



ZONATION A SPECIALIST'S TOOL FOR MAKING BETTER CONSERVATION DECISIONS



JUTTA KUURE / IMAGE BANK OF THE ENVIRONMENTAL ADMINISTRATION



Zonation analysis is a new tool designed for specialists working within Finland's METSO forest biodiversity programme. Zonation facilitates the choice of the optimal conservation measure for each forest owner wishing to participate in the programme by offering their forests for conservation on a voluntary basis.

Finland's METSO Forest Biodiversity Programme aims to halt the ongoing decline in forest species and habitats, and establish favourable trends in forest biodiversity.

The authorities implementing the METSO programme will soon be able to apply a new tool – a Zonation programme

developed by the University of Helsinki. Zonation provides the experts processing conservation proposals with additional information on the conservation value of each area – thus helping them to choose areas that are most suitable for conservation with a view to the ecological objectives of the METSO programme.

Zonation analyses will also give landowners more varied information on the natural values of their forests. Zonation has been widely applied internationally in conservation planning. In Finland, such analyses have been specifically tested for the METSO programme over the last few years.

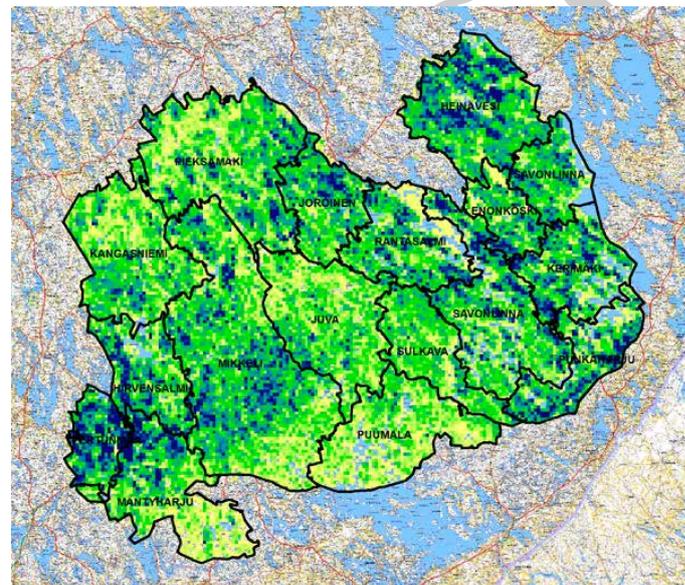
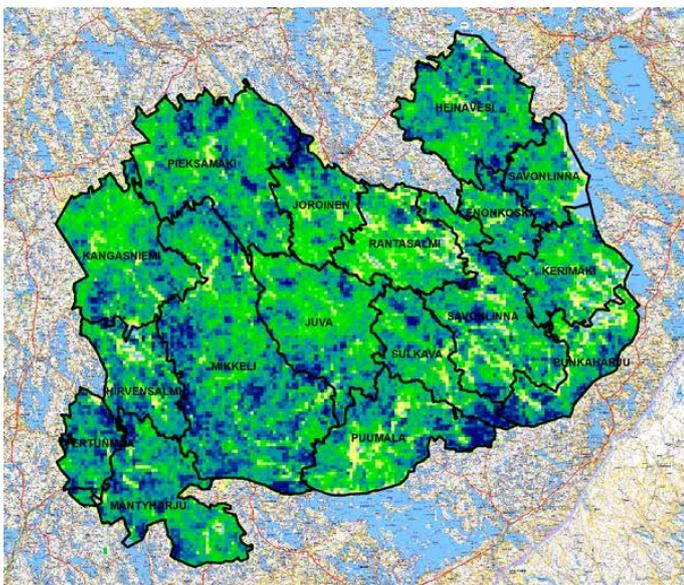
Analyses based on spatial data

The Zonation programme analyses spatial data that is constantly collected from natural habitats and stored in various geographic information systems. Most of this data concerns the occurrence of natural features

including species, biotopes and landforms. The Zonation programme analyses this data according to ecological criteria, and enables the simultaneous use of several nationwide data sets that would otherwise be difficult to apply in such a detailed way. Only the highest quality data is used in Zonation analyses.

Zonation does not produce a single answer to the question "Which areas should be protected?" Rather, it provides decision-makers with a set of options, helping them to choose areas that best suit local conservation targets in different parts of the country.





SOUTHERN SAVO METSÄKESKUS

1. Conservation values of forest habitats in the Southern Savo region.

2. Conservation values of herb-rich forests in the Southern Savo region.

The darker the colour, the higher the conservation value of an area. The map represents the data at a resolution of one square kilometre.

Benefits for landowners

Due to Zonation, more landowners will have a chance to benefit financially when they voluntarily agree to protect their forests under the METSO programme. Because Zonation also detects ecological connectivity between separate areas, analysis may also reveal the value of areas that would not otherwise qualify for the programme. Applying Zonation can also benefit landowners by speeding up the processing of proposals.

Ecological connectivity is important for safeguarding biodiversity, because it improves species' ability to move from one area of suitable habitat to another, and thus reduces their risk of local extinction. An emphasis on connectivity does not, however,

decrease the importance of other ecological criteria set for METSO. For landowners it is always worth proposing forests that are ecologically valuable in themselves for conservation under METSO.

Development work continuing

Research and development work on the utilization of Zonation in the METSO programme started in 2010. This work is still continuing in close collaboration with local conservation and forestry authorities and other stakeholders, using funding provided by the Ministry of the Environment and the Ministry of Agriculture and Forestry.

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