

**2010**

**AGRICULTURE &  
FORESTRY  
AWARENESS STUDY  
COMMISSION**

**MINUTES**

***North Carolina General Assembly***  
***Agriculture and Forestry Awareness Study Commission***  
***UnExpired Positions Only***

G.S. 120-150

***Pro Tem's Appointments***

Mr. Carlton Barefoot                      Public Member  
6330 Roanoke Road  
Newton Grove, NC 28366

Mr. Kendall Hill                              Public Member  
2574 Hugo Road  
Grifton, NC 28530

Ms. Jo Ann Stroud                           Public Member  
640 East NC Hwy 24  
Kenansville, NC 28349

***Speaker's Appointments***

Rep. Thomas Roger West                      Member  
North Carolina House of Representatives  
16 W. Jones Street, Room 1004  
Raleigh, NC 27601-1096  
(919) 733-5859

Rep. Arthur J. Williams                      Member  
North Carolina House of Representatives  
300 N. Salisbury Street, Room 637  
Raleigh, NC 27603-5925  
(919) 733-5906

Hon. Spruell Randolph Britt                      Public Member  
PO Box 463  
Fair Bluff, NC 28439

***Governor's Appointments***

Mr. David L. Burns                           Public Member  
1204 Shepherd Avenue  
Laurinburg, NC 28352

Mr. Phillip Lee Hudson                      Public Member  
553 Rosin Hill Road  
Newton Grove, NC 28366

Mr. Leland McKinley Simmons                      Public Member  
562 Masontown Road  
Newport, NC 28570

***Other's Appointments***

Sen. Robert C. Atwater                      Co-Chair  
North Carolina Senate  
300 N. Salisbury Street, Room 312  
Raleigh, NC 27603-5925  
(919) 715-3036

Rep. Dewey Lewis Hill                      Co-Chair  
North Carolina House of Representatives  
16 W. Jones Street, Room 1309  
Raleigh, NC 27601-1096  
(919) 733-5830

Mr. Maurice K. Berry Jr.                      Ex Officio  
1157 Double Bridge Road  
Elizabeth City, NC 27909

# ***Agriculture and Forestry Awareness Study Commission***

## ***UnExpired Positions Only***

Mr. Jerry Dorsett  
DENR  
512 N. Salisbury Street  
Raleigh, NC 27604

Ex Officio

Mr. Jimmy Gentry  
NC State Grange  
1734 Wilksboro Hwy  
Statesville, NC 28625

Ex Officio

Mr. David S. McLeod  
Department of Agriculture  
1001 Mail Service Center  
Raleigh, NC 27699-1001

Ex Officio

Mr. Robert W. Slocum Jr.  
NC Forestry Association  
1600 Glenwood Ave., Suite I  
Raleigh, NC 27608

Ex Officio

Mr. Steve Woodson  
NC Farm Bureau Federation  
5301 Glenwood Avenue  
Raleigh, NC 27612

Ex Officio

### ***Staff to Committee***

Barbara Riley, Research Division

Tim Dodge, Research Division

(919) 733-2578

Lanier McRee, Fiscal Research Division

(919) 733-4910

### ***Contact***

Carol Resar, Commission Assistant

(919) 715-3036

## 8

[illegible]

## Article 19.

### Commission on Agriculture and Forestry Awareness.

#### **§ 120-150. Creation; appointment of members.**

There is created an Agriculture and Forestry Awareness Study Commission. Members of the Commission shall be citizens of North Carolina who are interested in the vitality of the agriculture and forestry sectors of the State's economy. Members shall be as follows:

- (1) Three appointed by the Governor;
- (2) Three appointed by the President Pro Tempore of the Senate;
- (3) Three appointed by the Speaker of the House;
- (4) The chairman of the House Agriculture Committee;
- (5) The chairman of the Senate Agriculture Committee;
- (6) The Commissioner of Agriculture or the Commissioner's designee;
- (7) A member of the Board of Agriculture designated by the chairman of the Board of Agriculture;
- (8) The President of the North Carolina Farm Bureau Federation, Inc., or the President's designee;
- (9) The Master of the North Carolina State Grange or the Master's designee;
- (10) The Secretary of Environment and Natural Resources or the Secretary's designee; and
- (11) The President of the North Carolina Forestry Association, Inc., or the President's designee.

Members shall be appointed for two-year terms beginning October 1 of each odd-numbered year. The cochairmen of the Commission shall be the chairmen of the Senate and House Agriculture Committees respectively. (1985, c. 792, s. 20.1; 1989, c. 727, s. 218(81); 1989 (Reg. Sess., 1990), c. 1004, s. 19(b); 1991 (Reg. Sess., 1992), c. 785, s. 1; 1993, c. 23, s. 1; 1995, c. 490, s. 5; 1997-443, s. 11A.119(a); 2001-474, s. 14.)

#### **§ 120-151. Advisory Committee.**

Upon proper motion and by a vote of a majority of the members present, the Commission may appoint an Advisory Committee. Members of the Advisory Committee should be from the various organizations, commodity groups, associations, and councils representing agriculture and forestry. The purpose of the Advisory Committee shall be to render technical advice and assistance to the Commission. The Advisory Committee shall consist of no more than 20 members plus a chairman who shall be appointed by the cochairmen of the Commission. (1985, c. 792, s. 20.1; 1991 (Reg. Sess., 1992), c. 785, s. 2.)

#### **§ 120-152. Subsistence and travel expenses.**

The members of the Commission who are members of the General Assembly shall receive subsistence and travel allowances at the rate set forth in G.S. 120-3.1. Members who are officials or employees of the State of North Carolina shall receive subsistence and travel allowances at the rate set forth in G.S. 138-6. All other members plus the Chairman of the Advisory Committee shall be paid the per diem allowances at the rates

set forth in G.S. 138-5. Other members of the Advisory Committee shall serve on a voluntary basis and not receive subsistence and travel expenses. (1985, c. 792, s. 20.1.)

**§ 120-153. Facilities and staff.**

The Commission may hold its meetings in the State Legislative Building with the approval of the Legislative Services Commission. The Legislative Services Commission shall provide necessary professional and clerical assistance to the Commission. (1985, c. 792, s. 20.1.)

**§ 120-154. Duties.**

The Commission shall bring to the attention of the General Assembly the influence of agriculture and forestry on the economy of the State, develop alternatives for increasing the public awareness of agriculture and forestry, study the present status of agriculture and forestry, identify problems limiting future growth and development of the industry, develop an awareness of the importance of science and technological development to the future of agriculture and forestry industries, and formulate plans for new State initiatives and support for agriculture and forestry and for the expansion of opportunities in these sectors.

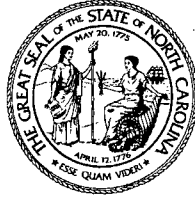
In conducting its study the Commission may hold public hearings and meetings across the State.

The Commission shall report to the General Assembly at least one month prior to the first regular session of each General Assembly. (1985, c. 792, s. 20.1; 1991 (Reg. Sess., 1992), c. 785, s. 3.)

**§ 120-155. Reserved for future codification purposes.**

**§ 120-156. Reserved for future codification purposes.**

**§ 120-157. Reserved for future codification purposes.**



**NORTH CAROLINA GENERAL ASSEMBLY  
COMMITTEE MEETING NOTICE  
LEGISLATIVE BUILDING  
RALEIGH NC 27601**

**MEMORANDUM**

**TO:** Members of the Agriculture and Forestry Awareness Study Commission

**FROM:** Senator Bob Atwater, Co-Chair  
Representative Dewey Hill, Co-Chair

**SUBJECT:** Meeting Notice

The Agriculture and Forestry Awareness Study Commission will meet on the following date:

**DAY:** Tuesday  
**DATE:** March 23, 2010  
**TIME:** 10:00 AM  
**LOCATION:** Southeastern Community College  
**Room T-101**  
**Whiteville, North Carolina**

If you have any questions concerning this meeting, please contact Barbara Riley, Commission Counsel at (919) 733-2578. If you cannot attend the meeting, please contact Carol Resar, Commission Clerk at (919) 715-3036, or [Atwaterla@ncleg.net](mailto:Atwaterla@ncleg.net).

cc: Committee Record \_\_\_\_\_  
Interested Parties \_\_\_\_\_

**NORTH CAROLINA AGRICULTURE AND FORESTRY  
AWARENESS STUDY COMMISSION**

**Southeastern Community College  
Whiteville, North Carolina  
Building T, Room 101  
March 23, 2010  
10AM**

**Welcome**

Representative Dewey L. Hill, CoChair  
Senator Bob Atwater, CoChair

**The Importance of Agricultural Exports**

Steve Troxler  
Commissioner of Agriculture

**Regulatory Issues for Agricultural Exports and Interstate Commerce**

Gene Cross, Director  
Division of Plant Industry  
NC Department of Agriculture and Community Services

**Strategic Plans for NC's Research Stations**

Edward Pitzer, Director  
Division of Research Stations  
NC Department of Agriculture and Community

**The New Farmer's Market Commercial Kitchen**

Dalton Dockery, Director  
Columbus County Cooperative Extension

Kip Godwin  
Marketing Consultant

**Agricultural Biotechnology Program**

**at Southeastern Community College/ Biofuels Unit      Tour**  
Rebecca Westbrooks, Biology/Environmental Science Technology Instructor

Gary Nealy, Chemistry Instructor

**LUNCH**



**Division of Forest Resources Update  
Forest Development Program Update/  
BRIDGE Program Update**

Wib Owen, Director  
Division of Forest Resources  
NC Department of Environment and Natural Resources

**State of the Forest Products Industry**  
Robert Slocum, Executive Vice President  
North Carolina Forestry Association

**Committee Discussion**

**Instructions to Staff**

*Lunch is being graciously provided by the Representative Dewey Hill.*

# **Agriculture and Forestry Awareness Joint Study Commission**

## **Committee Meeting Minutes**

**March 23, 2010**

**10:00 AM**

**Southeastern Community College**

**Whiteville, North Carolina**

The Agriculture and Forestry Awareness Joint Study Commission met on Tuesday, March 23, 2010 at 10:00 AM in Room T101 at Southeastern Community College, Whiteville, North Carolina. Representatives Dewey Hill, Co-Chair, and Arthur Williams, Senator Bob Atwater, Co-Chair, and public members Mr. Kendall Hill, Mr. Jimmy Gentry, Mr. Steve Woodson, Mr. Maurice Berry, Mr. Mickey Simmons, Mr. Bob Slocum, Mr. Jerry Dorsett, and the Honorable Spruell Britt attended. Representative Hill presided.

Representative Hill welcomed everyone and asked Ms. Kathy Matlock, President of Southeastern Community College, to give a few welcoming remarks. He then asked the Committee Co-chair, Senator Atwater, to give his opening remarks. Representative Hill next introduced the staff and asked the Committee members to introduce themselves. Representative Hill then proceeded with the agenda.

### **The Importance of Agriculture Imports**

Steve Troxler, Commissioner  
North Carolina Department of Agriculture and  
Consumer Services (NCDACS)

Commissioner Troxler told the Committee that agriculture and agri-business continues to be important to the North Carolina economy at \$70 billion annually. The bird flu, swine flu, high feed prices and less consumption has created a perfect storm for the poultry and hog industry but overall, agri-business has fared well during the recession.

Commissioner Troxler stated that a 50% increase in agriculture production will be needed by 2030 and the North Carolina agri-business people plan to take advantage of that increased need.

Commissioner Troxler next told the Committee that agriculture exports are also vital to North Carolina and in 2007-2008 there was a \$1 billion increase in exports making the yearly total of agriculture exports \$3.1 billion. He told the Committee about the Department's efforts to increase exports by highlighting a recent trip to China.

Commissioner Troxler stated that forestry exports also need to be explored along with tobacco, cotton and other agricultural products. He stated that the Department of Agriculture is operating at early 1990s budget levels and asked the legislators to make Agriculture a priority when North Carolina comes out of the recession. Commissioner Troxler praised the Agriculture Department employees for continuing to do an excellent job while being asked to do more each year.

After Commissioner Troxler's remarks, Mr. Slocum made a brief comment about the exports going out of Charleston, South Carolina and Norfolk, Virginia ports instead of North Carolina. Commissioner Troxler replied that land for a deep water port has already been purchased and having that will be a great asset and North Carolina needs to take advantage of it.

Mr. Dorsett then commented on the loss of farmland in North Carolina. Commissioner Troxler replied that the Farmland Preservation Trust Fund has been crucial in fighting the loss of farmland. However, in the first year of the Trust Fund, the Department received \$8 million, the second year it received \$4 million and received only \$2 million last year. North Carolina led the nation two years in a row in the disappearance of farmland and that needs to be reversed.

Representative Hill then asked Commissioner Troxler to briefly explain the Flavors of North Carolina program. Commissioner Troxler explained the Flavors of North Carolina, held twice a year, gives producers of locally grown food products exposure to buyers from major grocery stores, restaurants and institutions. The program has been very successful.

Representative Hill asked Commissioner Troxler to explain the Big Cart, which he drove once. Commissioner Troxler stated that it was a 13 foot tall grocery cart with a 15 foot basket. Using money from private sponsors, it is trailered all over the State to promote agri-business.

### **Regulatory Issue Impacting Interstate Commerce and Exports**

Gene Cross, Director

Division of Plant Industry, NCDACS

Next, Representative Hill asked Mr. Gene Cross to give his presentation on the regulatory issues impacting interstate commerce and exports (see Attachment #1). Mr. Cross' presentation included the mission of the NCDACS and the Plant Industry Divisions, as well as the following points:

- The impacts of globalization and global sourcing on agriculture.
  - >Up to 30% of the farm revenues in the US are the result of export with other countries.
  - >Globalization remains a clear pathway for invasive species.
- Expanding our state's agricultural exports.
  - >Commodities were exported to 43 countries, 26 states and Puerto Rico.
  - >Certificates issued for lumber comprise nearly half of the certificates issued in 2008 and 2009.
- Safeguarding our state's agriculture and the invasive species.
  - >Invasive species into North Carolina is affecting agriculture and environment.
  - >Invasive species result in \$2-3 billion in crop losses each year.
  - >NCDACS programs include Pest Survey, Quarantine Insect Programs, Nursery

and Garden Center Certification Programs, Quarantine Plant Pathology Programs, and Quarantine Weed Program.

- Re-tooling NCDACS for changes in agriculture.
  - >Local projects include developing a secure web-based application to permit nurseries to list plant material acquisitions.
  - >Regional and national projects include testing of radio frequency identification and barcode technologies for use in plant pest programs.

Mr. Cross presented the following recommendations to the Committee members:

- Establish the Pest Infestation Emergency Eradication Fund.
- Continue support for the Gypsy Moth Program.
- Expand the existing agricultural exports and working jointly to identify new initiatives.
- Re-tool NCDACS for the changes ahead in agriculture.
- Develop a comprehensive response to firewood movement-outreach, voluntary and regulatory.

After Mr. Cross' presentation, Mr. Slocum commended him and his staff for the outstanding job they have done on the plant protection program and stated that he supported the emergency pest fund. Mr. Slocum also supported a \$10,000 expenditure to provide computer equipment and software for the Division of Plant Industry. This equipment would enable mill inspectors to issue certificates on site.

Mr. Britt asked Mr. Cross how far north fire ants have been seen and Mr. Cross replied that fire ants were all over North Carolina. He added that there was an Argentinean fly that can help to reduce them but will not eradicate them.

Mr. Kendall Hill commended Mr. Cross for containment of the sweet potato weevil.

Before Representative Hill continued with the agenda items, he recognized Senator R.C. Soles who was in attendance and asked Senator Soles to say a few words to the Committee.

### **Strategic Plan for North Carolina's Research Station**

Edward Pitzer, Director  
Division of Research Stations, NCDACS

Representative Hill then asked Mr. Edward Pitzer to give his presentation on the North Carolina Research Stations (see Attachment #2). Mr. Pitzer stated the mission and the vision of the Research Stations Division. He also stated that agricultural research in North Carolina continues to operate in a unique partnership between the Department and North Carolina State University College of Agriculture and Life Sciences and North Carolina A & T State University.

Mr. Pitzer then told the Committee that there are 18 research stations in the State. Twelve stations are funded by NCDACS and six stations are funded by NC State

University. He then highlighted the May 1, 2009 strategic plan for the North Carolina Agricultural Research Stations, which included:

- Enhance infrastructure for high quality applied agriculture research.
- Ensure efficient research stations and management.
- Enhance working relationships and communications.
- Strengthening outreach extension and education.

Mr. Pitzer then reviewed the beef program, the tobacco program, the Border Belt Research Station in Whiteville, and the forest management program. Mr. Pitzer concluded his presentation by stating that the challenges facing the Division of Research Stations include the increasing cost of research and production, the reduction in receipts and the changing technologies and programs.

After Mr. Pitzer's presentation, Representative Hill, Mr. Kendall Hill and Mr. Slocum all commented on the importance of the Research Stations and the vital role they play in the success of the State's agri-business.

### **The New Farmer's Market Commercial Kitchen**

Dalton Dockery, Director  
Columbus County Cooperative Extension  
Kip Godwin  
Marketing Consultant

Representative Hill next asked Mr. Dalton Dockery, Director of Columbus County Cooperative Extension, to briefly discuss the new farmer's market. Mr. Dockery told the Committee that the new farmer's market was the cooperative effort of Southeastern Community College and the Columbus County Cooperative Extension, but it was the idea of the local farmers. He thanked Senator Soles and Representative Hill for helping to secure funding for the farmer's market. Mr. Dockery then asked Mr. Kip Godwin, Marketing Consultant, to give a brief overview of the farmer's market (see Attachment #3).

Mr. Godwin stated that a \$10,000 grant from the Rural Advancement Foundation International helped to establish the farmer's market in 1998. More recently, two grants totally \$277,000 from the North Carolina Tobacco Trust Fund enabled the farmer's market to construct a permanent facility and, most recently, build a commercial kitchen. The commercial kitchen includes a commercial honey extractor and a walk-in cooler. Farmers are able to bring unsold fresh produce to the kitchen and produce "value added" products such as jellies and jams. The cooler enables the farmers to hold produce during the week for sale on Saturday, which is the biggest day at the market.

Mr. Godwin told the Committee that there are 30 vendors that pay an annual fee and usually about 20 daily vendors that also pay a fee. The market is open May-December and averages 300-400 visitors on a Saturday and 600-700 visitors on special event days.

In addition to the grants already mentioned, Mr. Godwin stated that last year they received an \$18,000 grant from the USDA Farmers Market Promotion Program which helped to pay for brochures, radio and newspaper advertisement and a website. Also last year, they received \$70,000 from the Golden Leaf Foundation which enables them to share their resources with neighboring counties in cooperation with the Cooperative Extension, the Bee Keepers Cooperative, and the Lumber River Regional Growers.

Finally, Mr. Godwin said that in 2009 the farmer's market began accepting Electronic Benefit Transfer cards, credit cards and debit cards which help the farmers and the community. In an effort to promote healthy lifestyles, the farmer's market will hold a 5K walk/run and children's walk/run on opening day in May. Also, within the last six months local farmers have started the Farmers Market Association of North Carolina.

**Agricultural Biotechnology Program at  
Southeastern Community College/Biofuels Unit**

Rebecca Westbrook, Biology/Environmental Science Technology Instructor  
Gary Nealy, Chemistry Instructor

Representative Hill asked Ms. Westbrook and Mr. Nealy to give their presentation on the biodiesel program at Southeastern Community College. Mr. Nealy told the Committee that the biodiesel initiative was started in 2006 with a \$75,000 grant from the North Carolina Community College System's BioNetwork. The grant allowed the Chemistry Department to incorporate biodiesel into its chemistry classes. In 2009 a grant was received from the Tobacco Trust Fund Commission to acquire a mobile "seed-to-fuel" biodiesel processing unit. The unit is on site at Southeastern Community College and is used to demonstrate the process to farmers interested in growing seed crops for conversion into biodiesel. Also, the grant will enable the college to install an analytical testing lab for quality testing the biodiesel fuel produced with the unit. Mr. Nealy then gave a brief explanation of the biodiesel process (see Attachment #4).

Next, Ms. Westbrook spoke briefly about the history of the agricultural biotechnology program at Southeastern Community College. Ms. Westbrook told the Committee that the biotechnology program was started in 2005 with an emphasis on plants. Between 2005-2010, the biotechnology program has received \$1.2 million. The funding has come from many sources and has been used for equipment, supplies, training and program awareness. The program moved into the new Carteret Building in 2008.

Ms. Westbrook further told the Committee that the biotechnology program has several partners including the North Carolina Biotechnology Center, the Cooperative Extension, the Columbus County Soil and Water Conservation District, UNC-Pembroke, the Agricultural Advisory Committee, the Columbus County Schools and the Border Belt Research Lab.

Ms. Westbrook concluded her presentation by listing the areas that she thought the biotechnology program will be active in, including plant nurseries, pharmaceuticals,

alternative agricultural crops, bio-remediation, biomass production; ecosystem restoration; economic botany and biofuel production.

Following Ms. Westbrook's presentation, Representative Hill announce that the Committee members were invited to tour the mobile unit and lab during the lunch break.

After lunch Representative Hill then asked Mr. Harry Warren, Director of the North Carolina Museum of Forestry to speak briefly. Mr. Warren told the Commission members that the Museum was undergoing renovations and he invited the Members to visit the Museum.

Senator Atwater then thanked Commissioner Troxler for his leadership role in responding to the legislative crisis surrounding the potential destruction of the Agricultural Research Stations.

**Forest Development Program Update/BRIDGE Program Update**  
**Wib Owen, Director**  
**Division of Forest Resources**  
**North Carolina Department of Environment and Natural Resources**

Representative Hill asked Mr. Owen to give his update on the Forest Development Program and the BRIDGE Program (see Attachment # 5). Mr. Owen told the Commission that the Division of Forest Resources is responsible for protecting 18.3 million acres of state and privately owned forestland in North Carolina from forest fires and that all 100 counties participate in the forest fire protection program. He then gave an overview of the Forest Protection Program including:

- Training
- Smoke management
- Landowner hazard reduction prescribed burning
- Natural disaster assistance
- Law enforcement
- Insect and disease control
- Fire department assistance
- Aviation
- Information and education.

Next, Mr. Owen gave an update on the Building, Rehabilitating, Instructing, Developing, Growing, and Employing (BRIDGE) Program. This program is a cooperative effort with the Division of Prisons to train and utilize non-violent young inmates by offering rehabilitation and education opportunities to inmates while providing important services in the protection and management of the State's forests. The BRIDGE crews save the Division an average of \$800,000 per year. Mr. Owen further stated that the program will be reviewed this year by the Legislature and there is a request for funding in the Department's expansion budget.

Mr. Owen finished his presentation with an overview of the Forest Management Program. He told the Commission that the objectives of the Forest Management Program are to assist private, non-industrial forest landowners in establishing and perpetually sustaining a high level of productivity of natural resources within the State's forests. He included the following areas in his overview:

- Technical development, planning and utilization
- The forest tree seedling nursery program
- The tree improvement program
- The forest stewardship program
- The forest legacy program
- The forest development program
- The urban and community forestry program
- The water quality and non-point source pollution prevention program
- The forest inventory and analysis program.

**State of the Forest Products Industry**  
Robert Slocum, Executive Vice President  
North Carolina Forestry Association

Representative Hill asked Mr. Slocum to give his presentation on the state of the forest products industry (see Attachment #6). Mr. Slocum's overview included the following facts:

- 60% of the South is forestland – 212 million acres.
- 11% is government owned – mostly national forests and 89% are privately owned.
- Since 1950's timber inventories are up 73%.
- South provides 58% of total US production.
- North Carolina forests covers over 17 million acres – 58% of the state.
  - >89% is privately owned mostly by non-industrial private landowners
  - >Forests are dominated by hardwoods
- The forests provide clean air, clean water, wildlife habitat and recreation.
- The forest products industry is North Carolina's largest manufacturing industry, providing 82,780 direct jobs and a total annual economic impact of \$28.5 billion.
- There has been a net loss of 1 million acres between 1990-2002; three fourths to urbanization.
- Major forest product companies are selling their land base or becoming Real Estate Investment Trusts (REIT)
- Also Timber Investment Management Organizations (TIMO) are being formed and it is too early to tell how these will affect the industry.
- Economics and markets are the most important issues facing the forest products industry today.
- Consolidation of the industry is a dramatic change occurring.
  - >Companies focusing on "core businesses" and selling the rest.
- US industry must compete globally.



Mr. Slocum then stated that the forest product industry faces the following challenges and opportunities:

Challenges:

- Recession/depression in the wood product markets.
- Urbanizing population – 51% of registered voters in North Carolina live in 14 counties.
- Changing political climate.
- Changing landowner objectives and changing land use patterns.

Opportunities:

- Demand for wood and paper products will increase worldwide.
- Development of new markets and products.
- Forest industry in the US will concentrate in the South with harvests expected to increase 40-50% by 2040.

Mr. Slocum concluded his presentation by stated that forests and forest products are critical to the State's environment and economy and how the State deals with the unprecedented changes affecting both the industry and the forests will have major impacts on our environment and our economy.

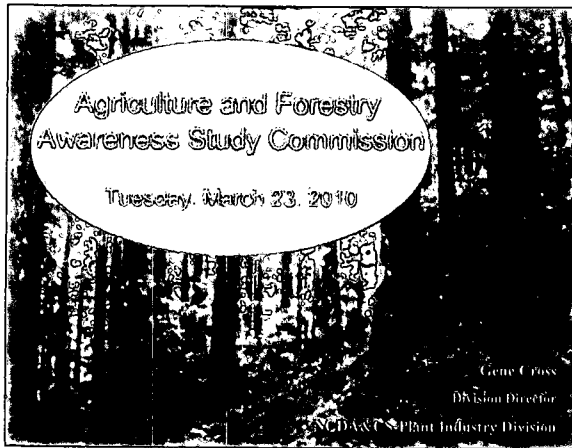
Representative Hill then recognized Mr. Steve Woodson to tell the Members about the Farm Bureau manual he distributed giving the Highway Patrol guidelines regarding the transportation of hazardous materials (see Attachment #7).

Representative Hill then recognized Mr. Jerry Dorsett so he could tell the Members about the informational sheet he distributed regarding the 32 soil and water conservation districts (see Attachment #8).

There being no further business, the meeting was adjourned at 2:00 PM.


  
Representative Dewey Hill, Co-Chair

  
Carol Resar, Commission Clerk



## Presentation Overview

- \*Impacts of globalization and global sourcing on agriculture
- \*Expanding our state's agricultural exports
- \*Safeguarding our state's agriculture- March of the Invasive Species!
- \*Re-tooling NCDACS for changes in agriculture
- \*Summary of Action Items




Page 2

## NC Department of Agriculture and Consumer Services

### Departmental/Divisional Missions


- \*NCDACS' mission is to provide services to our producers and agribusinesses, along with enforcing laws to protect their interests.
- \*NCDACS Plant Industry Division's mission is to implement a regulatory compliance program for the seed and fertilizer industries and protect agriculture from invasive species.



Page 3

## Role and Impacts of Globalization on Agriculture

- \*What is Globalization?
- \*Up to 30% of our farm revenues here in the U.S. are the result of export with other countries.
- \*Economists agree that free trade is useful in supplying competitively priced products; however, globalization remains a clear pathway for invasive species.
- \*Countries have established prohibitions and restrictions on the import and export of products to limit the spread of invasive pest species.




Page 4

## Expanding the State's Exports

Export Certification Program- Cooperatively Administered by USDA, APHIS, PPQ and the NCDACS-Plant Industry Division.

- \*Ag and forestry products must meet entry requirements for country of destination.
- \*Entry requirements vary greatly from country to country.
- \*FY 2008-09 NCDACS Phytosanitary Issuances  
Total Federal Certificates-1,554  
Total State Certificates-296
- \*2008-09 USDA, APHIS, PPQ Phytosanitary Issuances  
Total Federal Certificates-6,696




Page 5

## Expanding the State's Exports

For FY 2008-09 NCDACS Issuances:


- \*Commodities were exported to 43 countries, 26 states and Puerto Rico.
- \*Majority of phytosanitary certificates were issued for  
Lumber  
Tobacco  
Cotton  
Cotton Seed  
Christmas Trees  
Peanuts  
Nursery and Greenhouse Plants  
Sweet Potatoes and S. Potato Cuttings
- \*Certificates issued for lumber comprise nearly half of certificates issued in 2008 and 2009.



Page 6

## March of the Invasive Species

Safeguarding North Carolina's Agriculture and Forestry




- The introduction, establishment and spread of invasive species into this state is affecting agriculture and environment.
- Human activity including trade, travel and tourism have all increased; substantially paving the way for unprecedented movement of invasive species.
- Estimates of economic impact are difficult to obtain:
  - Invasive species alone result in \$2-3 billion in crop losses each year.
  - Aquatic species clog intakes for power plants and irrigation.
  - Direct human impacts

Page 7

## March of the Invasive Species

Safeguarding North Carolina's Agriculture and Forestry




**NCD&CS Programs:**

- Cooperative Agriculture Pest Survey
- Quarantine Insect Programs
  - Boll Weevil
  - Imported Fire Ant
  - Sweet Potato Weevil
  - Gypsy Moth
  - Firewood
- Nursery and Garden Center Certification Programs
- Quarantine Plant Pathology Programs
  - Phytophthora ramorum
- Quarantine Wood Program
  - Witchwood

Page 8

## Exploring and Utilizing New Technologies

Re-tooling NCD&CS to meet the challenges ahead



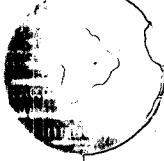
*The problem with the future is that it isn't what it used to be.*  
-Paul Valery

*Federal policies and procedures must be transformed to meet the demands of a world economy shaped by technological change, international economic integration, strategic alliances and partnerships, and domestic globalization.*  
-Safeguarding Review Report

Page 9

## Exploring and Utilizing New Technologies

Re-tooling NCD&CS to meet the challenges ahead



**Local Project:**

- Developing a secure web-based application to permit nurseries and garden centers to list plant material acquisitions.


**Regional and National Projects:**

- Evaluation and testing of radio frequency identification (RFID) and barcode technologies for use in federal and state regulatory plant pest programs.

Page 10

## Recommendations

Meeting the Challenges Ahead




- An effective early detection and rapid response initiative is critical when responding to new plant pest introductions. A recommendation is made to establish the Pest Infestation Emergency Eradication Fund. Funds would be placed annually in a reserve account and only be utilized in the event of quarantine pest introductions. Funds could be utilized as cost-share with federal or private partners.
- Support for the Gypsy Moth Program funding and cost-share resources are needed to ensure NCD&CS is poised to respond to the continuing threats of the gypsy moth.

Page 11

## Recommendations

Meeting the Challenges Ahead



- The NCD&CS focus must be on expanding existing agricultural exports and working jointly to identify new initiatives
- *Insanity: Doing the same thing over and over again and expecting different results.* Albert Einstein
  - NCD&CS must re-tool itself for the changes ahead in agriculture.....including new ways to monitor plant pests and new ways to communicate the threats posed by invasive species to our state's citizens.
- Developing a comprehensive response to firewood movement-Outreach, Voluntary, and Regulatory.

Page 12

## RESEARCH STATIONS DIVISION A UNIQUE PARTNERSHIP – NCDA&CS, NCSU, NCA&T

### MISSION

The mission of the North Carolina agricultural research station system is to manage crop and livestock facilities at research stations to support agricultural research, extension and teaching programs conducted by university faculty across the state.

### STRATEGIC PLAN – Completed May 2009

#### Identified Goals

1. Enhance infrastructure for high-quality applied agricultural research
2. Ensure efficient research station and farm management
3. Enhance working relationships and communications
4. Strengthen outreach, extension and education

### STATION STATISTICS

Stations: 17  
Staff: 237 FTE  
Acres:

Division Total	19,157 ac.
Row Crops	2,001 ac.
Tobacco	136 ac.
Horticultural Crops	329 ac.
Pasture	2,202 ac.
Small Fruits	93 ac.
Fruit Trees	110 ac.
Rotational	1950 ac.
Aquaculture	13 ac.
Ponds	126 ac.
Woodlands	10,519 ac.
Infrastructure	1,869 ac.
Leased Land	191 ac.

### ANNUAL EVENTS

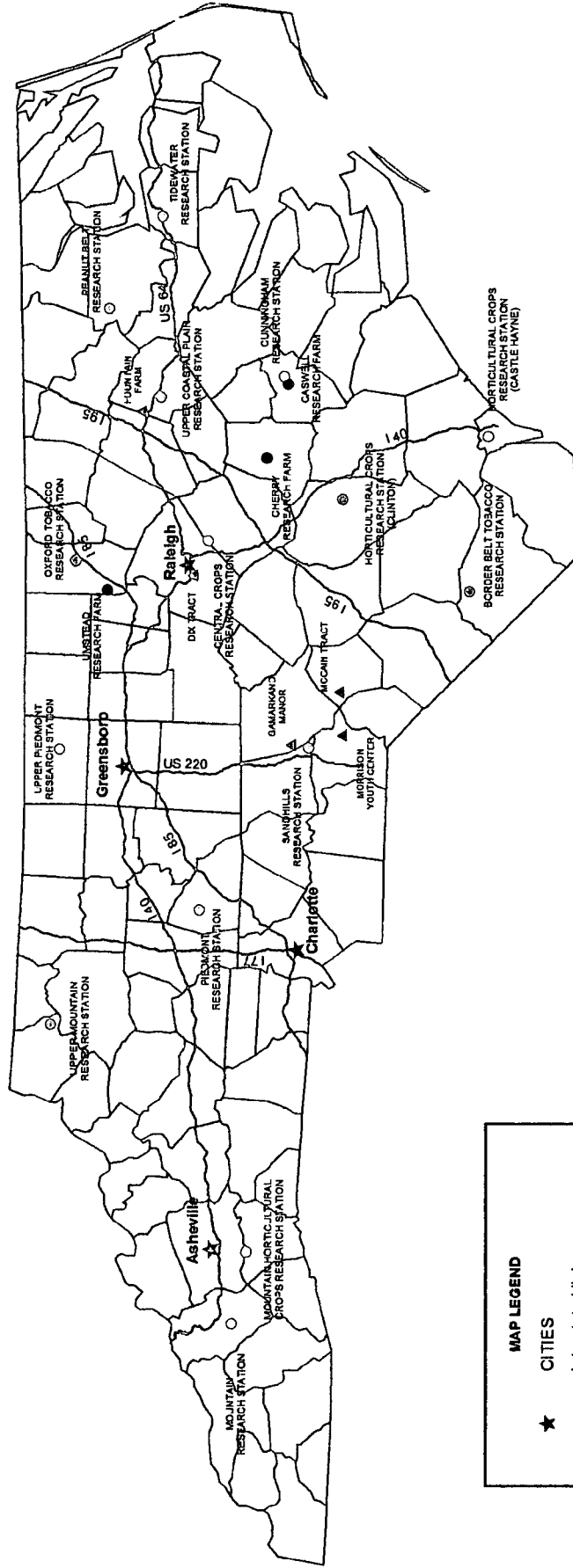
- Strawberry Field Day (May)
- Small Grain (May)
- Small Fruit (June)
- Hay (July)
- Fresh Market Tomato & Vegetable (August)
- Peanut (September)
- Sweet Potato (October)

### ANNUAL EVENT STATISTICS (July – December 2009)

Event Type	No. of Events	No. of Participants
Field Days	4	458
Workshops/Training	32	753
Education	16	324
Tour	40	1149
Youth	18	1300
Other	10	746
<b>Totals</b>	<b>120</b>	<b>4,730</b>

# RESEARCH STATIONS

Administered By The North Carolina Department of Agriculture and Consumer Services  
and  
North Carolina State University



★

CITIES

—

Interstate Highways

○

NCSU Research Stations

●

NCDA&CS Research Stations

●

NCDA&CS Research Farms

▲

Forest Management Sites



Prepared By: Deborah Robertson  
Date Prepared: July 30, 2007



## **Agriculture and Forestry Awareness Study Commission**

March 23, 2010

Eddie Pitzer, Director  
NCDA&CS  
Research Stations Division


## **Partnerships**



Agricultural research in North Carolina continues to operate in a unique partnership between:

North Carolina Department of Agriculture & Consumer Services  
North Carolina State University College of Agriculture & Life Sciences  
North Carolina A&T State University


## **Our Mission**



### **Research Stations Division**

Manage crop and livestock facilities at research stations to support agricultural research, extension and teaching programs conducted by the university faculty across the state.

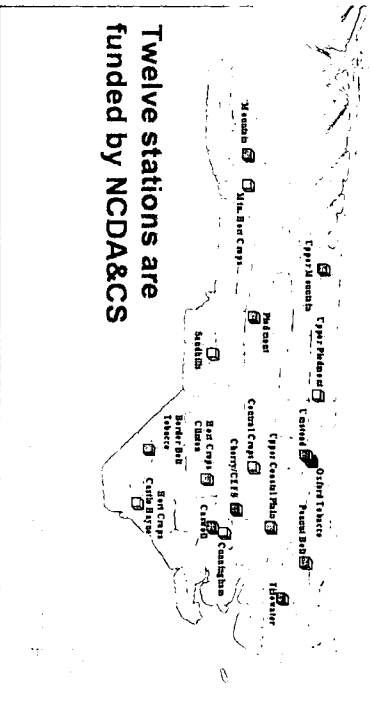
## **Our Vision**



### **Research Stations Division**

Support agricultural research conducted by university faculty that leads to increased productivity, profitability and sustainability of agriculture in North Carolina and worldwide.

## 18 Research Stations



### Working Together for Agriculture

#### A Strategic Plan for North Carolina Agricultural Research Stations

- Enhance infrastructure for high quality applied agriculture research:
  - Adopt new technologies
  - Recruit, retain and train a high quality workforce
- Ensure efficient research stations and management:
  - Better tracking process
  - Prioritize programs and consolidate work
  - Redefine SOPs and conduct Peer Reviews

### Working Together for Agriculture

#### A Strategic Plan for North Carolina Agricultural Research Stations May 1, 2009

- Enhance infrastructure for high quality applied agriculture research
- Ensure efficient research stations and management
- Enhance working relationships and communications
- Strengthening outreach, extension and education

### Working Together for Agriculture

#### A Strategic Plan for North Carolina Agricultural Research Stations

- Enhance working relationships and communications:
  - Involvement with NC A&T State University
  - Annual Report
  - Budget meetings, involvement in capital decisions
- Strengthening outreach, extension and education:
  - Conduct educational outreach for youth and students
  - Involve community on agriculture awareness programs
  - Community support during times of disaster relief

## Program Reviews

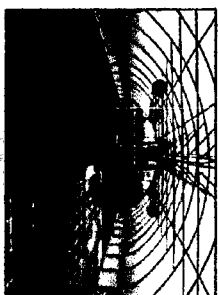
### Beef

- Faculty input on research program
- Regional Beef Center concept
- Ability for faculty to leverage grant funding



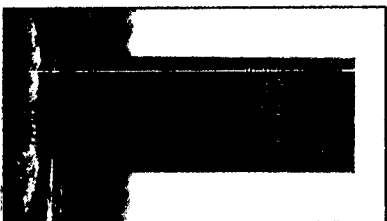
### Tobacco

- Faculty input on research programs
- Consolidation of tobacco research
- Increased efficiency of resources



## Border Belt Research Station Whiteville, NC

- Reduction in tobacco research
- Expansion of Small Grain research
- Continued peanuts, cotton, corn and soybeans
- Southeastern Community College, Biofuel production



## Forest Management

- Combined 10,500 acres of forestry land
- Forester position
- Renewable resource



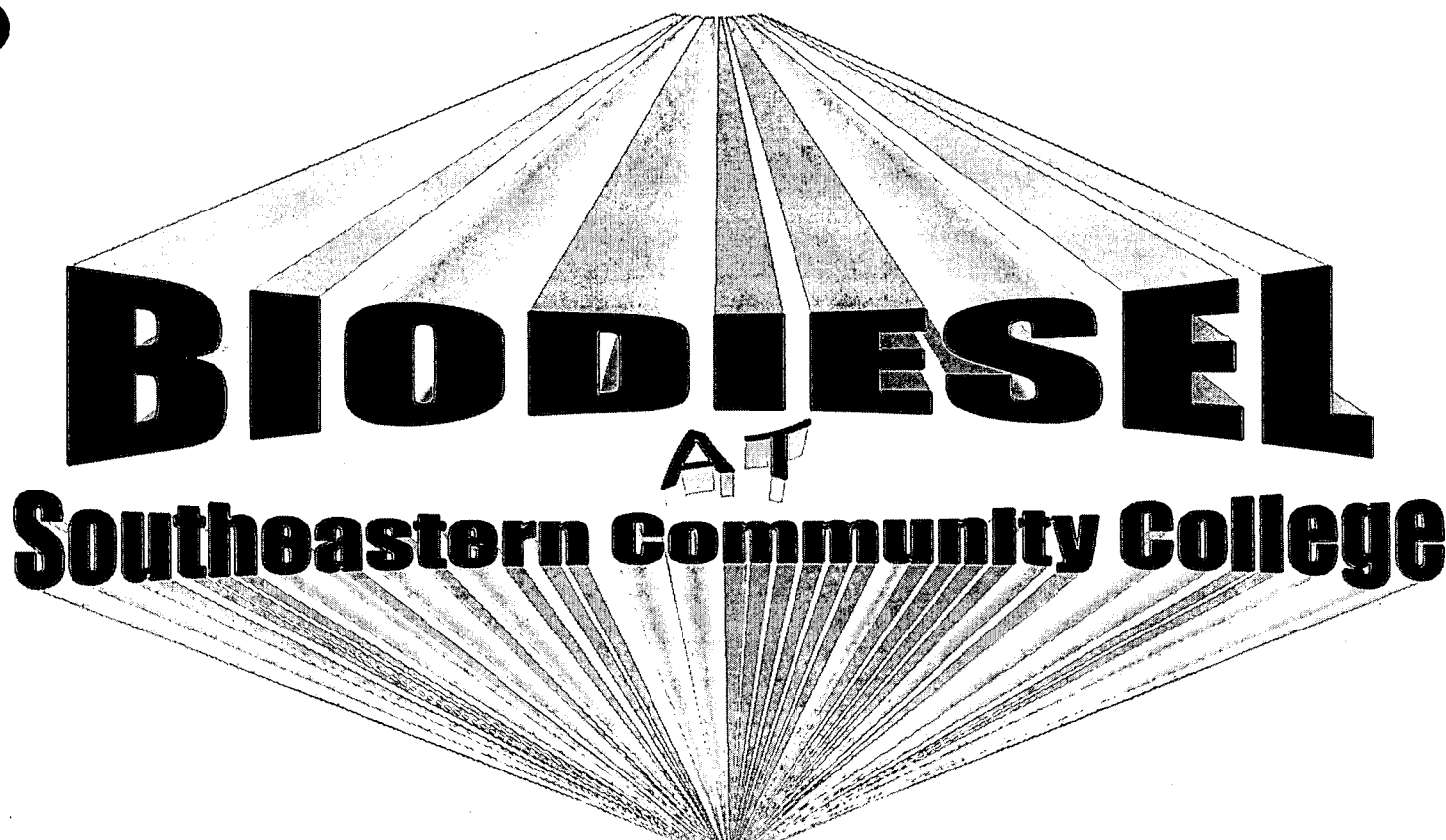


## Challenges

- Cost of research and production
- Reduction in receipts
- Changing technologies and programs

Learn more about the  
Research Stations Division

[www.ncagr.com/research](http://www.ncagr.com/research)



# **BIODIESEL**

**AT**

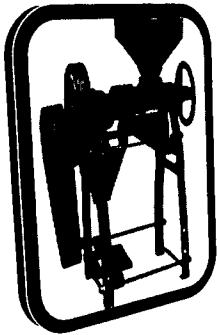
## **Southeastern Community College**

Southeastern Community College began its biodiesel initiative in 2006 with a \$75,000 grant from the North Carolina Community College System's BioNetwork. This grant allowed the Chemistry Department to incorporate biodiesel into its chemistry classes. It also provided for a five night workshop, offered to the public, through the college's Continuing Education Department.

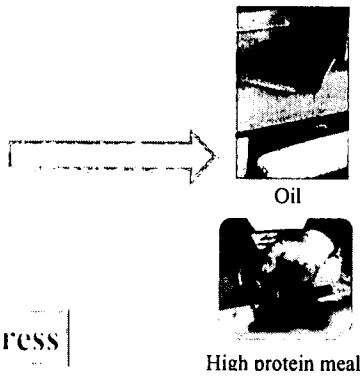
The biodiesel initiative continued and in 2009, a grant was received from the Tobacco Trust Fund Commission to acquire a mobile "seed-to-fuel" biodiesel processing unit. This unit will be used, on site, to demonstrate the process to farmers interested in growing seed crops for conversion into biodiesel. Further, part of the grant will enable the college to install an analytical testing lab for quality testing the biodiesel fuel produced with the unit.

Both the mobile processing unit and the analytical lab will be of great help in supporting local economic development as well as in helping to train tomorrow's workforce in biofuels production.

## Step 1: Press the seed.

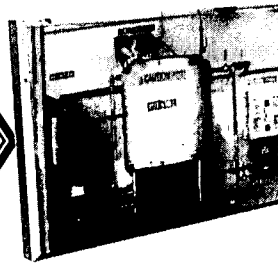


1-Ton Seed Press

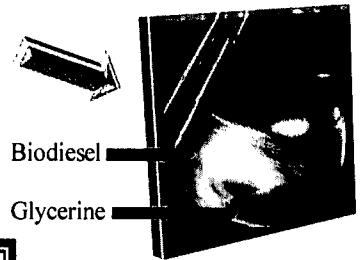


1

## Step 2: Process the Oil.



Reactor



2

## Step 4: Dry the Fuel.



Drying Tank

Shower Heads  
Inside Tank

Shower heads spray  
the biodiesel in the  
air, helping water to  
evaporate

3

## Step 3: Wash with Water.



Wash Tank

Biodiesel

Water

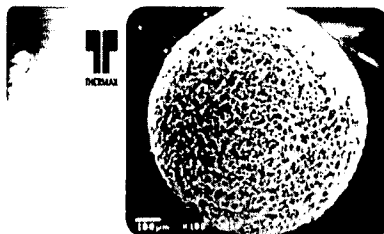
4

## Step 5: Polish the Fuel.



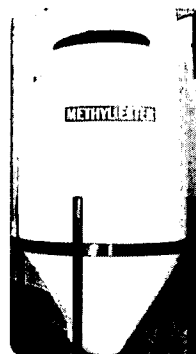
Tulsion® T-45 BD Macro Ion Exchange Resin

- A cross-linked polystyrene matrix containing sulfonic acid groups.
- It is used to remove trace levels of glycerine and soaps from biodiesel.



5

BIODIESEL!



Funding Provided By:



FOR MORE INFORMATION

GARY NEALY  
CHEMISTRY INSTRUCTOR

(910)642-7141, EXT. 369

gnealy@scnc.edu

*The* North Carolina Division of Forest Resources



RE

The Evans Road Fire, Summer 2003

**Managing and Protecting the Forest Resources of North Carolina**

# welcome



Wib L. Owen, Director

N.C. Division of Forest Resources

## FACTS ABOUT NORTH CAROLINA'S FOREST RESOURCES

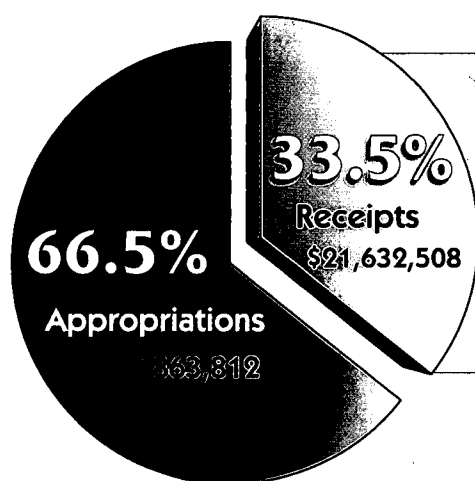
- North Carolina's forests cover 18.6 million acres, more than 59 percent of the state's land area. Nearly 97 percent of our forestland is classified as timberland - available and capable of timber utilization.
- About 86.5 percent of North Carolina's timberlands are owned by private landowners. This includes private individuals, families, and forest industry. The remaining 13.5 percent are owned by public agencies.
- North Carolina's timberland contains 23.0 billion cubic feet of hardwoods and 12.3 billion cubic feet of softwoods.
- North Carolina's timberland is diverse and includes over sixty commercially important tree species. Hardwoods are the dominant forest type, occurring on 72 percent of the State's timberland acres, compared with 28 percent in softwood forest types. Primary forest types in order of occurrence include oak-hickory, loblolly-shortleaf pine, oak-pine, and oak-gum-cypress.

## THE ECONOMIC VALUE OF NORTH CAROLINA'S FORESTS

- In 2007, \$3.5 billion in wages were paid to workers in forestry related industries (including furniture manufacturing), second only to the computer and electronics manufacturing sector with \$3.8 billion.
- The total economic importance of North Carolina's forest as estimated by the US Forest Service is \$30 billion.
- North Carolina is the second leading manufacturer of furniture in the United States with over 59,000 workers, \$1.6 billion in payroll and \$7.4 billion in shipments. California ranks first with 64,000 workers, \$1.9 billion in payroll and \$8.0 billion in shipments.
- Forestry, logging, and wood products manufacturing contribute \$6.0 billion annually to the State's economy.
- In 2007, nearly 97,000 North Carolinians were employed in forest products manufacturing and furniture manufacturing, first among the state's manufacturing sectors.
- North Carolina's timber markets are diverse, and include over 230 mills manufacturing sawlogs, pulp and paper, veneer and composite panels.



## Budget: Fiscal Year 2007-2008



PROGRAM TITLE	APPROPRIATION	RECEIPTS	TOTAL
Forestry Field Operations	40,791,844	16,001,032	56,792,876
Dare Bomb Range	--	1,261,033	1,261,033
Young Offenders Program	984,749	300	985,049
Forest Stewardship	--	541,780	541,780
Forest Tree Improvement	497,719	213,087	710,806
Bladen Lakes State Forest	--	554,791	554,791
Nursery	--	1,171,939	1,171,939
Forest Development	589,500	1,888,546	2,478,046
	\$42,863,812	\$21,632,508	\$64,496,320
	66.5%	33.5%	100%



# Mission:

To develop, protect, and manage the multiple resources of North Carolina's forests through professional stewardship, enhancing the quality of life for our citizens while ensuring the continuity of these vital resources.

# Organization:

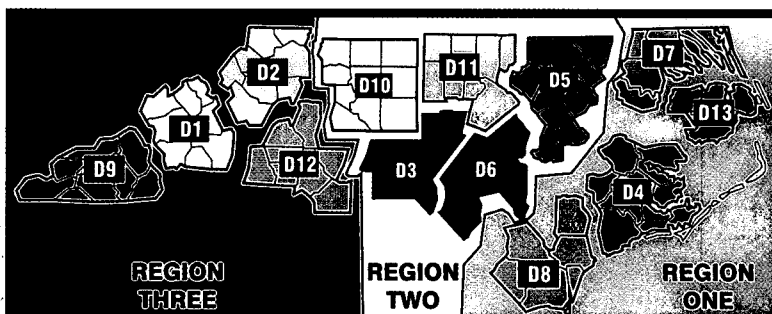
The Division's mandate is to protect, manage and conserve North Carolina's forest resources efficiently and effectively. The Division is organized as follows:

- Director's Office -- Director (State Forester), Deputy Director and Assistant Director (Raleigh);
- Three Sections -- Administrative Services, Forest Protection and Forest Management/Forest Development (Raleigh);
- Three Regional Offices -- Coastal (Kinston), Piedmont (Jordan Lake) and Mountain (Asheville);
- 13 Districts headquartered at Asheville, Lenoir, Rockingham, New Bern, Rocky Mount, Fayetteville, Elizabeth City, Whiteville, Sylva, Lexington, Hillsborough, Mount Holly and Fairfield; and
- County Forest Ranger and staff (if any) in each county.

Each county signs an agreement with the Division and shares in the cost of the county program. The county share varies from 35 to 40% depending on the tax base of the county. All personnel employed in the counties are state employees; however, the county boards of commissioners are consulted in the selection of the county ranger.

The county ranger is responsible for carrying out all Division programs within his or her county. The county ranger is a forest technician who has completed either a two-year forest technician course at a technical school and/or a comparable in-service training program administered by the Division.

Professional assistance in technical areas is provided by foresters and specialists on the district staff who are responsible for managing all programs administered by the counties within that district.



# The Forestry Council

The Forestry Council is an advisory council consisting of eighteen members appointed by the Governor, President Pro Tempore of the Senate, and Speaker of the House. The Council provides advice to the Secretary of the Department of Environment and Natural Resources/Division of Forest Resources with respect to all matters concerning the protection, management, and conservation of state owned, privately owned, and municipally owned forests in the state. A list of Council members is available on the Division's web site [www.dfr.nc.gov](http://www.dfr.nc.gov).

# Forest Protection Program:



The Division of Forest Resources has the responsibility for protecting 18.3 million acres of state and privately owned forestland in North Carolina from forest fires. The program is managed on a cooperative basis with the State's counties. All 100 counties participate in the forest fire protection program. Emphasis in the fire program include fire prevention efforts; presuppression activities (including extensive training of Division and non-Division personnel); aggressive suppression efforts on all wildfires; and law enforcement follow-up.

## Wildland Urban/Interface & Firewise

The Division is taking steps to raise awareness, prevent and mitigate the Wildland Urban/Interface hazards throughout the state through several initiatives that include Firewise, Southern Wildfire Risk Assessment (SWRA), Community Wildfire Protection Plans (CWPP), and the Community Protection Program. North Carolina now ranks first in the country for the number of acres classified as wildland/urban interface and intermix.

The Division and its cooperating agencies consider the Firewise program an essential resource to prepare the more than 1,400 communities at risk from wildfire and mitigate the hazards preemptively. North Carolina ranks 1st in the country in the number of acres of Wildland Urban / Interface acres and 5th in the number of homes in the Wildland Urban / Interface. Twelve communities are Firewise Communities/USA nationally recognized and more than a dozen communities across the state are currently participating in the Firewise program in an attempt to receive national recognition in the Firewise Communities USA program. The Division has purchased an interactive DVD training program titled Living on the Edge in North Carolina to educate homeowners, local leaders, developers and builders about the risk of homes in or near forested areas. This DVD utilizes photos and video specific to North Carolina, and is accompanied by another educational DVD program titled How to have a Firewise Home in North Carolina.

The Division, in coordination with its neighboring state forestry agencies, completed the SWRA. This Geographic Information System (GIS) assessment allows the Division and its partners at the national, state, and local levels to obtain a clearer picture of what the overall potential is for wildland fire and its associated challenges. The Division plans to make the SWRA web based in North Carolina to provide for maximum exposure to our wildfire history and its associated challenges.

The Division is taking the lead to complete CWPPs in all fire districts in the state. A CWPP brings together diverse local interests to discuss their mutual concerns for public safety, community sustainability and natural resources. It offers a positive, solution-oriented environment in which to address challenges such as: firefighting capability, the need for defensible space around homes and subdivisions, and where and how to prioritize land management.

## Training:

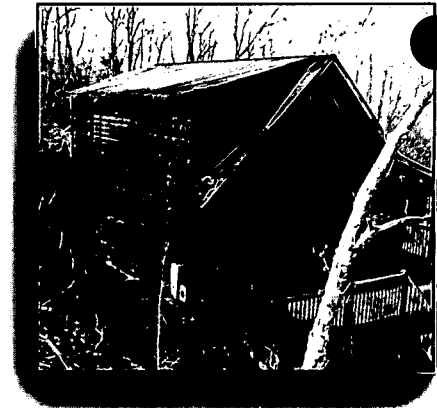
The Division has a very extensive training program in forest fire protection. The National Interagency Incident Management System (NIIMS) training courses are used in all fire organization and fire behavior training. The Division utilizes NWCG (National Wildfire Coordinating Group) training courses and Agency specific courses. This training and utilization of an all risk incident organization enables the Division to be one of the primary respondents to natural disasters in the state, including hurricanes, tornadoes, blizzards and other emergencies.

## Smoke Management:

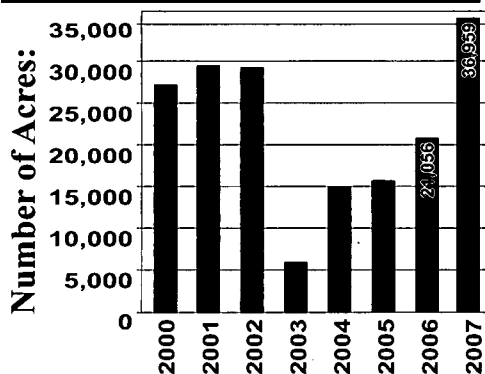
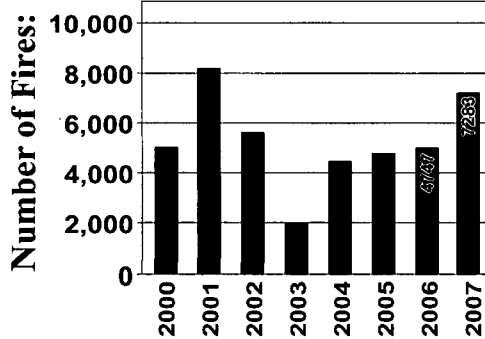
Smoke from forestry prescribed burns throughout the state is managed through a Voluntary Smoke Management Program. The volume of fuel that can be burned is determined by atmospheric conditions and by the distance the burn will take place from a smoke sensitive area, such as a major highway or a populated area.

## Landowner Hazard Reduction Prescribed Burning Program:

The Division established a Landowner Hazard Reduction, Prescribed Burning Program to train landowners to conduct prescribed burning on their forestland in an effort to reduce forest fires and property losses caused by forest fires. This is accomplished by reducing fuel buildup (litter, leaves, twigs, etc.) on their property through the use of prescribed burning.



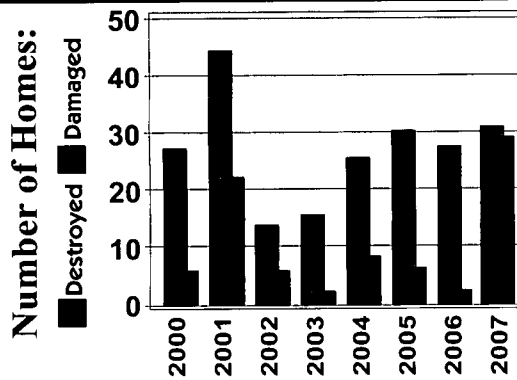
### Wildfire in North Carolina



7 year Average: Fires: 5151 Acres: 22,012

The goal is to keep average fire size to 3.5 acres or less. The average fire size for this time period was 4.27 acres.

## Homes Damaged or Destroyed by Wildfire



8 Year Average: 11 Destroyed, 28 Damaged.

## Natural Disaster Assistance

The Division has a distinguished reputation in assisting the public during or following natural disasters within North Carolina. The training and equipping of personnel make us ready to assist with tornadoes, hurricanes, floods and other events. The previously mentioned Incident Command System allows us to quickly mobilize and organize large forces on the ground anywhere in North Carolina. Working with the State Division of Emergency Management, we are often the first called and last to leave many disasters.

## Law Enforcement

The Division of Forest Resources is a service organization charged by General Statutes with the responsibility of preventing and controlling forest fires and with enforcing forest laws. Law enforcement is an essential part of forest fire prevention. Escaped fires from debris burning account for 40% of all forest fires while woods arson accounts for 24% of all forest fires. The Division's four full-time Law Enforcement Officers coordinate the enforcement activities of the 580 Forest Rangers in the state. They provide specialized training in arson investigation, fire cause and origin determination and forest laws to the forest rangers.

## Insect and Disease Control

The Division of Forest Resources is responsible for providing assistance to the forest landowners in the detection and control of destructive forest pests. A staff of four pest control foresters and two technicians in the Forest Protection Section directs this responsibility. Services are provided to forest landowners through the District and County organizations with Pest Control Branch staff providing training and professional/technical expertise in identification, biology and control of destructive insect and disease epidemics. Historically, personnel dealt primarily with traditional menaces to our forest, such as the notorious Southern Pine Beetle. More recently, dealing with non-native invasive species such as Gypsy Moth, Hemlock Woolly Adelgid and Sudden Oak Death monitoring and control has also become a major focus of the Forest Pest Control Program.



## The Fire Environment

The Division's Fire Environment Branch provides the oversight, strategic direction and vision relating to the measuring, predicting and/or providing guidance for decisions made for natural resource management within fire environment scope. Of most importance is the Branch's position to be at the leading edge of emerging Fire Environment technologies. All this activity is conducted in partnership with the Division's strategic interagency partners and natural resource community. The Fire Environment Working Group accomplishes this work and operates under the auspices of the Division's Director. The Branch's projects benefit North Carolina and have had extending influence within the southern region and across the nation.

## Fire Department Assistance

The N.C. Division of Forest Resources provides assistance to the 1600+ fire departments in N.C. through several programs. These programs offer a variety of fire training courses, equipment by loan agreements, equipment and supplies for purchasing by fire departments, and the Volunteer Fire Assistance Grant program for purchasing wildland firefighting personal protective equipment.

## Aviation:

The Division operates 27 fixed-wing aircraft and 5 helicopters. These aircraft are instrumental in forest fire detection and suppression programs throughout the State, including Federal forestlands in national parks and forests and military installations. DFR fixed-wing aircraft also operate in support of the Division's Forest Management, Pest Control, and Water Quality Programs. The aircraft may also be used for emergency management, coastal and land management activities. These aircraft support DFR by providing aerial survey platforms to insure that all established guidelines for all programs are adhered to across the state. Nineteen of the aircraft are Federal Excess Personal Property (FEPP) aircraft and are technically owned by the U.S. Forest Service. Federal law limits the use of these aircraft to 10% for non-fire use.



## Information and Education:

The Information & Education Branch is responsible for the production and distribution of educational materials used by the Division for public awareness. The Division maintains an active public outreach program designed to heighten the public awareness about the Division's services and the importance our state's vital forest resources.

This Branch also provides staff support to the seven Educational State Forests. The primary purpose of the Educational State Forests is to educate the public, primarily school children, about forest management practices, the forest resources of the state and the need to properly manage these resources. These forests now receive over 160,000 visitors per year. Visit: [www.ncesf.org](http://www.ncesf.org)

## Young Offenders Forest Conservation Program (BRIDGE)

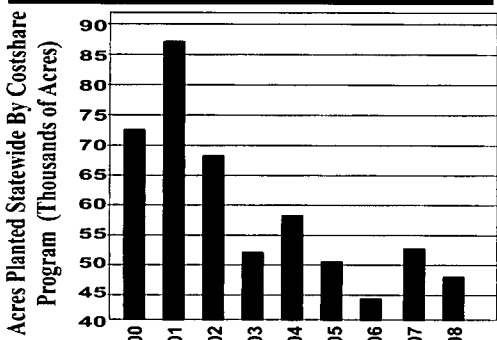
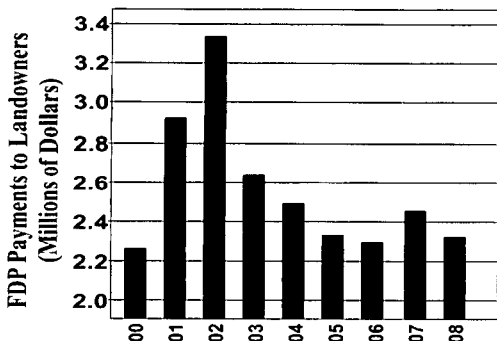
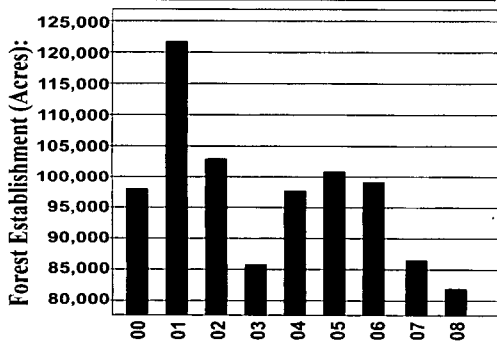
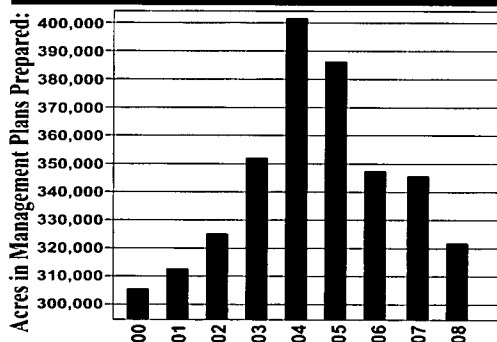
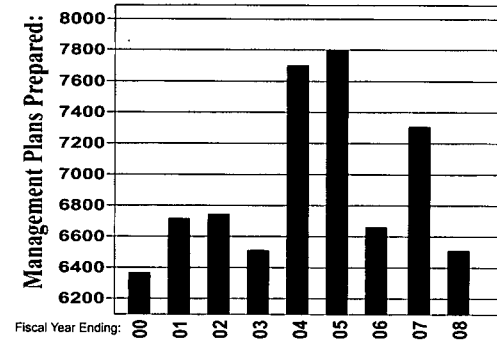
The Young Offenders Forest Conservation Program (also known as B.R.I.D.G.E.: Building, Rehabilitating, Instructing, Developing, Growing, Employing) is a cooperative effort with the Division of Prisons to train and utilize non-violent young inmates. The program offers rehabilitation and education opportunities to inmates while at the same time providing important services in the protection and management of the state's natural resources. The work done by the BRIDGE crews save the Division an average of \$800,000 per year.





# Forest Management Program:

## Forest Management Accomplishments



## Forest Management:

The objectives of the Forest Management Program are to assist private, non-industrial forest landowners in establishing and perpetually sustaining a high level of productivity of the natural resources within the State's forests. The major resources involved include timber, wildlife, watersheds, soils and the environment for outdoor recreation and aesthetic values.

The Division of Forest Resources is responsible for assuring those recommendations proposed for private lands are technically sound, practical and in the long term best interest of the public.

The Division's forest management activities provide a wide range of assistance to the public including forest establishment assistance, intermediate stand management practices and proper harvesting methods. This also includes managing for non-timber benefits, as well as, water quality protection and improvement during forestry operations through the use of forestry Best Management Practices (BMPs) and insuring compliance with Forest Practice Guidelines (FPGs) Related to Water Quality, which is part of the Sedimentation Pollution Control Act. The Division also provides the public with information on forest taxation, threatened and endangered species, forestry herbicides, prescribed fire, forest fertilization, and other common and unique forestry practices. DFR also coordinates Federal cost-share programs, as well as the State's Forest Development Program (FDP) which provides cost-share funds for reforestation and forest stand improvement. Other responsibilities include providing technical expertise for the Forest Stewardship Program; administering the Forest Legacy Program, coordinating forest management training for forest technicians and foresters; and serving as liaison with Federal agencies, forest industry, consulting foresters and other groups or entities with an interest in forestry.

## Technical Development, Planning and Utilization:

The Division's Research and Development program conducts applied forestry research that improves resource management knowledge. Our focus is on developing and applying new techniques that enhance productivity and sustainability of the state's natural resources. Technology transfer, staff training and outreach are key components. Forest-based economic development efforts support traditional forest products industries as well as emerging markets such as carbon sequestration, woody biomass for energy and ecosystem services. The Division is actively involved in efforts to re-establish declining species and ecosystems such as Loblolly and Shortleaf pine, Atlantic white cedar, Baldcypress, American chestnut, Butternut and upland and bottomland hardwoods. Collection and analysis of vital forest resource data is a critical component of the Division's strategic planning efforts to assess and address forest sustainability issues today and into the future.

## Forest Tree Seedling Nursery Program :

The Forest Tree Nursery Program is a receipt-based program. The goals of the program are to produce and sell seedlings of a wide variety of native forest species for afforestation and reforestation plantings, wetland mitigation, stream bank restoration, and for research efforts related to this program. Several species including Fraser Fir are also grown for the Christmas Tree Industry in the state. Seedlings are grown at cost as bare-root, container and greenhouse plants and may include 40 to 50 species of conifers and deciduous hardwoods in any given year. A seed processing facility is associated with the nursery program to process, extract and store seed for nursery use. Both wild and genetically improved seed is processed at this facility. Wild seed is collected by DFR personnel throughout the state.

## Tree Improvement Program

The Tree Improvement Program ensures that seed of the best genetic quality is available to the state nurseries so that seedlings of the highest productivity, form, wood quality and disease resistance are available for deployment throughout the state. This helps the landowners of North Carolina obtain the greatest return from planting these seedlings. Tree Improvement activities include selection, breeding and testing of numerous species. Establishment of seed production areas, genetically improved seed orchards and clone banks include the Southern Yellow Pine species, Eastern White Pine, Atlantic White Cedar (Juniper), and Fraser Fir. Several hardwood species are also being improved. Third cycle Loblolly Pine and second generation Fraser Fir seed orchards are now producing seed for commercial deployment from our nurseries.

## Forest Stewardship Program:

The Forest Stewardship Program is a Federally funded effort which provides coordinated assistance and enables landowners to enhance their property's productivity for future generations while remaining profitable today.

The Forest Stewardship Program provides landowners with on-the-ground assistance and planning. A working partnership of agencies and organizations delivers the program to enhance and protect the timber, soil and water, wildlife and fish, and recreational and aesthetic values of the ownership.

*Last year, there were 250 Stewardship Plans written, covering 38,994 acres.*

## Forest Legacy Program:

The Forest Legacy Program helps landowners, state and local governments, and private land trusts identify and protect environmentally important forestlands threatened by conversion to non-forest uses. Forest Legacy is a partnership wherein each State develops its own assessment guidelines which should conform to Federal requirements. Forest Legacy Program costs are shared between the Federal government (75%) and the State (25%) in cash or in-kind. The responsibility of easement monitoring rests with the State or local governments.

## Forest Development Program: (Cost-Share Assistance for Landowners)

The Forest Development Program (FDP) was designed to encourage private woodland owners to reforest their land after harvest, and to put idle or unproductive land into trees, thus ensuring future timber supplies while providing environmental protection to the State's woodland. This program offers cost-share assistance to private landowners as an incentive to encourage reforestation, and thereby ease the financial burden of their long-term investment. These landowners typically will not realize any return on this investment for 25 years or longer.

In July 1993, prompted by recent forest surveys indicating a steady decline in longleaf pine acreage, a "Longleaf Initiative" was undertaken to increase this species in its natural range and to restore this important ecosystem. Additional attention was also focused on hardwood production and the planting of desirable species in wetland areas. The higher cost to landowners to undertake these practices is prohibitive in many cases. To make restoration of longleaf, hardwood and wetland species more equitable and attractive, the cost-share rate for these practices was raised to 60% State, 40% landowner. Results to date are 3,057 acres of hardwood/wetland planting and 44,601 acres of longleaf during the thirteen years since implementing the higher cost share rate.

*Currently, annual state appropriations for the FDP program are \$589,500.00.*

## Urban & Community Forestry Program:

Total Federal U&CF Dollars Allocated to NC	\$356,525
Communities With On-going U&CF programs	150
Number of Tree City USA's	69



The Division's Urban and Community Forestry program promotes the management of urban trees in North Carolina by offering technical assistance, education opportunities and program support to municipalities, organizations, agencies, industries and private landowners. Urban trees can be individual trees along a street, scattered trees within a park, or a private or public forested area affected by urban and suburban surroundings. An urban forest is any tree where you work, live, or play. The program strives to help communities realize the importance of the urban forest in environmental protection, economic development, and landscape and aesthetic values.

## Water Quality and NPS Branch

The Water Quality & Non-Point Source (NPS) Pollution Prevention Program is supported by ten Water Quality Foresters and a Raleigh-based core team consisting of a Water Quality & Wetlands Staff Forester and four-person Forestry NPS branch. The DFR inspects thousands of forestry sites each year to monitor compliance with the mandatory Forest Practice Guidelines Related to Water Quality (FPGs) and other water-related regulations. The receipt-based Forestry NPS Branch also manages a diversity of projects aimed at protecting, restoring, and maintaining forest water quality. Examples include logger training, BMP site evaluation, bridgemats for stream and ditch crossings, and stream and watershed restorations. Program accomplishments are summarized annually in our Year-In-Review brochure.

## The Forest Inventory and Analysis (FIA) Program

The Forest Inventory and Analysis (FIA) Program of the U.S. Forest Service provides the information needed to assess America's forests. The Division of Forest Resources employs 6 inventory foresters and a coordinator who take measurements of the forest every 6 years at over 5,000 fixed plots located randomly throughout the State.

Data collected from these plots helps US Forest Service researchers project how forests are likely to appear 10 to 50 years from now, and helps the Division determine if current forest management practices are sustainable in the long run as well as to assess whether current policies will allow the next generation to enjoy North Carolina's forests.



## Dupont State Forest

The 10,400-acre DuPont State Forest is located between Hendersonville and Brevard. Forest management practices will be showcased in upland oaks, mixed oak and pine, eastern white pine, yellow poplar and hemlock forest types. The forest has a strong recreation component attracting over 120,000 visitors per year. The forest contains four major waterfalls and five mountain lakes. There are over 80 miles of roads and trails open to hikers, mountain bikers, equestrians and others. The DuPont Dedicated Nature Preserve contains 2,584 acres of primary area with unique plant communities.

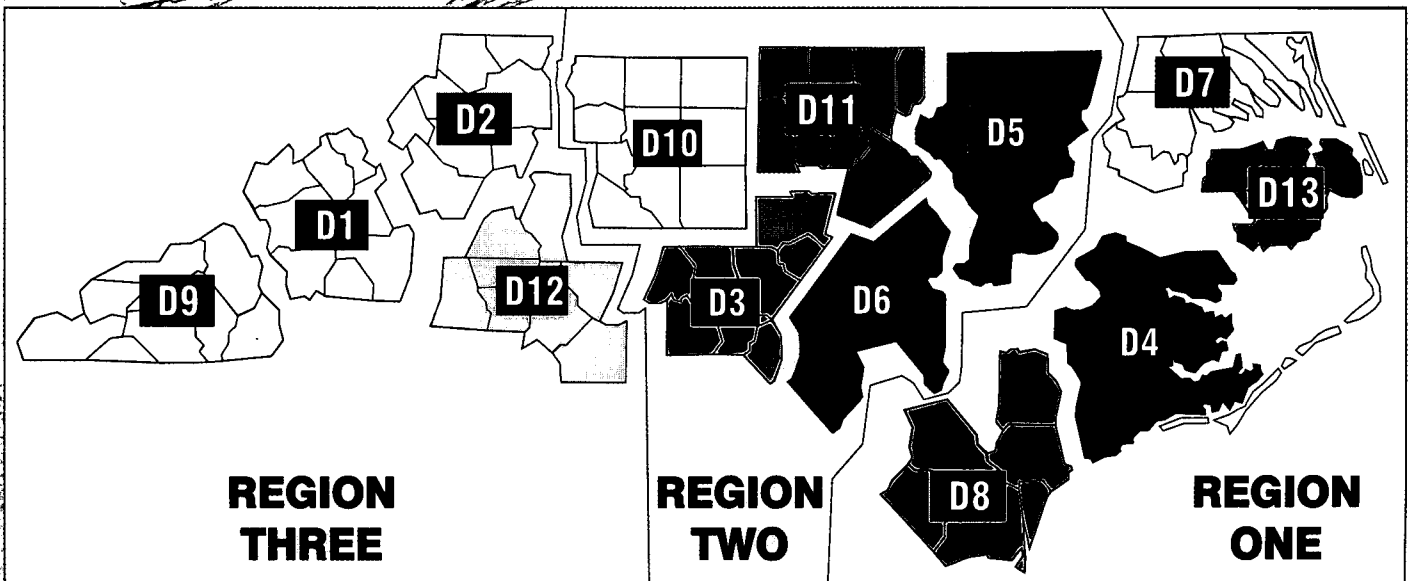
## Bladen Lakes State Forest:

Bladen Lakes State Forest is a 33,014-acre forest operated by the Division as a commercial demonstration forest. It is located just northeast of Elizabethtown in Bladen County. Because the land was poor for farming, it was acquired by the Federal government during the period 1936 to 1942. Families were then relocated to other areas where farming was more profitable. The land was deeded to the State on October 19, 1954, but the Federal government has the reversionary right to retake the property if it ceases to be used for public purposes. Since that time, forest stand development, tree planting, cultural practices and harvesting have taken place on the Forest, as well as considerable amounts of forestry research and development of innovative silvicultural management procedures. Nearly 5,000 acres of rare ecosystems have been set aside from any management activities.



# Our Mission:

*To develop, protect, and manage the multiple resources of North Carolina's forests through professional stewardship, enhancing the quality of life for our citizens while ensuring the continuity of these vital resources.*



[www.planforyourland.com](http://www.planforyourland.com)

1-877-9-NC-PLAN

## NCDNR DISTRICT OFFICES:

District 1: Asheville	(828) 667-5211
District 2: Lenoir	(828) 757-5611
District 3: Rockingham	(910) 997-9220
District 4: New Bern	(919) 514-4704
District 5: Rocky Mount	(252) 442-1626
District 6: Fayetteville	(910) 437-2620
District 7: Elizabeth City	(252) 331-4781
District 8: Whiteville	(910) 642-5093
District 9: Sylva	(828) 586-4007
District 10: Lexington	(336) 956-2111
District 11: Hillsborough	(919) 732-8105
District 12: Mt. Holly	(704) 827-7576
District 13: Fairfield	(252) 926-3041

Central Office (Raleigh) (919) 857-4801



William G. Ross Jr.  
Secretary

Mike Easley  
Governor

[www.dfr.nc.gov](http://www.dfr.nc.gov)

The North Carolina Division of Forest Resources is an equal opportunity affirmative action employer. Its programs, activities and services are available to all people regardless of race, color, religion, sex, age, national origin, handicap or political affiliation.

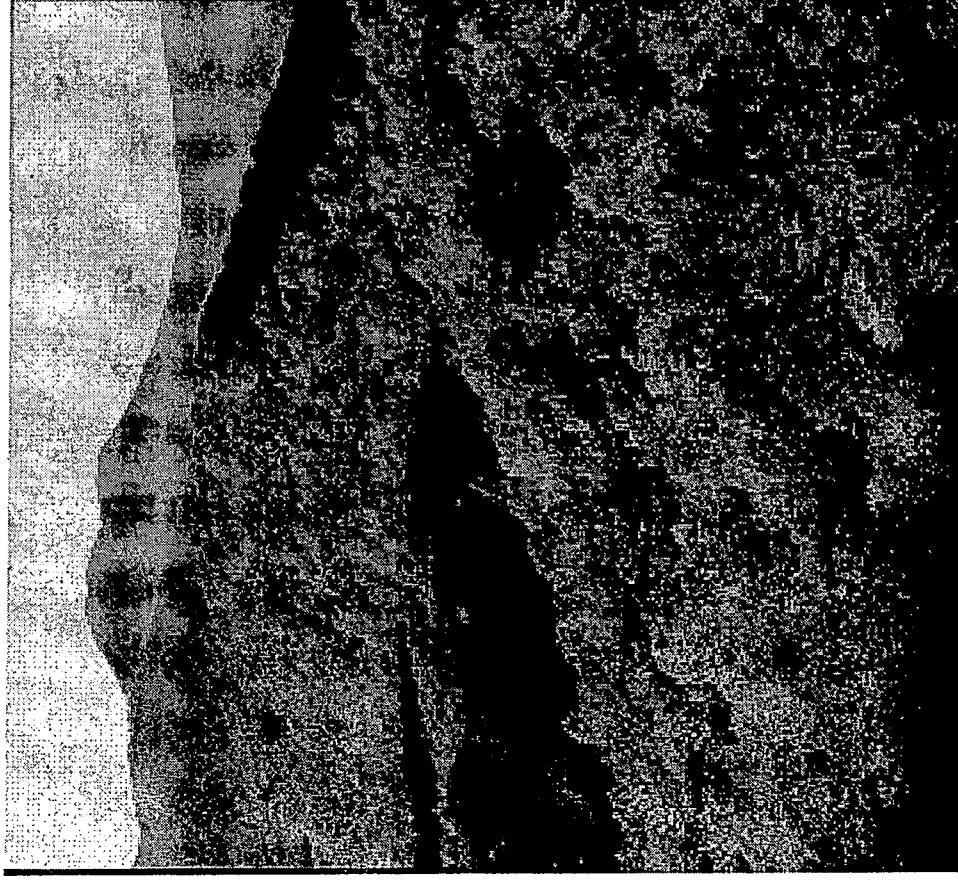
2,000 of this document were printed at a cost of \$1,360.88 or \$0.68 per copy.

***STATUS:  
FORESTS, FORESTRY AND  
THE FOREST PRODUCTS  
INDUSTRY  
IN  
NC AND THE SOUTH***

# ***OVERVIEW***

- **Forests in the South and in North Carolina**
- **Changing Ownership Patterns**
- **The Forest Products Industry**
- **Challenges Facing Forestry and the Industry**
- **The Future**

# ***FORESTS OF THE SOUTH***



**60% of the South is  
forestland – 212  
million acres**

**Stable since the 70's  
91% of what was here  
in 1907**

**30% pine; rest  
hardwood and  
mixed stands**

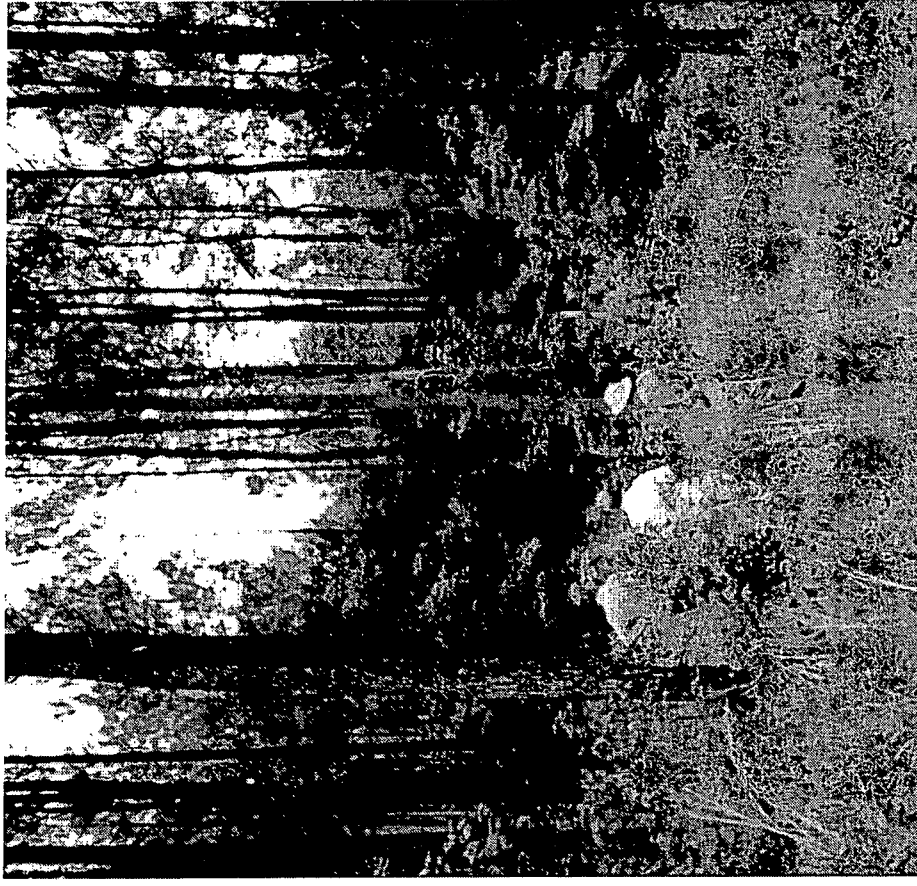
# ***FORESTS OF THE SOUTH***

## **WHO OWNS THE FORESTS?**

- **11% government owned – mostly national forests**
- **89% privately owned**
  - **22% by the forest industry**
  - **21% by farmers**
  - **12% by other corporations**
  - **45% by other individuals**

# ***FORESTS OF THE SOUTH***

- Since 1950's,  
timber inventories  
up 73%.
- Timber production  
has more than  
doubled.





# ***FORESTS OF THE SOUTH***

- South provides 58% of total US production and almost 16% of world's production.
- South produces more wood than any other single nation.



# ***NORTH CAROLINA FORESTS***

- Over 17 million acres of forest – 58% of the state
- 89% is privately owned – the majority by non-industrial private landowners.
- Dominated by hardwoods (>50%; pine <30%)



# ***FORESTS AND THE ENVIRONMENT***

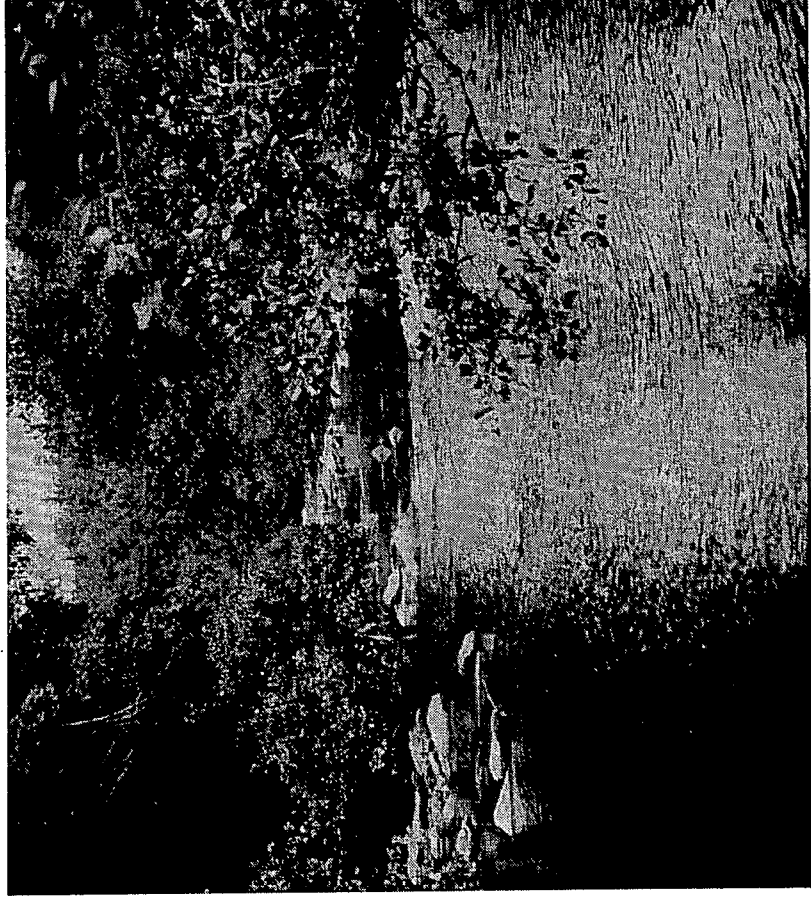
- Clean air...for every 1 lb. of wood produced, a tree takes in 1.4 lbs of CO<sub>2</sub> and gives off 1 lb of oxygen

**Younger forests are  
more efficient than  
older ones**



# ***FORESTS AND THE ENVIRONMENT***

**Our cleanest water  
comes from forests**



# ***FORESTS AND THE ENVIRONMENT***

**Wildlife habitat**

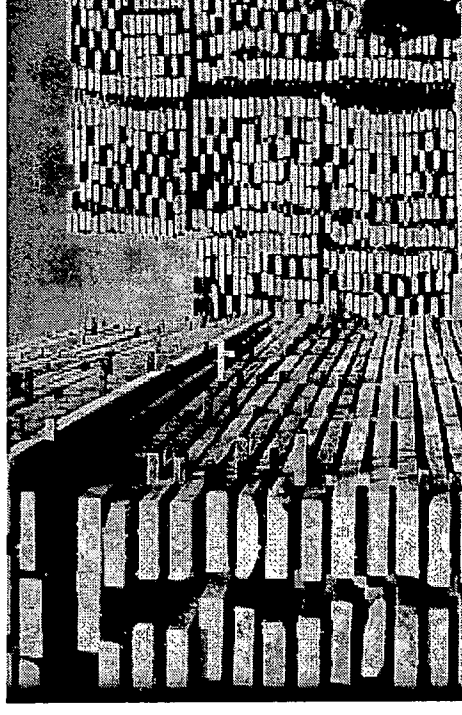
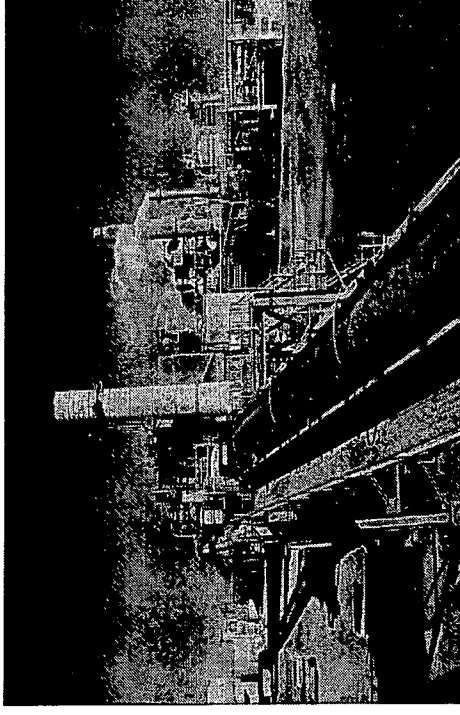


**Recreation**

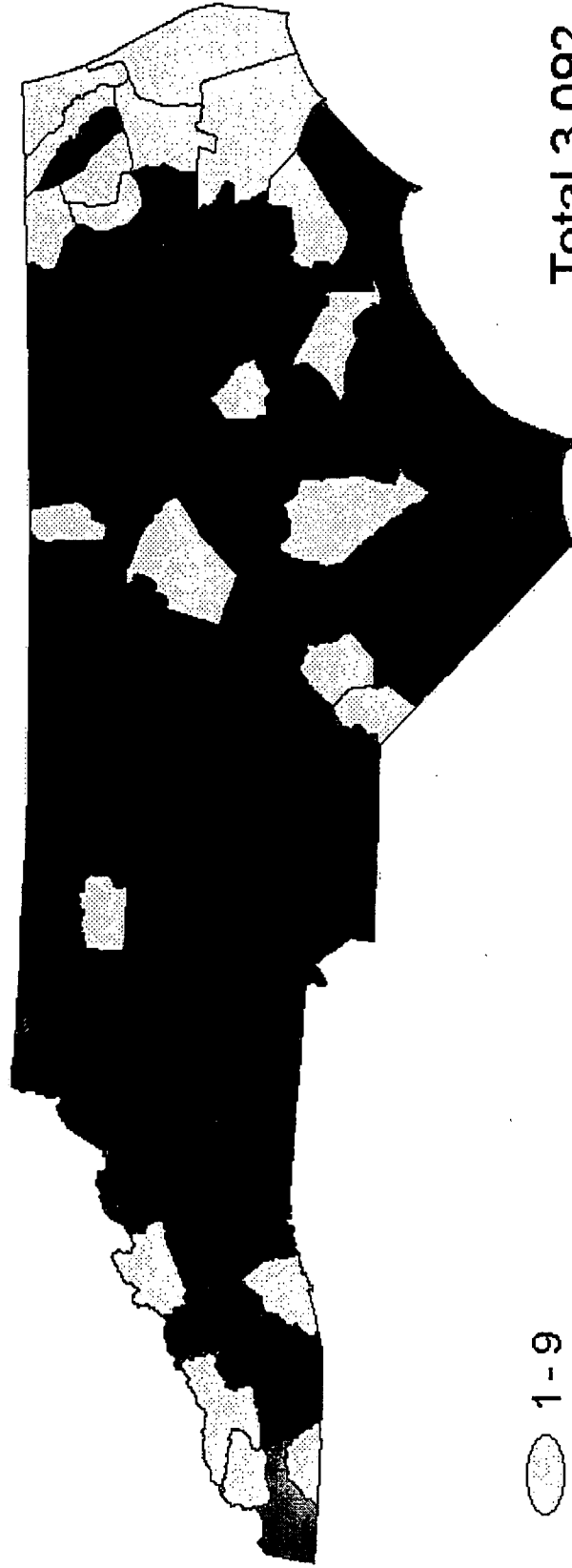


# ***NC'S FOREST PRODUCTS INDUSTRY***

- NC's largest manufacturing industry
- 82,780 direct jobs with an annual payroll of \$3.1 billion
- Total annual economic impact of 218,539 jobs and \$28.5 billion



# Forest Products Manufacturing Facilities



Created by: Center for Earth Observation  
College of Natural Resources  
North Carolina State University  
September, 2003

Source: NC Employment Security Commission 2002

# ***A CHANGING FOREST LAND BASE***

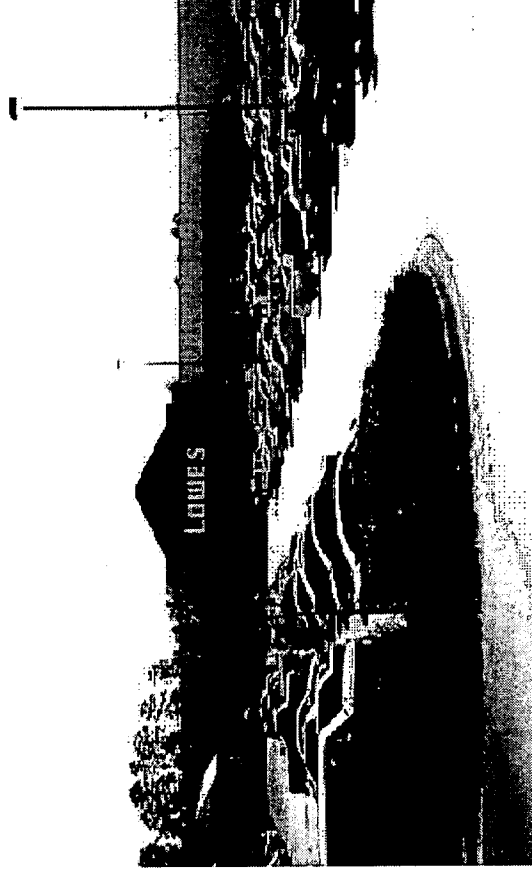
- Net loss of 1 million acres 1990 – 2002; three quarters to urbanization
- Major forest product companies selling land base or becoming REIT's
- Timber Investment Management Organizations (TIMO)





# *A CHANGING FOREST LAND BASE*

- Urbanization will continue;
- Industry divesting (Wall Street; taxation)
- More landowners owning fewer acres
- Long term management by TIMO's uncertain



# ***THE FOREST INDUSTRY***

**Economics and markets are the single most important issue facing the forest products industry today.**

**No one is making money!**

**The need to reduce operating costs and address market issues have driven the most dramatic changes in the industry.**

# *A CHANGING INDUSTRY*

Unprecedented consolidation of the industry is the single most important and dramatic change occurring.

International Paper took Federal Paper, Union Camp, and Champion; Westvaco and Mead Paper merge; Stone Container and Jefferson Smurfit merge; Weyerhaeuser took Willamette Industries; Georgia Pacific bought by Koch Industries.

# *A CHANGING INDUSTRY*

**Companies focusing on “core businesses” and selling the rest;**

**Older mills closing or being sold;**

**Production of some products moving off shore (fine papers for example);**

**Imports competing with domestic production; US industry **MUST** compete globally.**

# ***DEMAND FOR WOOD PRODUCTS?***

**Population Growth =  
Demand**

**Each person on Earth  
= 4 lbs of wood/day**

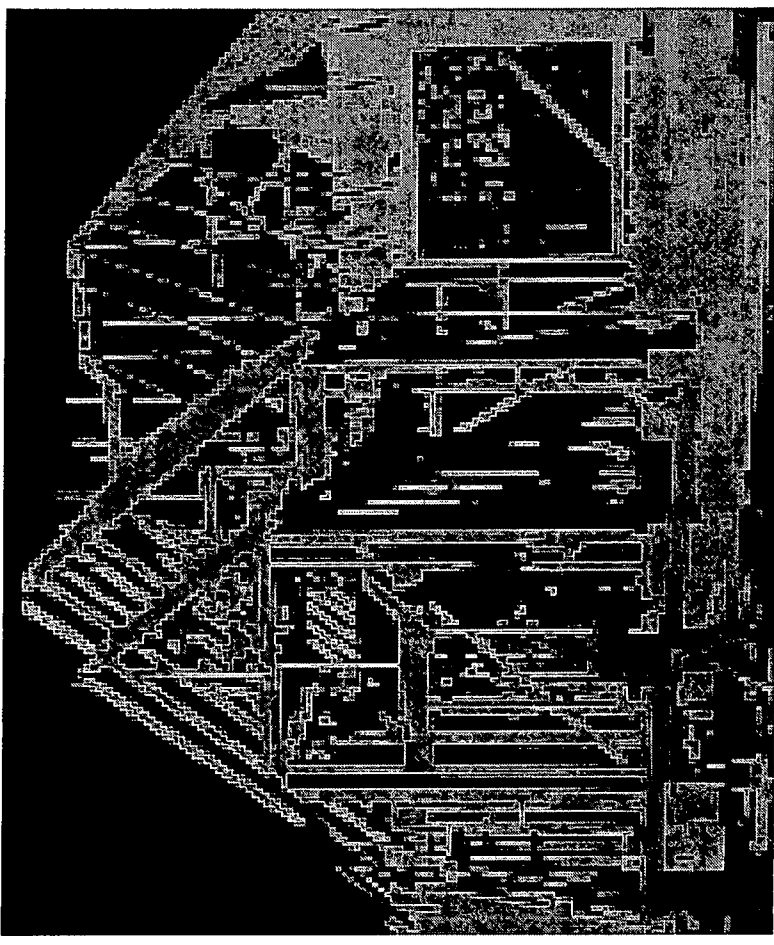
**Each US person = 14  
lbs of wood/day**

**Wood use > steel +  
concrete**



# ***DEMAND FOR WOOD PRODUCTS?***

- 300 billion sq.ft. of built space in 2000 – By 2030, the nation will need 427 billion sq. ft.
- Most of this will be residential.. >100 billion sq. ft.
- Most will occur in the South and West (NC/Raleigh)



# ***THE FUTURE: CHALLENGES AND OPPORTUNITIES***

## **CHALLENGES**

**Recession/depression in wood product  
markets!**

**Urbanizing population – 51% of registered  
voters in NC live in 14 counties;**

**Changing political climate;**

**Changing landowner objectives and changing  
land use patterns.**

# ***THE FUTURE: CHALLENGES AND OPPORTUNITIES***

## **OPPORTUNITIES**

**Demand for wood and paper products will increase worldwide – but when?;**

**Development of new markets/products – biomass and biomaterials**

**The forest industry in the US will likely concentrate in the South – harvests expected to increase 40% - 50% by 2040;**

**Large forest land base and productive forests.**



# ***CONCLUSIONS***

**Forests are critical to our environment and our economy;**

**The forests products industry is critical to our environment and our economy;**

**Unprecedented change is affecting both the industry and our forests;**

**How we deal with these changes will have major impacts, plus or minus, on our economy and our environment.**

**If our forests lose their economic value to the people who own them, then we will have less forestland and less management.**

# 32 Soil & Water Conservation Districts & conservation easement activity

## Holding Easements:

- \* Alleghany SWCD
- \* Beaufort SWCD
- Buncombe SWCD
- Cabarrus SWCD
- Chatham SWCD
- Cumberland SWCD
- Duplin SWCD
- \* Durham SWCD
- \* Fishing Creek SWCD
- Franklin SWCD
- \* Gates SWCD
- Haywood SWCD
- \* Hyde SWCD
- Iredell SWCD
- \* New Hanover SWCD
- Onslow SWCD
- \* Polk SWCD
- Rowan SWCD
- Rutherford SWCD
- Stokes SWCD
- Surry SWCD
- Wayne SWCD

## Owns Land:

- \*\* Brunswick SWCD
- \* Durham SWCD
- \* New Hanover SWCD
- \* Polk SWCD

## Monitors Easements:

- Alamance SWCD
- \* Beaufort SWCD
- Chowan SWCD
- \* Gates SWCD
- Hertford SWCD
- \* Hyde SWCD
- \* Fishing Creek SWCD
- Jones SWCD
- Lenoir SWCD
- Northampton SWCD
- Orange SWCD

## Decision To Hold Easements:

*(in progress)*

Currituck SWCD (\$'s in place)  
Yadkin SWCD (planning)

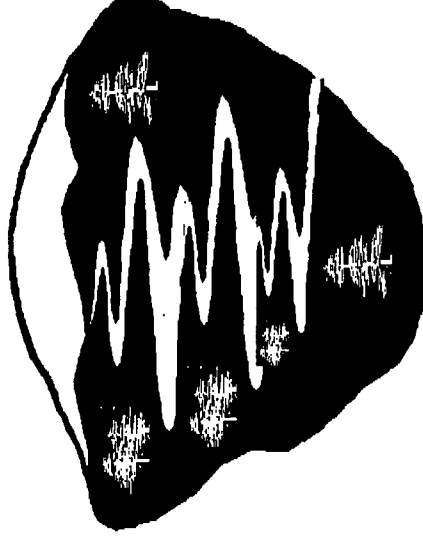
- \* Active in two (2) categories
- \*\* In progress

**updated March 2010**

## For additional information:

Gerald Dorsett, NC DENR  
Office of Conservation &  
Community Affairs  
585 Waightown Street  
Winston-Salem, NC 27107

Email: [jerry.dorsett@ncdenr.gov](mailto:jerry.dorsett@ncdenr.gov)  
Phone: (336) 771-4945



Accomplished through building  
partnership with land trusts,  
community conservation & NC  
DENR

# VISITOR REGISTRATION SHEET

Ag & Forestry Awareness Study Commission

March 23, 2010

Name of Committee

Date

**VISITORS: PLEASE SIGN IN BELOW AND RETURN TO COMMITTEE CLERK**

NAME	FIRM OR AGENCY AND ADDRESS
Chandler Worley	Chandler Worley Farms 11005 Swamp Fox Hwy Cerro Gordo N.C.
Curtis Hayes	NC Farm Bureau Glenwood Ave., Raleigh
George Wooten	Wayne E. Bailey Produce Chadbourn N.C. 28431
Michael Walker	Seaton District 13 1887 Oakton Church Rd Rd 17th N.C.
Kipling Godwin	Columbus County Farmers Market PO Box 888, Whiteville, NC 28472
Zane Hedgcock	N.C. DA + CS. Raleigh Adenton St.
Eddie Pitzer	N.C. DA + CS Research Station Division Raleigh
GENE CROSS	N.C. DA + CS PLANT INDUSTRY DIVISION, RALEIGH
Gino Teolis	Southeastern Community College P.O. Box 151 Whiteville, NC 28472
Bettina Cox	Town of Tabor City 301 East 5th St. Tabor City NC 28463
Gary Nealy	Southeastern Community College PO Box 151 Whiteville, NC 28472

## VISITOR REGISTRATION SHEET

## Ag & Forestry Awareness Study Commission

March 23, 2010

Name of Committee

Date \_\_\_\_\_

**VISITORS: PLEASE SIGN IN BELOW AND RETURN TO COMMITTEE CLERK**

NAME \_\_\_\_\_

**FIRM OR AGENCY AND ADDRESS**

Rebecca "Becky" Westbrook

Southeastern Community College  
4564 Chadbourn Highway - P.O. Box 151  
Whiteville, NC 28472

See Hawks

Southwestern Community College

# Dalton Dockery

NC Cooperative Extension Service  
Columbus County, 45 Government Complex Rd.  
Whiteville NC 28472

Maribel Hill

wife? Rep. Dewey Hill

[illegible]