

The forest industry of the future – a FAM project

Forest protection in Sweden and Germany

Compared with other European countries, Sweden applies a much stricter definition when classifying natural areas as protected. Sweden therefore appears in international statistics as one of the countries that protects the lowest proportion of its natural areas and forests, while Germany appears among the countries that provides the most protection. This is due to the fact that the two countries interpret the guidelines in different ways.

To safeguard biological diversity, international targets and directives have been established specifying the amount of land to be protected. The UN's Aichi Target 11, for example, stipulates the amount of area to be protected. On the EU level, the Habitats Directive and the EU's new Biodiversity Strategy for 2030 are in place, with related directives to be implemented in national legislation. The goal is to ensure that 30 per cent of Europe's land and water areas are under protection by 2030.¹ International statistics are kept for monitoring national implementation, with data collected and reported by each country.

Sweden currently reports 14.46 per cent² of its land and freshwater areas as protected, while the corresponding figure for Germany is 37.8 per cent.³ Germany looks to be performing at the top of the class, with Sweden lagging far behind as one of the EU countries that protects the least amount of its land area. This report demonstrates that this comparison is misleading. The countries' figures are based on different interpretations of the type of protection to be reported, and are therefore not comparable.

International statistics show that Sweden has a lower proportion of protected area than Germany. It also appears that Sweden reports a much higher proportion as strictly protected – i.e., protected from production and human intervention. This is because Sweden essentially reports only categories that are strictly protected, while Germany reports large land areas where active agriculture and forestry activities are permitted. Sweden also has these types of protected areas, but these are not reported and are thus not included in the statistics. Strictly protected land, similar to Sweden's nature reserves, comprise only a tiny percentage of Germany's land area.

This report focuses specifically on forest protection. According to Statistics Sweden, 26 per cent of Sweden's forests are excluded from use.⁴ The figure shown in international statistics is much lower, however. Our conclusion is that if Sweden interpreted the guidelines in the same way as Germany does, it would be able to report up to 46 per cent of its forest land as protected.

Different countries define protected natural areas in different ways, and Sweden is notable for its extremely strict interpretation of what is considered protected.

Regardless of the level of ambition and percentage target for forest protection, reporting should be designed to enable comparison between different countries.

Most natural areas reported by Germany as protected allow agriculture and forestry activity, while Sweden almost exclusively reports forms of protection in which these activities are prohibited or strictly limited.

A more reasonable starting point for the debate on the Swedish forestry industry would be to proceed from the official statistics showing that 26 per cent of Swedish forests are not farmed.

1 EU Biodiversity Strategy for 2030 – Bringing nature back into our lives: https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal/actions-being-taken-eu/eu-biodiversity-strategy-2030_sv#documents
2 World Database of Protected Areas, 2021, Country profile Sweden: <https://www.protectedplanet.net/country/SWE>
3 World Database of Protected Areas, 2021, Country profile Germany: <https://www.protectedplanet.net/country/DEU>
4 SCB, 2019, Statistics Sweden, Report MI 41 SM 2002: https://www.scb.se/contentassets/4f209dd15cd4c4c6482db6f1ac986dff/mi0605_2019a01_sm_mi41sm2002.pdf

Background

Protection of biodiversity is a central environmental target formulated by the Swedish Parliament as follows: 'Species' habitats and ecosystems, as well as their functions and processes, shall be protected. Species must be able to survive in viable numbers over the long term, with sufficient genetic variation.⁵ The purpose of protected areas is often to ensure that habitats for animals, plants, fungi, etc. do not deteriorate or disappear. This can be effectuated in many different ways, such as establishing national parks and nature reserves or through voluntary set-asides on the part of landowners.⁶

Increased conservation ambitions in international directives

Conservation ambitions have increased as biodiversity has become more highly prioritised. At the EU level, a series of initiatives set high standards for member states to protect land areas, with the aim of preserving biodiversity. The EU's Biodiversity Strategy establishes a target of protecting 30 per cent of Europe's land and water areas by 2030.⁷ On the UN level, the Aichi (Nagoya) Target 11 initially stipulated that 17 per cent of land and freshwater areas would be protected by 2020. The proposed UN framework for the period following 2020, the 'Post-2020 Global Biodiversity Framework', proposes protecting 30 per cent of the planet's surface.⁸ The new framework is on the agenda for the Conference of the Parties (COP15) to the UN Convention on Biological Diversity to be held in Kunming, China, in October 2021. Considering that 70 per cent of Sweden's land area is comprised of forest, these targets have a major impact on the forestry industry.

National implementation monitored through reporting

International statistics are kept for monitoring national implementation, with data collected and reported by each country. EU member states report to the European Environmental Agency, which compiles data on conservation work in the Common Database for Designated Areas (CDDA).⁹ This data is then used by other organisations, including the International Union for Conservation of Nature (IUCN). The data is also used as documentation in the World Database

of Protected Areas¹⁰ (WDPA), which the OECD's environmental target reports and Aichi Target 11 on protected areas make reference to.

Although there are guidelines for reporting to these databases, the guidelines are interpreted very differently. Many countries report pursuant to various national codes, which renders comparison between countries virtually impossible. The State of Europe's Forests (SoEF) report is compiled with a specific focus on forest protection. This report is used as supporting documentation by Forest Europe (Ministerial Conference on the Protection of Forests in Europe, MCPFE).¹¹

Sweden's reporting differs from other EU countries'

Opinions are divided as to whether Sweden is meeting its international commitments regarding the protection of nature. According to several studies, however, this is largely dependent on the way the protection of land is defined for reporting purposes.¹² Sweden is notable for its extremely strict interpretation of what is considered protected. Most of the natural area reported by Germany as protected allows agriculture and forestry activity, while Sweden almost exclusively reports forms of protection in which these activities are prohibited or strictly limited. In Sweden, the issue of forest protection has been brought into focus in connection with the official report 'Strengthened ownership rights, flexible protection, and care of the forest' (SOU 2020:73), submitted to the government in November 2020. Establishing the commission of inquiry was a specific point in the January Agreement between the governing parties and the Centre and Liberal parties.

The Swedish Environmental Protection Agency is currently working on behalf of the government on a comparative study of the way in which protected nature is reported. This project will be carried out together with the National Board of Forestry, the Swedish University of Agricultural Sciences, and Statistics Sweden in collaboration with other relevant authorities. The study is designed to compare the way in which protected nature is reported and, if possible, propose ways in which Sweden can report forms of protection in accordance with IUCN criteria. The study will also analyse the reporting's effects on biodiversity

5 Sweden's environmental targets, 2021, <https://sverigesmiljomal.se/miljomalen/ett-rikt-vaxt--och-djurliv/>

6 Swedish Environmental Protection Agency, 2021, <https://www.naturvardsverket.se/Miljoarbete-i-samhallet/Miljoarbete-i-Sverige/Uppdelat-efter-omrade/Naturvard/Skydd-av-natur/Formellt-skydd-av-skog/>

7 EU Biodiversity Strategy for 2030 – Bringing nature back into our lives: https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal/actions-being-taken-eu/eu-biodiversity-strategy-2030_sv#documents

8 Convention on Biological Diversity, UPDATE OF THE ZERO DRAFT OF THE POST-2020 GLOBAL BIODIVERSITY FRAMEWORK <https://www.cbd.int/doc/c/3064/749a/0f65ac7f9def86707f4eaeafa/post2020-prep-02-01-en.pdf>

9 Common Database for Designated Areas (CDDA), Published 29 May 2020 <https://www.eea.europa.eu/data-and-maps/data/nationally-designated-areas-national-cdda-15/cdda>

10 World Database of Protected Areas: <https://www.protectedplanet.net/en>

11 Forest Europe., 2020, State of Europe's Forests.

12 Strömvall Nyberg, 2020, Vad betyder det att skydda natur? – En europeisk jämförelse av skyddade områden. SLU, Institutionen för skogens ekologi och skötsel

efforts and opportunities to meet international commitments. The study will be presented to the Swedish Government Offices by 18 June 2021.¹³

What is protected forest – and why do we protect forests?

Different types of formal protection in Sweden

Seventy per cent of Sweden's land area is covered by forest.¹⁴ Part of this area is formally protected under the Land Code and Environmental Code through, for example, the formation of biotope protection areas, national parks, and nature reserves. Biotope protection areas are managed by the National Board of Forestry for the purpose of maintaining areas with highly valuable habitats, including key biotopes. National parks are state-owned and are usually managed so as to maintain their natural condition. Nature reserves are established by county administrative boards or local authorities for the purpose of preserving biodiversity, conserving and preserving valuable natural environments, protecting outdoor recreational areas, and protecting natural environments and species meriting special protection. Other formal forms of protection include Natura 2000 areas, nature conservation agreements, and government agreements between the Environmental Protection Agency and the Fortifications Agency.¹⁵

National forms of protection other than formal protection

In addition to forest under formal protection, national forms of protection include voluntary set-asides, wilderness areas, care-demanding patches, and shore protection zones.

In Sweden, approximately 5 per cent of productive forest area is protected through voluntary set-asides.¹⁶ These are areas which landowners voluntarily and without financial compensation exclude from normal forest production. Excluding forest areas from forestry activities is a requirement for FSC and PEFC environmental certification, which cover approximately 63 per cent of the forest.¹⁷ Voluntary set-asides are not reported as formally protected areas.

Shore protection zones are another example of national protection that does not appear in international statistics. These areas are designed to protect public access to shore areas and preserve important animal

and plant habitats. Protected areas are normally 100 metres from the shoreline, both on land and in the water, although several counties have extended that to 300 metres. Prohibitions in these areas include construction of new buildings and taking other measures that may harm plant and animal life.¹⁸

Different types of protection in Germany

According to statistics, Germany is the European country that protects the highest proportion of its forests. We have therefore chosen to take a closer look at the reasons for these high figures.

Thirty per cent of Germany's land area is covered by forest.¹⁹ The Federal Nature Conservation Act (Bundesnaturschutzgesetz) regulates protection of Germany's forests and classifies protected areas based on their size, applicable restrictions, and conservation objective.²⁰ The various forms of protection are defined in the German Federal Nature Conservation Act, with the primary forms of protection being nature reserves, national parks, biosphere areas, landscape protection areas, nature parks, and Natura 2000 areas.²¹

Landscape protection is one major difference between the Swedish and German definitions of formal protection, and applies to a large part of Germany's protected area. Agriculture and forestry activities are permitted in protected landscapes, as long as this does not disturb the area's character or impede the purpose of protection.²² This form of protection is similar to Swedish shore protection, under which forestry activities are also generally permitted.

Reporting of protected areas to IUCN

Each EU member state reports its own conservation statistics to the European Environment Agency, which compiles the data in the Common Database for Designated Areas (CDDA). Protection is reported in seven categories. Class 1 represents the strictest protection, such as biotope protection. No maintenance, or at most certain types of nature conservation maintenance, is permitted in Class 1 areas. The degree of restrictions is gradually reduced down to the least strict category (Class 6), which includes areas protected for recreational purposes.

Protected forest pursuant to MCPFE

Forest Europe (Ministerial Conference on the Protection of Forests in Europe, MCPFE) puts together the

13 Swedish Environmental Protection Agency, 2021, Regeringsuppdrag, Jämförande studie om sättet att redovisa skyddad natur, <https://www.naturvarvsverket.se/Miljoarbete-i-samhall/Miljoarbete-i-Sverige/Regeringsuppdrag/Uppdrag-att-jamfora-redovisa-och-foresla-forandringar-i-den-internationella-rapporteringen-av-skyddad-natur/>

14 Forest Europe, 2020, State of Europe's Forests.

15 Skogsstyrelsen, 2019, Statistik om formellt skyddad skogsmark, frivilliga avsättningar, hänsynsytor samt improduktiv skogsmark <https://www.skogsstyrelsen.se/globalassets/om-oss/publikationer/2019/rapport-2019-18-statistik-om-formellt-skyddad-skogsmark-frivilliga-avsattningar-hansynsytor-improduktiv-skogsmark.pdf>

16 Skogsstyrelsen, 2019, Statistik om formellt skyddad skogsmark, frivilliga avsättningar, hänsynsytor samt improduktiv skogsmark <https://www.skogsstyrelsen.se/globalassets/om-oss/publikationer/2019/rapport-2019-18-statistik-om-formellt-skyddad-skogsmark-frivilliga-avsattningar-hansynsytor-improduktiv-skogsmark.pdf>

17 Forest Europe, 2020, State of Europe's Forests

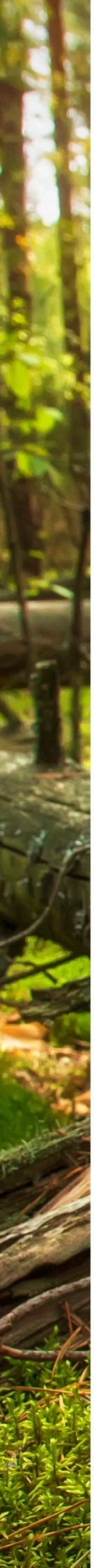
18 Boverket, 2020: <https://www.boverket.se/sv/samhallsplanering/sa-planeras-sverige/planeringsfragor/strandskydd/>

19 Forest Europe, 2020, State of Europe's Forests.

20 BFN, Federal Agency for Nature Conservation, 2021: <https://www.bfn.de/en/activities/protected-areas.html>

21 BFN, Federal Agency for Nature Conservation, 2021: <https://www.bfn.de/en/activities/protected-areas.html>

22 BFN, Federal Agency for Nature Conservation, 2021: <https://www.bfn.de/en/activities/protected-areas/landscape-protection-areas.html>



MCPFE classification of protected forest land

1.1	'No intervention'	The main management objective is biodiversity. No active, direct human intervention. Restrictions for visitors.
1.2	'Minimum intervention'	The main management objective is biodiversity. Certain types of conservation management, hunting, recreation, etc. are permitted.
1.3	'Conservation through active management'	Active conservation management with the objective of promoting biodiversity.
2	'Protection of landscapes and specific natural landscapes'	Landscape protection with the objective of preserving natural, cultural, recreational, and historical values. Some restrictions for forestry activities.
3	'Protective functions'	Objective is to protect land, water, ecological processes and infrastructure, and natural resources against natural hazards.

State of Europe's Forests (SoEF) report,²³ which presents national reports that divide protected forest areas into categories with varying levels of protection. The lower the category number, the greater the restrictions.

Major differences between what Sweden and Germany report as protected natural areas

According to the WDPA, Sweden reports 14.46 per cent²⁴ of its land and freshwater areas as protected, while Germany reports a corresponding figure of 37.8 per cent.²⁵ As compared with other European countries, Sweden appears to be among the countries offering the least protection, while Germany appears as the country with the greatest protection.

The same applies when looking solely at forests. According to the SoEF, Sweden protects 8.8 per cent of its forests under categories 1.1 - 2, while Germany reports that it protects 81 per cent of its forests under this definition. See Diagram 1 below.

Taking into account only those areas under strict protection, the picture looks different. Under this metric, Sweden appears as one of the countries that protects the most forest land. See Diagram 2 below.

This is because 87 per cent of the forest Sweden reports as protected is classified in categories 1.1 and 1.2 – i.e., the categories with the strictest protection. Germany reports only 2.4 per cent of its protected forest area in these categories, while 98 per cent of

Germany protects largest proportion of forest under Forest Europe categories 1.1 - 2

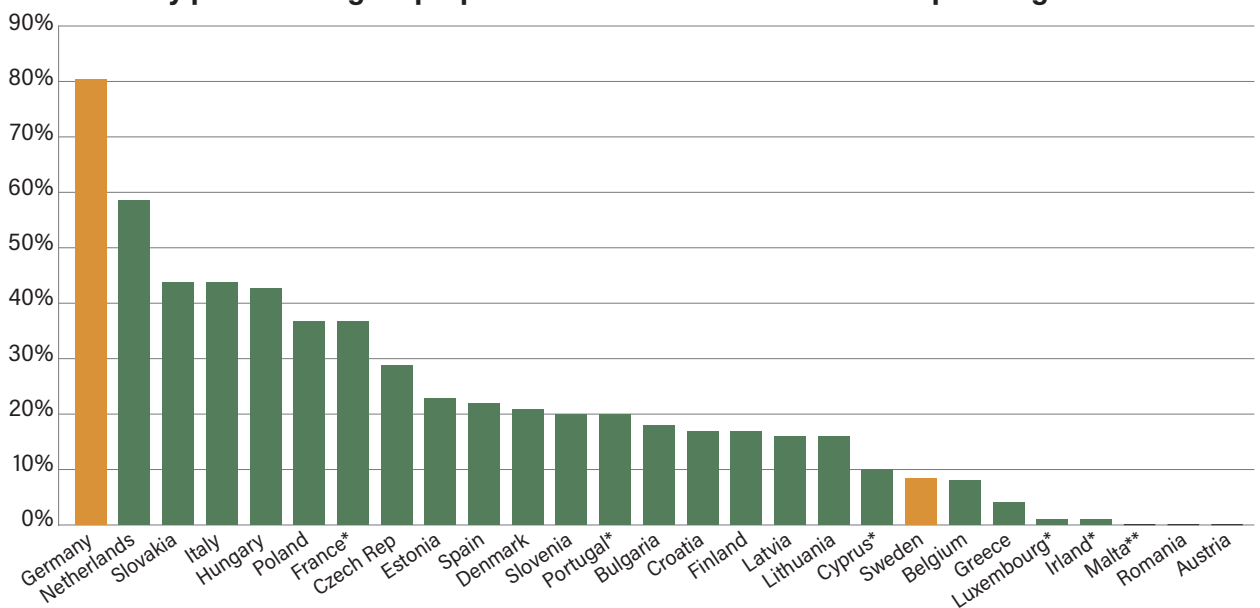


Diagram 1. Percentage of protected forest in Forest Europe categories 1.1 - 2.²⁶ There are major differences between Sweden's and Germany's reporting. As compared with other EU countries, Sweden appears to be among the countries protecting the least forest area, while Germany appears as the country protecting by far the most forest area.

23 Forest Europe, 2020. State of Europe's Forests.

24 World Database of Protected Areas, Country profile Sweden: <https://www.protectedplanet.net/country/SWE>.

25 World Database of Protected Areas, Country profile Germany: <https://www.protectedplanet.net/country/DEU>

26 Forest Europe, 2020. State of Europe's Forests.* Data from 2015. ** No data.

Sweden is among the countries with the largest share of forest under strict protection

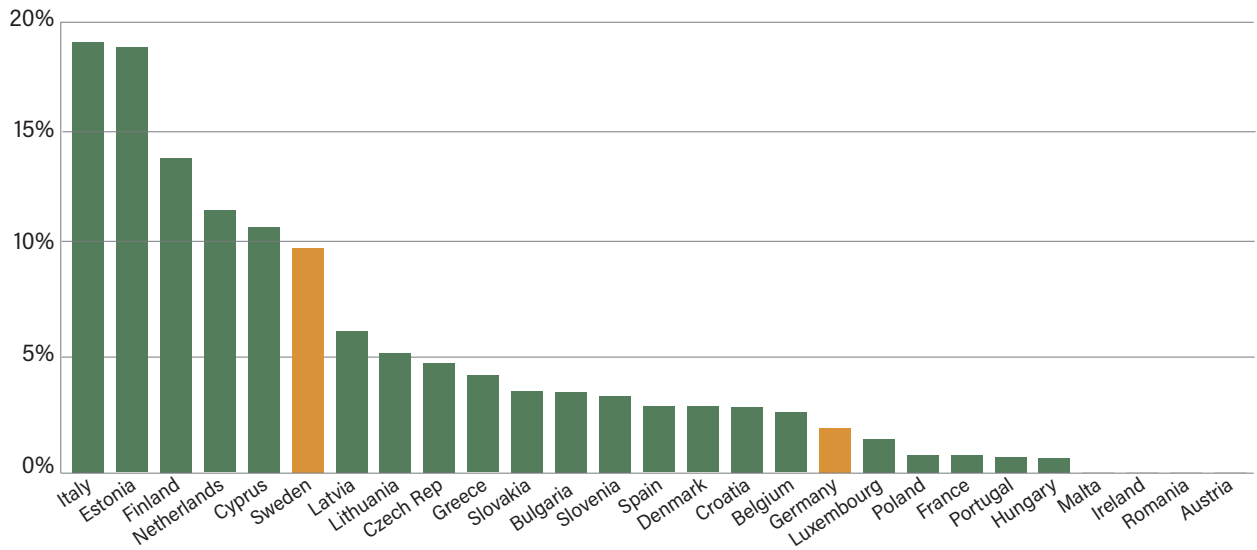


Diagram 2. Percentage of protected forest in Forest Europe categories 1.1 - 1.2.²⁷ Taking into account only categories providing the strictest protection, Sweden is among the countries protecting the most forest area.

Most of the forest Germany reports as protected is classified in categories that permit human intervention; Sweden protects most of its forest under the strictest categories

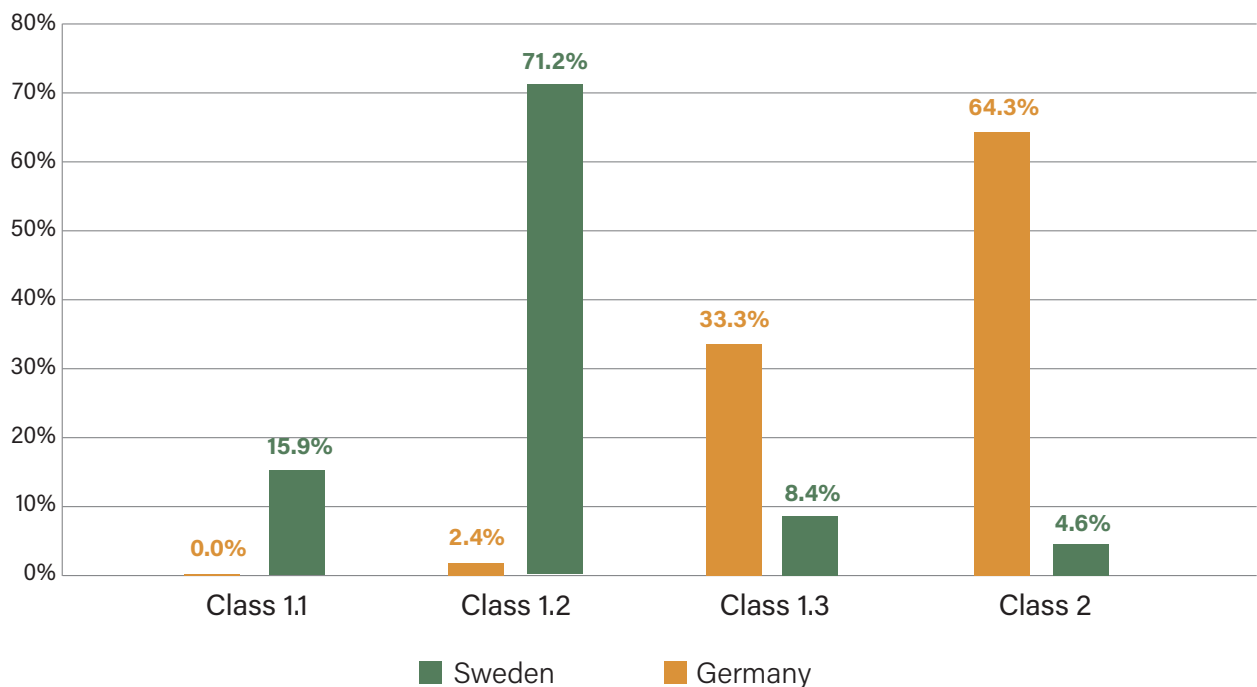


Diagram 3. Breakdown of protected forest by category, Forest Europe categories 1.1 - 2.²⁸ Sweden reports primarily forest under stricter protection, while Germany mostly reports forest with less protection.

27 Forest Europe, 2020. State of Europe's Forests.* Data from 2015. ** No data.

28 Forest Europe, 2020. State of Europe's Forests

Germany's forests are protected under categories that permit, and in some cases require, human intervention. See Diagram 3 above.

Several types of national protection are not reported by Sweden

In addition to the formal protection reported by Sweden, national forms of protection are not reported. These include nature conservation agreements, voluntary set-asides, wilderness areas, key biotopes, and areas owned by the Swedish Fortifications Agency. Depending on which areas are included, it is reasonable to argue that Sweden protects at least 26 per cent of its forest. This also corresponds to the percentage of unfarmed forest reported by Statistics Sweden and the National Board of Forestry. The reason such large areas are not reported as protected is either that their long-term conservation cannot be assured, that the habitat value is too low, or that the protection is too weak.²⁹

In Sweden's view, shore protection criteria are much too weak to apply to forest protection. However, since the purpose of this report is to examine the amount

of forest land that could be reported as protected if Sweden applied the same methodology as Germany, we ran a calculation that includes shore protection. Applying Germany's reporting methodology, which classifies shore protection (a type of landscape protection) as protected forest, immediately transforms the Swedish figures. Diagram 4 includes the estimated area of forest land protected by shore protection, but where forestry activities are permitted.

Table 1 below summarises the area presented as excluded from forestry activities according to the National Board of Forestry's statistics, as well as the estimated forest area located in shore protection areas. These figures represent the area that could be included in Sweden's reporting of protected forest if Sweden, like Germany, reported forest with landscape protection. The amount of land under shore protection that can be included varies among different assessments. According to this calculation, up to 46 per cent of Sweden's forests could be considered protected applying this methodology.

If Sweden reported as Germany does, it would be among the countries that protect the most forest area

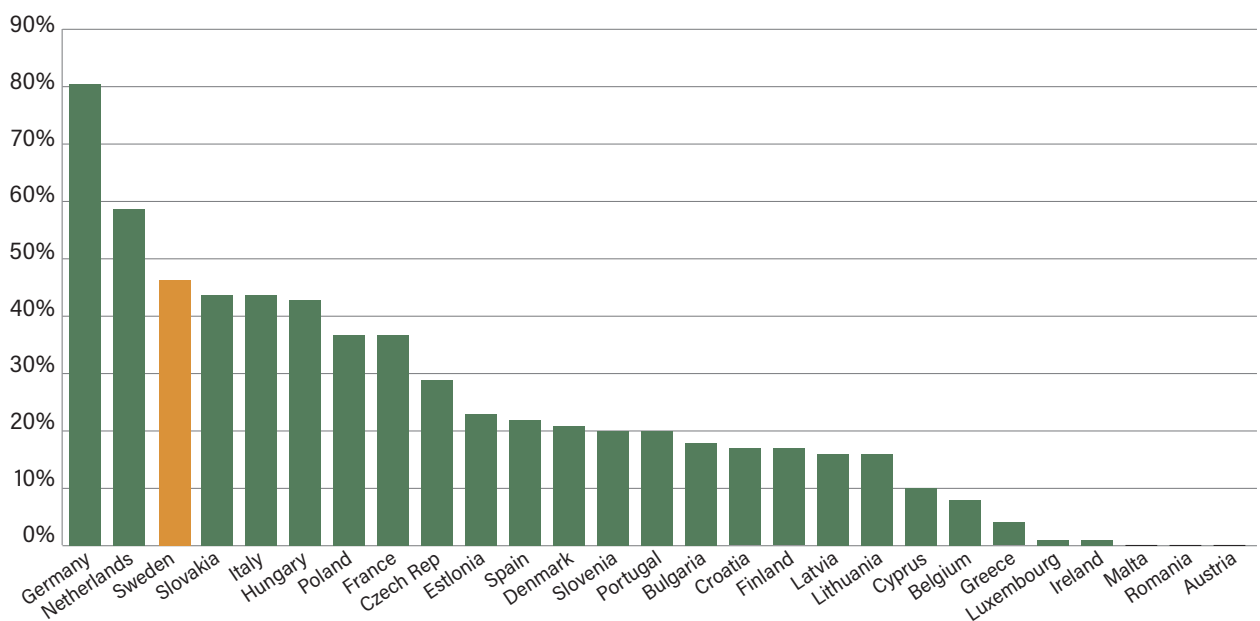


Diagram 4. Percentage of protected forest in Forest Europe categories 1.1 - 2, if Sweden included shore protection, forest wilderness areas, care-demanding patches, and voluntary set-asides in its reporting.³⁰

²⁹ Swedish Environmental Protection Agency, 2012, Redovisning av ett regeringsuppdrag till Naturvårdsverket och Skogsstyrelsen, M2012/71/Nm. (NV-00477-12).

³⁰ Data from National Board of Forestry, 2019, Statistik om formellt skyddad skogsmark, frivilliga avsättningar, hänsynsytor samt improduktiv skogsmark <https://www.skogsstyrelsen.se/globalassets/om-oss/publikationer/2019/rapport-2019-18-statistik-om-formellt-skyddad-skogsmark-frivilliga-avsattningar-hansynsytor-improduktiv-skogsmark.pdf>, and Forest Europe, 2020. State of Europe's Forests. Estimated area of forest land under shore protection based on areas 100 metres from shoreline multiplied by average percentage of forest land (68.7%), not adjusted for any overlap with other forms of protection.

Type of protection	Area	Percentage of forest area
Formal protection	2,335,400 ha ³¹	8%
Forest wilderness	3,240,000 ha ³¹	12%
Care-demanding patches	425,900 ha ³¹	2%
Voluntary set-asides	1,210,100 ha ³¹	4%
Total	7,211,400 ha	26%
Shore protection	5,818,200 ha ³²	20%

Table 1: Area of forest wilderness, care-demanding patches, voluntary set-asides, and forest land in shore protection areas

Conclusion

This comparison has demonstrated that Sweden and Germany define 'protected nature' in different ways. Sweden is notable for its extremely strict interpretation of what is considered protected. Most of the natural area reported by Germany as protected allows agriculture and forestry activity, while Sweden mainly reports forms of protection in which these activities are prohibited or strictly limited. Protection of biodiversity is an important environmental issue, but regardless of the level of ambition and percentage target for forest and land protection, reporting must be designed to enable comparison between different countries. A more reasonable starting point for the debate on the Swedish forestry industry would be to proceed from the official statistics showing that 26 per cent of Swedish forests are not farmed. Based on this, we can then discuss concrete policy goals which, when all is said and done, should focus on actual forest and land conditions.

³¹ National Board of Forestry, 2019, Statistik om formellt skyddad skogsmark, frivilliga avsättningar, hänsynsytor samt improduktiv skogsmark <https://www.skogsstyrelsen.se/globalassets/om-oss/publikationer/2019/rapport-2019-18-statistik-om-formellt-skyddad-skogsmark-frivilliga-avsattningar-hansynsytor-improduktiv-skogsmark.pdf>.

³² Estimated area of forest land under shore protection based on areas 100 metres from shoreline multiplied by average percentage of forest land (68.7%), not adjusted for any overlap.