

METSO



*The Forest Biodiversity
Programme for
Southern Finland
2002-2007*



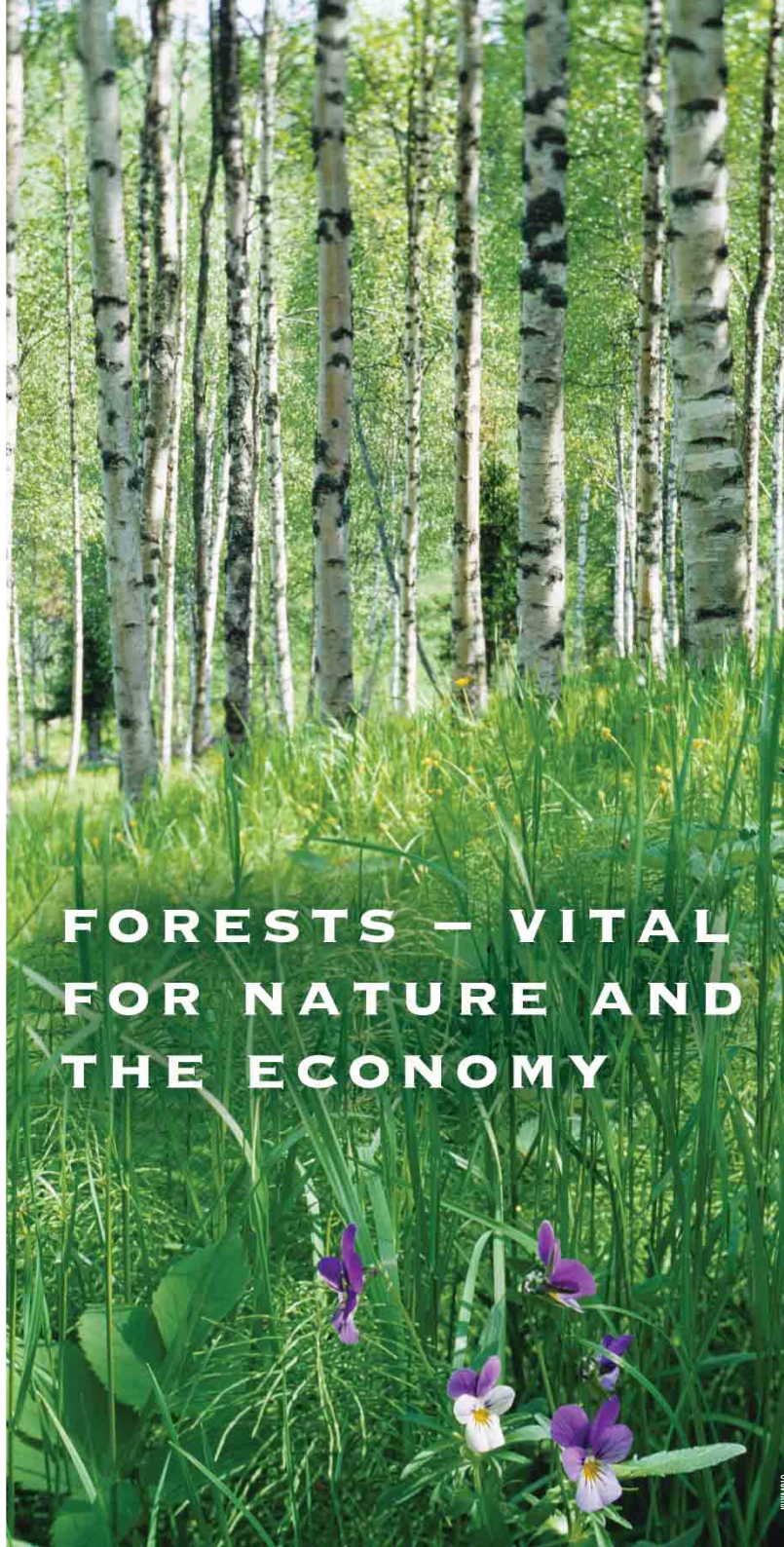
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ROUVAHO



PIKA ROKKA / LIA



FORESTS – VITAL FOR NATURE AND THE ECONOMY

More than two-thirds of Finland is covered by forest, most of which consists of small forest-holdings owned by local families. Forestry and the forest industries are a key sector of the Finnish economy – and with so many people depending on the forests for their livelihood, the need to conserve forest biodiversity is widely recognised.

In Finnish Lapland and other parts of Northern Finland, most forests are owned by the Finnish State, and many extensive areas have long been designated as national parks, nature reserves or wilderness areas. In the south, contrastingly, most forests consist of smaller privately owned holdings, and fewer areas have been protected under conservation programmes.

FINDING NEW WAYS TO CONSERVE BIODIVERSITY

Almost every area of forest in Southern Finland has at some time in the past been exploited for timber, tar-making or shifting cultivation – and many areas with nutrient-rich soils have been permanently cleared to create fields. This means that although the region is still largely covered by forest, few areas are preserved in a completely natural state.

ROUVAHO

Many wildlife and plant species are now threatened in Southern Finland's forests, and it is vital to find new ways to preserve them.

The compulsory protection of extensive areas of privately owned forest would be prohibitively expensive and unpopular. New conservation methods have therefore been devised, which involve working together with landowners to preserve ecologically valuable natural forest habitats.

METSO – AN INNOVATIVE FOREST CONSERVATION PROGRAMME

The METSO Programme is unique in that it depends on forest-owners' willingness to undertake conservation measures on a voluntary basis, through various kinds of special agreements under which forest-owners are compensated for any economic losses they consequently incur.

Forest-owners and other interest groups such as forest industry representatives, forestry workers' associations and environmental organisations have all been actively involved in the preparation and implementation of the programme. METSO particularly stresses the importance of open, transparent decision-



MATTI LUOMONEN / IFA

METSO is also the Finnish name for the capercaillie, whose numbers have been declining in Southern Finland. The METSO logo shows the footprints of a capercaillie superimposed on an aspen leaf.

making processes and public participation at every level.

COMBINING FORESTRY WITH CONSERVATION

The METSO Programme aims to preserve valuable forest habitats while also allowing forests to be commercially utilised to the benefit of rural economies and livelihoods, thus helping to promote sustainable development in rural regions of Finland. The types of forest habitats covered by the programme have been specially chosen for their importance to species that are rare or endangered in Southern Finland.

The Programme includes both short-term and long-term projects, and funding has so far

been organised until 2007. The impacts of METSO will then be carefully assessed before a decision is made on the continuation of the programme or other measures to conserve forest biodiversity.

The METSO Programme has been designed to complement Finland's National Forest Programme 2010. Since the early 1990s the conservation of biodiversity has been increasingly integrated into forest management guidelines and practices throughout Finland. Biodiversity is a key factor in Finland's various national nature conservation programmes and legislation in the Forest Act and the Nature Conservation Act. The importance of conserving biodiversity is also enshrined in Finland's Constitution.

MEETING INTERNATIONAL COMMITMENTS

The METSO Programme also forms part of Finland's implementation of various international agreements and commitments, including the Convention on Biological Diversity (CBD), the United Nations Forum on Forests (UNFF), and the Ministerial Conferences on the Protection of Forests in Europe (MCPFE).

The Programme is jointly co-ordinated by the Ministry of

Agriculture and Forestry and the Ministry of the Environment, with the work largely done by the regional forest centres, the regional environment centres and Metsähallitus – the state enterprise responsible for the management of state-owned forests in Finland. Forest-owners' organisations also help to implement and promote METSO.

METSO is largely funded from the national government budget. Total funding amounting to some 62 million euros has been allocated to the Programme for the period 2003-2007.

FUNDING FOR RESEARCH

METSO also includes an extensive forest biodiversity research programme, known as MOSSE, which particularly examines the ecological, economical and social impacts of the measures carried out to conserve forest biodiversity.

Funding is also provided to help researchers to learn more about the biological characteristics and habitat requirements of Finland's forest species – many of which are so little known that it has been impossible to evaluate their conservation status. An extensive forest biodiversity monitoring system is also being set up.



WORKING TOGETHER WITH FOREST-OWNERS

In many projects within the MET-SO Programme, forest-owners take the initiative by agreeing to preserve valuable natural features on their land. Projects known as **natural values trading, competitive tendering, forest biodiversity co-operation networks** and **nature management areas** can lead to various kinds of contracts between forest-owners and the authorities.

Natural values trading schemes allow forest-owners to commit themselves through voluntary contracts to maintain or enhance valuable natural features in their forests over a certain period. In exchange, the forest-owner receives compensation from the authorities. Natural values trading contracts are typically made for periods of 10-20 years, after which forest-owners may continue to use their forests according to their own wishes. A natural values trading pilot project was launched in South-west Finland in 2003.

Competitive tendering provides a way for landowners to offer to rent or sell ecologically valuable areas of forest to the authorities at an agreed price. The authorities then compare tenders from different landowners, and weigh up the financial costs and ecological benefits of each tender. Sites are then selectively

purchased or rented for conservation purposes. Competitive tendering pilot projects started up in early 2004 in three regions – one on the south coast, one in central Finland and one in South-west Lapland.

Forest biodiversity co-operation networks allow land-owners, the local environmental and forest authorities and other local interest groups to share their ideas and experiences related to conservation. The main aim is to encourage forest-owners to conserve biodiversity through various arrangements, including conservation contracts, environmental subsidies, nature management projects, and natural values trading. Networks operate within specific areas that are important in ecological terms or for their recreational amenity value, and are co-ordinated by the authorities or the local forest-owners' organisation. Networks are designed to promote socially and economically sustainable development by actively involving local forest-owners in conservation measures. Pilot networks started up in 2004 in four areas.

Nature management areas may also be set up in future in certain ecologically valuable sites on the basis of agreements between forest-owners and the authorities. In such areas forestry

and other land uses would be carefully planned to promote nature conservation, with forest-owners fully compensated for any losses they incur.

PROMOTING THE CONVERSATION OF BIODIVERSITY

Finnish forest legislation gives landowners certain obligations related to the conservation of biodiversity in commercially managed forests. Many forest-owners have already also been helping to conserve biodiversity in their forests on a voluntary basis. In many cases forest-owners are entitled to environmental subsidies where they help to conserve ecologically valuable features and natural habitats on their land. METSO speeds up the identification of suitable sites for conservation and makes more funds available for such subsidies, while also providing support for other suitable measures taken to enhance the management of forests in ecological terms.

Other projects within the METSO Programme aim to improve planning procedures and the recommendations, advice and training provided with regard to sustainable forest management.

RESTORING FOREST HABITATS IN PROTECTED AREAS

Even in protected areas in Southern Finland, few forest and peatland habitats are in a truly natural state, as most areas have been commercially managed or drained at some time in the past. Metsähallitus designs and carries out restoration measures to help habitats in state-owned forests and protected areas to revert towards their original natural state. Commonly used habitat restoration measures include controlled burning, increasing the amount of decaying wood in the forest, blocking drainage ditches, and removing tree cover from forested peatlands.

Such measures help to increase biodiversity by recreating conditions similar to those in natural habitats that have been disappearing over the years. Metsähallitus aims to carry out habitat restoration work over a total area of 30,000 hectares in Southern Finland. Metsähallitus also organises biodiversity surveys of ecologically valuable sites in commercially managed state-owned forests, in order to help plan future conservation measures.





PRESERVING IMPORTANT HABITATS FOR BIODIVERSITY

The sites approved for contracts within METSO projects have to meet special ecological criteria defined to cover the most significant habitats in terms of biodiversity – particularly where such habitats are rapidly disappearing.

Attempts are particularly made wherever possible to include **seven important habitat types** in conservation agreements within the METSO Programme:

Herb-rich woodlands grow where soils contain plenty of nutrients. Most areas of Southern Finland with fertile soils were cleared long ago to create farmland. The region's remaining herb-rich woodlands contain trees that are rare this far north – such as oak, elm, ash, lime, maple and hazel – as well as many species of birds, insects and plants.

The most diverse habitats on mineral soils are **natural heathland forests** with trees of different ages and species, such as aspens and other broad-leaved trees. Areas with plenty of decaying wood are particularly valued.

Natural **spruce mires** are often home to a wide range of forest and marshland species. Undrained and otherwise unspoilt marshy areas with springs and small pools are especially rich in biodiversity.

Many rare plants and animals are attracted to well-lit woodlands on the ridges and south-facing slopes of the **sandy eskers and moraine features** that were formed across many parts of Finland during the ice age. It is especially important to preserve woodlands on major eskers or moraine ridges, or near protected areas, to help the species associated with these habitats to expand their ranges.

Swampy woodlands and wooded flood meadows are typically covered by water during the spring thaw, and remain moist for much of the year. Many rare plants can grow in their fertile soils. Swampy woodlands with natural alder stands and other old and decaying trees are associated with rich diversity, especially along Southern Finland's low-lying lakeshores and coasts.

Species-rich **woodland pastures and wooded meadows** are created by traditional farming practices that have now almost vanished from Southern Finland. These grassy woodland habitats were originally formed where hay was regularly cut, or livestock were grazed in the forest. Many areas have also been shaped by the formerly widespread practice of shifting cultivation, where patches of forest were cleared and burnt, farmed for a few years, and then left for nature to reclaim.

Along the west coast of Finland the land is rising out of the sea at a rate of up to 1 cm a year, where the earth's crust is still recovering locally from being weighed down by a massive ice sheet during the ice age. **Natural forests along emerging coastlines** in western Finland form part of a unique natural succession, where new wetlands gradually become grasslands and then forest. A considerable section of this coastline has been proposed as a World Natural Heritage Site.

DETAILED SITE SELECTION CRITERIA

Sites containing these valuable habitats are selected for inclusion in METSO projects according to detailed criteria related to their ecological structure, extent and location. Sites are especially favoured where habitats are well preserved in their natural state or can easily be restored; where they host rare or endangered species; and where they are close to protected areas.

On a smaller scale, measures are particularly taken to conserve forests that are rich in biodiversity because they contain features such as:

- decaying wood
- burnt or charred wood
- mature broad-leaved trees
- large aspen trees
- nutrient-rich soils
- springs, brooks and other natural water features.





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