

# The Southern Forest Nursery Management Cooperative:

## Nursery Cooperative History & Nursery Production in the Southeastern United States

Scott Enebak  
Nursery Cooperative Director



# MISSION STATEMENT

To develop and disseminate available cultural, biological and chemical technologies using an integrated system for the economical production and utilization of forest tree seedlings in the southeastern United States.





# Resource Allocations

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Personnel: 70% of annual Coop budget

1 Research Fellow – Tom Starkey

½ Research Technician – Tommy Hill

½ Outreach Coordinator – Elizabeth  
Bowersock

Student Labor as needed – Paul  
Jackson

Operating: 30% of annual budget  
travel, equipment, supplies

# ACCOMPLISHMENTS

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## Herbicide labeling

Goal Reflex

Cobra Stinger

Ronstar Devrinol

Poast Barricade



# ACCOMPLISHMENTS

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Estimated reduction in nursery weed control costs of 2 million dollars annually (based on 1975 costs)



# ACCOMPLISHMENTS

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Coop research efforts lead to the labeling of triadimefon – Bayleton for control of fusiform rust in nurseries.

Best estimates indicate rust incidence fell from 2.5% to 0.1% of all seedlings.

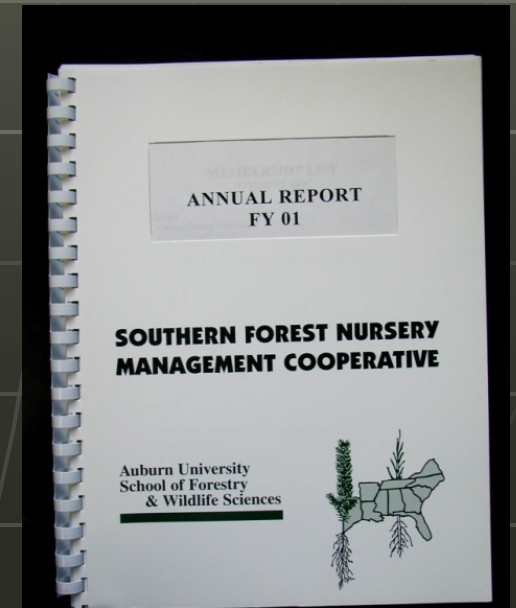
Currently working on another fusiform rust fungicide.



# TECHNOLOGY TRANSFER

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- ✓ Annual Contact Meeting – Ashville, NC
- ✓ Short courses – Auburn, AL
- ✓ Web Page: Coop only and public access
- ✓ Research Reports
- ✓ 2 Newsletters annually
- ✓ Consultancy Functions





# METHYL BROMIDE: THE NURSERY COOPERATIVE'S PRIME DIRECTIVE

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# METHYL BROMIDE

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Backbone of nursery pest control

Soil-borne pathogens

Conifer weed control, particularly nutsedge

Hardwood weed control

Seedling quality improvement

Nematode control

MANDATORY PRODUCTION PHASE-OUT IN 2005  
THROUGH INTERNATIONAL TREATY TO  
PROTECT THE OZONE LAYER

# METHYL BROMIDE - Research

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The Nursery Cooperative has coordinated a \$1,800,000 research program over the past 12 years to find a methyl bromide substitute.

# METHYL BROMIDE – EPA

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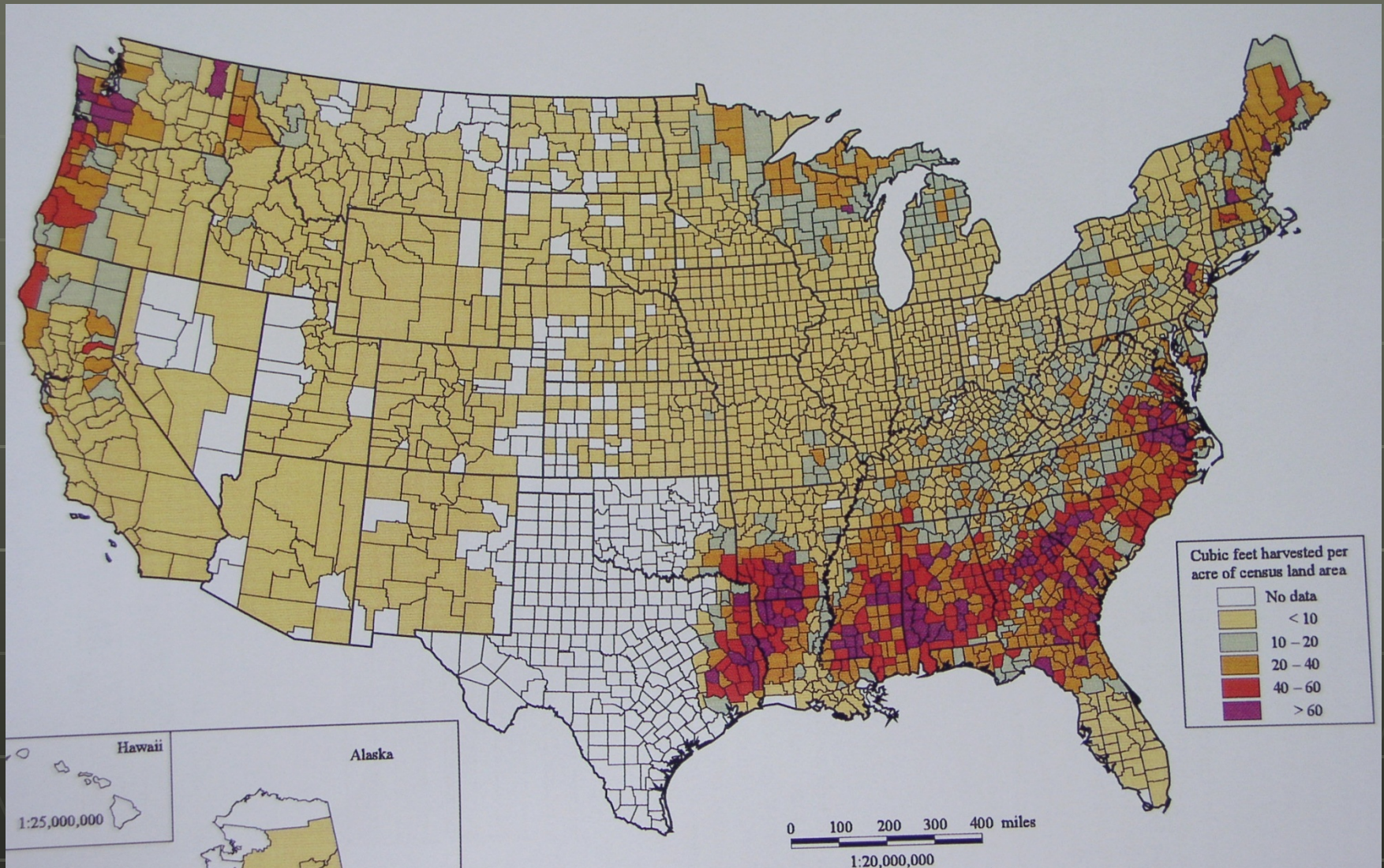
On behalf of forest tree nurseries in 11 southern states, the Nursery Cooperative filed and was awarded 1 of 11 **CRITICAL USE EXEMPTIONS (CUE)** for MBr from the Montreal Protocol.

The Nursery Cooperative developed **Quarantine and Phytosanitary Exemption (QPS)** with state regulatory authorities to ensure proper regulatory language is in place.

The Nursery Cooperative is working with EPA with respect to the re-registration (**REDS & TREDs**) of pesticides used in forest tree nurseries: Risk Mitigation.



# Forestry in the Southern US





# SEEDLING PRODUCTION 2006-2007

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## Total Production Southwide

964 million bareroot conifer seedlings

36 million container grown seedlings

44 million hardwood seedlings

1.04 billion seedlings - about 86% of U.S.  
production

Source: AU Nursery Coop TN 07-02

# CONIFER PRODUCTION 2006-2007

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		<u>2005-06</u>
Bareroot conifer seedlings	964,644,000	+0.5%
Container-grown conifers	64,359,000	+78%
Total for region	1,034,003,000	+3%

# CONIFER PRODUCTION 2006-2007

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		<u>06/07</u>	<u>05/06</u>	Change from last year
Loblolly	840 MM	81%	82%	+ 2%
Slash	126 MM	13%	13%	+0.5%
Longleaf	48 MM	<u>5%</u> 99%	<u>3%</u> 98%	+46%

Followed by shortleaf, white, baldcypress, Virginia, Frazier fir, and sand pine.

# RESULTS - Hardwood production

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	<u>Production</u>	<u>Change from last year</u>
Cottonwood	201,000	+ 27 %
Dogwood	698,000	+ 6 %
Green ash	4,297,000	+116 %
Oaks	33,380,000	+ 40 %
Others	9,644,000	- 17 %
Pecan	1,106,000	+ 94 %
Sweetgum	930,000	+ 33 %
Sycamore	996,000	+117 %
Walnut	621,000	+104 %
<u>Yellow poplar</u>	<u>539,000</u>	<u>+ 2 %</u>
Total	52,412,000	+ 28 %

# Production by Ownership Category

## CONIFERS

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### Bareroot production by ownership category

State	153.3 MM	16%
Private	115.0 MM	12%
Industry	701.3 MM	72%

### Container production by ownership category

State	6.9 MM	11%
Private	48.3 MM	75%
Industry	9.2 MM	14%



# Production by Ownership Category

## HARDWOODS

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### Bareroot production by ownership category

State	18.9 MM	35 %
Private	21.2 MM	42 %
Industry	11.8 MM	23 %

### Container production by ownership category

State	0.1 MM	7 %
Private	1.2 MM	92 %
Industry	0.02 MM	1 %

# Production by Ownership Category

## ALL SPECIES

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(05-06)

State	178.3	MM	16%	18%
Private	185.8	MM	17%	14%
<u>Industry</u>	<u>722.4</u>	<u>MM</u>	<u>66%</u>	<u>68%</u>
	1,044	MM		

Total last year = 1,166 MM

# Production by State - All Species

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	06-07 Production		Rank	change		
AI	147	MM	2	-	3	%
AR	107		5	-	5	%
FL	58		8	+	4	%
GA	257		1	+	36	%
LA	34		10		0	%
MS	93		6	-	5	%
NC	77		7	+	12	%
OK	6		11	+	200	%
SC	145		3	-	12	%
TN	5		12	-	5	%
TX	116		4	-	2	%
VA	39		9	+	3	%

# NURSERY COOP CONTRIBUTION

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- Nursery Cooperative Members produce 82% of regional seedling production.
- This is down 2% from 84% in 2005 -2006 season
- Nursery Cooperative produces 84% of bareroot seedlings and 50% of container seedlings.

# Production Value - All species

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## Estimated Overall Crop Value\*

Bareroot conifer	\$43.6 MM	66%
Bareroot hardwood	\$15.3	23%
Container	<u>\$ 7.2</u>	11%
Total	\$66.1	

\$45, \$300, and \$110 per 1000 for bareroot conifer, bareroot hardwood, and container stock, respectively.



# 2006-07 Nursery Seedling Production Survey

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1. Regional bareroot conifer production remained virtually the same.
2. There was a large increase in longleaf container production.
3. Regional bareroot hardwood production saw an increase in production of 32%.
4. Regional bareroot conifer production by ownership category remains unchanged.
5. Regional bareroot hardwood production appears to have shifted back into the "private" category and away from the states.
6. There has been little change in state rankings although production in Georgia increased substantially.
7. Coop membership continues to dominate bareroot production in the region, and has increased it's contribution to container production.

# FUTURE NURSERY ISSUES

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Future seedling sales

Prices for wood products

Cost share programs

Ownership changes (REIT's TIMO's)

Carbon sequestration

Alternatives to MBr / Risk Mitigation

Re-registration of pesticides