

Fact Sheet

Plantation Management Research Cooperative (PMRC)

August, 2013

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/service providers and The University of Georgia's Warnell School of Forestry and Natural Resources
 - Forest investors/management/service providers enable 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.
 - Allows evaluation of regimes with objectives ranging from biomass to sawtimber. Field trials are located from Virginia to Texas.
 - 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
- 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 advanced genotypes.
- Identify new approaches to enhance inventory quality and efficiency.
- Improve predictions of biomass and carbon production and yields associated with southern pine plantations
- Incorporate knowledge and models into decision support tools to facilitate validation and use.
- Develop collaborative relationships with other institutions and researchers and grant funding to advance PMRC research objectives and increase scope and efficiency of research.

Membership

- Entities that own or control forest land, provide forestry management and consulting services, utilize forest products, have plantation allied business, or interest in U.S. South plantation should consider membership.
- 2013 membership consists of sixteen full members, one supporting member, three allied members and two contributing member.
- Membership - *Full Members*: Deltic Timber, Foley Timber & Land, Forest Investment Associates, F&W Forestry Services, GMO Threshold Timber Corp., Hancock Timber Resource, Molpus Timberlands Management, Plum Creek Timber Company, Potlatch, Rayonier, Resource Management Service, Superior Pine, The Campbell Group, Timbervest, Timberland Investment Resources & Weyerhaeuser. *Supporting Members*: Forest Resource Consultant. *Allied Members*: ArborGen, Dow AgroSciences, International Forest Company. *Contributing Members*: Beasley Timber Management, Varn Wood Products
- 2013 full membership dues of \$19,500/yr leverages about \$43 for every \$1 dedicated to core PMRC efforts. Dues are reduced for organization with activities on less than 200M acres of land in the South
- Membership represents over 15MM acres of plantations in the U.S. South.

Contacts

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Public Website:

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