

Wood Quality Under Intensive Forest Management

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Forest and forest products researchers have known for decades that wood and fiber properties are controlled by genetics and are influenced by the environmental conditions under which trees are grown. Yet few forest managers have available to them the information and tools needed for incorporating wood quality goals into forest management and genetic deployment decisions. The primary goals of intensive silviculture and breeding have been on increased tree growth and stand yield, usually expressed in green weight or volume. Greater emphasis on understanding and improving wood quality through silviculture and genetics will provide greater opportunities to affect the final product yields and values. A consortium of forest products companies and researchers in the South has been formed to quantify wood properties and incorporate wood quality and value into intensive management decisions. Early results indicate that wood properties have not improved in plantations being harvested today, compared with stands surveyed 30 years ago. Today's most intensively managed stands pose further concerns. Important wood properties and how they change within trees and stands between will be discussed. Long-term improvements in wood quality will require a better understanding of wood formation and a collaborative approach to integrated genetic and cultural solutions.