

Workshop 2.
Poster presentation / abstract

**MONITORING OF THREATENED VASCULAR PLANTS IN ESTONIA AND FINLAND –
METHODS AND EXPERIENCES**

Terhi Rytteri¹, Ülle Kukk², Tiiu Kull³, Anne Jäkäläniemi⁴ & Mari Reitalu⁵

¹Finnish Environment Institute, P.O.Box 140, FI-00251 Helsinki

²Environmental Protection Institute, Akadeemia 4, EE51003 Tartu

³Estonian Agricultural University, Institute of Zoology and Botany, Riia 181, EE2400 Tartu

⁴Metsähallitus – Forest and Park Service, Torangintaival 2, FI-93600 Kuusamo

⁵Viidumäe Nature Reserve, Lümada, EE3335 Saaremaa

Contacts: terhi.ryttari@environment.fi

Population monitoring is an irreplaceable tool in assessing the need for conservation and management measures to help threatened species, and in evaluating the success of such measures. The monitoring of threatened species has recently become closely connected with national commitments under the EU Habitats Directive, and the concept of 'favourable conservation status'. The objectives of such monitoring may thus vary considerably. The geographical scale of monitoring may also vary, from site level to national or even international level. Monitoring work can consume a lot of resources, so it is extremely important that monitoring enables the most crucial questions to be answered.

In our work we examined many important practical issues related to the population monitoring of threatened vascular plants. Eight example case-studies were studied in detail, so as to assess which aspects of the monitoring methods used in Finland and Estonia are most favourable, and in order to recommend how monitoring can be improved practically in the future. The issues discussed in our work include the importance of understanding the biology of the target species; the significance of the timing of population monitoring; the usefulness of permanently marking plots and individuals; the application of size/stage classifications; the usefulness of measuring various morphological characteristics; the interpretation of short-term and long-term results; and how environmental parameters should be recorded.

Keywords:

vascular plants, threatened plants, population biology, nature conservation, monitoring, directive 92/43/EEC, favourable conservation status, Finland, Estonia, *Agrimonia pilosa*, *Ligularia sibirica*, *Cypripedium calceolus*, *Pulsatilla patens*, *Epipactis atrorubens*, *Epipactis palustris*, *Neotenia ustulata*, *Rhinanthus osiliensis*

Reference:

Rytteri, T., Kukk, Ü., Kull, T., Jäkäläniemi, A. & Reitalu, M. (eds.) 2003: Monitoring of threatened vascular plants in Estonia and Finland – methods and experiences. – The Finnish Environment 659: 1-122. ISBN 952-11-1544-0, ISSN 1238-7312