

# FSC Forest Management Training

## Finnish National Forest Stewardship Standard



**FORESTS<sup>TM</sup>  
FOR ALL  
FOREVER**



# Agenda

1. FSC introduction

2. Finnish National Forest Stewardship Standard





# FSC Introduction



# DEFORESTATION

The world has lost 1/3<sup>rd</sup> of its forests since 1750

180 million hectares lost between 1980 – 1995

## EARTH SUMMIT RIO 1992

Failed to produce agreement on deforestation

1993

## FSC IS BORN

Market-based solution to protect forests by promoting sustainable forest management



# From a good idea to an international market-changer



**1 212**

**International  
members in  
89 countries**



**159 Million  
certified hectares**



**58 000+  
Chain of  
Custody**



**75 000+  
Certified  
organisations**



# Decision-making is balanced between the three main pillars of sustainability

33.3%  
Social



Local communities &  
Society

33.3%  
Environmental



Biodiversity & Conservation

33.3%  
Economic



Responsible & Economically  
viable



# FSC Finland members

## Economic

UPM SILVESTA



Metsäteollisuus



storaenso

Metsäteho

Alcea Ab

Oy Silvicultura  
Ab



Tilanhoitajat  
SKOGSSÄLLSKAPET FINLAND



UPM



Ålands Skogsvårdsförening

FISKARS  
GROUP



TORNATOR



CARELIAFOREST OY



KONEYRITTÄJÄT



Metsä

## Environmental



Luonto-Liitto

GREENPEACE



WWF

Suomen luonnonsuojeluliitto



BirdLife  
SUOMI-FINLAND

## Social



KULUTTAJALIITTO  
KONSUMENTFÖRBUNDET



SUOMEN LATU



LOIMU



PARTIO  
scout

Meto



Suoma Boazosámit rs  
Suomen Porosaamelaiset ry

Teollisuus  
liitto

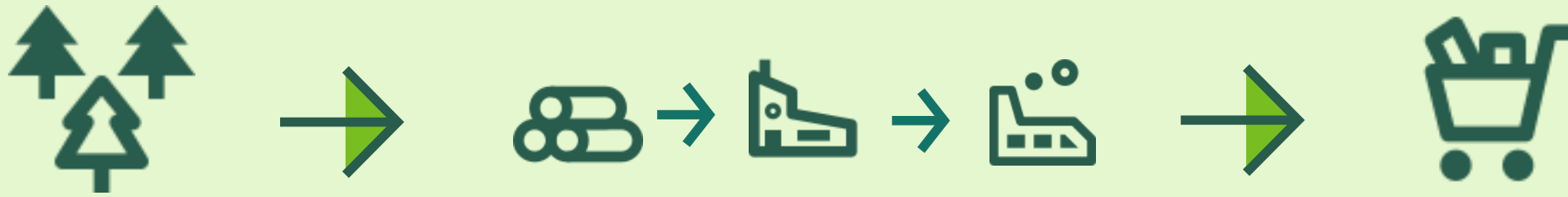


SÁMIRÁÐÐI

SAMERÁÐET SAAMELAISNEUVOSTO COI03 CAAMOB SAAMI COUNCIL



# FSC Chain of Custody



## Forests

### Forest Management certification

National standards (NFSS)

### Group certification

### Ecosystem Services Procedure

For operators in the forest

## Production

### Chain of Custody certification

Follows FSC-materials through production

For companies

## Consumer sales

### Promotional Licence

For promotional purposes, when using FSC-trademarks

For retailers



# FSC-labels

There are essentially three different FSC-labels:

- 100%
- MIX
- Recycled

Each of these tell something about the product composition:

- 100% contains only 100% FSC-certified inputs
- MIX is a mix of FSC-certified inputs and controlled inputs
- Recycled is, as the name suggests, recycled

From the licence code at the bottom of the label, you can find out who made the product, using FSC certification database:  
[search.fsc.org](http://search.fsc.org)





# Controlled wood

**When introducing controlled wood into FSC system, the certificate holder must ensure the wood is not:**

1. Illegally logged or otherwise produced
2. From an area where it violates social or land-use rights
3. From areas with high conservation values
4. Contributing to conversion of natural forests
5. Genetically modified (GMO)





# Audits and surveillance in FSC

- One audit cycle is five years
  - The certification must be renewed every five years with a full certification audit
  - Between the certification audits, annual surveillance-audits take place
    - All FSC Principles are audited against
      - but there can be key-focus areas within the Principles which change annually



# Audits and surveillance in FSC

- Single-certification is audited fully each year
- Certification groups are audited annually with sample-sites
  - Sampling process is based on:
    - The risk
    - Size of the forest management unit
    - Forest management activities



# Finnish National Forest Stewardship Standard



# Revision process & Participants



- **The Finnish FM-standard is based on international generic indicators**
- **The standard was developed and revised in three chamber consensus**
- **Technical experts were also involved**

## **The Finnish standard development group:**

**Metsäteollisuus ry, Metsä Group, Tornator Oyj, UPM-Kymmene Oyj, Stora Enso Oyj**

**LUVA-METO, Teollisuusliitto ry, Suomen Porosaamelaiset ry, Saamelaisneuvosto, Luonnon-, ympäristö- ja metsätieteilijöiden liitto Loimu ry**

**Luonto-Liitto ry, Birdlife Suomi ry, Suomen Luonnonsuojeluliitto ry**



# FSC's 10 principles

- 1.** Compliance with laws
- 2.** Workers' rights and employment conditions
- 3.** Indigenous peoples' rights
- 4.** Community relations
- 5.** Benefits from the forest
- 6.** Environmental values and impact
- 7.** Management planning
- 8.** Monitoring and assessment
- 9.** High conservation values
- 10.** Implementation of management activities





# Forest management unit size categories:

XS	< 20 ha
S	20-500 ha (Southern Finland), 20-1000 ha (Northern Finland)
M	500-10 000 ha (Southern Finland), 1000-10 000 ha (Northern Finland)
L	> 10 000 ha



# Management planning

## Forest management plan

- The Organization shall have a management plan consistent with its policies and objectives
  - Management plan is not required from smallholders under 20 hectares

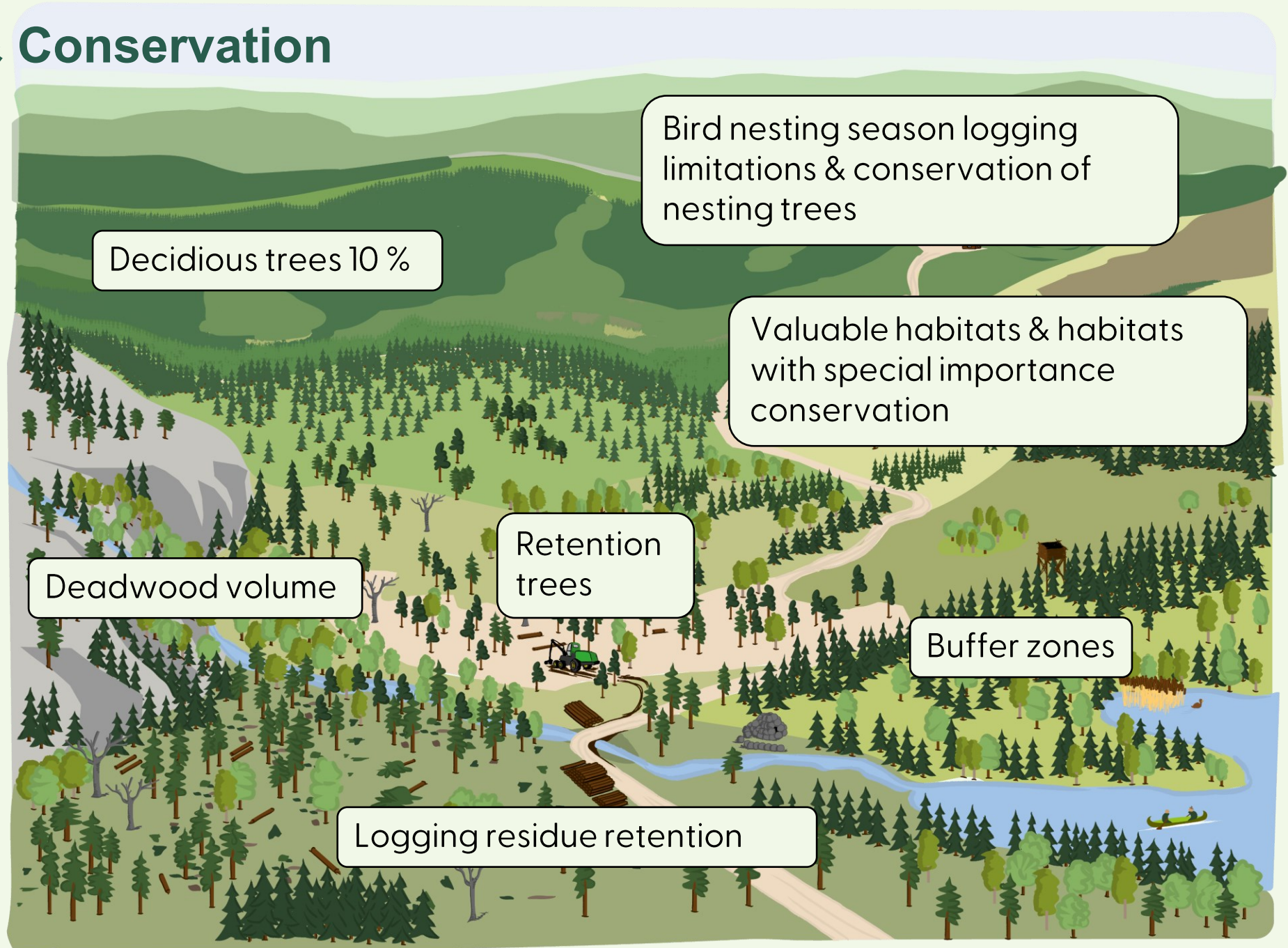
**The Organization calculates long-term (20 years) sustainable logging opportunities based on available forest resource data.**

## Monitoring

- The Organization monitors the environmental and social impacts of the management activities in such a fashion that the requirements of the Standard are met
- The Organization records in the management plan the management activities done or commissioned and monitors the achievement of the plan's objectives.
- M-L The monitoring results are taken into consideration in the implementation and revision of the management plan



# FSC & Conservation





# Principle 6

## Environmental values & Impact



# Retention trees

- In connection with management activities, The Organization retains living trees valuable for biological diversity
- The following valuable trees are conserved:
  - Protected species according to the law
  - Individual or small groups of very large trees
  - Arborecsent or columnar junipers
  - Aspens with minimun breast height diameter of 40 cm
  - Cavity trees
  - Nesting trees of raptors
  - Fire scarred pine trees



# Retention trees

- In regeneration felling, a minimum of 10 trees are retained with the minimum breast height diameter of:
  - Southern Finland: 20 cm
  - Northern Finland: 15 cm.
- In addition, at least 10 trees per hectare with a diameter at breast height of a minimum of 10 cm are left as retention trees in regeneration felling. This requirement is not applied if there is at least 5 retention trees per hectare with a diameter at breast height of:
  - Southern Finland at least 30 cm
  - Northern Finland at least 25 cm.
- In areas where continuous growth is being applied, the retention trees must be identified and retained.



# Retention trees

- Retention trees are chosen and maintained through forest management activity cycles
  - Retention trees must include the dominant tree species of the area
  - Previously retained trees are not to be felled at any point
- Maximum of 5 trees per ha can be turned into standing snags. These can be considered as part of the retention tree pool
  - All parts of the snagged tree shall be left on-site, if the snags are to be considered as part of the retention tree pool



# Deadwood

- All deadwood above the diameter of 10cm shall be conserved
- Forest management activities shall be planned in a way which causes minimal damage to the deadwood
  - Standing deadwood can be felled if it forms a security risk. The felled deadwood shall not be harvested



# Deciduous trees

- The sum of deciduous trees are to be kept at 10% of the total
- If the level of deciduous trees at the stand is less than 10%, all shall be retained
- Deciduous tree species with conservational values shall be retained



# Water protection

	Buffer zone	Buffer zone part with treatment retaining tree cover	Buffer zone total
Sea	15 m	approx. 10 m	approx. 25 m
Lakes	10 m	-	10 m
Ponds	10 m	-	10 m
Natural or natural-like rivers, brooks and springs	20 m	approx. 10 m	approx. 30 m
Rivers (other)	15 m	-	15 m
Heavily modified brooks	-	10 m	10 m



# Water protection

- The Organization does not perform first-time ditching or other water management measures on peatlands outside the area delimited by the existing ditch network, unless required by the Forest Act in forest regeneration. The ditched area is not extended
- In ditch cleaning or supplementary ditching the ditch bottom is not excavated deeper than the original
- Ditch cleaning and supplementary ditching is based on a ditching plan
- In ditch cleaning or supplementary ditching the waters are not directed directly into water bodies



# Water protection

- Ground water resources and quality are maintained. Prohibited activities on ground water areas are:
  - Ditch cleaning and supplementary ditching
  - Use of chemical pesticides
  - Harvesting stumps and burnings
- In bridge construction the ditches and water ways shall not form migration obstacles for aquatic species
- Conservation and preventive measures are done in unison with other management activities



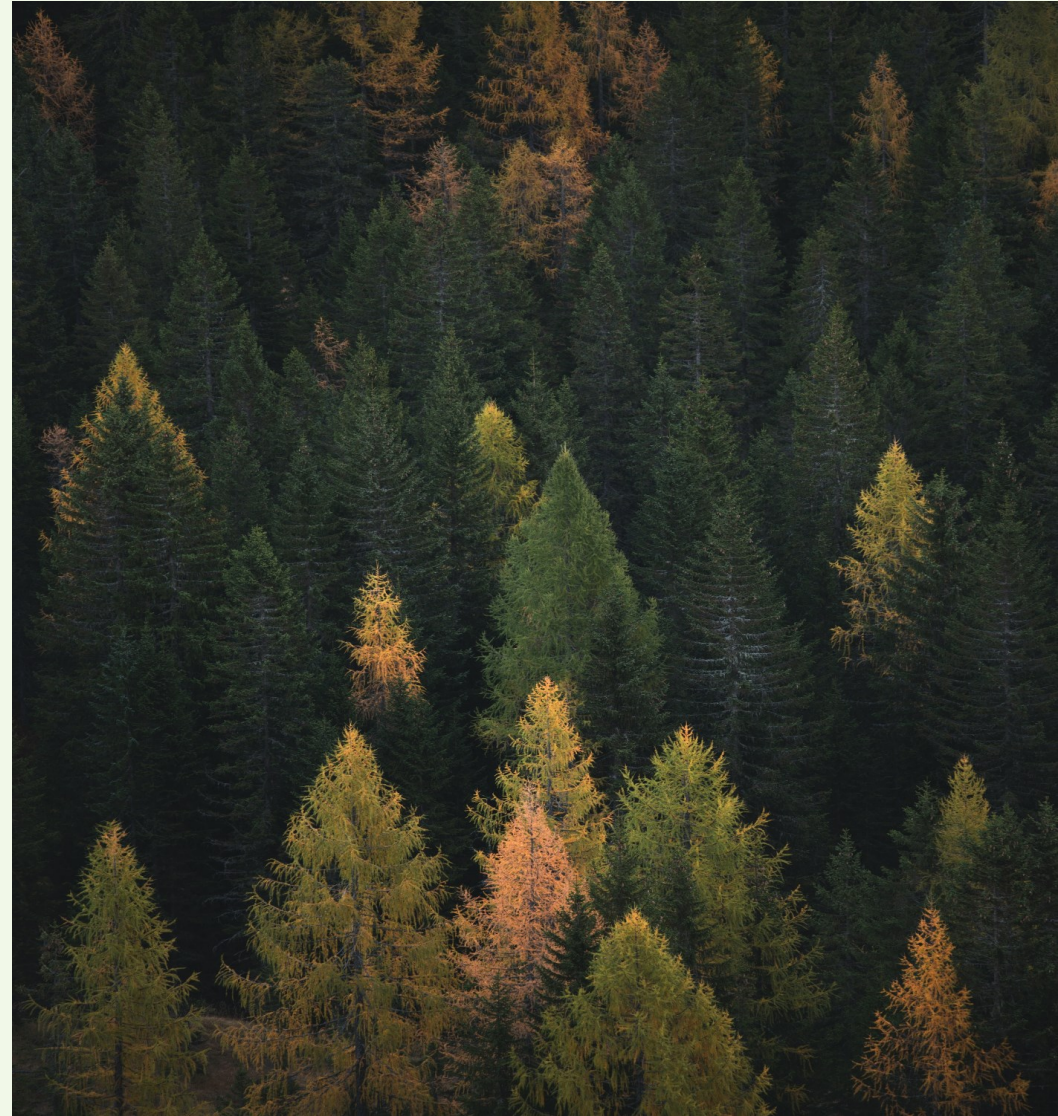
# Burnings

- L The Organization maintains the habitats of the forest fire-dependent species by performing prescribed burning on an area of at least 3% of the regeneration felling area situated in sites suitable for prescribed burning (mesic and poorer habitats) during a 5-year period. The aim is to produce at least 20 fire-damaged stems per hectare in the burnt area that meet the retention tree diameter requirement
- The counted burning area includes the burning of regeneration sites, groups of retention trees and sunlit heat slopes located in the certified area.
- If stands (> 0.1 ha) with all their trees remaining are burned, their area can be calculated in the areal target fivefold
- Prescribed burnings are not to be done on ground water areas without a consent from legal authorities



# Set-aside areas (sites excluded from forestry)

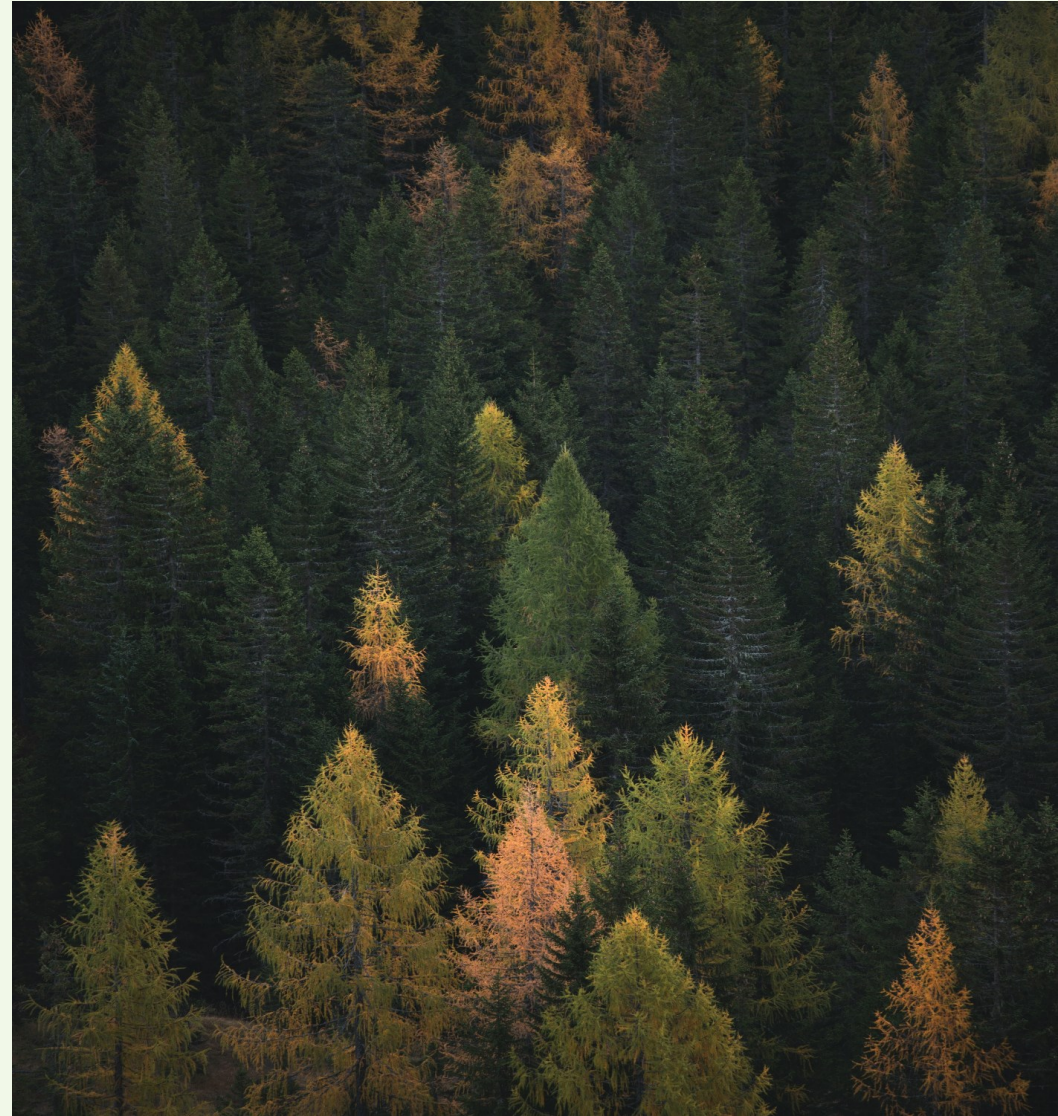
- Minimum of 5% of certified area shall be set-aside from all forest management activities
  - Area may consist of protected areas, buffer-zones and other areas which are excluded from forest management
- If other set-aside areas does not fulfil the minimum 5%, active forest management area shall be set-aside for conservation.
- Set-aside areas are permanent





# Set-aside areas

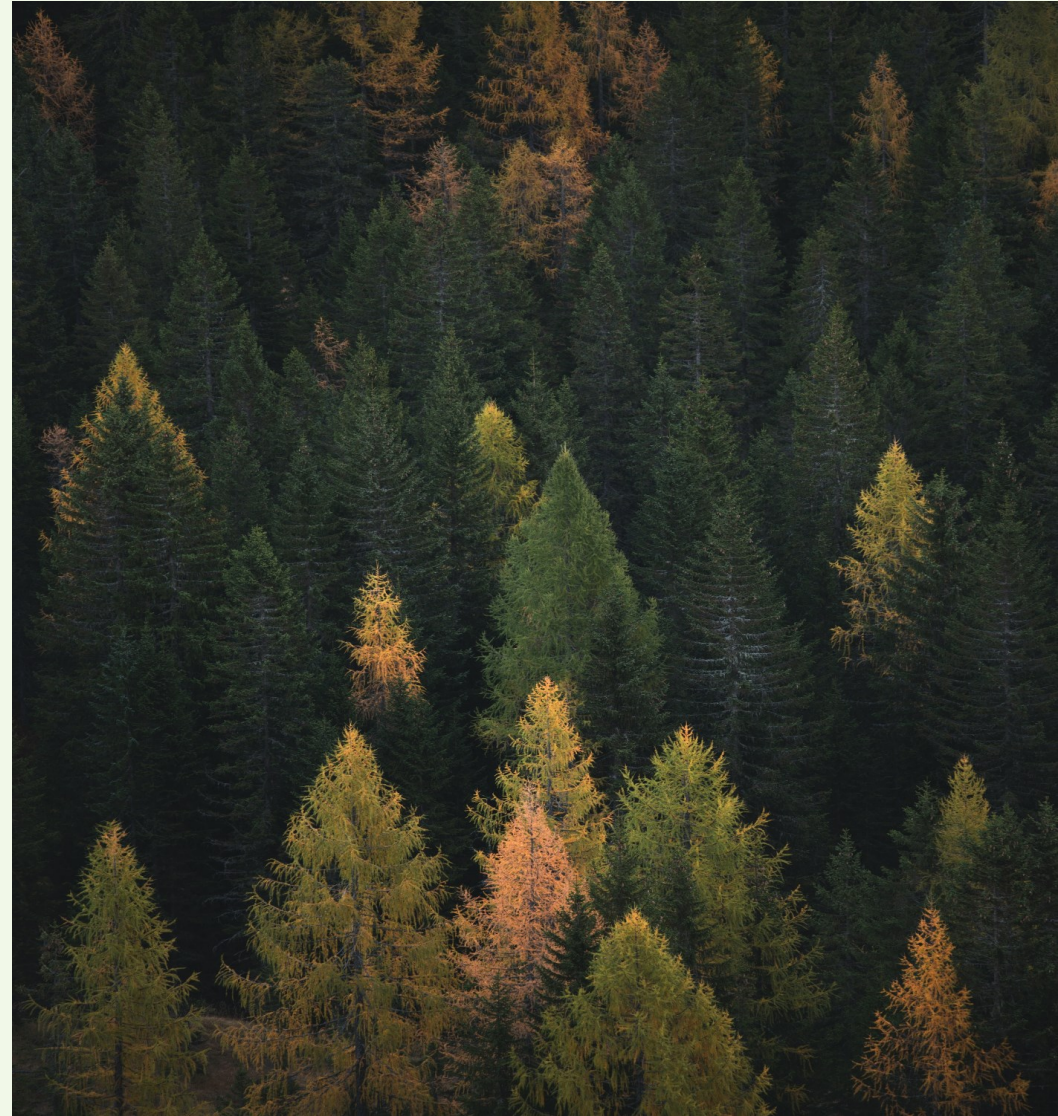
- The Organization delineates special sites that have particular significance for the biodiversity of the forest ecosystem or the diversification of the forest structure. Together with the sites excluded from forestry, their share covers a minimum 10%
- When joining the certification, The Organization presents a publicly available plan to identify the sites forming the 10% preservation areas
- In Group certification, the planning can be done on the group-level





# Set-aside areas

- Legally protected areas
- Other set-aside areas
  - For example herb-rich sites with natural or natural-like water relations
- Special sites
  - For example: sites where more than 10 m<sup>3</sup>/ha of deadwood is actively produced in connection with intermediate logging. Later, in the regeneration felling, the site is left with twice the number of retention trees compared to a normal regeneration site





# Rare, threatened or endangered species (RTE)

- The Organization shall protect rare species and threatened species and their habitats
- The Organization records in the forest management plan or otherwise documents the data received from researchers, scientific societies and associations, environmental NGOs and studies commissioned or carried out by The Organization on the occurrence of nationally and regionally threatened or rare species
- The Organization identifies the potential impacts of management activities on the living conditions of on record occurrences of nationally and regionally threatened (categories CR, EN, VU, RT) forest species, and ensures the preservation of their living conditions in forest management.





# Bird nesting

When planning forest management activities, especially loggings, the following restrictions shall be taken into consideration



## Southern Finland Northern Finland

No logging permitted

No logging permitted

In fertile deciduous-dominant forests, spruce mires and buffer zones of water bodies	1.5.-30.6.	15.5.-15.7.
In the internationally important bird areas (IBA) in Finland, logging is not committed from 15 April to 31 July	15.4.-31.7.	15.4.-31.7.
In the vicinity (less than 50 m) of bird wetlands (shallow lakes, ponds, sea bays, flooded swamps) in internationally, nationally and regionally important bird areas in Finland (IBA, FINIBA and MAALI areas)	15.4.-31.7.	15.4.-31.7.
In the vicinity (1000 m) of the inhabited nests of the golden eagle	15.2.-31.7.	15.2.-31.7.
In the vicinity (500 m) of the inhabited nests of the white-tailed eagle	15.2.-31.7.	15.2.-31.7.
In the vicinity (500 m) of the inhabited nests of the osprey at sites where a visual connection to the nest is established	15.4.-31.7.	15.4.-31.7.
In the vicinity (300 m) of the nests on record of the northern goshawk and the common buzzard	15.3.-31.7.	15.3.-31.7.
In the vicinity (300 m) of on record nests of the European honey buzzard	1.5.-31.8.	1.5.-31.8.
In capercaillie breeding-grounds on record	15.3.-20.5.	1.4.-20.5.

In fertile deciduous-dominant forests, spruce mires and buffer zones of water bodies loggings are avoided in Southern Finland from 15th to 30th of April and from 1th to 15th of July. In Northern Finland from 1th to 14th of May and from 16th to 31th of June.



# PRINCIPLE 9

## High Conservation Values



# PRINCIPLE 9: High conservation values

## HCV Categories

**HCV 1 – Species diversity**

**HCV 2 – Landscape level ecosystems and mosaics**

**HCV 3 – Ecosystems & habitats**

**HCV 4 – Critical ecosystem services**

**HCV 5 – Community needs**

**HCV 6 – Cultural values**



# PRINCIPLE 9: High conservation values

## HCV 1

- Species diversity: concentrations of biological diversity including endemic species, and rare, threatened or endangered species, that are significant at global, regional or national levels

## HCV 2

- Landscape level ecosystems and mosaics: Intact Forest Landscapes and large landscape-level ecosystems and ecosystem mosaics that are significant at global, regional or national levels, and that contain viable populations of the great majority of the naturally occurring species in natural patterns of distribution and abundance.



# PERIAATE 9: Korkeat suojeluarvot

## HCV 3

- Ecosystems and habitats: Rare, threatened, or endangered ecosystems, habitats or refugia

## HCV 4

- Critical ecosystem services. Basic ecosystem services in critical situations, including protection of water catchments and control of erosion of vulnerable soils and slopes



# PRINCIPLE 9: High conservation values

## HCV 5

- Community needs. Sites and resources fundamental for satisfying the basic necessities of local communities or Indigenous Peoples (for livelihoods, health, nutrition, water, etc.), identified through engagement with these communities or Indigenous Peoples

## HCV 6

- Cultural values. Sites, resources, habitats and landscapes of global or national cultural, archaeological or historical significance, and/or of critical cultural, ecological, economic or religious/sacred importance for the traditional cultures of local communities or Indigenous Peoples, identified through engagement with these local communities or Indigenous Peoples



## PRINCIPLE 9: High conservation values

- The Organisation shall be aware of the locations and the state of HCV-areas
  - S-L includes HCV-areas into the management plan
  - XS assesses and documents HCV-areas
- The Organization requests relevant information in a culturally appropriate manner from stakeholders on High Conservation Values when necessary for defining these values in the Management Unit.
- The Organization shall develop effective strategies that maintain and/or enhance the identified High Conservation Values, through engagement with affected stakeholders, interested stakeholders and experts.



## PERIAATE 9: Korkeat suojeluarvot

- The Organization has guidelines for operating in HCV areas. The guidelines identify threats to High Conservation Values, and are developed in collaboration with stakeholders and experts
- If forest management activities are harming the HCV-values:
  - All activities are ceased immediately
  - Measures to protect and conserve the areas are taken
  - Measures to develop the forest management activities are taken



# PRINCIPLE 10

## Implementation of Management Activities



# Principle 10: Implementation of Management Activities

## Forest regeneration

- Local tree species suitable for the site are used for forest regeneration
- Alien tree species may only be used for a clearly and convincingly justified reason
- The Organization documents the origin of all alien seeds and seedlings used for regeneration in accordance with the information received from the producer
- The use of genetically modified organisms (GMO's) are prohibited



# Principle 10: Implementation of Management Activities

## Fertilizers

- Fertilizers are not used or the use is minimized
- The Organization shall demonstrate that use is equally or more ecologically and economically beneficial than use of silvicultural systems that do not require fertilizers, and prevent, mitigate, and/or repair damage to environmental values, including soils
- Health fertilization is permitted on sites where the stand has been shown to suffer from nutrient imbalance.
  - Ash fertilization in peatland forests is allowed
  - Growth fertilization is permitted on mesic and sub-xeric heaths on wooded mineral soils

## Growth fertilizations

- **L** During one year, a maximum 3% of the forest area managed by The Organization is fertilized for growth.
- **M-L** Maximum of 30% in the long term (20 year cycle)
- **XS-S** Maximum of 50% in the long term (20 year cycle)



# Principle 10: Implementation of Management Activities

## Fertilization

- Ash fertilization in peatland forests is not included in the area of growth fertilization.
- The effects of fertilization on water bodies are minimized by leaving non-fertilized buffer zones with at least the following width between the fertilized area and the water bodies:
  - 1) water bodies (sea, lake, river or pond): aerial top dressing 50m; land spreading 30m
  - 2) brooks and springs on record: 20 m
  - 3) ditches: 5 m



# Principle 10: Implementation of Management Activities

## Pesticides

- The use of chemical pesticides is avoided or minimized, and other control methods are used primarily
- In the control of root rot only biologically decomposing pesticides are to be used
- FSC Pesticide Policy FSC-POL-30-001
- In the use of pesticides, the national law and documentation is taken into consideration



# Principle 10: Implementation of Management Activities

## Pesticides

- The use of chemical pesticides does not pose a risk to the environment or health
- Damage is mitigated or repaired where it occurs.

## Biological control agents

- The use of biological control agents does not cause damage to the environment or to non-target species. Damage is mitigated or repaired where it occurs
- The root rot is controlled as required and permitted by Finnish law



# Principle 10: Implementation of Management Activities

## Harvesting

- Harvesting and extraction practices for timber and non-timber forest products are implemented in a manner that conserves environmental values
  - In logging, damage to remaining trees, dead trees, soil and seedlings is avoided

## Energy wood

- There is no energy wood harvesting on heathland sites poorer than sub-xeric heaths and corresponding heathy peatlands
- The indicator does not prevent harvesting in accordance with the Forest Damages Prevention Act in the event of significant fungal and insect damage, nor from large areas of destruction where a large proportion of the trees have died



# Principle 10: Implementation of Management Activities

- Energy wood
  - In woody biomass harvesting, at least 30% of the residues is retained evenly distributed over the harvesting site. All standing and fallen dead trees more than 10 cm in diameter are left unharvested and breaking them is avoided.

A minimum of 25 thicker than 15 cm stumps per hectare are left unharvested, evenly distributed over the harvesting site
  - In sites contaminated with Heterobasidion root rot, it is possible to remove all coniferous tree stumps



# Principle 10: Implementation of Management Activities

## Natural hazards & infrastructure

- Potential negative impacts of natural hazards on infrastructure, forest resources and communities in the Management Unit are assessed
- Management activities are modified and/or measures are developed and implemented that reduce the identified risks

- **Dispose of waste materials**

- The Organization legally disposes chemicals, containers, liquid and solid waste used in forestry, procured for forestry or generated in the course of forestry
- The Organization ensures that hazardous waste (e.g. fuels, oils and their tanks) are kept separate from other waste and delivered legally for disposal
- The storage of fuels in groundwater areas is only permitted on a temporary basis in tanks that have the necessary type approval and are lockable to prevent fuel theft and vandalism, and are equipped with a drainage basin, double jacket or double bottom. Temporary storage of liquid lubricants is permitted under protection from vandalism.

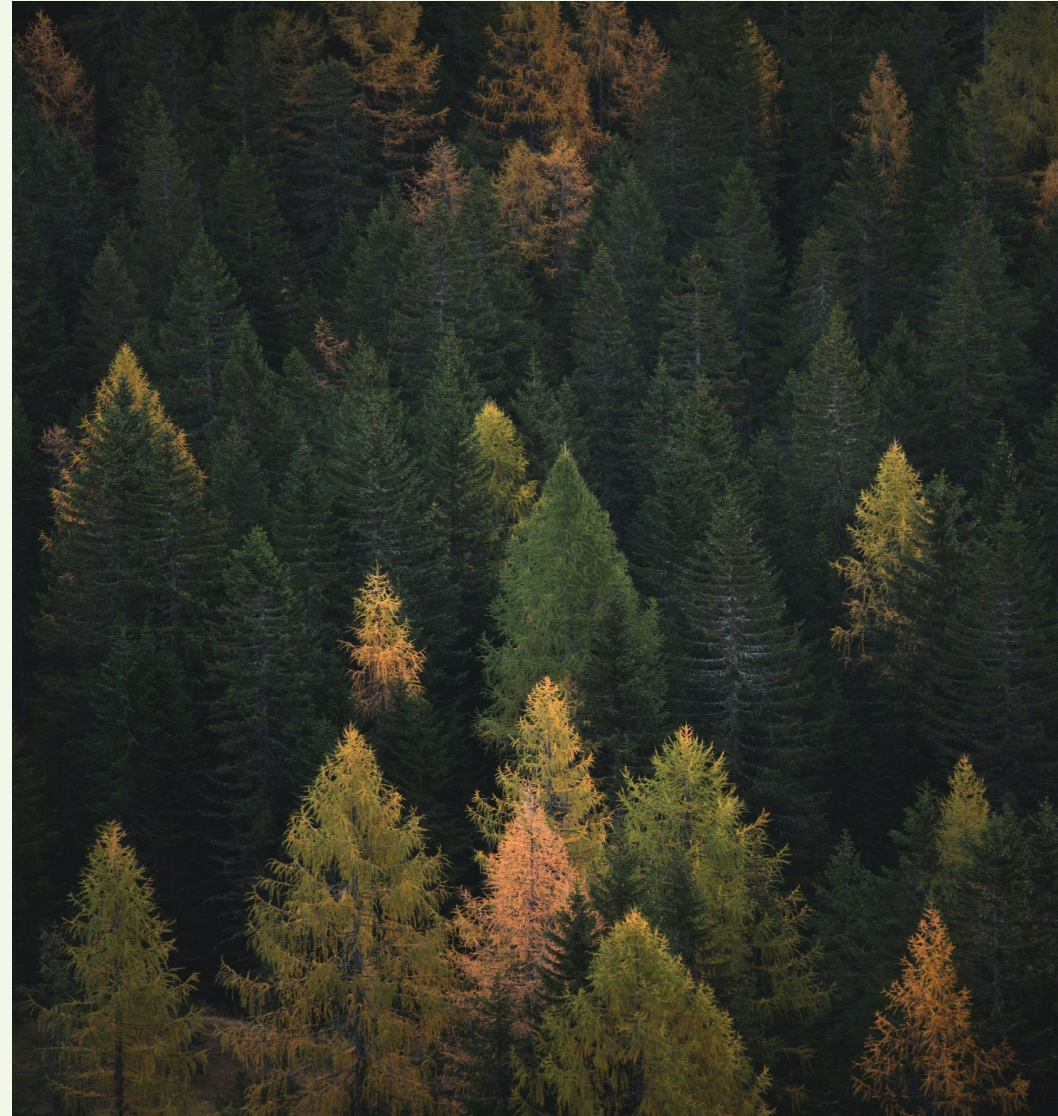


# Information about FSC

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## Useful links:

- [FSC.org](https://www.fsc.org)
- [Fi.fsc.org](https://fi.fsc.org)
- [National Forest Stewardship Standard of Finland in Finnish, Swedish and English](#)





# Thank you!

## You can contact FSC Finland Experts

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