AUBURN UNIVERSITY



Southern Forest Nursery Management Cooperative

Newsletter



SPRING 2005

DIRECTOR'S REPORT

With another lifting season behind everyone, I hope that this Spring Newsletter finds the members of the Coop ready for a productive growing season. It has been a relatively quiet and mild winter, as observed from my office window in Auburn. I received only a few calls from landowners concerned about browning and tip die-back, most likely due to needle cast, and perhaps one example of freeze injury on some older trees in Alabama. David South speculates that the mild temperatures in January may have resulted in the stand becoming active thus causing it to be susceptible to a sudden down turn in temperatures that, under normal conditions, would not result in tree injury. Nursery studies were taken down and data collected this past winter and put into Research Reports that will be published this New studies have been vear. worked out and those are getting ready to be installed this spring. Other items of interest include the Contact Meeting, to be held in Chat-



tanooga this June and the Nursery Short Course, to be held in Auburn the last week of August. Be sure to read this Newsletter for more details and watch your e-mail and "snail" mail for specific announcements.

The Big Move

Another big change taking place this year is that the School of Forestry and Wildlife Sciences is getting a new state-of-the-art building, with moving dates set for June/July 2005. What this means is that office and laboratory space currently used by the Nursery Cooperative will need to be boxed up, moved and unpacked in the new building. The actual move will most likely occur after the Contact meeting and will result in everything being "dropped" for a few days while we dismantle our current space and reinstall it in the new building. Those that attend the Nursery Short Course and the Advisory Meeting will have the first opportunity to tour the new facilities.

Membership

Perhaps this is old news to many in the close-knit world of nursery production, but the Alabama Forestry Commission voted to close the E.A. Hauss Nursery in Atmore, AL. Manager Craig Frazier was instructed to sell the hardwood and longleaf pine seedlings in the ground and not to sow any seed for the 2005-2006 planting season. Plans for the nursery area include leasing to farmers for now and "wait and see." It is hoped that the tree improvement program can be maintained so as to not lose the investments put into that program.

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Nursery Production Survey

Now into our third year, the Nursery Coop will again survey regional seedling production. Using information gained at the Advisory Meeting in November, we will survey as many nurseries as possible to obtain a complete and accurate picture of production. This mail-out survey will be sent in early June and I ask that you help us out by completing and returning the survey. Last year's results are summarized in this Newsletter; the entire report was published as Technical Note 04-02. This can be accessed on the Nursery Coop Website or, if you prefer a hardcopy, simply drop Elizabeth Bowersock a note (334.844.1012 or bowerep@auburn.edu) and she'll see that you get a copy.

Contact Meeting

The 2005 Contact Meeting will be held June 15-17, 2005 in Chattanooga, TN. Here's an update from Elizabeth Bowersock:

"Mark your calendar, pack your bags, and load up the family van because this year's Contact Meeting is in Chaaat-taaa-nooooga!! The meeting is going to be held at the Hilton Garden Inn, Hamilton Place (off of I-75) from June 15-17. There will be research presentations, guest speakers and a field trip!

After all the work is said and done, then it's definitely time for fun! Chattanooga has so many things to do; it's hard to decide what to do first! Of course you can't leave without visiting the classics: Ruby Falls, Lookout Mountain, Rock City, and the Incline Railway. Then there's the Tennessee Aquarium and IMAX Theater, the Children's Discovery Museum (for the wee little ones), Lake Winnepesaukah Amusement Park, Sir Goony's Family Fun Center, the Tennessee Valley Railroad, the Chattanooga Zoo, and MORE MORE!! If you like to golf, there are several wonderful courses in and around the city. Shopping? Hamilton Place - need I say more? For those of you who prefer more culture and class, there are plenty of museums and theatres. Want sports? Look no further than Bellsouth Park, home of the Chattanooga Lookouts. And if you're really adventurous, try white water rafting down the Ocoee River!

We are REALLY excited about the Contact Meeting this year – not just because of all the fun stuff to do in Chattanooga, but for the chance to catch up with all of our members and talk about the latest research. There is plenty of time to register, and everyone is



more than welcome! Help to make this the best Contact Meeting ever!"

For more information about Chattanooga and all the great things to do in and around the city, visit www.chattanoogafun.com.

An agenda and registration packet will be mailed shortly.

PESTICIDE NEWS

Methyl Bromide

Scott Enebak

Being such a significant component of the production of forest-tree seedlings, it is not surprising that MBr issues take up a large amount of the Coop staff's time and efforts. These past few months have not been any different and, while some may tire of bi-annual updates, we must all be aware of the processes and decisions that occur which determine the fate of MBr.

2005 -CUE Three months into the calendar year should have many of you thinking about spring and fall fumigation. The MBr allocated to forest-tree nurseries in the US for 2005 was 192.52 metric tons and managers need to carefully and closely monitor their fumigation needs this year. According to the agreements made during the CUE process and at Prague, any allocated CUE MBr that is unused at the end of the 2005 calendar year is automatically deducted from future requests. This deduction of MBr allocation is in line with the Treaty and Parties' desire to decrease the amount of ozone depleting gases and the adage "use it or lose it" becomes important to future availability of MBr. The procedure for requesting and using CUE MBr is similar to the process for obtaining MBr through the Quarantine Pre-shipment (QPS) and can be done through the fumigation contractor. As part of the "consortium," Nursery Coop members should have received a letter to be used as "proof of membership" for State or Federal plant inspectors and to show that they are authorized to use CUE MBr

2006-CUE In August, the Nursery Cooperative submitted a CUE for the 2006 calendar year. This request was compiled with other CUE requests by the EPA and then submitted to the State Department for presentation and approval by the Parties at Prague. What follows is a brief summary of the November 2004 meeting, supplied by Wayne Ausk of Great Lakes Chemical Corporation:

"The Critical Use Exemptions process continues to be a point of major controversy. The U.S. delegation stated during the plenary that Methyl Bromide Technical Options Committee (MeBTOC) was in fact making "policy decisions" and applying arbitrary reductions to the Critical Use Nominations rather then conducting the required "technical reviews." Yet in spite of all the complaining about the process, at the end of the day, the Parties adopted the European Community (EC)-favored recommendations of MeB-TOC. The EC unilateral position of "ban methyl bromide at all costs" and continued pressure from other commercial interests the Parties still approved production of 27% of baseline as a CUE for 2006, with the possibility (albeit slim) of increasing to 37% at the Extraordinary Meeting in Montreal in July of 2005. In addition, all the supplemental applications for 2005 were approved so the final 2005 CUE is actually about 37% of baseline (30% new production, 7% from existing stocks). So we live to fight another day; we must press on and not quit. A big part of the strategy by those opposed to methyl bromide is to wear down its supporters by a constant barrage of questions about nearly every aspect of the US Critical Use Nominations, despite the fact that the US nominations are the most complete and robust of any. We must remain determined to continue to defend what is clearly authorized by the Montreal Protocol and what is right for the U.S. end-user community."

Three points need to be taken home from the events in Prague: 1) that forest-tree nurseries requested, and were awarded, 157.69 metric tons for 2006 -- so the reduction in MBr CUE did not come from our user group, but rather other user groups; 2) the 2006 CUE award is 34.83 metric tons *less* than we have available for 2005; and 3) the CUE process continues to be a political, somewhat arbitrary, phenomena. Thus, you need to continue to press your case to your elected officials about your need for MBr so that they can weigh-in on the decision making process. As employees of the State of Alabama, we (the Coop staff) are limited in our ability to lobby government officials but can help you with data and information.

In that regard, the Nursery Cooperative was invited to testify before the subcommittee on Conservation, Credit, Rural Development and Research; Review of the Methyl Bromide Critical Use Exemption process under the Montreal Protocol. The Hearings were held on March 10, 2005 and in addition to the Nursery Coop (Forest Seedling representative), representatives from the Farm Bureau, North American Millers Association, Florida producer on behalf of Crop Protection Coalition, Society of American Florists and a strawberry producer from California testified on their behalf to the importance of MBr and the CUE process. Dr. William Carey was extended the invitation to speak before the subcommittee and has been the "point man" on the CUE process, was used by the

EPA as an evaluator during the CUE process, and has great insight into the CUE application process since it began.

2007-CUE The application for the 2007 allocation for CUE MBr will be due sometime in August 2007. The Nursery Cooperative will file a CUE on behalf of the Coop Members for inclusion into the State Department's request to the meeting of the Parties taking place in November 2007. The CUE Hearings in Washington D.C. this month, as mentioned above, may have an effect on the CUE nomination process and, as always, we will keep you abreast of the decisions made and how that may influence the availability of MBr.

Methyl Bromide - QPS Scott Enebak

As many of you know, methyl bromide used for Quarantine and Pre-shipment (QPS) is exempted under the Montreal Protocol from the phase-out that occurred on January 1, 2005. Even though we've been successful with the CUE process, the availability of MBr through the CUE process is limited and will eventually come to an end. Thus, the best long-term approach to using MBr in seedling production is under the QPS guidelines of the Montreal Protocol. In 2004, EPA ruled that the use of MBr for QPS was



possible for 'inter-state' shipment of seedlings (if you were going to ship your seedlings across state lines, then you could use MBr). However, QPS 'intrastate' (seedlings that were not shipped out of state) would not qualify. Thus, if your nursery

does not move seedlings across state lines, you would not be authorized to use MBr under the QPS guidelines. In late November 2004, the USDA and APHIS proposed, and later approved, some rules to clarify how, what and when individual states can approve and require MBr as a QPS for 'intra-state' use. At the November Advisory Meeting in Auburn, Dr. Tomm Johnson of the Alabama Plant Regulatory Board discussed with those in attendance the necessary verbiage to fall under the guideline QPS rules that would allow MBr to be used in the production of forest-tree seedlings for 'intra-state' shipment of seedlings. Since the meeting in November, the Alabama Plant Regulatory Officials have been working with one of their attorneys on the new QPS intra-state regulation. The new regulation does not involve cogongrass (actionable pest) as had been discussed at the Advisory Meeting because some thought it frivolous. I have been told that the newly proposed regulation will cover the needs of the forest nurseries.

Thus, it might be possible to use this regulation for intra-state production and shipment of forest-tree seedlings. As the process moves on and takes shape, we will keep members informed and up-to-date on this

Congress Questions EPA on CUE Process Bill Carey

The story of MBr's role in ozone depletion and regulation under the Montreal Protocol (MP) and Clean Air Act (CAA) is a confusing mess. Contributing are a combination of inadequate science, treaties and laws, and pressures from economic and "world view" interests. The science to relate fumigation to atmospheric MBr and then to ozone depletion is simply inadequate. Nevertheless, the MP and CAA layout a road map that we, as users of MBr for seedling production, must follow. Unfortunately, much of what happens among Parties to the MP is hidden from view and exceeds its authority. We, as users of MBr, are many times left in the dark wondering what happened. The MP is an international treaty, so the State Department (Executive Branch) represents our interests. However, what the State Department agrees to



at meetings in Europe is enforced in the United States under the CAA (Legislative Branch) and Congress is concerned with recent concessions by the State Department to our Critical Use Exemption (CUE) nominations.

My input into the CUE process is limited to providing basic data on fumigation to forest nurseries and the non-availability of suitable alternatives. This data goes in a CUE application sent to biologists and economists at the EPA and from them along to others at EPA and State to take forward to a MP group called MeBTOC (Methyl Bromide Technical Options Committee).

The MP gives MeBTOC no authority to reject or reduce CUE's or provide for the ultimate zeroing out of CUE's. Critical is critical, and CUE's are based on data submitted by the user groups and MeBTOC has no better data. However, in the last two years, MeBTOC has proposed reductions to our CUE nomi-

nations and our State Department delegation has "signed on" and "agreed" to such proposed reductions.

On March 10th, the House Agriculture Subcommittee on Conservation, Credit, Rural Development, and Research called on representatives of our MP delegation (State and EPA) to explain why they accepted reductions to our CUE's. The questioning of that panel by the committee members was pleasant to observe from where I sat, considering the time and effort we have put into MBr and CUE's. How will this hearing and questioning of the EPA and State Department affect the CUE process? The message of the day was that our representatives should defend our CUE requests with more vigor and that if that fails, Congress may consider ways to provide the amounts of MBr requested for CUE's. An amendment to the CAA has been introduced and has 44 cosponsors that states in part, "if the Parties to the MP do not approve the entire amount of MBr requested by the US under the CUE process...then notwithstanding any other provision ... the entire amount of MBr requested shall be deemed to have been approved...." The clear message from the hearings on March 10th is that Congress is interested.

A complete listing of the hearings and testimony can be found at:

http://agriculture.house.gov/hearings/statements.html

GoalTender™

David South

The new name for Goal [™] 4F is Goal Tender [™]. This product is registered in the states of AR, GA, LA, MS, NC, TN, TX (as of February 2005). If all goes well, it soon will be registered in AL, OK, SC and VA. This will be the first year for national sales, so contact your distributor so they can stock their shelves in time for the first postemergence application in June.

The cost of GoalTender per application might be 24% more than Goal 2XL but it causes less injury to newly emerged pine seedlings. Since it is more expensive, we do not recommend it for use at time of sowing. Instead, it will be useful as the first postemergence application (but before the weeds emerge). However, GoalTender is twice as concentrated as Goal 2XL so do not be scared off by the price per gallon. For example, if a gallon of GoalTender sells for \$210/gallon, it will only be 24% more expensive than Goal 2XL which sells for \$85 per gallon.

One problem nursery managers sometimes have is that weeds develop 4 or 5 weeks after sowing and to avoid injuring young plants, some managers have

been waiting until 8 weeks after sowing (about 5 weeks after emergence). Unfortunately, this allows weeds to develop before the first application. To treat young weeds early, some managers apply Cobra® 2L. Although Cobra® causes some necrosis to new tissue, the amount is less than with Goal™ 2XL. From limited experience, we did not see any phototoxicity with GoalTender™. Some nursery managers might switch to using GoalTender™ for the first postemergence application. However, Cobra® is likely better on prostrate spruge so some managers may decide to continue applying Cobra®. Our tests indicate GoalTender[™] can safely be applied about 5 weeks after sowing. The application rate can be about 4 to 8 fluid ounces of product per acre. Due to reduced codistillation, some managers might find Goal 4F useful as a directed application in hardwoods (when applied under the canopy and directed away from foliage).

A copy of the GoalTender[™] label can be downloaded from the Coop web page: http://www.sfws.auburn.edu/sfnmc/intro/goaltender.pdf

\$200,000 Worth Of Pesticide Stolen

Source: The Associated Press

February 21, 2005

"Pesticide theft is on the rise in Ventura County California, where the purloined poisons are being resold on the black market," stated a recent article by The Associated Press (AP).

Approximately "\$200,000 worth of pesticides stolen from Seaboard Produce Co. late last month was the latest in a string of such thefts," the article stated. According to the article, some growers are being targeted by these thieves "who steal expensive pesticides and fungicides that can cost hundreds of dollars per gallon." According to the local sheriff's department's agricultural crimes unit, there have been at least four major burglaries of pesticides and fungicides in the first part of 2004.

According to the AP, "The (pesticides) are being stolen and sold possibly in other areas of the state. Or they could be going to Mexico," Detective Don Jennings of the Ventura County Sheriff's Department agricultural crimes unit said. "We don't know where they are being taken or the price they're being sold at. We have to find the chemicals, and we've just had no luck yet."

At this point the county is speculating that the thieves

are in it for the money since chemicals can be so expensive. Though this may not have happened to any growers that you know yet, make sure that all of your chemicals are locked up and stored away in a safe place.

PRODUCTION TECHNOLOGY

Southern Forest-Tree Nursery Production

The seeding production survey conducted last fall was summarized and published as Technical Note 04-02. Like previous production surveys, the seedling production is categorized by species, state, type and ownership. The results in the Note are only production and do not provide any indication of sales. As previously mentioned, the results from the entire survey can be found on the website or you may obtain a copy of Technical Note 04-02 by contacting Elizabeth Bowersock.

A few key points are listed below:

By Species	2003-2004		2002-2003		Change	
Loblolly	81 %	852.3 MM	76%	957.7 MM	-11.0 %	
Slash	13 %	135.7 MM	13 %	167.7 MM	-19.0 %	
Longleaf	4%	48.1 MM	5 %	67.5 MM	-28.7 %	
Hardwoods	1%	38.9 MM	4%	47.4 MM	-17.9 %	
Others	1%	15.7 MM	2 %	19.3 MM	-18.6 %	
By State*						
Georgia	23 %	249 MM	24 %	296 MM	-15.8 %	
South Carolina	15%	158 MM	15 %	190 MM	-16.8 %	
Alabama	13%	137 MM	12 %	147 MM	- 6.8 %	
Mississippi	11%	117 MM	8 %	94.6 MM	+ 23.6 %	
Texas	9%	95 MM	11 %	136 MM	- 30.0 %	

^{*} Top five seedling production States in 2003-04, MS and TX were not in top 5 in 2002-03.

Seed treatment with Yield-Shield* on germination and damping-off of longleaf pine Scott Enebak and Bill Carey

One of the tasks at the Nursery Cooperative is to increase seed efficiency in nurseries and nowhere is

this more important than container longleaf culture. Some previous research had shown that the bacterial treatment Yield-Shield® is antagonistic to Fusarium and fungi in this genus can significantly reduce the germination of longleaf seed. This past summer we evaluated the ability of Yield-Shield® to enhance germination of two half-sib longleaf families (119 and 137) that differed in pitch canker symptoms in a seed orchard. The treatment was applied as a dressing to moistened seed at one rate (1.5 gm treatment / lb seed) but for three different incubation periods. The product was either applied immediately before sowing or 48 or 96 hours before sowing to seed that were returned to a 4° C incubator till sown. The control was a 10 minute soak in distilled water. Seed were sown by placing each flat on the surface of 80 containers cells (two 40 cell racks of 80 cm3 cells) containing Premier® Pro-Mix, and then covered with a thin layer of sand. Numbers of emerged seedlings were recorded weekly for four weeks and again at 12-weeks after sowing. Damping-off was recorded as originating at the seed where attached to the needles (top-down) or within the root system (bottom up). The number of longleaf seedlings and symptomatic seedlings were analyzed for differences between clones and incubation times using SAS ANOVA while differences between means were compared using SAS Duncan's.

Table 1. Longleaf pine germination and damping off 12 weeks after seed treatment with bacteria.

Clone	Bacteria Incubation	Germination 12 wks (%)	Damping-off 12 wks (%)
137	Check	27.5 a	11.0 a
	0 hrs	32.5 a	12.2 a
	48 hrs	34.2 ab	13.0 a
	96 hrs	36.0 b	9.7 a
119	Check	30.0 a	13.7 a
	0 hrs	29.5 a	19.0 a
	48 hrs	29.5 a	21.5 a
	96 hrs	27.3 a	16.0 a

Yield-Shield® treatment of clone 137 increased germination and cavity fill at 12-weeks and, as incubation with bacterial treatment increased, so did the number of seedlings. In contrast, treatment of clone 119 neither affected cavity fill nor decreased damping-off. Thus, it appears that the effects of the bacterial antagonist are more effective on poorer seed lots

than good seed lots. Similar effects (increasing poor seed lots and not good seed lots) have been observed with fungicide trials as well.

Effects of Synthetic Bed-Stabilizers on Bareroot Pine Seedling Production

Bill Carey and Scott Enebak

Most industry nurseries in the South adopted the use of synthetic stabilizers within a few years of preliminary trials in the mid 1980's and now on average use close to 55 gal/ac in 800 gal water with satisfactory protection most years (Carey 2004). Although uses have been refined through the 1990's, there are few reports on efficacy after the 1980's. In this past year, (2004) stabilizer appeared to be beneficial even where bed erosion caused by rain was not apparent. Detailed descriptions of the 2004 stabilizer trials, including rainfalls and soil textures for three nurseries is being prepared as a 2005 Research Report. However, at one nursery, seedling mortality in control plots resulted from preemergence applied Goal. This effect has been reported (South 1987) but was not previously quantified and unfortunately confound the effects of soil stabilization on seed efficiency. Since stabilizer seems to affect herbicide injury on only a few fine textured soil types, those plots will be discussed in the Research Report; only two nurseries will be reported in this Newsletter.

Stabilizer studies were installed at the Pine Hill, the Rock Creek and the Pearl River nurseries. Three adjoining beds were treated together and treatments were applied as a randomized complete block (RCB) by dividing each site into four equal blocks (of 80 to 120 feet long depending on total length), and assigning one stabilizer rate to a third length section of each block. The three treatments were 1) a not treated control, 2) the nurseries' standard rate of stabilizer and 3) twice the standard rate. The same design was used at all nurseries. Stabilizer effects were assessed 30 days after sowing and in November as stems/drill foot in each drill.

We assumed that differences between treatments early in the season would be caused by severe rain, especially if between sowing and seedling establishment, and that where bed erosion occurred it would reduce seedlings in outside drills compared to inside drills. We expected that differences between treatments would depend on rainfall and would vary among nurseries.

Stems / drill foot (for 8-drill-beds, one drill foot = 0.5 ft²) are presented in Table 1. At Rock Creek, a 5" rain six days after sowing reduced May seedling counts in control plots and the number of seedlings in outside compared to inside drills. At Pearl River, the only potentially severe rain during germination was a

2" on day 4 which had no apparent effect on bed structure or on seedling counts.

Stabilizer cost in 1987 (about \$190/ac) required a saving of 8,000 seedlings/ac (0.3 / ft²) to justify use (South 1987). Stabilizer costs have apparently increased less than seedling value and currently (at about \$220/ac) require saving only about 5,500 seedlings/ac (0.2 /ft²). Using this criteria, the values saved at Rock Creek and at Pearl River were more than ten times the costs of material. Although rainfall caused no visible bed erosion and no statistically significant differences between treatment or drill positions at Pearl River, means indicate stabilizer was still economically beneficial.

Table 1. Seedlings per linear foot of drill by nursery, stabilizer treatment and bed position.

Nursery	Variable	Level	Stems / drill foot May	Stems / drill foot November
Creek	Stabilizer	0	11.4 a	11.2 a
		1	12.9 Ъ	12.3 ab
		2	13.0 Ъ	12.8 Ъ
		lsd	1.3	1.1
	Drill Position	Outside	11.8 a	10.9 a
		Inside	13.1 Ъ	13.3 Ъ
		lsd	1.1	0.9
Kiver	Stabilizer	0	12.5	11.7
		1	12.5	12.2
		2	12.0	12.3
		lsd	1.5	1.0
	Drill Position	Outside	12.5	12.3
		Inside	12.2	11.9
		lsd	1.2	0.8

A Coop survey of severe rain losses in 1991 estimated that 80 million pines and three million hardwoods were lost across the South (Carey 1991). 2003 was another bad year for Coop studies in several places. Many of us probably pay little attention to rain-caused losses in average years, and perhaps assume stabilizer is most important only to control those dramatic but sporadic rain events. However, with many historically important pests adequately controlled, rains after sowing remains an important cause of seedling loss (Boyer and South 1984) and the results of this study indicate that even without visible bed deterioration stabilizer was cost effective.

The kind of seedbed surface protection (stabilizer, mulch, etc) chosen at a nursery results from many factors, including past experience (comfort), availability and cost of substitutes and labor, and the value placed on seed efficiency and production. However, synthetic stabilizers have been the preferred choice at many nurseries since the mid-1980's and these may be more cost effective than in the past. Where seed efficiency is valued, the non-significant improvement in stabilized plots (as at Pearl River) pays for application in years with moderate rain and the return is increased where erosion would occur (as at Rock Creek) in years with severe rain.

Boyer, J.N. and D.B. South. 1984. Forest nursery practices in the south. Southern Journal of Applied Forestry. 8(2):67-75.

Carey, Bill. 1991. Survey of rain related seedling loss at southern nurseries. Auburn University Southern Forest Nursery Management Cooperative. Fall 1991. Pg 2.

Carey, Bill. 2004. Survey shows synthetic bed stabilizers generally satisfactory to nursery managers. Auburn University Southern Forest Nursery Management Cooperative. Spring 2004. Pg 5-6.

South, David B. 1987. Soil stabilizers. Auburn University Southern Forest Nursery Management Cooperative. Spring 1987. Pg 5-6.

OTHER NEWS

Sudden Oak Death

Scott Enebak

For the past few years we have been discussing the new disease that is killing oaks in the western United States. Up until March 2004, the fungus responsible for the disease was limited to 14 coastal counties in California. It was discovered, however, that a nurs-



this past year, with 3 confirmed "positives" in the landscape. While it is too early to tell if the fungus has been established in the eastern U.S., the Forest Service and APHIS, along with State Plant Protection Offices, will be conducting an extensive survey to monitor for the pathogen. To increase the "angst" level among pathologists such as myself, a new strain or mating type that may allow the fungus to reproduce both sexually and asexually (increasing the potential for the fungus' ability to infect new host types) was recovered in California this past winter...

Short Course Scott Enebak

Mark on your calendars the last week in August 2005! As discussed and agreed upon during the Advisory Meeting in November, the Nursery Cooperative is going to have an Introductory Nursery Management Short Course in Auburn this summer. The 3-day course will have an Agenda similar to those discussed in 2002 and will include faculty from Auburn University, other Nursery Managers and Chuck Davey from NC State University. Topics include fumigation, soil fertility, irrigation, weed control, disease control, insect control, seedling quality, regulations, and more...

The cost for the Short Course has not yet been determined but should be in the \$125-140 range. As soon as we coordinate the speakers' schedules, we will provide you with an agenda, costs, hotel list, registration materials and the specific dates. Please let those in your organization know of the upcoming short course and make plans to let those newly hired personnel attend.

From "The Longleaf Alliance Newsletter"

It has been awhile since the Longleaf Alliance activated the 'Longleaf Seedling Locater Service' but it appears for the 2004-2005 planting season that the demand for longleaf seedlings will exceed supply in some portions of the longleaf's natural range. Since the inception of the Longleaf Alliance in 1995, the following has occurred:

- Longleaf survival has increased 20-30% on agricultural sites
- Planting failures on agricultural sites have decreased from 50% to 25%
- Planting failures on cutover sites are now rare occurrences
- Grass stage has decreased from 4 years to 2 years
- Seedling quality has increased
- Container seedlings have increased from 50% to 75% of production

From "The Forestry Source"

EPA has determined that the application of a pesticide to waters of the United States consistent with all relevant requirements of the FIFRA (Federal Insecticide, Fungicide and Rodenticide Act) does not constitute the discharge of a pollutant that requires a National Pollutant Discharge Elimination System permit under the Clean Water Act. This resolution is important to forest managers (nursery operations) because, if pesticide application is defined as a point source, then they are required to obtain a National Pollutant Discharge Elimination System permit — a process that takes considerable time, effort and money. Again, it is critically important to use a pesticide in a manner consistent with the directions on the label.



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