

Why MOTH?

Nature conservation in the EU is largely governed by the Habitats Directive, whose objectives are promoting the maintenance of biodiversity by conserving natural habitats that are rare or decreasing. In Sweden, there are about 90 such habitats. Some of them, such as the taiga, cover vast areas. Others are very rare.

The Habitats Directive prescribes that member states shall ensure favourable conservation status of specified habitats. Every six years, each member state must present a report on how this work is proceeding.

In Sweden, the occurrence and status of coniferous forests are well known, since they have been surveyed for a long time. Many less common habitats are, however, very poorly known. This concerns for example habitats connected to sea shores, grasslands, rocky slopes and deciduous forests.

New methods are needed for the survey of sparsely occurring habitats. A project directed towards the development of such methods has been initiated by the Department of Forest Resource Management at the Swedish University of Agricultural Sciences in Umeå. It is called *Demonstration of an integrated North-European system for monitoring terrestrial habitats* (MOTH). The project is run 2010–2014 and is jointly funded by EU's financial instrument LIFE+, and the Swedish Environmental Protection Agency.



MOTH

Forest Resource Management, SLU
S-901 83 Umeå, Sweden
Program manager: Hans Gardfjell
+46-70-620 17 06

MOTH

towards a better knowledge
of sparse habitats

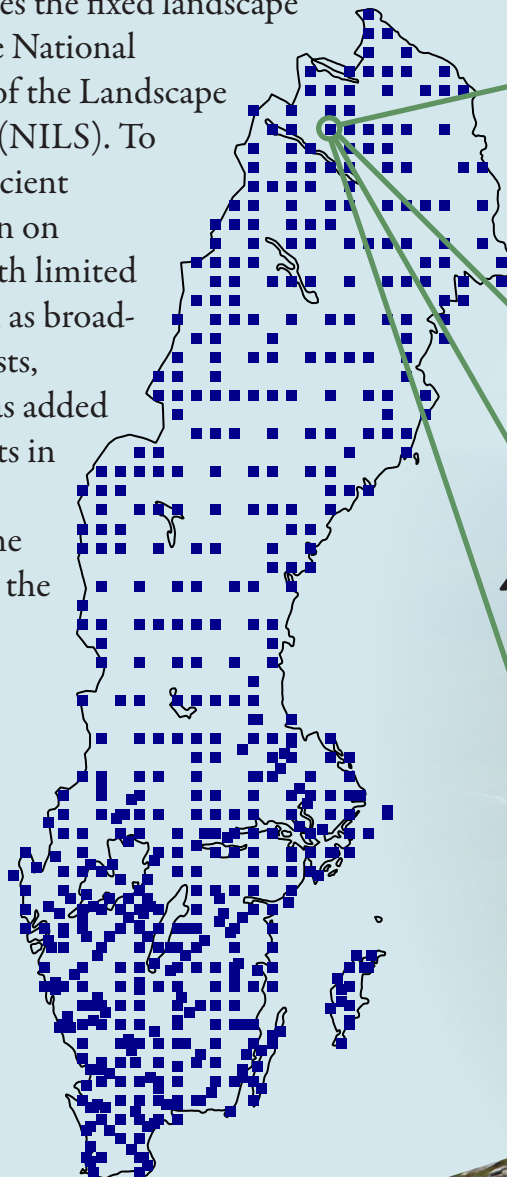
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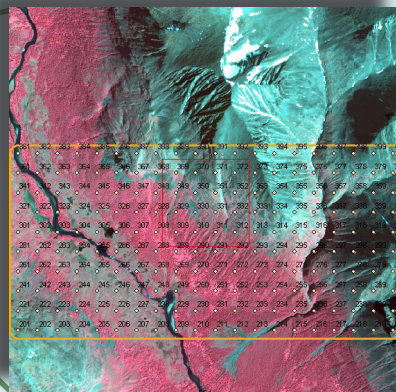
Combining remote sensing with a close look



1 MOTH is based on 5x5 km sample units distributed all over Sweden. MOTH uses the fixed landscape units of the National Inventory of the Landscape in Sweden (NILS). To gather sufficient information on habitats with limited range, such as broad-leaved forests, MOTH has added sample units in southern Sweden. The map shows the 498 units analyzed 2010–2013.



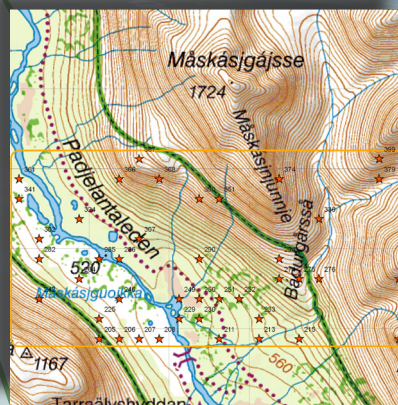
2 For each sample unit, a grid of 200 points is placed in a regular pattern over an aerial photo.



3 Photo interpreters analyze each point and make a rough classification into habitat categories.



4 Points likely to present interesting habitat types are selected for field survey.



5 Field workers navigate to the selected points with gps. Habitat classes and conservation status are closely assessed.

