



Vavenby Woodlands TFL 18 LiDAR Project

Presentation for the
FIM Workshop
May 9, 2007

Introduction

- **Project conception**
- **Benefits for Vavenby Division**
- **Operational Linkages**

LiDAR Presentation Introduction -

- **Everything starts with an idea...early 2004 review of Sunpine Workshop proceedings; Use of LiDAR in Forestry Applications.**

<http://www.softree.com/articles/LiDARWorkshop.pdf>

- **Further research on LiDAR led to contacting Olaf Niemann of UVic later that year.**
- **Many meetings later, and a great deal of work on Dr. Niemann's part led to a Forest Science Program proposal for TFL 18**
 - partnership among MoFR, Canfor, UVic, and Terra Remote Sensing Inc.
- **The project collected LiDAR, hyperspectral, and digital photography over 60,000 ha of TFL 18.**
- **Data acquisition was substantially completed in 2006.**

LiDAR – Benefits for Vavenby Division

- **Immediate benefit when processing is complete:**
 - Multiple forest engineering and planning applications.

- **Longer term benefit:**
 - Contributes to expanding our understanding of applications of the technology through research using data from a known forest land base.
 - Outputs will further develop our understanding of the cost/benefits of this technology.

LiDAR – Operational Linkages

- **LiDAR: The opportunities are wide ranging**
 - CSA/SFM indicator analysis
 - Hydrology and watershed analysis
 - Geological applications
 - TEM mapping
 - Direct and indirect Timber Supply/Inventory applications
 - MPB Change detection
 - Biodiversity
 - First Nations site identification and mapping
 - Detailed harvest unit planning
 - Harvesting cost and species forecast profiling
 - Road design planning applications

Please Welcome

**Olaf Niemann, Ph.D.,
Professor and Graduate Chair,
Department of Geography,
University of Victoria,**

