



Forest Condition Reports 2010

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Mues, Oliver Granke, Susanne Iost, Georg Becher
Han van Dobben, Gert J. Reinds, Wim de Vries

Preface (German Minister - to be confirmed)

1. Introduction

2. Defoliation:

Some deterioration in forest condition and large differences between tree species (V. Mues, O. Granke)

3. Deposition:

Sulphur deposition is clearly decreasing. Further nitrogen emission reductions are needed (O. Granke, V. Mues)

4. Soil Solution

Soil acidification remains a threat to forest vegetation across Europe (S. Iost)

5. Ground vegetation

Nitrogen deposition alters plant species composition (H. van Dobben, G.J. Reinds, W. de Vries)

Comparison of EMEP modelled deposition and measured deposition
from ICP Forests Level II (Georg Becher, Martin Lorenz)

Critical loades, exceedances of critical loads, dynamic modelling and
modelling of vegetation effects
(H.D. Nagel, ICP Integrated Monitoring)

UNECE Summary – formal adoption here

Technical Report – authors' report

Executive Report (glossy brochure) – authors' report

- ⇒ Represent findings of the Programme, need for commenting grateful for comments! General and concerning contents, here in the meeting, editorial comments this evening
- ⇒ Recalculation of defoliation
- ⇒ No possibility for commentig prior to the meeting for Executive Report, we will circulate the final version prior to print

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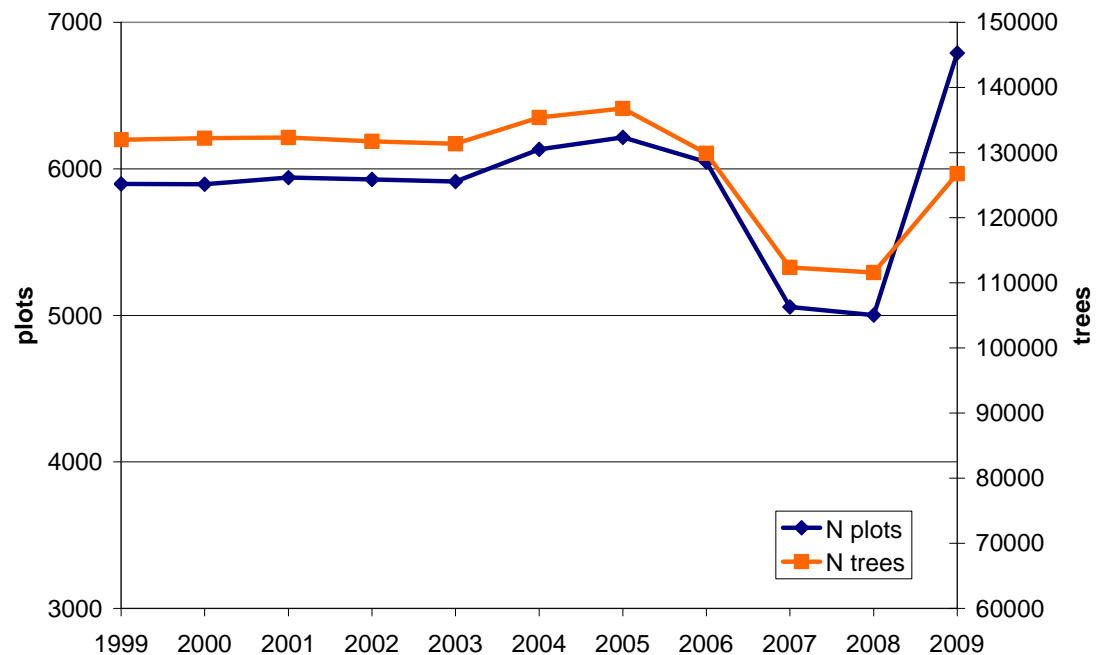
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Defoliation

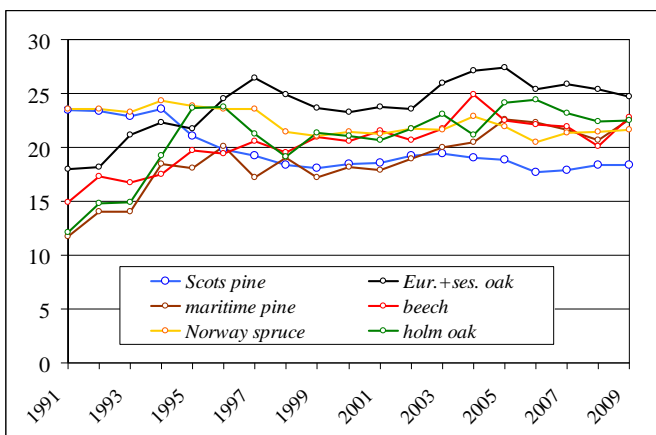
Defoliation

New implementation of online data submission – success but delay

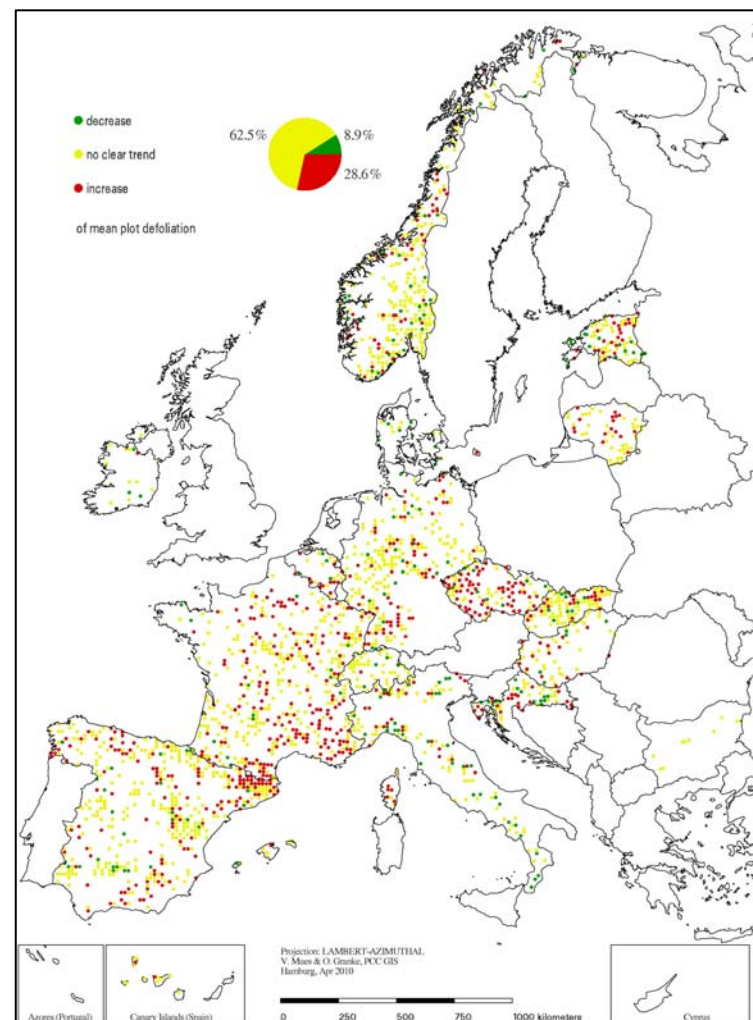
Number of plots increased



No forest type classification: approx. 50% of plots unclassified



Mean defoliation for the most frequent tree species and for the total of all tree species



Plot wise development of defoliation for all tree species, 1998-2009

Some deterioration in forest condition and large differences between tree species

- On two thirds of the plots there were no significant changes in tree crown condition over the last ten years. However, an increase in defoliation prevailed on the remaining observation points.
- Out of 127 764 observed trees one fifth was rated as damaged or dead in 2009.
- Trends differ between main tree species. European and sessile oak were the most frequently damaged tree species, but showed some recuperation during the last five years. In general, Norway spruce and Scots pine health status improved over the last 18 years. For common beech, holm oak and maritime pine mean defoliation increased.