

# Združeno savjetovanje Austro2007 – FORMEC'07

Od 8. do 11. listopada 2007. u Beču je održano združeno savjetovanje Austro2007 – FORMEC'07 (40. međunarodni simpozij »Mehanizacija šumskoga rada«) pod naslovom »Ususret potrebama sutrašnjih šuma: Nova kretanja u šumskom inženjerstvu« (*Meeting the Needs of Tomorrow's Forests: New Developments in Forest Engineering*) u suorganizaciji Zavoda za šumarsko inženjerstvo Odjela za šume i tloznanstvo Sveučilišta u Beču (BOKU), Odjela za šumarstvo Tehničkoga sveučilišta Virdžinija (USA), Austrijskih saveznih šuma, Ministarstva poljoprivrede, šumarstva, okoliša i vodnoga gospodarstva Republike Austrije te Ureda za šumarstvo i poljoprivredu grada Beča.

Savjetovanje su otvorili: Ingela Bruner, rektorica Sveučilišta u Beču (BOKU), Gerhard Mannsberger, austrijsko Ministarstvo poljoprivrede, šumarstva, okoliša i vodnoga gospodarstva, Hans Rudolf Heinimann, koordinator razreda 3 »Šumarsko inženjerstvo

i upravljanje šumskim radovima« Međunarodnoga udruženja šumarskih istraživačkih organizacija (IUFRO), Karl Stampfer, predsjednik FORMEC-a, predstojnik Zavoda za šumarsko inženjerstvo i prodekan Odjela za šume i tloznanstvo s BOKU-a.

Na savjetovanju je sudjelovalo 126 sudionika iz 24 zemlje, odnosno 5 kontinenata.

Prva dva dana savjetovanja izlagali su se referati (Hotel Schloss Wilhelminenberg), a zadnja su dva dana bila predviđena za terenske izlete: međunarodna izložba šumarskih stojeva i opreme – AUSTROFOMA 2007 (Heiligenkreuz), kogeneracijsko postrojenje (elektrana) na šumsku biomasu (Simmering).

Savjetovanje je obuhvatilo 12 tematskih skupina:

## Radna skupina 1 – Uvodna izlaganja

Nemestothy, K.: The success story of solid biomass in the Austrian energy market



De Hoop, C. F., Chang, S. J., Hanumappa-Reddy, A., Kizhakkepurakkal, A.: Developing biomass utilization in Louisiana, USA: educating policy-makers, assessing supply and demand, and integrating with forest management

#### **Radna skupina 2 – Neka iskustva iz svijeta**

Spinelli, R., Magagnotti, N.: Guidelines for the development of forest chips supply chain model: the Italian experience in the Eastern Alps

Purfürst, F. T.: Human influences on harvest operations

Gallagher, T. V., Smidt, M., McDonald, T., Tufts, R.: How to improve transportation efficiency and cost – A WSRI Study

Shiba, M., Itaya, A.: Object-oriented image segmentation approach for timber harvest cruising strategies in mountainous areas

De Filippi, R., Niederhuber, M.: The GIS learning environments at the Institute of Terrestrial Ecosystems of the ETH Zürich

#### **Radna skupina 3 – Pridobivanje drva na nagnutim terenima po tlu kretnim sustavima**

Eberhardinger, A.: Analysis about the productivity and fields of application using light weight feller buncher heads in early thinnings

Marenče, J., Košir, B.: Limits of uphill skidding with AGT 835 and woody 110 tractors

Krč, J., Košir, B., Cavalli, R., Grigolato, S., Lubello, D.: Different approaches on skidding operation and wood transport investigation: integrate two different approaches in one model

Hittenbeck, J.: Limits of wheel based timber harvesting in inclined areas

Ionascu, G., Derczeni, R., Iordache, E.: Fine development of the forests with modern high economical efficiency skidding equipments

#### **Radna skupina 4 – Ergonomija**

Tsioras, P. A., Efthymiou, P. N.: Research results on forest workers' training in Greece

Sowa, J. M., Leszczynski, K.: Analysis of noise level affecting machine operators during timber harvesting in Poland

Visser R. J. M., Guild, B.: Analyses of Shift Pattern Effect on Productivity at the Kaingaroa Central Processing Plant Kim Rose

Markoff, I., Findeisen, E., Gluschkov, S., Dvorak, J.: Full-mechanized harvesting in Bulgaria – the outlines of an upcoming market

Martin, B., Kline, E., Prisley, S., Visser R. J. M.: Online Information Systems for today's forest industry

#### **Radna skupina 5 – Tla**

Poršinsky, T., Stankić, I., Horvat, D., Pentek, T., Šušnjar, M.: Timber forwarding from Croatian lowland forests – rutting and soil compaction

Neri, F., Spinelli, R., Lyons, J.: Ground pressure forwarder trials: assess benefits in reducing wheel rutting

Wolf, B., Matthies, D., Kremer, J.: A new training concept for the practice

Kremer, J., Matthies, D., Borchert, H.: The impact of different carriages on soil and roots – wheels and tracks in comparison

Gluschkov, S., Markoff, I.: Implementation of caterpillar tractors in Bulgaria

#### **Radna skupina 6 – Pridobivanje drva na nagnutim terenima žičarama**

Zimbalatti, G., Proto, A. R.: Cable Logging opportunities for firewood in Calabrian forestry

Smeets, P.: The use of high performance synthetic fibers in synthetic ropes for logging applications in the forestry

Kirth, R., Schiemer, S., Nemestothy, N., Sperrer, S.: Further developments of synthetic ropes for logging applications in forestry

Hosseini, S. M.: Steep terrains and harvesting operations in the Hyrcanian Forests of Iran

#### **Radna skupina 7 – Biomasa (1)**

Kanzian, C., Holzleitner, F., Stampfer, K.: Regional wood energy logistics – optimizing local fuel supply

Eckmüllner, O., Schedl, P.: Methods for Acquisition of Biomass Compartments

Aruga, K., Saito, M., Tasaka, T., Yoshioka, T.: Long-term feasibility of timber and forest biomass resources at a mountainous area in Japan – Discussion on economy and energy balances

Heinimann, H. R., Hässig, J., Wollenmann, R.: Eco-Efficiency of Pellet Production – Comparison of Log Wood and Sawmill Byproduct Systems

Villette, A., Emeyriat, R., Bigot, M., Boulay, J. M.: Innovating clear-felling technique to improve harvesting of branches in maritime pine forest

#### **Radna skupina 8 – Ceste**

Ghaffarian, M. R., Stampfer, K., Sessions, J.: Optimum road spacing of forwarding operations: a case study in Southern Austria

Doukas, A. K. G., Giannoulas, V. J., Stergiadou, A. G.: The applicability of different GPS – types with the survey of forest road networks in Greece

Pentek, T., Nevečerel, H., Poršinsky, T., Horvat, D., Šušnjar, M., Zečić, Ž.: Quality planning of forest

road network – precondition of building and maintenance cost rationalisation

Nitami, T.: Multi-standard forest road network and forest harvesting system – a monorail-based new operation system for forest harvesting at steep hillside

Stergiadou, A. G., Eskioglou, P. Ch.: Eco-development of a protected mountainous area and the improvement application of forest road

#### **Radna skupina 9 – Upravljanje informacijama**

Sladek, P., Neruda, J.: Analysis of volume differences in measuring timber in forestry and wood industry

Dvorak, J., Rusnakova, P.: Quantitative and financial confrontation of electronic roundlog acceptance between harvester and measuring frame Kesat

Liepa, J.: The grow-in and growth of pine and spruce container seedlings in the site type *Hylocomiosa* growing conditions

Friedl, K.: Blue stain on Norway spruce – Quality loss and effect on the storage time

Drosos, V. C.: The digitized data management supported by modern technology on the Greek forest conditions

#### **Radna skupina 10 – Biomasa (2)**

Dinev, D.: Wood biomass in wood harvesting and waste wood procurement in Bulgaria

Drosos, V. C., Dimitrios, F. E., Giannoulas, V. J.: The biofuel production as a means of improvement of the quality of life

Kanzian, C., Kindermann, G.: Regional wood energy logistics – Estimation of wood resources based on inventory data

Liepa, I., Blija, T.: Determination of transition rates for the energy biomass calculations in spruce stands in Latvia

Neruda, J., Ulrich, R.: Characteristics of progressive technologies of snowbreak processing and the production of energy woody biomass in young pine stands

#### **Radna skupina 11 – Usitnjavanje biomase**

Cavalli, R., Emer, B., Grigolato, S., Zuccoli Bergomi, L.: Wood chipping service: an analysis approach in Northeastern Italy

Neri, F., Piegai, F.: Biomass chipping operations: cases study in Tuscany (Central Italy)

Moskalik, T.: Analysis of full mechanized wood chips harvesting process in the young thinning stands

O'Neal, B. S., Gallagher, T. V.: Designing and Testing a Small-Scale Biomass Harvesting System in the Eastern United States

Visser, R. J. M.: Methodologies for setting timber harvesting rates

#### **Radna skupina 12 – Posljednje, ali ne manje važno!**

Tasev, G., Dinev, D.: State and problems of the system for machinery repair service in Bulgarian forestry

Jirousek, R., Klvac, R., Liska, S.: Forest stand disruption by fully mechanized logging systems in spruce stands

Cavalli, R., Košir, B.: Forest utilisation features in alpine parts of Italy and Slovenia

Iordache, E.: Opening up the Romanian forests: Presents and perspectives

Sowa, J. M., Stanczykiewicz, A.: Determination of the impact of selected logging technologies on the tree damage level in thinned mountain stands

Kitanova, S., Markoff, I.: Multilingual web based dictionary for FORMEC

Po brojnosti sudionika (126), ali i po broju iznesenih vrsnih referata (57) združeno je savjetovanje »Austro2007 – FORMEC'07« najznačajnije održano savjetovanje šumskoga inženjerstva u Europi 2007. godine.

Tijekom savjetovanja sudionik je mogao steći presjek ovodobnih istraživanja iz područja šumarskih tehnika i tehnologija u cijelom svijetu. Posebno valja istaknuti brojnost referata (16 izloženih u 3 radne skupine) vezanih uz pridobivanje šumske biomase kao obnovljivoga, okolišno prihvatljivoga izvora energije.

Sljedeći FORMEC'08 (41. međunarodni simpozij »Mehanizacija šumskoga rada«) održat će se od 2. do 5. lipnja 2008. u Schmollenbergu (Njemačka), u organizaciji Kuratorija za šumski rad i šumsku tehniku (*Kuratorium für Waldarbeit und Forsttechnik – KWF*) te će biti prislonjen održavanju 15-ih dana KWF-a. Više informacija može se naći na internet-skoj stranici <http://formec.kwf-online.org/>.

Tomislav Poršinsky