



Länsstyrelsen
Värmland



ABBORRTJÄRNSBERG AND RITAMÄKI

Finn homesteads with thriving meadows

© PHOTO: Ega Nohlgren

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Abborrtjärnsberg after mowing. © PHOTO: Jan Wirtberg.



Mowing by scythe at Abborrtjärnsberg. © PHOTO: Johanna Malmgren.

The Finn homesteads in northern Värmland

During the 1600s, many people moved from east Finland to Sweden. The authorities encouraged this, and people who established new settlements in far-off forest areas were granted tax reliefs for several years. These forests were considered more or less useless, but the “forest Finns”, as they were sometimes called, had experience of cultivating forest land through slash-and-burn farming. This practice entails cutting down and burning the forest, and then sowing seed into the ashes. However, before long, the economic value of the forest increased drastically, first as a source of charcoal for the steel mills, and later as timber. When that happened, slash-and-burn farming became prohibited, and the “forest Finns” had to readjust to field farming and animal husbandry. There are still traces of their hard work in many of the forests in northern Värmland.

The importance of haymaking

Gathering feed for the animals was a necessity to get them through the winter. The grounds closest to the houses, the infields, were used as fields and meadows, but these alone did not suffice. Hay was also harvested by scythe from mid-July until the end of September on the meadows and moors a little further from the farm. The meadow hay was more nutritious, and considered especially good for the animals, but moor hay and leaf hay were decisive for how many animals a farm could keep fed during winter.

Forest grazing and leaf hay

Since the lands closest to the farm were used as fields and meadows, the animals would graze in the forest during the summer. The forest grazing led to rich and diverse forest environments which are highly uncommon today. Sometimes, the forest floor was burned down to improve grazing. The forest also provided an addition to the winter

feed in the form of leaf hay, i.e., green twigs from deciduous trees that were gathered and dried. You can still find traces of grazing and leaf hay harvesting in the forest such as plants that benefit from such grazing and trees with multiple trunks that have grown from stump shoots after the harvesting of leaf hay ended. In bad years, the farmers would even harvest the tops of pine trees to supplement the feed, so that the animals would survive until spring.

Thriving, species-rich meadows

Mown meadows have a high level of biodiversity, especially around old Finnish farms, where the meadows were maintained for hundreds of years. The annual haymaking led to the slow depletion of nutrients from the grounds, which kept fast-growing species at bay. This instead benefited plants adapted to these particular conditions. The unusual and highly endangered field gentian can be found at both Abborrtjärns-

berg and Ritamäki. Just as many other plants that benefit from haymaking, the field gentian cannot tolerate being surrounded by excessively high vegetation. These plants have adapted to withstand haymaking in various ways. Some species survive in the meadow by keeping most of their leaves lower than the cutting height of the scythe. One example of a plant with its leaf rosette close to the ground is the spotted cat's-ear. Other species will set seeds early in the summer in order to make it before the hay is cut down, such as the yellow-rattle. For these species to survive, it is important to maintain the grounds through haymaking, and it is important that this is not done too early or too late in the year. As the plants that benefit from haymaking are adapted to conditions with limited nutrients, it is also important not to fertilise the lands.

More than just plants

The maintained meadow is not only home to a



Violet coral fungus (*Clavaria zollingeri*). © PHOTO: Anders Janols.



Dark green fritillary (*Argynnis aglaja*). © PHOTO: Sven-Åke Berglind.



Rocky mown meadow at Abbortjärnsberg. © PHOTO: Johanna Malmgren.



Flourishing meadows at Ritamäki. © PHOTO: Eva Nohlgren.

rich flora of vascular plants, but also to insects and mushrooms. Many of the insects have host plants that are only found in mown meadows. Butterflies and day-flying moths are strongly associated with mown meadows, and some of the species you might spot around the Finn homesteads are the green forester, the false heath fritillary, the six-spot burnet, the mazarine blue, the geranium argus and the dark green fritillary.

For many butterflies it is important that the hay is not cut too early, as their pupae need time to fully develop. What matters most to the mushrooms is instead the meagre nutritional conditions and unbroken/unploughed grasslands. There are also indications that the mushrooms cooperate with plants in the meadow through their roots and mycelium, but this has not yet been satisfactorily proven by science. If you are lucky, you may find violet coral fungus around Ritamäki in the autumn.

Ritamäki

Ritamäki is one of Sweden's best preserved Finn homesteads, and the last one that was tradition-

ally lived in and used. In 1964, the last people to farm it moved to the elderly care home in Torsby, and the farm was gifted to the regional history society of Lekvattnet. Up until that point, they had maintained their land still using the scythe as a tool. The area became a protected nature reserve in 1993.

The farm is surrounded by open infields, with patches of tilled ground and meadows. The mown meadow is highly rich in species. Field gentian grows here in masses, as do other rare species such as wolf's bane, spotted cat's-ear, grass-of-parnasus, fragrant orchid, lesser butterfly-orchid, alpine cat's-tail and moonwort. The endangered violet coral fungus can also be found in the meadows around Ritamäki.

About one tenth of the open ground around Ritamäki consists of cultivated fields divided into patches of various sizes. The fields were not permanent, but were moved around the meadows in order to avoid depletion and to stimulate the meadow vegetation.

In the lowest points of the reserve, there are wetlands which have also been cultivated or used

for haymaking. The hay from these moors did not have as high a nutritional value as that from the meadows, but it was still a necessary part of the winter feed.

Abborrtjärnsberg

Abborrtjärnsberg is a Finn homestead that was colonised relatively late, sometime before the mid-1800s. The c. 7 hectares of infields used to hold two crofts. Nowadays, only the buildings from North Abborrtjärnsberg remain, but the foundations of the houses that comprised South Abborrtjärnsberg are still visible. The area became a protected nature reserve in 1996.

The infields comprised both arable fields and mown meadows. The fields were used to grow potato and barley.

Abborrtjärnsberg also used to have apple trees and currant bushes.

The long-term use has created good conditions for several endangered plants, including field gentian, alpine cat's-tail and moonwort, but also typical meadow plants like pill sedge, mat-grass, alpine bistort and yellow-rattle. There are also rare insects such as the green forester moth.

The grounds were maintained through haymaking up until the 1940s. Since then it has been uncultivated. The Solörs Finnkulturörening (culture association) resumed maintenance of the grounds closest to the buildings in the 1970s. After that, the rest of the open grounds have gradually been reopened, and nearly all of the earlier infields are currently being maintained.



Heath fritillary (*Melitaea athalia*). © PHOTO: Sven-Åke Berglind.



Green forester moth (*Adscita statipes*). © PHOTO: Sven-Åke Berglind.

Measures taken within the project Foder och fågning (2010-2014)

The number of traditionally kept grasslands is decreasing all over Europe, and in Sweden they are almost completely gone. The highest natural values are often found in areas where farming was not modernised during the 20th century. In places where agriculture has been modernised, the mown meadows and pastures have often been ploughed into fields and leys, or have been fertilised. Doing so leads to the disappearance of the rare species that cannot compete with grass and crops. Many mown meadows have also been transformed into pastures. The open landscape is maintained with the use of grazing animals, true, but species that cannot withstand being trodden on or grazed will disappear.

The goal of the project in Ritamäki and Abborrtjärnsberg has been to continue building on the work already carried out in these nature reserves. Both areas already had beautiful mown meadows in connection to the buildings, but they were small, and lay in shadow of the trees in the surrounding grounds. The shade is detrimental to the plants and animals of the meadow. By expanding the mowed surfaces and improving their maintenance, the rare species have a greater chance of spreading and increasing in number. This would make them less vulnerable to random or unpredicted events that harm the place where they grow, such as extreme weather or a few years without maintenance.

At Ritamáki, all bushes and ferns have been cleared away. The tree line has been thinned out at the edges of the area to obtain a larger area of continuous mowed land, and to decrease the shading of the grass cover. At the southwest corner, there is a wetland which has also been reopened for haymaking; a maintained environment that has not existed in the area for many years.

At Abbortjärnsberg, the tree line in the southern parts of the area has been thinned out,

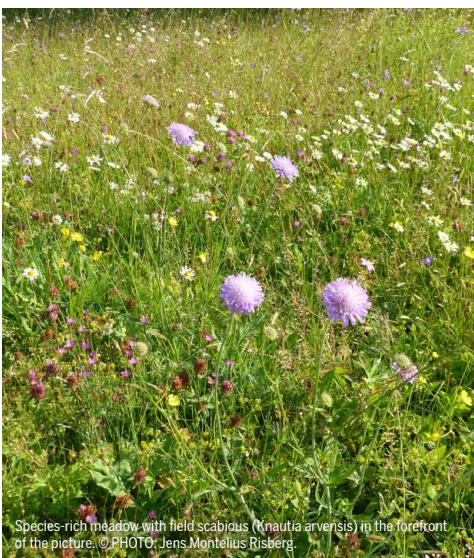
and the old system of ditches has been restored to prevent the waterlogging of the haymaking grounds. This has improved the chances of the plants and animals of the meadow, and created excellent conditions for long-term maintenance.

Now that the project has been completed, the work of annual haymaking begins. Using modern technology, such as a bar mower, it is possible to mow the old cultivated fields, but since large parts of the areas are highly uneven and rocky, traditional mowing by scythe will still be needed.

Moonwort (*Botrychium lunaria*). © PHOTO: Marie Brunzell.



A mound of stones at Ritamáki indicating the hard work that has gone into freeing the land from rocks, thus making it easier to maintain. © PHOTO: Johanna Malmgren.



Species-rich meadow with field scabious (*Knautia arvensis*) in the forefront of the picture. © PHOTO: Jens Montellius Risberg.



Field gentian (*Gentiana campestris*). © PHOTO: Johanna Malmgren.



A large load of hay on its way into the barn. © PHOTO: Torsby Finnskogscentrums arkiv.



Inside the smokehouse of Abbortjärnsberg, the oven is still intact, even if it is no longer possible to build a fire in it. © PHOTO: Eva Nohlgren.



How do I get to Abbortjärnsberg and Ritamáki?

Abborrtjärnsberg is almost on the Norwegian border, north of Röjdåfors. The easiest way to get there is from Torsby via Östmark. Turn north at Röjdåfors and continue towards Matilla. Before you reach Matilla, there are sign posts to the nature reserve. Follow these westwards for 9 km.

Ritamäki is also near the Norwegian border,

south of Lekvattnet. The easiest way to get there is from Torsby via Lekvattnet along the E16. Turn south at Lekvattnet, pass the church, continue around 7 km up the mountain, at which point a private road takes you westwards towards Lomstorp. There is a parking area by the Lomsen lake.



Visitors to Ritamäki are met with a beautiful view after their walk up from the parking area. © PHOTO: Johanna Malmgren.

Abborrtjärnsberg and Ritamäki

Abborrtjärnsberg and Ritamäki are two Finn homesteads in Torsby municipality, which are protected as nature reserves. They are also part of the EU network of protected areas, Natura 2000.

This brochure is about the natural values found in the mowed meadows of the homesteads. You can find out more about the history and cultural values of these areas at the county council website or at the Finnish culture centre in Torsby.

The county council has restored some of the mowed meadows at Abborrtjärnsberg and Ritamäki as part of the project Foder och Fägring – restoration of pastures and meadows in central Sweden, which was financed by the EU environmental fund LIFE+. Please visit the project website to read about more mowed meadows and pastures that have been restored.



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