nyvallen or Nysäteren. Follow the signs to Sånfjället from road 84 at Hedeveiken. To get to Nysäteren, drive south from Hede towards Råndalen. You can also enter the park from the south, via Linsell, at Dalsvallen. In the summer, the picnic spot at Valmen can be reached via a gravel road from Hedeveiken.

PROTECTED STATUS: National park, Nature reserve, Natura 2000

SIZE: 104 km²



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■ Vålådalen

Vålådalsfjällen is undoubtedly the best known and most popular mountain area in the county. It is easy to see why. Magnificent views can be found almost everywhere. If you are not the adventurous type, you can sleep and eat well close to the mountains and go for short day trips. If you want to walk a bit farther without taking a tent and sleeping bag, there are a number of cabins within a day's walk, both inside and outside the reserve. Helags, Gåsen, Sylarna and Blåhammar are a few well-known names and welcome resting places for tired hill-walkers. Several Norwegian cabins are within reach of Vålådalen as well. You can also leave the tourist routes and camp by remote mountain lakes.

The reserve contains deep spruce forests and sparse forests of mountain birch. Lush mountain birch forests grow in the valleys, where plants like alpine blue-sow-thistle, garden angelica and wolf's-bane reach thigh-high. There are deep coniferous forests in Rekdalen and Rulldalen. Even if the forests look untouched, there are traces that show that people have lived and worked here. There are relics from the Stone and Bronze Ages. Mountain farmers and Sami have also left their mark. Vålådalen is still used year-round for reindeer grazing, so please remember to show



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respect to the Sami and their animals.

The mountains are crossed by impressive u-shaped valleys. Lunn-dören is one of these, where walkers and reindeer-herding Sami can move through low terrain rather than climbing the mountainsides. One advantage of keeping to higher ground is that it is dry and the vegetation is low. Dwarf birch and crowberry spread across the stony ground and you can move quickly and easily. Down in the valleys you must cross marshes and winding streams.

Vålådalen has amazing floral splendour, everything from low-lying forests and marshes to the barren mountainsides high above the tree line. Walkers can delight in mountain avens, blue heath, lousewort, purple saxifrage and common butterwort. In the autumn, the marshes offer sun-warmed cloudberries. The most noticeable animal is probably the reindeer. Remember to show consideration for them and their owners. There are not many other mammals in

the mountains, but there are several Arctic fox dens in the reserve and, if you're lucky, you may see some of the foxes that live here. There are plenty of mountain birds; don't be surprised if you startle crouching ptarmigan or brooding dotterel. Try to move away quickly if you have come close to a den or a nest so that the animals are not disturbed.



The reserve is crossed by a great many summer and winter trails. Good starting points, both summer and winter, are Storulvån and Vålådalen. Vålådalen also has a visitor centre, Vålådalens naturum, with information about the area, suggestions for excursions and guided tours. Please visit www.naturum.jamtland.se for more information. Getting here: You can drive to Vålådalen, or combine train, bus and taxi. From the south you can enter the reserve via Ljungdalen, which is accessible by car or bus.



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ARCTIC FOX. EMMA BERGMAN

GETTING HERE: You can drive to Vålådalen, or combine train, bus and taxi. From the south you can enter the reserve via Ljungdalen, which is accessible by car or bus.

PROTECTED STATUS: Nature reserve, Natura 2000.

SIZE: 1175 km²





LISA TENNING

■ Skäckerfjällen

Skäckerfjällen lies on the Norwegian border, surrounded by the lakes of Anjan, Torrön and Kallsjön. The mountains are not so high, but they still offer an impressive, ragged silhouette that is visible from a great distance. This area is also known as “Little Sarek”, with good reason. Visitors are few and far between;

you can walk for days without meeting anyone else. The area has old-growth forest, marshes and open mountainside. Magnificent mountainous wilderness at its best! Short day trips can be replaced by longer treks or ski trips in pristine terrain. This is a wonderful place to walk, ski, hunt, or pick berries or mushrooms.

The Rutsälven river runs through Skäckerfjällen. The river winds along the bottom of a deep valley, Rutsdalen, through marshes and coniferous forest. Manshögarna is to the south of Rutsdalen and has a number of high peaks that must be passed if you want to get to or from Anjan. If you are arriving from the



ANDERS BENGTSSON

south, you can follow a trail northwards from Baksjön to get to Strydalen, Sockertoppen and Anjeskutan. The lowland terrain has lakes and tarns where you

can fish for char and salmon trout. In Strådalen, to the south-west, there is an area of marshes and verdant spruce forests close to the tree line. The forest is old, with an old-growth character and, at first glance, it may seem to be untouched by man. If you look carefully, you can see traces of the Sami culture in the form of ruined “kåtor” and “kåtor” areas. You can get to Strådalen via a path from Anjan to Mansjön, and then straight westwards. There is also an area of old-growth type coniferous forest around Lågsjön, in the north-east. A gently undulating plateau spreads out here, covered by pine and spruce forest. Throughout the reserve, the marshes are home to orchids and cloudberries and, in the forest, there are blueberries and chanterelles.

Sandnäset farm, by Lake Äsingen, was formerly a landless mountain farm. This means it was a leasehold farm, with small-scale mountain agriculture on reindeer grazing land. This frequently small-scale, traditional land use has given this type of farm natural and historical value.



Two important starting points for the trails are the tourist stations of Anjan in the south and Kolåsen in the south-east. However, from the latter there is a barrier across the road and you must walk, cycle or paddle into the reserve. Snowmobiling is prohibited in the entire area and there are no snowmobile trails. The entire area is used year-round for reindeer grazing; please remember to show respect.



TAIGA NATURE & PHOTO

GETTING HERE: Turn off the E14 in Järpen and take road 336 to Kallsedet. In Kallsedet you can either turn right and continue to Kolåsen, or go straight on to Anjan.

PROTECTED STATUS: Nature reserve, Natura 2000. **SIZE:** 467 km²



■ Daimadalen and Jougdadalen

Daimadalen is a 30 km long forested mountain valley, stretching from Ankarvattnet almost all the way to Saxån. The forest consists of low mountain birch with some spruce. Two abandoned mountain leasehold farms, Daima and Värjaren, are on the north side of the valley. The forest near the farms was used for wood and timber for domestic use, but otherwise the forest in the valley has been entirely spared from forestry. Le-

jarälven runs westwards in the bottom of the valley, via the lakes of Värjaren and Lejaren. However, the lakes of Övre and Nedre Daimasjön empty into Daimaån, which flows eastwards towards Saxån. The terrain in the valley is mixed marshland and dry areas. The surrounding mountains are fairly low and, if you don't stick to the marked trails in the area, it could be a good idea to stay higher up the slopes where the vegetation isn't as

difficult to penetrate.

Just south of Daimadalen, Jougdadalen stretches out in all its glory. The valley is a magnificent wilderness; pristine forest and surrounded by uninhabited mountains. The reserve covers the valley between Jerikkklumpen and Klumpvattnet. The Jougdån flows through the valley and there are lakes, one after the other, like pearls on a string. There are several paths through the valley; some go past the now abandoned mountain dwelling of Jougdaberg. The old settlements of Flyberg and Tjärnback are also located by the lakes. The surrounding mountains aren't so high but, nonetheless, if you follow the path to the bottom of the valley, they are an impressive sight. The old-growth type of forest contains great nesting trees for woodpeckers, capercaillie, black grouse and various birds of prey. If you are lucky, you may see the tracks of lynx or wolverine or see otters playing in the water.

Large parts of the area are reindeer grazing land, and reindeer husbandry is carried out here. The whole area is characterised by the Sami's life and work. On the south side of Lake Värjaren, by the Uretjukke stream, there is an old Sami dwelling area with "kåta" (tepee-like, traditional dwellings) sites that date from the Viking Age.



J-O ANDERSSON



There are walking paths, ski trails and snowmobile trails that pass through both reserves. In the summer, you can also travel through Jougдалen by canoe. In the winter, Jougðán and the lakes in the valley are popular fishing waters, even with snowmobiling jig fishermen. There are no cabins in any of the areas. There is a Naturum visitor centre in Gäddede, with information about the area's geology, flora, fauna and history, as well as suggestions for excursions and walks. The same premises also house the Frostviksfjäll tourist association.

GETTING HERE: To get to Daimadalen, travel west via Stora Blåsjön and Ankarede. If you are arriving from the east, the village of Borgafjäll is a suitable starting point. You can also enter Daimadalen from the south, via Härbergsdalen. There are roads to all these places. To get to Jougdadalen, take the road to Trångmon and Risede (halfway between Strömsund and Gäddede). From Hovde, you can walk towards Flyberg in the south of the reserve, or continue to Blomhöjden and enter via the abandoned dwelling of Jougaberg.

PROTECTED STATUS: Nature reserve, Natura 2000. **SIZE:** 316 km² (Jougdadalen), 284 km² (Daimadalen)



LISA TENNING



J-O ANDERSSON



GUNNAR JACOBSSON



VARGLAV, MARIE BRUNSELL

■ Rogen

Rogen is a labyrinth of lakes, headlands, holms and islands. Hundreds of lakes and watercourses divide the land into innumerable meanders and spits. The rocky terrain and the water make it difficult to move through the area, but there are some walking trails. It is necessary to have a canoe if you want to go farther into the wilderness, even if you have to be prepared to carry it at times. It is perhaps easier to enjoy Rogen in the winter, as you can ski over the ice and get far into the wilderness. There are also a couple of snowmobile trails and driving is permitted on some areas of ice.

Rogen's landscape was created by glaciation, when gravel and stones were scraped together to make long eskers and then left behind when the ice melted. The mountains in the area are low and smooth. Instead of steep slopes and spectacular peaks, Rogen is distinctive for its long, winding gravel eskers. Countless eskers alternate with shallow hollows and soft lowland hills.

The moraine and the thin layer of soil make it difficult for many plants to survive here. There are large areas in which nothing grows at all, but there are also areas of blueberry, lingonberry,

crowberry, heather and reindeer lichen. Pine is the most common tree in the Rogen area. Many of them are low and wind-twisted but, despite the barren environment, they can live for hundreds of years. Even after they die they can remain standing, as snags, for several centuries. These ancient trees are excellent hosts for the rare wolf lichen, which is a bright neon yellow on the grey trunks.

Many animals thrive in the undisturbed nature that Rogen offers. There are bear, wolverine and lynx. There are also otters and you could see golden eagle, rough-legged buzzard and gyrfalcon. The most famous animals in the area are probably the musk oxen, which usually stay here in the winters. Remember that each musk ox has a private animal conservation area around it and you may not approach any closer than 100 metres. Char, salmon trout, grayling and whitefish live in Rogen's waters and the area is popular with leisure fishermen. It is very probable that fishing was important for the first people to settle here. Rogen was settled in the Stone Age and



TAGA NATURE & PHOTO

there are many different types of cultural relics, including pitfall trap systems, Stone Age settlements, rock art, graves and Sami camps.

You may only light fires in designated places and you may not use snags or living trees for firewood. Two Sami villages

conduct reindeer husbandry in the area throughout most of the year, so please remember to behave considerately.



The fishing centre (Fiskecentrum) in Tännäs has more information about the reserve, cabins and canoe hire, as well as sales of fishing permits (tannasfiskecentrum.se). The Swedish Tourist Association has two cabins in the area, Rogenstugan and Skedbrostugan. There are some limitations to the Right of Public Access in the area. From 20 April to 31 May, dogs may only be taken along winter trails (as always, they must be kept on a lead on reindeer grazing land).

GETTING HERE: From Tännäs, in Härjedalen, drive about 20 km south to Käringsjövädden. There is a car park and an information sign that shows routes through the reserve. Please note that the area is labyrinthine, so take a map, compass and other safety measures when walking off the trails.

PROTECTED STATUS: Nature reserve, Natura 2000. SIZE: 500 km²



■ Järvdalen

Järvdalen is a reserve that is close to the mountains, with deep forests that border on open mountainside. The area is located between Håckervälen and Sällsjöfjället, south of the Håckrenmagasinet reservoir. The eastern areas offer old spruce forest along ravines and hollows, with magical walks below lichen-draped trees and over fallen, mossy tree trunks. At the heart of the old-growth forest is a deep gully, called Järvdalen. Maybe someone saw a wolverine passing through here, which gave the gully its name (wolverine valley). There are several small lakes, streams and waterfalls dotted around the forest. On the mossy old aspens in the area you could find the rare *Chaenothecopsis fennica* lichen and the *Skeletocutis odora* fungi, which grows on fallen spruce trees. A brown, velvety smooth bracket fungus

that needs untouched old-growth forest to thrive is *Onnia leporina*. It is found on dead trunks and stubs. Endangered animals are found here, including lynx and wolverine. You can find traces left behind by hibernating bears in old anthills.

The western parts of the reserve are dominated by barren areas of rock. Old pine forest grows on dry, lichen-clad outcrops and it is obvious that the area has been affected by numerous forest fires. It has been a long time since silviculture was carried out in the reserve and the stumps that are visible are old and covered in moss. Several places offer fine views of forests and mountains from cliffs and rocky outcrops.

The entire reserve is suitable for long day trips and for camping trips. It is a real wilderness, sometimes requiring demanding walking. There are a number of summer trails and snowmobile trails in the reserve. After you have walked through the coniferous forest, you reach the lighter mountain birch forest and, even higher up, open mountainside.

Järvdalen is year-round reindeer grazing land and the entire area is influenced by the Sami and reindeer husbandry. It has everything from relics of the earliest trapping culture to modern reindeer husbandry facilities.



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Snowmobiling is forbidden in most of the area, but there are two snowmobile trails that go through the reserve, from Spjätten to Hovde and to Hosjöbottnarna. If you want to go walking, there is a lovely trail from Spjätten to Hosjöbottnarna and several trails that start at the road towards Fångåmon, south of Håckrenmagasinet (close to Fjällviken). You can follow a path to the reserve from Mårdsundsbodarna, but then you must use a map and compass (there is no trail from this direction).

GETTING HERE: Take the E14 to Mörsil and then drive south towards Sällsjö. If you drive past Strömvalle and Håckrenlägret, you can enter the reserve from a few different directions. **PROTECTED STATUS:** Nature reserve, Natura 2000. **SIZE:** 2023 hectares



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■ Bjurälven and Korallgrottan

Jämtland's calcareous bedrock affects its flora and fauna in many different ways. One very obvious result is the karst landscape found in the Bjurälven river valley. Traces of the water's subterranean activities are everywhere! Rain and groundwater are slightly acidic and eat away at the limestone. Over thousands of years, this water has trickled through small cracks and holes, down into the ground. Small rivulets have merged and created subterranean streams and rivers that have rushed along, eroding the rock. Over time, multilayered systems are formed as the water forces its way downwards. This leaves the upper parts dry. This is what has happened in Korallgrottan (Coral Cave),

where you can walk through the upper passages with dry feet. Its six kilometres of surveyed passages means that it is Sweden's longest cave! Inside the cave, it is easy to see how it was shaped by water. There are stalactites, formed as water has dripped from the roof of the cave. Some of them look like coral, giving the cave its name. Thin stone drapery hangs from the roof; sometimes this is called cave bacon!

Bjurälven Nature Reserve has a dramatic landscape, with churning water, deep lakes, steep slopes and fantastically shaped rocks and cliffs. In summer, you can walk along beautiful, flowering hillsides. The river, Bjurälven, slowly but surely descends into the limestone

bedrock. Sometimes it is entirely below ground, in narrow, water-filled tunnels just below the surface. This is what happens in Blinda dalen, the blind valley. You see the opposite happening in Lake Dolinsjön, where the water flows up from below through siphons. In other places, the subterranean water channels have caused the ground to collapse and form dolines. These are places where underground caves have collapsed, leading to the ground level subsiding to create deep, crater-like hollows.



It is necessary to walk for several kilometres along marked trails to reach the karst area by Bjurälven and Korallgrottan. To enter Bjurälven Nature



EVA NÄSMAN



KRISTOFFER SVERTSSON

Reserve, you first walk 3 km to a cabin, then another 3 km to the karst area. There is a walk of about 3 km to Korallgrottan. A marked path starts at the car park. The entrance to the cave is locked. If you want to see it close up, you can book a guided tour with the Vilseledaren guide centre through Rid i Jorm or Frostviken tourist office.

GETTING HERE: There are signs to Bjurälven from "Vildmarksvägen" (Wilderness Road), a few kilometres north of Ankarvattnet. There are parking spaces, a picnic area and a toilet at the end of the road, by Leipikvattnet farm. There are information signs about the reserve and marked paths into the area. Korallgrottan is located between Stora Blåsjön and Ankarvattnet in northern Jämtland. Park the car in the car park by the road, next to Leipikälven.

PROTECTED STATUS: Nature reserve, Natura 2000. **SIZE:** 25.6 km² (Korallgrottan), 23 km² (Bjurälven)



TOMMY ANDERSSON



TOMMY ANDERSSON

Enchanting forests

It is messy in an old-growth forest! Dead and dying trees stand and lean over, there are rootstocks, branches and trunks scattered over the ground.

In really old forests that have been spared from large-scale felling, there are lots of plants and animals. The reason that so many species thrive in old-growth forest is that the trees are many different ages, from centuries-old giants to small saplings. Storms or diseases may fell some trees and, in their place, sunlit glades form, in which new plants have room to grow. They may have been waiting for many years, but when they finally get the chance they shoot up toward the light! Because the trees continually replace each other there are plenty of dead or dying trees in the forest. Dead trees lie on the ground, getting softer and more hidden in the moss.

The old pine forests are lighter places than the spruce forests. In their natural state, pine forests often catch fire, but many pines, particularly old ones with thick bark, survive. After the fires, seeds from the surviving trees germinate because the fires release nutrients and reduce competition from other trees, brushwood and mosses. Many insects and fungi are dependent on burnt wood to survive and there are plants that can only germinate on

land that has been heated by fire. There are many standing dead trees, called snags, in old pine forests. Thanks to the fires, the snags are impregnated with tar and can stand for many hundreds of years.

Many plant and animal species are dependent on the volumes of dead wood that are found in old-growth forests. Different mosses, insects and fungi thrive on the fallen spruce trees, and many rare lichens live on old sunlit snags. Older trees may be draped with different hanging lichens, and many lichens thrive on the rough trunks. The legendary fairy slipper orchid and the pale ghost orchid hide in the shadows beneath the old trees. Woodpeckers find food and lodging in old trees that are swarming with larvae and insects. The nesting holes that they leave behind them may be used as nests or lairs by owls or small mammals. Younger plantations of coeval forests often lack thick trunks or branches. This means that large forest birds, such as capercaillie and Ural owls, find it difficult to find good resting or nesting places.

The forest reserves that are included in the brochure are just a small selection of the protected forests in the county that are worth visiting. Other examples are Bollaberget, Blektjärn and Högåsen.



LÄNSSTYRELSEN JÄMTLANDS LÄN

■ Hede urskog

Hede old-growth forest lies on the northern slope of Sånfjället, close to Hede. It is easy to get to and it is fairly easy to move through the terrain in the forest. It has been protected since 1909, so there are no stumps or other traces of silviculture. There are really old trees, and all the old pines bear the marks of one or more fires. The western part of the reserve is dry and quite blocky (stony) and is entirely dominated by old pine forest. This is where you find the really ancient trees among those in the reserve. The fact is that the reserve is unaffected by forestry, and the old

trees and the amount of dead wood mean that the area has no equivalent in Jämtland. Hede old-growth forest may be some of the most old-growth, or virgin, type forest to be found in the county. Many endangered species of plants and animals thrive here, including many that are dependent on forest fires to survive. *Pycnoporellus alboluteus* and *Antrodia infirma* are just a few of the rare fungi that are found here.

The wetter areas, to the east, have areas of old spruce forest. There are also some old pines, both living and dead, and plenty of dying and dead



CLAES AHLSTRÖM

spruce at varying stages of decomposition and of varying dimensions. There are lots of old spruce, many of which are up to 250 years old. Because there are so many old trees here, it is probable that these areas of the reserve weren't touched by the most recent fire. It is different in the pine forest. Here, visitors can really experience what an old-growth forest that has been affected by fire is like. Dry pine forests are areas that, in natural conditions, are formed by recurring fires. This is the case in Hede old-growth forest. On average, the pine forest has been affected by fire once a century. The oldest trees are between 400 and 500 years old and have survived several fires. When they eventually die they will remain in the forest for hundreds more years as snags and fallen dead wood. Sunlit snags are popular places, both with woodpeckers and unusual lichens.

It is now 170 years since the last fire and, bearing in mind the area's



GÖRAN ERIKSSON

history, you might think it's beginning to be about time for another. Perhaps it wouldn't be such a bad thing if the pine forest was once again visited by fire. Without fires, species that are associated with pines and fires will eventually disappear.



The road leads all the way to the edge of the reserve. There is a picnic spot and non-flush toilet at the car park. A path that is almost 2 km long leads through the reserve.

GETTING HERE: Drive south from Hede, towards Råndalen. After about 10 km, the reserve is signed to the left. It is not a great distance to the other reserves of Storåsen and Brovallvålen, or to Sånfjället National Park.
PROTECTED STATUS: Nature reserve.
SIZE: 0.15 km²



BLACK WOODPECKER. GEORG NYSTRAND





CHEESE BRACKET, PAR HEDBERG

■ Storholmsjö

Storholmsjö Nature Reserve mostly consists of forest. But there is a lot else to see! There are two well-preserved shielings and a superb marl lake.

Three-quarters of the reserve are 120-140 year-old spruce forest, but there are trees that are older than this. A number of endangered lichen and wood-decay fungus species thrive because of the dead and dying trees that remain in the forest. Many spruce trees are de-

corated with green and grey beards of hanging lichen. Rare lichens that grow here include *Chaenotheca gracillima* and *Chaenothecopsis viridialba*. The fungi that live on the dead spruce in the forest include various *Aphyllphorales*. Some of these have wonderful names in Swedish which, when translated, are: cheese bracket, star hedgehog mushroom, violet oyster, scented bracket, scented leather and old spruce bowl.

The area has been influenced by shieling agriculture. The marshes have been used for haymaking for many, many years and livestock once grazed in the forests. The Holmbodarna shielings were built in the last half of the 19th century, while the Själderbodarna shielings had come into existence a century before. The outlying forests were good for grazing and were also used for firewood, timber and fencing for domestic



BENGT PETTERSON

HAKAN ATTERGAARD

use. In general, the forest has been carefully felled and has great natural value in the form of dead wood and endangered species. Holmbodarna's shieling pasture, in the middle of the reserve, is newly restored and is kept open by sheep. In the summer, sheep also graze in Själderbodarna's meadow, in the south of the area. Parts of Holmbodarna were once damp and waterlogged, and have had ditches cut in them so that they can be used. Using wetland for new cultivation was common at the end of the 19th century. They were called "marsh plantations" and are beginning

to become more waterlogged now that the ditches aren't maintained. This means that the land is becoming overgrown by coarser grass and is slowly returning to wetland.

There is a small stream along the left edge of the reserve and, to the south-east, the area borders a marl lake, Grönvattnet.



There is a footpath north of the road with information about the forest and its flora. There is also a 2.5 km path that starts at the car park to the



GETTING HERE: From Föllinge, drive west towards Lillholmsjö and then to the village of Storholmsjö. The road from Storholmsjö village to Åkersjön passes through the reserve and signs show where you can park.
PROTECTED STATUS: Nature reserve, Natura 2000. **SIZE:** 2.86 km²



south of the road. This passes both shielings and a lake, Grönvattnet. There is a picnic spot and wind shelter by the lake.

■ Valletjärnarna

Valletjärnarna Nature Reserve is a magical forest, with soft moss and huge pine trees. There are a lot of dead trees, both old pine snags and spruce that are decomposing on the forest floor. No trees have been felled here since the beginning of the twentieth century and the forest has been left in peace.

There are plenty of two and three hundred year-old pines. The spruce are somewhat younger. The area has been influenced by forest fires. From the early 1300s up to the present day there have been at least 12 forest fires here, this means about once every fifty years. This affects the forest's appearance. There

are no younger pine trees, only very old ones. Older pines survive a fire, after which there is space for new pines. If there are no fires, spruce begins to dominate and eventually there will only be spruce left in Valletjärnarna. Reserve management is therefore focused on reintroducing some sort of disruption that benefits pine regrowth, perhaps in the form of controlled burning. Several old pines have fire scars in their bark, showing that they survived one or more fires. A number of endangered bracket fungi live on the old fire-scarred, resin-impregnated trunks.

Woodland birds thrive among the



FIRE SCAR. GÖRAN ERIKSSON

old trees, including capercaillie, hazel hen, black woodpecker and three-toed woodpecker. The reserve has plenty of suitable nesting trees and old or dying trees with many insects inside the bark.

The north-west of the area has a beautiful tarn. It's a lovely place for a picnic.



MALE CAPERCAILLIE. P-O NYSTRAND



FEMALE CAPERCAILLIE. P-O NYSTRAND



GÖRAN ERIKSSON



There are four reserves in the area around Ljungå, all on the same property. Apart from Valletjärnarna, they are Käringberget, Båthällan and Svedjan. There is a marked trail from the forest road to the south-east of the reserve; this goes in a north-westerly direction to the reserve's boundary. There is an information sign; from here there is another marked trail through the reserve to the tarn.

GETTING HERE: To get to Valletjärnarna Nature Reserve you drive on forest roads about 6 km north (road 305) of Ljungå. There are signs to the reserve. **PROTECTED STATUS:** Nature reserve, Natura 2000. **SIZE:** 0.15 km²



■ Billtjärns urskog

The forest is bursting with life. Lichen-clad spruce and inquisitive Siberian jays greet you when you arrive in Billtjärn Nature Reserve. The decaying stumps and fallen trees bustle with insects and rare fungi grow on the old trees, such as *Phlebia centrifuga* and *Amylocystis lapponica*. The forest isn't really an old-growth forest, but the stumps are now old and it has been many, many years since saws and axes were used here. There are also other traces of human im-

pact in the forest. Round, slightly raised areas, often with different vegetation to their surroundings, such as thickets of spruce saplings, show where there were once charcoal kilns. Billtjärn has a lovely mixture of spruce and pine of all ages, and plenty of dead wood, both standing and on the forest floor. Silver-grey snags stretch towards the sky and soft, overgrown spruce trunks slowly decay on the ground, below a thick layer of moss.

If you follow the path from the car

park, the dense spruce forest eventually opens up to reveal a beautiful forest tarn. This is Norra Billtjärn. The reserve also contains the slightly larger Södra Billtjärn.

The forest in the reserve has burned many times, most recently in 1886. You can see the traces of the fire in the bark of the old pines. These are called fire scars and look like long, narrow openings in the bark where, farthest in, the burnt wood can be glimpsed. Because

KRISTOFFER SIVERTSSON





SIBERIAN JAY. KENNETH JOHANSSON

it is now a long time since the forest burned, the spruce trees are starting to take over. This is particularly obvious on damper, lower-lying ground where the fire didn't take hold; 200 to 250-year-old spruce grow here. On drier ground, the fire has been hard on the spruce and there are few trees of that age. Instead, most of the spruce have grown after the most recent fire and are no more than around a century old. The real survivors are the 300 to 400-year-old sturdy pine trees that stand among the spruce and which have survived a number of fires. These are enormous trees with trunk diameters of 70 cm or more. There are also big aspen and goat willow trees that developed after the last fire.



There is a walk of a few hundred metres from the car park before you enter the nature reserve. The path then continues to Norra Biltjärn and continues all the way round it. In total, the walk is about 2.5 km. Naturally, you can walk outside of the path, but the terrain is a little more difficult. också men det är lite oländigare terräng.

ANDREAS GÄLLERSPÅNG



GETTING HERE: The reserve is about 10 km north of Bispgården. A little more than 6 km from Fors Church in Bispgården, turn off towards Åsbodarna and Biltjärn Nature Reserve from road 87. Follow the signs for about 8 km along the forest road. Park in the designated place and follow the path into the forest.

PROTECTED STATUS: Nature reserve, Natura 2000. SIZE: 1 km²





GÖRAN ERIKSSON

■ Berge urskog

Berge old-growth forest has everything that is characteristic of an ancient forest. It is magnificent to walk here, amongst the spruce and pine trees. There are a number of small marshes in the area, and some places can be fairly damp. There are also rock outcrops with really old pine trees. There is a beautiful lake, Gråssjön, in the middle of the forest.

The rock slabs beside the lake are a wonderful place from which to enjoy the view. The combination of ancient forest, marshland and water means that many species thrive in Berge old-growth forest. The marshes contain orchids such as the heath spotted-orchid, lesser twayblade and coralroot orchid. Osprey and red-throated divers are just two of

the birds that often nest by the lake and the tree trunks have visible traces of the three-toed woodpecker.

Just like all ancient forests, Berge old-growth forest has been affected by the many violent fires that have swept through the area. On the western edge of Gråssjöberget there are many pines that survived a major fire in the mid

1800s. The forest regrew after the fire, with a mixture of younger spruce and pines of varying ages. Now even the spruce are old, as they first took root about 150 years ago! Other parts of the mountain bear traces of a fire from almost 300 years ago. Because the old pines survived it is possible to find evidence of fires in the bark of a number of trees. These are called fire scars. On an outcrop on the slope down to the lake, there is a pine with fire scars from four different fires. It is at least 580 years old!

Dead trees stand in the forest, high stubs slowly decompose and broad pieces of fallen timber are scattered and decaying on the forest floor. Fires are not the only thing to have affected what the forest looks like today. If you look carefully, you can see traces of human

activity. There are stumps of trees that were felled for timber, but there has never been a large amount of felling. There are also ruins of an old summer cowshed in the area and cattle certainly grazed in the forest in the early 1900s. Charcoal was also produced in the area. The remnant of the site of the charcoal kiln is called a "kolbotten".



Berge old-growth forest is easily accessible because it is so close to Östersund and Brunflo. There are few paths in the forest, but the dry rock slabs are easy to walk over. The western areas of the reserve have a genuine old-growth character, with many fallen trees and marshy forest. This is where rare species can be found, but the terrain is also much more difficult.

GETTING HERE: The reserve is 15 km south of Brunflo and almost 10 km south of Tandsbyn. Turn off towards Tandsbyn from road 81 and take the road going south-east from the middle of Tandsbyn. After almost 10 km, you'll see signs to "Berge urskog". The reserve is close to the road, on the right-hand side. There is parking, an information sign and a path that leads into the forest.

PROTECTED STATUS: Nature reserve, Natura 2000. **SIZE:** 72 hectares



MARKS LEFT BY THREE-TOED WOODPECKER. CHRISTOFFER BERGMAN



GÖRAN ERIKSSON



KRISTOFFER SVERTSSON

■ Andersön

It's no surprise that almost all those who live in Östersund know of Andersön. It is a green, visitor-friendly oasis surrounded by Lake Storsjön, with a stunning



EMMA BERGMAN

view of the mountains, great bathing and gentle paths. It is close to town, with opportunities for mushrooming and berry picking, cycling or walking and lovely bathing for the entire family. The shoreline is long, and many people come to swim or picnic in the evenings. As early as April, the ice and the shoreline fill with people skiing, fishing and relaxing in the spring sunshine. The north-easternmost area has a long, sandy beach. There are wind shelters and barbecue sites here and in other places. In principle, the entire shoreline is suitable for bathing and picnicking and, if you wish, there are good chances of finding a secluded spot. The beaches are often stony and the waters shallow.

Along the shoreline there are beautiful, wind-twisted 200-year-old pines and, farther into the forest, there are plenty of lingonberries and mushrooms. Not

many people are aware that the calcareous bedrock and many generations of forestry work means that the older forest on the island of Andersön is home to many different rare fungi species. These include rare toothed fungi, such as the *Sarcodon fuligineoviolaceus* and *Sarcodon fennicus*. These parts of the forest are entirely protected from silviculture, but it is permitted in other places on the island.

People have lived on Andersön since the Stone Age. There are traces and relics of ancient settlements, burial mounds and cairns. The construction of Andersö Redoubt began in the middle of the 1600s, on the orders of Queen Kristina. The remains of the ramparts are clearly visible on the southernmost part of the island. In the 1600s, the island's agriculture was merged to become Jämtland's biggest farm. For a



CARL-JOHAN WIKSTRÖM

while there was a windmill on the island, as well as a park with broadleaf trees. Some arable land is still cultivated in the north of the island.



Marked paths start at the large car park on the north-east side of the island. There are information signs and maps. There is also a toilet and a wheelchair-friendly picnic spot. There are paths, picnic spots, hearths and toilets along the shoreline. Park in designated spaces or where you are not blocking the road. Outdoor activities are slightly

restricted, so read about what applies in the reserve on the signs. Isön is also part

of the reserve and has a car park and an information board.

GETTING HERE: From Frösön, cross Vall-sund Bridge to "Annersia" and then continue towards Orrviken. After about 10 km, take the road to Norderön; there are signs to the reserve after about 1 km. If you are arriving by boat, there is a public landing stage at Trefotsudden.

PROTECTED STATUS: Nature reserve, Natura 2000. SIZE: 10 km²



■ Hoverberget

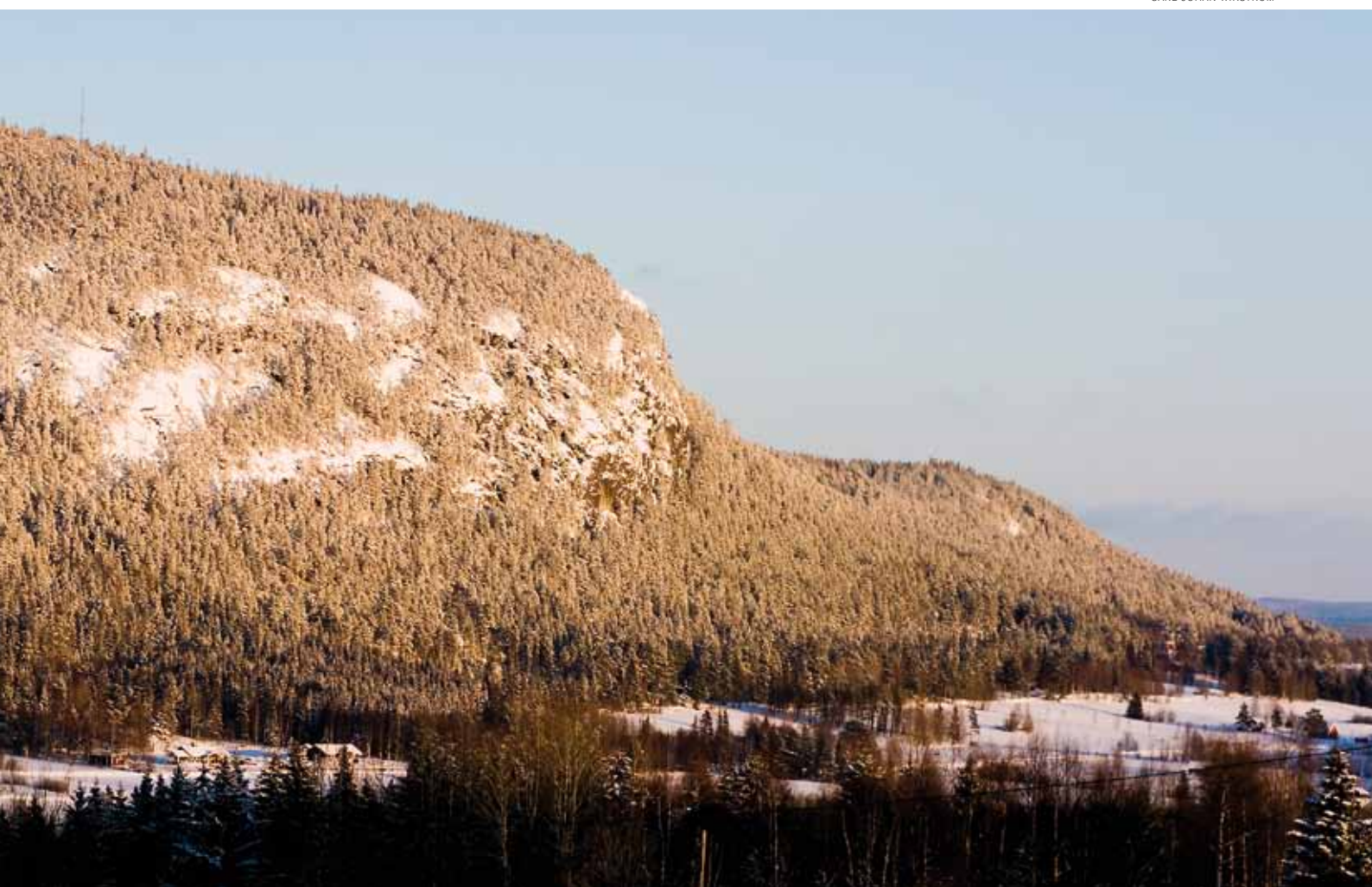
A few kilometres north of Svenstavik, a stately peninsula stretches into the waters of Lake Storsjön. Hoverberget takes up most of the peninsula and rises more than 250 metres above the water. Its western slope is steep and inaccessible, but to the east a number of villages and

arable land climb high on the shallow slope. The open arable land eventually gives way to an area with characteristics of natural forest. It has areas of open rock with knotted old pines, cliffs and crags. The top of the mountain is also fairly undulating and, in the lower areas,

old spruce and carpets of blueberries surround you. The old trees are home to many rare lichens and fungi. *Cynodon-tium suecicum* is an unusual moss that thrives in the forest slopes and ravines that Hoverberget provides.

Perhaps the most famous geolog-

CARL-JOHAN WIKSTRÖM



ical formations on the mountain are the cave, Hoverbergsgrottan, and “Rämnan” (the fissure). The cave is open for visitors in the summer and you can reach 80 metres into the mountain via a couple of sets of steps. Rämnan is a long, deep, bow-shaped fissure, which can be clearly seen on the west side of the mountain – it is visible from the road. It is about 400 metres long, but just 30 metres across at its widest point.



During the tourist season there is a café at Toppstugan, at the top of the mountain. There is also a viewing tower, and tables and benches. The view is astounding, and you have the whole of the southern area around Lake Storsjön at your feet. There is a 2 km long path from the top, which shows the way to Rämnan. Once at the ravine, you can observe the steep cliffs and huge pine crowns from the upper edge of Rämnan. If you don't want to take the car to the top, there are footpaths that start lower down. There is one path that starts at Hembygdsgården, the homestead museum, and one that follows the road to the top. There are information signs at these spots. Just outside the reserve there are paths to the cave, Hoverbergsgrottan, and to Rämnan. For information about guided tours of the cave, see www.hoverbergsgrottan.com.



KRISTOFFER SIVERTSSON



PHYSCIA MAGNUSSONII. CARL-JOHAN WIKSTRÖM

GETTING HERE: Hoverberget is about 7 km north of Svenstavik. Take road 321 between Svenstavik and Mattmar. **PROTECTED STATUS:** Naturreservat, Natura 2000. **SIZE:** 1 km²



Rushing waters and tranquil lakes

The county's biggest rivers are Indalsälven and Ljungan. These rivers and their tributaries run through much of the region. They both begin their journey in the mountains, passing Lake Storsjön on their way to the sea. Both Ammerån and Hårkan are examples of well-known tributaries to Indalsälven. Many of the rivers and their tributaries have been affected by hydropower development, but there are places where the water is still unregulated.

Jämtland has everything from still, clear mountain tarns to thundering rapids and waterfalls. Its waters are often lime-rich and productive. The area that rests on calcareous bedrock is usually called the Cambro-Silurian area. Limestone is a friable and easily eroded rock that releases nutrients into the water in the form of minerals, which means that the water has a high degree of resistance to acidification. Many animals are sensitive to acidification, from bottom-dwellers such as small molluscs, mussels and crustaceans to fish like salmon trout, char and grayling. Because many of Jämtland's watercourses are unaffected by acidification, these animals thrive and, alongside

them, many other species that are dependent on insects or fish as food. This means that the lime-rich lakes and rivers are often very species-rich biotopes. Apart from all the fish, there may be plenty of wading birds looking for insects along the shoreline and birds of prey looking for food. Otters and beavers are other animals that thrive in the county's waters. The calcareous bedrock means that parts of shallow lake beds or beaches are coloured white by marl. These marl lakes are formed when large amounts of calcium are precipitated, which then fall to the bottom as a grey-white sludge. Eventually the water becomes shallower, so that at times of low water there are long, exposed white marl fields along lakes and tarns.

In the county's flowing water, fish such as salmon trout, char and grayling live and breed. This creates opportunities for rewarding fishing, both for locals and for tourists.

Don't forget to buy a fishing permit if you want to go fishing!

Other protected watercourses that are worth visiting are Gimån, Dammån and Sölvbacka.



RED-THROATED DIVER. GÖRAN EKSTRÖM



TINA STAFREN



BEAVER: GÖRAN EKSTRÖM

■ Linsellborren

Close to Linsell there is a 15-km long stretch of the river Ljusnan that is the only part of Ljusnan's main channel in Härjedalen that is not regulated for hydropower. Within the reserve, the water falls about 30 metres, divided between three major rapids (Ransjöforsen, Linsellborren and Sandsforsen). This stretch has a long history as an important logging route. In the mid 1800s, the timber was floated past the rapids in an excavated canal but, when demand for timber increased, the canal was no longer adequate (it is still possible to see the remains of the old canal). Various devices were built along the river in order to ease log driving, to steer the timber and raise

water levels. In the 1920s, the wooden devices were replaced by ones made of stone, including the thick walls of wedged stones (stone caissons), which are still visible along the river. The longest of these is 800 metres long! The remains of the older, wooden caissons can also be seen on the river banks and in the canal. During logging's heyday, in the 1930s, 20–30 million logs were transported down Ljusnan (and its tributaries) every summer. The word "borr" probably comes from the Swedish word for bear/carry. So the name "Linsellborren" probably means a place where something was carried along a watercourse.

The most popular reason to come here is almost certainly the wonderful fishing, with grayling and salmon trout. If you're lucky, you could also catch a glimpse of a beaver or, more rarely, an otter. Birds include the black-throated diver, red-throated diver and white-throated dipper. There are paths, picnic spots and wind shelters along the river banks and small bridges across to the bigger islands and to help you see the rapids close up. The paths and picnic spots that you visit often have their origins in the log driving era. The picnic spot where you stop to study the river could well have been used by many log drivers, for drying their clothes or eating a bit of food.



There are a number of picnic spots with wind shelters at Linsellborren and at Ransjöforsen and Sandsforsen. There is a small log driving museum on the south bank of the river. It is located in one of the old log drivers' barracks. Tours of the museum or parts of the nature reserve can be arranged through prior agreement (www.linsell.se).

GETTING HERE: There are signs to the nature reserve from road 84 (Hede to Sveg) between Ransjö and Glissjöberg. The land area within the reserve is reached from the north via a signed access road in the village of Östberget, about 1.5 km south-east of Linsell. On the south side of Ljusnan you reach the reserve by turning off towards Lofsålen from the middle of Linsell, crossing the bridge over Ljusnan, and then taking the second road to the left (signed). Follow the road for about 4 km and then turn left (signed), continue for about 3 km to Linsellborren and the log driving museum.

PROTECTED STATUS: Nature reserve.
SIZE: 1.6 km²



EVA NÄSMAN



JOHAN LOOCK



KRISTOFER SVERTSSON

■ Tännforsen

You can hear the waterfall thundering through the forest long before you arrive at the water. It is exciting to follow the paths down towards the waterfall. The forest is green and verdant. Old, bear-

ded spruce surround the visitor and the ground is covered by soft mosses.

Tännforsen is one of Sweden's biggest waterfalls, with an impressive drop of 38 metres and a width of 60 metres.

In the 1800s, Tännforsen became one of Jämtland's first natural tourist attractions, and is now one of Sweden's most famous waterfalls. As long ago as the 1800s, people came here by boat across Tännsjön to see the falls. It was mainly the upper classes that came here, but when Tännforsen's tourist station opened in 1906 and a road was built, it became possible for more people to visit the falls. Tännforsen's great tourist value was a major reason why the falls were never silenced by hydropower.

In the spring thaw of 1992, a large boulder, the "bear stone", fell from the top of the waterfall. No one saw it happen, but since then the falls have looked a little different.

The even, high humidity created by the rushing water means that many rare plants and animals thrive here. The mist that drifts into the forest means that rocks and trees are covered by fine drops of water. This creates special conditions for many plants and animals. Because big waterfalls and rapids have often been victims of hydropower, there are few places like this left in Sweden. Around the falls you can find the very rare *Lobaria hallii* (gray lungwort) and *Parmeliella parvula*. There are also rare mosses and an unusual type of rove beetle. But it's not just rare lichens and insects you can meet on your walk down to the waterfall. Tännforsen is still a popular tourist destination. The falls are pleasant to visit at any time of the year.

The waters are wildest in the spring, and in the winter they freeze into beautiful shapes and a thrilling cave is formed below the waterfall. On dark winter afternoons the path to the waterfalls and the waterfall itself are lit, creating a magical atmosphere.



Tännforsen's tourist station, with a souvenir shop and restaurant, is close to the waterfall. In the winter, the tourist station builds igloos next to the falls where various activities are offered. There is a large car park next to the tourist station; this is where the path through the forest to the waterfall starts. There are several tables outside the station and there are benches along

the path. At the waterfalls there are viewing platforms, protective roofs and information signs. The paths down to the falls are wide and suitable for prams/ pushchairs. It is possible for people with disabilities to get to the upper viewpoint, but the path is fairly steep. If you contact

the tourist station, it may be possible to view the falls close up from the bottom. The coach parking has a wheelchair-friendly outdoor toilet that is always accessible, or there are toilets in the tourist station. Fee, SEK 20/car.

GETTING HERE: Turn off the E14 a few kilometres west of Duved. Turn onto road 322 to Staa and follow the signs to Tännforsen. It is about 22 km from Åre to Tännforsen.

PROTECTED STATUS: Nature reserve.

SIZE: 0.1 km²



LOBARIA HALLII. CARL-JOHAN WIKSTRÖM



ANDREAS GÄLLERSPÅNG

■ Ammerån



INGEMAR NÄSLUND



INGEMAR NÄSLUND

When the River Ammerån finally flows into Indalsälven, it marks the end of a long journey that began in Hotagsfjällen. Along the way, the waters may be foaming rapids or run quietly through spruce-clad valleys. It has everything from white-water to areas that are completely calm and still. The river has never been used for power generation and has been a nature reserve since 2003.

Ammerån is an incredibly species-rich environment. The water is high quality, unaffected by acidification and with unregulated rapids. The calcareous bedrock means that many species thrive

in and along Ammerån. For example, many orchids grow in the surrounding fens. These include early marsh-orchids, fly orchid, fragrant orchid and lady's slipper. Limestone is a friable and easily eroded rock that releases nutrients into the water in the form of minerals, which means that the river has a high degree of resistance to acidification. Many insects are found along the river banks and in the running water, providing food for fish and birds. The common sandpiper wades on the water's edge and the white-throated dipper loves to stand on smooth stones, gazing into the water

to hunt for aquatic insects. Other birds found here are the common merganser, red-breasted merganser, common goldeneye, heron and osprey. The calm waters are home to perch, pike, roach and burbot. Grayling and salmon trout thrive in the running water, which makes Ammerån a popular destination for fishermen. Otters and the freshwater pearl mussel also hide in the river's water.

There are around 80 Stone Age settlements along Ammerån, and almost as many pitfall traps. The river was an important floatway at the end of the 1800s and in the first half of the 20th century.



TINA STAFREN

Relics of the log driving era are visible along the river, both as stone caissons and large boulders that were removed from the river to make moving the logs easier. Others that have left traces behind them are the many beavers that live along the river. Felled trees and dams show that the beavers are flourishing.



Visitors to Ammerån fish, paddle, birdwatch or admire the breathtaking rapids. Road 344, which runs the length of the nature reserve, has access roads, parking places and picnic spots with information signs, wind shelters, barbecue sites, benches and tables.

GETTING HERE: Road 344 runs the length of the nature reserve and is accessible from road 87 between Stugun and Hammarstrand, as well as from a number of minor roads. From the north-west, Ammerån is accessible from the E45. Turn off towards Ramsele on road 344, just south of Hammerdal. After a few kilometres, you will pass Edeforsen on your left, and then the reserve begins downstream of Solbergsvattnet. **PROTECTED STATUS:** Nature reserve, Natura 2000. **SIZE:** 8.2 km²



INGEMAR NÄSLUND



EVA NÄSMAN



EVA NÄSMAN

■ Döda fallet

It is difficult to imagine that one of Sweden's wildest rapids once thundered through the dry, silent river channel at Döda fallet (the Dead Falls). It is even more difficult to comprehend that it was a human error that silenced the falls.

It has been possible to keep your feet dry when crossing the riverbed ever since the end of the 1700s. At that time, Storforsen had long been a barrier to log driving along the river Indalsälven, and both the farmers above the falls and the timber merchants on the coast wanted to excavate a logging channel to

get the timber past the rapids. Magnus Huss, later famed as Vildhussen, was given the job.

Storforsen actually existed for "only" 9000 years, from the end of the Ice Age to 1796. When the ice retreated, it left huge amounts of stones and gravel behind. These piles of gravel formed a ridge, an esker, that blocked Indalsälven and created Lake Ragundasjön. The river found a new course beside the esker, over a ravine. This was Storforsen. During the excavation to create a logging channel alongside the rapids,

the water was led into channels in the esker that trapped the water in Lake Ragundasjön. In early June, 1796, the lake overflowed due to severe spring flooding, and the weakened gravel esker was unable to contain the huge volume of water. In just a few hours the lake was entirely drained and the ravine in which Storforsen had roared was dry. Fields and meadows were covered by water and sediment, and the mills, roads and barns that lay in the water's path were washed away. In total, 1.5 km of the river bed dried up and Storforsen be-

came Döda fallet. There are clear traces of the water that once rushed along the old river bed, including the potholes, or giant's kettles, that were created by rotating stones wearing their way down into the rock.



You can visit Döda fallet when the ground is free of snow and ice. Some of the visitor facilities are wheelchair-friendly. There is a nature trail with information signs that starts at the entrance to the falls area. The café at Döda fallet has food and beverages, information about the falls and also offers guided tours. There is also a revolving theatre and concert stage that

is used in the summer. A few kilometres downstream from Döda fallet, there is a wooden suspension bridge of historical interest, which has recently been

renovated. There is a nature trail to the bridge. This joins road 87 on the northern side of Indalsälven, and road 701 on the southern side.

GETTING HERE: The access road to Döda fallet is from road 87, about 10 km east of Hammarstrand. The road to the edge of the reserve means that the area is easily accessible.

PROTECTED STATUS: Nature reserve.

SIZE: 31 hectares





■ Hällingsåfallet

Hällingsån itself appears to be surprised as it suddenly rushes out of the forest and down the high rockface. The water seems to hesitate for a second before it leaps and makes a headlong dive onto the hard rocks, 42 metres below. The falls are spectacular and beautiful at any time of the year. Below the falls, the water is forced into a narrow canyon. After a journey of around 800 metres, the river widens and travels towards its outflow into Lake Hetögel'n at a slower speed.

The waterfall is not only amazing to look at, it is also a unique setting for many mosses and lichens. The waterfall and canyon create a large spray zone, in which a veil of water drops covers nearby rocks and trees. The mist cools the cliffs on hot summer days and provides constantly high humidity. The phenomenon is called waterfall mist. The environment created by the mist is unusual because many falls and rapids are harnessed for hydropower. This means that many lichens and mosses that are dependent on waterfall mist are threatened with extinction. One rare lichen that grows at the falls is gray lungwort, which is only found in a few places in Sweden.

Some years, birds of prey nest in the ravine and, if you're lucky, you could see a rough-legged buzzard or a merlin as they swoop between the cliff walls. The grey wagtail and white-throated dipper are other birds that thrive in the area.

Hällingsåfallet has long been a popular destination for tourists and visitors. In the first half of the twentieth century, the area was much more inaccessible and visitors first had to take a boat trip across Hetögel'n and then take a tough walk upstream to reach the falls. The road now goes all way to the reserve and there is a wheelchair-friendly plankway all the way to the falls.



You can park in the first car park and then walk 2 km along the river to the falls. There is a marked path. At the waterfalls there is a visitor centre with plankways, protective fences, a cabin, picnic tables and hearths. You can also continue along the road to the falls, driving all the way there. The picnic spot is partly wheelchair-friendly, with a wheelchair-friendly toilet and gravel areas.



KRISTOFFER SIVERTSSON

GETTING HERE: Hällingsåfallet is about 20 km south-east of Gäddede. There are signs to Hällingsåfallet from the road that runs from Gäddede along the south side of Hetögeln. You can either get here from Gäddede or, from the east, along the south side of Vattudalen. **PROTECTED STATUS:** Nature reserve, Natura 2000. **SIZE:** less than 0.1 km²



KRISTOFFER SIVERTSSON



■ Ändsjön

Frösön's only lake is a paradise for both birds and visitors. The lake is located in the dip between Östberget and the hills up towards Frösö Church. It is surrounded by agricultural land and housing and, because it is so accessible, it is a popular place to visit. The lake is very shallow and a perfect refuge for many water fowl. The black-headed gull's cries can be heard over large parts of Frösön. Its chocolate brown head and sharp cry makes it impossible to miss. A little more effort is needed to spot the birds that hide in the reeds and out on the water. There is a good view from the bird tower; it is possible to see the Slavonian grebe, Eurasian wigeon, common pochard, great crested grebe or

coot. Ospreys, hen harriers and western marsh harriers circle above the lake, hunting. Many birds use Ändsjön as a resting place. In the autumn, barnacle geese, bean geese and greater white-fronted geese gather at the lake to rest for a few days on their journey south.

The reserve contains both forest and old agricultural land. In part of the reserve, cattle still graze down to the water's edge. This creates a good environment for many birds that like well-grazed shoreline meadows in which to search for food. As the agricultural land slopes towards the lake, nutrients from fields and meadows run into it. This has resulted in broad belts of reeds along the shore and in the shallowest waters. The reeds shelter many birds from the gaze of birds of prey, and sedge warblers and herons also thrive here.

Parts of the reserve consist of forest and in areas with broadleaf trees and grazing land the calls of the garden warbler, wood warbler, blackcap and three-toed woodpecker can be heard. The forest is also home to roe deer, foxes and badgers. However, the mammal that is most evident around the lake is the beaver. There are many beaver families in the area and sometimes they fell trees next to, or even over, the paths. The beavers get to and from the area via the lake's inflow and outflow, Djupbäcken and Mjällebäcken.

Because the soil is calcareous, there are plenty of flowers, including orchids, and you can find the bird's-eye primrose, early marsh-orchid and the Jämtland dandelion. The calcium is deposited and can be seen as light areas in the lake, a calcareous marl.



ANDERS BENGTSSON



HORNED GREBE. GEORG NYSTRAND



KRISTOFFER SIVERTSSON



The forest around the lake is an important local recreation area and has ski trails and lit exercise tracks. There is a path around the lake with information signs and benches. The path is about 2.5 km long and passes both bird towers. There is a wind shelter at Frösö Skidlek that can be used for picnics in the winter and summer.

GETTING HERE: There is parking at Frösö Skidlek. Follow the lit exercise trail to the left and you will come to the path around the lake. Signs show the way to the nearest bird tower. There are also parking spaces and information signs along Vallaleden. This is where the other bird tower is, close to the road. Ändsjön is easily accessible on the local buses. **PROTECTED STATUS:** Nature reserve, Natura 2000. **SIZE:** 1 km²



■ Ånnsjön



CURLEW: GEORG NYSTRAND



ULLA FALKDALEN

Lake Ånnsjön has an incredibly beautiful location, almost entirely surrounded by mountains. It is very shallow, thus forming a large delta landscape, including the areas where Enan and Handölan flow into the lake. It's not only the lake that is included in the reserve, but also the associated marshland and delta areas. The marsh and delta areas, and the open, shallow shoreline are important resting and nesting sites for a variety of birds. In total, around 100 bird species nest in the area. These include: Eurasian wigeon, common scoter, long-tailed duck, northern pintail, red-throated diver, broad-billed sandpiper, red-necked phalarope and Eurasian curlew. Many wetland birds that nest farther north stop here and rest at Lake Ånnsjön on their way north.

Two bird conservation areas are included in the reserve, at the mouths of Enan and Harån. Many birds thrive on the delta that has formed, and from 1 May to 31 July there are special regu-

lations so that they are not disturbed! Keep to the designated areas so you can watch the birds without disturbing them.

You will probably get the most out of visiting Lake Ånnsjön in early and mid June, when the lake and surrounding wetland are filled with divers, ducks, gulls and courting waders. Just after Midsummer, bird watching at the lake isn't quite so good. Some birds move on and others quiet down when nesting is over. The expansive wetland, open mountainside and the forests around the lake offer a few more weeks of fine bird watching. In the summer, you can view your surroundings from a kayak or canoe, and in the winter Lake Ånnsjön is a popular destination for skaters. Because the lake is shallow, it freezes early and news spreads fast when the new ice has settled. The lake is an amazingly beautiful place for skating, with mountains on three sides. In the lake and its watercourses there are populations of

salmon trout and char that spawn in running water, and the char is considered to be among the best in Sweden. This makes the lake popular with fishermen. In the winter it is a popular place for jig fishing.



There are currently information centres in three places: at the railway station in Ånn, the FBU centre in Ånn, and in Klocka. All of them have a map and description of the area, and the birds that you could see. There are plenty of bird towers, hides and plankways. There is a ramp to a wheelchair-friendly bird tower from the railway station in Ånn. There is an information centre at the ring marking station/observatory in Handöl, as well as good opportunities for bird watching. The observatory is staffed for some of the summer and has up to date information about the birdlife. For more information, please visit Lake Ånnsjön Bird Observatory's website: www.annsjon.org.

GETTING HERE: From Åre, drive west on the E14, towards Storlien. You can park the car at Ånn station and walk down to the lake. You can also take the train to Ånn. By car, you can also continue to Handöl on the other side of the lake. The bird observatory is on the left of the road, just after Handöls Vårdshus.

PROTECTED STATUS: Natura 2000, bird conservation area.

SIZE: 10 km²



PER-OLOF WIKBERG



TOMMY ANDERSSON



WHOOPER SWAN. KENNETH JOHANSSON

■ Tysjöarna

Two watery mirrors and enormous marl fields. This seems to be an irresistible combination for waders and ducks. As early as April, the air around Tysjöarna is filled with the songs of the cranes and the trumpeting of the swans. Lapwing, Eurasian curlew and ruff are early arrivals on the shoreline. In May and June, the marl fields and the lakes' shorelines are full of long-legged waders. These include the little ringed plover, temminck's stint and little stint, which stalk around in the shallow waters. There are three bird towers for those who want to observe

the resting birds. The birdsong fades in June; the resting birds have long since continued northwards and the breeding pairs are concentrating on their chicks. The southern lake dries up during the summer and is no longer as interesting for birdlife. Therefore, if you want to watch from the bird tower beside the southern lake, it is recommended that you do so early in the season. During the summer, you should head for the northern lake and its two bird towers if you want to watch the nesting birds. If you search the reeds and open water with binoculars, you can see Eurasian wigeon, Eurasian teal, lapwing, redshank, Slavonian grebe and the common tern. During the light nights at the end of

May, you can sometimes hear the great snipe performing in the south-west corner of the marl area around the northern lake.

Tysjöarna is one of the largest marl areas in the world. Apart from the marl fields, there are several springs and richens with calcareous tufa formations. Many rare plants and animals live in the calcium-rich environment. Lady's slipper, early marsh-orchid, broad-leaved hel-leborine and lesser twayblade are just a few of the 16 different types of orchids found here. Other very uncommon species that require calcareous water or tufa to thrive are cratoneuron moss, claw-leaved hook-moss and the round-mouthed whorl snail.



There is a wheelchair-friendly ramp to one bird tower from the northern entrance at Kännåsen. There is also a picnic spot. Both the tower and the picnic spot are wheelchair-friendly. If you leave the ramp and follow a path through the forest, you come to another tower (there is a toilet here). There is a path from the car park by the E14 to the southern lake, passing through forested and open land. Turn off to the right and continue on a plankway (about 500 metres) to a bird tower. The lakes are connected by a signed path that is about 7 km long. There is no access to the marl fields from 15 April to 31 July. Please keep to the paths, plankways and towers so that you do not disturb the breeding birds.

GETTING HERE: To get to the northern lake, take the E14 westwards and turn off towards Lit/Näskott. Then drive towards Kännåsen and turn right just before the railway in Kännåsen, onto a small gravel road that leads to a car park. The southern lake can also be reached from the E14. Just after leaving the edge of the city, there is long straight section of road with overtaking lanes and a central barrier. After slightly more than a kilometre, there is a large car park with an information sign. You can also get to the southern lake via Lugnvik's industrial area. Follow Tysjövägen right to the end and park outside the fence of the large warehouse. A

path over Semsån leads into the forest. PROTECTION STATUS: Natura 2000, bird conservation area. SIZE: 135 hectares



Flowers galore

The landscape that surrounds us has been affected by the people that have lived here for thousands of years. There are traces of human activity even in remote forests and mountains. These traces are particularly obvious in the open agricultural landscape. Flowering meadows and fields are the fruit of centuries of hard work. Lush river meadows, dry ground, fen and mountain marshland have been cut for winter fodder for livestock. Cows, goats and sheep have grazed freely in the forests and on the mountainsides, eating brushwood, twigs, grass and fungi. Haymaking or grazing are types of cultivation. What all cultivated land has in common is that it is dependent on management, either in the form of a scythe or a muzzle, so that it doesn't become overgrown.

Grazing land and meadows that have been cultivated for long periods of time and not affected by sowing, fertilisers or ditching, can be very species-rich. There are plants, insects, birds and fungi that thrive nowhere else. Mountain everlasting, violet glory bush, Bloxam's entoloma and the black vanilla orchid are a few species that are found on the county's cultivated land. Calcareous areas in particular, like parts of Jämtland, can be home to many different types of plants. Many orchids thrive on calcareous soils. Jämtland also has Sweden's greatest concentration

of rich fen, making the county one of the most important orchid regions. The county's calcareous fens offer colourful lady's slipper, elegant early marsh-orchids and purple flecked marsh-orchids, just to name a few species.

No plants really enjoy being eaten, trampled or cut with a scythe. The reason so many plants thrive on grazed or mown land is simply that the disturbance created by grazing and cutting means that no species can grow unrestrainedly and crowd out others. On grazing and haymaking land, small plants that find it difficult to survive competition will grow, with an enormous species-richness as the result! Some plants avoid the scythe blade by having a low rosette of leaves, and an effective protection against grazing is to taste unpleasant or be resistant to trampling.

People often live close to hay meadows and grazing land. Remember to show respect for residents; do not park inconveniently, avoid driving up to houses, farmyards, etc. Walk carefully if you visit an uncut meadow and remember to close any gates behind you when you enter or leave grazing land. Please remember that you may have close contact, welcome or unwelcome, with inquisitive livestock.



FROG ORCHID. BENGT BRUNSELL



MARIE BRUNSELL

■ Hamrafjället

Hamrar is a Swedish word for mountainsides – and it isn't difficult to see how the area got its name. The impressive, almost vertical scree slopes tower above the forests of mountain birch and the marshes, providing a dramatic setting for the reserve. Hamrafjället has open mountainside, forest, sloping marshes and relics of agricultural land. The

mountain faces south, allowing many plants the opportunity to survive despite the bare environment. Below the open mountainside, in the mountain birch forest, knotted, shimmering white tree trunks jostle with flowers and juniper bushes. The calcareous rock, the sunny south-facing slope and the area's long history as haymaking and grazing land

mean that the forests and marshes are rich in flowers, including many orchids. Almost four hundred different plants have been found here, making the area one of Sweden's most species-rich mountain areas! Plants that you can find here are fragrant orchid, early marsh-orchids, Lapland marsh-orchid, heath spotted-orchid, common twayblade, frog

orchid, grass-of-parnassus, wolf's bane, alpine blue-sow-thistle, field gentian and alpine meadow-rue.

There are Iron Age pitfall traps and burial mounds in the area. There are also 1000-year-old burial mounds next to Hamravallen, one of the old shielings; it appears that the area was used for haymaking and cattle breeding for a very long period of time. Meadows and fens have been mown, forests and mountainsides grazed. In the 1800s, there were fifteen shielings here, with around a hundred cows and just as many sheep and goats. The cattle's muzzles and people's scythes kept tussocks and bushes at bay, meaning that many flowers thrived. The last shieling closed in 1971, but parts of the old shieling meadows, mountain birch forests and sloping marshes were kept open by grazing and haymaking.



A number of popular walking paths pass through the reserve. They start from both car parks. A signed footpath called the "Iron Age Path" starts at the largest car park. There are also benches, tables, a toilet and information signs. Take your time to discover all the orchids and other calcicole species that are found here. In the summer you may bump into some of the cows that graze in the area.

FRAGRANT ORCHID. MARIE BRUNSELL



GETTING HERE: There are two entrances (with car parks) to the nature reserve. They are next to road 84, about 15 km west of Funäsdalen and a few kilometres after Tänndalen, in western Härjedalen.

PROTECTED STATUS: Nature reserve, Natura 2000. SIZE: 7 km²



KRISTOFFER SWERTSSON



■ Övre Rise

The village of Övre Rise is located where Risberget rises above the agricultural landscape around Tulleråsen. Here, on the southern side of the mountain, forested slopes meet flowering meadows. Above the village is a long stretch of beautiful, species-rich grazing land, as well as narrow strips of neglected hay meadows resting at the edge of the forest.

The land is high and the view is magnificent. Spruce, birch and juniper give way to open areas and an amazing variety of species. The area has long been used for grazing or haymaking and

has never been fertilised or ploughed, which means that numerous species thrive here. Much of the traditional grazing and meadow flora is now threatened by changes in farming methods. The land is becoming overgrown or is cultivated in a manner that disadvantages the plants which are adapted to traditional meadow cultivation. Here, some parts of the land are managed through haymaking and others through grazing. All cultivation-dependent plants have a sanctuary at Övre Rise and they are obviously thriving! In some areas you really have to make an effort not

to trample on rare plants as you walk. There are lots of black vanilla orchid and other orchids, as well as field gentian, mountain everlasting, moonwort and spotted cat's-ear. Most of the flowers are at their finest just after Midsummer and for a few weeks afterwards; if you would like to see the black vanilla orchid,



EMMA BERGMAN



BENGT BRUNSELL



BENGT BRUNSELL

this is the time to visit. There are unusual flowers to admire even in the middle of August, when a late flowering variety of field gentian is in bloom.



The area is perfect for picnicking or for flower spotting. It's not a long walk, just a few hundred metres from the car park to the closest open areas and their floral splendour. Remember that there may be grazing animals in the area.

GETTING HERE: The grazing land is in the village of Rise, about 20 km north-west of Krokmo. On the edge of Tulleråsen, turn left towards Övre Rise. After a couple of kilometres there is a sign to “naturbetemark”, up towards the forest. Drive past a farm and just after the edge of the forest you come to a designated car park, from which paths start in two directions.

PROTECTED STATUS: Natura 2000.

SIZE: 11 hectares



■ Kungsnäset



EMMA BERGMAN



EMMA BERGMAN

It is said that Lake Näkten has as many islands as the year has days. The fishing is good and its shoreline is undulating, with enough room for agriculture and forestry. The village of Näs is on the western shore of the lake, surrounded by a rolling agricultural landscape. The headland to the south of Näs Church is called Kungsnäset (the king's nose). At the end of it is a beautiful and historic

area of grazing land. This slants down towards the lake, offering beautiful views and plenty of slopes that are perfect for picnics.

The grazing land has hills covered in broadleaf trees and species-rich juniper slopes. There are also forested areas with birch, aspen and spruce. Cows, horses and landowners all help to keep the land open. It has never been artifici-

ally fertilised, and there are flowers here that are only found in areas that have a long history of cultivation. There has been a farm on Kungsnäset for hundreds of years, possibly from as far back at the 6th century. A map from 1745 shows that this area was then used as hay meadows. One hundred years on, the maps show meadows, fields and grazing land. Each part of the land was

used for the most suitable purpose. The level surfaces were easy to cultivate and slopes and hollows were grazed or mown. Today, the well-grazed slopes are home to dwarf milkwort, burnet saxifrage, drug eyebright and field gentian, among others.

You can read more about the area's geology, history and biology along a 2.5 km marked nature and history trail. Because the terrain is gentle and the ground is mostly open and free of trees, it is easy to find your way.

It is likely that people have lived here and cultivated the land for 1500 years. There are graves from the Viking Age (9th – 11th centuries). They look like piles of stones, but are often higher up and may be covered by turf. There is a hill that is called Lindsgraven (Lind's grave), but it is uncertain whether it actually is a grave.



Remember that grazing land is private land and that the farm is the Pettersson family's home. From

the church, follow the small gravel road towards the grazing land. It is only a couple of hundred metres to a stile that takes you into the grazing land. There is an information sign at the entry to the area, and a box with brochures about the area. The "Kungsnäs" brochure can also be ordered free of charge from the County Administrative Board. Remember, there are grazing livestock here, which can be inquisitive and intrusive. If you keep your distance and don't disturb the animals, hopefully they won't disturb you.

GETTING HERE: Strax söder om Fåker, längs väg 45, tar man av mot Näs. Parkera vid kyrkan.
PROTECTION STATUS: Natura 2000.
SIZE: 18.6 hectares



FIELD GENTIAN: BENGT PETTERSSON



MARIE BRUNSELL

■ Myhrbodarna

Just like all the other villages in the county, generations of farmers in Valsjöbyn have taken their livestock to the shielings in the summer. There was lush ground on the mountainsides and forests,

and leaving the farm to stay outside of the village for a few weeks meant that all the benefits of the forests and land could be put to use. The lush forests of mountain birch provided rich grazing, re-

sulting in milk that was thick and creamy yellow. Different types of grass grew on the marshes and were cut for hay. There was often a milkmaid who took care of the livestock and processed the milk. The

men came to the shieling to help with haymaking on the outfields and shieling pastures, but first the hay had to be mown on the farm.

Outside Valsjöbyn, the Myhr family still move their animals to Myhrbodarna (Myhrbuan) every summer. They have done so for generations. The animals are put on traditional shieling grazing, moving freely through forests and open land, starting around Midsummer and ending in October. Myhrbuan has an incredibly beautiful location, with extensive views over forests, lakes and mountains. Coming here is calming and relaxing. The impressive view, the animals and peace and quiet are a balm for the soul. You can hear cow bells, mooing and twigs snapping in the forest of mountain birch. The goats climb acrobatically to reach twigs and leaves and the cows chew on plants and mushrooms. The infields are separated from the forest by beautiful traditional fencing. The farm's calves may graze on a small part of the open pasture, the rest is mown and the grass can dry to become hay. There are some lovely flowers in the pasture, including oxeye daisy, alpine bistort and yellow-rattle. The rare small-white orchid grows outside the pasture.

The shieling is a historic settlement and has all the buildings necessary for a traditional shieling. These include a beautiful and well-preserved cottage, with storage space, kitchen and beds for the workers. The milk is processed in the kitchen building, becoming creamy "thickmilk", smooth cheese or yellow-gold butter. The animals stay in the cowshed at night to protect them from gnats and predators.



Myhrbuan is privately owned and run by Anita Myhr from Valsjöbyn. Visitors are welcomed and well looked after. During the summer there is always traditional shieling food to taste and animals to stroke. There is a wheelchair-friendly toilet at the car park and from there it is only a few metres to the gate into the pasture. The family also rents



EMMA BERGMAN

out cabins and can help organise hunting and fishing. Their website is www.myhrbodarna.se.

GETTING HERE: Myhrbodarna is about 130 km north of Östersund. In Valsjöbyn, turn right to Gunnarsvattnet. After a few kilometres there is a sign to Myhrbodarna and Vinklumpen (to the right). After another five kilometres you will see the shieling to the left and can follow the fencing to the car park. **PROTECTED STATUS:** Natura 2000. **SIZE:** 4 hectares



EMMA BERGMAN



Klinken

Klinken is actually the name of the farm that once lay in the Ljusnan river valley, a few kilometres west of Ramundberget. The farm was built in the 1830s, but it was never rebuilt after it burnt down. Instead, it was used as a shieling. From 1927 to 1967, about 16 cows, 8 goats, 8 sheep and a pig grazed freely in the mountain birch forest. Sheep were kept here for a few more years.

The area around Klinken was once used for haymaking. In the 1800s and some way into the last century, out-field haymaking was a vital element of agriculture. Throughout the Ljusnan river valley, all the way to Grönsjöarna, a few kilometres from the Norwegian border, all suitable land was mown. A lot of

hay was needed to feed the livestock through the long winter months. Sloping marshes, meadowed birch areas and river meadows were mown and hay gathered in stacks. It was then transported home once the snow had fallen. After cultivation ceased in the 1960s, the hay meadows began to become overgrown by juniper and willow. The Tvärångarna meadows, along Ljusnan, are home to the beautiful black vanilla orchid; if it is to continue to thrive, the bushes and tall herbaceous plants must be reduced. Tvärångarna and the open land downstream from Klinken are now maintained through haymaking, provided by the County Administrative Board. The entire area has plenty of orchids

BLACK VANILLA ORCHID. MARIE BRUNSELL



EMMA BERGMAN

and various alpine plants. These include fragrant orchid, early marsh-orchid, Lapland marsh-orchid, grass-of-Parnassus, moor-king and alpine gentian. It is fantastic to see the marshes covered by beautiful flowers in July.



Klinken is used as a holiday home, please do not disturb the owners. Flowering marshes and extensive views are the reward for those who put the effort into climbing the slopes. There are a number of paths and trails in the area.

EVA NÄSMAN



GETTING HERE: Park at Ramundberget. Then there is an easy 5-kilometre walk to Klinken. A bridge crosses Ljusnan, then signs and paths lead the way. You can also drive a car a little farther along a toll road from Ramundberget.

PROTECTION STATUS: Natura 2000.

SIZE: 470 hectares



EVA NÄSMAN



■ Lillhärjåbygget

The lush grass along the waters of Lillhärjån has been used for haymaking since the 1500s. In 1804, a new farm was built here. Its name, Lillhärjåbygget, was a given. A few hectares of fields were cleared around the farm, as well as marshes and meadows along the river were cleared and the forests grazed. The same family has owned the farm and cultivated the land since 1865. The fifth generation, sisters Ann and Eva Eriksson, now lives at Lillhärjåbygget. The farm has been a cultural reserve since 2002, and the County Administrative Board helps to run it.

The farm is unique in that it is on roadless land and is still mostly run in a traditional manner. The livestock graze

freely in outfield forests and marshes. The infields and a few smaller outfield areas along the river are maintained by mowing. The sixteen remaining barns, both on the infields and outfields, are evidence that haymaking was once even more extensive in the area. In the middle of August, people and livestock move up to the farm's shieling, Hackåsvalen, which is a few kilometres up the mountain. Hay is also mown around the shieling and stored in the barns until the winter comes. In September they move back to the farm again.

The farm is still extremely self-sufficient. All milk is processed and becomes cheese, butter and whey butter. Potatoes are grown and animals

provide meat. Hunting and fishing have always been important elements of self-sufficiency.



Lillhärjåbygget's residents welcome guests who want to experience life on the farm or stay overnight in the self-catering cabin. If you wish, you can watch when the animals are tended and the hay mown. Check with the people at the farm about what is happening at the time when you plan to visit. You can also visit the farm independently, but always contact the owners in advance. (Day/visitor fee SEK100). For more information see www.lillharjabygget.se or ring the farm on tel: +46 (0)680 45016.



LARS-OLOF HALLBERG



LARS-OLOF HALLBERG



GETTING HERE: It is easiest to approach from the south. Drive towards Lövnäsullen from Sveg (about 60 km). Then turn towards Storhärjåvallen and follow a forest road for about 12 km, note that the road is in poor condition. It takes 2 hours to walk to the farm from Storhärjåvallen. **PROTECTED STATUS:** Cultural reserve, Natura 2000. **SIZE:** 55 hectares





VIOLET COPPER. BENGT PETTERSON

■ Vackermyn

Vackermyn is the name of a large wetland area that actually consists of several smaller marshes and fens. These include Håkansmyn, Rödfon, Surmyn and Vackermyn, which are rich-fens. A fen may be either rich or poor in minerals, depending on the bedrock in the area. Limestone is a soft rock type that is easily eroded and so supplies

mineral-rich water from the surrounding land to fens in areas that have calcareous bedrock. Rich-fens are often very species-rich and are characterised by the occurrence of many orchid species. The marshes in the Vackermyn area are home to around fifteen different orchid species. Vackermyn has not been affected by ditching, a practice

that dries out the land and improves the opportunities for agriculture, for forestry or, previously, for marsh cultivation. This is a very species-rich and valuable area because the marshes have been spared from drainage and because of the calcareous bedrock.

The marshes have long been influenced by man. There were once several

HEATH SPOTTED-ORCHID. CHRISTOFFER BERGMAN



FRAGRANT ORCHID. CHRISTOFFER BERGMAN



MORGAN JONSSON



shielings in the area. The marshes and the surrounding forest have been used for outfield haymaking and grazing. Some of the marshes are now being used for haymaking again, in order to benefit orchids and other species. This includes several species that require that tall vegetation and bushes are cut down. The marshes' calcareous waters also hide an interesting species, Geyer's whorl snail, which is worthy of protection. This brown snail has a size of barely 2 millimetres, and thrives in marshes that have not been disturbed by felling or ditching and which have long been used for haymaking. The fen also attracts a range of butterflies. One genuine rarity that is threatened when fens and hay meadows become overgrown is the violet copper. This is a

beautiful little butterfly that can be seen fluttering over the fens at Vackermynen in June.



Lady's slipper blooms at the end of June, which is the starting shot for all the other orchids to try to outdo each other as regards beauty and colour. Thanks to the plankways, it is possible to keep your feet dry, even through the surroundings are sometimes fairly wet. It is even possible to take prams or wheelchairs along the wide wooden walkways. There is a picnic place with a barbecue, information sign and a map of the area, etc. In the eastern area, south of Håkansmyren, there is a roofed picnic spot with a hearth.

GETTING HERE: About 15 km south of Hammerdal, towards Fyrås. There are signs to Vackermynen from the E45, at the entrance to Fyrås.
PROTECTED STATUS: Natura 2000.
SIZE: 124 hectares



■ Forsåsen

Forsåsen's orchid fen is small, but species-rich. The fen's immediate surroundings are calcareous coniferous forest. Coniferous forest on calcareous soil is an unusual biotope and the forest has several red listed species of lichen, including *Cybebe gracilentia*. The forest is mostly spruce, but there are also pine, downy birch and goat willow trees. Even if the forest is worth visiting in its own right, it is especially so as a beautiful setting for the fen. At first glance, it is the orchids that capture the visitor's

interest. The fen is what is known as an extremely rich fen, because the water in the fen is very rich in lime. This means that Forsåsen's orchid fen is a wonderful flowering oasis where many calcicole orchids thrive. Growing in and around the fen are: lady's slipper, heath spotted-orchid, coralroot orchid, creeping lady's-tresses, lesser twayblade, common twayblade and fragrant orchid. Naturally, there are many more unassuming plants in rich fen like that in Forsåsen. There are a couple of beautiful springs at the

edge of the fen, surrounded by soft moss. The lower, damper areas have a number of rare mosses, including *hamatocaulis* moss.

The biggest celebrity and visitor attraction in the fen is probably the lady's slipper. It is a tall, robust orchid that is easy to recognise. The flower's extended sepals are reddish-brown and the large, slipper-shaped lip is yellow. The lady's slipper is almost only found in areas with very calcareous soil and preferably grows in the semi-open, in forests or fens. It is called "guckusko" in Swedish, which literally means the "shoe of the forest siren".



The fen is very easy to get to and visitor-friendly; you don't need to wear walking boots. A plankway runs from the car park (east of the area) to the fen. Plankways have been laid out in the fen and there are information signs next to some of the orchids. The best time to see the orchids is usually the end of June and a few weeks afterwards.

LADY'S SLIPPER, HANNA SUNDIN



JØRGEN SUNDIN

GETTING HERE: Forsåsen's orchid fen is in the hills to the east of Hårkan, in the south-east corner of the crossroads about 1 km west of Forsåsen. From Föllinge, take road 339 across Hårkan. The fen is about 4 km from Föllinge. **PROTECTED STATUS:** Natura 2000. **SIZE:** 4.2 hectares



LESSER TWAYBLADE. CHRISTOFFER BERGMAN



SIBERIAN JAY. CHRISTOFFER BERGMAN

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