Growth and yield studies critical to sustainability of pine forests

The Foothills Growth and Yield Association (FGYA), supported in part by FRIAA, has begun research that will help ensure the sustainability of Alberta's lodgepole pine forests.

FRIAA has so far contributed about $600,000 to FGYA projects. The association was created in the summer of 2000 as a partnership between the Foothills Model Forest in Hinton, Alberta Sustainable Resource Development and nine forest product manufacturing companies.

Sponsoring companies are Alberta Newsprint Company, Blue Ridge Lumber, Canadian Forest Products, Millar Western Forest Products, Spray Lakes Sawmills, Sundance Forest Industries, Sunpine Forest Products, Weldwood of Canada and Weyerhaeuser Canada.

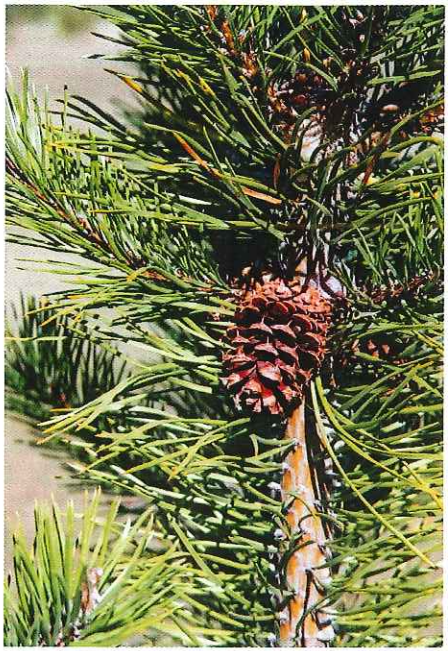
Forester and project manager Dick Dempster says the association was created to deliver information that will be crucial to sustaining forests and human communities.

A recent meeting between partners resulted in agreement on a five-year business plan with a budget of $1.5 million, and the scene is now set for the launch of several new projects.

"All of the projects are related to forecasting and monitoring the growth of lodgepole pine in managed stands," Dempster says. "Our first priority is the forecasting and monitoring of growth on regenerated lodgepole pine stands, because how these stands perform after harvesting is the biggest assumption currently made when calculating sustained yield fibre production."

Companies are spending large sums on regeneration of the forest, he says, and they - and the government - want to know that their forecasts of how the stands will evolve and mature over time are indeed accurate.

Dempster said the first regeneration project, already 90-per-cent installed, involves 102 research plots looking at site and treatment effects on pine growth between Cochrane and Grande Prairie. It's hoped that initial yield forecasts from the regenerated stands project will appear in March, 2003.



Spotlight is on lodgepole pine.

A second project will address site index data - the information that helps classify a site according to its likely productive capacity. Dempster says foresters have found that regenerated stands seem to be doing better than older natural-origin stands, and foresters and scientists want to know why, and by how much. Work will also be conducted to develop computer models that will integrate growth estimates and yield estimates, which traditionally have been derived separately. The aim is to develop more accurate linkages between regeneration standards and final actual fibre yields.

Plans are also being firmed up for a comprehensive study on the effects of various stand density and nutrition strategies on fire-origin stands.

"We believe the work of the FGYA will be very valuable," says Greg Branton, forestry supervisor at Alberta Newsprint Company in Whitecourt. "With increasing pressure from other uses on the landbase, we need to understand better how trees grow in natural and managed stands, first so that we know our yield forecasts are accurate, and second so that we can take advantage of any opportunities to intervene and improve some of those growth characteristics over time."

For more information contact Dick Dempster at (780) 424-5980.

did you know?

During the 2001-2002 program year, FRIAA partnered with numerous other organizations to further its aim of sponsoring research and activities related to improvement of the forest resource. Partnerships are a valuable way to leverage and maximize the value of our research investment, and to bring the best expertise available to bear on the issues of concern to our members.

Partners include the Western Boreal Growth & Yield Cooperative, the Alberta Conservation Association, the Alberta Research Council, the national Sustainable Forest Management Network, Foothills Model Forest and the Foothills Growth and Yield Association.

For more information contact FRIAA at (780) 429-5873.