

THE ONLINE INFORMATION BULLETIN OF THE GLOBAL FOREST SCIENCE NETWORK

Sustainable Approaches for Mountain Forest Harvesting

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Mountain forests are valuable resources providing wood, water, and wildlife habitat, a wide variety of non-timber products, recreation and scenic quality. Meeting society's demands for wood products while maintaining and enhancing those scenic, protective and productive values requires skillful application of forest engineering operations and management knowledge.

Beginning in 1969 and approximately every three years, the accumulated knowledge and technology gained by experience and research of private industry, contractors, public organizations, universities and research organizations in the Pacific Northwest region of the USA, and other mountainous regions around the world, are disseminated at the *International Mountain Logging and Pacific Northwest Skyline Symposium*. The 13th Symposium, held in Corvallis, Oregon, USA from 1-6 April 2007, focused on sustainable approaches for mountain forest harvesting including technical, economic, environmental, and social issues with harvest planning, forest road management, and logging operations.

Social Aspects of Mountain Forest Harvesting

Sustainable management issues and opportunities involving forest harvesting include changing workforce dynamics and cultures; the environment, forest biomass harvesting and utilization for energy and bio-based products, and applications of emerging technologies. A USDA Forest Service Research Paper characterizes today's loggers as "older, better educated, and more skilled; a large portion are self-employed, many work less than a full year, a substantial number have incomes below the poverty level; and mechanization will continue to affect the size and makeup of the labor force". In the next five to ten years, the forest operations workforce will experience significant retirements of salaried forest managers and woods workers. In the PNW region of the USA, there will be an increasing Hispanic participation in forest operations. Solutions to these programmatic issues include stronger efforts with recruitment, training and retention, family living wages, developing new training materials for different cultures, and safety management.

With increasing global demand for timber and other products from forests, mountain forests can grow trees and provide a multitude of resources for society. However in many

mountain forest regions around the world, public attitudes determine regulation of timberlands and the degree to which commercial forest management will continue in the future. Conventional and new forest harvesting and transport technology can be used to help solve forest management problems such as forest health and uncharacteristic wildfires, while at the same time, providing greater wood utilization for new markets, energy and bio-based products.

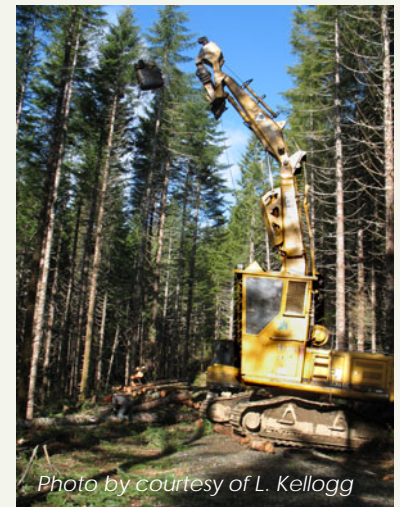


Photo by courtesy of L. Kellogg

Mountain Logging Technology and Innovations

New skyline logging technology has been developed for combined cable yarding and tree processing with a 2-3 person crew. Skyline thinning operation productivity and residual stand protection are improved when more time is spent on detailed logging operations planning and monitoring including skyline corridor layout, and field design of intermediate supports and tailtrees. More expensive logging technology including long-span skylines and helicopters fill an important niche in producing timber and protecting mountain forest resources. New harvest planning software and harvest operations assessments have been developed.

Forest road management in mountain forests is a critical aspect affecting the operational economics and the effectiveness in protecting soil and water resources. Transportation planning and decision analysis, often assisted with software and models, is applied to determine road standards, long term road management needs, and environmental risks and tradeoffs with forest road practices. Alternative road construction equipment and techniques have appropriate applications to meet sustainable management objectives.

The *International Mountain Logging and 13th Pacific Northwest Skyline Symposium* was organized and hosted by the Oregon State University, Department of Forest Engineering. Co-sponsors were [IUFRO 3.01.00](#) – Harvesting and Transportation Engineering, and Division 3; the Oregon Forest Resources Institute (OFRI), the Associated Oregon Loggers (AOL), and Oregon State University. For *symposium proceedings*, please contact: feddept(at)cof.orst.edu

What does it mean ?

As an exception, in this issue a forest dictionary shall be presented here:

Sociedad Española de Ciencias Forestales.

DICCIONARIO FORESTAL

[Dictionary of Forestry]. Madrid: Mundi Prensa, 2005. 1314p., 19000 t., 24 cm. ISBN 8484761894. EUR 95.00

In the past, several attempts were made either to translate the classic English Terminology of Forest Science, Technology Practice and Products (Ford-Robertson, 1971) into Spanish or to revise the basic work of the Terminología Forestal Española (Neira & Martínez Mata, 1971), including efforts promoted by Alejandro López de Roma, former IUFRO Board member, aimed at editing a new forest dictionary in Spanish. In 1997, the Sociedad Española de Ciencias Forestales (Spanish Society of Forest Sciences) established a committee of experts who were entrusted with the production of a Diccionario Forestal featuring a wider spectrum of forest-related areas and an additional number of terms. Besides the forestry fields like silviculture, inventory, forest harvesting and logging, biology, forest

ecology, genetics, forest health and protection, and entomology, the dictionary also considers general aspects as well as economic and social aspects of forestry, nature conservation, and water management. In total, it offers definitions for more than 19,000 Spanish terms. In addition, the dictionary presents a list of English equivalents of the terms defined in Spanish. These definitions in most cases have a rather explicative character and are often enriched by examples and/or notes about the terms uses or possible wrong uses, intending to reflect and, whenever possible, homogenize terminological reality in Spanish forest sciences. Latin American users will have to take into account that this is a dictionary addressed to Spanish foresters, and non-expert users might have to look up a lot of cross-references in order to understand some definitions.

The IUFRO Terminology service is collecting information about forest dictionaries, glossaries and terminological publications in all languages and makes these bibliographic data (titles of dictionaries, content and language information, on-line links) available on the [SilvaVoc website](#) under 'Bibliography'.

Let us know your favourite dictionary or glossary link!

Contact: [prueller\(at\)iufro.org](mailto:prueller(at)iufro.org).

Conferences

Forests, Society and Sustainable Development

On March 19, 2007, the NGO "SYLVA-WORLD for Development and the Protection of Forests and the Environment", organized an international conference under the theme "Forests, Society and Sustainable Development", in Casablanca, Morocco. The participants elaborated a number of recommendations for the improvement of the situation of forests, agroforestry systems, environment and the development of people and natural resources in the Maghreb, in Africa, the Mediterranean region and in all developing countries throughout the world.

For more information, contact:

Mohammed Ellatifi, [sylva.world\(at\)yahoo.fr](mailto:sylva.world(at)yahoo.fr)

<http://www.geocities.com/sylva.world/home.htm>

Proceedings

Impacts of Air Pollution and Climate Change on Forest Ecosystems - IUFRO Research Group 7.01.00

The Research Group organized two special sessions investigating 'Impacts of Air Pollution and Climate Change on Forest Ecosystems' at the XXII IUFRO World Congress in Brisbane, Australia, 8-13 August, 2005. The Proceedings have now been released as special sections in:

Environmental Pollution (2007) vol.147 (3) pp. 429-531 (Marcus Schaub and Elena Paoletti, Eds.)

and

Environmental Monitoring and Assessment (2007) vol.128 (1-3) pp. 1- 131 (Elena Paoletti, Andrzej Bytnerowicz, and Marcus Schaub, Eds.)

14-20 August 2007

IUFRO Division 6 Symposium: Integrative Science for Integrative Management

Saariselkä, Finland

Contact: James E. Johnson, [jej\(at\)vt.edu](mailto:jej(at)vt.edu)

<http://www.metla.fi/tapahtumat/2007/iufro-d6/>

6-7 September 2007

IUFRO European Congress: Forests and Forestry in the Context of Rural Development

Warsaw, Poland

Contact: Piotr Paschalis-Jakubowicz,

[paschalis\(at\)delta.sggw.waw.pl](mailto:paschalis(at)delta.sggw.waw.pl)

Web site: <http://conference2007.wl.sggw.pl/>

29 October – 2 November 2007

IUFRO All-Division 5 Forest Products Conference

Taipei, China-Taipei

Contact: Chris Risbrudt, [crisbrudt\(at\)fs.fed.us](mailto:crisbrudt(at)fs.fed.us),

Conference Secretariat: [iufro2007\(at\)gmail.com](mailto:iufro2007(at)gmail.com)

Web site: <http://www.alldiv5iufro2007.org.tw/index.htm>

The **proceedings** of the 23rd IUFRO Research Group 7.01.00 meeting on "Forests under Influence of Air Pollution, Climate Change and Urban Development" in Riverside, California, USA from 10-15 September 2006 have also been released in The ScientificWorld Journal (2007) 7(S1) (Andrzej Bytnerowicz, Michael Arbaugh, Mark Fenn, Robert Heath, Elena Paoletti, and Benjamin Sanchez Gimeno, Eds.). A selection of papers is under review to be published in Environmental Pollution.

IUFRO Meetings

NOTE: The following list of meetings is just a selection!

For a full list of IUFRO events, please visit our online [calendar](#), or the [homepages](#) of IUFRO Units involved. Non-IUFRO meetings are also announced on the IUFRO [Noticeboard](#) on our web site.

20-24 June 2007

Humus and Soil Biodiversity

Cagliari, Italy

IUFRO [8.02.03](#)

Contact: Augusto Zanella, augusto.zanella@unipd.it

29 July – 2 August 2007

Complex Stand Structures and Associated Dynamics: Measurement Indices and Modeling Approaches

Sault Ste. Marie, Ontario, Canada

IUFRO [4.01.02](#) and [1.05.00](#)

Contact: Peter Newton, peter.newton@nrcan.gc.ca
<http://www.iufrosault.org/>

12-19 August 2007

12th Int'l Meeting on Root and Butt Rots of Forest Trees

Berkeley, California, United States

IUFRO [7.02.01](#)

Contact: Matteo Garbelotto, matteo@nature.berkeley.edu

<http://nature.berkeley.edu/IUFRO2007/rootrot/>

27-28 August 2007

Conference on Scientific Framework of Environmental and Forest Governance

Goettingen, Germany

IUFRO [6.12.02](#)

Contact: Daniela Kleinschmit, dkrumla@gwdg.de

28 August – 1 September 2007

VI Congreso Latinoamericano de Derecho Forestal

Quito, Ecuador

IUFRO [6.13.01](#)

Contact: María Fernanda Escudero, congresodf@sur.iucn.org

3-5 September 2007

Norway Spruce in the Conservation of Forest Ecosystems in Europe

Warsaw, Poland

IUFRO [2.02.11](#)

Contact: Janusz Sabor, wles@ar.krakow.pl
rlsabor@cyf-kr.edu.pl

http://www.ar.krakow.pl/les/e_szk_sel.htm

9-14 September 2007

Natural Enemies and Other Multi-scale Influences on Forest Insects

Vienna, Austria

IUFRO [7.03.05](#), [7.03.06](#), [7.03.07](#)

Contact: Michael L. McManus, mlmcmanus@fs.fed.us
<http://www.wabo.boku.ac.at/7512.html?&L=1>

16-21 September 2007

Larix 2007

Quebec, Canada

IUFRO [2.02.07](#)

Contact: Martin Perron, Martin.Perron@mrnf.gouv.qc.ca

<http://www.mrnf.gouv.qc.ca/carrefour/english/larix-eng.asp>

17-19 September 2007

The History of Ecology and Archeology of Medieval Parks and Parklands

Sheffield, U.K.

IUFRO [6.07.02](#)

Contact: Diane Harrison, info@hallamec.plus.com
<http://www.ukeconet.co.uk>

1-4 October 2007

3rd Forest Engineering Conference: Sustainable Forest Operations - The Future is Now!

Mont Tremblant, Canada

IUFRO [3.00.00](#)

Contact: Jean-Francois Gingras, jf-g@mtl.feric.ca
<http://fec2007.feric.ca/>

Other events

21-22 July 2007

Workshop on Natural and Human-induced Hazards and Disasters in Africa

23-25 July 2007

Conference on the East African Rift System (EARS-07) both in Kampala, Uganda

Organizers: The Geological Society of Uganda (GSU), IGCP 482/489, ICSU Regional Office for Africa.

Contact: Genene Mulugeta, genene.mulugeta@falw.vu.nl

30 September 2007

International Community Forestry Workshop

Toronto, Canada

Side-event preceding the University of Toronto, Faculty of Forestry Congress

Contact: Sarah Heiberg, sarah@cen-rce.org

<http://www.cen-rce.org/eng/caucuses/forest/index.html>

7-19 October 2007

Innovative Approaches for Sustainable Management of Forest Ecosystems under a Changing Environment

FORCE - Summer school for early-stage researchers and PhD students, close to Freiburg, Germany

Organizers: Albert-Ludwigs-Universität Freiburg, (ALU) and Forest Research Institute, Baden-Wuerttemberg (FVA), under the umbrella of NFZ.forestnet

Contact: Philipp Duncker, philipp.duncker@www.uni-freiburg.de;

<http://www.nfz-forestnet.org/?katid=214&lang=en>