TREE IMPROVEMENT IN THE SOUTH: THE STATE OF THE COOPERATIVE TREE IMPROVEMENT PROGRAMS

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Tree improvement cooperatives focused on the southern pines have recently weathered significant changes in the structure of the forest industry, product demands, and land ownership patterns. The cooperatives have done this by streamlining their breeding programs and by broadening their appeal to include a variety of land owner objectives. In addition to the economic incentives that should continue to support investment in forest productivity, emerging issues such as increasingly unpredictable weather and the increased potential for sudden outbreaks of pests and pathogens that may disrupt forest health, make the continued support of forest genetics/tree improvement crucially important.

The demise of the vertically integrated forest industry and the emergence of forest land as an important investment vehicle have had both negative and positive consequences. The resulting fragmentation and volatility in land ownership has made it increasingly difficult to operate tree improvement programs and seed orchards targeted to specific landbases. On the other hand, the need to realize a financial return on land ownership has put a premium on maximizing growth rates to reduce the production cost of stumpage. Encouragingly, the market place is beginning to recognize the value of genetics in with faster growing seedlings demanding concomitantly higher prices and making it possible to monetize access to the performance databases. Creativity, however, will continue to be needed to provide sustained support for the traditional mainline breeding and testing programs. The authors discuss the changes experienced by the cooperatives in recent decades, give brief status updates of their current programs, and speculate as to how the tree improvement programs of the future will capture the value added by genetics and return it to those doing the breeding and testing.

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