

Precision Forestry Research and Applications along the Timber Value Chain

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Precision Forestry uses high technology sensing and analytical tools to support site-specific, economic, environmental, and sustainable decision-making for the forestry sector supporting the forestry value chain from bareland to the final customer.

It arose from a concern originally expressed by industry and academic leaders about the challenges facing the state at the dawn of the 21st century. Around the world questions were asked about the need for new technologies that could transform traditional sectors of the economy, such as agriculture and forestry, and how technologies could create important new sectors of research and practices.

Precision Forestry therefore provides additional quality information about forests and the manufacturing of forest products. It helps to maximize economic return within accepted, current constraints, and provides tools to make good decisions, allow highly repeatable measurements, take accurate actions and provide for processes to initiate, cultivate and harvest trees. It also enhances bio-diversity and other environmental resources.



(Photo by Pierre Ackerman)

The international symposium on "Precision Forestry in Plantations, Semi-natural and Natural Forests" that took place from 5 - 10 March 2006 at Stellenbosch University, South Africa 2006 therefore examined topics such as remote sensing of forestland and vegetation, real-time tracking of logs as well as decision support systems in order to take stock of the status quo in Precision Forestry.

The meeting concluded that in the future, precision forestry will need to be more than a few new technologies. Its real potential lies in its ability to improve the forestry process, not only helping to collect information but to use it for better and more transparent decision-making.

The International Precision Forestry Symposium was co-sponsored by IUFRO Division 3. It attracted 110 delegates from some 16 countries which included Austria, Canada, Chile, Czech Republic, Denmark, France, Finland, Germany, Italy, Japan, Namibia, Nigeria, Slovenia, Sweden, USA and South Africa.

Scientists and practitioners from around the globe presented 45 scientific papers over a period of four days. A field day was included to introduce the delegates to the rich South African natural environment and practicing forest operations. The good blend of South African and international delegates and speakers allowed for a diverse and stimulating discussion during the Symposium.

Meeting Web site: <http://www.sun.ac.za/forestry/pf2006>

Full papers and presentations online available at:

<http://academic.sun.ac.za/forestry/precision/iufro2006.html>

Terminology: [What does it mean: Precision Forestry?](#)