

# Workshop on Development of Models and Forest Soil Surveys for Monitoring of Soil Carbon, April 5-9, 2006

## Wednesday, April 5

- 19.00-21.00 Arrivals and registration  
Welcome-reception  
Poster session (Panu-cabinet at the hotel)
- (21.00-21.45 Business meeting of the scientific advisory board)

## Thursday, April 6

Hotel breakfast served from 07.00 -

Workshop in the auditorium of the Heritage Centre Ukko

### **Session I National soil surveys in carbon monitoring - possibilities to improve current methodologies**

Chair: Raisa Mäkipää

- 09.00-09.40 *Keynote: prof. Mats Olsson (SLU, Sweden)*  
*National soil surveys in soil carbon monitoring*
- 09.40-10.00 Commentary by Esther Thuerig (5 min) & discussion (15 min)
- 10.00-10.30 Perry, C.H. (USDA Forest Service, North Central Research Station)  
Methodologies for estimating forest soil carbon stocks using annual forest inventory data
- 10.30-11.00 Coffee break

### **Session II Models in estimation of decomposition and soil carbon budget**

Chair: Pete Smith

- 11.00-11.40 *Keynote: Dr. Jari Liski (Finnish Environment Institute, Finland)*  
*Models in estimation of decomposition and soil carbon budget*
- 11.40-12.00 Commentary by Steve Ogle (5 min) & discussion (15 min)
- 12.00-12.30 Faubert Patrick et al. (EFI) Effect of the model choice for simulating soil carbon stocks and stock changes: comparison of four soil models
- 12.30-13.30 Lunch
- 13.40-15.00 Outdoor hiking and campfire coffee

### **Session II Models in estimation of decomposition and soil carbon budget (cont.)**

Chair: Aleksu Lehtonen

- 15.00-15.30 Komarov, A. (Russian Academy of Sciences) Uncertainties in the model of soil organic matter pools dynamics
- 15.30-16.00 Wutzler, T. (Max Planck Institute for Biogeochemistry) Soil Carbon Model Parameterization and the Equilibrium Assumption
- 16.00-16.30 Leifeld, J. et al. (Swiss Federal Research Station for Agroecology and Agriculture) Validation of modelled soil organic carbon pools by DRIFT-PLS

( Session II to be continued on Saturday)

16.30-17.00	Break for a fruit, juice and coffee
<b>Session I</b>	<b>National soil surveys in carbon monitoring - possibilities to improve current methodologies (cont.)</b>
	Chair: Mats Olsson
17.00-17.30	Zhiyanski, M. et al. (Bulgarian Academy of Science) Monitoring of organic carbon stocks in forest soils in Southwest Bulgaria
17.30-18.00	Somogyi, Z. et al. (Forest Research Institute of Lower Saxony) Detecting C stock changes in soils of afforested areas in Hungary
18.15-19.00	Sledslide or sightseeing 2 saunas reserved from 18.30-20.00
20.00 -	Dinner

## Friday, April 7

Hotel breakfast served from 07.00 -

<b>Session III</b>	<b>Combining models and soil surveys - advances in development of soil carbon monitoring programmes</b>
	Chair: Jari Liski
09.00-09.40	<i>Keynote</i> Dr. Stephen Ogle (Colorado State University, USA) <i>Monitoring Soil C Stocks Using a Simulation Model-Based Approach - US Agricultural Lands as an Example</i>
09.40-10.00	Commentary by Mats Olsson (5 min) & discussion (15 min)
10.00-10.30	Raisa Mäkipää (Finnish Forest Research Institute) Soil carbon modelling applied for nation-wide forest carbon inventory
10.30-11.00	Coffee
	Chair: Zoltan Somogyi
11.00-11.30	Chertov, O. et al. (St. Petersburg State University) On methods of regional and local soil organic matter pools evaluation for soil monitoring in the forests of European Russia
11.30-12.00	Berg, B. et al. (University of Helsinki) Carbon sequestration rates in Nordic forest soils - some results from three approaches
12.00-12.30	Maraseni, Tek N. et al. (University of Southern Queensland) Comparing and predicting soil carbon quantities under different land use systems on the Red Ferrosol soils of Southern Queensland
12.30-13.40	Lunch

<b>Modelling party</b>	Chair: Pete Smith
13.40-14.00	<i>Opening of the modelling party</i> by Mikko Peltoniemi and Esther Thuerig
14.00-16.00	<i>Invited presentations and discussion session</i> Taru Palosuo: Yasso Oleg Chertov / Alexander Komarov: ROMUL Annmieke Gärdenäs: SOILN Pete Smith: RothC Stephen Ogle: Century
16.00-17.00	Outdoor hiking and coffee at the hotel
17.00-18.30	<b>poster session</b> (Panu-cabinet at the hotel)
20.00 - 22.00	Conference Dinner

## Saturday, April 8

	Hotel breakfast served from 07.00 -
<b>Session III</b>	<b>Combining models and soil surveys - advances in development of soil carbon monitoring programmes</b> Chair: Esther Thuerig
09.00-09.40	<i>Keynote:</i> prof. Pete Smith (University of Aberdeen, UK) <i>Combining Soil and Forest Models with Spatial Data Sets to Assess Climate Impacts on European Forest Soils</i>
09.40-10.00	Commentary by Bjorn Berg (5 min) & discussion (15 min)
10.00-10.30	Mikko Peltoniemi et al. (Finnish Forest Research Institute) Model stratified sampling for soil carbon stock changes
10.30-11.00	Coffee
<b>Session II</b>	<b>Models in estimation of decomposition and soil carbon budget (cont.)</b> Chair: Mikko Peltoniemi
11.00-11.30	Gärdenäs, A. et al. (SLU) Modelling soil carbon sequestration of forest soils for different nitrogen fertilization and deposition levels
11.30-12.00	Mikhailov, A. et al. (Russian Academy of Sciences) Forest soil dynamics at different silvicultural regimes: simulation modelling
12.00-12.30	Summary of the modelling party

12.40-16.00 Departure to Stone Center, Lunch at Stone Center 13.15 - 14.00, and afternoon excursion (geology, stones)

ca 17.00- Departure for a post-conference excursion (dinner and overnight in a small island). There will be two departures from the island (on Sunday, the 9th). First will be early in the morning for those who take the 12.45 flight or earlier and the other later for those who are not in such a hurry (maybe around mid-day).

or Outdoor activities (skiing or snowshoes) from the hotel Koli, sauna and dinner available for those who stay at the hotel

### **Sunday, April 9**

07.00 - Breakfast and departures