PROGRAMME

Monday 5th August 2002

0930-1600 hrs  Workshop
               Cedar Room

1830-2030  Registration & Icebreaker (sponsored by ESRI/ERDAS)
            James Watt Centre 1

Tuesday 6th August 2002

0830-0915 hrs  Registration and coffee

1st Plenary Session
Main Auditorium

0915-0920  Welcome
Steve Smith, UK

0920-0945  Formal Opening
David Bills, UK / Hakan Wirten, Sweden

0945-1000  Keynote: The Use Of Remote Sensing For Operational Forestry:
The Truth Is Out There
Juan Suarez, UK

1000-1030  Keynote: EU LIFE-Environment and ForestSAFE: Demonstration of use
of satellite images, estimations and www in forestry to protect nature
and prevent environmental accidents
Erik Sandstrom / Lars Bjork, Sweden

1030-1100  Keynote: Implementation of Remote Sensing for Natural Resource
Applications in the Forest Service
Tom Bobbe, USA

1100-1130  Coffee

2nd Plenary Session
Main Auditorium

1130-1200  Keynote: Earth Observation Trends & Opportunities
Ian Downey, UK

1200-1230  Keynote: The Development of More Efficient Tools For The 21st Century
Forest Inventory Using Satellite data
Erkki Tomppo, Finland
1230-1300  
**Keynote: Roles For Aerial Photography in Woodland Research, Management and Planning**  
David Miller, UK

1300-1400  
**Lunch**

**Exhibitors session**  
Main Auditorium

1400-1540  
Each presentation lasts for 10 minutes - 10 exhibitors

1540-1600  
**Coffee**

3 Parallel Sessions.

1600-1740 hrs  
Each presentation lasts for 15 minutes with 5 minutes of question time.

**Forest Inventory 1: Estimating Timber Volume and Other Stand Parameters (1)**  
Main Auditorium

FI1.1  
**Data acquisition for forest planning using airborne scanning laser**  
Erik Naesset, Norway

FI1.2  
**A method for forest stem volume estimation**  
Laura Sirro, Finland

FI1.3  
**Polarmetric SAR interferometry in Glen Affric - Final Results**  
Iain H Woodhouse, UK

FI1.4  
**Above ground forest biomass estimation using fully polarimetric/interferometric radar data**  
T. Mette, Germany

FI1.5  
**Estimating timber volume using forest canopy density mapper**  
Kamaruzaman Jusoff, Malaysia

**New Technologies 1**  
Carnegie Room (B)

NT1.1  
**Mobile GIS support for remote sensing data interpretation**  
Karel Charvat, Czech Republic

NT1.2  
**Remote sensing techniques**  
Theresa Braniff, UK

NT1.3  
**Application of future TerraSAR data for improvement of forest resource assessments**  
Stefan Leyk, Switzerland

NT1.4  
**Combined estimation of forest parameters from high- and medium resolution satellite imagery and forest inventory data**  
Ole Hagner, Sweden
**Siberia Project**  
Carnegie Room (A)

**SP1**  
Sensor systems and data products in SIBERIA-11 - a Multi-Sensor approach for full greenhouse gas accounting in Siberia  
Soren Hese, Germany

**SP2**  
Fire scar detection using SPOT-VEGETATION data  
France Gerard, UK

**SP3**  
From data to a biomass map - the Siberia processing chain  
Shaun Quegan, UK

**SP4**  
Multi-seasonal study of the SIBERIA classification procedure  
Andreas Wiesmann, Germany

**SP5**  
Forest mapping with multi-temporal SAR  
U. Wegmüller, Switzerland

1740-1800 Free time

1800-1930 hrs  
Exhibitors Reception: Whisky Tasting  
Coffee Area

**Wednesday 7th August**

**3rd Plenary Session**  
Main Auditorium

0900-0930 hrs  
Keynote: Using remote sensing to quantify the role of forests in the carbon cycle  
Shaun Quegan, UK

0930-1000  
Keynote: Satellite Remote Sensing for Forest Change Detection & Landscape Structure Analysis Over Large Areas  
Steve Franklin, Canada

1000-1030  
Keynote: Predicting Forest Stand Structure and Terrain characteristics using small footprint LIDAR  
Mike Renslow, USA

1030-1100  
Coffee

3 Parallel Sessions

1100-1300 hrs  
Each presentation lasts for 15 minutes with 5 minutes of question time.

**Forest Inventory 2: Monitoring Change in Forest Conditions**  
Main Auditorium

**FI2.1**  
Techniques for forest/non-forest mapping using inventory data and satellite imagery  
Ronald E McRoberts, USA
FI2.2 Forest inventory information for multi angle texture signatures of high resolution airborne stereo scanner data
Soren Hese, Germany

FI2.3 Large Area Forest Mapping Using Segmentation Based Imaged Classification
Barbara Koch, Germany

FI2.4 User-centred design for the FOREMMS forestry monitoring system.
Martin Maguire, UK

FI2.5 Spatial variability of leaf area index within a beech stand based on in situ measurements and remote sensing
Nathalie Breda, France

FI2.6 FOREMMS - a system prototype for large scale environmental forest monitoring
Anders Rognes, Norway

Forest Inventory 3: Identifying Vegetation Types and Forest Structure
Carnegie Room (B)

FI3.1 Analysis of forests spatial structure using SAR and Ikonos data
Muljanto Nugroho, The Netherlands

FI3.2 Detection of clear cuttings with help of multi-temporal panchromatic high-altitude aerial photographs, image segmentation and unsupervised classification
Anssi Pekkarinen, Finland

FI3.3 Local radiometric calibration of digital aerial photographs for multi source forest inventory
Sakari Tuominen, Finland

FI3.4 Multi-purpose vegetation assessment, inventory and monitoring: the treescape system
Klaus R Halbritter, Germany

FI3.5 Habitat quality mapping using remote sensing and ecological niche factor analysis
Heiko Balzter, UK

New Technologies 2
Wardlaw Room

NT2.1 Monitoring of forest ecosystems by using passive microwave remote sensing
E Santi, Italy

NT2.2 Airborne lasercanning
Stephen Stables / Steve Chafer, UK

NT2.3 Forestry applications of radar remote sensing with sensors In-situ
Henrique Lorenzo, Spain
NT2.4  The b correction: an empirical topographic normalization method for forest observed radiance
  Vincini Massimo, Italy

NT2.5  Seeing the woods and the trees!
  A. A. Wild, UK

NT2.6  Image WEB Server, N Efficient System For Working With Images Through The World Wide WEB: Tragsatec's on Line Image Catalogue Applications
  Javier Fernandez Casals, Spain

1300-1400 hrs  Lunch

3 Parallel Sessions

1400-1540 hrs  Each presentation lasts for 15 minutes with 5 minutes of question time.

Forest Inventory 4: Estimating Timber Volume and Other Stand Parameters (2)
Main Auditorium

FI4.1  An application of LIDAR in Forest Inventory
  Robert C Parker, USA

FI4.2  Estimation of forest stand parameters from IKONOS panchromatic data
  Yasumasa Hirata, Japan

FI4.3  An investigation of the potential of Landsat TM and Synthetic Aperture Radar (SAR) imagery for deriving timber volume in Britain's upland conifer plantations
  D.N.M. Donoghue & P.J. Watts, UK

FI4.4  Accuracy issues in the assessment of deciduous woodland canopy height by airborne laser scanning
  Ross Hill, UK

FI4.5  Application of digital photogrammetry for estimating timber volume in Eucalyptus globulus Labill stands in Galicia
  David Miranda, Spain

Forest Growth 1
Carnegie Room (B)

FG1.1  Estimation of 19 years of tree growth in a conifer plantation from satellite-borne radar. X3
  Heiko Balzter, UK

FG1.2  Forest Carbon Accounting using Lidar and Modelling Based Approaches
  Genevieve Patenaude, UK

FG1.3  Capability for biomass assessment and mapping of forest structure with radar remote sensing in boreal forests
  Konstantin Olschofsky, Germany
FG1.4 Retrieval of forest biomass information from Sar data
Thuy Le Toan, France

FG1.5 Mapping of forest information using I-band polarimetric SAR
G Florsch, France

Forest Health 1
Wardlaw Room

FH1.1 Operational use of remote sensing data in mapping the forest burned areas in North-western Italy
Fabio Giannetti, Italy

FH1.2 Toward a meso-theory of wildfire modeling: A complex systems approach using artificial neural networks
Ronald J McCormick, USA

FH1.3 Generation of forest parameters for fire behaviour modelling using LIDAR
David Riaño, Spain

FH1.4 Methods for fast storm damage assessment by remote sensing - options with optical data – experiences from damage assessment of the storm Lothar in Germany
Gernot Ramminger / Matthias Dees, Germany

1540-1610 hrs Coffee

3 Parallel Sessions

1610-1710 hrs Each presentation lasts for 15 minutes with 5 minutes of question time.

Forest Inventory 5: Monitoring Natural Regeneration and Forest Management, and Forest Mapping
Main Auditorium

FI5.1 Monitoring natural regeneration using optical remote sensing techniques
Tim J Malthus, UK

FI5.2 Forest Management Using Remotely Sensed Data Acquired at Middle Infrared Wavelengths (3.0-5.0 m)
D.S. Boyd, UK

FI5.3 Ecological multi criteria evaluation as fuzzy prior probability supporting regional forest type mapping
La Mela Veca, Italy

Forest Growth 2
Carnegie Room (B)

FG2.1 Investigating forest physiology using airborne hyperspectral data
C. Nichol, UK
FG2.2 Retrieval of canopy structure and biochemistry from hyperspectral imagery: application of MIVIS and VIRS spectrometers to Mediterranean coniferous and broadleaf forests
S. Raddi, Italy

FG2.3 Estimating forest stand height using SAR Interferometry: A comparison of current spaceborne and airborne interferometric systems
Laine Skinner, UK

Forest Health 2
Wardlaw Room

FH2.1 Monitoring vegetation stresses in Sicily using Landsat TM and Hydro-morphological dataset
Giuseppe Ciraolo, Italy

FH2.2 Remote sensing, digital terrain modelling and GIS as tools to determine the spreading borderline of airborne pollutants in the coniferous boreal forest on the Kola Peninsula
Bernd Cyffka, Germany

FH2.3 Fusion of active and passable optical remote sensing techniques for quantifying forest photosynthetic pigments
Alan Blackburn, UK

Poster Session
Poster Hall
1710-1810 Poster authors have the opportunity to be at their posters for this period

P1 Environmental and ecological analyses using classified satellite imagery and forest inventory data
Ronald E McRoberts, USA

P2 Mobile forest management
Karel Charvat, Czech Republic

P3 Multi-level segmentation of remote sensing imagery for mapping and monitoring forest transitions
M.H. Obbink, The Netherlands

P4 A vegetation model to analyse the polarimetric signature of vegetation
Cyril Dahon, France

P5 Forest Structural Condition Assessment using High-Resolution Airborne Digital Camera Imagery
D. King, Canada

P6 Evaluation of Interferometric Radar Tree Mapping Parameters Using Tree Grouping Approach
M. Nugroho, The Netherlands

P7 Utilization of Satellite Technology to Enhance Forest Inventory Efficacy: An Operational Demonstration
P. Glass, UK
Forecasting the inter-annual trends in terrestrial vegetation dynamics using time series modelling techniques  
Doreen Boyd, UK

Evaluation of Rectification Between Fieldwork Data and High Resolution Remote Sensing Data  
B. Suryokusumo, The Netherlands

Extension of forest attributes over the land surface by the application of different classification algorithms to Landsat ETM+ imagery  
La Mela Veca, Italy

National Inventory of Woodland and Trees: aspects of Britain's most recent national forest inventory  
G. Bull, UK

SAR for forestry applications  
Edward D. Wallington, UK

1810- Free evening (some tickets for Edinburgh Tattoo available)

Thursday 8th August 2002

4th Plenary Session  
Main Auditorium

0900-0930 hrs  
Keynote: A Prototype European Forest Information System: An Internet-based Product  
Pam Kennedy, Italy

0930-1000  
Keynote: What Can Remote Sensing provide for Biodiversity Assessment  
Barbara Koch, Germany

1000-1030  
Keynote: Remote sensing monitoring for tropical forest ecology and fire impact assessment  
Dirk Hoekman, The Netherlands

1030-1100  
Coffee

3 Parallel Sessions

1100-1300 hrs  
Each session lasts for 15 minutes with 5 minutes of question time.

Forest Inventory 6: Monitoring Forest Establishment and Development  
Main Auditorium

FI6.1  
An evaluation of the use of satellite data for monitoring Picea sitchensis plantation forest establishment and growth  
D.N.M. Donoghue & P.J. Watts, UK

FI6.2  
Deriving nationwide estimates of forest variables for Sweden using Landsat ETM+ and field data  
Mats Nilsson, Sweden
FI6.3  Detection of single tree in aerial images using template
       Kenneth Olofsson, Sweden

FI6.4  Biomass estimation of Thetford forest from SAR data: potential and limitations
       Clare Rowland, UK

FI6.5  Ikonos-2 imagery potential for forest stand mapping
       Francois Kayitakire, Belgium

FI6.6  Forestry Applications of CARABAS
       Gary Smith, Sweden

Forest Ecology
       Carnegie Room (B)

FE1   Improved methods of biodiversity assessment: comparison of spatial landscape metrics by pixel and image segment based approaches
       Sandra Luque, Finland

FE2   Analysis of Spatial forest structure using spatial recession rule
       Muljanto Nugroho, The Netherlands

FE3   Monitoring biodiversity indicators - the case of forest fragmentation in Europe
       Pam Kennedy, Italy

FE4   Towards operational forestry tools for Kyoto Protocol reporting
       Espen Volden, Italy

FE5   Earth Observation for Natura 2000+ EON2000+
       Andrew Richman, UK

FE6   Scaling effects on predictive models of species richness
       O. Viedma, Spain

Developments in European Countries with Economies in Transition
       Wardlaw Room

EE1   Methodologies to enhance and improve Biodiversity in the Czech Republic: Breeding and Improvement of Forest Tree Species
       J Frydl, Czech Republic

EE2   Current status of forest databases from the point of view of GIS and Remote Sensing techniques implementation in Slovakia
       Tomas Bucha, Slovakia

EE3   The Latvian State Forestry Research Institute: A review of the main research directions of forest taxation in the Republic of Latvia
       Dagnis Dubrovskis, Latvia

EE4   ITC Tools for Post Windthrow Management in the Romanian Forests and Forest Information System for Europe
       Gabriela C. Florescu, Romania
EE5  
**Forest databases and using remote sensing techniques in Lithuania**  
Gintautas Mozgeris, Lithuania

EE6  
**State-of-the-art of forest database and its possible future in Hungary**  
Tamas Szedlak, Hungary

1300-1400 hrs  
*Lunch*

1400-1500  
*5th Plenary Session*  
Main Auditorium

**Closing Discussion and Summary**  
Panel of Experts

1500-1600  
Change for dinner

1600-2330  
**Conference Dinner at Mavis Hall**  
*(sponsored by Scottish Forestry Cluster Group - outdoor venue and mini Highland Games - waterproof jacket and sensible footwear required, transport to/from Mavis Hall provided)*

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**Friday 9th August 2002**

*Field Excursion*  
**Forestry within Scotland's first National Park: Loch Lomond**  
*(designated a national park in July 2002)*

0815  
Depart Heriot Watt University

0945–1000 hrs  
Arrive Queen Elizabeth Forest Park Visitor Centre

1000–1200  
Visit Achray Forest to look at:  
Alternatives to Clearfell and Recreation

1200–1300  
Buffet lunch, Visitor Centre

1300–1600  
Visit Loch Ard Forest to look at:  
Riparian management  
Deer management  
Harvesting  
Pinewood habitat creation  
Native woodland restoration

1615  
Depart from Visitor Centre

1800  
Arrive back at Heriot Watt University

*Note: The programme details may change depending on the number of participants.*