



# METSO Newsletter

THE FOREST BIODIVERSITY PROGRAMME FOR SOUTHERN FINLAND (METSO) 2003-2007  
Publishers: Finnish Ministry of Agriculture and Forestry; Finnish Ministry of the Environment

No 4/2007

November 2007

## METSO'S SUCCESSOR BEGINNING TO TAKE SHAPE - MORE FEEDBACK FROM STAKEHOLDERS

The working group responsible for the preparation of a new programme for the years 2008-2016, to build on the successes of the pilot phase of the METSO Forest Biodiversity Programme for Southern Finland (2002-2007), presented its vision of the new programme at a special seminar organised for stakeholders on 7th November 2007. The working group believes that biodiversity can be safeguarded in the forests of Southern Finland largely by applying the means tried and tested during the programme's first phase. These measures include actions to improve Finland's network of protected areas, as well as measures to boost biodiversity in commercially managed forests.

The working group's vision emphasises that METSO's innovative conservation tools, based on the voluntary participation of forest-owners, are here to stay.

### A unified set of measures under a single umbrella

The working group believes that all the conservation tools based on measures taken voluntarily by land-owners could be in future treated together under the description 'natural values trading'. These tools will function variously in different regions on a supply and demand basis, according to regional ecological needs. Natural values trading will be conducted by the environmental and forestry authorities together with local forest management associations.

Funding would be provided according to principles set out in the Act on the Financing of Sustainable Forestry and the Nature Conservation Act. Measures funded under the Nature Conservation Act, including the establishment of privately owned nature reserves, voluntary land exchanges and time-specific conservation agreements, would aim to preserve valuable sites permanently or in the longer term. In contrast, measures funded under the Act on Sustainable Forestry, including environmental subsidies, natural values trading deals, and forest habitat management schemes, would primarily aim to safeguard natural values which are subject to ecological changes, which require active management, or which need to be preserved in areas where commercial forestry is also practised.



ANTTI KOTISAARI

Stakeholders had many constructive ideas to share with the working group preparing the new programme.

### More comprehensive site selection criteria

Sites should in future be selected for permanent or temporary conservation on the basis of a more comprehensive set of conservation biological criteria. New site types should include, e.g. small water features, pine mires, occurrences of threatened species, and sites where valuable natural features are beginning to develop or can be actively created. In commercially managed forests one objective would be promote the interconnectivity of ecological sites, through measures such as controlled burning and leaving more than recommended mature trees to decay in final cutting.

The expanded criteria could also be applied to prioritise the marketing of natural values trading to

landowners in areas of particular significance for biodiversity.

### **New opportunities for natural management in private forests**

Recommendations on natural management measures for commercially managed forests were renewed last year to bring them into line with the aims of METSO. New ecologically effective natural management measures have now been proposed for METSO II, with forest-owners to be compensated for any additional expenses they incur.

In commercially managed forests such measures aim to safeguard and improve natural values in habitats of importance for biodiversity, such as the surroundings of small water features, herb-rich groves and spruce mires. Another goal is to increase the abundance of the structural features of forests that benefit biodiversity. Nature management measures may in future be applied in additional valuable habitat types such as nutrient-poor heathland forests.

### **Making the most of existing protected areas**

It is vital to enhance the functioning, effectiveness and representativeness of the existing network of protected areas in Finland's State-owned lands. This can be done by continuing habitat restoration and management work, and by adjusting the delineation of areas according to ecological criteria. It is important to build up the related knowledge base, especially by compiling more data on species' occurrences in protected areas. Other ways to improve

the national protected areas network also remain under consideration.

In State-owned forests commercially managed by Metsähallitus, the emphasis will be on actions that promote biodiversity values and on measures to safeguard a wider range of habitats. Many projects may also involve related research into the costs and benefits of the measures involved.

### **Fine-tuning of conservation measures**

Conservation measures will be further developed on the basis of research and monitoring results. It is vital to have comprehensive data to facilitate efforts to deal with the biodiversity impacts of both climate change itself, and the measures taken to mitigate global warming.

Other proposals still under discussion include measures to improve advisory services for forest-owners, professional training, and publicity work related to forest biodiversity and its conservation.

### **Close links to the new National Forest Programme**

The forthcoming successor to the METSO Forest Biodiversity Programme for Southern Finland aims to halt the decline of forest species and habitats and produce a stable and favourable trend in forest biodiversity by 2016. METSO II and Finland's National Forest Programme (NFP) for 2015 have been drawn up in tandem, to complement each other. The successor to METSO will focus on biodiversity in all kinds of forests, whereas the new NFP will particularly strive to promote  
(cont. on the back cover)

## **SURVEY OF THE STATUSES OF BIOTOPES APPROACHING COMPLETION**

The first major evaluation of the threatened statuses of biotopes in Finland is due to be completed by the end of 2007, and the survey results will be compiled and published early in 2008. Work on the evaluation commenced in 2005 on the basis of a preliminary report prepared in 2003.

Forest and mire biotopes have particularly been studied during this project, and it is hoped that its findings will soon be available for use in planning the successor to the METSO Programme.

The extent of the relevant data varies for different types of biotope, but for forests and mires such information is widely available. Useful data sources include Finland's major national forest inventories, similar surveys carried out specifically for the new study, Metsähallitus's biotope surveys, forestry centres' forestry planning data, the

findings of the METE surveys of forest habitats of special importance, inventory data on biotopes covered by the Nature Conservation Act, and the Natura 2000 database. Other data has been newly compiled through GIS analyses and expert evaluations.

Some 90 researchers from many institutes have been involved in the evaluation project, including experts on various biotopes. The project has been coordinated by the Finnish Environment Institute.

In addition to the threatened status evaluations, the project will also produce a new scheme for classifying and describing biotopes, and a set of general maps of their distributions. The new descriptions will be used in educational and training materials related to forestry and ecology.



Unique vegetation communities form in areas where rocks are rich in ultra-alkali minerals such as serpentine (the dark rock in the centre of the photo).

## NEW FINDINGS ON POORLY KNOWN FOREST SPECIES

The results of the Research programme of Deficiently Known and Threatened Forest Species 2003-2007 (PUTTE) are currently being compiled, and the programme's concluding seminar will be held in January 2008. The survey has revealed the presence of more than 1,400 species never previously recorded in Finland, including 182 species completely new to science. These "new" species are unlikely to be invasive species, as they have probably been present in Finland's forests for a long time, but never observed by experts.

The PUTTE programme aims to expand the knowledge base for future evaluations of threatened statuses, and its data has been collected in close cooperation with the experts responsible for such evaluations. The new data will enable the next "Red List" of Finland's rare and threatened species, due for publication in 2010, to encompass previously unevaluated species groups including fungus gnats (*Mycetophilidae*), thrips (*Thysanoptera*), black flies (*Simuliidae*) and dolichopod flies. More species in other groups such as spiders and gilled mushrooms can also now be evaluated thanks to the new data on their distribution and behaviour. Many species whose statuses were previously unknown are now known to have thriving

populations, while the factors endangering many threatened species are now better understood.

One aim of the programme has been to produce Finnish-language identification guides covering new species groups. Such publications encourage amateur naturalists to collect more information on these creatures. New guides so far produced through the programmes feature polypores, fungi, moth caterpillars and hoverflies. Forthcoming publications will cover beetles, true bugs, aphids, coleophora moths and lichens.

The programme's closing seminar will focus on many fascinating species groups and include an overall review of findings. The whole programme will be evaluated by international experts.

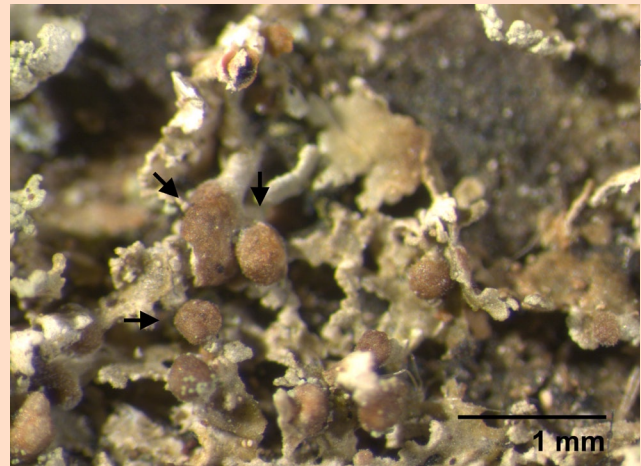
With its annual funding of 1.6 million euros over the years 2003-2007, PUTTE represents Finland's largest ever investment in species research. The programme has successfully activated professional scientists and amateurs who have together produced a wealth of new material on species' distributions, abundance, behaviour and habitat requirements. For more information see the PUTTE programme's website at <http://www.environment.fi/default.asp?node=20934&lan=en>.

## Witch's butter in the woods - a new species for Finland

In July, lichenologist Heini **Hyvärinen** and METSO coordinator Kimmo **Syrjänen** were collecting samples of powderhorn lichen (*Cladonia coniocraea*) in broad-leaved woodland in Western Finland when they noticed the minuscule brown fruit bodies of an unfamiliar fungus, less than half a millimeter in diameter.

Emilia **Pippola**, a fungi expert from the PUTTE research programme, eventually identified the strange growths as *Tremella cladoniae*, a species of "witch's butter" fungus never previously recorded in Finland. Such tiny fungi are easily overlooked, and knowledge of their distribution is patchy, although this species is known in Sweden, Denmark and other parts of Europe.

A total of 16 *Tremella* fungus species are now known to live in Finland - although seven of these were first recorded here only during the PUTTE Programme. The last Finnish Red List was only able to assess four *Tremella* species, but the next evaluation should be



These witch's butter fungi (fruit bodies indicated by arrows) are the first of their species ever recorded in Finland

able to rate the status of about ten species, thanks to the new data from PUTTE. All of Finland's better known *Tremella* species are considered to have viable populations.

(cont. from page 2)

water protection measures in commercially managed forests. The two programmes will be submitted to the Government simultaneously for approval.

### Hectares only an indicator - biodiversity the real goal

In her opening speech for the seminar, Sirkka **Hautojärvi** stressed that the objectives of conservation and commercial forestry do not necessarily conflict: "We also need to consider productivity in conservation,

since resources are limited. Our tools must additionally be flexible, since situations can change." Hautojärvi rejects objectives for percentages of protected area coverage as inefficient. "The number hectares of areas are more an indicator than an objective in itself. Biodiversity is the objective."

**For additional information on METSO:** Mr. Mikko Kuusinen, Environmental Counsellor, Ministry of the Environment: Tel. +358 20 490 7113 or +358 50 345 0582, mikko.kuusinen@ymparisto.fi.  
Ms. Marjukka Mähönen, Senior Advisor, Ministry of Agriculture and Forestry: Tel. +358 9 160 54626, marjukka.mahonen@mmm.fi.

### METSO AND FINLAND'S INTERNATIONAL AGREEMENTS

The METSO Programme is an integral part of Finland's implementation of various international agreements. METSO makes significant contributions towards the sustainable development objectives 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 also one of the key resolutions agreed 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 practised on a small scale in Southern Finland, where average cutting areas are only 1-2 ha. METSO piloted 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 2010, METSO is backed up by intensive research and evaluation work.

[www.mmm.fi/metso/international](http://www.mmm.fi/metso/international)

