Fact Sheet
Plantation Management Research Cooperative (PMRC)
November, 2018

Mission

Create value for its members by improving knowledge about forest plantations under different silvicultural management regimes and by developing growth and yield systems and decision support tools that result in improved valuation of the plantation resource in a sustainable manner.

Products

➢ Growth and yield systems for loblolly and slash pine plantations
  o Stand models and height and basal area response models for common silvicultural treatments
➢ Stand response estimates for a comprehensive set of silvicultural treatments
  o 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
  o Reports, meetings, workshops, online decision support tools
➢ Comprehensive databases for loblolly and slash pine growing in the southeast US

Approach

➢ Partnership between forest investors/management/service providers and The University of Georgia’s Warnell School of Forestry and Natural Resources.
  o Forest investors/management/service providers and product manufacturers contribute annual dues and guide PMRC direction via participation on an Advisory Committee. Research plots are located on members’ lands.
  o Warnell provides excellent faculty and staff support to direct and coordinate PMRC activities.
➢ South’s most comprehensive series of designed research field trials to quantify the impact of silvicultural management activities and inform growth and yield decision support systems.
  o Allows evaluation of forest management regimes with objectives ranging from biomass to sawtimber production. Field trials are located from Virginia to Texas to Florida.
  o Singularly strong field trial program in planting density, vegetation control treatments, thinning intensity, treatment combinations and silvicultural regimes for both loblolly and slash pine.
  o South-wide field trials on pine plantation performance of thinned stands with fertilization and competition control combinations.
➢ Field testing emphasis is on true region-wide analysis to ensure widest applicability of resulting management tools and decision support systems.
➢ PMRC field crew does 99% of the field related work, freeing member companies 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 they accurately reflect responses for a range of site and forest stand conditions.
➢ Enhance state of the art loblolly and slash pine growth and yield systems.
    o Use new data and approaches to improve base growth models, refine response models, and evaluate value of additional predictive variables (location, climate, soils, leaf area, etc.).
    o 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 pine genotypes.
➢ Identify new approaches to enhance forest inventory quality and efficiency.
➢ Improve predictions of biomass and carbon production and yields associated with southern pine plantations.
➢ Develop collaborative relationships with other institutions and researchers and grant funding to advance PMRC research objectives and increase the scope and efficiency of PMRC research.

Membership

➢ Entities that own or control forest land, provide forestry management and consulting services, utilize forest products, have pine plantation allied businesses, or interest in the U.S. South plantation resource should consider membership.
➢ 2018 membership consist of fifteen full members, three supporting member, three allied members and three contributing members.
➢ Membership – The PMRC has a total of 24 forest industry members!
    o Allied Members: ArborGen, International Forest Company, SilviaTerra.
    o Contributing Members: Beasley Timber Management, ForesTech International, Varn Wood Products
➢ 2018 full membership dues of $22,000/year leverages about $41 for every $1 dedicated to core PMRC efforts. Dues are reduced for organizations based on the scale of operations and type of operations.
➢ Membership represents over 15 million 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)