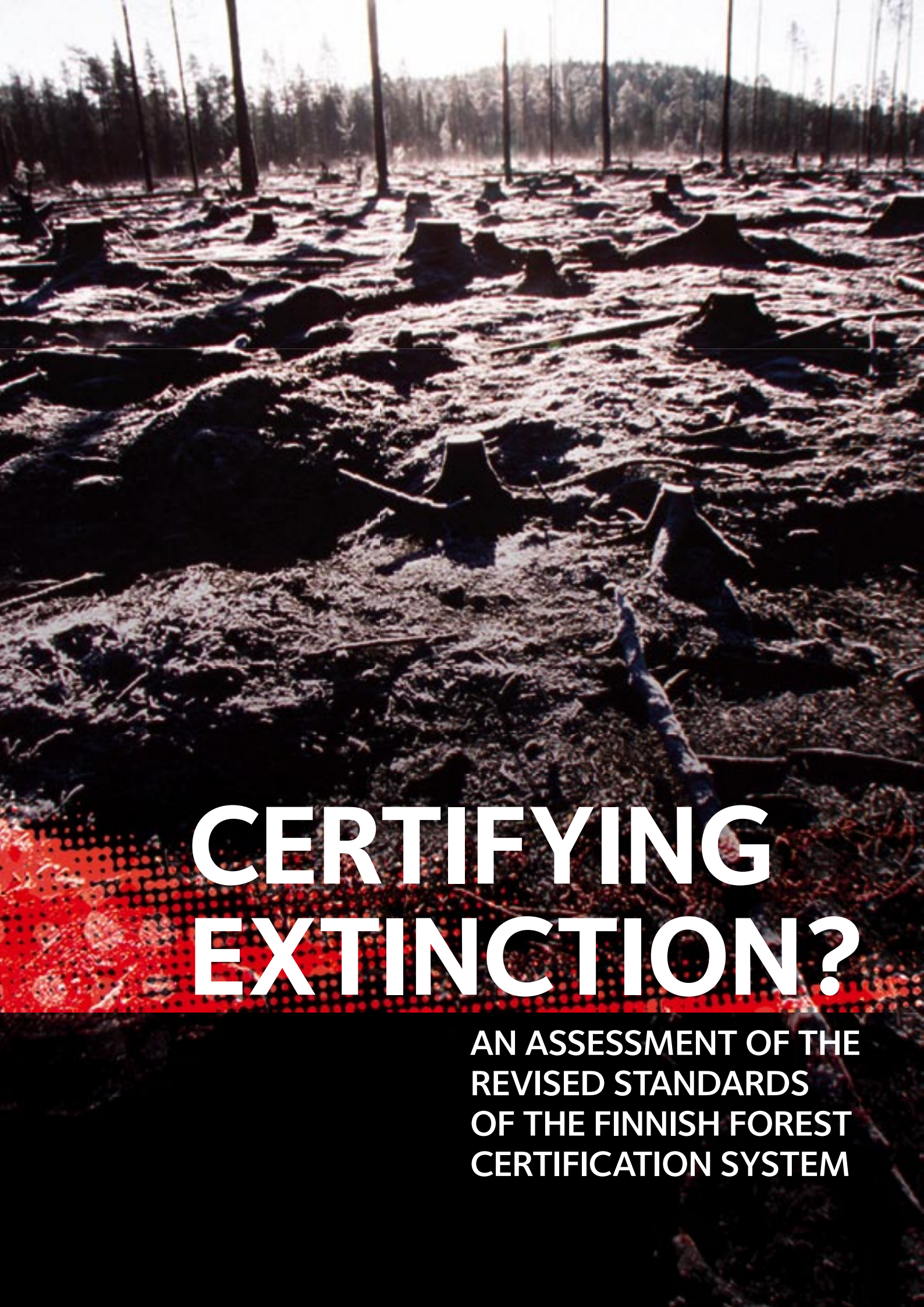
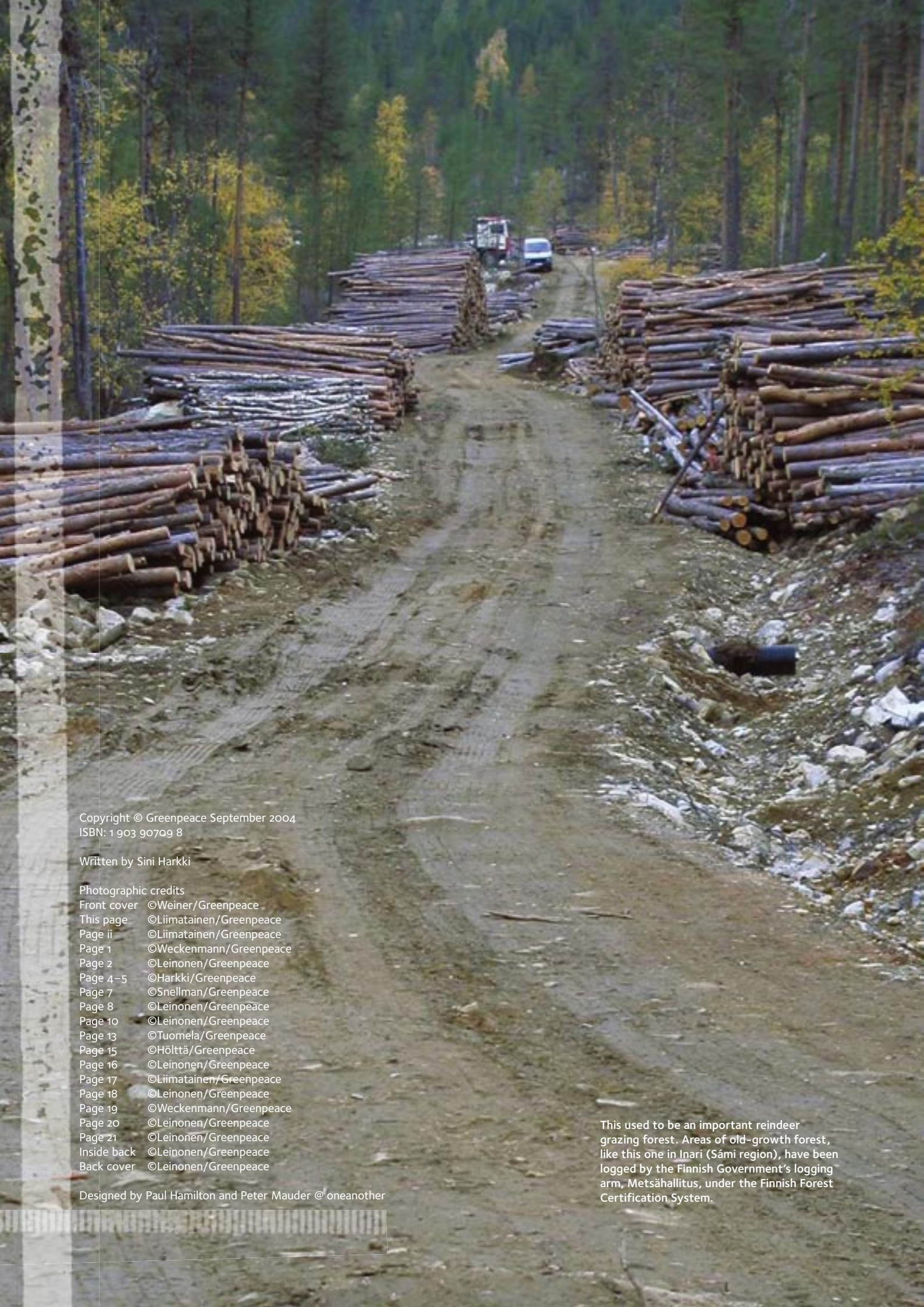


CERTIFYING EXTINCTION?

AN ASSESSMENT OF THE REVISED STANDARDS OF THE FINNISH FOREST CERTIFICATION SYSTEM



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This used to be an important reindeer grazing forest. Areas of old-growth forest, like this one in Inari (Sámi region), have been logged by the Finnish Government's logging arm, Metsähallitus, under the Finnish Forest Certification System.

FOREWORD

Finland's forests are among the most intensively managed in the world. Over 50 million cubic metres of wood are harvested every year from the country's 20 million hectares of commercial forests. The Finnish forest management model has resulted in the rapid conversion of natural forests into monotonous industrial forests that lack many key features of boreal forest ecosystems. Forestry is the most serious threat to species survival in Finland. Unless there is a significant increase in the amount of protected forest area and a parallel improvement in the standards of forest management, hundreds of species face extinction within the next 50 years.

Sustainable development and protection of biodiversity are now popular phrases in the public communications of the Finnish forestry sector. But there remains a huge gap between rhetoric and reality.

Forest certification could be an effective way to improve the ecological and social sustainability of forest use. However, 95% of Finland's forests have been certified according to the inadequate Finnish Forest Certification System standard, with the result that there has been little change to the destructive practices that have caused the current degradation of forest biodiversity.

With this report, the undersigned Finnish environmental organisations want to emphasise the urgent need for better forest management and better protection for the remaining old-growth and high-conservation-value forests in Finland.

Helsinki September 2004

Eero Yrjö-Koskinen
Executive Director, Finnish Association for Nature Conservation (FANC)

Matti Liimatainen
Forest Campaigner, Greenpeace

Lotta Ruokanen
Secretary General, Finnish Nature League

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1. INTRODUCTION

The Finnish forest sector prides itself on its reputation for sustainable forestry, trading on the national certification standard, the Finnish Forest Certification System (FFCS), under which 95% of Finland's forests are managed. The FFCS standard is endorsed by the Programme for the Endorsement of Forest Certification schemes (PEFC). However, as this report confirms, there are serious problems with the FFCS and the standard cannot guarantee that timber comes from environmentally and socially responsible sources. Logging under the FFCS threatens Finland's biodiversity and the traditional rights of the indigenous Sámi people. The FFCS continues to allow logging in unprotected old-growth forests and other high-conservation-value forests.

This report compares key environmental criteria of the FFCS to those of the internationally recognised Forest Stewardship Council (FSC) certification scheme. The FSC is the only certification system that is supported by environmental organisations such as Greenpeace, Friends of the Earth, WWF, the Finnish Association for Nature Conservation (FANC) and the Finnish Nature League. Indigenous peoples' groups and progressive companies within the timber industry also support the FSC system.

The report makes clear that companies sourcing from Finland need to exert pressure for positive change in forest management practices, through the implementation of environmentally and socially responsible timber procurement policies. It concludes that in the absence of such change progressive companies will increasingly turn their backs on the FFCS and Finland's forest products.

Clearcutting of an old-growth area in Kainuu region, Malahvia, East Finland, 1999. More logging is currently planned by Metsähallitus in this area, upon which many red-listed species such as the golden eagle *(Aquila chrysaetos)* **depend.**

Only about 4% of Finland's forest area is currently strictly protected, like this National Park.

2. FINLAND'S FORESTS

2.1. From natural forests to an industrial landscape

Forests (including scrub land) cover 23 million hectares (76%) of the land area of Finland.[1] Forests are the primary habitat of almost half of the country's species diversity.[2] The most common tree species of these boreal forests are pine (*Pinus sylvestris*), spruce (*Picea abies*) and birch (*Betula* spp.).

Over half of Finland's forests are in small private holdings (54%), while a significant proportion is owned by the state (33%). Only a small amount is owned by companies (8%) and by other owners such as municipalities and the church (5%).[3]

Since early in the 20th century the state has strongly promoted intensive forestry in Finland with the aim of maximising the flow of timber to Finnish mills. Forest policies have resulted in the conversion of old-growth forests to industrial forests that lack key features of natural boreal forest.[4]

Industrial forestry and in particular the creation of monoculture forests have significantly changed the structure, dynamics and species composition of the forest ecosystem.[5] Species such as the flying squirrel (*Pteromys volans*), three-toed woodpecker (*Picoides tridactylus*), Siberian jay (*Perisoreus infaustus*) and hundreds of plants and invertebrates have been unable to sustain their populations in commercial forests. Altogether 564 forest species are classified as threatened in the Finnish assessment of threatened species (the Red List), a majority of them as a result of modern forest management.[6] A further 416 forest species are classified as near-threatened. In reality, the number of threatened species is probably much greater, since the status of 65% of all forest species could not be assessed at all because of insufficient information on their populations.

Around a quarter of the threatened forest species are entirely dependent on old-growth forest, and many others depend on particular features of boreal forest that are now only to be found in old-growth forests.[7] The number of species entirely dependent on old-growth forest that have become extinct or are threatened or near-threatened has reached 260, according to the latest assessment of threatened species (2001)[8] – an increase of over 40[A] from the previous assessment (1991).[9]

Currently only about 4% of the country's forest area (7% including scrub land) is strictly protected.[10] The vast majority of this is situated in areas where many of the threatened species are unable to survive. Unless the area of forest and of rare habitats under protection is significantly increased, hundreds of species are expected to face extinction within the next 50 years.[11]

2.2. Forest legislation

Finland's forest policies are formulated by the Ministry of Agriculture and Forestry, which spends over €100 million annually on subsidising private forestry.[12] Regional Forestry Centres (government bodies under the administration of the Ministry of Agriculture and Forestry) have a central role in the implementation of forest policies – they promote forestry, create Regional Forest Programmes and supervise the implementation of forest legislation (see Section 2.3).

Several pieces of legislation regulate Finnish forestry, the most important being the Forest Act,[13] which focuses on the harvesting, management, economic sustainability and regeneration of commercial forests. Under the Forest Act biodiversity protection in commercial forests is regulated in only seven specifically defined rare habitats, the Habitats of Special Importance.[B] These habitats are mapped by the Regional Forestry Centres and delineated so strictly that they cover only about 0.36% of private commercial forestry land in southern Finland.[14] Many of the most important habitats of threatened species, such as old-growth forests, are not even mentioned in this legislation and can be legally harvested without restrictions.

Due to strict definitions, the Habitats of Special Importance omit the largest occurrences of the defined habitat types and only protect small areas.[15] In fact, the average size of areas of habitats preserved by the Forest Act is approximately 0.5ha.[16] Larger areas continue to be fragmented and destroyed by logging operations. Those habitats that are demarcated by the Forestry Centres are usually too small-scale to remain viable and consequently, often lose the species that depend on them within a few years of surrounding areas being logged.[17]

Whilst most operations in commercial forests are regulated by the Forest Act, the protection of threatened species is the preserve of the Nature Conservation Act,[18] which also allows for the establishment of protected areas. The Nature Conservation Decree (an annex to the Nature Conservation Act) lists specially protected and threatened species, along with species prioritised in the EU Habitats[19] and Birds[20] Directives. Of all threatened species in Finland, 32% are listed as specially protected in the Nature Conservation Decree.

Under section 47 of the Nature Conservation Act, it is illegal to exploit habitats of specially protected species once they have been demarcated by Regional Environment Centres (Government bodies under the administration of the Ministry of Environment). However, due to the fact that few resources have been allocated to this process, only 15 individual habitats of specially protected species have been demarcated in the past seven years.[21]

[A] Some of the changes in categorisation, from one level of threat to another, are based on new IUCN criteria used for the 2001 assessment, which may affect this estimate.

[B] Habitats of Special Importance as defined in the Forest Act are: 1) immediate surroundings of springs, streams, wet hollows and small pools; 2) herb-rich and grassy spruce swamps/mires and eutrophic fens south of Lapland province; 3) fertile patches of herb-rich forest; 4) heathland forest islets in undrained wetlands; 5) gorges and ravines; 6) steep bluffs and underlying forests; and 7) a group of habitats of low productivity – sandy soils, exposed bedrock, boulder fields, wetlands with sparse tree cover and those flood meadows that are less productive than nutrient-poor heathland forests (Ministry of Agriculture and Forestry 1997).


1692
AD 1600
A.D. 1500

This tree, which died in 1692, had been standing for nearly 700 years in the Sámi region, before Metsähallitus recently logged it. The Sámi region contains some of the largest ancient forest areas in Western Europe. Standing dead trees are important habitat for several red-listed species. They are increasingly rare due to modern forest management methods.

According to section 49 of the Act, the destruction or degradation of breeding sites or resting places of the species referred to in Annex IV of the EU Habitats Directive is also prohibited. Annex IV lists 42 species, of which about half are forest species.

The habitats of the threatened species not listed as specially protected under the Nature Conservation Decree or included in Annex IV of the Habitats Directive have no legal protection, although individual specimens of some animals and plants are protected from killing, capturing or picking. The habitats of the majority of threatened forest species whose habitats continue to be destroyed legally.

2.3. The supervisory role of the Regional Forestry Centres

Regional Forestry Centres have a problematic double role, being both supervisors of forest legislation and FFCS certificate holders. As supervisors of forest legislation, the role of the Forestry Centres is supposed to be impartial. However, the centres receive subsidies from the Ministry of Agriculture and Forestry obliging them to take part in FFCS certification, meaning that this impartiality could be undermined.[22]

Section 22 of the Forest Act requires Forestry Centres to report suspected violations of the Act to the police. However, according to recent research from the University of Joensuu, they only report a third of the violations they investigate.[23] The research concludes that some Forestry Centres seem to have a unwritten policy not to report certain forest crimes at all. Although Forestry Centres are expected to specify a reason for not reporting a violation, in several cases studied they failed to do so.

2.4. Old-growth forests and high-conservation-value forests

One of the major impacts of the Government's policy of promoting intensive forest management has been the rapid reduction in the size of Finland's ancient or old-growth forest areas, some of the last fragments left in Europe.

Old-growth forests differ from industrial forests in terms of their multi-layered canopy structure, the presence of dead trees of various ages and the occurrence of species that are no longer found in abundance in industrial forests.[24] These forests are therefore essential for maintaining forest biodiversity in Finland.[25]

Today, the most optimistic estimate concludes that only about a million hectares of old-growth forest remain (less than 5% of Finland's total forest cover), with approximately half outside existing protected areas.[26] The vast majority of these forests are situated on state lands in the north and east of the country.

In the south, old-growth forests exist only in extremely small fragments. However, high-conservation-value forests that have retained some of the features of old-growth forests and thus support populations of threatened species do still exist, mostly outside protected areas. These fragments are usually too small to remain viable and need to be enlarged and restored.

2.5. Old-growth forest protection programmes

Four protection programmes for old-growth forests were carried out in Finland during the 1990s, two in the south and two in the north. Whilst the programmes attempted to preserve some valuable examples of natural forests, their impacts were limited, not least due to the lobbying efforts of the forestry sector and the perceived economic value of allowing logging to continue. Decisions about protection were primarily based around political considerations rather than on scientific analysis.

In total the programmes set aside 343,000ha, although much of this land was already protected, had logging restrictions in place or had been classified as unproductive land.[27] Taking existing decisions into account, an additional 80,000ha of old-growth forest were protected in the north and an additional 28,000ha in the south. This represents less than 0.5% of Finland's forest land area. Since there are so few old-growth forest fragments remaining, some of the land protected included clearcut or secondary forest adjacent to old-growth areas.

The protection programmes left hundreds of thousands of hectares of old-growth forest available for industrial use, including some of the largest areas of old-growth forest in the northernmost part of the country, the Sámi homeland, which was arbitrarily excluded from the programmes.[C] Moreover, many unprotected old-growth forest areas outside of protection have since been shown to hold significant populations of threatened species.[28]

Ecological research now indicates that the amount of old-growth forest remaining in Finland may already be too small to ensure the long-term survival of many old-growth forest-dependent species.[29]

[C] The old-growth forests of the Sámi area were not assessed in the course of the old-growth forest protection programmes. However, within the Sámi area there are a number of forest protection areas such as national parks and wilderness areas based on earlier political decisions.

2.6. Forest protection in south Finland

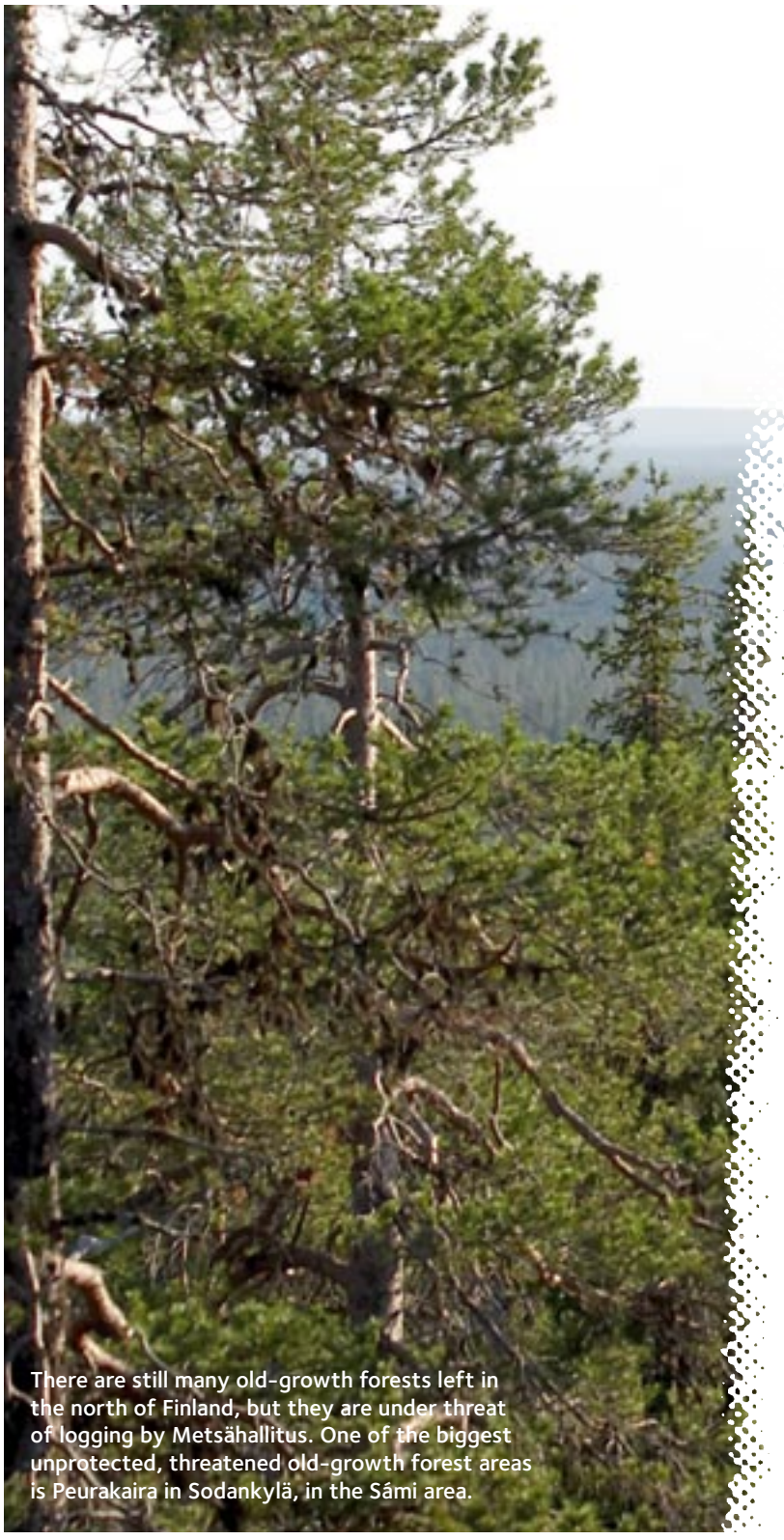
'The amount of strictly protected forest in south Finland and Ostrobothnia must be increased in order to protect rare habitats and threatened and specialised forest species.'
Ministry of Environment working group, 2000

Only 1% of the forests of south Finland have been protected despite this region containing the largest number of forest-based species in the country. Most of the forests have now been converted to monotonous industrial forestry. As a result, the number of species threatened in the south has significantly increased.

Recognition of the urgent need for greater forest protection led to the establishment in 2000 of a working group including scientists and government representatives. This group concluded that the state of forest biodiversity in south Finland was inadequate and that timely and adequate protection measures, including new protected areas and restoration plans, were needed in all forest types to stop biodiversity loss.[30]

In the same year a committee of interest groups, with a majority of representatives from the state forestry administration (including the Ministry of Agriculture and Forestry and Metsähallitus), forest industries and forest owners, was set up by the Government and assigned to prepare a protection programme for the area. In 2002 the committee published its action plan, the so-called METSO programme ('metso' means 'capercaillie' in Finnish), which postponed the decision on the need for a protection programme until 2007. It was also decided that the next assessment should be carried out by relevant government ministries rather than by scientists.

The METSO programme, which has since been endorsed by the Government, includes a small number of experimental, small-scale regional conservation projects for the years 2003–15. In the best-case scenario, these projects will result in the increased protection of less than 5,000ha of forest with current funding. This may have positive local impacts but will have no effect on the general decline of forest biodiversity in south Finland. The programme includes no actions to stop the destruction of the majority of high-conservation-value forests.



There are still many old-growth forests left in the north of Finland, but they are under threat of logging by Metsähallitus. One of the biggest unprotected, threatened old-growth forest areas is Peurakaira in Sodankylä, in the Sámi area.

Siberian tit *(Parus cinctus)*. **This species is dependent on old-growth forests, and is classified as near-threatened according to IUCN criteria.**

3. DEVELOPMENT OF CERTIFICATION SYSTEMS IN FINLAND: FFCS AND FSC

3.1. History of the FFCS

In August 1996 representatives of 29 different stakeholder groups, including some environmental NGOs, met to create a Finnish standard for forest certification. It was intended that the scheme would later be adopted by the Forest Stewardship Council (FSC). However, when during 1997 most members of this group failed to show significant commitment to ecologically sound forestry, the environmental NGOs left the process. The forestry sector and forest owners then went on to develop their own standard called the Finnish Forest Certification System (FFCS).

The FFCS was endorsed by the Programme for the Endorsement of Forest Certification (PEFC) in May 2000.[D] Since then, the PEFC logo has been used on FFCS-certified products. The FFCS never gained NGO support because of its weak environmental criteria and insufficient consideration for social concerns. Both the FFCS and the PEFC have also been criticised for their industry-dominated governance and non-transparent processes.

3.2. Certification process under the FFCS

Certification of Finnish forests by the FFCS began in 1999 and within a year 95% of all Finnish forests had been certified. The certification was carried out at a regional level via the 13 Regional Forestry Centres (see Section 2.2) who applied for the certificate. All forests automatically became certified via their owners' membership of a Forest Management Association (FMA), unless they specifically opted out by sending a written notice to the FMA.[E] In practice this led to some individual forest owners not even being aware that their forests had been certified.

3.3. Decision-making and complaints procedure in the FFCS

The FFCS is governed by the Forest Certification Council, the Working Group on Forest Certification Standards and the Working Group on the Development of Forest Certification. The majority of seats on all these bodies are reserved for forest industry and forest owners' representatives.[31]

There are no rules setting out requirements for the representation of different interest groups under the FFCS or the PEFC. NGOs, for example, can only participate in the PEFC Council as associate members with no voting power.

A dispute settlement body exists to deal with any complaints made under the FFCS, but there is no provision for complaints to be filed by interested parties such as environmental organisations or reindeer herders. It is therefore unsurprising that no complaints have ever been filed.

3.4. Development of the FSC

The Finnish FSC standard was drafted by the Finnish FSC Working Group, including representatives from NGOs, social interest groups, small forest owners and forest industries. It was accepted by the Finnish FSC Standard Committee in 2002. The standard has been sent to the FSC International Secretariat for approval and is expected to be endorsed by the end of 2004.

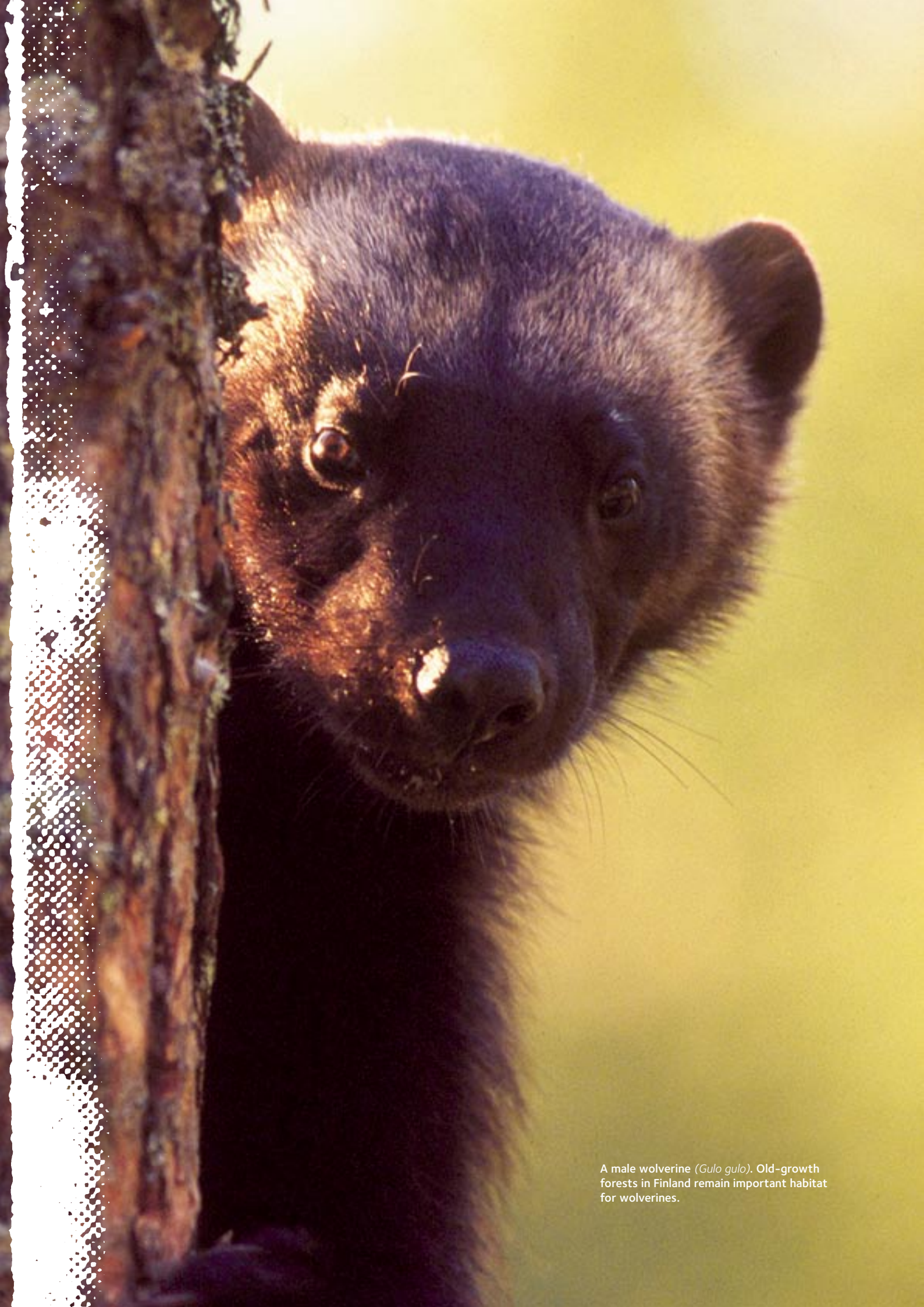
However, with 95% of Finland's forests already certified by the FFCS, the forestry sector has shown limited interest in the FSC and its progressive criteria. The development of the Finnish FSC standard has therefore been slow. Furthermore, because of the involvement of FMAs and the Regional Forestry Centres in the FFCS, FFCS certification is free to forest owners. The state thus provides a competitive advantage to the FFCS.

3.5. Decision-making and complaints under the FSC

As of 2004, only a few experimental sites in Finland are being assessed to FSC standards. When the FSC system becomes operational in Finland decision-making power will be divided equally between three interest groups – economic, social and environmental. Furthermore, all FSC-certified forest operations, certification bodies and national FSC initiatives have a system for managing and responding to complaints. If these mechanisms prove insufficient to resolve a disputed issue, all interest groups will be able to use their respective chambers (economic, social or environmental) to submit complaints to the FSC International Secretariat for dispute resolution.

[D] At the time the PEFC was called the Pan-European Forest Certification Scheme.

[E] Under the FFCS, local FMAs apply for certification on behalf of their members, allowing for the simultaneous certification of all forest holdings in a Forestry Centre. Most Finnish forest owners are obliged by law to belong to an FMA.



A male wolverine *(Gulo gulo)*. Old-growth forests in Finland remain important habitat for wolverines.

4. ENVIRONMENTAL CRITERIA

4.1. Revision of the FFCS standard

The FFCS standard was revised during 2002–03 and was accepted by the FFCS Working Group in September 2003. The revised standard includes 28 criteria. Three new criteria have been created, eight have been removed and some have now been combined.[32] No improvements have been made in the most seriously flawed environmental criteria such as those concerning old-growth forests and threatened species.

4.2. Revised FFCS criteria compared with those of the FSC

Fourteen criteria in the FFCS standard concern environmental targets. The most important of them are analysed below with emphasis on their actual environmental impacts. Each criterion is compared with the corresponding criterion of the Finnish FSC standard.[33]

The criteria with the most potential to influence forest management are those based around performance standards in the forests, as opposed to systems-based criteria. (Performance-based criteria set specific targets to improve forest management on the ground, whereas systems-based criteria set out processes that certified companies must follow.) Consequently, this critique focuses largely on performance- related criteria.

FFCS Criterion 1. Legislative requirements are complied with

Under this criterion all certified forest operations must demonstrate compliance with a number of Finland's laws, but, strangely, not with all of them. For example, whilst FFCS-certified holdings are obliged to comply with the Forest Act, they do not have to provide evidence of compliance with the Act on Financing Sustainable Forestry.[34]

One of the important roles of the Act on Financing Sustainable Forestry is its regulation of the €60 million worth of subsidies given annually to forest management operations by the Ministry of Agriculture and Forestry. Recent inspections of 5% of these subsidised operations (in young forest stands), carried out by the Regional Forestry Centres, revealed that 20% of the operations studied were not legally entitled to subsidies they had received.[35] In some cases the forest management operations had not spent the money as had been stipulated, and in others, forestry operations were not entitled to the subsidies they had received. Operations caught falsely claiming subsidies, or shown to be misusing them, are expected to return the money, but given that Forestry Centres are obliged to inspect only 5% of the subsidised operations, it is likely that many of the illegally subsidised operations are never revealed.

Moreover, in the FFCS standard there is no requirement for certified forests to comply with the provisions of binding international agreements signed by Finland, such as the Convention on International Trade in Endangered Species, International Labour Organisation conventions, and the Convention on Biological Diversity.

The corresponding FSC criteria (Criteria 1.1, 1.2, 1.3, 1.4 and 1.5 on compliance with laws) require all FSC-certified operations to comply with national and local laws and administrative requirements. Each certification candidate is checked for violations of all relevant laws. Unlike FFCS certifiers, FSC certifiers check the bookkeeping of each certified holding to ensure that 'all applicable and legally prescribed fees, royalties, taxes and other charges' have been paid. The draft FSC standard also requires certified forests to be managed in accordance with the provisions of all binding international agreements signed by Finland.

FFCS Criterion 6. Forest management planning promotes sustainable forest management

The FFCS standard only requires forest management plans for 50% of the forest holdings in a certified area. The plans are required to include environmental targets related to national legislation, which itself has serious environmental shortcomings (see Section 2.2), and to Criterion 10, which is also largely based on the same legislation (see below).

The system contrasts strongly with the FSC's approach, which requires management plans for all certified holdings. According to the Finnish FSC standard, management plans will have to include provisions for identification and protection of endangered species, important reindeer *(Rangifer tarandus)* pastures and religious sites of the Sámi; for demarcation of forests to be restored and high-conservation-value forests; and for harvesting restrictions during the bird nesting season. None of these provisions is required by the FFCS, or under Finnish legislation.

Management plans under the FSC standard will have to include environmental impact assessments and monitoring and will be periodically revised to adjust them to the results of monitoring and relevant scientific information.

FFCS Criterion 9. Conservation value of protected areas is not endangered

This criterion prohibits destructive activities inside the borders of protected areas (which would be illegal in any case). However, it does not go so far as to protect the buffer zones to these areas, which are crucial to prevent loss of ecological value

within the areas themselves. Thus, the FFCS standard offers no additional environmental protection beyond that demanded by legislation. Ecological research has shown that forest management activities (such as ditching) in the proximity of protected areas have, in several cases, resulted in environmental degradation within those areas.[36]

Under the Finnish FSC standard, operations that are harmful to protected areas will be controlled, even when taking place outside the protected areas: 'Construction of forest roads, delineation of logging sites or renewal of drainage systems shall not harm the sites protected under this criterion [Criterion 6 on set-aside areas and protected habitats] or other protected areas.' Compliance with the criterion will be checked by field inspections and these aspects will also be monitored in the management plan.

FFCS Criterion 10. Typical features of important habitats are preserved

Most of the habitats listed in this criterion are already protected by legislation.

Important habitats to be protected are classified in three different categories:

1) habitats protected by the Nature Conservation Act

2) habitats protected by the Forest Act (Habitats of Special Importance)

3) habitats whose preservation is recommended by forestry guidelines and the FFCS standard.

Finnish law already protects habitats in categories one and two. Regional Environment Centres carry out demarcation and protection of the habitats protected by the Nature Conservation Act. However, of the nine habitats protected by the Act only three are forest habitats. These are: 'wild woods rich in broadleaved deciduous trees, hazel woods and common alder woods'. All of these three habitat types are extremely rare and occur mainly in southernmost Finland.

The Forest Act requires the preservation of seven Habitats of Special Importance, which are mapped by the Regional Forestry Centres (see Section 2.2).

The habitats listed in category three[F] – including old-growth forest – are not protected by legislation in commercial forests. The habitats listed in this category should therefore be subject to protection under the FFCS, and according to the standard 'the characteristic features of the majority of these habitats should be preserved.' However, logging is allowed in most of the habitats, with the exception, theoretically, of kettle holes and old-growth forests. Unfortunately, at least for old-growth forests, the habitats are then defined in such a way that means that logging can still take place.

The problem of definition is common to all three categories of important habitat. The 'typical features' of the habitats have been defined very strictly in legislation (for categories 1 and 2) and under the FFCS (for category 3). As a consequence, in most cases only the most representative areas qualify for protection. Moreover, if a habitat exceeds 1ha it nearly always falls outside the stipulations for protection.

The FFCS standard goes further, stipulating that the important habitats of category 3 'do not exceed [a size of] one hectare'. There is no logical explanation as to why the size is limited in this way.

OLD-GROWTH FORESTS IN THE FFCS STANDARD

'With the pace of old-growth logging in Finland today it seems clear that many endangered species as well as species typical of old-growth forests will continue to decline.' Mariko Lindgren, Finnish Biodiversity Research Programme (FIBRE), University of Helsinki, 2002.

Old-growth forest is one of the habitats 'protected' by Criterion 10 of the FFCS standard. However, the reality is that the FFCS has set thresholds in such a way as to make protection of any more old-growth forests extremely difficult. Most remaining old-growth forests are found on state land, where more than 5% of all forests are already protected in some form. Conveniently, the FFCS standard states that if more than 5% of a forest owner's land is already protected, no further additional protection is required. By defining the standard in this way, the FFCS manages to evade one of the most significant ecological problems in Finland – old-growth forest logging on state lands.

Even in forests owned by private landowners, protection can only be granted to areas 1ha in size or less, drastically limiting any potential for greater protection for old-growth forests. The situation is further exacerbated by the strict qualitative criteria that have to be met for an area to be classified as old-growth.[G] Forest areas 1ha or under in size are simply not able to meet these criteria.

The Finnish FSC standard will require at least 5% of all commercial forests to be permanently set aside from all logging operations.[H] In addition, 10% of commercial forests will be permanently protected from clear cutting, only allowing for selective logging. Furthermore, valuable habitats and their buffer zones (minimum width of 20 metres) will be protected in all cases, even if their area exceeds the 5% set-aside quota. The habitats protected under the FSC standard will include the important habitats as listed in national legislation and those protected under the FFCS, as well as a number of other valuable habitats that are not protected by FFCS or national legislation (such as certain spruce mires). The definition of Habitats of Special Importance given by the Forest Act will be extended

[F] Habitats listed in category three of protected habitats under the FFCS are: alluvial forests and flood meadows; herb-rich swamps; fens in Lapland province; sunny slopes of ridges and kettle holes; and old-growth forests.

[G] The FFCS criteria for old-growth forest are: 'The dominant tree stand is usually significantly older (more than 1.5 times) than the recommended forest rotation age in the area; the stand usually consists of trees of different sizes and species forming several canopy layers, or the forest is a spruce stand of a late succession stage; the tree stand has not been treated by selective logging, intermediate thinning or preparatory felling in the last 60 years; the stand is composed of [includes] old broadleaved trees, plenty of (at least 20% of the tree stand) decaying trees, snags and ground [fallen] trees.'

[H] The set-aside area can include legally protected areas, areas in official protection programmes, and areas designated for protection in official land-use plans, provided that the landowner has not received compensation for the protected land.

so that the qualitative requirements are less strict and these habitats are protected regardless of their size. Old-growth and 'near-natural' forests and other high-conservation-value forests will also be protected regardless of their size or owner.

FFCS Criterion 11. Known habitats of threatened species are safeguarded

Criterion 11 does not protect threatened species or require their mapping. Instead it requires their preservation only if their habitats have been 'demarcated by Regional Environment Centres', as required under the Nature Conservation Act (see Section 2.2). As the Environment Centres have demarcated only 15 individual habitats of specially protected species in the past seven years, and have very limited resources for further demarcation and mapping, this is clearly not an adequate state of affairs.

In their evaluation of compliance with Criterion 11, FFCS certifiers are required to check that none of the habitats demarcated by Environment Centres have been destroyed. However, with so few demarcations having been undertaken, it is reasonable to assume that Criterion 11 will rarely be violated. Examples of this problem have been encountered during field inspections by environmental NGOs in FFCS-certified state forests. In dozens of cases old-growth forests with reported occurrences of threatened species have been clearcut. However, none of these cases can be classified as a violation of FFCS Criterion 11, as Environment Centres had not demarcated the habitats.

A prime example of the inadequacies of the current situation involves one of Finland's best-known threatened species, the flying squirrel. In April 2004, The European Commission has referred Finland to the European Court of Justice for its failure properly to protect this species. The revision of the FFCS provided an opportunity for forest certification to move beyond inadequate legislation and to ensure greater protection for the species, but no action was taken.

Finland and Estonia are the only European countries where the IUCN red-listed flying squirrel is found.

The FSC standard, in contrast to the FFCS, will demand the protection of all 'known populations of both nationally and regionally threatened species' and their habitats and associated buffer zones (FSC Criteria 6.3 and 6.4). Thus, forest owners and loggers will be expected to preserve all known populations of threatened species, not only those demarcated by Environment Centres. The FSC standard also has provisions which will protect regionally threatened species that are omitted by both the FFCS and national legislation.

FFCS Criterion 12. Trees are retained in regeneration areas

Criterion 12 focuses on the number of trees that need to be retained following logging operations. Retention trees can be a mix of living and dead trees and their main purpose is to provide a supply of dead wood (immediately or in the near future, in the case of living trees) for species that use dead wood as their habitat or source of food.

One of the most serious negative impacts of industrial forestry on biodiversity in boreal forests is the decrease in the amount and quality of dead wood. Dead wood is a vital habitat for many fungi, invertebrates and birds. The amount of dead and decaying wood in a commercial forest is only a fraction of the amount found in a natural boreal forest, because in commercial practice trees are usually logged before they begin to decay. In good forest management practice dead trees should be preserved as a matter of course, but this is not the case with FFCS.

In the revised FFCS standard, the number of living and dead trees required to be retained is 'at least 5–10 per hectare' instead of the 'at least 5 trees per hectare' specified in the original standard. This could be seen as an improvement in the standard, but it is undermined by allowing very small trees to be classified as retention trees, since smaller trees have a lesser ecological value. Further, trees left in the buffer zones of water bodies (Criterion 16) can also be counted towards the total number of retention trees, again undermining any potential ecological benefit from changes to this criterion.

According to the Finnish FSC standard, all dead trees will be preserved unless the total exceeds 10m^3/ha. In addition, 10–20m^3/ha of living trees will be saved as retention trees (including a minimum of 10 trees per hectare with a trunk diameter of at least 20cm). The FSC standard will also require that, when it does not already exist, dead wood should be created by killing living trees by ring-barking or other methods.

Under the FSC standard, bird-nesting trees and trees over 200 years old will not be allowed to be logged, whereas in FFCS-certified forests nesting trees can be felled and the logging of ancient trees, of whatever age, is also allowed.

FFCS Criterion 13. Genetically modified seed and plant material is not used

This criterion requires that 'genetically modified material or other material which is not approved by the national authority [the Inspection Centre for Plant Production] should not be used in seeding and planting.' Thus the FFCS standard would allow the use of genetically modified trees if the Inspection Centre for Plant Production were to accept them.

The FSC standard will prohibit the use of genetically modified organisms.

FFCS Criterion 15. Prescribed burning promotes diversity of species dependent on burned areas

A number of threatened species in Finland require naturally burned areas, and in particular burned wood material, for their survival (burning caused by lightning is part of the natural dynamic of boreal forests). In the FFCS, the target area prescribed for burning after logging is about 6,700ha across the whole country over a five-year period. Prescribed burning carried out with government funding in protected areas is also included in the evaluation of this criterion, although this activity has no connection to FFCS certification, which is focused on commercial forests.

In FSC-certified forests of more than 1,000ha at least 5% of 'Myrtillus' (according to the Finnish classification of forest types) and less productive forest areas will have to be burned after logging during a five-year period. This will lead to a significant increase in the amount of burned wood as the FSC requires more standing trees to be left in the area after logging than does the FFCS. Indeed, the FFCS standard does not specifically define how much timber is to be retained after logging in areas to be burned. The burned areas can be normal clearcuts, in which case the operation results in very little burned wood being left behind. Under the FSC standard, at least 20m^3/ha of wood (trunk diameter at least 20cm) will have to be left on logged sites that are to be burned (Criterion 6.3.8.).

FFCS Criterion 16. Buffer zones are left along watercourses and small water bodies to capture nutrient run-off

Buffer zones alongside watercourses and water bodies have two important functions for the protection of biodiversity. Firstly, habitats close to water are valuable in their own right for a number of species. Secondly, buffer zones protect aquatic ecosystems from nutrient run-off that results from forest management operations.

This criterion has been weakened further in the revision of the FFCS standard. The new buffer zone width required is only 3–5m (instead of 5–10m in the previous standard) and even this zone can be logged. The only requirement is that on this strip 90% of the soil surface is protected from scarification (such as ploughing) or fertilisation.

The Finnish FSC standard will require untouched buffer zones at least 20m in width. In exceptional cases, 'for restoration or scenic reasons or in order to improve the nutrient-absorbing capacity of the site', cautious selective logging may be applied within the buffer zones (Criterion 6.5.2).

FFCS Criterion 17. Peatland nature is preserved

This criterion is weak because of the number of exceptions allowed to its implementation. First-time draining is not supposed to be carried out in peatlands which are still in a natural state. However, such peatlands are defined in such a way as to make their identification difficult. Moreover, 'single ditches' can be drained even in peatlands in a natural state – thereby potentially ensuring that they will no longer be in such a state. The criterion further allows for supplementary ditching in ecologically valuable wooded mire types such as some spruce mires, which are high in biodiversity. These habitats are not protected from any of the forestry operations harmful to their ecological value (draining, soil scarification and clearcuts are all allowed).

[J] The use of pesticides and herbicides is prohibited in classes 1 and 2 of the classification of Finnish groundwater areas. Groundwater areas have been classified according to their importance as fresh water sources and their need for protection.

The Finnish FSC standard will not allow any ditching of rare peatland habitats; furthermore, it will require implementation of a restoration plan for valuable habitats that have been drained but still show some characteristics of their natural state (Criterion 6.2). The draft standard stipulates that 'undrained peatlands, marshy sites, or even parts of such sites shall not be drained.'

FFCS Criterion 19. The quality of important groundwater areas is not degraded with chemical pesticides or fertilisers *and* Criterion 20. Use of chemical herbicides and pesticides is avoided in forest management

In the FFCS standard the use of chemical pesticides and herbicides is only prohibited in important groundwater areas [J] and important habitats as defined in Criterion 10. Elsewhere, they can be used 'for the control of ground vegetation in forest regeneration areas, for stump treatment of broadleaved trees, to control pine weevil, and for treatment of coniferous timber stores in the vicinity of forests'. As for the use of chemical fertilisers, no buffer zone is required between fertilised areas and watercourses or water bodies.

The FSC standard will allow the use of fertilisers only in forests with nutrient imbalances that have been confirmed in chemical analyses. A buffer zone of at least 50m will have to be left between fertilised areas and watercourses or water bodies. Furthermore, according to the FSC standard, 'biological or mechanical methods shall be used for pest and weed management instead of chemical pesticides.'

Ditching of forests and swamps has not only caused a decline in species dependent on natural ecosystems, but it also has severe effects on water quality.

Reindeer herding is central to the Sámi culture and is protected under Finnish law. Despite this, critical winter pastures for these reindeer *(Rangifer tarandus)*, which are often in old- growth forest, continue to be destroyed in forests certified under the FFCS.

5. SOCIAL CRITERIA IN RELATION TO REINDEER HERDING

In recent years there has been increasing concern among both indigenous Sámi and non-Sámi reindeer herders at the destructive logging practices of the state forest enterprise Metsähallitus in traditional reindeer grazing forests.[37] Most of these are old-growth forests. The logging damages reindeer grazing areas and reduces the availability of tree lichen,[38] a valuable winter food source for reindeer.[39]

5.1. Sámi culture and reindeer husbandry in the FFCS standard

The aim of FFCS Criteria 27 and 28 is to safeguard Sámi culture and to integrate the traditional livelihood of reindeer husbandry with forestry. Criterion 27 requires that 'in the Sámi homelands the management, use and protection of natural resources administered by Metsähallitus should be integrated in co-operation with the Sámi parliament, reindeer herders and other representatives of traditional livelihoods to safeguard the facilities for Sámi culture and traditional livelihoods.' Criterion 28 requires Metsähallitus to integrate forest management activities with reindeer husbandry 'so that the conditions for reindeer husbandry are safeguarded'.

Considering these criteria, it is hard to see how the Forestry Centre of Lapland could have been certified according to the FFCS. Virtually all reindeer herding co-operatives in the Sámi area have published written statements denouncing Metsähallitus' logging plans. Most of the co-operatives have produced maps of important grazing forests and demanded an end to destructive logging in these areas – with few tangible results.[40] One co-operative has a complaint pending to the United Nations Human Rights Commission concerning the destructive effects of planned logging. The case has not yet affected logging plans in the area, and logging operations will remain FFCS-certified.

The major problem with these FFCS criteria is the failure to define 'co-operation' or effectively to evaluate whether this has taken place. Criterion 27 is defined in such a way that actual agreement between Metsähallitus and the Sámi is not expected; instead the certification body 'assesses conformity to the criterion on the basis of the co-operation that has been carried out'. Without a definition of what that co-operation should consist of, the assessment of whether this criterion has been met appears to be entirely arbitrary, and left moreover in the hands of certifiers who primarily represent the interests of the forestry industry.

According to reindeer herders, 'co-operation' mostly consists of informing communities of where and when logging will take place.[41] In the few cases where there have been negotiations, the herders have been informed that logging volumes will not be reduced as a result. At best, the herders have been able to influence which area within their co-operative is logged first. The situation is exacerbated by the absence of a transparent and independent complaints procedure. As they are unable to make complaints, reindeer herders are powerless to influence whether the timber logged within their herding area is certified by the FFCS.

5.2. Sámi culture and reindeer husbandry in the FSC standard

The corresponding criteria of the draft FSC standard (3.1, 3.2, 3.3) require that 'forest management shall not threaten or diminish, either directly or indirectly, the resources or tenure rights of indigenous peoples' and that sites of 'special cultural, ecological, economic or religious significance' to the Sámi must be identified with the Sámi and recognised and protected by forest managers.

The greatest differences between the FSC and FFCS criteria lie in their respective indicators. While the FFCS only requires that there has been co-operation, regardless of its results, the draft FSC standard requires that reindeer herders must accept and officially approve all of Metsähallitus' logging plans in their area. Moreover, the FSC standard stipulates that forest management plans must protect sites important to the Sámi culture, and that the relevant maps and management plans must be endorsed by the Sámi parliament.

Thus, both standards deal with the issues of Sámi culture and reindeer husbandry, but only the FSC standard includes assessment with performance-based indicators that will truly verify that consensus between loggers and the Sámi people or other reindeer herders has been reached.

Kalevi Paadar, a Sámi reindeer herder, has already lost most of the old-growth forest his reindeer used to range in.

The pine tree *(Pinus sylvestris)* pictured is one of the main tree species in Finland's boreal forests.

6. THE EXCLUSION OF CONTROVERSIAL TIMBER

Certification standards, as well as addressing forest management issues, should also include a system for dealing with uncertified forest products that enter the certified supply chain. The aim of such a system is to ensure that timber from 'controversial' sources (such as illegal logging or uncertified high-conservation-value forests) cannot enter that supply chain at any stage of processing.

This issue is particularly relevant in Finland given the amount of uncertified timber that is imported each year from Russia to meet the capacity of the country's paper mills. Illegal logging remains a major problem in Russia's forestry system, with up to 50% of all timber estimated to come from illegal sources. In 2002 Finland imported approximately 13.3 million cubic metres of industrial roundwood from Russia, which equates to nearly one-fifth of all timber consumed in Finland during that year.[42]

The FFCS chain of custody policy[43] states that companies must provide 'at least a signed self-declaration that supplied raw materials or products do not contain any wood raw material from illegal sources'. No reference is made to other types of controversial source, and the system relies on self-declaration from suppliers to ensure legality. Consequently, it is possible that large amounts of illegal timber from Russia are entering Finnish mills for processing, with the resulting timber products still being labelled as from FFCS or PEFC certified forests.[K]

In the FSC policy[44] the definition of 'controversial sources' goes much wider, including illegal timber, timber from uncertified high-conservation-value forests, timber from GM trees and timber from areas where traditional or civil rights have been violated in the course of timber extraction. Companies have to take 'reasonable measures' to exclude any timber from these sources. Current revision of the FSC's chain of custody requirements means that verification of supplier claims regarding potentially controversial sources will have to be undertaken to confirm that such sources are completely excluded from the supply chain.

Russian logs being loaded for transport to Finland.

[K] Beyond the issue of legality, forest management standards in north-west Russia, which is the major supply area for Finnish importers, are the poorest in Europe. Clearcuts predominate all over this area, with cutting blocks of up to 50ha. Effective reforestation takes place on less than half of the area clearcut annually; the tending of young secondary stands happens only occasionally. Poor forestry standards continue to degrade accessible forests and pose a growing threat to the last ancient forests and protected areas in the region.

A Siberian jay. This species is classified as regionally threatened (in south Finland) according to IUCN criteria.

7. CONCLUSIONS AND RECOMMENDATIONS

The FFCS has failed to provide any credible guarantee that Finnish timber products originate from forests managed in an environmentally or socially responsible fashion. Old-growth logging continues, inadequate protection is given to habitats of threatened species and social conflicts remain unresolved. The situation is exacerbated by the failure of the FFCS effectively to regulate the use of the uncertified imported timber that is relied upon to meet the capacity of Finland's sawmills.

Poor forestry practices in Finland have been rewarded in the market place by retailers and other companies keen to obtain certified timber and paper products. These companies are given the impression either that the FFCS can provide credible guarantees of forest management standards, or that standards will improve over time. Yet the reality is that with recent revisions the FFCS standard has actually been weakened in two key criteria. Other weaknesses have remained unchanged. The likelihood is that unless practices change in Finland, endangered species will be pushed to extinction and the traditional livelihoods of indigenous communities will be lost, all with the FFCS or PEFC stamp of approval.

But this is an economic as well as an environmental and social issue. Progressive companies are beginning to change their procurement practices in response to consumer demands for timber products that can genuinely be said to come from well-managed forests. The UK-based retailer B&Q, part of the Kingfisher group, has this year revised its timber procurement policies so that products originating from Finland will be phased out. Meanwhile, the German postal service, Deutsche Post, has implemented procurement guidelines to prevent the use of pulp from mills in the north of Finland which are linked to timber from old-growth forests, and has started to offer FSC-certified envelopes in its post offices. Given such developments the question is how the Finnish logging industry will respond to the continued damage that is being inflicted, not just on Finland's biodiversity and the livelihood of indigenous communities, but, increasingly, on its own reputation and market share.

The environmental organisations which co-authored this report want to see positive change in Finland's forests. In order to achieve that change we call on Finland's timber companies to:

- FSC-certify their own forest holdings and encourage their major suppliers (Metsähallitus, Tornator) to move towards FSC certification
- phase out all timber that comes from high-conservation-value forests, working in conjunction with Finnish environmental organisations, the scientific community and reindeer herding co-operatives to identify these areas
- take an active role in pushing for timely and adequate political solutions to stop the degradation of biodiversity.

We further call on the companies who continue to buy Finland's forest products to:

- implement environmentally and socially responsible procurement policies, which specify FSC-certified timber and paper that contains FSC and/or recycled fibres
- ensure suppliers are not receiving timber products from old-growth or potential high-conservation-value forest areas (as mapped by environmental NGOs)
- encourage Finnish timber companies to certify their own forests according to the Finnish FSC standard and to start demanding FSC-certified timber from their suppliers.

A male wolverine in old-growth forest in Kainuu region, Eastern Finland.

Endnotes

1 Finnish Forest Research Institute 2003
2 Ministry of Environment 2001
3 Finnish Forest Research Institute 2003
4 Siitonen 2001
5 Siitonen 2001
6 Ministry of Environment 2001
7 Ministry of Environment 2001
8 Ministry of Environment 2001
9 Ministry of Environment 1991
10 Ministry of Agriculture and Forestry 2002
11 Hanski 2003
12 Harstela et al. 2001
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16 Hänninen 2001
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19 92/43/EEC
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21 Ministry of Environment 2004
22 Laakso 2003
23 Laakso et al. 2003
24 Airaksinen and Karttunen 1998
25 Siitonen et al. 2001
26 Virkkala 1996; Turunen et al. 2000
27 Ministry of Environment 1996
28 Lindgren 2001
29 Siitonen et al. 2001; Andrén 1994
30 Ministry of Environment 2000
31 FFCS 2004
32 FFCS 2003a
33 Finnish FSC Working Group 2002
34 1094/1996, Statute Book of Finland
35 Ministry of Agriculture and Forestry 2004
36 Syrjänen 2001
37 Heikkinen et al. 2003; Hukkinen et al. 2002; Raitio 2000
38 Kumpula 2003
39 Kumpula 2001
40 Greenpeace 2003
41 Hukkinen et al. 2002; Raitio 2000
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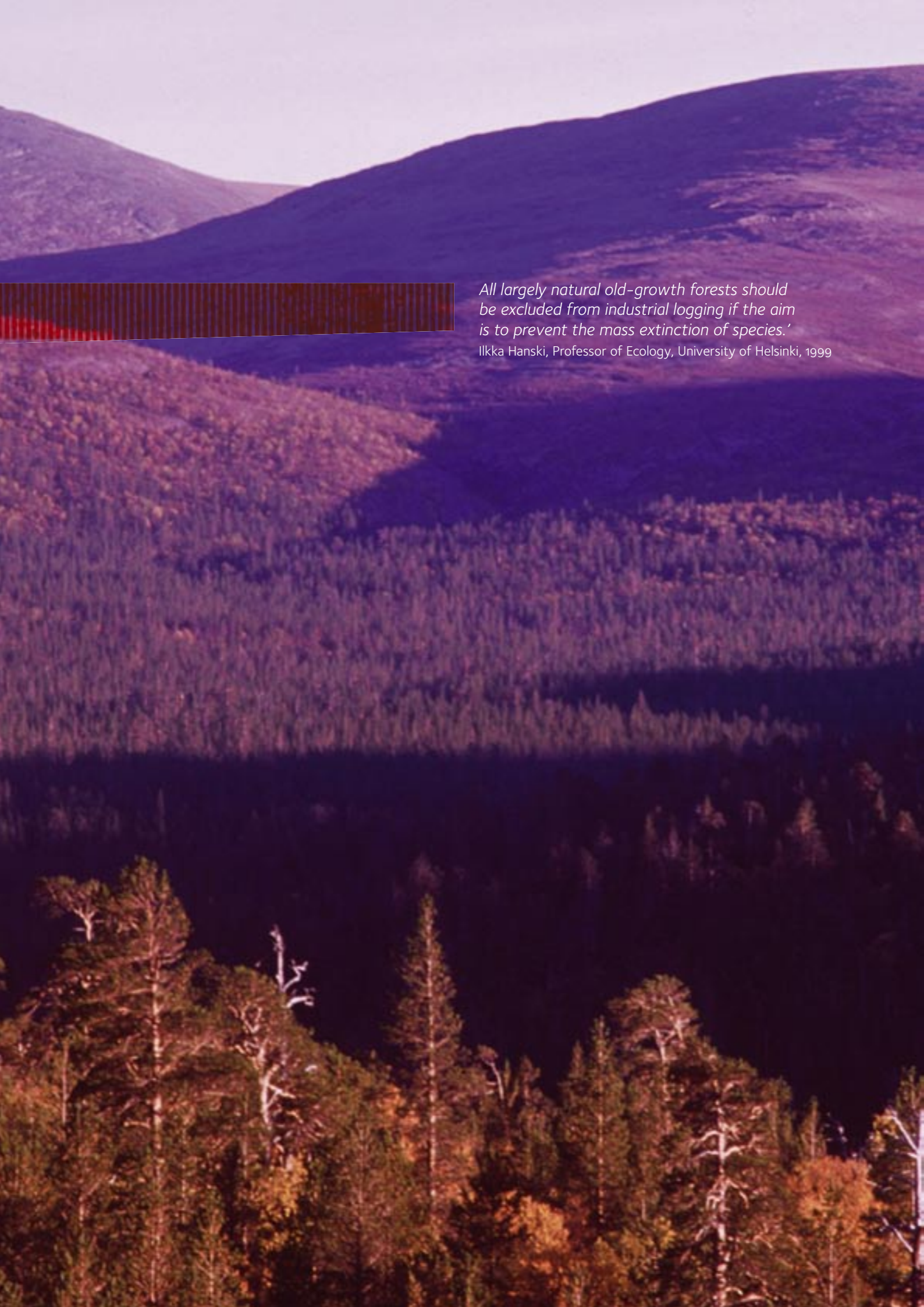
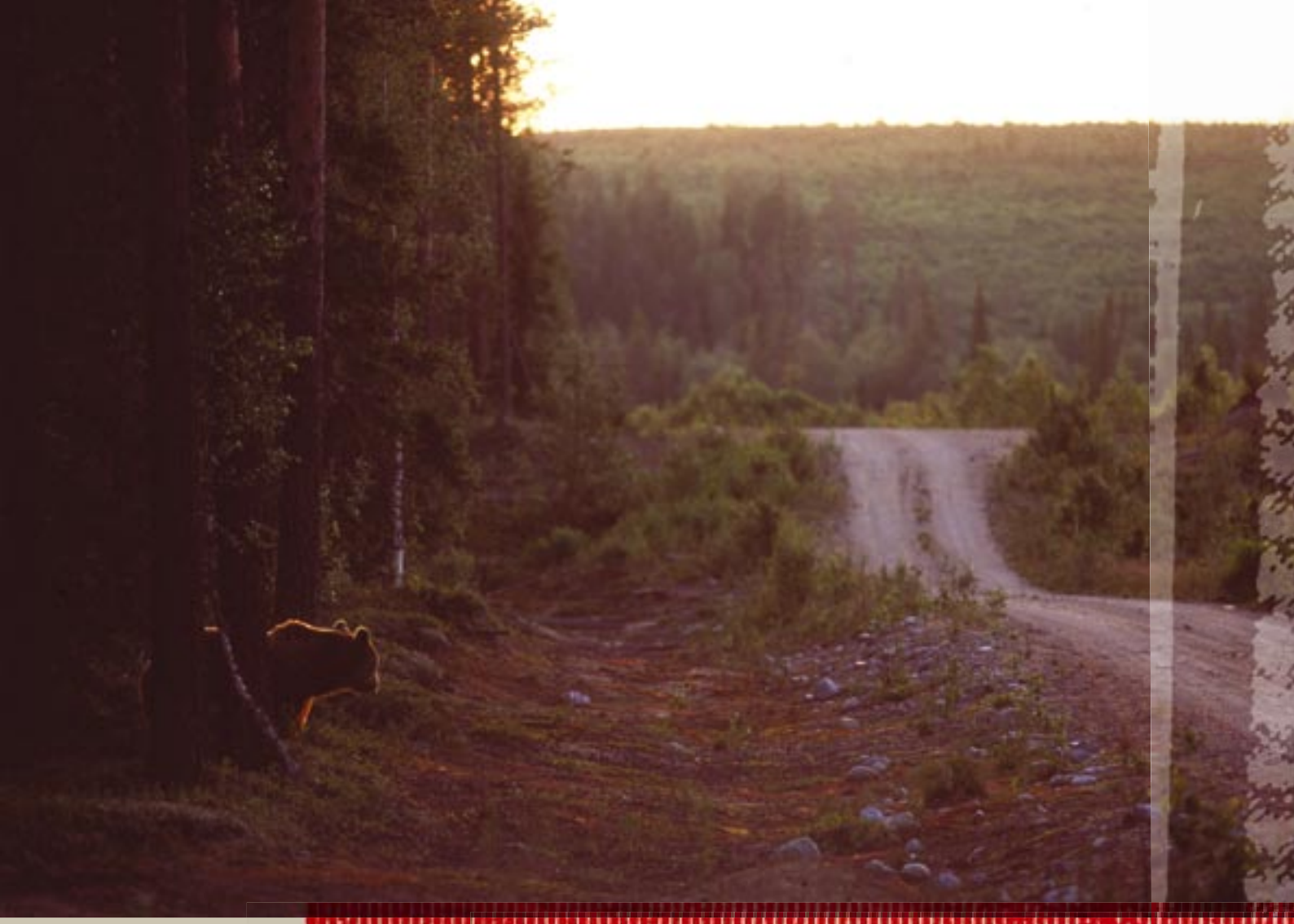


All largely natural old-growth forests should be excluded from industrial logging if the aim is to prevent the mass extinction of species.'

Ilkka Hanski, Professor of Ecology, University of Helsinki, 1999



GREENPEACE

Greenpeace Finland
Aurorankatu 11 A 2
FIN-00100 Helsinki
tel. +358 9 4315 7136
fax +358 9 4315 7137

Greenpeace is committed to protecting Finland's remaining ancient forests and the plants, animals and people that depend upon them.

Finnish Association for Nature Conservation (FANC)
Kotkankatu 9
FIN-00510 Helsinki
tel. +358 9 228 08 269
fax +358 9 228 08 200

The FANC promotes sustainable production and consumption patterns and the protection of biodiversity. It is the largest environmental NGO in Finland.

LUONTO-LIITTO

Finnish Nature League
Annankatu 26 A 5th floor
FIN-00100 Helsinki
tel. +358 9 68 444 214
fax +358 9 68 444 222

The Finnish Nature League is a children's and youth organisation for nature protection and environmental education.

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