

Status Report to the Forestry Research Partnership

Project Title: Yield Curve Refinement in Northeastern and Southern Ontario

Project No: 120-304 (6234-00)

Project Leader: Margaret Penner, Forest Analysis Ltd, and John Parton, OMNR

Project Facilitator: Al Stinson

Project Start Date: *Date on which FRP started to fund the project*

Project Reporting Period: *April 1st 2008 to March 31st 2010*

Report Date: *March 31st 2010*

1. Project Description and Activities:

Objective:

To refinement of yield curves by

- Coarse review of data including assignment forest unit, NEBIE (and reconcile with MNR NEBIE), check ecosite, disturbance (e.g., blowdown, budworm), spatial coordinates, age
- Refresh of data, particularly for southcentral
- Fix tree improvement routine
- Support programming changes
- Add spatial distribution (clumpiness) index

2. Project Results vs. Objectives:

Data review

Review datasets – are some missing (Andisson remeasurement)? Should some be dropped (Quebec)?

Review plot metadata – add NEBIE, check forest unit, ecosite, age, disturbance and clumpiness.

It may be worthwhile here to review the age definitions. Is plot age the since disturbance (or years since planting)? Should breast height age be used for modeling throughout and use the user-specified regeneration acceleration/set back (age to breast height)?

This phase will be coordinated by the MNR.

Data refresh

Re-run fitting routines and provide updated coefficients to MIST.

Fix tree improvement algorithm

The current tree improvement algorithm implements tree improvement as a site index boost. This is incorrect and should be implemented as an acceleration in height growth with the same height upper asymptote as unimproved stock.

Support of programming changes

Some programming needs have been identified and will require some input from the development side.

Include Mixed Effects and Seemingly Unrelated Regression in the model fitting.

3. Financial Report: 2009/2010 Planned and Actual Partner Expenditures (insert project #)

Expenditures	Tembec				MNR				CFS				Total FRP Only			
	Planned		Actual		Planned		Actual		Planned		Actual		Planned		Actual	
	Cash	In-kind	Cash	In-kind	Cash	In-kind	Cash	In-kind	Cash	In-kind	Cash	In-kind	Cash	In-kind	Cash	In-kind
Salaries																
Travel																
Equipment																
Supplies																
Support Services																
Other																
Total																

Expenditures	Legacy Trust		FRP Partners				Other Partners				Total All					
	Planned	Actual	Planned		Actual		Planned		Actual		Planned		Actual		Combined	
	Cash	Cash	Cash	In-kind	Cash	In-kind	Cash	In-kind	Cash	In-kind	Cash	In-kind	Cash	In-kind	Planned	Actual
Salaries																
Travel																
Equipment																
Supplies																
Support Services																
Other																
Sub Total																
Holdback																
Total																

Financial Plan:

Data review – 2 days	\$1200
Data refresh – 5 days	\$3000
Tree improvement routine – 2 days	\$1200
Support of programming changes – 3 days	\$1800
<u>Meetings – 2 days</u>	<u>\$1200</u>
Total – 14 days	\$8400

4. Next Year's Work Plan: Describe the next year's activities; anticipated results; milestones and deliverables and provide the budget estimate. The budget estimate should be the budget detail table, with footnotes, that was part of the approved project's financial plan. Therefore, please complete the Table below.

Expenditures	2008-09	LLT Request	Tembec		MNR		CFS		Other	
			Cash	In-kind	Cash	In-kind	Cash	In-kind	Cash	In-kind
Salaries										
Travel										
Equipment										
Supplies										
Support Services										
Other										
Sub total										
Holdback										

Additional datasets?

- Burt Lake (jack pine?)
- Halls Pr
- Southcentral data 2004+
- Southcentral plots off the shield
- Garibaldi
- Bompar PCT
- 2009 Coop measurements

5. Information and Publications: *List produced project database(s), information and publications to date as applicable; where and when the information can be accessed; describe how this information was transferred to practitioners.*

6. Project Synopsis: *Provide an abstract or synopsis of the project's results to date for posting on the website.*