NATURE RESERVE IN ÖREBRO COUNTY



# Nittälvsbrännan

Early in the spring of 2000 a forest fire raged across the Nittälv heath, a couple of kilometres north of Dansarbacken. The fire spread from a burning car on a forest road west of the Nittälven river, and spread northeast until it was eventually brought under control. Today, the area that burned has become an exciting nature reserve, one of the many lying along the beautiful Nittälven river in the north of Örebro county.

Fires on the sandy Nittälv heath are nothing new. Numerous traces of older forest fires can be seen, particularly in the form of fire scar damage – indentations in the lower stems of old pines, as well as charred tree stubs. The spruce is sensitive to fire and is usually killed, while the pine is more tolerant and usually survives. The young forest that burned in 2000 had been planted in the mid-1960s after extensive clearance.

Forest fires can be a major disaster for individual landowners but, in a wider perspective, fire is a type of natural disturbance that shaped the forest landscape over much of the country. The most common cause of forest fire was lightning, but our ancestors often deliberately set fire to the forest to create good pasture for livestock or for the practice of using leaves as fodder, making use of the lush broadleaved vegetation that grows after a forest fire.

#### **Forest fires**

It is estimated that a half to two percent of Swedish forests burned every year. Fires could sweep across some dry areas several times a century, while fires were rare or never occurred in the moister forest areas.

Today forest fires are unusual because forests now contain only a small amount of dead wood and the extensive network of roads makes it easier to control and put out forest fires. Many of the tree species in the coniferous forest have adapted to the frequent forest fires. After a fire, there is usually a phase when deciduous trees dominate in the burned area. Aspen, birch, rowan, goat willow, alder and pine quickly colonise the area. Trees that are more shade-tolerant, particularly spruce, then gradually replace the pioneer species.

As a result of forest fires, large areas sometimes develop with pure stands of deciduous trees for a few decades. These

often contain rich flora and fauna. Certain fungi, lichens, vascular plants and insects are totally dependent on forest fires for their survival. Orchid blue and Geranium lanuginosum are two plants whose seeds require a temperature exceeding 50 degrees before they start to grow. The seeds of the Geranium species can remain dormant in soil for over a hundred years. Many species of beetle also benefit from forest fires, as well as many butterfly species.

Today, several years after the fire in Nittälvsbrännan, the nature reserve is an attractive and interesting destination for visitors. Raspberry, rosebay willowherb, yellow bird's nest and sticky groundsel are some of the species that colonised the burned areas. Hare's tail cottongrass is common on the bogs, and its seeds are important food for the black grouse and the capercaillie. The three-toed woodpecker benefits from the large supply of dead wood where beetle larvae live. The common redstart, the crested tit and the coal tit can be seen in the nature reserve and the visitor strolling along the herb-rich river banks may see beavers and their effects on trees. With luck, traces of wolf may be seen.

Nittälvsbrännan is the county's hundredth nature reserve. A path leads round the most interesting parts of the burned areas, and there is also a barbecue on the path.

#### Nittälven

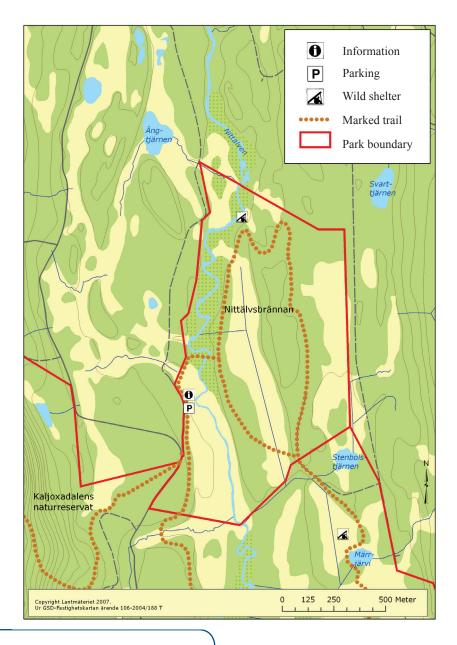
Nittälven meanders through sandy sediment deposited in a meltwater delta during the final stages of the glacial period. The banks are raised embankments (levées) that are breached by floodwater from time to time. The areas outside the levées are wet and often flooded, and were used as hay meadows in the past.

The ground further away from the river is firmer, and long hills run north-south. Mixed coniferous forest grows on the hills, dominated by pine. The river is one of the few unregulated rivers in the county, and it was used for floating timber in the past. On still evenings the brown trout can be seen waiting for prey near the surface.

#### The forest

Not all trees die in a forest fire, so the post-fire forest will be a mixture of older and younger trees. The nutrient-rich ash is a good seed bed for new plants. Birch seeds grow very quickly in areas that have burned, so the forest will have more deciduous trees than before the fire.

Länsstyrelsen Örebro län



## § In the nature reserve, you are not permitted to:

- damage the ground surface
- have dogs unleashed
- disturb animals
- pick flowers, lichens or wood-decay fungi and damage vegetation in any other way; however, berries and edible fungi may be picked
- collect insects or other invertebrates
- carve in dry wood or bark, or damage fallen tree trunks
- start fires except where designated and then using only designated wood
- camp, drive motor vehicles or cycle
- set up notice boards, placards, posters, signs or similar
- set up orienteering control points or mark trails with paper strips

#### How to get there

The nature reserve lies 15 km northwest of Kopparberg. The easiest route is from Kopparberg, following road 793 towards the northwest. Shortly after crossing the Nittälven river west of the Uvbergsbron bridge, continue southwards a couple of kilometres, following the sign to Dansarbacken. Bear right at the fork in the road, and reach the car park after a further 3.4 km.

### Facts about the nature reserve

Established: 2002 Area: 105 ha

Landowner: Swedish Environmental Protection

Agency

Managed by: County Administrative Board Established by: County Administrative Board The area is part of the EU network Natura 2000