



METSO Newsletter

FOREST BIODIVERSITY PROGRAMME FOR SOUTHERN FINLAND (METSO) 2003-2007

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GOOD PROGRESS WITH METSO - ACHIEVEMENTS IN 2004

The implementation of the Forest Biodiversity Programme for Southern Finland METSO progressed well in 2004. In practical pilots projects, the natural values trading continued successfully, and the two others - competitive tendering and cooperation networks - got started and were well received among the forest owners. First contracts were concluded towards the end of 2004.

The monitoring and assessment of the economic, ecological and social impacts of the METSO Programme was started up. According to initial observations, both the reception and impacts of the METSO projects have been positive. The assessment is supported by the Biodiversity Research Programme MOSSE (2003-2006), which in 2004 included 44 projects, 19 of which primarily concern forests. In addition, the research programme Endangered and Data Deficient Forest Species included 17 projects with 1,000,000 euros a year. The total funding for METSO during 2004 amounted to • 9.4 million, and the total budget for 2003-2007 is • 61.7 million. METSO is part of Finland's National Forest Programme 2010.

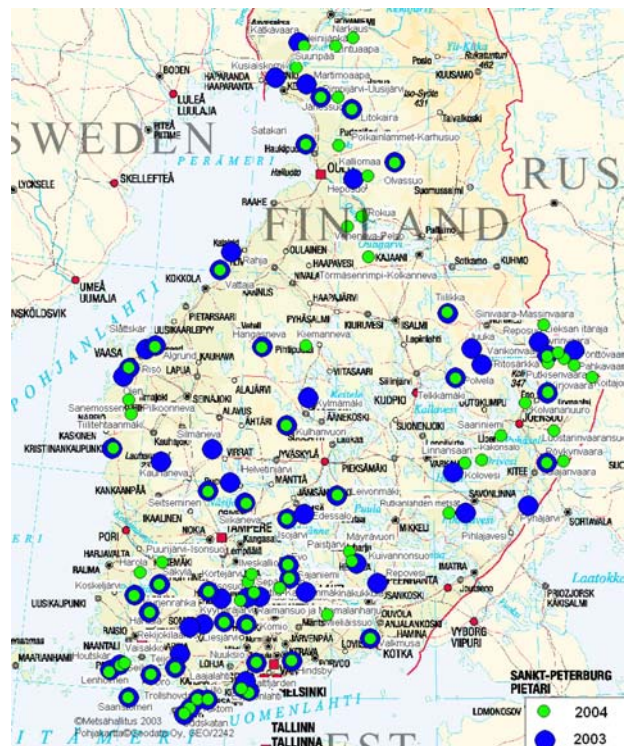
Restoration and management of habitats in nature reserves

The aim of this project is to restore and maintain the nature conservation value and ecological state of existing nature reserves. It is estimated that within the region covered by METSO habitat restoration work is required in about 700 nature reserves, with a total area of 33,000 hectares.

By the end of 2004 Metsähallitus, responsible for state-owned forests in Finland, had restored 6,600 hectares of forests, including 3,370 hectares of dry heathland forest and 3,230 hectares of peatland. So far restoration and natural management measures have been carried out in more than 140 sites in all over Southern Finland (see the map).

In dry heathland forests restoration can involve producing decaying wood in various ways, cutting small clearings within uniform tree stands, allowing trees to decay, the controlled burning of wood to imitate natural forest fires. In peatlands natural hydrological conditions are restored by damming or filling in ditches, and sometimes by removing trees.

Funds have also been allocated to Metsähallitus for the restoration and management of private conservation areas, mainly for the purposes of basic data collection. At the end of 2004 Metsä-



Metsähallitus has so far carried out habitat restoration and management measures in nature reserves at over 140 sites (map on the situation at the end of 2004).

hallitus was managing about 660 hectares of wooded traditional biotopes in the METSO region. Other natural management work, such as habitat management in herb-rich forests and the habitats of the white-backed woodpecker, was undertaken in a total area of about 200 ha.



MARJA KOLSTRÖM

ANU RAUTAINEN

Top: The project group of the *Herb-rich forest network project of Central Karelia* testing models for evaluating stands offered by the landowner for conservation. Below: A training session for forest owners in Suitia, W. Finland, as part of the *MetsäVasu in the Lohja region* network included a visit to a forest with ecologically valuable broad-leaved trees.

NEW CONSERVATION INSTRUMENTS AND PILOT PROJECTS

Natural values trading

Natural values trading was the first new instrument for the protection of biodiversity to be launched under the METSO programme. It is applied as a pilot project in Satakunta region in western Finland. The related contracts are made on the basis of tenders submitted by private landowners for individual sites which meet biological conservation criteria agreed in the METSO Programme.

In 2004 a total of 35 contracts were made with 34 landowners, compared to 38 contracts with 30 landowners in 2003. The average premium for a site was 161 euros/ha/year (170 euros/ha/year in 2003). In 2004 forest owners were more able to submit suitable price tenders for their sites. The area covered by the contracts was 323 hectares

in 2004, compared to 228 hectares in 2003. Most of the contracts concerned heathland forests rich in decaying wood.

The contracts made in 2004 included more natural management work promoting biodiversity than before. The contract periods also varied according to site-specific needs. The maximum period for such contracts was 13 years. The objective for 2005 is to increase the diversity of the sites chosen.

The pilot project on natural values trading has stressed the initiative of the forest owners and down top voluntary approach. The most important output of the pilot has been the positive attitude of forest owners for this conservation scheme.

Competitive tendering

Another new instrument for the conservation of biodiversity is *competitive tendering* aimed at long-term or permanent protection of ecologically valuable sites. The environmental authorities ask landowners to present sites and prices for which they would be willing to offer them for protection. The sites which best meet the METSO conservation criteria are selected for the programme.

Competitive tendering was started in 2004 in eastern Uusimaa, Pohjois-Savo and parts of SW Lapland. In the first year almost 40 tenders were submitted, covering a total area of about 800 hectares. Altogether 9 of these sites, with a total area of 115.5 ha, were either purchased and set up as private conservation areas, or covered by 20-year contracts. The total funding available for these contracts was 500,000 euros. Negotiations with some landowners are still under way. The majority of the landowners were interested in conserving the sites as private nature conservation areas, either permanently or for a certain period. Only five sites were offered to the State for sale.

According to the Government Decision-in-Principle on the METSO Programme, funding for competitive tendering in 2005 should remain at 500,000 euros.

Cooperation networks

Forest biodiversity cooperation networks constitute the third new METSO instrument for conservation. In this pilot project the protection of the biodiversity of forest nature takes place

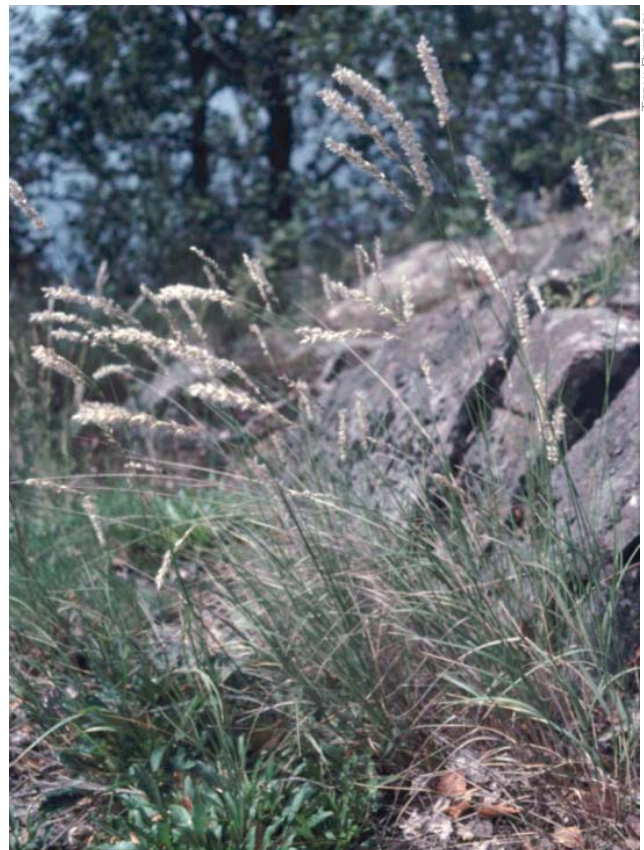


The Baton Blue (*Pseudophilotes baton*), an endangered butterfly species characteristic of open sunlit habitats. Photo from Säköjärvi, Central Finland.

on the basis of local initiatives and voluntary action. Landowners, the local authorities, NGOs and other interest groups all participate in these networks. The objective of the cooperation networks is to create regional networks of small conservation areas, which may share similar features, and which are valuable in terms of their biodiversity while also promoting social and economic sustainability, through opportunities for rural entrepreneurship, employment and nature tourism, for instance.

Some twenty feasible proposals were offered from different regions, and four of these were selected: *Metso Häme*, *MetsäVasu* in the Lohja region, a herb-rich forest network in Central Karelia and *From Sea to Forests* on the Ostrobothnian Coast.

All these projects were launched in 2004. Decisions were made on the application of the conservation biological criteria; various forms of cooperation were developed with different parties; and advice and training was offered to forest owners. In the *Metso Häme* and *From Sea to Forest* projects, the first contracts were already made with landowners in 2004, using the instruments for protecting biodiversity referred to in the Act on the Financing of Sustainable Forestry, natural values trading and environmental sub-



The Hairy Melic (*Melica ciliata*), a plant associated with open sunlit habitats, requires special protective measures such as the removing extra trees, as has been done in the stand in the photo.



The *From Sea to Forest* network project covers a beautiful region of W.Finland. Adder's-tongue Fern (*Ophioglossum vulgatum*) (left) on a shore meadow, an emergent coastline.

sidies. This work is continuing with the aim of creating conservation site networks for each of the project areas during 2005 and 2006.

Metsähallitus revenue from land sales and exchanges

In accordance with the Government Decision-in-Principle on the METSO Programme, Metsähallitus uses revenue from land sales to purchase forest areas which are valuable in terms of biodiversity. A new ten-year financing programme, linked to the competitive tendering schemes described above, was launched in 2005.

The funds reserved for land purchases under the METSO Programme in 2005 total 5 million euros, and about the same annual amount will be available for this purpose over the next few years.

Nature management in commercial forests

According to the Government Decision-in-Principle on the METSO Programme, the shortcomings in the support schemes for natural management in private forests will be corrected as stipulated in the Act on the Financing of Sustainable Forestry, while environmental subsidies will be increased.

In accordance with the proposal of the working group on the Financing Act, the Decree of the

Ministry of Agriculture and Forestry concerning the financing of sustainable forestry was amended concerning environmental support for forestry, so that contract periods are now 10 years instead of the earlier 30 years, with subsidies paid as lump sums in the beginning of the contract period. A memorandum made by the working group was broadly consulted in summer 2004, and the preparations began at the end of the year for the overhaul of the Financing Act.

The special survey of sites under the Forest Act was completed in 2004, allowing more funds to be allocated for environmental support for forestry. In 2004 the Ministry of Agriculture and Forestry allocated 3.7 million euros to the Forestry Centres for natural management, 1.6 million euros more than in 2003. Of the increased funding 84% was used for environmental support for forests.

Metsähallitus started an inventory of special sites and sites bordering on protected areas in State-owned commercially managed forests. This project is being implemented jointly by the forestry and natural heritage services business units of Metsähallitus, and will take two years. The sites to be examined include special sites identified in natural resource planning and landscape ecological planning, sites located close to protected areas, areas transferred from the Ministry of Defence and other ecologically valuable areas. These areas are to be divided into



HANNU VALLAS



JUHA NIEMI



JRMELI PUUKKANEN

coastline at Kalajoki, a seashore meadow near Hanhikivi region, and herb-rich forest with Red Campion, a later stage of the land rise succession on the W. Finnish

areas to be protected or restored, special sites, and commercially managed forests. During 2003 a project plan and instructions for field work were drafted; the area to be covered was defined; and field surveys were started. The total area covered is almost 350,000 hectares, of which about 32,000 hectares have been surveyed in the field. The field surveys were completed in 2004 and the final report was published in spring 2005.

Particularly valuable habitats and prevention of insect and fungus damage

The Act on Amending the Forest Act (552/2004) entered into force on 1 July 2004. The new Section 14c concerning advance information on habitats of special importance was added to the Act. The inventory of particularly important habitats referred to in Section 10 of the Forest Act was completed as required by the Parliament. A working group set up by the Ministry of Agriculture and Forestry prepared a memorandum on the possible revision of provisions issued under Section 10 of the Forest Act.

The reform of the statutes concerning the prevention of insect and fungus damage was supported in 2004 in the research project of the Finnish Forest Research Institute "Dealing with Consequential Damages in Forests", where data to be utilised in revising the statutes was compiled and analysed.

Need for research and surveys

Research on biodiversity accounts for a significant share of METSO funding. There is particularly a need for more funding for research on the ecological, economic and social dimensions of biodiversity. The evaluation of the pilot projects also calls for research and follow-up.

The Forest Biodiversity and Monitoring Programme MOSSE continued throughout 2004. Programme funding in 2004 totalled 2.3 million euros, of which about half was used for the 19 forest projects within the programme. The Ministry of the Environment has allocated about one million euros a year to a 17-project research programme on poorly known and endangered forest species. Four other environmental research projects funded by the Ministry of the Environment also directly relate to the need for information for the METSO Programme.

The Finnish Forest Research Institute continued to develop a monitoring system, and has launched a new related research programme.

Forest Conservation Foundation

A preliminary review of the prospects for a Forest Conservation Foundation was completed on 30 June 2004. The objective was to examine the possibilities to channel citizens' willingness to contribute to the funding for increasing forest biodiversity through a foundation. According to

a working group set up by the Ministry of the Environment to make related preparations, there could be room for such foundation, but there are not yet enough parties who would be willing to donate sufficient initial capital to launch the foundation. Decisions on further work will be made in 2007.

Monitoring of the Action Programme

Progress with the METSO Programme has been monitored since 2004 by the Forest Committee, together with the monitoring group on ecological sustainability. The monitoring of the ecological, social and economic impacts of the measures is founded on the ecological, economic, cultural and social evaluation criteria defined by the METSO Committee, which cover several topics, such as impacts on biodiversity, the cultural significance of forests, conditions for multiple use, and employment effects. The monitoring and evaluation of these impacts is a highly complex task that must be specifically adapted to each project.

The Ministry of Agriculture and Forestry has commissioned the Finnish Forest Research Institute

Metla to conduct a preliminary survey to monitor the economic and social impacts of the METSO Programme; while the Ministry of the Environment has commissioned the Finnish Environment Institute (SYKE) to carry out the same task with regard to ecological impacts. The two institutes will carry out the monitoring and evaluation of the economic and social as well as ecological impacts in close cooperation with each other, as well as with researcher and interest groups in the sector. This work will be done in close conjunction with the monitoring of the National Forest Programme and the evaluation of the National Biodiversity Programme.

The monitoring and evaluation of the projects' impacts is based on the self-evaluation data collected from the METSO projects, interviews, statistics, research results, as well as information and summaries on the sites included in pilot projects (natural values trading, forest biodiversity cooperation networks, competitive tendering). According to the self-evaluation forms returned so far, the METSO Programme has been well received and the expected impacts are positive.

Because many of the impacts of the METSO



TERHI RYTÄRI



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JUHO NIEMELÄ

Top left: Creeping Thyme (*Thymus serpyllum*), which thrives in open, sunlit-habitats such as esker slopes. Many endangered butterflies depend on this plant. Top right: Dyer's Polypore (*Phaeolus schweinitzi*) occurs in old-growth forests. Bottom left: The pine beetle (*Tragosoma depsarium*) is an endangered species associated with undisturbed old-growth forest. Adult beetles live concealed in decayed fallen pines. Bottom right: *Polyporus pseudobetulinus* is extremely rare.



JARI KOSTET

Red-breasted Flycatcher (*Ficedula parva*).

Thrift occurs on the edges of esker forests on the coast and in inland of western Finland. This endangered species lives in traditional biotopes threatened by afforestation. In the area shown in the photo trees have been cleared.

measures will only become evident in the long term, the results, models and scenarios of the MOSSE Programme and other research programmes are highly significant in evaluating the impacts and applicability of the different measures.

A comprehensive evaluation of the ecological, social and economic impacts of the METSO Programme should be completed by the end of 2006 as part of the monitoring of Finland's National Forest Programme. These reports will lay the foundation for decisions on forest protection to be made in 2007.

Revision of the recommendations for forest management

In its Decision-in-Principle on the METSO Programme, the Finnish Government recommended that actors in the forest sector should take forest biodiversity better into account. The forest organisations are now revising again or have already revised their recommendations for the management of commercial forests.

The first revised forest management instructions



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during the METSO Programme were published by Metsähallitus in the new Environmental Guide in summer 2004. This guide takes into account the most recent research information and practical experiences accumulated over the years. After personnel have been trained, the practices defined in the guide will be applied to all new plans for marked stands and forest work sites to be implemented in connection with felling and other work. The guide is highly significant, because it influences the treatment of almost five million hectares of forest.



AHTI KOTISAARI

Researchers from the MOSSE Programme checking insect traps, summer 2004.

Due to its wide application, the new forest treatment methods correspond directly in practice to the natural management of commercial forests, which constitutes one METSO project. This guide will have significant impacts over the years.

The Forestry Development Centre Tapio has started to revise forest management recommendations for private forests together with the Finnish Forest Research Institute and other cent-

ral forest organisations. The revised recommendations should be completed during 2005.

More attention to protecting birds

Three national training sessions were held in May 2004 on how birds can be better protected through the management of commercially managed forests. The training was organized by Bird Life Finland and forestry organisations.

METSO AND INTERNATIONAL AGREEMENTS

The METSO Programme is an integral part of Finland's implementation of various international agreements. METSO makes significant contributions to meeting the objectives for sustainable development set out by 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). Maintaining and enhancing the biological diversity of forests is one of the resolutions of the MCPFE Vienna Conference (April 2003)

METSO IN BRIEF

METSO - the Forest Biodiversity Programme for Southern Finland 2003-2007 - is part of Finland's National Forest Programme 2010. METSO contains 17 sub-programmes, including pilot projects designed to test innovative voluntary means for landowners to promote biodiversity in the forests of Southern Finland. The METSO Programme aims to design and test cost-effective measures to acquire the most ecologically valuable forest sites in Southern Finland for temporary conservation or permanent protection.

Forestry is typically practiced on a small scale in Southern Finland, where average cutting areas are only 1-2 ha. METSO is piloting new ways to increase biodiversity under such conditions, complementing the work done through several other programmes since the 1997 Forest Act.

The METSO Programme was carefully prepared through processes involving many stakeholders such as forest industry associations, forest owners' organisations, the Finnish Association for Nature Conservation and WWF Finland, as well as the two ministries responsible for the Programme, so as to complement and supplement Finland's National Forest Programme 2010. Like the rest of the National Forest Programme, METSO is backed up by intensive research and survey work and will be evaluated.

METSO Programme: www.mmm.fi/metso or www.ymparisto.fi/metso



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