

Research seminar

Carbon budget of Finnish forests 1920 – 2000

Date and venue

March 23, 2004, Tieteiden talo (Kirkkokatu 6), Hall 104 (Ground floor), Helsinki, Finland

Background

Reliable estimates biomass, litter and soil carbon are needed both to understand the effect of forests on atmospheric carbon dioxide and to fulfill the reporting requirements of international agreements. Forest inventories are among the few sources of information for such estimates. Inventory data must, however, be complemented with other data and modelling to quantify the whole carbon budget of forests.

This seminar deals with the integration of forest inventory data with other data and modelling to obtain estimates of the whole carbon budget of forests. The seminar is based on results of a three-year research project and perspectives by scientists from outside the project. The nationwide case study to be presented gives insight into factors that affected the carbon budget of Finnish forests in the 20th century.

Program

Carbon budget of Finnish forests from 1920 to 2000

9.00 – 9.15 **Opening** by *Ilkka Savolainen*, VTT Technical Research Centre of Finland

9.15 – 10.00 **Carbon budget of Finnish forests from 1920 to 2000 – an example of integrating forest inventory data with other data and modelling** by *Jari Liski*, EFI and *Aleksi Lehtonen*, Metla

Components of the carbon budget – obtaining regional estimates

10.00 – 10.30 **Biomass** by *Raisa Mäkipää*, Metla

10.30 – 11.00 Coffee break

11.00 – 11.30 **Litter production** by *Petteri Muukkonen*, Metla

11.30 – 12.00 **Soil carbon** by *Taru Palosuo*, EFI

Reliability of the results

12.00 – 12.20 **Reliability of the estimated 80-year carbon budget of Finnish forests** by *Raisa Mäkipää* and *Mikko Peltoniemi*, Metla

12.20 – 12.40 **Soil carbon accumulation along stand age** by *Mikko Peltoniemi*, Metla

12.40 – 13.00 **Carbon fluxes – calculated estimates compared to stand-scale measurements** by *Thies Eggers*, EFI

Perspectives

14.00 – 14.45 **Estimation of biomass and litter production: a functional-structural perspective** by *Annikki Mäkelä*, University of Helsinki

14.45 – 15.15 Coffee break

15.15 – 16.00 **Evaluating and testing models of terrestrial biogeochemistry: the role of temperature in controlling decomposition** by *Ingrid C. Burke*, Colorado State University, USA

16.00 – 16.45 **Applicability of the developed Integrated method in other countries** by *Mats Olsson*, Swedish University of Agricultural Sciences, Uppsala, Sweden

16.45 – 17.00 **Closing**

Registration

Please inform about your attendance by sending e-mail to margit.kuronen@metla.fi on March 16 the latest.

Further information

www.efi.fi/projects/integrated

Organizers

Research project “Integrated method to estimate the carbon budget of forests” of the European Forest Institute (EFI) and the Finnish Forest Research Institute (Metla); the project is a part of the research programme “Sustainable Use of Natural Resources (SUNARE)” of the Academy of Finland. Co-organized by the Finnish Society of Forest Sciences.

Welcome!