

Enhancing Resource Inventories Conference

By Paul Courville and Julia Hancock

Over 60 delegates gathered at the Canadian Ecology Centre near Mattawa Ontario during the week of May 22nd to participate in a special conference entitled: ***Enhancing Resource Inventories: Tools for Today and Tomorrow***. The main goal of this event was to continue to share the knowledge gained to date and to demonstrate the potential for enhancing forest resource inventories using an array of modern and state-of-the-art remote sensing tools. The interest in this conference was well reflected by the occupational diversity of participants, which included forest practitioners and professionals from provincial and federal government, forest industry, contractors, and various remote sensing vendors. There was also excellent national representation, with individuals from Ontario, British Columbia, Alberta, and New Brunswick in attendance, as well as



Captivated audience members at the Tools for Today and Tomorrow conference.

one international participant from Texas.

The conference featured a total of 11 presentations from project leads and consultants associated with the Forestry Research Partnership's (FRP's) project: *Acquiring and Testing Digital Orthophotography and integrated LiDAR for the production of enhanced forest inventories in the Great Lakes - St. Lawrence Forest*.

Several other related projects were represented, including the FRP's *LiDAR for*

Hydrologic Mapping study. Some of the topics and themes covered included: the operational benefits of LiDAR, evaluating LiDAR for wetland mapping, LiDAR prediction of forest and tree metrics, operational forest inventory development with imagery-based individual tree classification (ITC) methods, LiDAR's role in predicting biomass, and leaf area index. The conference concluded with a discussion period led by Ken Durst, Extension and Project Manager for the FRP. This facilitated session allowed participants to ask and answer questions, sum up results, identify opportunities for operational implementation of resource inventory tools, and help determine future research direction.

"The conference was very successful on many fronts," said Murray Woods, Senior Analyst of Forested Landscapes for the Ministry of Natural Resources. "The diversity of participants was very impressive and the quality and the project results conveyed in presentations created a lot of interest and discussion. This was one of the best conferences that I have ever attended at the Canadian Ecology Centre!" Murray's sentiments were echoed by many of the other participants.



Kent Todd from OMNR Peterborough during his presentation.

Another success of the event was the emerging partnership between the Forestry Research Partnership (FRP) and the Canadian Institute of Forestry (CIF). CIF Executive Director John Pineau was in attendance, and made a promotional presentation during the second evening. Despite a largely partisan crowd of CIF supporters, he still managed to sign up six new members. Conference materials will be distributed through the CIF website to a national audience as a result of the new partnership. All

presentations were digitally recorded and will be synchronized to the appropriate PowerPoint slides in a windows media format or PodCast for distribution.

Some key outcomes of the session included the determination that research will continue to demonstrate the applicability of LiDAR to forestry planning and operations, and that there is a strong need for new research partnerships both internal and external to the forest industry. The importance of technology transfer and uptake into operation and production was also emphasized.

“In addition to the current practical uses of the LiDAR datasets, within the next few years we expect to be able to apply an increasingly powerful set of tools resulting from this LiDAR research that will further augment and enhance resource inventories”, said Ken Durst of Tembec. Ken added, “With continued support from industry, government and other partners, the momentum for using LiDAR as an important part of the toolkit in day to day forestry operations, planning, resource management, and forest resource inventory production is growing, and pervasive use will be the norm.”

All conference materials will be available on the new CIF website in early July (www.cif-ifc.org). For more information on either of the two projects mentioned visit www.enhancedinventory.ca.

A *LiDAR Use in Natural Resources*- themed issue of The Forestry Chronicle, available through the CIF, is in the planning stage for mid 2008. Many of the presenters and participants at this conference are in the process of writing and submitting papers for this timely and relevant topic.