

Södra's forest certification





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Forest certification – what does that mean for me as a forest owner?

As a certified forest owner, you sign an agreement to conduct responsible forest management. In practice, this means:

- Comply with regulations applying to forest management and respect the right of public access.
- Use the Green Forest Management Plan to manage your estate and follow the forest management recommendations (does not apply to holdings of less than 20 hectares).
- At least 5 percent of your forest area is set aside with the primary objective of preserving and developing conservation values (does not apply to holdings of less than 20 hectares).
- Managing a certain percentage of the forest area with methods that secure nature conservation or social benefits (FSC® only).
- Forestry operations are not carried out in a manner that destroys high conservation values.
- Environmental considerations are applied in all forest management operations.
- At least 5 percent of the area of your estate is, or will become, a hardwood-dominated stand. Forest management operations ensure that hardwood species makes up 10 percent of softwood-dominated stands, where the right conditions exist.
- Chemical pesticides may only be used if exemptions have been granted.
- The use of non-native tree species is restricted.
- PEFC-certified contractors are engaged to perform forestry operations.
- All forest management operations are documented.

The certification remains valid until the agreement is terminated by either Södra or the forest owner. Södra pays a premium on wood from certified forests.



Certification for responsible forest management

Södra offers certification from two of the world's largest forest certification schemes, PEFC and FSC®. This brochure explains what it means to be certified or double-certified by Södra.

What is forest certification?

Forest management certification is a standpoint and sends a signal to both the market and the public that you conduct active, long-term and responsible forest management. All certification is based on compliance with the requirements of a standard and that an independent third party verifies and certifies that you meet the criteria.

Why should I certify my forest management?

Swedish forest management is based on a method that integrates production with environmental and social impact considerations, and forest owners enjoy 'freedom with responsibility.' Forest certification is a tool for clarifying how these combined objectives can be achieved.

More and more people are taking an interest in how the world's forests are managed. This has led to a growing demand for products from certified forests among Södra's customers. By certifying your forest management and complying with the certification requirements, the wood that Södra purchases from you will become more attractive across the entire forest products market.

Certification involves additional responsibilities, because as a forest owner, you must take more forest values into consideration than those driven by legal requirements. As compensation, you will receive a special certification premium when you deliver wood to Södra. Your forest operations area can provide up-to-date information about the amount of the premiums and the ranges covered.

Who can achieve forest management certification?

All forest owners who agree to comply with the certification requirements of each standard can achieve forest management certification. Exceptions apply if the forest holding has recently been managed or subdivided in a manner that clearly breaches the certification requirements. In such cases, a special assessment is needed to ensure that the requirements for Södra's group certification have been met. If the right to manage forests on the forest holding is subject to major unresolved disputes, certification will not be possible until these rights have been clarified. To achieve certification, all estates with the same legal owner must be included in the certified holding.

What is forest management certification?

The certification agreement that you sign with Södra sets out your overall responsibilities, and this brochure presents the most important parts of both the PEFC and FSC® standards. The contents of this brochure are based on an integration of PEFC and FSC® requirements, and the requirements contained in Södra's Sustainability Policy and 'Environmental considerations, Södra Skog – Strategic direction.' After each description, any additions for FSC® certification are presented in a grey box. For more information about forest management certification and current standards, contact your forest operations area or visit the websites of the certification standards, www.pefc.se and se.fsc.org.

Internal and external verification

Verification of compliance with the certification requirements is carried out on an annual basis. Verification is conducted in several stages. Södra's own forest management auditors select approximately 180 members for sampling each year.

Södra's entire certification process is also reviewed by third-party, accredited PEFC and FSC® auditors every year. Södra handles the primary contact with the external certification firm for you, as a member under Södra's umbrella. However, your commitment is obviously the most important aspect for achieving the purpose of the certification. All parts combined form the engine of the certification and are vital for maintaining credibility with the market and for our business in general.

For forest owners with forest holdings of more than 1,000 and 5,000 hectares, respectively, there are additional requirements in the PEFC and FSC® standards. These requirements are not included in this brochure, they are described in a separate document – see Södra's website (sodra.com) or contact your forest operations area for more information.



Every year, Södra's forest management auditors inspect the management carried out on a selection of certified estates.

Minimum requirements for both PEFC and FSC®

1. Green Forest Management Plan

On estates with more than 20 hectares of productive forest land, a certification-adapted Green Forest Management Plan must be drawn up within two years of signing the agreement. The plan must be current and usually requires updating after 10 years. Green Forest Management Plans that are not created by Södra must be checked to ensure they meet the certification requirements. In principal, the action and management proposals presented in the plan must be followed.

Forest owners must provide the inspection team with the following documentation:

- Map of the estate.
- Information about ancient relics/monuments, water protection areas, key habitats, perimeter protection, habitat protection, nature conservation agreements, nature reserves and Natura 2000 sites.

This can easily be found in Södra's app (My Forest Estate) or under 'My pages' on the Swedish Forest Agency's website.

FSC® addition:

- **Forest owners must provide the inspection team with the following documentation:**
Area per land-use classification.
- **Landowners with forest holdings of less than 20 hectares must also provide the following information about their estate:**
Hardwood-dominated stands and non-native tree stands.

2. Conservation value assessment

To safeguard against the destruction of high conservation values (HCV) in forestry operations, a conservation value assessment must be prepared. Conservation values are normally assessed when the Green Forest Management Plan is prepared. For estates that do not have a Green Forest Management Plan, conservation values must always be assessed and documented before commencing planned forest management operations.

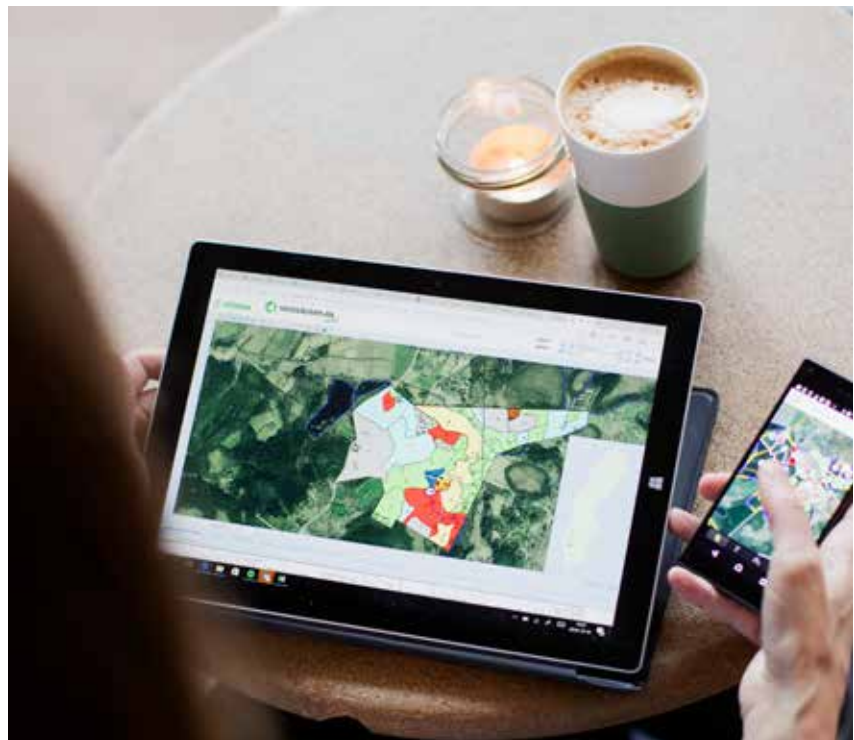
Aids and instructions for assessing conservation values are available on Södra's website under 'My forest estate,' where it is also possible to download forms and instructions for the assessment. Forms are also included in the certification folder that you receive when your forest management has been certified. If you have any questions, contact your forestry operations area for more information and advice.

3. Environmental considerations, Södra Skog – strategic direction

For estate assignments, the forest owner accepts Södra's application of the guidance in 'Environmental considerations, Södra Skog – strategic direction.' This also includes the provision that forest owners do not harvest key habitats or other high conservation value forest (HCVF).

4. Engaging forestry contractors

Forest owners shall only engage contractors for forestry operations who hold PEFC forestry contractor certification. Agreements and 'Appendix to the contract for wood sales or contracting purchases' or equivalent documents must be used. The appendix can be found in the certification folder and on sodra.com.



The forest management plan is an important part of your certification.

5. Forest owners with own employees and self-employed forest owners

Employees of a forest owner who carry out harvesting or forest management operations must meet the certification requirements for contractors. If forest management is carried out by a self-employed forest owner, or in collaboration with other individual forest owners, all operations performed on the forest holding must comply with the requirements of the standard. The certification requirements for contractors do not need to be fulfilled.

6. Tract directive

Anyone who performs a forest management operation must receive the necessary information (such as a tract directive) from the client (such as a forest owner or Södra) in order to conduct the assignment in accordance with the requirements of the standard. The tract directive must include GPS coordinates for emergency responders.



Any forestry measures that you perform on the estate must comply with the certification requirements.

7. Legislation

The forest owner agrees to comply with the applicable legislation for forest management in Sweden. Most of the relevant laws can be found under 'Forest management – compliance' on sodra.com. Collaboration with relevant authorities takes place to avoid, prevent and address illegal activity based on a relative priority of scale, intensity and risk.

All international arrangements with relevance for forest management that Sweden has signed or otherwise committed to follow or introduce, must be respected. One of these is the Convention on Biological Diversity. In the event of any conflict between legislation and certification requirements, such as wind-thrown trees in a key habitat, Södra must be contacted.

8. Use of PEFC and FSC® logos (labels)

All use of PEFC or FSC® logos (such as FSC® or Forest Stewardship Council®) on products or for marketing purposes requires prior approval. Please contact Södra for more information.

9. Public domain

In the event of an external query about certification, individual forest owners are responsible for providing information about nature conservation allocations and the overall objectives of forest management. Information about the economic conditions of their estate, such as growth and wood volumes, is not public, nor is information about sensitive species. Information about production and finance must, however, be available for the auditor.

10. Documentation

All major forestry measures performed on the estate must be documented (such as harvesting, forest management, nature conservation measures, forest biofuel extraction and nutrient recycling). The documentation must be saved for at least five years.

11. Audits

The forest owner accepts that compliance with the requirements of each certification standard is verified by both Södra and an external third-party auditor. The forest owner is responsible for remedying any non-compliance for which they are personally responsible.

12. Agreement

An PEFC and/or FSC® certification agreement is signed between all owners of the entire forest holding and Södra, provided that all estates included have the same legal owners. Estates located outside Södra's operational area must also be certified if they have the same legal owner. The estate shall join a group certification scheme for the area in which the estate is located. The forest owner undertakes to meet the requirements of the standard.

Rights of use, easements and agreements that affect the estate are documented and respected (such as hunting leases, road easements, etc.).

Forest management standard



1. Active and economical forest management

- Forest management shall be active, economical, sustainable and legally compliant.
- Safe regeneration techniques shall be prioritised to achieve high and valuable wood production.
- Forestry principles and practices shall be adapted to site conditions.
- Forest management shall stimulate regeneration, and be characterised by active cleaning and thinning.
- Harvesting rates must not exceed long-term sustainable levels.

The Green Forest Management Plan provides the starting point for forestry on estates of more than 20 hectares.

2. Selection of tree species and stand sites

2.1 PLANT AND SEED MATERIAL

- The source of plant and seed material must be documented and adapted to site conditions.
- Genetically modified (GM) regeneration material must not be used.

FSC® addition:

Opportunities for natural regeneration should be considered when choosing a regeneration method.

2.2 FORESTRY OPERATIONS

FSC® addition:

- Existing shrub and tree species must be protected when cleaning and thinning.
- When carrying out understorey cleaning prior to thinning, regeneration harvesting, site preparation or planting, any undergrowth that will not impede subsequent forestry measures is retained.

2.3 NON-NATIVE TREE SPECIES

For non-native tree species such as Sitka spruce, Douglas fir, sycamore maple, hybrid aspen and hybrid larch, the following applies:

- Non-native tree species shall only be used in accordance with applicable laws and regulations.
- Non-native tree species shall only be introduced under strict control.
- The tree species must be ecologically suited to the site conditions where they are used.
- The forest owner must prevent any self-propagation from spreading to conservation set-asides.

FSC® addition:

- The introduction of non-native tree species (land conversion) shall be restrictive.
- **A non-native tree species may only be used when a systematic assessment can show that:**
 - a) the tree species provides significant production or other benefits compared with native tree species,
 - b) the tree species is ecologically suited to the site conditions where it is used,
 - c) the tree species does not have any significantly negative effects on the natural processes and long-term productive capacity of the soil,
 - d) the tree species does not have any significantly negative effects on other ecosystems or biodiversity,
 - e) self-propagation to surrounding areas can be restricted and removed.
- The total area of newly planted non-native tree stands after 1994 must not exceed 5 percent of the certified land holding. Reforestation with non-native tree species on land that was dominated by non-native tree species prior to 1994 is not affected by the restriction.
- Forest owners who plant new non-native tree stands shall take additional and more wide-reaching measures to strengthen nature conservation considerations in proportion to the use of non-native tree species. Considerations take the form of native tree species.
- The forest owner has a programme for limiting and preventing the self-propagation of non-native tree species outside existing and planned non-native tree stands.
- Restocking with non-native seedlings may only be carried out in stands already dominated by non-native tree species.
- Non-native tree species are exempt from conservation measures when harvesting and are not retained.
- Non-native tree species are actively removed from conservation set-asides and buffer zones during forestry measures.

2.4 REGENERATION IN THE NEMORAL ZONE (PARTS OF BLEKINGE, HALLAND AND SKÅNE)

PEFC has no restriction on how much of the estate can comprise spruce-dominated stands.

FSC® addition:

Over time, at least 50 percent of productive forest land in the nemoral zone shall be dominated by native hardwood trees and/or pine. When the proportion of land dominated by native hardwood trees and/or pine in the nemoral zone is less than 50 percent, measures must be taken to achieve the target.



The nemoral zone boundary:

The boundary goes from Halmstad along Road 117 to Tjärby, down to Laholm and then along Road 24 to Hörja. It then proceeds in an easterly direction to Stoby, Sandby, Knislinge, Hjårsås, Immeln, Arkelstorp, Vånga, Näsrum and Kylinge. It then travels along Road E22 to Jämjö and then southwest toward the coast.

The boundary zone (10 km along each side of the boundary) is normally handled as follows:

Estates in the boundary zone north of the boundary belong to the boreal zone, while estates in the boundary zone south of the boundary belong to the nemoral zone. The forest owner may request exemption from this interpretation. Södra will then make an assessment to determine whether more than 50 percent of the estate can be considered boreal in the transition between the nemoral and boreal zones.

3. Controlling forest damage

Measures to reduce forest damage caused by, for example, frost, drought, wind, fungi and insects should be given high priority in advisory services, training and forest management operations. The guidance and recommendations issued by the Swedish Forest Agency must be followed.

3.1 CHEMICAL AGENTS

Chemical pesticides are not used on forest land unless an exemption is granted.

3.2 BIOLOGICAL PESTICIDES

PEFC has no restriction on the use of biological pesticides.

FSC® addition:

- The use of biological pesticides should be minimised.
- Only evaluated and effective biological pesticides that have been approved by the Swedish Chemicals Agency may be used.

3.3 WILDLIFE DAMAGE

Forest owners shall work to ensure that the size of wildlife populations is consistent with the long-term targets for forest management and nature conservation. Close collaboration between forest management and hunters is a prerequisite for achieving the goal of a viable wildlife population/food supply balance.

Measures shall take the form of hunting, or a requirement for hunting leases and wildlife management areas, so that wildlife damage is limited and populations of cloven-hoofed game are kept at an appropriate level. Objective, quality-assured methods shall be used to determine whether the size of wildlife populations is well-balanced.

The size of cloven-hoofed game populations is considered well-balanced and in harmony with food supply when:

- Rowan, aspen, sallow and oak (RASE) can form trees in those parts of the country where they are naturally occurring,
- It is possible to regenerate forest land with suitable tree species,
- At least 7 of 10 regenerated pine stems are undamaged at a height of 5 metres.

Trees that attract wildlife (aspen, rowan, sallow, temperate deciduous trees and crab apple) are largely retained when cleaning.

3.4 FOREST FIRES

FSC® addition:

When carrying out forest management operations during periods with a high fire risk, fire prevention measures must be taken.

3.5 FOREST ROADS

- When constructing new forest roads:
 - a) watercourses must be preserved,
 - b) damage to aquatic environments and surrounding buffer zones must be prevented,
 - c) road crossings over watercourses must not block walking trails,
 - d) road ditches must not flow directly into watercourses or valuable wetlands.
- Walking trails that are blocked by culverts are repaired when roads are upgraded, which includes excavation.
- When excavation is used to upgrade forest roads, sludge transport is minimised and road ditches are prevented from flowing directly into watercourses or valuable wetlands.



Your forest road is an important part of sustainable forest management.

4. Other forestry measures

4.1 FERTILISATION

Fertilisation with nitrogen and minerals must comply with the regulations and guidance issued by the Swedish Forest Agency (fertilisation is not currently permitted across major parts of Götaland).

FSC® addition:

- Any fertilisation that is carried out must be followed-up and the damage recorded.
- If fertilisation is carried out, the type of fertilising agent, dose and fertilisation date is recorded for each stand.

4.2 DITCH MAINTENANCE AND REMEDIAL DITCHING

New ditches are not dug on previously undrained land. Existing ditches must be cleaned down to their original width-to-depth ratio, provided that nature conservation values are not affected.

Ditch maintenance:

- Ditches must not flow directly into watercourses, lakes or valuable wetlands.
- Ditch maintenance must always be planned so that valuable habitats downstream are not harmed. If necessary, sedimentation ponds are created or other measures are taken to reduce sludge transport.
- No maintenance is carried out on existing ditches on low-productive peatlands, or in wetland biotopes with high conservation value.

Remedial ditching:

Remedial ditching is only carried out when the regeneration requirement under the Swedish Forestry Act cannot be otherwise met.

FSC® addition:

Maintenance is only carried out on existing ditches to prevent a serious deterioration of production conditions.

4.3 FOREST BIOFUEL EXTRACTION

Forest biofuel extraction is part of active forest management and shall be carried out in a manner that preserves the long-term productive capacity of the soil and the conservation values of branches and treetops.

- When removing harvesting residues, thick hardwood and pine treetops are retained. These are preferably exposed to sunlight along with other considerations.
- Nutrient/ash recycling as compensation for forest biofuel extraction complies with the regulations, guidance and recommendations issued by the Swedish Forest Agency.

FSC® addition:

Forest residues from spruce, pine, birch and non-native tree species can be removed when this has minimal adverse effects on the productive capacity of the soil, provided that at least 20 percent of the residue is retained.

There is no need to leave residue:

- a) from non-native tree species,
- b) with consideration for outdoor activities and recreation,
- c) when managing forests to create hardwood-dominated stands or land for forest/pasture grazing,
- d) when it does not contribute to the achievement of the nature conservation target.

Forest residues from other tree species can be removed when carrying out nature conservation measures or in hardwood-dominated production stands, unless the stand is an important habitat for insects.



When removing harvesting residues, thick hardwood and pine treetops are retained.

4.4 NEW, UNTESTED FORESTRY METHODS

New, untested methods and materials with an appreciable risk of negative effects on humans and nature are not used unless the environmental impacts have been assessed, and regulations issued by the relevant authority.

FSC® addition:

New, untested methods and materials as described above must be FSC® certified.

4.5 CONVERSION OF FOREST LAND

The conversion of forest land to other types of land use shall be limited and subject to regulatory compliance, and after all necessary permits have been granted and consultation has taken place.

FSC® addition:

Natural forests must not be converted to plantation forests or any other type of land use unless all of following requirements are met:

- a) the conversion affects no more than 5 percent of the certified land holding and no more than 0.5 percent of the certified land holding per year (refer to 6.9.2 for exceptions to the 0.5 percent limit),
- b) additional measures are carried out during the conversion to strengthen consideration for important social or nature conservation values,
- c) the conversion does not damage or pose a threat to high conservation values.

The following are examples of land conversion that may be carried out without additional measures since they are either included in forest management or are normally small-scale:

- all installation directly linked to forest management, such as forest roads and mining for household needs,
- installation of fields with forage crops for wildlife, wildlife fencing or water for wildlife,
- installation of pastures or arable land,
- installations to promote recreation and outdoor activities,
- cultural resource management,
- training and other activities led by a recognised research institute,
- development for construction on a plot of land,
- installation of mobile masts,
- installation of a wind turbine.

The following are examples of other large-scale land use that may require compensation:

- commercial mining with no direct connection to forest management,
- wind farm installations (for each wind turbine, one hectare of productive forest land is set aside for nature conservation. Contact Södra Skog's Environmental Manager or certification coordinator for more information),
- conversion of natural forests to plantation forests/ non-native tree species.

When converting forest to a more permanent type of land use, some land may need to be removed from the certified holding. Such areas include:

- mining,
- development for construction that requires planning.



THE FOREST MANAGEMENT STANDARD IN BRIEF

- Forest management shall be active, economical and responsible.
- Management principles and practices shall be adapted to site conditions.
- Forest management shall stimulate regeneration, and be characterised by active cleaning and thinning.
- Measures to reduce forest damage shall be given high priority.
- The use of non-native tree species shall be limited.

Environmental standard

1. Managing high conservation value (HCV) areas

1.1 AREAS SET ASIDE FOR NATURE CONSERVATION

- At least 5 percent of the productive forest land on the total estate holding must be set aside for nature conservation, such as NO (Nature conservation – to be left untouched) and NS (Nature conservation – Management) stands.
- Exceptions apply to landholdings with less than 20 hectares of productive forest land, with no areas that can currently, or in the near future, develop high conservation values.
- When selecting and delimiting, the areas are prioritised according to their significance for biodiversity and how common they are in the landscape. Key biotopes are selected first. Areas that are fully subsidised by the government – nature reserves and habitat protection areas – and redeemed before certification, are not included. (Nature conservation agreements may be included in the set-asides.)
- Set-aside areas in need of nature-conservation measures are managed in accordance with the nature-conservation targets defined for the area.
- Dead wood must not be removed from the areas set aside for nature conservation, unless this is required to meet the forest protection requirements of the Swedish Forestry Act.
- When considerably more than 5 percent of the productive area has been set aside for nature conservation, the requirements may be eased in regard to other parts of the standard.

FSC® addition:

- If land is granted to replace redeemed reserve land, up to 5 percent of the new land must be set aside. For more information about the rules that apply when areas are redeemed with full financial compensation, contact Södra Skog's Environmental Manager or certification coordinator.
- Only nature conservation agreements valid for longer period than 25 years, unless a shorter period can be justified by nature conservation reasons, may be included in the set-asides for nature conservation purposes.
- Other wooded land with at least 25 percent canopy cover, and where sufficient grazing or hay-making is carried out to provide favourable conditions for conservation-dependent flora/fauna, may be included in the nature conservation set-asides.
- Man-made/restored wetlands may be included in the nature conservation set-asides.
- With consideration for the bird-nesting period, no forest management operations should take place in the stratified hardwood-dominated areas set aside for nature conservation between April and June.

1.2 KEY BIOTOPES AND OTHER HCV OBJECTS

Key biotopes and other HCV objects are exempt from forestry measures if these are not required to protect or promote biological diversity.

1.3 WET FOREST LAND

Wet forest land shall normally be set aside as a nature-conservation object. Smaller areas of wet forest land are set aside for general consideration measures.

1.4 FOREST MANAGEMENT WITH SPECIAL CONSIDERATION MEASURES

Forest with nature conservation values that have not been prioritised for setting aside, shall be managed as an HCV object. There may sometimes be areas in individual stands with higher conservation value than their surroundings, such as watercourses, cliffs, rocky slopes, and so forth. These areas require special consideration in forest management operations to promote biodiversity. These are described with the management targets of CT/PS (Combined Target/ Production with Special Consideration).

FSC® addition:

According to the FSC® standard, another 5 percent of the productive forest land area shall be managed to secure long-term conservation and/or social benefits as the primary objective.

The following can be included either alone or in combination:

- a) additional areas set aside for preserving and promoting the area's natural or established biodiversity, in addition to the 5 percent that is set aside for nature-conservation measures (NS/NO areas that exceed 5 percent),
- b) areas with special conservation considerations and specific nature conservation measures,
- c) areas managed to sustain forest continuity or group selection with natural forest regeneration,
- d) areas with special considerations for experience values and/or local economy.

When carrying out measures in these areas (b-d), at least 50 percent of the original volume must be retained after measures to secure long-term future conservation and/or social values, unless it is specified in the target description that the preservation/promotion of these values requires larger withdrawals.

Södra applies this requirement at an overall Södra level for estates of less than 1,000 hectares.

2 Hardwood forest and trees

- Forest management shall ensure that at least 5 percent of the area's healthy and wet productive forest land comprises stands that are, or will eventually be, dominated by hardwood trees.
- In stands where natural conditions allow, hardwood trees shall be promoted when cleaning and thinning, so they account for at least 10 percent of the number of stems until final thinning. Hardwood should preferably be concentrated to, for example, damp areas, declines, buffer zones, protection zones, conservation set-asides and groups of trees.
- In the stand, including its surrounding areas, favourable living conditions are created for at least 20 hardwood trees throughout the entire rotation period.

FSC® addition:

- Where natural conditions allow, hardwood trees are promoted in forestry operations so they account for at least 10 percent of the number of trees throughout the entire rotation period.
- When thinning, favourable conditions are created for at least five existing hardwood trees on average per hectare so they can develop into HCV trees. Temperate deciduous trees, aspen, sallow and rowan are prioritised.
- In stratified, hardwood-dominated forests, no harvesting is carried out during the bird-nesting period (April to June).
- Hardwood-dominated stands included in the stands set aside for nature conservation (as described in 1.1 Nature conservation set-asides) must not be counted twice and are included in the 5 percent that shall be, or shall eventually become, hardwood-dominated.
- Hardwood-dominated stands managed with methods to promote conservation and/or social values (as described in 1.4, Forest management with special consideration measures) may be included and counted twice in the 5 percent that shall be, or shall eventually become, hardwood-dominated.



Promoting hardwood trees when thinning, so they account for at least 10 percent of the number of trees.

3. Managing species

Consideration shall be made for the known presence of red-listed species outside the key biotopes. Such considerations may take the form of detailed consideration or conservation set-asides during harvesting, and setting aside forest for nature conservation.

FSC® addition:

Considerations apply for the known presence of forest-dependent species linked to the Species Protection Ordinance. Conservation measures are applied for the known presence of red-listed species that are affected by forest management.

In forest management operations, considerations are applied for known:

- a) bird of prey nests for species prioritised under the Swedish Forestry Act,
- b) presence of territorial bird species with small populations,
- c) capercaillie sites.

4. Planning and management at landscape level

4.1 LANDSCAPE PLANNING

- Landscape planning is normally carried out when the Green Forest Management Plan is created.
- Regional action plans or the equivalent must be observed when planning forest management.
- Lakes and watercourses throughout the entire forest landscape must be observed and, as far as possible, an assessment of forestry measures should be based on a landscape and catchment area approach.

4.2. MANAGING NATURE CONSERVATION VALUES ON CULTIVATED LAND

Consideration shall be made for the specific nature conservation values in cultivated areas. In meadows and pastures, management that promotes conservation-dependent species should be continued.

- Forest shall not be actively planted on land with special nature conservation and cultural heritage values (cottage villages, old farms, etc.).
- Nature conservation values linked to earlier free-standing thick trees and the cultural landscape's trees and shrub species shall be promoted to an appropriate degree.
- Planting shall be avoided in areas directly adjacent to nature conservation objects that require large amounts of light, such as sun-exposed edges, field islets and other open small biotopes.



Consideration for nature conservation and cultural heritage values shall characterise forest management planning and be applied in all forestry measures. Harvesting area with nature conservation and cultural considerations in line with responsible and sustainable forest management. Buffer zones around water, dead wood and high stumps help to promote biodiversity. Cultural heritage stumps are used to mark ancient and cultural relics.

5. General conservation considerations

5.1 SENSITIVE BIOTOPES

- Sensitive biotopes are areas with higher nature conservation values than the surrounding production forest. Species that are sensitive to forestry operations can be preserved and/or promoted here. Biotopes are important for maintaining variation in the forest landscape and for promoting the diversity of plants and animals. More information is available in the forestry sector's joint environmental consideration objectives.

Examples of sensitive habitats are:

- Waterlogged woodlands with natural forest features.
- Slopes or ravines with old trees.
- Marsh and spring-impacted soil.
- Cliffs.
- Flat-rock pine forests with an abundance of dead wood.
- Multilayer leafy riparian forests and other types of forest with big old trees and an abundance of dead wood.
- In all types of forest management, damage in and around sensitive biotopes should be prevented or limited.

- Protection for sensitive habitats is primarily created by clearly marked set-aside areas of more than 0.5 hectares, or conservation set-asides of less than 0.5 hectares. Protection zones may be required for objects that are particularly sensitive to sun exposure and wind.
- Nature conservation values in sensitive habitats are preserved or promoted in forest management operations.



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5.2 BUFFER ZONES AND PROTECTION ZONES

Buffer zones and protection zones are important for preserving species in forests and other types of surrounding land use, such as infields, wetlands, lakes and watercourses. Buffer zones are often species-rich, since they host plants and animals from both the buffer zone as well as surrounding environments. If there are no existing buffer zones, remember to include plans for such forestry measures in, for example, site preparation, planting and cleaning operations. A protection zone may comprise forest with low conservation value forest that has been retained to secure nature conservation benefits in, for example, sensitive biotopes. The width is adapted to the protection object and the site conditions. More information is available in the forestry sector's joint environmental consideration objectives.

Preserving buffer zones:

- The width of the buffer zone is adapted to the natural conditions.
- Leave buffer zones with existing or developable conservation values around other types of land such as infields, wetlands, waste land and water.
- Leave natural, leafy multilayer edges around open land or wetland.
- Leave protective hardwood and undergrowth around creeks and watercourses, and on the wet or damp land affected by the creek.



Example of a buffer zone around a lake.

- Buffer zones are preserved and/or created when cleaning and thinning.
- Avoid all driving in moist and wet buffer zones.
- Where spruce production forest grows all the way up to other types of land use or creeks, the spruce is harvested and no new spruce is planted in the buffer zone. Promote hardwood and shrubs instead, to achieve a layered, multi-aged buffer zone.
- Edge zones with multi-layered trees and shrubs are preserved or recreated adjacent to the cultivated landscape in forestry operations.

Protection zones are retained:

- If there is a risk that high conservation values may disappear due to light and dehydration.
- Around water where there is a risk of extensive nutrient leakage.
- Around sensitive habitats, cultural relics, buildings and so forth whenever necessary.

5.3 GROUPS OF TREES AND CLEAR-CUT RESTRICTIONS

A group of trees is a stand that currently has lower conservation values than sensitive biotopes, but that could eventually increase variation in the landscape if set aside for free development or managed to promote conservation values. The groups of trees may contain both HCV trees and development trees.

- Strive to save groups of trees as small conservation set-asides adjacent to natural geologic formations, such as boulders and sinkholes, or existing single HCV trees.
- It may be appropriate, particularly when thinning, to cut around or otherwise accentuate the retained tree group, making it easier to see conservation considerations in later measures.

FSC® addition:

The position of the trees avoids the visual effect of a clear-cut. The trees can be retained as single, thick storm-resilient trees, or in small groups. When harvesting an area of more than four hectares, the distance between each point in the harvesting area and the closest set-aside object must not exceed 70 metres.

5.4 UNPRODUCTIVE LAND

Unproductive land refers to areas with low productive capacity (< 1 m³ standing tree volume per hectare and year).

- Forestry measures may only be carried out to protect or promote biodiversity.

5.5 HCV TREES AND DEVELOPMENT TREES

High-conservation-value (HCV) trees

High-conservation-value trees include both living and dying trees, with green leaves or healthy needles in the crown. They must have specific conservation values and be different from timber trees.

Examples of HCV trees:

- Deviating coarse and/or old trees with high conservation value, including coarse juniper trees and coarse, formerly free-growing pasture spruce.
- Nesting trees with bushy nests, trees with cavities or thick trees with a notably wide and thickly branched and/or flat crown.
- Thick hazel, thick aspens and alders in softwood-dominated stands if they are not abundant.
- Arborescent sallow, rowan, whitebeam, maple, linden, bird cherry, wild cherry, elm and hawthorn in softwood-dominated stands (more than 7 cm in diameter at breast height).
- Trees with marked, open fire scars and trees that bear signs of former human activity.

HCV trees do not include:

- Trees included in the normal forest management programme, such as seed-tree, shelter and saw-log stands.
- Older trunks of softwood, hardwood or temperate deciduous trees that are managed for wood production.

Development trees

Development trees are ordinary living trees that are retained for future development into HCV trees. Storm-resilient trees are selected on the basis of their significance for biodiversity at stand or landscape level. Thickness shall be representative of the relevant tree species in the stand, or thicker.



A tall, old linden is a valuable HCV tree.

Measures:

- All HCV trees shall be retained in forestry measures. Wind-thrown HCV trees must not be cleared unless they pose a threat to buildings, power lines, humans, or prevent accessibility on roads and tracks.
- When there is a shortage of HCV trees, development trees are retained to ensure at least 10 green trees per hectare. Trees with a 30-cm DBH (diameter at breast height) are prioritised. However, the trees must have a minimum DBH of 15 cm in final harvesting, and 10 cm in thinning to be counted.
- All species of shrubs and hardwood in the stand shall remain after measures.
- The retained trees should preferably be growing in sensitive biotopes, buffer zones or groups of trees, but may also be free-standing.

HCV trees may be removed for the following exceptions:

- a) where there is a risk of injury to people or buildings, in connection with roadwork or if they are growing close to power lines,
- b) to promote other prioritised HCV trees,
- c) if they risk destroying ancient or cultural relics,
- d) where there is an abundance of thick aspens and alders in softwood-dominated stands, provided that a sufficient number is retained for nature conservation,
- e) if they affect accessibility when harvesting.

Trees with high biodiversity values that are felled shall be left in the forest as fresh dead wood.

FSC® addition:

Trees retained in sensitive habitats/buffer zones may not be included in the requirement of 10 trees per hectare in harvesting areas of more than 4 hectares.



An old pine with a nesting hole.

5.6 DEAD WOOD

Dead trees and other dead wood, such as dry and fallen trees, are important for nature conservation. Some 40 percent of red-listed forest species have a connection with dead wood. Retaining different types of dead wood is therefore one of the most effective forms of nature conservation. It is also cost-efficient, since dead trees have low timber value.

General measures

- Driving damage to dry trees, high stumps and valuable fallen trees shall be avoided.
- Retain all dry trees, fallen trees and other dead trees:
 - a) from HCV trees and other trees previously retained for nature conservation considerations,
 - b) in stands set aside for nature conservation and nature conservation set-asides,
 - c) on wasteland.

Exceptions:

- Dry trees that pose a safety hazard (work environment, roads, property) are cut down to high stumps and the limbs are placed on the ground. Dead trees within a tree-length's distance from tracks and walking trails are also cut down to high stumps and the dead limbs are placed on the ground.
- In urban forests and along tracks and trails, windfalls may need to be cut or shifted to increase accessibility and ensure safety.



Retaining dead wood is an effective nature conservation measure.

Dead wood younger than 1 year

- When taking care of windfalls on clear-cut areas, all wind-thrown HCV trees are retained.
- The permitted amount of fresh softwood to be retained is determined by the Swedish Forest Agency (normally 5 m³fo/hectare).

FSC® addition:

When taking care of wind-thrown seed or shelter-wood trees, at least two thick fresh windthrows per hectare, on average, are retained. (Does not apply to repeated windthrows).

Dead wood older than 1 year

- Dry trees, fallen trees and other dead trees that have been dead for longer than 1 year must always be retained unless:
 - a) they pose a safety hazard to people or property,
 - b) they are blocking tracks and roads.
- When extracting recoverable harvesting residue such as branches and treetops, some should always be retained. Preferably leave any thickly branched caps of oak, aspen and pine. Special considerations apply for the extraction of residues from hardwood forest.
- Should reforestation obligations apply, areas with dead forest must be managed in accordance with the Swedish Forestry Act and in dialogue with the Swedish Forest Agency.

5.7 HIGH STUMPS

Making high stumps is one way of imitating nature's own production of dead wood. Fresh high stumps attract species that do not inhabit old dry trees, and are therefore required as a complement in the general considerations.

- At least three high stumps or ring-barked trees per hectare of harvested area are created in final harvesting and thinning operations.
- For regeneration harvesting operations in oak and beech stands, at least two ring-barked trees or high stumps, on average, of the main tree species are created per hectare of harvested area.
- Selecting the coarseness of high stumps based on what is representative for the stand, striving for an overrepresentation of high stumps of deciduous trees. Cutting the high stumps at the maximum height that is considered as safe (higher than 3 meters). High stumps of deciduous trees are avoided in areas where such trees occur very sparsely

5.8 WATER AND SOIL CONSIDERATIONS

Water must be protected in all forest management operations. Effective planning is a prerequisite for reducing the environmental impact of driving. Wherever possible, forestry measures should be assessed on the basis of potential impact on the landscape, such as downstream. Special considerations apply for HCV wetland and aquatic ecosystems. More information is available in the forestry sector's joint environmental consideration objectives.

Water is protected by:

- Applying special considerations for wetland and aquatic ecosystems when planning forestry operations and road construction.
- Planning driving routes prior to measures.
- Not driving in watercourses, along lake edges, through cold springs or on wet soil.
- Avoiding damage to the soil around water by:
 - Driving as far away from the water as possible.
 - Strengthening the soil where driving is unavoidable and there is a risk of damage.
 - Using the harvester's range and not loading the timber close to the watercourse so that the log hauler can avoid driving near the water.
- Avoiding crossings over watercourses and ditches whenever possible. When a crossing is unavoidable, choose the most appropriate place and use technical aids (portable bridge, timber mats, a wooden bridge or similar depending on the size and characteristics of the watercourse). Placing wood in the ditch is only permitted for crossings and must always be removed afterwards to avoid damming.
- New road ditches must not flow directly into watercourses, lakes or valuable wetlands.
- Preventive measures are taken to prevent oil and fuel leakage from forestry machinery.
- Damage to walking trails and watercourses is avoided/ remedied in conjunction with road construction or the installation/renovation of culverts.



Soil must be protected by:

- Avoiding serious driving damage in forest management operations.
- Adapting site preparation to site conditions and using low-intensity methods.
- Not carrying out site preparation in buffer zones around water or on wet soil.
- Using intermittent site preparation methods on wet soil and soil at high risk of erosion.
- Driving around wet and waterlogged areas, moist soil in discharge areas, unproductive peatland areas and conservation set-asides.
- Applying special considerations when harvesting on productive peatland, such as broader tyres on forestry vehicles and extra brush on driving routes.
- Not harvesting forest residues unless serious driving damage can be avoided.
- Repairing any driving damage, unless there is a risk of making the damage worse.

Driving damage causes substantial erosion and debris flows to watercourses, rutting that alters water flows, damage in areas with unique natural or cultural values, and rutting in environments of particular significance for outdoor activities, especially near urban areas. Refer to the forestry sector's joint objectives.

6. General cultural heritage considerations

Consideration for the life and work of previous generations – cultural heritage – shall be applied in all forest management operations. Cultural heritage includes ancient relics, other cultural relics, biological cultural heritage and intangible phenomena such as place names, legends and places with tradition. High cultural values (HCV) may motivate the protection of entire areas. All ancient relics are protected under the Swedish Act on Historical Monuments. Under the Swedish Forestry Act, forest owners are required to take other cultural relics into consideration. You can find information about known sites in Södra's app (My forest estate) or under 'My pages' on the Swedish Forest Agency's website. However, please remember that not everything is known or registered yet.

- Forestry measures are performed so that immovable ancient relics and areas with ancient relics are not damaged, and damage to other cultural relics is minimised.
- Cultural heritage stumps are created to mark ancient and cultural relics, unless these are clearly marked in some other way. Create 1.3-metre high cultural heritage stumps to mark individual features (such as croft ruins) or linear features (such as hollows).
- For forest management on land with cultural relics, refer to the forestry sector's joint environmental consideration objectives for guidance.
- For ancient relics, announcements or decisions issued by the County Administrative Board apply.

7. Other considerations

- Avoid all types of littering. All waste is handled in accordance with the municipality's regulations and instructions.
- Hazardous waste is collected and transported to the waste management facility designated by the municipality.
- Forestry contractors shall only use biodegradable hydraulic oils and saw chain oil. Ethylene glycol is not used in the cooling system.

THE ENVIRONMENTAL STANDARD IN BRIEF

The forest owner applies consideration for biological diversity by:

- Identifying HCV areas and setting aside at least 5 percent for nature conservation.
- Managing a certain percentage of the forest area with methods that secure nature conservation or social benefits (FSC® only).
- Applying consideration for the known presence of red-listed species that are sensitive to forest management operations.
- Planning nature conservation from a landscape perspective.
- Applying general conservation considerations in all forest management operations.
- Applying general cultural heritage considerations in all forest management operations.



The remains of an old sawmill are now a unique cultural relic.

Social standard



Engaging PEFC-certified contractors is fundamental to meeting the requirements of the social standard. Forest owners with their own employees must comply with the requirements of the PEFC and FSC® standards summarised in points 1-5.

1. Laws and labour market conditions

The operations shall be conducted in accordance with applicable laws, collective bargaining agreements (central and local) and labour market practices.

2. Contractual and employment relationships

- Only contractors/companies that have paid their statutory charges and tax are engaged for planning, forestry and harvesting operations. Written contracts must be signed.
- Employment and working conditions for both own employees and those of contractors must comply with applicable laws. Collective agreement provisions form the basis of agreements between employers and employees. Permanent employment shall be prioritised. Employment contracts shall be drawn up in writing.

3. Occupational health and safety (OHS) and work organisation

- Forest owners shall promote a safe and healthy workplace both for their own employees and those of contractors, and a developing work organisation within the framework of laws and standard industry practice.
- Decisions regarding work methods, organisation and the purchasing of equipment shall be based on the best overall solution in terms of health and safety, the external environment and economy. Prioritisation of the external environment must not compromise health and safety.
- Employers shall work systematically to improve the workplace environment, promote gender equality and eliminate discrimination.
- Work and safety instructions, and accident and emergency procedures:
 - a) are available at the workplace,
 - b) can be understood by those performing the work,
 - c) are familiar to those performing the work.
- Employees shall be provided with staff facilities in accordance with the Swedish Work Environment Act and applicable collective agreements.
- Regular performance reviews and workplace meetings are held both for permanent and seasonal employees.

4. Basic level of expertise for employees

- Forest owners shall hire employees or contractors with the competencies required by the task at hand.
- For short-term employees, any gaps in training shall be compensated by special training, management and supervision.

5. Competency development

- Systematic development of employee competencies shall be an important part of the company's personnel policy.
- Initiatives to develop an employee's competencies shall be documented in individual competency development plans that are prepared, implemented and followed up every year.

6. Recreation and right of public access

- Those areas of the estate with major significance for recreation, outdoor activities and culture shall be identified and documented.
- When forestry operations are planned to take place in areas that are important for recreation, outdoor activities and culture, appropriate information and invitations to dialogue shall be announced no later than 14 days before the operations commence.
- Forestry activities in urban areas require particular care.
- Forest owners shall respect the rights of all people to enter forests on foot under the right of public access, provided they do not disturb the privacy of those who live there, harm financial interests or prevent forest owners from using their land.

- If local residents, local communities or other local stakeholders contact forest owners with their views on a planned forest management operation, consultation must be offered. The consultation will not lead to a decision; the aim is to capture views as a basis for the forest owner's decision on how the measures should be carried out.
- The size and shape of the clear-cut area shall be adapted to the natural and cultural environment to avoid an intrusive visual impression.
- The accessibility of public paths, permanent tracks and trails and heritage routes shall not be impaired by forestry operations. Any damage shall be repaired.

THE SOCIAL STANDARD IN BRIEF

- Comply with applicable laws, collective agreements and labour market practices.
- Promote a safe and healthy workplace and a developing work organisation.
- Hire employees or contractors with the competencies required for the task at hand.
- Work systematically to develop the competencies of permanent employees.
- Respect the recreational values of the forest environment and the right of public access.
- Strive for forest management that maintains and promotes job opportunities, competitiveness and profitability.





Information that may be requested at an audit

- Up-to-date certification-adapted Green Forest Management Plan (if there is no plan for the forest holding, or if the holding is less than 20 hectares, refer to page 6 of this brochure).
- Information about land distribution per land-use classification (not required for forest holdings of less than 20 hectares).
- Completed natural value assessments (if there is no plan).
- Completed forestry measures.
- Documentation of the stands used for forest biofuel extraction.
- Documentation of the stands that have been fertilised or where ash recycling has taken place.
- When forest land has been converted for other land use, the reasons must be documented.
- Any major changes in forest conditions, such as storm damage, shall be documented.
- Financial records (for example, to show that tax has been paid).
- Proof of the right to manage forest on the land holding (ownership structure, ownership details and any agreements).

- Purchasing contracts, measurement notes or any other documents showing the extraction of traditional forest products that make it possible to trace the products back to your forest.
- Agreement appendix if PEFC-certified contractors have been engaged.
- Agreement appendix if wood has been sold to purchasers other than Södra.
- Up-to-date certification agreement.

For employees of forest owners, the following documentation is also required:

- The employee's competencies in the actual field of work.
- The employee's basic personal data (if more than 10 employees).
- The employee's individual competency development plans.

Summary

THE FOREST MANAGEMENT STANDARD IN BRIEF

- Forest management shall be active, economical and responsible.
- Management principles and practices shall be adapted to site conditions.
- Forest management shall stimulate regeneration, and be characterised by active cleaning and thinning.
- Measures to reduce forest damage shall be given high priority.
- The use of non-native tree species shall be limited.

THE ENVIRONMENTAL STANDARD IN BRIEF

The forest owner applies consideration for biological diversity by:

- Identifying HCV areas and setting aside at least 5 percent for nature conservation.
- Managing a certain percentage of the forest area with methods that secure nature conservation or social benefits (FSC® only).
- Applying consideration for the known presence of red-listed species that are sensitive to forest management operations.
- Planning nature conservation from a landscape perspective.
- Applying general conservation considerations in all forest management operations.
- Applying general cultural heritage considerations in all forest management operations.

THE SOCIAL STANDARD IN BRIEF

- Comply with applicable laws, collective agreements and labour market practices.
- Promote a safe and healthy workplace and a developing work organisation.
- Hire employees or contractors with the competencies required for the task at hand.
- Work systematically to develop the competencies of permanent employees.
- Respect the recreational values of the forest environment and the right of public access.
- Strive for forest management that maintains and promotes job opportunities, competitiveness and profitability.