THE OLD-GROWTH FORESTS THREATENED BY THE SWEDISH STATE

A report on how the state-owned company Sveaskog de-registers woodland key habitats

GREENPEACE

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Preface

To the international community, Sweden tries to present its forestry as combining timber production with environmental sustainability. But is this really true? This report shows that even the state-owned company Sveaskog uses forests with high conservation value for timber production, risking the survival of threatened species.

Both the UN Convention of Biological Diversity and the EU Habitats Directive require Sweden to protect what old-growth forests that we have left. But the state demands that Sveaskog make a profit, even when it threatens biodiversity.

Several polls show that most Swedes prioritize biodiversity and nature conservation over timber production. The international buyers of Swedish timber and paper products also do not want to buy products that come from old-growth forests.

Last summer, the organization Protect the Forest Sweden (among others) surveyed a sample of Sveaskog's forests, showing that Sveaskog has de-registered woodland key habitats, using them for timber production despite their high conservation value. These are not unique examples. On the contrary, we believe that this is a strong indication that this is a recurring practice with Sveaskog. This practice makes it very difficult to reach Sweden's environmental goals for the forest.

A woodland key habitat is a forest area that plays a key role for our future - it is a forest that is home to a multitude of life. Such ecosystems are the ground of all life. Biodiversity is also important for the ability of ecosystems to resist and adapt to climate change.

The short-sightedness that Sveaskog displays can never give the Swedish people or the international customers what they want: a forest rich in biodiversity, where we can explore nature, where sustainable management provides end consumers with sustainable products, where reindeer husbandry is possible, and a forest that helps us mitigate and handle the burning issue of our time: climate change.

We demand that the Swedish government and parliament change Sveaskog's directives so that they can put nature before profit - see the Swedish environmental movement's campaign Our Forest. We also demand that Sveaskog stops de-registering woodland key habitats.

Lina Burnelius
Forest and bio-economic issues, Greenpeace

Elin Götmark
Spokesperson for Protect the Forest

Introduction

This report examines the state-owned forest company Sveaskog's de-registering of areas earlier classed as woodland key habitats, and investigates what conservation values these areas have. Our conclusion is that these forests often have high conservation value, and that Sveaskog cannot, or will not, respect this.

According to the Swedish Forest Agency, a woodland key habitat is "a forest area which, from an overall assessment of the structure, species, history and physical environment, is very important for the forest flora and fauna. Red-listed species occur, or can be expected to occur, there." (Our translation.) Ever since the concept came into use in the 1990's, the large forest companies have been responsible for doing surveys and registering woodland key habitats on their own land. They update the map layer with woodland key habitats which they send to the Forest Agency and which is also shown on "Skogens Pärlor" (the Forest Agency's digital map which shows woodland key habitats and other valuable forest sites such as historical remains). Woodland key habitats do not have formal protection, but they cannot be logged under the voluntary forest certification FSC.

Many of the mature forests that forest companies want to log, are also forests with high conservation value which need to be protected, if Sweden is to reach its own environmental objectives and its international commitments in the UN Convention on Biological Diversity and the EU Birds and Habitats Directives. How do the forest companies handle their woodland key habitats? Many earlier reports have shown that forest companies are not capable, or willing, to register forests as woodland key habitats even when they clearly are. Some recent examples are Sveaskog's major CAR 2017 and Holmen's major CAR 2017, where their forest certification (FSC) auditor found that the companies were planning to log forests which were in actuality woodland key habitats. But how do the companies handle already registered woodland key habitats?

As background, we need to look at Sveaskog's nature conservation policy and the international agreements about nature conservation that Sweden has entered into. Sweden has decided to protect 20% of the area of every different kind of ecosystem for conservation according to the Aichi targets[1] [2] (which demand a minimum of 17%). This agrees well with the Swedish environmental movement's and conservation researchers' demand that at least 20% of all productive forest should have long-term protection[3] [4]. According to the Aichi targets, this protected land should consist of representative and well-connected areas with particular importance for biodiversity. The reason for the last is that species should be able to spread and not be stuck on small pieces of forest where they risk dying out. In a new analysis[5] by the conservation scientist Per Angelstam, commissioned by the County Administrative Board, he states that many protected areas are too small and lie too far apart, which makes the actual protection need even greater.

1 https://www.regeringen.se/rattsliga-dokument/proposition/2014/03/prop-201314141/

2 http://www.biodiv.be/convention/strategic-plan-2011-2020/aichi-biodiversity-targets

3 Hanski, I. (2011). Habitat Loss, the Dynamics of Biodiversity and a Perspective on Conservation. Ambio. 2011 May; 40(3): 248–255; https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3357798/

4 Skydda Skogen (2010). Scientists call for action: Protect Sweden's Old-Growth Forests: http://www.skyddaskogen.se/en/211-english-category/actual/2684-scientists-call-for-action-protect-swedens-old-growth-forests

5 https://www.lansstyrelsen.se/orebro/tjanster/publikationer/2018/fran-skydd-av-skog-till-gron-infrastruktur.html

According to Sveaskog, they voluntarily set aside 20% of their productive forest land (600 000 hectares) for nature conservation[6], which seems to agree well with the Aichi goals. But Sveaskog's policy does not actually mean that 20% of their productive forest land is set aside as well-defined areas of forest with high conservation value which are protected long-term.

Retention of single trees or groups of trees on clear-cuts as a conservation measure comprises 7.3 percentage points of Sveaskog's 20% conservation land. Single trees left on clear-cuts are assigned an area by the company which is then counted towards the total conservation area. There are several problems with counting this retention as part of the area of protected conservation forest.

1. Conservation scientists' models for estimating the area of protected forest that we need in order to conserve biodiversity assumes that conservation measures are taken in the whole forest landscape including managed forests, so this retention should not be counted towards the area of protected forest. The Aichi targets support this, since sustainable management and harvest has its own target (number 7), which should be seen as separate from the target for protected areas (number 11). According to target 7, all ecosystems should be managed and harvested sustainably, which surely includes retention.
2. Retention on clear-cuts may not last - the trees can fall in storms, and there is no guarantee that it will not be logged later. For example, Herman Sundqvist (an earlier executive at Sveaskog, now Director-General of the Forest Agency) said that the idea that groups of trees left as a conservation measure after logging should be left there during a whole cycle of forestry is staggering.[7]
3. In a production monoculture forest which has grown from an earlier clear-cut, it is usually not possibly to leave trees of the same quality, that is, old trees or other types of trees with high conservation value. This is only possible when logging a forest which has high conservation value to start with. Additionally, quickly-grown spruces or pines from a monoculture might be more vulnerable to storms than older trees from natural forests.
4. If an area is to be counted as protected, it must be possible to define it clearly on a map, which is not the case with single trees or small groups of trees. This concern has also been voiced by the Swedish Environmental Protection Agency, about the forest industry's way of counting low-productive forest as protected.[8]
5. These 7.3% do not consist of retention that has in fact been left on clear-cuts (which Sveaskog also acknowledges) It includes all such retention that is planned to be left on all productive forest land in the future when it is logged. That is, also in areas that are today only clear-cuts or young forest.

Five percent of Sveaskog's productive forest land consists of so-called ecoparks, and set-aside forests and retention in the ecoparks contribute with 2.7 percentage points of the 20% conservation land. In the ecoparks, Sveaskog

6 https://www.sveaskog.se/miljo--och-naturvard/

7 https://databas.infosoc.se/rattsfall/28491/fulltext

8 https://www.naturvardsverket.se/upload/miljoarbete-i-samhallet/miljoarbete-i-sverige/naturvard/landmiljoer/rapport-skrivelse.pdf

claims that conservation will always be more important than business.[9] Despite this, when older forest is classed for production while younger forest is set aside for conservation, the priorities are obviously influenced by the bottom line. An example of this is Ecopark Halle-Hunneberg, where Sveaskog has 4,800 hectares of forest, including 1,400 hectares set aside for conservation. Of the conservation area, almost 600 hectares is under 60 years old and only about 300 hectares is old forest (above 120 years old), while about 600 hectares of forest that is over 100 years old is used for production. They have also logged about 200 hectares of older forest since the park was created in 2004. The area used for production is 3,400 hectares, which is 70% of the area. Of this, 700 hectares is included in the conservation area as retention on present and future clear-cuts. This is nothing more than an attempt to eat their conservation cake and still have it.

Ten percentage points (300,000 hectares) of Sveaskog's 20% conservation area consists of areas voluntarily set aside for conservation, but about 3 percentage points of these are also nature reserves which are formally protected and thus not voluntarily set aside. The set-aside areas can be either unmanaged, or managed for conservation purposes. Sveaskog has done good work in managing and restoring forests through the years, for example restoring oak pastures and wetlands.

Unfortunately the managed category can be abused for the purpose of getting more timber even if this does not favor conservation, by Sveaskog's goal of increasing the proportion of broad-leaved trees. It is true that these need to increase, since during the 1970's the forest industry used herbicides to kill them. But it should not be done at the cost of other conservation goals. The system is abused in the following way: a forest with high conservation value is logged, except for the broad-leaved trees, which are left on the clear-cut. Or a young forest rich in broad-leaved trees is set aside for conservation, while a coniferous forest with high conservation value which earlier has been set aside is now taken into production and logged. The Ecopark Halle-Hunneberg in the previous paragraph is a good example. We urge Sveaskog to publish statistics of the age distribution in their managed and unmanaged conservation areas, since this can indicate the extent to which young forest is being set aside while old, economically valuable forest is logged.

Sveaskog's forests that are voluntarily set aside for conservation can be switched out, and their total area is constant. This means that if Sveaskog sets aside a new area, another previously set-aside area will be taken into production. Conversely, old forest with high conservation value can be taken into production and young forest set aside instead, as described above. This means that many of the forests are not permanently set aside. The areas which are not possible to switch out are: 1) the nature reserves on Sveaskog's land, which they count among the voluntarily set-aside forests, 2) some areas identified in a national inventory of large state-owned forests with high conservation value, which Sveaskog has signed agreements with the county administrative boards not to log, and 3) the woodland key habitats. But if a woodland key habitat is de-registered, it becomes possible to switch it out. This report thus shows that even areas that are supposed to be permanently set aside actually are not.

9 Sveaskog. Våra ekoparker - skogslandskap med gott om plats: https://www.sveaskog.se/miljo--och-naturvard/vara-ekoparker/

It is hard to get a handle on the total area of set-aside forests which have been switched out and taken into production over the years, since Sveaskog does not publish the information. But in 2014, Johan Ekenstedt, a conservation specialist at Sveaskog said that 20,000 hectares of set-aside forests had been re-classified "during the last years", consisting of over 2,000 forests.[10] At the same time, new areas have been registered as woodland key habitats, which is natural to do when knowledge increases and new forest areas are investigated. But that is not an excuse to de-register existing woodland key habitats with high conservation value. We do not know how many hectares of set-aside forests have been switched out since 2014. Another problem is that Sveaskog does not make their assessments of switched-out forests public, even when environmental organizations make investigations that show the forests have high conservation value. Perhaps their assessments would not stand up to a scrutiny.

It is not just Sveaskog that reclassifies voluntarily set-aside forests at a large scale. A study from the Swedish University of Agricultural Sciences compared the voluntarily set-aside forests of the large company Bergvik Skog from 2005 to 2014, and found that 17.5% of them had been reclassified during that time, of which most had been returned to production.[11] The Forest Agency and the Swedish Environmental Protection Agency also state that voluntarily set-aside forests are generally only protected for a limited time.[12] In some cases areas with low conservation value have been replaced by areas with high conservation value, which seems legitimate. But many voluntarily set-aside forests are regrettably now being used for timber production instead. The Environmental Protection Agency also states that voluntarily set-aside forests are increasingly being sold to new owners who are not FSC-certified, and then registered for logging.[13] This is another indication that these areas are not protected long-term.

Since January 2015, Sveaskog has classified 2,200 hectares as not being woodland key habitats anymore (of which 200 hectares has instead become nature reserves). According to Sveaskog, they are conducting a quality assurance process where they de-register woodland key habitats that are not good enough. But Sveaskog has already conducted such a process that ended in 2012[14], where they also brought in external expertise (according to a former employee). We can also ask why a for-profit company would register forests that weren't good enough as woodland key habitats in the first place. So why do they need to assess their woodland key habitats again? One hypothesis is that they need timber.

So what do these de-registered woodland key habitats look like?

10 "Sveaskog försvarar sitt skogsbruk" [Sveaskog defends their forestry], Norrbottens-kuriren 2014-03-19,

11 https://stud.epsilon.slu.se/7153/

12 https://www.naturvardsverket.se/upload/miljoarbete-i-samhallet/miljoarbete-i-sverige/naturvard/landmiljoer/rapport-skrivelse.pdf

13 Letter from the Environmental Protection Agency to the industry organization Skogsindustrierna with regard to the webside skyddadskog.se (ärendenummer NV-09512-12).

14 See page 4 in the magazine "Forum Sveaskog" from 2012: https://www.sveaskog.se/globalassets/trycksaker/forum-sveaskog/2012/forum-sveask-og-1-2012.pdf

Experts from Protect the Forest (Elin Götmark and Helena Björnström) have investigated eight re-classified woodland key habitats in western Hälsingland, and have judged that most of these are in fact woodland key habitats and should not have been de-registered. Further, there are other de-registered woodland key habitats that are part of forests which have been investigated by the county administrative board and judged to have high conservation value. Some de-registered woodland key habitats also lie in areas which have been investigated by other environment organizations such as the Swedish Society for Nature Conservation and Nature and Youth Sweden. All these have high conservation value.

We conclude that Sveaskog does not have the competence or the will to respect woodland key habitats. This is part of a larger problem where Sveaskog prioritizes access to timber over nature conservation, which is a threat to our democratically determined environmental objectives and our international environmental obligations. Since Sveaskog is a state-owned company, it is ultimately up to the state to guarantee that these forests are not treated in a way that impoverishes our common natural heritage.

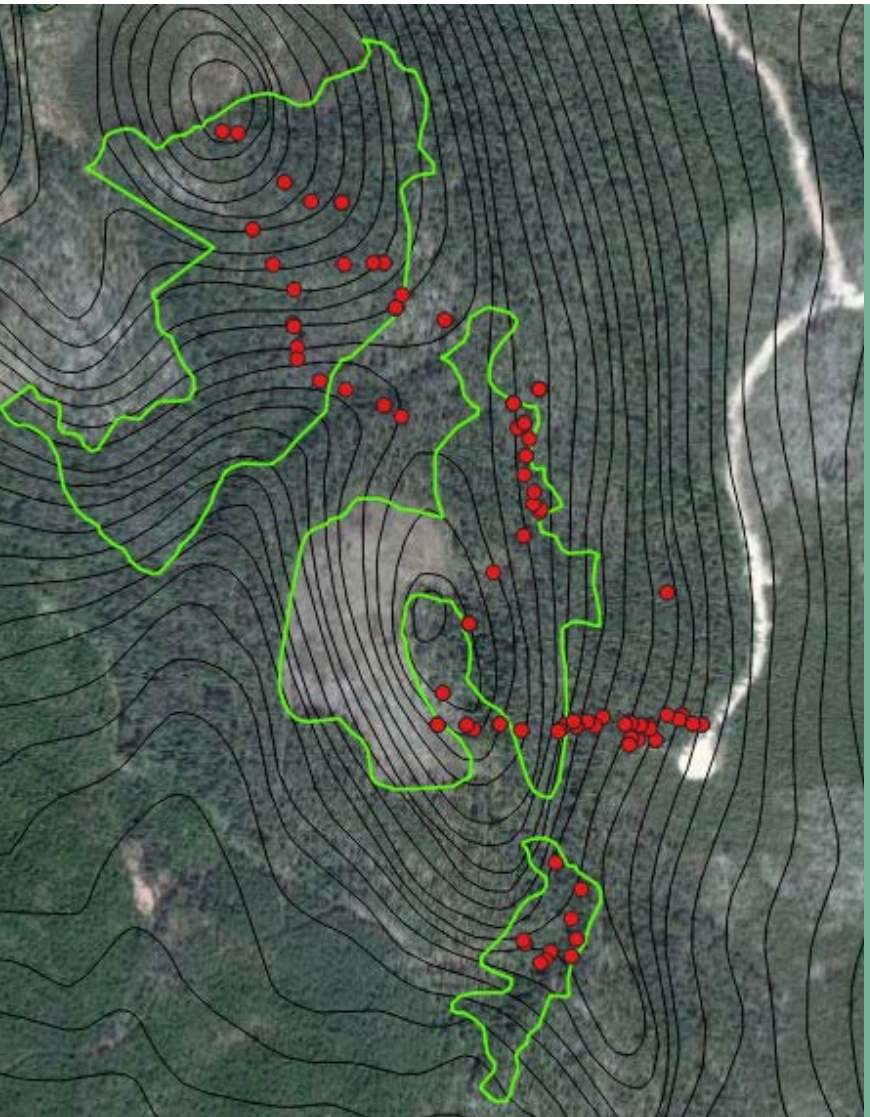
The state is also responsible in another way. In the examples below, we see cases where the Forest Agency refuses to investigate whether a forest is a woodland key habitat, even in cases where environmental organizations have found many red-listed species and other signs of high conservation value. At the same time, they agree to go out in the field with Sveaskog to de-register a woodland key habitat - in this case they do not even have any documentation of the fieldwork, which they must legally have (see page 31). The Forest Agency must act to protect environmental interests and not just production interests!

In the national red list (seen on the following pages) we found assessments of a species' risk of national extinction. The categories are as follow: Near Threatened (NT), Vulnerable (VU), Endangered (EN), Critically Endangered (CR), and Regionally Extinct (RE). The designation "S" indicates that a species signals high conservation value according to the Forest Agency (a so-called "signal species"). "EU" indicates that a species is listed in the Birds or Habitats Directive.

Gällsjöberget-Högvedsberget

South of Lillskog, Hälsingland. Three de-registered woodland key habitats which are 13.5, 10.2, and 2 hectares. The second one is partly logged - we can't see that the logging has been registered (if so, this is illegal) and the logging is obviously older than the de-registering of the woodland key habitat. East of the three areas there is also an area registered to be logged (A31232-2016, 3,2 ha), which is marked out with colored bands on the trees. On Gällsjöberget there is still a relatively unbroken area of forest, consisting of the three de-registered woodland key habitats which are embedded in voluntarily set-aside areas. Parts of the sides of the mountain are logged, though, and we fear that there are more loggings to come.

The forest is mostly pine-dominated natural forest, with some spruce, birch, goat willow and aspen, marked by earlier forest fires. The terrain is rocky. On the lower slopes there are some large stumps from old fellings of single trees at about the turn of the 19th/20th century. The forest is self-thinning and on the dead trees we see the gnawing of the beetle Tomicus minor, which plays an important ecological role in natural pine forests. On the ground are rich amounts of old dead pine trees, many with fire scars, and there is dead wood in different stages of decomposition. Most pines are between 120-130 years old, with older trees of at least 180 years old, some even older. Farther up the hill there is a nutrient-poor lichen-rich rocky area with many older trees, some with fire-scars. We also found an old birch with a fire-scar. On the southern slopes there is an area rich in aspen which has probably come up after a fire, a rare type of forest in today's landscape. In a ravine in the southwestern part (the third area), it is damper, with many aspen, goat willow, birch and spruce trees, and much dead wood. Close to the logging in the second woodland key habitat, there are many recently storm-felled pines.



SPECIES FOUND:

Sidera lenis	VU
Phellinus nigrolimitatus	NT
Odonticium romellii	NT
Phellinus pini	NT
Phellinus ferrugineofuscus	NT
Phellinus viticola	S
Scytinium fragrans	EN
Calicium denigratum	NT
Chaenothecopsis fennica	NT
Calicium parvum	NT
Lobaria pulmonaria	NT
Letharia vulpina	NT
Cladonia parasitica	NT
Alectoria sarmentosa	NT
Carbonicola anthracophila	NT
Carbonicola myrmecina	NT
Pyrrhospora elabens	NT
Hertelidea botryosa	NT
Bryoria nadvornikiana	NT
Microcalicium ahlneri	NT
Nephroma parile	S
Parmeliella triptophylla	S
Leptogium saturninum	S
Chaenotheca brachypoda	S
Anastrophyllum hellerianum	NT
Calypogeia suecica	NT
Hylocomiastrum umbratum	S
Goodyera repens	NT
Platanthera bifolia	
Tomicus minor (gnaw-marks)	S
Lyrurus tetrix (droppings)	EU
Tetrao urogallus (droppings)	EU

Total number of red-listed species:
1 EN, 1 VU, 21 NT, 7 S

PHOTOS FROM THE FOREST




PHOTOS OF SPECIES




Collema furfuraceum (NT), Sidera lenis (VU), Phellinus ferrugineofuscus (NT), and Letharia vulpina (NT).

Bondskogskilen södra

North of Lillskog, Hälsingland. De-registered woodland key habitat, 6.8 hectares.
Spruce-dominated natural forest surrounded by wetlands, a Pinus contorta plantation and a gravel road. There is a spring with a creek running through the area, where we found the rare moss Scapania carinthiaca (EN)! Very fine swamp with mostly spruce and birch, surrounded by goat willows with rich populations of Lobaria pulmonaria, as well as some old and thick aspens. There are trees in many ages and stem diameters, and much standing and lying dead wood with a rich mycobiota. The spruces are old and slow-growing, draped with lichens. Some trees bear the characteristic scars of food-seeking Picoides tridactylus. Partly the forest is herb-rich, with Dactylorhiza sp, Convallaria majalis, Phegopteris connectilis, and Paris quadrifolia, as well as juniper bushes – perhaps parts of the area have been used as forest pasture in the past? Some stem damage on the spruces also indicates this.

SPECIES FOUND:

Diplomitoporus crustulinus	VU
Phellinus populicola	NT
Phellinus ferrugineofuscus	NT
Cystostereum murrayi	NT
Pseudographis pinicola	NT
Phellinus chrysoloma	NT
Phellinus viticola	S
Collema furfuraceum	NT
Cladonia parasitica	NT
Alectoria sarmentosa	NT
Carbonicola anthracophila	NT
Carbonicola myrmecina	NT
Hertelidea botryosa	NT
Calicium parvum	NT
Lobaria pulmonaria	NT
Bryoria nadvornikiana	NT
Chaenotheca subroscida	NT
Microcalicium ahlneri	NT
Arthonia vinosa	S
Leptogium saturninum	S
Parmeliella triptophylla	S
Felipes leucopellaeus	S
Lecanactis abietina	S
Nephroma parile	S
Chaenotheca brachypoda	S
Protopannaria pezizoides	S
Scapania carinthiaca	EN
Anastrophyllum hellerianum	NT
Sphagnum wulfianum	S
Hylocomiastrum umbratum	S
Pseudobryum cinclidioides	S
Corallorhiza trifida	S
Carex loliacea	S
Neottia cordata	S
Lactuca alpina	S
Callidium coriaceum (gnaw-marks)	S

Total number of red-listed species: 1 VU, 17 NT, 17 S

PHOTOS FROM THE FOREST




PHOTOS OF SPECIES

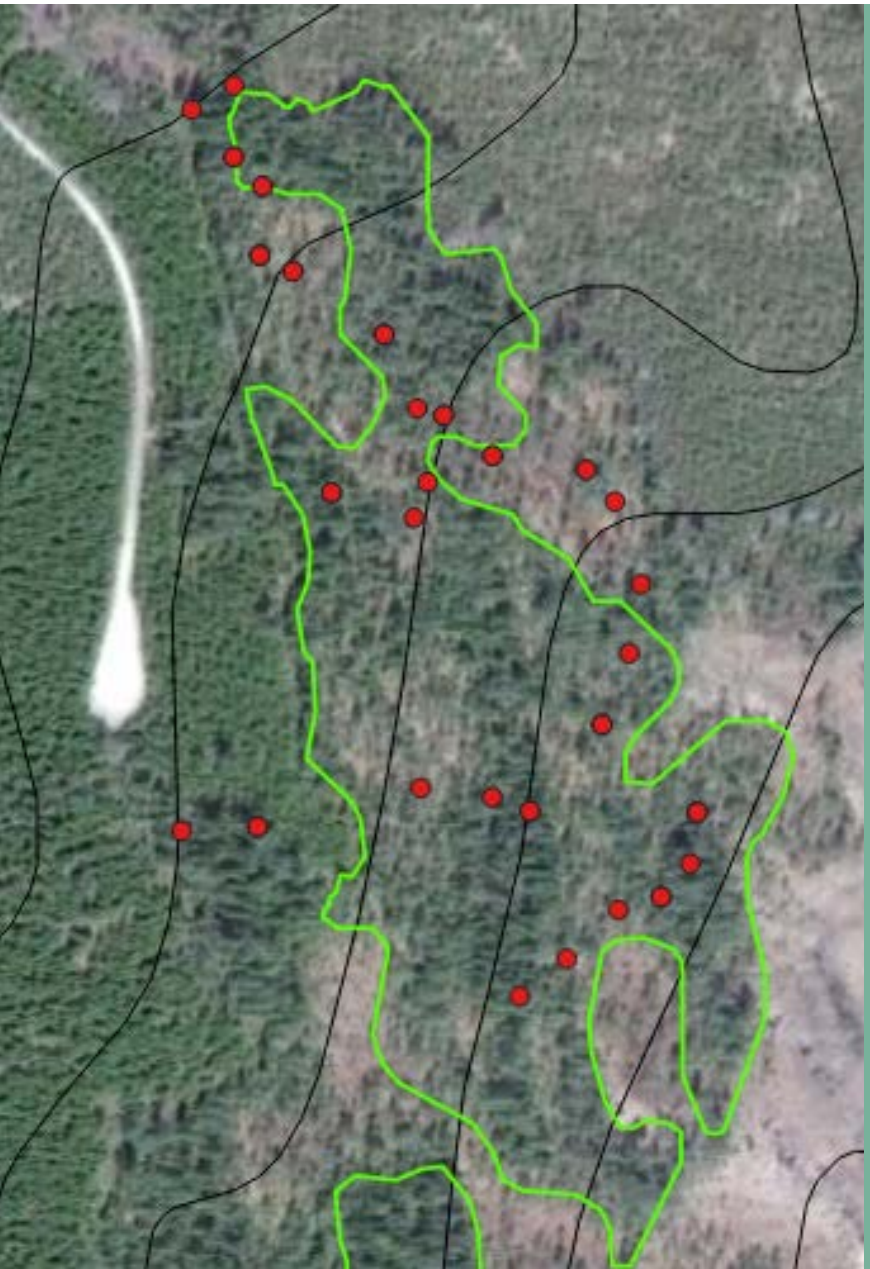



Diplomitoporus crustulinus (VU), Lobaria pulmonaria with apothecia (NT), Cystostereum murrayi (NT) and Alectoria sarmentosa with apothecia (NT).

Bondskogskilen norra

North of Lillskog, Hälsingland. De-registered woodland key habitat, 5.8 hectares, just north of the prior one.

The area mostly consists of low-productive forest on mire, with a higher-lying area of mixed coniferous forest with bilberry, with some goat willow. There are many slow-growing spruces richly draped with lichens. On the mires are many sun-exposed old dead pines with rich populations of calicioid lichens, and on the edges of the mires stand older trees. In parts of the forest there are many junipers as well as spruces with stem damage, which may indicate that it was used as forest pasture in the past.



SPECIES FOUND:

Pseudographis pinicola	NT
Phellinus pini	NT
Pyrrhospora elabens	NT
Bryoria nadvornikiana	NT
Calicium denigratum	NT
Chaenothecopsis fennica	NT
Alectoria sarmentosa	NT
Microcalicium ahlneri	NT
Calicium parvum	NT
Lobaria pulmonaria	NT
Carbonicola myrmecina	NT
Nephroma bellum	S
Parmeliella triptophylla	S
Lecanactis abietina	S
Chaenotheca brachypoda	S
Neottia cordata	S
Corallorhiza trifida	S

Total number of red-listed species:
11 NT, 6 S

PHOTOS FROM THE FOREST




PHOTOS OF SPECIES




Phellinus pini (NT), Chaenothecopsis fennica (NT), Pyrrhospora elabens (NT) and Microcalicium ahlneri (NT).

Norr om Nedre Lysstjärnen

Northeast of Lillskog, Hälsingland. De-registered woodland key habitat, 4.5 hectares.

The area is bordered by clear-cuts, young forest and to the mire edge of a lake in the south. Spruce- and birch-dominated swamp with a spread in age and stem diameter, with much standing and lying dead wood of several species and in many stages of decomposition. Some goat willow and rowan. A small creek runs through the forest and some trees stand on a heightened platform of roots ("sockel" in Swedish; this is common in swamps). In the outskirts of the area there is severe damage from forest machinery in a sensitive wet area, bordering on an area with some storm felling which has been marked with colored bands for logging. In this area, saplings have been felled in order to make space for forest machinery.

SPECIES FOUND:

Cystostereum murrayi	NT
Pseudographis pinicola	NT
Phellinus nigrolimitatus	NT
Asterodon ferruginosus	NT
Phellinus ferrugineofuscus	NT
Phellinus viticola	S
Chaenotheca gracillima	NT
Alectoria sarmentosa	NT
Lobaria pulmonaria	NT
Bryoria nadvornikiana	NT
Chaenotheca brachypoda	S
Felipes leucopellaeus	S
Parmeliella triptophylla	S
Lecanactis abietina	S
Nephroma parile	S
Nephroma bellum	S
Lopadium disciforme	S
Hylocomiastrum umbratum	S
Carex disperma	S
Carex loliacea	S
Neottia cordata	S
Corallorhiza trifida	S
Moneses uniflora	S

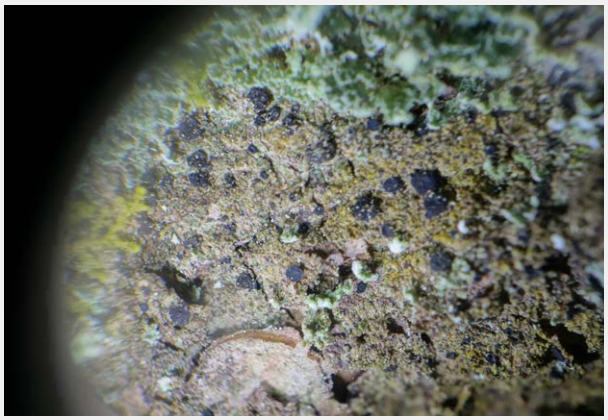
Total number of red-listed species: 9 NT, 14 S

PHOTOS FROM THE FOREST




PHOTOS OF SPECIES






Cystostereum murrayi (NT), Phellinus nigrolimitatus (NT), Lopadium disciforme (S), and Moneses uniflora (S).

Slåttkölsmyran

East-northeast of Los, just north of road 310. De-registered woodland key habitat, 15.9 hectares.

A narrow area along a creek, surrounded by mire. A gravel road crosses the north part. The area is dominated by spruce and birch swamp, with some pine. There are trees in many ages and the older coarse-barked spruce trees are over 180 years old, probably older. Slow-growing spruce and much standing and lying dead wood in many different stages of decomposition characterizes the area. There are many dead trees that have been rotted by fungi before they fell, as well as signs of a rich bird and insect life.

SPECIES FOUND:

Diplomitoporus crustulinus	VU
Cystostereum murrayi	NT
Pseudographis pinicola	NT
Phellinus chrysoloma	NT
Phellinus viticola	S
Chaenotheca gracillima	NT
Bryoria nadvornikiana	NT
Chaenotheca subroscida	NT
Chaenothecopsis fennica	NT
Calicium denigratum	NT
Alectoria sarmentosa	NT
Microcalicium ahlneri	NT
Calicium parvum	NT
Hertelidea botryosa	NT
Hypogymnia vittata	S
Lopadium disciforme	S
Chaenotheca brachypoda	S
Hylocomiastrum umbratum	S
Pseudobryum cinclidioides	S
Corallorhiza trifida	S
Neottia cordata	S

Marks of gnawing by insects:

Scardia boletella	NT
Semanotus undatus	S
Callidium coriaceum	S
Regulus regulus	VU
Tetrao urogallus (droppings)	EU

Total number of red-listed species:
2 VU, 14 NT, 9 S

PHOTOS FROM THE FOREST




PHOTOS OF SPECIES




Granticka (NT), Chaenotheca gracillima (NT), gnaw marks of Scardia boletella (NT) and Callidium coriaceum (S).

Vandelån

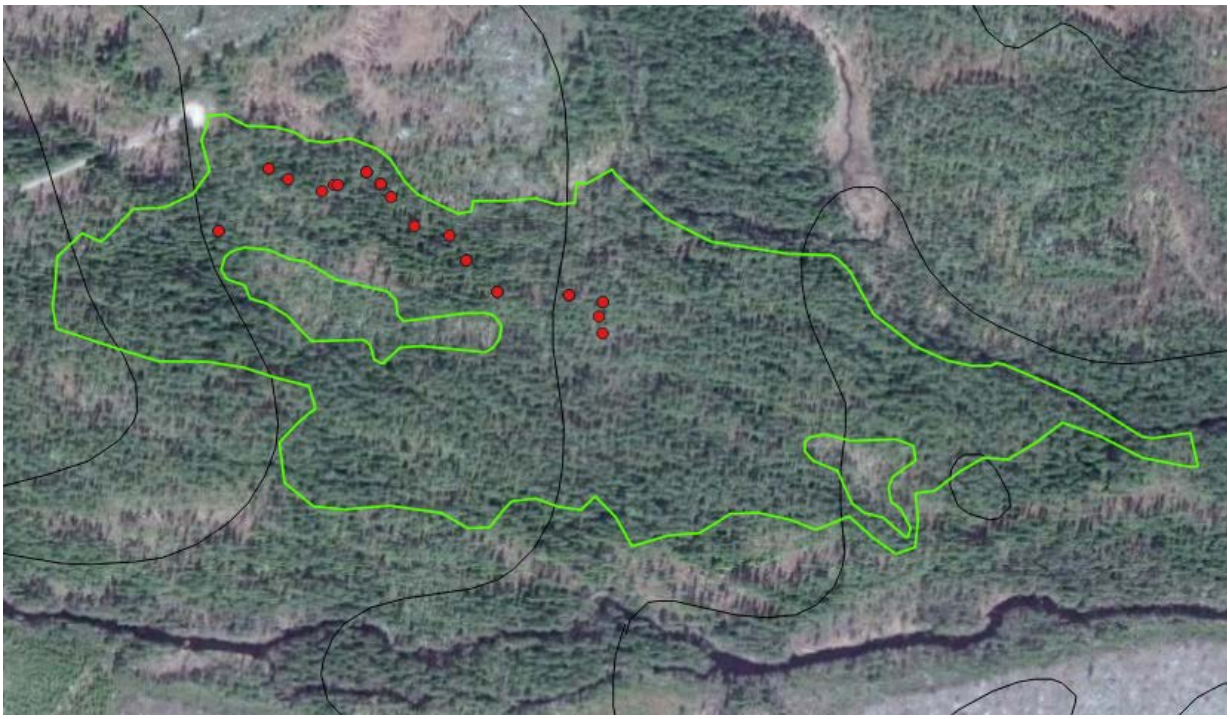
West of Gårdsjön, west of Korskrogen, Hälsingland. De-registered woodland key habitat, 9.3 hectares, which has also been registered for felling (registration number A 20866-2018).

Pine-dominated natural forest, with some spruce, concentrated to the western part. The area is bordered by mire to one side, and to the other side by a clear-cut, which we can see from stumps and other remains was an old natural forest before it was logged. In our area, single large trees were logged probably in the late 19th century. The oldest pines are about 180 years old, with lots of Alectoria sarmentosa on the trunks. There is old dead wood of pine with fire scars. Unfortunately, storm-felled trees were taken out of the forest a few years ago (the stumps were left), which lessens the conservation value of the forest. We do not know if this happened before or after the woodland key habitat was de-registered. In the western part there is old slow-growing spruce. We also saw a capercaillie hen with chicks, and lots of capercaillie droppings.

SPECIES FOUND:

Pseudographis pinicola	NT
Bryoria nadvornikiana	NT
Chaenotheca subroscida	NT
Cladonia parasitica	NT
Carbonicola anthracophila	NT
Carbonicola myrmecina	NT
Pyrrhospora elabens	NT
Hertelidea botryosa	NT
Calicium denigratum	NT
Chaenothecopsis fennica	NT
Microcalicium ahlneri	NT
Alectoria sarmentosa	NT
Calicium parvum	NT
Lobaria pulmonaria	NT
Sphagnum wulfianum	S
Tetrao urogallus (with chicks)	EU

Total number of red-listed species: 14 NT, 1 S



PHOTOS FROM THE FOREST




PHOTOS OF SPECIES




Sphagnum wulfianum (S), Cladonia parasitica (NT), Hertelidea botryosa (NT) and Calicium denigratum (NT).

Blistermyran öst

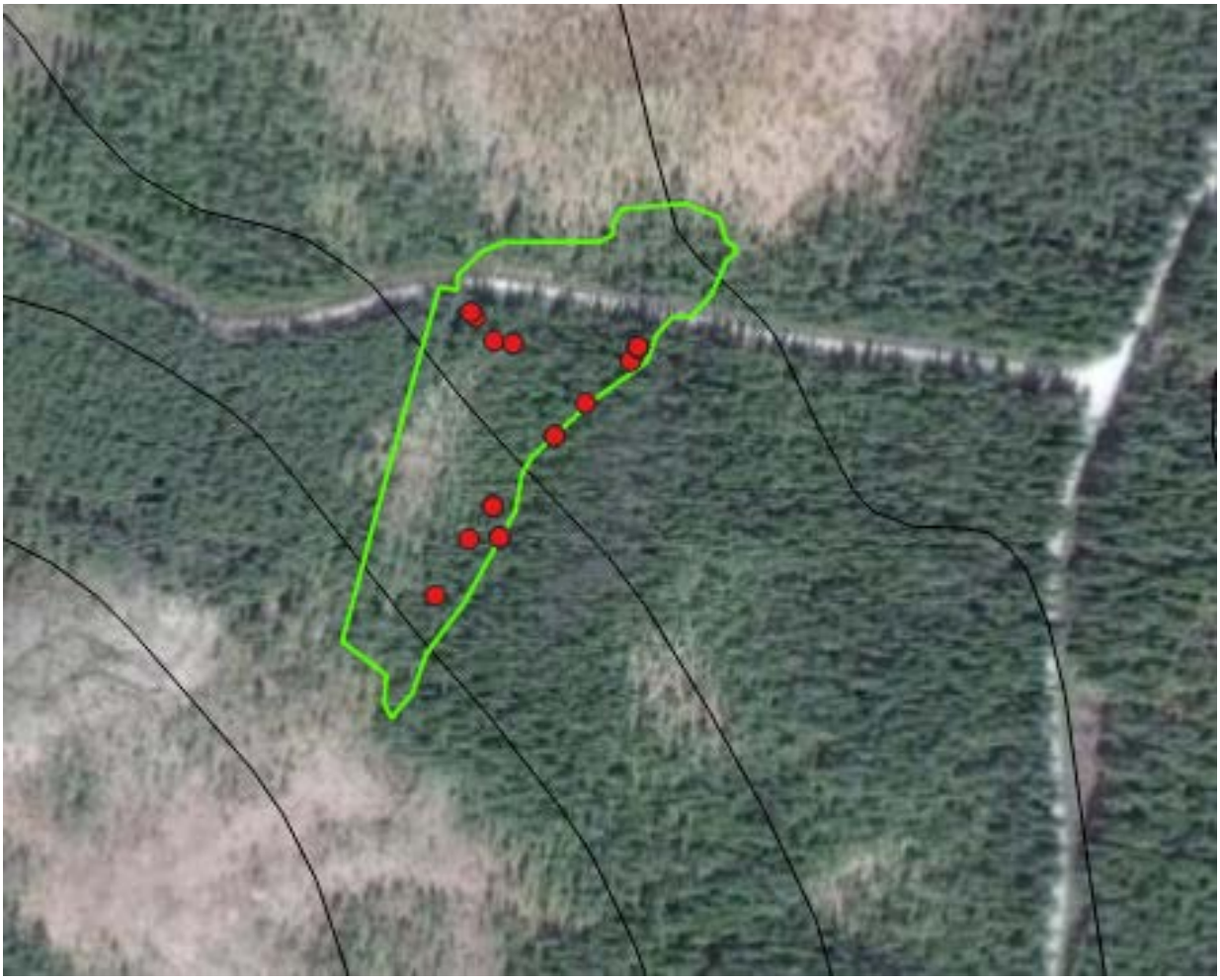
Northeast of Lillskog, Hälsingland. De-registered woodland key habitat, 1.4 hectares.

Spruce swamp with some birch, rowan and goat willow, with a clear-cut on one side and a young pine plantation on the other. There is a large spread in tree age and diameter, with a lot of older, slow-growing spruce and many trees standing on a platform of roots ("sockel"). Dead wood occurs mainly in the form of standing trees.

SPECIES FOUND:

Pseudographis pinicola	NT
Bryoria nadvornikiana	NT
Collema nigrescens	NT
Lobaria pulmonaria	NT
Alectoria sarmentosa	NT
Chaenotheca subroscida	NT
Nephroma resupinatum	S
Nephroma bellum	S
Parmeliella triptophylla	S
Felipes leucopellaeus	S
Hylocomiastrum umbratum	S
Neottia cordata	S

Total number of red-listed species: 6 NT, 6 S



PHOTOS FROM THE FOREST




PHOTOS OF SPECIES




Bryoria nadvornikiana (NT), Hylocomiastrum umbratum (S), Felipes leucopellaeus (S) and Pseudographis pinicola (NT).

Selingen

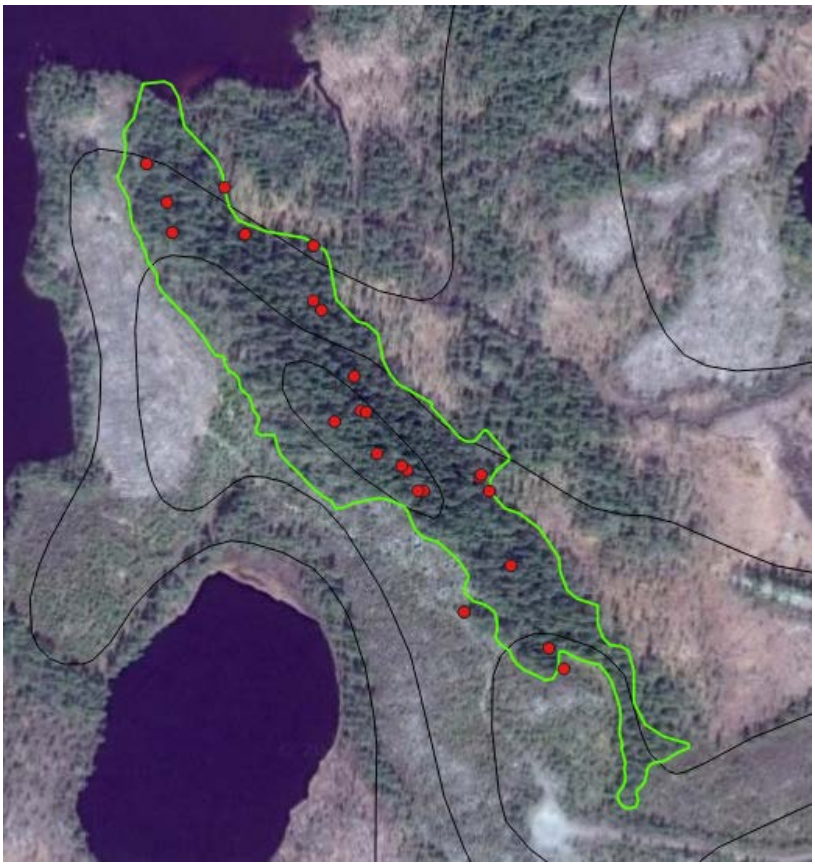
East-northeast of Los, just north of road 310, Hälsingland. De-registered woodland key habitat, 4.3 hectares.

Narrow area on a ridge, with a young plantation on the west side, mire on the east, and a lake in the north. The area has a history of pine trees, with large stumps from single trees logged probably at the turn of the 19th/20th century and some old dead wood of pine, but it is now mixed spruce-pine forest with a large spread of stem diameters, and some aspen and goat willow. The lichen Alectoria sarmentosa grows on both spruce and pine, and in several places we found the red-listed orchid Goodyera repens. Both species indicate long forest continuity. The edge effect can be clearly seen in the form of many storm-felled trees along the plantation border which also runs along the weather-exposed ridge. The area is dominated by large boulders with fine vertical surfaces with lichens and mosses.

SPECIES FOUND:

Pseudographis pinicola	NT
Chaenothecopsis fennica	NT
Alectoria sarmentosa	NT
Carbonicola anthracophila	NT
Carbonicola myrmecina	NT
Lobaria pulmonaria	NT
Lobaria scrobiculata	NT
Pyrrhospora elabens	NT
Hertelidea botryosa	NT
Bryoria nadvornikiana	NT
Hypogymnia vittata	S
Nephroma bellum	S
Nephroma resupinatum	S
Nephroma parile	S
Chaenotheca brachypoda	S
Goodyera repens	NT
Tetrao urogallus (cock)	EU

Total number of red-listed species: 11 NT, 5 S



PHOTOS FROM THE FOREST




PHOTOS OF SPECIES




Goodyera repens (NT), Hypogymnia vittata (S), Nephroma resupinatum (S) along with Lobaria scrobiculata (NT) and Nephroma parile (S).

Stor-Tjäderberget Öst

South-east of Lycksele, de-registered woodland key habitat, 9.4 hectares. This is part of area number 48 (Stor-Tjäderberget Öst) in the report "Skogar med höga naturvärden i Västerbottens län" [Forests with high conservation value in Västerbotten county] (2017) from the county administrative board of Västerbotten.

According to the report:
"The conservation values in Stor-Tjäderberget East are strongly related to the history of fire and the large proportion of broad-leaved trees. There are also areas with natural spruce forest and older pine forest on rocky areas. Even though the amount of dead wood is not very large, the area has many other valuable structures such as broad-leaved trees, very old pines, and dead wood of broad-leaved trees. The area also borders on a large set-aside area, Stor-Tjäderberget, which makes it more valuable. The county administrative board considers that the area's high conservation values would be damaged considerably by forestry or other exploitation."

SPECIES FOUND BY THE COUNTY ADMINISTRATIVE BOARD:

Haploporus odorus	VU
Pseudographis pinicola	NT
Phellinus populicola	NT
Inonotus rheades	S
Alectoria sarmentosa	NT
Carbonicola anthracophila	NT
Lobaria pulmonaria	NT
Lobaria scrobiculata	NT
Bryoria nadvornikiana	NT
Nephroma bellum	S
Nephroma parile	S
Nephroma resupinatum	S
Leptogium saturninum	S
Lactuca alpina	S
Xyletinus tremulicola	NT
Ptilinus fuscus	S

Total number of red-listed species: 1 VU, 8 NT, 7 S

Abmoberget norr

The north part of Abmoberget, south of Sorsele, de-registered woodland key habitat, 82.2 hectares. The area lies within forest number 113 (Abmoberget) in the report "Forests with high conservation value in Västerbotten county" (2017) from the county administrative board of Västerbotten. The area is no longer listed on the webside skyddadskog.se as a voluntarily set-aside forest. According to the Forest Agency, they have quality assessed the de-registration of the woodland key habitat together with Sveaskog in a field visit, but the Forest Agency has no documentation of the visit, even though such documentation should be available.

According to the county administrative board:
"Abmoberget is a large, un-fragmented forest area with very high conservation value because of the area's size, very small impact from forestry, and natural structures such as remains of old forest fires, old trees, dead wood, and natural swamps. The county administrative board considers that the area's high conservation values would be damaged considerably by forestry or other exploitation.".

Abmoberget has also been investigated multiple times by the Swedish Society for Nature Conservation in Västerbotten County, see a detailed report by Patrik Nygren and Lill Eilertsen.

From this report: "Abmoberget is a large hilly area, located between Blattnicksele and Sorselse in Västerbotten. From Abmoträsket in the north to Lillberget in the south there is 1,896 hectares of natural forest, also containing some mires, tarns and subalpine terrain. The area begins 350 meters above sea level and the peak of Abmoberget lies at 668 meters above sea level. Both west, east, and south of this area of connected forest there are very large areas of clear-cuts, and new clear-cuts are still being planned by the landowner, Sveaskog. This area of natural forest is not affected by modern forestry, and parts of it are even virgin forest.

There are many old trees - the oldest pine that we have determined the age of was 420 years old, and the oldest spruce was 497 years old! In the most fertile parts, there are many giant spruces which measure about 70 cm in diameter at chest height!

We have found 29 red-listed species (that is, species which are threatened or near threatened by forestry) in the area, for example, the threatened species Haploporus odorus and Sidera lenis occur richly. Aquila chrysaetos, Perisoreus infaustus and Picoides tridactylus, all red-listed, occur in the area. The wilderness at Abmoberget is not fragmented by any gravel roads and contains many different forest types, from highly productive forests to subalpine forest, plus mires, creeks and tarns. This area is one of the last connected wildernesses that are left in Västerbotten County below the subalpine forests. In the south there is a small area of young forest.

Assessment: Very high conservation value, Class 1. Should be protected as a nature reserve."

SPECIES FOUND BY THE SWEDISH SOCIETY FOR NATURE CONSERVATION AND THE COUNTY ADMINSTRATIVE BOARD OF VÄSTERBOTTEN (for all of Amboberget):

Haploporus odorus (many finds)	VU
Amylocystis lapponica	VU
Tricholoma apium	VU
Phlebia centrifuga	VU
Anthoporia albobrunnea	VU
Sidera lenis (common!)	VU
Skeletocutis odora	VU
Pseudographis pinicola (common)	NT
Asterodon ferruginosus	NT
Phellinus chrysoloma	NT
Cystostereum murrayi	NT
Onnia leporina	NT
Phellinus populicola	NT
Phellinus nigrolimitatus	NT
Fomitopsis rosea (many finds)	NT
Phellinus ferrugineofuscus	NT
Phellinus pini	NT
Leptoporus mollis	NT
Hericium coralloides	NT
Odonticium romellii	NT
Climacocystis borealis	S
Hydnellum ferrugineum	S
Meruliopsis taxicola	S
Phellinus viticola	S
Phellinus lundellii	
Cladonia parasitica	NT
Lobaria pulmonaria, fertile (on goat willow, aspen, birch, spruce!)	NT
Lobaria scrobiculata	NT
Hypogymnia bitteri	NT
Alectoria sarmentosa	NT
probably Collema furfuraceum	NT
Parmeliella triptophylla	S
Nephroma bellum	S
Nephroma parile	S
Nephroma resupinatum	S
Leptogium saturninum	S
Hypogymnia vittata	S
Goodyera repens	NT
Coptidium lapponicum	S
Aconitum lycoctonum	S
Neottia cordata	S
Lactuca alpina	S
Moneses uniflora	S
Apus apus	VU
Pernis apivorus	NT, EU
Aquila chrysaetos (breeding 2015)	NT, EU
Buteo lagopus	NT
Picoides tridactylus	NT, EU
Surnia ulula	EU
Tetrao urogallus	EU
Tetrastes bonasia	
Perisoreus infaustus	

Total number of red-listed species: 7 VU, 24 NT, 18 S

Skravelliden

South-west of Blattnicksele, de-registered woodland key habitat, 51.5 hectares. This forest was investigated by Nature and Youth Sweden in 2016, se the report "Inventering av åtta naturskogar i Västerbottens inland" [Investigation of eight natural forests in inland Västerbotten]. [15]

The assessment of Nature and Youth:
"We divide the area into two zones. Zone A: Mixed forest on a slope, with a high proportion of deciduous trees, and high conservation value. The area should be protected. It is dominated by spruce and pine, and the proportion of pine increases with the altitude. Rich in aspen and birch. Variation in tree age and size, but the oldest trees are gone. Some standing and lying dead wood. Some stumps with fire scars and a high proportion of young deciduous trees shows that this is a forest regenerated after fire. The slope is to the north-east. Ground vegetation is dominated by bilberry shrub. No logging stumps. Especially interesting species in this part were Amylocystis lapponica, Lobaria pulmonaria and Leptogium saturninum. The area is already a woodland key habitat.

Zone B: Coniferous forest with high conservation value, bordering in the north on a large clear-cut which should not become larger. The area should be protected. Mainly spruce and pine, with some old aspens. The north part has trees in many ages and sizes, but lacks the very oldest trees, and the southern part towards the top of the hill has mostly younger forest. Dead wood also decreased towards the top of the hill. The area slopes to the north and west. Ground vegetation dominated by bilberry and crowberry. On the heights there are many remains of previous logging, but not in the northern part. On old aspens we found Phellinus populicola and Ulota crispa. The latter is perhaps Sweden's most northerly find of this species. In the north, the area borders on a new large clear-cut. There are also some older clear-cuts and new areas registered for logging. If these are logged, there would be a contiguous clear-cut of 170 hectares, only separated by a narrow strip of forest from another clear-cut of 60 hectares."

SPECIES FOUND BY NATURE AND YOUTH SWEDEN:

Amylocystis lapponica	VU
Phellinus populicola	NT
Alectoria sarmentosa	NT
Carbonicola anthracophila	NT
Lobaria pulmonaria	NT
Lobaria scrobiculata	NT
Nephroma parile	S
Nephroma resupinatum	S
Leptogium saturninum	S
Ulota crispa (very far north!)	S
Lophozia longiflora	NT
Regulus regulus	VU
Picoides tridactylus	NT, EU

Total number of red-listed species: 2 VU, 7 NT, 4 S

15 https://drive.google.com/file/d/16L30kI19zQ96ZautenUnXiH9PhfK32gB/view

Njuöniesvarrie

On the mountain Njuöniesvarrie, in Sorsele. Investigated and brought to attention by the Swedish Society for Nature Conservation in Sorsele.

This case is not directly about de-registration of woodland key habitat, but we include it anyway, since it shows two examples of woodland key habitats being handled badly. First, the area contains a woodland key habitat which is spruce forest, but which Sveaskog has registered and described as "118-year-old pine forest".

But Sveaskog has also registered an area for logging on the same mountain, where the Swedish Society for Nature Conservation in Sorsele has found over 40 species signaling high conservation value, of which 25 are red-listed. But Sveaskog does not consider that the area has any conservation value, and the Forest Agency refuses to investigate whether the area is in fact a woodland key habitat, despite the evidence that it clearly should be.

SPECIES FOUND BY THE SWEDISH SOCIETY FOR NATURE CONSERVATION IN SORSELE:

Antrodia infirma	EN
Haploporus odorus	VU
Anthoporia albobrunnea	VU
Sidera lenis	VU
Phlebia centrifuga	VU
Laurilia sulcata	VU
Cystostereum murrayi	NT
Pseudographis pinicola	NT
Phellinus chrysoloma	NT
Phellinus nigrolimitatus	NT
Odonticium romellii	NT
Fomitopsis rosea	NT
Phellinus ferrugineofuscus	NT
Chaenothecopsis fennica	NT
Cladonia parasitica	NT
Hypogymnia bitteri	NT
Carbonicola anthracophila	NT
Carbonicola myrmecina	NT
Hertelidea botryosa	NT
Bryoria nadvornikiana	NT
Alectoria sarmentosa	NT
Lobaria scrobiculata	NT
Anastrophyllum hellerianum	NT
Dryocopus martius	NT, EU
Picoides tridactylus	NT, EU

Total number of red-listed species: 1 EN, 5 VU, 19 NT

Åbyälven

By the Åby river (7273285, 1702685), about 1 hectare. This is a woodland key habitat which was de-registered earlier than the others, investigated 22nd of July 2014 by Steve Daurer.

Steve Daurer's assessment: "This forest has been downclassed for intended use in production; it consists of a small forest with high conservation value, about 1 hectares along the bank of the Åby river. It is overall natural pine forest with some spruce. Stand age is about 280 years. The oldest pines are very slow-growing on the rocky lichen-covered ground. In the areas where spruce grows, the land is more productive, with bilberry and lingonberry. There is a lot of dead wood, but sport fishermen and other visitors do burn some of it in campfires by the popular Åby river. On lying dead wood the very rare and exclusive red-listed fungus Antrodia primaeva was found, and in the bark of an old dead pine were gnaw marks of the red-listed rare wood insect Nothorhina muricata."

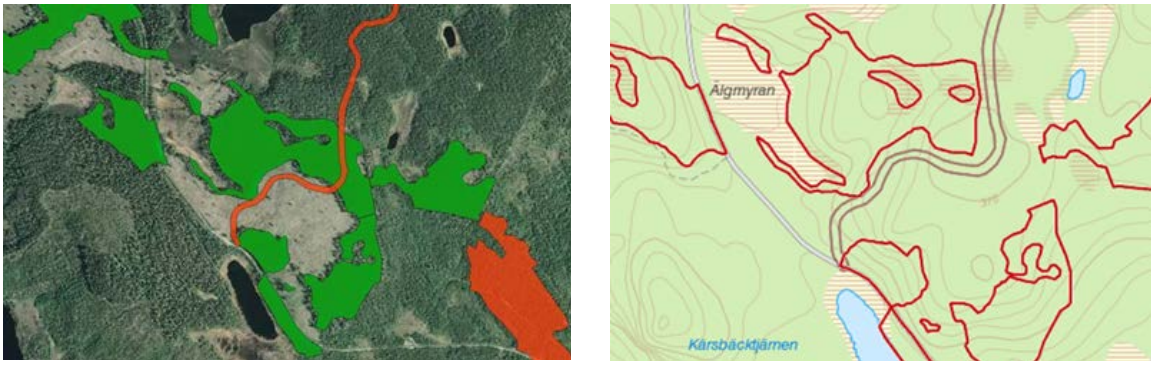
SPECIES FOUND BY STEVE DAURER:

Antrodia primaeva	EN
Pseudographis pinicola	NT
Cladonia parasitica	NT
Hypogymnia bitteri	NT
Alectoria sarmentosa	NT
Nothorhina muricata	NT
Apus apus	VU

Total number of red-listed species: 1 EN, 1 VU, 5 NT

Björnbergshuvudet

Norrbotten County, between Harads and Kåbdalis. The nearest village is Björklund.
Here Sveaskog has registered an area for logging, in order to make a gravel road. The area includes a woodland key habitat, which Sveaskog has de-registered after registering their plans for logging. After Erland Lindblad, among others, brought attention to this, the Forest Agency has visited the area and again registered the area as a woodland key habitat. See the registration for logging with number A 39970-2017.



To the left is the area before the 25th of September 2017, with the planned road through the woodland key habitat. To the right is the area on the 7th of October 2017, with new woodland key habitat borders.

Photos of the forest, with colored bands marking the logging plans, from the area that since the 25th of September 2017 was de-registered as a woodland key habitat by Sveaskog.

Gillenäs

In Ecopark Raslången, de-registered woodland key habitat, 4.8 hectares, investigated by Erland Lindblad.

Pine and spruce swamp around a tarn. The southern part is very wet, so that trees die and leave much dead wood. Nowellia curvifolia is frequent, along with Odontoschisma denudatum (NT) in several places. The area is bordered by the slope down to the mire edge of the tarn, and on the edge of the woodland key habitat grows aspen, birch, and some beech and oak. Beside the de-registered woodland key habitat there is an area registered for logging, which is dominated by spruce.

SPECIES FOUND:

Oxyporus corticola (1 find)	S
Odontoschisma denudatum (3 finds)	NT
Leucobryum glaucum (2 finds)	S
Nowellia curvifolia (rikligt)	S
Rhytidiadelphus loreus (3 finds)	S
Scardia boletella (1 find)	NT
Microbregma emarginatum (1 find)	S
Dryocopus martius (1 find)	NT, EU

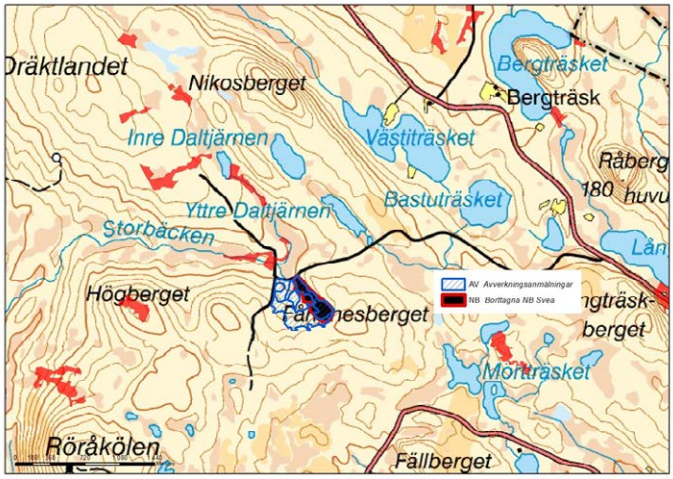
Total number of red-listed species: 3 NT, 5 S

Photos from the de-registered woodland key habitat.

A spruce gnawed by Microbregma emarginatum and a birch with fruiting bodies of Fomes fomentarius gnawed by Scardia boletella. Foton: Erland Lindblad.

Fångnesberget

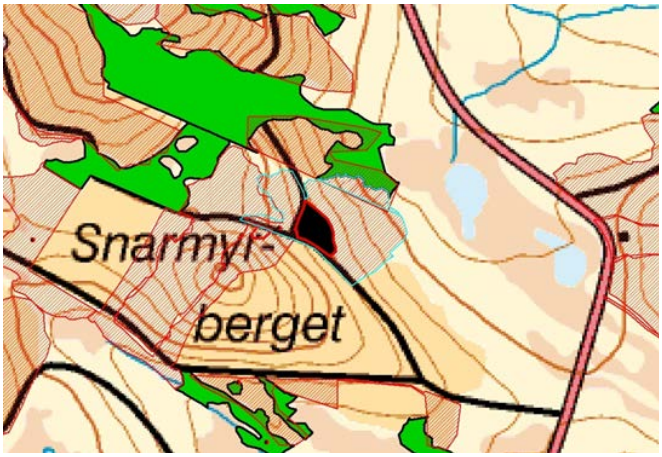
De-registered woodland key habitat planned to be felled by Sveaskog at Fångnesberget, about 10 km northeast of Gunnarsbyn in Boden municipality. In total, Sveaskog has notified 4.7 hectares for felling. Parts of the nearby forest area consist of older spruce dominated forest which is flood irrigated by groundwater. There are also deciduous trees in the forest. Sveaskog has reported 6 findings of Pulmonaria lobaria (NT) in the forest area which is planned to be felled.



Map of the de-registered woodland key habitat at Fångnesberget (blackmarked) which is planned to be felled by Sveaskog. The forest area planned to be logged is outlined with a blue line.

Snarmyrberget

De-registered woodland key habitat planned to be felled by Sveaskog at Snarmyrberget, about 20 km east of Moskosel in Arvidsjaur municipality. In total, Sveaskog has notified 9.3 hectares for felling of which 2.3 hectares is within the de-registered woodland key habitat. Sveaskog has reported over 50 findings of redlisted species in the area which is planned to be felled at the Swedish Species Observation System (Artportalen). Despite the impressive findings of redlisted species, the woodland key habitat was de-registered and notified for felling.



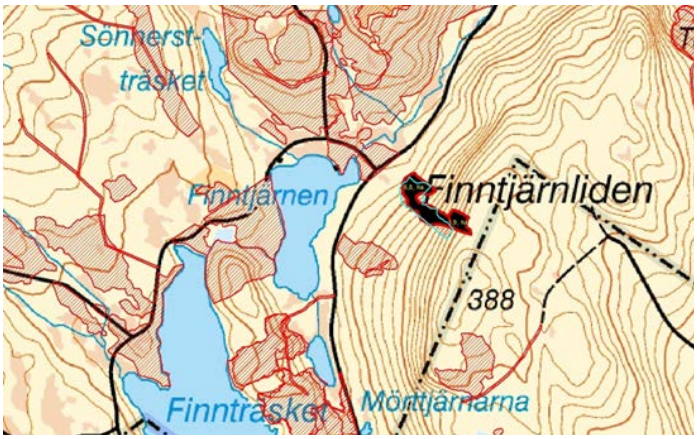
Sveaskog is planning to log the de-registered woodland key habitat at Snarmyrberget (the black marked area on the map). The forest area which is planned to be felled is outlined by a blue line.

SPECIES FOUND BY SVEASKOG:

Haploporus odorus (four finds!)	VU
Trichaptum laricinum	NT
Fomitopsis rosea	NT
Phellinus ferrugineofuscus	NT
Inonotus rheades	S
Lobaria pulmonaria	NT
Lobaria scrobiculata	NT
Alectoria sarmentosa	NT
Nephroma bellum	S

Finntjärnliden

De-registered woodland key habitat planned to be felled by Sveaskog at Finntjärnliden, about 20 km southwest of Älvsbyn in Älvsbyn municipality. The de-registered woodland key habitat is 8.7 hectares of which about 7 hectares is planned to be felled. This forest area has not been inventoried by environmental NGOs. North of the de-registered woodland key habitat, 4 different findings have been made of Phellinus rosea (NT, 2 findings), Trichaptum laricinum (NT) and Hypogymnia bitteri (NT).



Sveaskog is planning to fell the de-registered woodland key habitat at Finntjärnliden (the black marked area on the map). The forest area planned to be felled is outlined by a blue line.

Finally we would like to thank:

Elin Götmark and Helena Björnström who surveyed the first eight forests, in Hälsingland. Also those who surveyed the other forests: the County Administrative Board in Västerbotten, the Swedish Society for Nature Conservation in Sorsele, the Swedish Society for Nature Conservation in Västerbotten, Nature and Youth Sweden, Erland Lindblad and Steve Daurer.

GREENPEACE

SKYDDA SKOGEN