

SOUTHERN REGIONAL REPORT

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INTRODUCTION

It appears as if many in wood procurement, forest management, operations, manufacturing, and sales in the southern U.S. are simultaneously biting the bullet and showing signs of guarded optimism for the future.

On the one hand, during last year, purchasing costs were high, selling prices were low, quotas ruled, machine purchases sagged, and everyone's favorite discussion topic was "SFI." However, there is continued commitment to training, investments in timberland and facilities in the South, new technology implementation, and a common hope that forestry will survive and prosper in the South. As the South becomes the wood basket for the nation, many see opportunities and the potential for a better future. The questions are "how can we afford to get where our industry needs to be" and "who will pay." These questions will need to be addressed in the near future.

HARVESTING TASK FORCE

In 1996, the American Pulpwood Association Southeastern Technical Committee formed a Harvesting Task Force. The purpose of the Task Force is to encourage the development and improvement of systems for economically harvesting trees with reduced levels of soil disturbance on wet sites. Objectives are to:

- (1) identify and clarify opportunities for improvement of wet site harvesting,
- (2) identify shared perspectives on how to harvest trees on wet sites with a focus on moving trees from the stump to roadside or deck,
- (3) provide a framework for testing alternative approaches and sharing results,
- (4) provide loggers a forum for input to this process, and
- (5) provide a forum for supplying information to equipment and engineering firms for development of alternative concepts.

The Task Force is composed of representatives from five forest industry companies, two universities, the Forest Service, APA, and two logging contractors.

To date, the Task Force has:

- (1) identified a protocol for measuring soil surface disturbance,
- (2) established some selected machine and system attributes that minimize soil disturbance, and
- (3) sponsored logging equipment manufacturers/ loggers forum to discuss more innovative methods of reducing site impacts on wet sites.

The forum had excellent participation with common recognition and concern for the problem of site impacts on wet sites, and strong desire to continue such dialogue. There was excellent discussion concerning that some solutions were already available but expensive, the market will not bear the cost of developing new technologies, technologies were not the only answer (an example was a need for training), and a concern as to who has to pay the cost associated with doing what it takes to reduce site impacts. The Task Force will continue to provide mechanisms for addressing these concerns and looking at solutions.

ROLE OF THE SOUTH

The Southern U.S. has become a major supplier of wood and wood products for the nation. It has over one third of the production forestlands in the U.S., and forestry is the number-one industry in most of the Southern states. In the past year, land and production facilities transactions in the South are an indication of the current and projected role that the South has in timber production.

Two examples are the additional acquisition of over 240,000 acres of commercial forestlands in the South by Weyerhaeuser Company, and the purchase of over 500,000 acres of timberlands in the South by Plum Creek Timber, a Northwest company.

There is also increased interest in the development of fast-growing hardwood plantations by the larger pulp and paper companies. Several companies are doing pilot studies and are in the process of developing large plantation systems, some using irrigated systems that provide supplemental water and controlled nutrient

delivery systems to individual trees. The Southern Research Station of the Forest Service has initiated a multi-disciplinary research cooperative to look at site productivity, environmental concerns, and efficient management systems for such plantations. The proposed coop involves the Department of Energy's Savannah River Site and Oak Ridge National Laboratory, three universities, and several forest industry companies.

INNOVATIONS

There have been new, or at least reuse or expanded use, of innovative techniques in forest harvesting.

More companies have implemented or expanded pine plantation thinning. Many are using cut-to-length systems, and several contractors are using small swing-tracked harvesters. An innovation on the tree-length system in thinnings is to use the trees in the cut corridors as matting to protect the ground, especially by using swing, tracked feller-bunchers. Many bottomland and swamp loggers are using swing, tracked feller-bunchers to reduce site damage and to improve the efficiency of their system by building strategically larger bundles, and by working with shovels to the tree-length material to improve skidder access.

Clambunk skidders and large capacity forwarders are being introduced on wet sites to improve production and reduce site damage by eliminating high-trafficked areas. Large shovels and use of cable yarders on flat sites with intermediate supports are also being tried.

Satellite and in-woods flail delimiting and debarking have become commonplace, especially in first thinnings of pine plantations. An innovation by one company is the delimiting/debarking of trees at roadside by flail systems into "barkless" tree-length wood to be sent to drum debarkers at the mill for improved chip quality, almost zero percent bark content when chipped. The system increases the percent of usable fiber per truck load and leaves more of the waste on site to be used for replacing nutrients.

A manufacturer has developed a hydrostatic driven skidder with variable speed control to reduce slip and improve traction while operating on wet sites. It has shown some potential in reducing site disturbance and improving production. Also, a major skidder manufacturer has announced the construction of a skidder plant in Georgia.

Logger training is still a major concern, especially in response to the AF&PA's Sustainable Forestry Initiative

(SFI). Almost every state has a logger training program. International Paper Company announced a plan that will require all loggers who supply fiber to their company to support this initiative, complete an education program, and adhere to SFI's harvesting criteria.

Champion International has initiated a Preferred Suppliers Program (PSP) which is an expansion of SFI and its own Stewardship and Sustainability Initiative. It's being pilot tested in the Alabama Region. It requires that loggers exceed many state standards for water quality protection, worker safety, provide for protection of endangered species, and meet wood quality standards.

CURRENT RESEARCH AND EXTENSION EFFORTS

The USDA Forest Service Engineering Research Unit at Auburn, Ala., is completing extensive evaluation of site productivity, water quality, system efficiency, regeneration, and visual quality for upland hardwoods. Other studies include evaluating harvesting systems for bottomland hardwoods, assessing impacts of road construction on side slopes, predicting water quality and soil impacts from different site prep and harvesting treatments, and improving forest worker safety and health.

Auburn University has an active Professional Logging Management Course, having trained over 900 loggers to date. Two video conferences were conducted last year:

- (1) The Sustainable Forestry initiative and Its Impact on Loggers. and
- (2) Worker's Compensation Issues and the Logger.

There has been a high demand for workshops such as Logging Cost Analysis, Thinning Methods, and Harvest Planning and Layout. Research has continued on evaluating cut-to-length systems in first and second thinnings and clearcuts.

Other research has included evaluating the spreading of poultry litter and sludge on thinned pine plantations. Researchers have been investigating the prevalence and operating characteristics of animal logging operations in Alabama. They conducted a survey which identified over 50 animal loggers currently working in Alabama. A video conference on horse and mule logging was broadcast to several states and British Columbia in April 1997.

Ongoing forestry operations research at Virginia Tech includes the evaluation of BMPs, logging capacity uti-

lization and cost, soil and site impacts from timber harvesting, chip quality, and logger training. New research is on the effectiveness of logging safety programs and the establishment of SMZs in disturbed wetlands. Extension efforts at Virginia Tech have been the development of logger education programs on safety, business management, and harvest planning for Virginia's Sustainable Forestry Initiative. Over 1,600 logging personnel were trained in these programs in 1996. In cooperation with the American Pulpwood Association's Southwide Safety Committee, a "Knuckleboom Loader Safety" videotape was produced.

The Virginia General Assembly passed a "right to practice forestry" law in 1997 that prohibits local governments from passing ordinances that unduly restrict a landowner's right to practice forestry or harvest timber. Timber harvest levels have increased dramatically in some areas of Virginia over the past 2-3 years, causing concern among state forestry officials and forest industry leaders. The issue is being studied.

A prominent researcher at Mississippi State University, Dr. William F. Watson, retired after a long and distinguished career to partake in the fruits of working for a forest industry company. Research and extension, especially in logging training, will continue, if not flourish in his absence.

The University of Georgia is formally establishing a center for forestry business and is adding five new faculty positions. Current research and extension in forest operations are focusing on labor issues, labor productivity, and SFI training. Computer simulation modeling is being used to evaluate a range of systems working in various silvicultural treatments. New research has been initiated to evaluate the productivity and quality for delimiting and processing.

There is other excellent research and extension being completed at other universities and institutions across the South. Unfortunately, the author had insufficient time to contact everyone and regrets their exclusion from this report.