

Forest Co-op Imagery Project

The Use of LSP with Satellite or Aerial Super
High Resolution Imagery to Project and Track
Stand Development

Forest Ecosystem Science Co-op

Science Day

April 12, 2006

Imagery Project

- This project will build on the technical investigations and advances made during the Forest Co-op Forest Inventory and Modelling Project (Forest Co-op Pilot Project)
- The Pilot Project used 1m resolution imagery which limited the analysis to stands 5 metres or taller
- The Pilot Project did not look at the methods for the classification of stands to a management intensity

Project Description

This project would involve the use of:

- Push broom digital imagery to create the inventory (40-60 cm resolution)
- Large Scale Photography (LSP) to develop SPP, ES, SC, density, and ITC equations
- Also, LIDAR and IFSAR will be tested to assess the ability to accurately measure height for use in the assignment of site indices

Project Description – cont'd

- Field sampling of regenerating areas, including plantations and thinned stands, will be conducted to determine base data
- Density, height and site index would be applied to SDMD and other algorithms to predict and assign stands to management intensities

Other uses

- Identify stands that need remediation (e.g. fill plant or spacing) to achieve the desired density or commercial thinning opportunities
- Identify the species composition of the block to aid in assessing competition and planning control
- Provide a means to conduct statistically valid silviculture effectiveness monitoring

Project Team

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Final Word

If you have any questions you can
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