Volume Gains from Fusiform Rust Resistance in Slash Pine Exceed Expectations
By Dr. Dudley Huber, UF-IFAS School of Forest Resources and Conservation

The Cooperative Forest Genetics Research Program at the University of Florida has just finished an evaluation of how much extra volume might be available as a result of planting fusiform rust resistant seedlings. Data for the analysis came from eight-year-old block plots of slash pine, planted with 10 different improved slash pine seedlots plus unimproved and improved checks. Each seedlot was planted in 50- to 100-tree block plots. The primary emphasis of these tests was to compare actual plantation volumes with estimates of genetic gain determined in progeny test row plots. The two genetic values available from progeny testing were separate measures of growth potential and fusiform rust resistance.

The results indicated that the growth potential estimated from progeny tests accounted for almost exactly the measured gain in plantation volume per acre. However, the gain in volume per acre due to rust...
resistance was much greater than previous work had indicated. For example, in an area where the unimproved check would get 40% rust, the percentage volume gain per acre for a relatively rust resistant seedlot would equal the gain from growth potential plus an additional 24% from rust resistance. Our previous work, which was not based on block plots, had indicated that the additional gain from rust resistance would be only 8%. When the amount of rust in the unimproved check was even higher, the relative gains in volume per acre from rust resistance were much greater; often exceeding 50%.

While these results apply directly to volume gains at age eight, these plots will be measured through age 15 to obtain a direct measure of volume gains for a pulpwood rotation. Also, modeling based on growth projections and stand tables will be used to project these gains at age eight to older harvest ages. As exciting as these volume gains per acre are, they do not fully quantify the value of rust resistance which also includes preventing product degrade from high value products such as sawtimber and chip-n-saw into pulpwood. For additional information about Florida’s genetic improvement programs, see Genetically Improved Pines for Reforesting Florida’s Timberlands (http://edis.ifas.ufl.edu/FR007).

**Highlights of Marketing Forest Products Workshop Series**

If I asked you how much money you would pay for something without telling you what that something was, what would you say? Unless you are adventurous you would probably want to know what it is before you make a bid. Likewise, you probably wouldn’t want to sell something before you had at least a ball-park idea about what its value is, right? What about timber? If you don’t know how much value is in the trees you are selling, how can you be sure you are getting a fair price? That is the question we addressed at the last workshop series on marketing forest products.

James Vardaman, a consulting forester in Alabama, is asked on a routine basis by landowners how they can make more money growing trees. His answer is always the same: *stay home and study HOW and WHEN to sell timber*. This workshop was designed to give you the tools you need to do this.

**Current state of north Florida’s timber buying markets**

Jeff Main, President of Land & Timber Services Group, gave an excellent overview of recent supply and demand factors that have influenced timber markets, reforestation, and real estate trends.

**Market Changes**

Many changes in the forest products industry, land ownership, mill operations and imports and exports over the last 20 years have created today’s markets.

*Industry consolidation* – since 1985 there have been at least 21 mergers between major timber companies, such as International Paper’s merger with Federal, Union Camp, Shorewood Packaging and Champion. To offset the cost of these types of mergers, large landholdings have been sold.

*Land and timber ownership changes* – Jeff divided these into 2 phases:
1. land sold by industry to other corporate land managers or investors and
2. land sold by phase 1 purchasers or additional land sold by phase 1 sellers for further subdivision or taken out of wood production for “highest and best use”.

*Mill changes* – many are manufacturing new products such as oriented strand board (OSB), super pulpwood / canterwood or pine mulch. Most have upgraded in terms of production efficiency, increased utilization and more shifts. Several mills have closed. Since 1998, pulpwood markets have consolidated, with some additional mill changes:

- mills are holding down prices for delivered logs,
- wood specs have been redefined,
- smaller inventories are held by mills, and
- pricing is maintained more or less at the cost of production.

*Import / Export Factors* – when the US dollar is strong relative to other currencies there are generally fewer lumber exports. With a more fully globalized pulpwood market and greatly decreased industrial ownership of raw materials, facilities are driven by cost.

What does the future hold for Florida’s timber market?
Although there is evidently an oversupply of wood in the Southeast, Florida’s supply will probably diminish due to the multiplied effects of urbanization, timberland fractionalization and increased public land purchases. Forestland investment managers (TIMOs) will require finite investment periods and we can probably expect their lands to return to market sooner the next time around.

On the demand side, the mills operating in Florida are modern, well operated and efficient. As long as a significant supply of stumpage is available a healthy timber market will remain for the foreseeable future and active management will continue to pay off.

**How the timber market works**

Dr. Alan Long gave us a good timber market 101 talk, discussing how timber prices are determined and where to get timber price information.

The price you get for your timber, aka stumpage price, is equal to the mill gate (delivered) price minus harvesting cost and profit.

- Gate price depends on markets for finished products, current inventories, weather, source of wood and competition.
- Harvest cost is dependent on the size of the sale and type of harvest, species, tree size and density, soil and slope conditions, weather, accessibility, distance to mill and contract specifications.
- Profit depends on interest rates and available markets.

**Sources of stumpage price information:**

- Timber Mart-South (a summary of the previous quarter is in this newsletter)
- [http://www.forest2market.com/](http://www.forest2market.com/) provides monthly region-wide averages for the major products
- Consultants
- Local agency or procurement foresters
Major product specs (can vary slightly depending on the mill):

- Pulpwood (or OSB): 4-8 inches dbh, 25 ft minimum log length
- Chip-n-saw: 8-13 inches dbh, 30 ft minimum log length
- Sawtimber: 11-29 inches dbh, 17 ft minimum log length

Selling your timber for what it’s worth

Getting the right price for your timber starts with knowing what you have to sell and then using the market competition to get the highest price.

Inventory your timber
For each stand, an inventory should measure, by species, how much is pulpwood, superpulpwood, CNS, plylogs, and poles. In general, if your property is 160 acres or larger, it is recommended that you hire a consulting forester to conduct an inventory and assist with the timber sale.

Decide when to sell: this is perhaps the most difficult step due to the unpredictability and variability of timber prices over time and space. As a rule of thumb, it is best to sell timber when current prices are above the long-term trend line. Take advantage of active market periods and avoid selling, if possible, during periods of decreased demand for your products. The advantage of growing trees is that you can usually "bank on the stump" until market conditions improve.

Decide on a selling method: negotiation or sealed bid

In a negotiation, the seller arrives at a price after negotiating with one or more potential buyers. This method may yield a fair price but it may not be as high as the value of a bid sale that receives responses from a larger number of potential buyers. Sellers do not usually have as much information about current market values as the buyers in a negotiation. Negotiation is necessary and appropriate when: the tract is small and/or irregular; small volumes are sold per acre; timber is sold from a thinning or salvage sale; there are few mills within a reasonable trucking distance; specialty products are sold; or when the seller prefers or has a previous working relationship with a certain buyer.

In a sealed-bid timber sale, the seller advertises the sale to as many prospective buyers as possible. The seller may specify a minimum bid or the right to refuse all bids. Potential buyers submit confidential written offers that are opened at a specified time and place. Each bidder is allowed a single bid and no bids are accepted after the bid closing. Sealed bids are most appropriate when the area to be harvested is large and uniform (i.e., clearcut harvest). Sealed bids historically have yielded the highest price to the landowner and take advantage of competition among buyers. This selling method is not suitable for small, irregular tracts; and it eliminates opportunities for negotiation.
Decide on a payment method: lump sum or pay-as-cut

In a **lump sum payment**, the seller and buyer agree on a total price for the timber before it is cut and the full payment is made at contract closing. A lump sum can also be paid in installments. This payment method is best when the sale boundary is easily defined and the timber to be cut is uniform. The advantages of lump sum payments for sellers are that they receive full payment before harvesting begins and risk of timber loss is transferred to the buyer. As such, buyers are careful not to over-pay for the timber to compensate for this added risk. Often the landowner will receive less for his or her timber than they might otherwise receive.

The **pay-as-cut payment**, or scale sale, is the most common method of selling timber. This type of sale requires the seller and buyer to agree on per-unit prices and specifications for each product before harvesting. There is usually an initial advance payment or deposit, with subsequent payments as the timber is harvested. The seller retains ownership of the timber and risk of loss until it is harvested. This method is best when the seller needs to sell quickly, or when the sale involves thinning, harvesting areas with difficult or uncertain access or a timber cruise will be difficult or inaccurate because of non-uniform conditions. Close monitoring of this type of sale is critical and the total amount of income is unknown until the end of the sale.

More details on selling timber are in Steps to Marketing Timber: [http://edis.ifas.ufl.edu/FR130](http://edis.ifas.ufl.edu/FR130).

**Marketing alternative products**

There are many opportunities to make additional income from enterprises other than timber, ranging from some of the more common options like selling pine straw, cattle grazing and hunting leases to more exotic ones like gathering wild edibles or medicinals, decorative florals, ecotourism and specialty wood products. For any of these to work there must be a market for the product or opportunity you have to sell.

**Before you start** any new enterprise consider the following: a management plan, available markets for your product, labor intensity, capital investment, record keeping, and management options (will you use existing resources or cultivate or create new ones).

See these UF-IFAS publications for more information on some of these enterprises:

- Pine Straw Management in Florida’s Forests: [http://edis.ifas.ufl.edu/FR030](http://edis.ifas.ufl.edu/FR030)
- Wildlife and Hunting as Alternative Farm Enterprises: [http://edis.ifas.ufl.edu/UW224](http://edis.ifas.ufl.edu/UW224)
- Ecotourism: [http://edis.ifas.ufl.edu/CR007](http://edis.ifas.ufl.edu/CR007)
- Integrated Timber, Forage and Livestock Production - Benefits of Silvopasture: [http://edis.ifas.ufl.edu/FR139](http://edis.ifas.ufl.edu/FR139)

**Florida Division of Forestry services**

Each program was concluded with a presentation by the local DOF county forester about local market conditions,
available services and cost shares. These were very helpful tips and helped us keep things relevant for local audiences. For information about available technical assistance and cost-share programs see these publications:

- Improving, Restoring, and Managing Natural Resources on Rural Properties in Florida: Sources of Financial Assistance: http://edis.ifas.ufl.edu/FR156
- Improving, Restoring, and Managing Wildlife Habitat in Florida: Sources of Technical Assistance for Rural Landowners: http://edis.ifas.ufl.edu/UW218

Many thanks to all these folks for presenting the program: Greg Barton, Jerry Brooks, Chris Demers, Shep Eubanks, David Holmes, Matthew Johnson, Jeff Jones, Dr. Alan Long, Jeff Main, Steve Tullar, Tony Wallace, Chris Vann and Russ Weber.

Leftover materials available: There are about a dozen or so binders left over from this program, available on a first come first serve basis. Contact Chris at 352-846-2375 or cdemers@ufl.edu if you want a copy.

National Wild Turkey Federation’s Operation Oak Program
By Brian M. Zielinski, NWTF Regional Biologist

The National Wild Turkey Federation is proud to announce the continued expansion of its Operation Oak Program that is dedicated to restoring and creating wildlife habitat throughout the Southeast. A partnership between the Natural Resources Conservation Service (NRCS) and the NWTF has made 10,000 select oak seedlings available free to private landowners in Florida. A total of 4,000 live oak, 1,000 white oak, and 1,000 persimmons will be available to landowners, with a minimum order of 100 trees. These native seedlings are grown under a specialized nursery protocol at the Flint River Nursery in Georgia. The result of this nursery protocol is a large, vigorous seedling with high survivability, high growth potential, and the potential to produce mast in approximately 7-10 years.

Participants will need to pick up their seedlings at a centralized location. Pickup locations and dates will be finalized in November and trees will be made available in early February.

If you are interested in receiving free seedlings you must complete an application form and mail, e-mail or fax it back to the attention of: Kay Morris, Operation Oak, P.O. Box 530, Edgefield, SC 29824, kmorris@nwtf.net, fax (803) 637-9180. Applications must be received on or before December 1, 2006.

If you would like an application or have additional questions about the 2007 program, please contact Brian M. Zielinski, NWTF Regional Biologist, at (386) 804-6691 or email: bzielinski@nwtf@hotmail.com.

Stewardship Publications New and Old

A series of Forest Stewardship Program publications is available through the University of Florida IFAS. Here is a run-down of the publications in this series that are currently available on-line at edis.ifas.ufl.edu/:
These and many other publications on various natural resource topics are available at http://edis.ifas.ufl.edu/TOPIC_Natural_Resources_and_the_Environment.

Congratulations to these Landowners for Achieving Forest Stewardship Certification

Mark Carpenter, Holmes County
John D. Brown, Holmes County
Bill & Val Ford, Holmes County
Charles Alford, Holmes County
Edna & Lee Knight, Holmes County
Dr. William Cox, Holmes County
Ken Carroll, Holmes County
EJ Lanum, Holmes County
Sheri Brooks, Holmes County

Timber Price Update

The timber pricing information below is useful for observing trends over time, but does not necessarily reflect current conditions at a particular location. Landowners considering a timber sale are advised to solicit the services of a consulting forester to obtain current local market conditions. Note that price ranges per ton for each product are included in parentheses after the price per cord.

Stumpage price ranges reported across Florida in the 3rd Quarter 2006 Timber Mart-South (TMS) report were:

- Pine pulpwood: $15 - $26/cord ($6 - $10/ton), ↑ from 2nd Quarter 2006
- Pine C-N-S: $55 - $75/cord ($21 - $28/ton), ↓
- Pine sawtimber: $85 - $115/cord ($32 - $43/ton), ↑
- Pine plylogs: $94 - $127/cord ($35 - $47/ton), ↑
- Pine power poles: $140 - $171/cord ($52 - $64/ton) ↑
- Hardwood pulpwood: $10 - $24/cord ($3 - $8/ton), ↑

Trend Report

With the exception of pine chip-n-saw, which hit a 10-year low this quarter across the Southeast, average stumpage prices for all products in Florida were up at least slightly from last quarter. However, Southeast stumpage price averages were all down due to various market factors including fewer housing starts, decreased lumber and panel prices, and several lumber mills taking market-related downtime this quarter.