

College of Forest Resources **Extension Forestry**

The Overstory MSU Forestry Extension Newsletter

Volume 3, Issue 3, September 2014

INSIDE THIS ISSUE

From the Coordinator's Desk

Feature Article: Increase Timber Revenue by Planting High Level of Pine Genetics

Inside Articles:

Delta Hardwood Notes

Mississippi Timber Price Report

Many Forest Landowners "Unwilling" Estate Planners

> Editors Jason Gordon Linda W. Garnett

Send comments to: Jason Gordon Extension Specialist (662) 325-8851 jgordon@ext.msstate.edu





From the Coordinator's Desk

by James Henderson, Extension Specialist "Nothing can be said to be certain, except death and taxes" so wrote Benjamin Franklin. Tax season will be here before you know it. Please consider making plans now to schedule your forestry tax Extension program through your county Extension agent. Making sure you have everything in order before April 15 will spare you much anxiety. All forest landowners can benefit from Extension

programs on forestry and taxes. This is true not only for those that have recently harvested or replanted, but also for those planning such forestry activities. Some expenses associated with the management of forestland can be deducted. So consider asking your county Extension agent to plan a tax program for your county. The program could be a brief overview or our 6 hour short course on Income Taxes and the Family Forest.

WELCOME:

On September 2nd a new faculty member started with the Department of Forestry. Dr. John Willis will be our new Extension forestry specialist for forest restoration and silviculture. John comes to us from Michigan State University where he recently completed his Ph.D. in forestry with a specialization in silviculture. We are pleased to have John on our team and he will soon be developing new Extension programs and publications. He has expressed interest in working on both longleaf and shortleaf restoration.



Feature Article

Increase Timber Revenue by Planting High Level of Pine Genetics

by Randall Rousseau, Extension Specialist

Today landowners have the ability to purchase a wide variety of genetically improved pine planting stock to overcome disease problems and provide increased yields of sawtimber and pole quality trees. Although, open-pollinated 1.5- and 2nd-Generation planting stock is still available, there are also 3rd-Generation or 3rd-Cyle seedlings. This type of genetic material is focused on the selected female mother tree passing on its superior traits to its offspring. In general, the vast majority of southern pine plantations have been established using open-pollinated seedlings and the results have shown dramatic improvement in growth rates, disease resistance, and stem form.

More recently, Mass Control Pollinated seedlings (i.e. MCP) have become available. These seedlings result from the mating of two highly selected parents. The specific cross has already gone through tests designed to predict the performance of the resulting full-sib progeny. This specific cross is then replicated but at a much greater frequency in order to produce sufficient seedlings for larger scale plantings. These MCP seedlings will exhibit less variation than open-pollinated seedlings and will show increased growth and disease resistance as well as better form superior to that of open-pollinated seedlings. Thus, the sawtimber potential is typically greater than the open-pollinated seedlings. For the first time in pine culture a relatively cheap system of producing high guality full-sib seedlings is offered to private landowners. Open-pollinated seedlings vary from \$50 to \$80 per thousand, while MCP seedlings will cost from \$120 to \$150 per thousand.

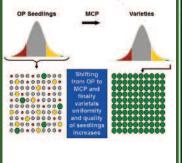
The highest level of pine genetic material available to the private landowner is clonal pine, or more commonly known as varietal pine. This type of material begins similarly as the MCP seedlings in that control-pollinations of highly selected individuals are completed. "If you go to a desert, you will hear this mysterious voice: Be wise, protect your forests!"

— Mehmet Murat ildan



Bagging in preparation for controlled pollenation

Gains in Genetic Improvement



A graphic view of how genetic improvement in pine seedlings is achieved over time, moving from OP seedlings to MCP seedlings and finally to varital seedlings



Swamp chestnut oak acorns - a good alternative to sawtooth oak for deer mast in

the winter



sawtooth oak

acorn



Estate Planning

The Overstory

Increase Timber Revenue by Planting High Level of Pine Genetics (Continued)

But instead of testing the resulting seed for full-sib performance the interest lies in each seed which is a different genetic recombination. So if we clone each seed and then test this material we can now exploit the variation we see in a full-sibfamily by selecting the overall best genotype or individual. This step, although complicated, provides the developer with a culture of embryonic tissue that can be used to produce hundreds or thousands of genetically identical seedlings for testing. At that same time, the embryonic culture is in cryostorage, which stops the culture from maturing. The ability to effectively store the culture for years while testing is taking place provides the capability to regenerate those specific individuals. Therefore, when the testing is completed and the specific variety is selected for regeneration on a large scale, the culture is taken out of cryostorage and millions of genetically identical seedlings are produced. The use of a specific genotype (i.e. a single variety) provides greater uniformity to the plantation. Thus, the landowner can plant fewer trees per acre and focus on the characteristics needed for his specific objective, such as the development of higher revenue products. Because of the intensive steps needed to produce varietal seedlings, the cost is higher than either open-pollinated or MCP seedlings at \$400 to \$435 per thousand.

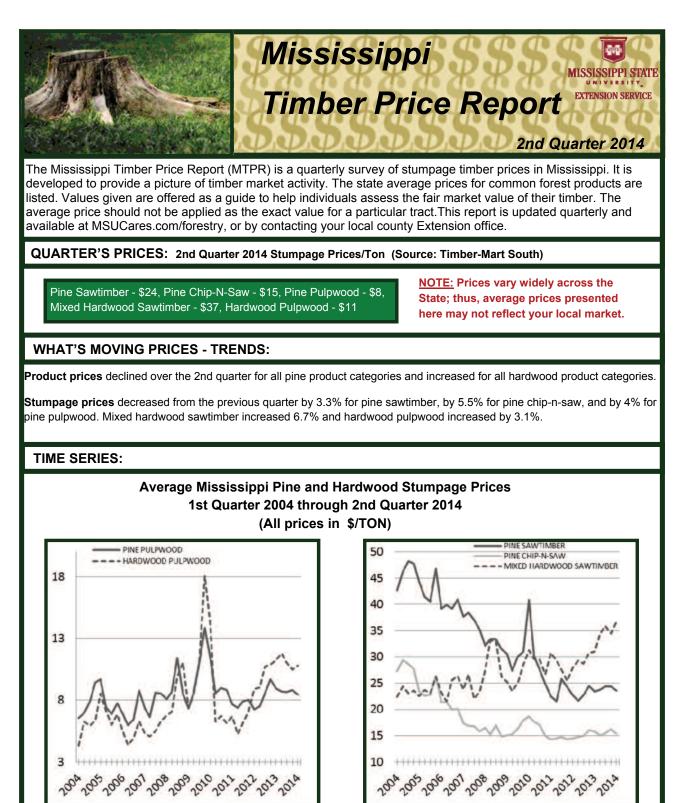
In 2014, Mississippi State University in conjunction with ArborGen will be offering private landowners a small sampling of MCP and Varietal seedlings in an effort to demonstrate the advantages of these higher level genetic seedlings. We would like to find three landowners for each of the four Extension Districts that would be willing to plant 600 seedlings on their property during January and February of 2015. Thus, each landowner would receive 100 seedlings of 2 MCP families, 2 Varietals, 1 Open-Pollinated family, and a Seed Orchard Mixture. These seedlings would be cared for by the landowner but measured by Mississippi State University on a yearly basis for information on yields per genetic type as well as gains made toward increasing sawtimber potential. The Extension component allows for outreach among the various County Forestry Associations to understand the role that pine genetics plays in increasing revenue potential.

Delta Hardwood Notes

by Brady Self, Extension Specialist

Landowners often plant sawtooth oak in an effort to produce large quantities of acorns during hunting season. Most are drawn to the species' fast growth, early acorn production, and heavy mast crops. While these attributes do exist, sawtooth oak, native to eastern Asia, may not serve in this role as suitably for its intended purposes as many believe. Mississippi hunting season typically starts October 1, and by this time, the typical sawtooth oak acorn crop will be either gone, or in the last stages of dropping. Most sawtooth specimens start acorn drop mid-August to early September and are finishing up by the time hunters start hunting over the year's crop. Additionally, the species possesses wood prone to splitting, is characteristically branchy, and does not form quality single-stem logs as it matures.

Several native oak species can provide desired wildlife food goals while providing acorns during optimal periods of the year. For example, Nuttall oak is the fastest growing oak species in Mississippi, drops acorns later in the fall and winter (October - December), and has relatively heavy mast crops. Nuttall oak can be widely spaced so as to produce numerous acorn producing branches capable of greater acorn production. With fertilization and irrigation, acorns can be produced in as little as five to six years (more typically 10 years+). If timber is part of the overall property management objective, Nuttall will form quality logs while providing desired wildlife benefits. Other oak species that should be considered as alternatives to sawtooth include: swamp chestnut oak, white oak, willow oak, cherrybark oak, Shumard oak, as well as others. All are native and fully capable of providing good mast crops and quality timber simultaneously.



Timber-Mart South (TMS), Inc. has more detailed data available by subscription that contains values for other timber products not included in this report.TMS is compiled and produced at the Center for forest Jusiness, Warnell School of Forest Resources, University of Georgia, under contract with the Frank w. Norris Foundation, a non-profit corporation serving the forest products industry. See http://WWW.TMART-SOUTH.COM/ for information on subscriptions.

Discrimination based upon race, color, religion, sex, national origin, age, disability or veteran's status is a violation of federal and state law and MSU policy and will not be tolerated. Discrimination based upon sexual orientation or group affiliation is a violation of MSU policy and will not be tolerated.

Please don't forget to check out our Blog at www.blogs.msucares.com/forestry and sign up for email notices!

Many Forest Landowners "Unwilling" Estate Planners

by Glenn Hughes, Extension Specialist

Forestland is a significant family asset that often spans generations. That's the good news. The bad news is that about 40% of landowners are unprepared for this transfer because owners do not have basic estate planning documents such as written wills or trusts. Lack of wills or trusts, through several generations, can easily lead to dozens of people owning land "in common," and landowners frequently do not even know each other. Some of the outcomes of such complex ownerships include:

•Inability to qualify for some government programs designed to assist landowners;

•Inability among family members to agree on recommended management practices, thus delaying action and reducing economic returns;

- •Reduced likelihood that reputable loggers will bid on a timber sale;
- Increased likelihood that prices bid for timber will be low;
- •Lack of involvement of all owners, as some might be unaware that they are partial owners of the land.

In Mississippi, a person dying without a will or trust is "intestate." At that point, the State will distribute the person's assets according to state law. For example, let's assume that I have an undivided interest in 40 acres of timberland (we'll ignore other assets for this example). I have a wife and 3 children. Under Mississippi law, my wife will get a child's portion, so my wife and children will each own a 25% undivided interest in this 40 acres. There is a really good chance that she would be upset about this. As you can see, with passing generations the ownership pattern gets more complex and difficult to address.

Fortunately, preparing a written will or trust can avoid some of the above problems. I recommend that landowners seek advice from an attorney who deals in estate planning. There is a cost; however, it is minor and the money will be well spent. We've all heard horror stories about the estate going to the attorney, but these stories in my opinion are blown out of proportion.

I would also recommend against going online and preparing your own will. I've personally seen where an attorney recognized a potential problem, brought it to the attention of the individual, and a small change in the will saved the family many thousands of dollars. There is no substitute for good legal assistance when the stakes are so high.

All families are different, and the landowner might have special concerns such as a child with disabilities or concern about a family member getting control of assets. The attorney can make recommendations and tailor the will to address the concerns of the landowner.

Landowners should periodically update their estate plan documents, particularly if conditions change. Births, deaths, weddings, divorce, and changes in financial condition can all necessitate updates. So don't be "unwilling." Do your family a great favor by updating your estate plan.

Primary Business Address Mississippi State University Forestry Extension P. O. Box 9681 775 Stone Blvd Mississippi State, MS 39762

Contact: Jan McReynolds janm@ext.msstate.edu 662-325-3905

Fax:662-325-0027



We are an equal opportunity employer, and all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, national origin, disability status, protected veteran status, or any other characteristic

protected by law.

Area Specialists:

NE District: Dr. John Kushla 662-566-2201, or kushla@ext.msstate.edu

NW District: Dr. Brady Self 662-226-6000, or bradys@ext.msstate.edu

SW District: Dr. Stephen Dicke 601-857-2284, or steved@ext.msstate.edu

SE District: Dr. Glenn Hughes 601-794-0671, or ghughes@ext.msstate.edu

Don Bales, 601-794-0671, or dbales@ext.msstate.edu,

Butch Bailey, 601-794-0671, or butchb@ext.msstate.edu,

State Specialists:

Hardwood Silviculture: Dr. Randy Rousseau 662-325-2777, or rrrousseau@cfr.msstate.edu

Economics & Taxes: Dr. James Henderson 662-325-0754, or jhenderson@cfr.msState.edu

Restoration Silviculture: Dr. John Willis 662-325-0523, or jwillis@ext.msstate.edu

Community Forestry: Dr. Jason Gordon 662-325-8851, or jgordon@ext.msstate.edu

Logger's Education: Mr. John Auel 662-325-7948, or jauel@cfr.msstate.edu

Media: Linda Garnett 662-325-8355 or, lgarnett@cfr.msstate.edu

