

## Running water

Mellanljusnan is an unexploited part of the river Ljusnan. Plans to harness the river in the 1970s were thwarted by the government, partly due to loud protests. The freely streaming water is vital for many species. The rare freshwater pearl mussel prefers rapid water. Sand and gravel bottoms in streaming water are perfect spawning grounds for grayling and brown trout. Naturally, grey wag-tail and dipper feature where the water rushes.



Brown trout  
*Salmo trutta*

Freshwater pearl mussel  
*Margaritifera margaritifera*

## Traces of log-driving

In the past, the river Ljusnan was a major float-way. To facilitate the transport of logs, stone piers were constructed along the shores. Other measures included the clearing of stones and rocks from the river bed and the building of log flumes. Log-driving ceased at the end of the 1960s but the traces still remain today.



You find many traces of the log-driving era within the reserve. At Lassekrog and Kölen there are, for example, impressive stone piers. Log flumes and guiding booms are other remains along the river.

## Come out and enjoy!

In Mellanljusnan Nature Reserve you experience a sense of wilderness. You can walk for miles on the Flottarstigen or Ljusnanleden trails without coming across buildings or other people. The reserve offers wonderful views across rapids, steep riverbanks and forest-clad ridges. Sometimes the trails make detours into the dense forest, where the ground is a soft carpet of moss and the tree trunks are covered in lichens. And when it is time for the obligatory picnic break you have several wind shelters with fireplaces to choose from. For those who want to try their luck at fishing there are several stretches of rapid flowing water. But remember that you need a fishing permit!



There are a number of wind shelters with fireplaces in the reserve, like here at Knutnäsudden. Remember to bring your own firewood – you are not allowed to take wood from the forest.

## Fragments from prehistoric times

Throughout the ages, humans have chosen to settle near water. People have lived and worked by the river Mellanljusnan since the Stone Age. Traces of old settlements remain, for example, at Kölströmmen and Skytesvallen. Here, archeologists have found shattered rock fragments. The angular stones are the remains of rocks heated in fires and used for cooking etc., after which they cracked.



There are marked trails on both sides of the river Mellanljusnan. The Flottarstigen trail on the southern side is 27 km long and equipped with bridges. The Ljusnanleden trail on the northern side is 24 km long and more adventurous, which means that you may have to wade across water-courses. The trails link to the six entrances of the reserve. The Helgonleden trail, which stretches between Uppsala and Trondheim, runs parallel with Flottarstigen until Laforsen.

## Remeber!

Please note that in the reserve you may not:

- drive motorised vehicles other than on roads designated for vehicular traffic,
- collect firewood or light fires on rocks. Otherwise, fires may only be lit using wood that has been supplied or that you have brought with you,
- break off branches, fell or in any other way damage living or dead standing or fallen trees or shrubs,
- damage, pick or collect plants or fungi, with the exception of berries, edible fungi and flowers for own use, except for protected or red-listed species,
- deliberately damage or disturb wildlife, except for permitted fishing.

Full regulations are available at the County Administrative Board website [www.lansstyrelsen.se/gavleborg](http://www.lansstyrelsen.se/gavleborg)



## Find us

The roads up to the entrance points are accessible for vehicular traffic during the summer months. At other times of the year (for example when the ground is thawing or during winter conditions) the roads may be closed or un-cleared of snow.

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801 70 Gävle  
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Telephone (switchboard): +46 (0)10-225 10 00  
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The purpose of the reserve is to conserve the biological diversity and to preserve and maintain the valuable natural environment as well as meet the need of areas for outdoor recreation. The nature reserve contains areas included in the European network Natura 2000.

**Area:** 1041 hectares, of which 622 hectares are land.  
**Established:** 2015. **Owner:** Private individuals, companies and the state. **Manager:** Gävleborg County Administrative Board.

**Production:** Naturcentrum AB 2015. **Translation:** M. Morris for S. Busam Golay, Stilren. **Photos:** Naturcentrum AB. **Illustrations:** M. Holmer. **Map:** C. Lindkvist, Naturcentrum AB.





## Mellanljusnan – walk along the water

Mellanljusnan Nature Reserve offers steep riverbanks, swirling rapids and dense forest with soft carpets of moss. On both sides of the river Mellanljusnan you find walking trails and a number of beautifully located wind shelters with fireplaces. On your walk, you have the chance of seeing rarities such as the fungus witches cauldron and spring pasque flower!

Home to many

Along the river there is a lot of forest which, in principle, has been left untouched since log-driving ceased in the 1960s. The forest contains plenty of old trees and dead wood, and the air is humid. This is why many rare plants and animals thrive here. Bracket fungi and lichens grow on tree trunks and stumps. Woodpeckers dig out insects from the decayed wood, and owls take up residence in the hollow trees. One of the rarities in the reserve is witches cauldron. The chocolate brown, velvety fungus appears in the moss-rich spruce forest in early spring.



When the air is humid you can pick up the aniseed scent of the fungus *Haploporus odorus* from a great distance. The moisture also contributes to the bright green colour of the large lung lichen. Both *Haploporus odorus* and lung lichen are indicator species. This means that the forest where they occur has high natural values.

## Exciting plants

You find exciting plants in many areas of the reserve. Alpine plants, such as alpine milk-vetch, alpine catchfly and sceptered lousewort grow along the shores of Mellanljusnan. Alternate-leaved golden-saxifrage, alpine enchanter's-nightshade and ghost orchid thrive in the ravines on the north-eastern side of the river. The spring pasqueflower is a rarity which flowers in early spring. It grows in glades in the pine forest, for example at Kasteln.



Spring pasqueflower  
*Pulsatilla vernalis*



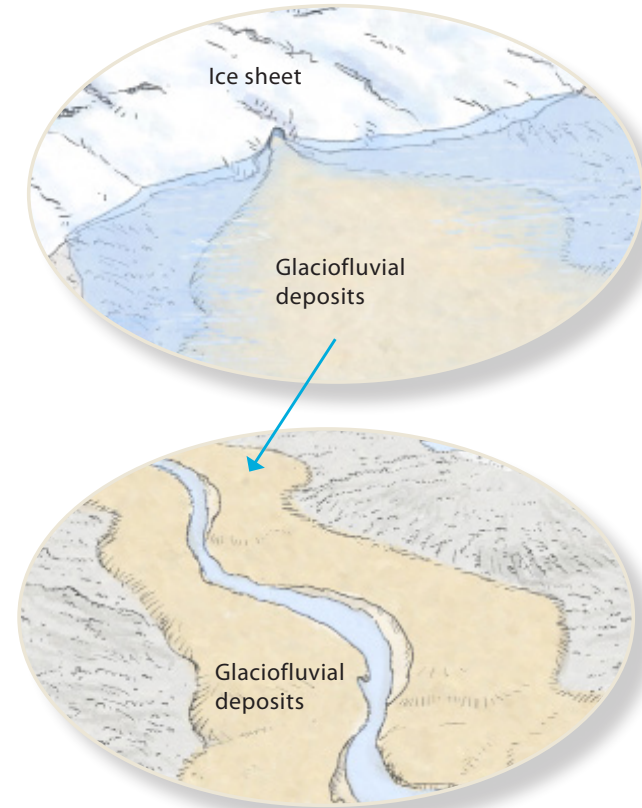
Alpine catchfly  
*Viscaria alpina*

Alpine milk-vetch  
*Astragalus alpinus*

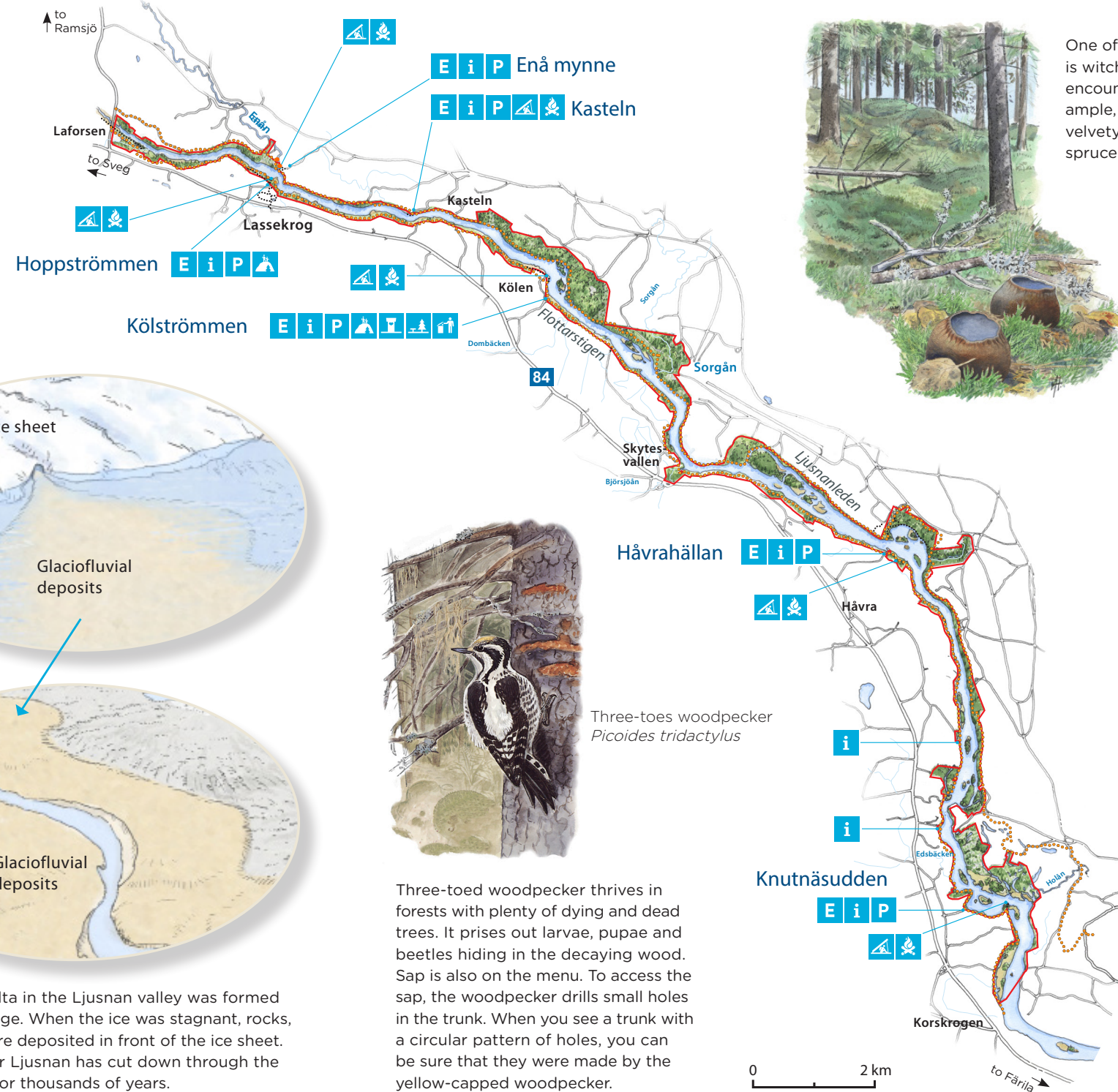
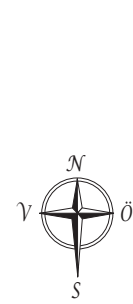
Alpine catchfly and alpine milk-vetch grow on the shores along the river Mellanljusnan. As the names denote, these plants are normally found in the mountains.

## Fascinating geology

In the reserve, the river Ljusnan flows through the largest glacial river delta in Gävleborg county. Rocks, gravel and sand were transported here by glacial rivers running under the ice mass. The material was deposited in front of the stagnant ice sheet, creating a delta in the form of a plateau with steep sides. Subsequently, the river Ljusnan has cut down through the sedimentary layers of the delta. In several places along the river, the water has created steep sandy riverbanks.



The glacial river delta in the Ljusnan valley was formed during the last ice age. When the ice was stagnant, rocks, gravel and sand were deposited in front of the ice sheet. Since then, the river Ljusnan has cut down through the layers of sediment for thousands of years.



One of the rare species in the reserve is witches cauldron. With luck, you may encounter this peculiar fungus at, for example, Håvrahällan. The chocolate brown, velvety fungus appears in the moss-rich spruce forest in early spring.

Witches cauldron  
*Sarcosoma globosum*



Three-toes woodpecker  
*Picoides tridactylus*

Three-toed woodpecker thrives in forests with plenty of dying and dead trees. It prises out larvae, pupae and beetles hiding in the decaying wood. Sap is also on the menu. To access the sap, the woodpecker drills small holes in the trunk. When you see a trunk with a circular pattern of holes, you can be sure that they were made by the yellow-capped woodpecker.