

PMRC Fact Sheet

June, 2008

Mission

Create value for its members by improving knowledge of southern pine plantation performance under different silvicultural regimes and by developing growth and yield systems and decision support tools that result in improved silviculture, management, and valuation of the plantation resource

Products

- Growth and yield systems for loblolly and slash pine plantations
 - Base stand models and height and basal area response models for all common silvicultural treatments
- Stand response estimates for a comprehensive set of silvicultural treatments
 - Stocking control via planting density and thinning, mechanical and chemical site prep, tillage, herbaceous weed control, woody release, and fertilization, culture x genetic improvement
- Technology transfer integrating soils, silviculture, and growth and yield modeling
 - Reports, meetings, workshops, decision tools

Approach

- Partnership between forest investors/management and The University of Georgia's Warnell School of Forestry and Natural Resources
 - Forest investors/management provide funding via annual dues and guide PMRC direction via participation on an Advisory Committee. Research plots are located on members' lands.
 - Warnell provides excellent faculty and staff support to direct and coordinate PMRC activities.
- South's most comprehensive series of designed field trials to quantify impact of silvicultural activities complement growth and yield plots.
 - Singularly strong field trial program in planting density, vegetation control treatments, treatment combinations and silvicultural regimes for both loblolly and slash pine.
 - Excellent south-wide field trials examining planting density, cultural intensity, and thinning regimes.
 - New south-wide field trial on plantation performance following second thinning
 - Allows evaluation of regimes with objectives ranging from biomass to sawtimber. Field trials are located from Virginia to Texas.
- Field testing emphasis is on true region-wide analysis to ensure widest applicability of resulting management tools.
- PMRC field crew does 95% of field related work, freeing members of these responsibilities and promoting greater quality and uniformity in maintenance and measurements.

Priorities

- Improve response models for mid-rotation treatments including thinning, release, and fertilization so that they accurately reflect responses for a range of site and stand conditions.
- Enhance state of art loblolly and slash pine growth and yield systems.
 - Use new data and approaches to improve base models, refine response models, and evaluate value of additional predictive variables (location, climate, soils, leaf area, etc.).
 - Refine understanding of the effects of genetics, soils, physiology and silviculture on pine plantation growth and yield and value.
- Develop growth and yield systems that accurately portray performance of varietal block plantings.
- Identify new approaches to enhance inventory quality and efficiency.
- Incorporate knowledge and models into decision support tools to facilitate validation and use.
- Provide training and workshops per member interest
- Develop collaborative relationships with other institutions and researchers to advance PMRC research development objectives and increase scope and efficiency of research.

Opportunities

- Improve predictions of biomass and carbon production and yields associated with southern pine plantations
- Develop “precision” silviculture and management applications

Membership

- 2008 membership consists of twelve full members (own or manage land) and four associate members (do not own or manage land).
- Full Members: Foley Timber & Land, Forest Capital Partners, GMO Threshold Timber Corp., Hancock Timber Resource, MeadWestvaco, Molpus Timberlands Management, Plum Creek Timber Company, Potlatch, Rayonier, Resource Management Service, The Campbell Group, Weyerhaeuser.
- Associate Members: BASF, CELLFOR, Dow AgroSciences, Smurfit-Stone Container Corp.
- Current full membership dues of \$17,000/yr leverages \$50 for every \$1. Dues are reduced for organization with less than 200M acres of forest land in the South
- Membership represents about 15MM acres of plantations in the U.S. South.

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Public Website:

<http://warnell.forestry.uga.edu/pmrcpub/> (There is also a web site for member use only)