

The Swedish FSC Working Group
Secretariat

Swedish FSC Standard for Forest Certification

24 September 1997

English version

List of contents

- 1 FOREWORD3**
- 2 INTRODUCTION.....4**
- 3 BASIC REQUIREMENTS5**
 - 3.1 COMPLIANCE WITH LAWS AND FSC PRINCIPLES5
 - 3.2 TENURE AND USE RIGHTS AND RESPONSIBILITIES6
- 4 STANDARDS FOR THE SOCIAL SPHERE7**
 - 4.1 WORKER'S RIGHTS7
 - 4.2 INDIGENOUS PEOPLE'S RIGHTS8
 - 4.3 LOCAL COMMUNITIES9
- 5 MONTANE FOREST.....10**
- 6 ENVIRONMENT AND BIODIVERSITY STANDARDS12**
 - 6.1 THE PRESERVATION AND RESTORATION OF HABITATS12
 - 6.2 HABITATS WITH SPECIFIC MANAGEMENT REQUIREMENTS13
 - 6.3 WATER MANAGEMENT14
 - 6.4 SOIL MANAGEMENT14
 - 6.5 REGENERATION, STAND MANAGEMENT AND FELLING15
 - 6.6 FORESTRY IN THE AGRICULTURAL LANDSCAPE AND ON PREVIOUSLY OPEN CULTIVATED LAND17
 - 6.7 OVERALL PLANNING18
 - 6.8 ADAPTION TO NATURAL ECOCYCLES19
- 7 STANDARDS FOR THE AREAS OF PRODUCTION AND ECONOMICS20**
 - 7.1 MULTIPLE USE20
 - 7.2 PRODUCTION.....20

FOREWORD

The Forest Stewardship Council (FSC) is an independent international organisation with its headquarters in Mexico. Its aim is to encourage the environmentally responsible, socially beneficial and economically viable management of the world's forests.

The FSC promotes a voluntary accreditation programme for organisations and enterprises that certificate forestry. The FSC's Principles and Criteria contain overall forestry management guidelines that may be generally applied all over the world. The system of certification, however, is to be adapted to the local conditions that apply in different countries, and one of the FSC's most important tasks is therefore to support the work of developing the Swedish FSC Standard.

The Swedish FSC Working Group was formed on February 15, 1996 for the purpose of producing a proposal for the Swedish FSC Standard to be submitted to the FSC for approval. The Working Group, which is made up of representatives of social, environmental and economic interests, was reformed on May 7, 1997.

2

INTRODUCTION

The photosynthesis of green plants using solar energy as an energy source is the basis for development towards a globally sustainable utilisation of resources. Responsibly managed forests are of great importance in providing the growing global population with multiple-use renewable raw materials, and energy.

Forestry is an important cornerstone of Sweden's prosperity, and of a community that will be sustainable in the future. At the national level, the FSC process aims to promote the management and use of forests in ways that are ecologically, socially and economically sustainable.

Sweden's forest landscape has been exploited for centuries, and the percentage of natural forest that is barely affected is very small. To achieve its ecological and social objectives, society must assume a significant economic responsibility in addition to the voluntary commitments of certified landowners.

Certification in accordance with the FSC regulations signifies that the enterprise/landowner carries on environmentally responsible, economically viable, socially beneficial forestry management that complies with all applicable laws and regulations, the FSC Principles and Criteria and the Swedish FSC Standard. This certification also allows forest products from certified land holdings to be marked with the FSC symbol in forms decided by the FSC.

The objective is to manage and use forest and forest land in forms that:

- maintain, and where necessary regenerate the ecosystem's production capacity, fundamental ecological processes and biodiversity,
- secure people's livelihoods, promote a safe working environment, respect the cultures of, respectively, the local population and the Sami people and their time-honoured rights, and attach due importance to values such as wildlife, fungi, berries, fish and recreation, and
- promote long-term valuable wood production and good economic profitability.

Research and development in the forestry sector should be intensified with a view to maintaining/ increasing employment in local communities.

Certification in accordance with the Swedish FSC Standard means that the landowner accepts that this Standard, on the basis of new knowledge and experience, be changed to better meet the objective by means of recurring reviews carried out by a national FSC representative body that is consensus-oriented in its work, and made up of representatives of the parties involved.

BASIC REQUIREMENTS

Under the basic requirements set by the FSC's national representative body the landowner undertakes to:

- fulfil the undertakings that are set out in the Swedish FSC Standard unless current legislation in individual cases directs otherwise
- accept that this is verified and evaluated by accredited certification bodies
- apply the revised Standard not later than one year after the revision has been completed
- not later than five years after certification, produce planning documents for the holdings in accordance with the FSC Standard
- implement and document assessments of biodiversity values in accordance with the guidelines developed by the FSC's national representative body in the absence of planning documents adapted to the Standard.

3.1 Compliance with laws and FSC Principles

3.1.1. The landowner shall comply with all relevant national legislation, i.e., the laws and agreements that regulate forestry, worker's rights, and the consideration given in forestry to other interests and their directives and regulations, and to directions issued by authorities.

3.1.2. The landowner shall demonstrate a long-term commitment to adhere to the FSC Principles and Criteria and the Swedish FSC Standard.

3.1.3. The provisions of all applicable international agreements/directives to which Sweden is a signatory or which Sweden has in some other way undertaken to observe or implement shall be respected. Such international agreements include CITES, ILO Conventions, ITTA and the Convention on Biological Diversity.

3.1.4.. In the context of certification, any conflicts and problems of interpretation between Swedish legislation, agreements to which Sweden is a signatory and Swedish FSC Standards shall be assessed on a case by case basis by the certifiers, the landowner and the involved authority or authorities and parties.

3.2

Tenure and Use Rights and Responsibilities

Long-term tenure and use rights to the land and forest resources shall be demonstrated in the form of ownership or a legally-binding contract. Any confusion as to whether or not such contracts allow certification shall be resolved. If there are a number of owners of a single holding, all the owners shall be in agreement on certification and undertake, either singly or through their representative, to comply with the demands thus made. Unresolved disputes concerning claims on the right to carry on forestry will normally disqualify an operation from being certified.

4

STANDARDS FOR THE SOCIAL SPHERE

4.1 *Worker's rights*

Forest management operations shall maintain and enhance the economic, social and cultural well-being of forest workers, and shall observe applicable ILO conventions and recommendations.

4.1.1. The enterprise should comply with all applicable laws and is bound by collective agreements for its employees, and apply good practices in the labour market.

Workers shall be offered long-term and secure conditions of employment. Unless otherwise agreed, workers shall be employed on a permanent basis. Priority shall be given to this form of employment, with consideration given to the duration of the work involved.

4.1.2. The enterprise shall employ only employees who have the required competence in the area of work in question, both in production and the environment.

A high degree of competence in employees is an important pre-requisite for meeting with the working environment and external environment goals, but also for profitable production.

In co-operation with the employees, the enterprise shall produce individual competence development plans for subjects related to forestry. Knowledge corresponding to the level of the upper-secondary natural resources management programme shall serve as a guideline. New staff are appropriately recruited from people who have completed the upper-secondary course on natural resources management, post upper-secondary forestry management training, or in some other way acquired corresponding knowledge/confidence.

4.1.3. The enterprise is responsible for ensuring that the employees have a good working environment, and for the prevention of physical, mental and social ill-health.

The current regulations for internal control of the working environment shall be followed.

In choosing work methods and work organisation, and in the procurement of equipment, the best overall solution shall be selected, with due weight being given to working environmental, outdoor environmental and economic considerations.

The outdoor environment shall not be given priority at the expense of the working environment.

Employees shall have access to an occupational health service which offers a broad range of competence. Where available, an occupational health service with particular knowledge of this sector and a high degree of efficiency is to be chosen. The enterprise is to offer an appropriately-organised adaptation and rehabilitation service.

In large enterprises, preparations are to be made for the introduction at a later date of human resources-social/economic annual reports. Enterprises that have developed a system of human resources accounting are to present these reports annually.

4.1.4. If assignments are allocated to subcontractors or others, the relevant parts of the criteria listed above shall also apply.

4.1.5. When co-operation or job rotation is arranged between individual landowners, this shall not be regarded from the viewpoint of FSC certification as a condition of employment, and the social criteria for employees shall therefore not apply.

4.2 *Indigenous People's Rights*

4.2.1. Areas of Reindeer Husbandry

The forest owner accepts and gives consideration to the Sami people's reindeer husbandry carried on on his land holdings if it is within the area that the County Agricultural Board, the National Board of Physical Planning and Building report no. 44, Section 5, 1978, has designated as a reindeer husbandry area (year-round and winter grazing land).

4.2.2. Consultation procedure

If the land holdings are in the area stated above, consideration shall be given to reindeer husbandry as set out in §31, the Forestry Act. The regulations and general guidelines on consultation embodied in §§20 and 31 shall apply, unless otherwise agreed, for land other than areas used year-round for reindeer husbandry.

4.2.3 Forest Bearing Arboreal Lichens

In reindeer husbandry areas each forest manager must consider in his planning access to older forest bearing arboreal lichens, leaving edge zones bordering on bogs, streams and water courses and, when felling trees with arboreal lichens, save stands in the clear felled area as areas from which lichens may disperse.

4.2.4 Places of Special Importance

In the reindeer husbandry area, the forest manager shall take into consideration and respect, in co-operation with the Laplanders, places identified as being of special cultural, ecological, economic or religious importance to the Sami people. These are old dwelling places and other Sami cultural relics, migration paths, natural gathering places, overnight resting places (grazing), difficult passages, particularly important arboreal lichen areas, work paddocks and calving places.

4.3 *Local Communities*

Forest management shall maintain or enhance the long-term social and economic well-being of forest workers and local communities. Forest owner's should carry on responsible long-term forestry management on their property, promoting a high degree of utilization of forest production potential with due consideration given to the natural environment and other interests.

Appropriate silviculture and forestry management methods, and the appropriate sale or refinement of forest products will preserve and develop employment, competitiveness and profitability.

Particular attention shall be paid to the recreational values of forest environments for the local population.

5

Montane forest

For primarily climatic and topographical reasons, montane coniferous forest has a special character that is unlike our ordinary domestic forests. Montane forest on which forestry has had very little impact often has a high biodiversity value, and is very important for reindeer husbandry as well as having its own value in terms of the size of its total area. The continuity of these fragile forests is interrupted in places by areas of earlier forest management. The extent of this impact lessens towards the upper limit for productive forest.

The potential for forest management in montane forest regions is, however, of great importance in terms of securing the employment and livelihood of the local population, and thus the economies of local communities. Certified forestry management in the mountain regions ensures that the important biodiversity values are not set at risk, that consideration is given to the needs of reindeer husbandry and that the local population may feel secure in their continued use of the forest's resources.

A landowner who carries out forestry management above the nature conservation border (the Swedish Society for Nature Conservation, 1988 ISBN 91-558-5201-7) will, on application, be awarded FSC certification provided the landowner undertakes, in addition to the applicable parts of the FSC general criteria, to follow the guidelines 5.1-5.3 set out below.

Landowners who declare in writing that they do not intend to carry out forestry activities above the nature conservation border, or possibly a revised such border at a later date, are considered to fulfil the certification requirement. The above guidelines apply on the basis of the 1988 nature conservation border until such time as a motive for revising this border is demonstrated in documentation. Such border revision shall then take the form of a local process of consensus, and the guidelines 5.1-5.3 shall then apply on the basis of the revised border.

5.1. Areas of virgin-type forest according to the FSC's main criteria * are exempt from forestry measures with the exception of measures intended to promote natural biodiversity. All other types of key habitat are included here.

**(For montane forested regions, the specific definition of virgin type forest is as follows): No, or occasional felling stumps, a continuity of old windthrow, an abundance of wood fungi such as Fomitopsis rosea, Amylocystis lapponica, Phlebi centrifuga, an abundance of old-growth windthrow, often 15-20 per hectare. Major differences in age and stratification. Plenty of natural stumps and dead standing trees.*

5.2. Other forests with biodiversity values, such as strips or enclaves adjacent to areas of old-growth type forests and that form a natural, cohesive unit with these areas are in Category 5.1 and are exempt from measures other than those aimed at promoting natural biodiversity. *(Definition: clear evidence of dimension felling. A moderate amount of windthrow and sparse or isolated occurrence of the fungi listed above. Common differences in age and stratification. Sparse dead standing trees).*

The other areas in Category 5.2 may be subjected to selective felling and special nature consideration when so required to contribute to the local forestry industry, and thus to employment and the economy of the local communities.

5.3. Areas that are neither in Category 5.1 nor 5.2 may continue to be used for normal forestry. This category consists primarily of recently-managed areas or other severely affected areas with broken continuity.

Due to the special management required in areas in Category 5.2, the requirements that 5% of the area is exempted from management (6.1.2) and that 5% of forests be dominated by broad-leaved stands (6.7.3) do not need to be met for montane forest according to Chapter 5.

6

ENVIRONMENT AND BIODIVERSITY STANDARDS

6.1 *The Preservation and Restoration of Habitats*

The areas described below shall be preserved and restored in order to give especially demanding species the opportunity to survive, and to serve as sources of dispersal and reference areas in the managed forest landscape.

6.1.1. The areas listed below are exempt from measures other than the management required to preserve and support the natural biological diversity of the habitat. Measures to promote outdoor activities may be taken on condition that the biodiversity values are not harmed.

a) Pronounced uneven-aged, multi-layered natural forests with a great abundance of old trees and large dead wood in different stages of degradation.

In interpreting this definition in a regional perspective, consideration should be given to the conditions that obtain for particular species and types of woodland. For the interpretation applied to montane forest regions, see Chapter 5.

b) Key habitats according to the definitions and methodology of the National Board of Forestry.

c) Waste and other non-productive forest land (production less than 1 forest cubic metre per hectare and year).

6.1.2. At least 5% of the productive forest area is exempted from measures other than the management required to preserve and support the natural biological diversity of the habitat. Selection and demarcation areas shall be prioritized according to their importance for biodiversity and representativity in the landscape. (Exemptions may be made for landholdings of less than 20 hectares of productive forest land which have no areas that have, or may in the near future develop, high biodiversity values.) Measures to promote outdoor activities may be taken on condition that the biodiversity values are not harmed.

The following areas may be included here:

- created/restored forest wetland
- areas according to section 6.1.1. a & b
- shares in collectively-owned nature conservation forest areas
- other land with stands of trees that do not meet the conditions for environmental support, but where there is sufficient grazing or haymaking to provide good conditions in which flora/fauna that are dependent on cultivation may thrive
- areas for which nature conservation agreements have been signed with the County Forestry Board

- where applicable, the part of a private landholding designated as a nature reserve or habitat protection area after deductions corresponding to the proportion for which compensation have been made.
- transition zones adjoining areas allocated for conservation and restoration under the provisions of section 6.1.2.

The following may not be included:

- care-demanding areas and transition zones normally demarcated when felling is carried out
- areas that have been sold for nature conservation purposes (nature reserves etc.). (However, a proportion corresponding to areas that have clearly been voluntarily allocated with no, or purely symbolic, compensation covered by such nature reserve agreements may be included.)

6.1.3. When forestry management on landholdings where areas as per section 6.1.1. a and b above (for which the landowner has not received financial compensation) significantly exceeds 5% of the productive forest land area, the appropriate quantitative parts of the Standard could be adjusted in agreements with the certifier.

6.2 *Habitats with Specific Management Requirements*

Forestry is carried out with the specific aim of promoting the biodiversity values of the habitat.

6.2.1. The habitats below are managed with a view to the long-term promotion of the conditions required for natural biological diversity. Measures are avoided during the spring and early summer - the main reproductive periods of birds and mammals.

a) Unmanaged meadows and enclosed pasture. Biodiversity values connected to previously solitary grown old trees and the species of tree and bush of importance in terms of the cultural landscape are to be favoured.

b) Moist sedimentary land bordering water courses and areas of open water, sediment ravines and other naturally deciduous-dominated moist/wet land. The deciduous dominance should be maintained/supported.

6.3

Water Management

Forestry shall give particular consideration to the importance of the water for biodiversity.

6.3.1. New ditches shall not be dug on previously unditched forest land. Ditches in less productive peat land that is classified as lichen, lichen-rich, poor branch wood, *Calluna vulgaris* and star fern habitats shall be left unmanaged. (Classification of vegetation types according to the National Board of Forestry.)

6.3.2. Measures relating to water courses and open water areas are normally planned on land while not snow-covered, and carried out in a way that avoids damage. Roads across water courses shall be constructed and maintained to preserve in the long term the natural level and function of the river beds. As a rule, no new road ditches should flow directly into water courses.

6.3.3. Forestry measures close to water courses and open water areas shall promote continuously forested, if possible layered, transition zones in accordance with topographical, hydrological and ecological conditions.

6.4 *Soil Management*

Forestry management is carried out in ways that aim to maintain the natural processes of forest soil and its long-term production capacity, and to avoid harm to other ecosystems and biodiversity.

6.4.1. Landowners that add or restore nitrogen and mineral substances or extract biofuels shall demonstrate, not later than the end of 2002, with the support of comprehensive documentation, that no measures have been carried out that conflict with the above.

6.4.2. Until and including the year 2002, these measures are to be carried out in accordance with the principles and general recommendations issued by the National Board of Forestry and with consideration given to other relevant research findings. During this period, any nitrogen fertilization is to be highly restrictive, and the major part of the landholding is not to be fertilised.

6.4.3. Soil scarification is to be limited to sites where this measure is required to achieve good regeneration. This work is to be site-adapted and is to be carried out with care. Intermittent methods are to be used on moist land. Continuous soil scarification is to be carried out in a way that minimises erosion and leaching, and to ensure that the mineral soil is not affected more than is necessary for good regeneration.

6.4.4. Owners of larger landholdings are to take all reasonable measures to burn an area corresponding to at least 5% of the regeneration area of dry and mesic areas during a 5 year period. Preferably, earlier fire-affected land should be chosen. Naturally-burned forest and forest burned for conservation purposes may be included here. Felling and burning are to be planned so that fire-dependent species are favoured. In areas with high nitrogen levels, the leaching of nitrogen into water courses shall be minimised. Where the appropriate conditions exist, natural regeneration shall be used.

Exceptions can be made in regions where natural fires have been of minor importance. This includes montane forest, and the provinces of west Västergötland, west Småland, Halland, Skåne and south Blekinge. Exceptions can also be made for forest close to populated areas and on the islands of Åland and Gotland.

6.5 *Regeneration, Stand Management and Felling*

In managed forest, biodiversity and a variation in the forest landscape is promoted by recreating/ mimicking naturally-occurring phenomena, structures and disturbance patterns.

6.5.1. Natural regeneration, for example under shelterwood and seed trees, is used where this method will result in good regeneration of species of tree suitable to the site and to management goals.

6.5.2. Stands on moist land are regenerated when possible with regard to regeneration and wind conditions, by means of selective felling, using shelterwood systems or through small-scale group selection systems.

6.5.3. Forests dominated by selected valuable broadleaved trees are usually regenerated through selective felling, using shelterwood systems or through group selection systems.

6.5.4. The following are defined on land, whenever possible while not snow-covered, as care-demanding patches:

- small habitats with special biodiversity value
 - when needed, buffer zones adjacent to habitat with special biodiversity values.
- Adjacent to wetlands and waste or non-productive land, continuously forested, if possibly layered, topographic, hydrologic and ecologically-conditioned transition zones are to be favoured.

Care-demanding patches, edge zones or groups of trees and the kind of trees referred to in 6.5.6 below, are left in a way that ensures that larger treeless areas are avoided.

Owners of larger landholdings and umbrella organisations are to follow up and document the extent of the care measures taken.

6.5.5. Trees with high biodiversity value should be protected in all measures, and not felled. Cleaning and thinning are carried out in a way that protects to a reasonable extent potentially high biodiversity value trees.

Trees with biodiversity value include:

- trees that differ from the rest of the stand, particularly large/old trees
- large trees with notably wide girth and large-branches/ flat crowns
- large, previously free-growing spruce on pasture land
- large aspens and alders where these are not abundant, in conifer-dominated stands
- arborescent goat-willow, mountain ash, white beam maple, linden, bird-cherry, wild cherry and large hazel, where there is not a great abundance of these trees in conifer-dominated stands
- selected valuable broadleaved trees in the boreal forest landscape
- large junipers
- trees with obvious fire scars
- hollow trees and trees with raptors' nests
- trees of cultural significance.

6.5.6. When felling for regeneration, enough wind-resistant trees of various species with good chances of developing into large, old trees during the next rotation period should be left, with the aim of incorporating at least 10 such trees per hectare into the next generation of forest (including relevant trees with high biodiversity values as per Section 6.5.5 above). This figure is the average for productive land in the management area, including transition zones and care-demanding areas. The number of trees may be reduced when the trees with high biodiversity value are large oak/beech.

6.5.7. Dead wood, except for smallwood felling residue, is to be protected from forest measures unless there is a documented risk of the mass reproduction of pest insects.

- Windthrown seed trees/shelterwood trees and standing spruce infested with large bark beetles (*Ips typographus*) may be removed provided the conditions set out in Section 6.5.8 below are fulfilled.

- Fresh windfalls may be removed from stands where the average volume exceeds 3 m³ per hectare provided that some representative windfalls per hectare are retained. Where the volume of windfalls is less than 3 m³ per hectare, single, especially valuable and easily accessible windfalls may, in exceptional cases, be extracted, provided that the corresponding volume of larger dead wood is created.

In forest close to populated areas, measures may be taken to enable accessibility and to improve safety.

6.5.8. Standing dead wood, such as high stumps, of common deciduous and coniferous trees should be created when thinning and regeneration felling.

Some fallen trees representative of the stand may be left per hectare, either actively or passively, during the regeneration phase.

6.5.9. Exotic tree species are used on forest land only in exceptional cases after a decision in principle taken by the FSC's national representative body in consensus. More detailed guidelines for exotic tree species on forest land are to be used when better basic data has been gathered, including the current Environmental Impact Assessment and a review of the FSC Principle no. 9, not later than January 1, 1999.

6.5.10. In the nemoral zone, outside the natural range of spruce, the proportion of spruce is limited with the long-term aim of achieving less than half of the productive forest land area consisting of spruce-dominated stands (together with any possible stands dominated by exotic tree species).

6.5.11. The origin of seedlings and seeds is to be documented. Provenances adapted to the site are to be used within the framework of the National Board of Forestry regulations and general guidelines. Regeneration materials with genetic material alien to the species (genetically-modified regeneration materials) are not to be used. Cloned material is not to be used on a large scale pending an environmental impact assessment.

6.5.12. If their natural presence allows, broadleaved trees are to be protected when cleaning and thinning so that they make up at least 5-20% (depending on region, soil conditions, site quality and the total proportion of broadleaved trees on the forest holding) in the stand, including the immediately surrounding area. Favourable conditions are created with a significant proportion of broadleaved trees.

Only the provisions of the Forestry Act shall apply to currently or previously open agricultural areas with low biodiversity values under Section 6.6.4 below.

6.5.13. Biofuel shall not be extracted in ways that worsen the conditions for biodiversity.

6.6 *Forestry in the Agricultural Landscape and on Previously Open Cultivated Land*

Reforestation and forestry management measures in cultivated areas shall give special consideration to those areas which are of importance to the biodiversity and the character of the landscape.

6.6.1. Forests shall not be established on open or overgrowing cultivated land with special biodiversity values where the composition of species is still characterized by grazing or haymaking. Forests shall not be established on adjoining open or overgrowing cultivated land surrounded by forest land less than 0.5 ha.

6.6.2. Open edge zones, if possible cultivated, are to be maintained or recreated to a suitable extent. Future shading of sun-exposed edge zones, "field islets" and other small habitats, is to be avoided.

6.6.3. Forests on previously open cultivated land are to be managed to allow the area adjacent to cultivated land that is still open to be dominated by broadleaf trees during the entire rotation period.

6.6.4. When establishing new forest and taking measures in stands with low biodiversity values on open/previously open arable land, parts of the standard may be suitably modified (e.g., general consideration, soil scarification, burning etc.). Tried and tested site-adapted and non-invasive exotic species may be used on such land.

6.7 Overall planning

Forestry management is to be practised from the perspective of landscape ecology, and in consideration of other cultural values.

6.7.1. Major landowners are to implement landscape ecology planning on the basis of local conditions, and further develop ecologically suitable silviculture and felling methods.

Associations of certified landowners are to work towards common solutions based on a landscape ecology perspective.

6.7.2. Major landowners shall plan their forestry operations with a view to achieving a balanced age distribution for the landscape ecology, with special consideration given to the proportion of older forest in landscapes with a scarcity of such forest.

6.7.3. Forestry planning is to aim to achieve an area, corresponding to a minimum of 5% of the area, of mesic and moist forest land consisting of stands dominated by broadleaved trees during the greater part of the rotation period.

- This requirement applies when natural regeneration and growth conditions are suitable for broadleaved trees.

- Stands under section 6.1.2 above may be included in the boreal zone.

- Stands are to be managed in a way which encourages good conditions for deciduous-dependent biodiversity.

6.7.4. Measures are to be taken to keep game at levels that allow grazing-sensitive species to develop naturally into arborescent individual trees.

6.7.5. In areas in which red-listed species are known to occur, outside demarcated key habitats, proper consideration shall be given to the living conditions for these species when planning and carrying out forestry work. This consideration may, for

example, take the form of specific consideration, areas of special consideration or special consideration at nesting and mating places.

6.7.6. Forestry work adjacent to ancient remains and historic monuments should be carried out without damaging these remnants.

6.8 *Adaption to Natural Ecocycles*

Forest management should strive to use input and consumable goods that are adapted to the environment and ecocycles, as well as technology that is not harmful to nature or humans. Emissions of harmful substances are to be minimised. (See also section 4.1.3 above, Workers' Rights).

6.8.1. New, untested methods and material with potentially substantial adverse effects on man and nature shall not be used without the approval of the FSC national representative body.

6.8.2. Substances, including chemical pesticides and herbicides in the Chemicals Inspectorate's class 1 & 2 that are harmful to the environment and health shall not be used for the treatment of forest land. Permetrine treatment is currently exempted (until and including 1999). Plants are to be procured only from nurseries that attempt to minimise the use and effects of chemical pesticides.

7

STANDARDS FOR THE AREAS OF PRODUCTION AND ECONOMICS

7.1 *Multiple use*

7.1.1. Multiple use is a feature of the utilization of forests. The production of timber, reindeer husbandry, outdoor life, hunting, fishing and other uses are carried on with due consideration of one another and of the environment.

7.1.2. Hunting shall be sustainable, using the best available knowledge, while avoiding any threat to biodiversity.

7.1.3. The forest is open to one and all by means of the right of public access, which requires that the landowner and others who live on the landholding do not have the privacy of their homes disturbed or their financial interests harmed.

On frequently used paths the accessibility shall be maintained after forestry operations.

7.2 *Production*

The aim of the Swedish forestry policy and its associated legislation is to achieve sustainably high production levels of valuable wood while at the same time securing biodiversity.

7.2.1. Forestry management is carried on in long-term economically-viable forms in consideration of the size and conditions that apply to the landholding. Forestry management normally carries its own costs within the framework of this Standard, but subsidies that are available for forestry management may be used.

7.2.2. In consideration of the size of the landholding and the conditions that apply to it, forestry management shall be planned with a view to achieving a long-term balanced age distribution.

7.2.3. Felling levels shall be sustainable in the long-term.

7.2.4. Silviculture measures shall be site-adapted.

7.2.5. All forest land is to be reforested following regeneration felling unless a nature conservation agreement stating otherwise exists .

7.2.6. Regeneration methods that give a secure and speedy reforestation with well-growing forests are to be selected irrespective of whether the method used is planting, sowing or natural regeneration.

7.2.7. Felling should make the best use of the wood value, and wastage should be avoided.

7.2.8. When cleaning and thinning and cutting selectively, dense, productive stands shall be left with the least possible damage.

7.2.9. The condition of the forest, its development and the quality of measures carried out shall be followed up.

7.2.10. Forestry management shall be carried on in ways that limit the risk of damage by wind, fungi and insects. Steps shall be taken to limit the damage done by game.