THE AGRICULTURE AND FORESTRY AWARENESS STUDY COMMISSION

REPORT TO THE

2001 SESSION

OF THE GENERAL ASSEMBLY

OF NORTH CAROLINA

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January 23, 2001

TO THE MEMBERS OF THE 2001 SESSION OF THE GENERAL ASSEMBLY:

The Agriculture and Forestry Awareness Study Commission herewith submits to you for your consideration its report.

Respectively Submitted,

Senator Charles W. Albertson

Representative Dewey Hill

Cochairs
Agriculture and Forestry Awareness
Study Commission

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INTRODUCTION

History of the Commission

The agriculture and forestry industries have always played an essential and vital role in supporting both the rural and urban populations of North Carolina. Over the past decade, all of these industries have experienced severe financial setbacks and instability due to inclement weather, pollution problems, inflation, reduction in foreign exports, and other unavoidable circumstances. In order to insure that the agriculture, forestry, and seafood industries maintained their ability to produce for future needs, the 1983 General Assembly enacted HB 1169 (Chapter 914, 1983 Session Laws) which created the Agriculture, Forestry, and Seafood Awareness Study Commission. The Commission was successful from 1983 through 1985 in making findings and recommendations for the industries of agriculture, forestry, and seafood. Based on this success, the 1985 General Assembly permanently established the Agriculture, Forestry, and Seafood Awareness Study Commission in the law (Chapter 792, 1985 Session Laws) so it could continue to study these three industries. In 1989, the General Assembly established the permanent Join Legislative Commission on Seafood and Aquaculture in the law (Chapter 802, 1989 Session Laws) to concentrate on the State's production, processing, and marketing of seafood. With the creation of the Commission on Seafood and Aquaculture, the Agriculture, Forestry, and Seafood Awareness Study Commission began to focus more specifically on the needs of agriculture and forestry industries. Recognizing this change, the 1991 General Assembly, during the Regular Session 1992, passed legislation effective January 1, 1993 removing seafood from both the title and scope of study of the Commission.

Commission's Charge

G.S. 120-154 authorizes the Agriculture and Forestry Awareness Study Commission to:

* Study the influence of agriculture and forestry on the economy of the State.
* Develop alternatives for increasing the public awareness of these industries.
* Study the present status of agriculture and forestry.
* Identify problems limiting the future growth and development of these industries.
* Develop an awareness of the importance of science and technological development to the future of these industries.
* Formulate plans for new State initiatives and support for agriculture and forestry, and for the expansion of opportunities in these industries.

These duties form the foundation of Agriculture and Forestry Awareness Study Commission's review of these industries and serve as a basis for its final recommendations.

Commission's Membership

The membership of the Commission includes citizens of North Carolina who are interested in the vitality of the agriculture and forestry sectors of the State's economy. The Governor, the Lieutenant Governor, and the Speaker of the House of Representatives, each appoint three members to this 17 member commission. The following individuals also serve on the Commission:

* The Chair of the House Agriculture Committee.
* The Chair of the Senate Committee on Agriculture, Marine Resources, and Wildlife.
* The Commissioner of Agriculture, or his designee.
* A member of the Board of Agriculture.
* The President of the N.C. Farm Bureau, or his designee.
* The Master of the State Grange, or his designee.
* The Secretary to the Department of Environment, Health, and Natural Resources, or his designee.
* The President of the North Carolina Forestry Association, Inc., or his designee.

The Chair of the House Agriculture Committee and the Chair of the Senate Agriculture Committee serve as co-chairs of the Agriculture and Forestry Awareness Study Commission.

COMMITTEE PROCEEDINGS

The Agriculture and Forestry Awareness Study Commission met five times from February 2000 through January 2001. The Commission covered numerous topics ranging from the problems caused by the northward expansion of the red imported fire ant to the question of how to make the State's small farms profitable. The Legislative Research Commission assigned two topics to the Commission. These topics were the red imported fire ant and North Carolina apple industry. S.L. 1999-365, Sec. 2.1(10(b) and (c)/

FEBRUARY 10, 2000

Fire ants were the primary focus of the Commission's first meeting February 10, 2000. Faculty from the Department of Entomology, College of Agriculture and Life Sciences at North Carolina State University and personnel from the Plant Industry Division of the North Carolina Department of Agriculture and Consumer Services (NCDA&CS) gave the Commission a comprehensive overview of the current status of the red imported fire ant in North Carolina, its economic impact, and the regulatory, educational, and research programs underway to control the ant. Presenters from NCSU included Dr. Ed Vargo, Dr. Charles Apperson, and Dr. James Harper. Presenters from NCDA&CS included Dr. Lloyd Garcia, Gene Cross, Kathy Kidd and W.A. Dickerson.

The Committee learned that the red fire ant arrived in the United States in the 1930's at the port of Mobile, Alabama in soil used for shipping ballast. The ant spread rapidly throughout the southeaster and south central United States. By the late 1950's the ant had become firmly established in North Carolina. Today the red imported fire ant infests almost 50% of North Carolina's counties and is expected to continue to spread throughout the piedmont and the coastal plain regions of the State.

Fire ants are a serious pest and have a considerable negative economic impact on the areas that they occupy. The sting is painful and frequently requires medical treatment. Fire ants are considered an agricultural pest. They infest fields discouraging entry by farm laborers, damaging equipment and crops and killing young pigs and chickens. Fire ants have also impacted wildlife in the State causing a loss of biodiversity, displacing native ants, and negatively impacting other wildlife species. Finally, costs for fire ant control are substantial.

Studies done in 1995 estimated the cost in the South to control fire ant infestations to be $3.8 billion annually.

North Carolina's regulatory program is enforced by the Plant Industry Division of NCDA&CS. Under this program approximately 50 counties in the State are under quarantine. All nurseries, turf farms and businesses located in the quarantine area that ship soil or straw are required to operate pursuant to a compliance agreement with NCDA&CS. Through the compliance agreements the Plant Industry Division seeks to impede the spread of the fire ant into non infested areas. Compliance agreements usually require pesticide applications to the commodities being shipped out of the quarantine area and the premises of the operation. The agreements may also require the maintenance of a physical fire ant barrier

The North Carolina Cooperative Extension Service plays an active role in education and outreach to both farmers and the general public. Extension provides information on fire ant control and frequently is able to detect new infestations of the an during farm and other site visits. North Carolina does not earmark any funds for fire ant research. Fire ant research at North Carolina State University is currently supported by the Texas Fire Ant Research Management Program. Representatives from the Department of Entomology at NCSU stressed the need for additional State support for basic and applied research on fire ant biology and management in North Carolina well as the development of a proactive education program . NCDA&CS representatives urged the Commission to look at initiatives that could help slow the spread of the fire ant, reduce impacts on infested communities, and develop long range management activities. A copy of the presentation to the Commission on the Red Imported Fire Ant is included in Appendix D of this Report.

APRIL 20, 2000

At the second meeting, the Commission heard testimony on the status of the apple industry in North Carolina. Mr. Russ Williams from NCDA&CS, Mr Kenny Barnwell, President of the North Carolina Apple Growers Association and Mr. Jamie Oxley, Agricultural Development Specialist for Henderson County made presentations to the Commission.

North Carolina ranks 7th in the nation in apple production. Harvests, however, have decreased from 10 million bushels per year seven years ago to 4 1/2 to 5 million bushels per year for the past three years as a result of changes in the market. Historically, the State's apple

crop was grown for the food processing industry with 75% of the crop being used for juice, baby food and pie fillings. Only 25% of the crop was grown for fresh apple consumption. The market for processing apples has declined seriously in the past two years. North Carolina lost its two major apple processors, Gerber and National Fruit Products Company. In addition to the problems created by the loss of processing capacity, apple growers have also seen prices decrease as a result of the dumping of apple juice by foreign countries.

The decline in the market has led to the need to develop new markets for North Carolina apples, especially the market for fresh apples. Mr. Oxley spoke about a proposal for Henderson County to develop a processing plant to produce juice and other products from fresh apples. The proposal calls for the formation of an economic development corporation composed of local apple growers who would work to build and equip a processing facility. The group would seek to lease the facility to an apple processing company that would use local apples. The apple growers are seeking a grant of $100,000 to assist with the conversion of the assets of an existing apple cooperative to the economic development corporation that would construct and equip the plant.

After the presentations on the status of the apple industry, Mr. Robert Slocum, Executive Vice President of the North Carolina Forestry Association spoke to the Commission about the need for additional resources for the Forest Inventory and Analysis Program. Mr. Slocum also brought to the Commission's attention the recommendation for a forestry biotechnology initiative at North Carolina State University. The University currently has the nation's leading forestry biotechnologist on the faculty and there is an opportunity to make NCSU's program the best in the nation.

OCTOBER 17, 2000

The October 17, 2000 meeting of the Commission focused on the needs of small farmers in the State. Billy Ray Hall, Executive Director of the North Carolina Rural Center spoke to the Commission about the newly created Agricultural Advancement Consortium. Creation of the Consortium was one of the recommendations made the Rural Prosperity Task Force. The Consortium was established by the General Assembly during the 2000 Regular Session. The purpose of the Agricultural Advancement Consortium is to coordinate activities in the State focused on improving farming's long-term viability. The Consortium will be

developing a long term plan to revitalize the farm economy and advocate for legislation at the State and national level to assist the State's farming community.

After Mr. Hall spoke the Commission heard about several specific proposals and projects designed to improve the profitability of farming including value added processing and the formation of cooperatives. The Commission discussed reintroducing legislation from the 2000 Regular Session that would create a tax credit for persons investing in North Carolina value-added agribusiness. The purpose of the credit would be to encourage investment in the small farm sector. For the purpose of the legislation value-added agribusiness is defined to mean a business that uses processes, refines or packages raw agricultural products in a manner that increases the value of the raw agricultural products on the market.

Mr. Robert Usry, Extension Specialist and Lecturer, Department of Agricultural and Resource Economics, College of Agriculture and Life Sciences at NCSU was the next speaker. Mr. Usry emphasized the need for farmers find way to get a larger share of the food dollar. Farmers need to focus on marketing. This means not just producing the commodity, but producing the commodity that the consumer wants to buy. Mr. Bill Jester, Area Specialized Agent, North Carolina Cooperative Extension Service addressed the needs of farmers in Eastern North Carolina. He noted the need for increased funding for education and research programs. He also pointed out the lack of financing available to farmers who want to develop markets, test and market new varieties or add processing or other value-added capacity to their farms. Mr. Jester introduced Mr. Curtis Smith, President of the Southeast Growers Association and Mr. James Sharp, Marketing Specialist for the /Southeast Growers Association. The vegetable cooperative has been very successful in marketing the produce of its members. They need processing facilities, however, to be able to grow and improve their marketing position. Financing for such a project has been very difficult to obtain.

Ms. Betty Bailey, Executive Director of the Rural Advancement Foundation International, USA (RAFI), presented several proposals to the Commission for programs to enhance the profitability of family farms. The first proposal was the Enterprise Cost-Share Program. This program would support, through cost-share grants, on-farm and community based agricultural enterprise development The cost-share program would focus in particular on proposals which would add value to raw agricultural products at the farm and community level. As envisioned by RAFI the program also would provide technical support in business

development, marketing, production and processing. RAFI has operated a successful pilot project along these lines for three years known as the Tobacco Communities Reinvestment Fund.

Ms. Bailey also proposed the establishment of a Value-Added Agricultural Enterprise Incubator, similar to the incubators now used to encourage technology development and small business development. The Agricultural Enterprise incubator would mentor farmers who are developing value-added enterprises, integrate services and information on agribusiness entrepreneurial development and provide training and support programs for agricultural entrepreneurs.

The need for more on farm sustainable production research and development also was emphasized. The RAFI-USA model project known as the Peanut Project provides an example. The peanut project came about as a result of the phase out of the federal peanut program. Researchers and farmers working together developed an alternative production system that reduced pesticide use (and farmer costs by an average of $100 per acre) while maintaining yields and profitability. Ms. Bailey urged the Commission to support using State research dollars for on farm research to develop sustainable production methods which reduce the need for expensive inputs and which work directly with the farmer in problem solving.

Finally, Mr. Gene Cross, NCDA&CS Plant Industry Division, and Dr. Charles Apperson, NCSU Department of Entomology, spoke to the Commission. They reiterated the needs outlined in the first meeting for fire ant research and control. Mr. Cross presented a budget request for an expansion of the Plant Industry Divisions fire ant program of $795,o47 for fiscal year 2001-2002 and $598,577 for fiscal year 2002-2003. Dr. Apperson presented the Commission with a request for earmarked funds for a fire ant research and extension program in the Department of Entomology at NCSU. The Department's request totaled $250,000 for fiscal year 2001-2002 and $225,000 thereafter.

DECEMBER 12, 2000

The Commission's fourth meeting was devoted to forestry issues. Mr. Robert W. Slocum, Jr., Executive Vice-President of the North Carolina Forestry Association was the first speaker and he addressed several issues impacting the forest industry in the State.

His first issue concerned a recent ruling by an administrative law judge interpreting the Environmental Management Commission's turbidity rules for water quality. According to the ruling, the use of best management practices cannot substitute for compliance with the numerical standard. Mr. Slocum stated that the difficulty presented by this ruling is that the numerical standards are so strict that any land disturbing activity would cause a violation. Water quality scientists have indicated that even nature cannot comply with the numerical standards set in the rule.

The other issues raised by Mr. Slocum included the pending renewal of the US/Canadian Lumber Agreement. Canada subsidizes its lumber industry which negatively impacts the timber industry in the US, especially in the Southeast. The Southern Governors Association has adopted a resolution asking Congress to renew the agreement. Mr. Slocum also spoke about the Logger education program in the State. Sponsored by NCFA and taught through the Community College System, the program has been taken by an estimated 50-75% of the loggers in the State. Finally, Mr. Slocum noted that a proposal to create a Forestry Resources Commission was under consideration by the Department of Environment and Natural Resources and the industry.

Mr. Rick Hamilton, Departmental Extension Leader with the North Carolina Cooperative Extension Service, Extension Forestry spoke to the Commission about efforts to educate forest landowners about the resources available to help them manage their forestland. One of the difficulties that Extension faces, however, is identification of the forest landowners. Dr. Mark Megalos, Stewardship Coordinator, Division of Forest Resources, DENR, described two of the programs offered by the Division; the State Stewardship Program and the Forest Legacy Program. The Forest Legacy Program is a federal program. It was enacted as part of the 1990 Farm Bill, and moneys appropriated to the program are used to purchase key forestland, or the development rights to such forestland, to protect them as working forests. The Stewardship program is designed to help forest landowners who are interested in enhancing forestland and preserving the resource for future generations. Finally, Mr. David Brown, Utilization Forester with the Division of Forest Resources spoke to the Commission about the forest inventory currently underway. The last forest inventory was completed by the US Forest Service in 1990. The Division, together with the Forest Service, is in the process of implementing a new system of data collection. The inventory is to be conducted annually

instead of periodically. Responsibility for the data collection is being shifted from the Forest Service to the State forestry departments. North Carolina is among the first states to be involved in the new system and currently has two field crews hired with a third to come on line in January 2001

JANUARY 23, 2001

The final meeting of the Commission was held on January 23, 2001. Personnel from the Food Bank of North Carolina and the Society of Saint Andrew asked the Commission to consider a recommendation to the 2001 General Assembly to increase the income tax credit for gleaning crops and to provide a similar credit to processors who donate fresh produce. Jane Cox, Executive Director of the Food Bank of North Carolina, told the Commission that the Food Bank of North Carolina is a private nonprofit organization founded in 1980 to address hunger in North Carolina. It is one of 6 second harvest food banks in the State. The Food Bank serves 34 counties in eastern and central North Carolina. Approximately 375,000 persons in these counties are at risk for hunger daily, 50% of these people are children. During the last two years the Food Bank's distribution of food has nearly doubled, from 10.8 million pounds to 19 million pounds per year.

Anna Davenport, Food Resources Manager for the Food Bank of North Carolina, stated that the Food Bank of North Carolina distributes 400,000 pounds of fresh produce each month in its service area. With the distribution network that is already in place, the Food Bank could distribute twice as much fresh produce. The challenge is to get farmers and processors to donate produce. Farmers are currently entitled to an income tax credit for 10% of the value of produce that they allow to be gleaned from their fields. This encourages the donation of produce that would otherwise be left to rot in the fields or dumped in the landfills. The tax credit also helps to offset part of the losses farmers suffer when produce cannot be sold at a profit.

Rachel Gonia, Program Coordinator for the Society of St. Andrew, said that the tax credit ends a message of support for the farmers of the State and what they do. The State needs to encourage farmers and processors to participate in food bank programs and not let excess or unmarketable produce go to waste. The current tax credit does not cover the cost of growing the crop, much less harvesting and packaging or processing. The Food Bank and the Society of

St. Andrew would encourage the legislature to increase the amount of the income tax credit to 50% of the value of crops gleaned and to provide an income tax credit to farmers and processors who donate produce to the hungry. Ms. Gonia noted that Arizona allows an income tax credit of 80% of the market value of the crops gleaned and Virginia allows 45% of the value of the donation.

The last speaker before the Commission was Bill Dickerson from the Plant Industry Division of NCDA&CS. Mr. Dickerson spoke about the expansion of the gypsy moth into North Carolina. The moth is a big problem and North Carolina is part of a program with several other states to try to slow the spread of the moth. The Plant Industry Division places some 17,000 traps across the State each year. The plan is to find the infestations while they are still small and eradicate these colonies. The Plant Industry Division hopes that the moth's spread through the State can be slowed to 4 or 5 miles per year. At this rate it would take 25 to 30 years for the moth to go through North Carolina.

The Commission finished its meeting with a discussion of their report to the 2001 General Assembly. Commission members voted to recommend legislation to expand funding for fire ant control and research, to provide an income tax credit for investment in qualified agribusinesses processing raw North Carolina agricultural products, and to increase the income tax credit for allowing the gleaning of crops.

FINDINGS AND RECOMMENDATIONS

The red imported fire ant presents both a serious medical and economic threat to the citizens of North Carolina. Annual costs of dealing with the pest runs into the millions of dollars each year and include the expenses of compliance with quarantine agreements, medical treatment for stings, expenditures for pesticides by individuals. unharvestable crops, and repair of damaged agricultural equipment. The problems caused by the fire ant are expected to increase as the ant extends its territory throughout the eastern and central region of the State. The Plant Industry Division of the North Carolina Department of Agriculture and Consumer Services has responsibility for the regulation of commodities affected by the pest The Division has requested that funding be provided to establish a coordinated program to slow the spread and reduce the impact of the ant. The major components of this program would include further development and implementation of a regulatory program, expansion of current biological control initiatives, additional staffing for ant detection and eradication, and technical assistance to local governments. The Commission finds that the Plant Industry Division's request is well founded and therefore recommends that the General Assembly consider Legislative Proposal 1;: **A BILL TO BE ENTITLED AN ACT TO APPROPRIATE FUNDS FOR THE EXPANSION OF THE IMPORTED FIRE ANT PROGRAM IN THE PLANT INDUSTRY DIVISION OF THE NORTH CAROLINA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES.**

Although North Carolina is one of eleven southern states that are grappling with the invasion of the red imported fire ant, the State currently has no funds dedicated to fire ant research and extension. Serious needs exist in the areas of fire ant biology behavior physiology, and biologically based management strategies. A program of outreach and education is also needed to deal with the increasing number of requests for assistance in dealing with infestations of the fire ant by farmers and landowners. The Commission therefore recommends that the General Assembly consider Legislative Proposal 2: **A BILL TO BE ENTITLED AN ACT TO APPROPRIATE FUNDS FOR THE ESTABLISHMENT OF A RESEARCH AND OUTREACH PROGRAM ON THE CONTROL OF THE RED IMPORTED FIRE ANT.**

North Carolina is this Nation's third largest agricultural producer and ranks 2d in the diversity of agricultural products produced. The past twenty years, however, has seen a tremendous decline in farm income and a tremendous increase in the loss of prime farmland to developers. To remain competitive, the State must develop strategies that assist farmers with improving the profitability of their agricultural operations. A number of such strategies were presented to the Commission for discussion. These included the ongoing development of the Agriculture Advancement Consortium, housed within the North Carolina Rural Center, Inc., the formation of marketing cooperatives, to help farmers negotiate better prices for their crops, alternative, high dollar crops that can help diversify the farm and partially replace the loss or decrease of tobacco, and adding value on farm to those commodities produced. Access to capital for cooperatives and individual farmers seeking to develop value-added processing capacity is very limited. The Commission believes that the legislature can assist with the problem of access to capital by enacting legislation that would encourage individuals to invest in small value-added agribusiness enterprises. Therefore, the Commission recommends that the General Assembly consider Legislative Proposal 3: **A BILL TO BE ENTITLED AN ACT TO CREATE AN INCOME TAX CREDIT FOR TAXPAYERS INVESTING IN AGRIBUSINESS ENTERPRISES THAT ADD VALUE TO RAW, NORTH CAROLINA GROWN AGRICULTURAL COMMODITIES.**

North Carolina's second harvest food banks play a vital role in redistributing excess food and feeding the hungry people of the State. The opportunity to assist fellow North Carolinians is shared by the farmers and food processors of the State. Farmers frequently permit the gleaning of their fields by volunteer after harvest. Processors often donate produce that is good, but unmarketable, to the food banks for distribution to the hungry. In addition to feeding the hungry, the redistribution of food, especially fresh produce, keeps the material out of local landfills, and provides some financial relief, in the form of income tax credits and deductions, to farmers and processors with unmarketable produce.

The Food Bank of North Carolina distributed over 4 million pounds of fresh produce last year. Making this food available decreases reliance of programs like Food Stamps and provides a healthier diet for those in need. Representatives from the Food Bank indicated that they have the capacity to handle twice that amount. Current law encourages farmers to allow

rops to be gleaned from their fields after harvest by providing a 10% credit against income taxes for the market value of the gleaned crop. One way to promote gleaning would be to increase the amount of the credit offered. In order to increase donations of fresh produce, a tax credit could also be extended to farmers and processors of produce who donate fresh produce to nonprofit organizations that will distribute the produce to the needy. The Commission recommends, therefore, that the General Assembly consider Legislative Proposal 4; **A BILL TO BE ENTITLED AN ACT TO INCREASE THE TAX CREDIT FOR PERMITTING GLEANING OF CROPS AND TO ESTABLISH A CREDIT AGAINST INCOME TAX FOR THE DONATION OF HARVESTED AND PACKAGED FRESH PRODUCE.**

APPENDIX A

Article 19.

Commission on Agriculture, Forestry, and Seafood 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 his 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 his designee;
(9) The Master of the North Carolina State Grange or his designee;
(10) The Secretary of the Department of Environment and Natural Resources or his designee; and
(11) The President of the North Carolina Forestry Association, Inc., or his 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

§ 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.

§ 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.

§ 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.

§ 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

APPENDIX B

COMMISSION MEMBERSHIP

AGRICULTURE AND FORESTRY AWARENESS STUDY COMMISSION
1999-2000

MEMBERSHIP

Pro Tem's Appointments	Speaker's Appointments
Senator Charlie Albertson, Cochair 136 Henry Dunn Pickett Road Beulaville, NC 28518	Representative Dewey Hill, Cochair Post Office Box 130 Lake Waccamaw, NC 28450
Mr. Vernon James Route 4, Box 251 Elizabeth City, NC 27909	Representative John Brown 2297 Austin Traphill Road Elkin, NC 28621
Mr. Ross Lampe Guy C. Lee Manufacturing Company 1235 Market Street Smithfield, NC 27577	Representative Phillip Haire Post Office Box 248 Sylva, NC 28779
Senator Edward Warren 227 Country Club Drive Greenville, NC 27834	
Governor's Appointments	
Mr. David L. Burns 1204 Shepherd Avenue Laurinburg, NC 28352	Mr. Phillip C. Farland Farm Service Agency 4407 Bland Road Raleigh, NC 27614
Mr. Robert Eric Harrell 124 E. Granville Street Windsor, NC 27983	

Ex-Officio Members	
Commissioner James Graham Department of Agriculture 2 West Edenton Street Raleigh, NC 27601-1200	Mr. Robert Caldwell NC State Grange 2751 Patterson Street Greenboro, NC 27407
Mr. Robert Slocum, Jr. Executive Vice President NC Forestry Association 1600 Glenwood Ave., Suite l Raleigh, NC 27608	Mr. Larry Wooten NC Farm Bureau Federation Post Office Box 27766 Raleigh, NC 27611
Mr. Bill Holman DEHNR 512 North Salisbury Street Raleigh, NC 27604	
STAFF Barbara Riley Research Division Gayle Christian, Committee Assistant	

APPENDIX C

LEGISLATIVE PROPOSAL 1

GENERAL ASSEMBLY OF NORTH CAROLINA

SESSION 2001

S/H **D**

BILL DRAFT 2001-RFz-4* [v.1] (02/05)

(THIS IS A DRAFT AND IS NOT READY FOR INTRODUCTION)
2/5/2001 5:20:14 PM

Short Title:	Fire Ant Funds.	(Public)
Sponsors:	Senator Albertson./Representative Hill.	
Referred to:		

A BILL TO BE ENTITLED

AN ACT TO APPROPRIATE FUNDS FOR THE EXPANSION OF THE IMPORTED FIRE ANT PROGRAM IN THE PLANT INDUSTRY DIVISION OF THE NORTH CAROLINA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES.

The General Assembly of North Carolina enacts:

SECTION 1. There is appropriated from the General Fund to the North Carolina Department of Agriculture and Consumer Services the sum of seven hundred ninety five thousand forty seven dollars ($795,047) for fiscal year 2001-2002 and the sum of five hundred ninety eight thousand five hundred seventy seven dollars ($598,577) for fiscal year 2002-2003 to be used to expand the Imported Fire Ant Program in the Plant Protection Section of the Plant Industry Division within the Department of Agriculture and Consumer Services.

SECTION 2. This act becomes effective July 1, 2001.

LEGISLATIVE PROPOSAL 2

GENERAL ASSEMBLY OF NORTH CAROLINA

SESSION 2001

H/S D

BILL DRAFT 2001-RFz-6* [v.1] (02/12)

(THIS IS A DRAFT AND IS NOT READY FOR INTRODUCTION)
2/12/2001 4:34:01 PM

Short Title: NCSU Fire Ant Funds. (Public)

Sponsors: Representative Hill./Senator Albertson.

Referred to:

A BILL TO BE ENTITLED

AN ACT TO APPROPRIATE FUNDS FOR THE ESTABLISHMENT OF A RESEARCH AND OUTREACH PROGRAM FOR THE CONTROL OF THE RED IMPORTED FIRE ANT.

The General Assembly of North Carolina enacts:

SECTION 1. There is appropriated from the General Fund to The University of North Carolina the sum of two hundred and fifty thousand dollars ($250,000) for fiscal year 2001-2002 and the sum of two hundred twenty five thousand dollars for the fiscal year 2002-2003. The funds are to be used to establish in the Department of Entomology of the College of Agriculture and Life Sciences at North Carolina State University a program for research on the red imported fire ant and for outreach and extension to assist the general public with the management and control of the ant.

SECTION 2. This act becomes effective July 1, 2001.

LEGISLATIVE PROPOSAL 3

GENERAL ASSEMBLY OF NORTH CAROLINA

SESSION 2001

H/S **D**

BILL DRAFT 2001-RFz-4* [v.1] (02/13)

(THIS IS A DRAFT AND IS NOT READY FOR INTRODUCTION)
2/13/2001 9:18:35 AM

Short Title: Credit for Value-Added Ag Business. (Public)

Sponsors: Representative Hill./Senator Albertson.

Referred to:

A BILL TO BE ENTITLED

AN ACT TO CREATE AN INCOME TAX CREDIT FOR TAXPAYERS INVESTING IN AGRIBUSINESS ENTERPRISES THAT ADD VALUE TO RAW, NORTH CAROLINA GROWN AGRICULTURAL COMMODITIES.

The General Assembly of North Carolina enacts:

SECTION 1. Chapter 105 of the General Statutes is amended by adding a new Article to read:

"ARTICLE 3E.

"VALUE-ADDED AGRIBUSINESS TAX CREDIT.

"§ 105-129.40. Credit for investment in value-added agribusiness.

(a) A taxpayer who invests in a qualified North Carolina value-added agribusiness shall be entitled to a credit against the income tax imposed under Article 4 of this Chapter in the amount of twenty-five percent (25%) of the amount invested. Investments in a qualified North Carolina value-added agribusiness may include cash and in-kind contributions of machinery and equipment, real property, or facilities. To be eligible for the credit, contributions of machinery and equipment, real property, or facilities shall be directly related to the agribusiness.

(b) The amount of the credit allowed shall not exceed fifty percent (50%) of the tax against which it is claimed for the taxable year, or fifty thousand dollars ($50,000), reduced by the sum of all credits allowed against the tax except tax payments made by or on behalf of the taxpayer. This limitation applies to the cumulative amount of credit, including carryforwards claimed by the taxpayer under this Article against the tax for

the taxable year. Any unused portion of the credit may be carried forward for the succeeding 10 years.

(c) The following definitions apply in this Article:

(1) 'Commercial entity' means (i) an agricultural marketing cooperative established pursuant to Subchapter V of Chapter 54 of the General Statutes or (ii) a person producing raw agricultural products.

(2) 'Person' means a natural person, partnership, or corporation that earns less than two hundred fifty thousand dollars ($250,000) in annual gross income from the production of raw agricultural products.

(3) 'Qualified North Carolina value-added agribusiness' means a commercial entity operating in this State that uses, processes, refines, or packages raw agricultural products in a manner that increases the value of the raw agricultural products on the market.

(d) To claim a credit allowed by this Article, the taxpayer shall provide any information required by the Secretary of Revenue. Every taxpayer claiming a credit under this Article shall maintain and make available for inspection by the Secretary of Revenue any records the Secretary considers necessary to determine and verify the amount of the credit to which the taxpayer is entitled. The burden of proving eligibility for the credit and the amount of the credit shall rest upon the taxpayer, and no credit shall be allowed to a taxpayer that fails to maintain adequate records or to make them available for inspection.

(e) The total amount of all tax credits allowed to taxpayers under this section for contributions made in a calendar year may not exceed two million dollars ($2,000,000). The Secretary must calculate the total amount of tax credits claimed from the applications filed under this section. If the total amount of tax credits claimed for contributions made in a calendar year exceeds two million dollars ($2,000,000), the Secretary must allow a portion of the credits claimed by allocating a total of two million dollars ($2,000,000) in tax credits in proportion to the size of the credit claimed by each taxpayer. If a credit is reduced pursuant to this subsection, the Secretary must notify the taxpayer of the amount of the reduction of the credit on or before December 31 of the year the application was filed. The Secretary's allocations based on applications filed pursuant to this section are final and will not be adjusted to account for credits applied for but not claimed."

Section 2. This act becomes effective July 1, 2000, and shall apply to investments made in qualified North Carolina value-added agribusinesses on or after that date.

LEGISLATIVE PROPOSAL 4

GENERAL ASSEMBLY OF NORTH CAROLINA

SESSION 2001

H/S **D**

BILL DRAFT 2001-RF-5* [v.1] (02/20)

(THIS IS A DRAFT AND IS NOT READY FOR INTRODUCTION)
2/20/2001 4:23:05 PM

Short Title:	Tax Credits for Gleaning/Donation of Produce.	(Public)
Sponsors:	Representative Hill./Senator Albertson.	
Referred to:		

A BILL TO BE ENTITLED

AN ACT TO INCREASE THE TAX CREDIT FOR PERMITTING GLEANING OF CROPS AND TO ESTABLISH A CREDIT AGAINST INCOME TAX FOR THE DONATION OF HARVESTED AND PACKAGED FRESH PRODUCE.

The General Assembly of North Carolina enacts:

SECTION 1. G.S. 105-130.37(a) reads as rewritten:

"(a) Any corporation that grows a crop and permits the gleaning of the crop during the taxable year is allowed a credit against the tax imposed by this Part equal to fifty percent (50%) of the market price of the quantity of the gleaned crop. This credit may not exceed the amount of tax imposed by this Part for the taxable year reduced by the sum of all credits allowable, except tax payments made by or on behalf of the taxpayer. No deduction is allowed under G.S. 105-130.5(b)(5) for the items for which a credit is claimed under this section. Any unused portion of the credit may be carried forward for the succeeding five years.

SECTION 2. G.S. 105-151.14(a) reads as rewritten:

"(a) A taxpayer who grows a crop and permits the gleaning of the crop during the taxable year shall be allowed as a credit against the tax imposed by this Part an amount equal to fifty percent (50%) of the market price of the quantity of the gleaned crop. This credit may not exceed the amount of tax imposed by this Part for the taxable year reduced by the sum of all credits allowable, except tax payments made by or on behalf of the taxpayer. In order to claim the credit allowed under this section, the taxpayer must add the market price of the gleaned crop to taxable income as provided in G.S.

105-134.6(c). Any unused portion of the credit may be carried forward for the next succeeding five years.

SECTION 3. Part 1, Article 4 of Chapter 105 is amended by adding a new section to read:

"§ 105-130.37.1. Credit for donation of fresh produce.

Any corporation that donates fresh produce after harvesting or that donates fresh produce that has been packaged or otherwise prepared for market to a non profit organization during the taxable yar is allowed a credit against the tax imposed gy this Part equal to % of the market price of the fresh produce donated. This credit may not exceed the amount of tax imposed by this Part for the taxable year reduced by the sum of all credits allowable, except tax payments made by or on behalf of the taxpayer. No deduction is allowed under G.S. 105-130.5(b)(5) for the items for which a credit is claimed under this section. Any unused portion of the credit may be carried forward for the succeeding five years.

(b) The following definitions apply to this section:

(1) "Fresh produce" means recently harvested fruits and vegetables that have been subjected to only minimal, if any, processing.

(2) "Market price" means the average wholesale price for the particular kind of fresh produce in the nearest local market for the month in which the produce is donated.

(3) "Nonprofit organization" means an organization to which charitable contributions are deductible from gross income under the Code.

SECTION 3. Part 2 of Article 4 of Chapter 105 of the General Statutes is amended by adding a new section to read:

"§ 105-151.14.1 Credit for donation of fresh produce.

A taxpayer who donates fresh produce after harvesting or that donates fresh produce that has been packaged or otherwise prepared for market to a non profit organization during the taxable yar is allowed a credit against the tax imposed gy this Part equal to % of the market price of the fresh produce donated. This credit may not exceed the amount of tax imposed by this Part for the taxable year reduced by the sum of all credits allowable, except tax payments made by or on behalf of the taxpayer. No deduction is allowed under G.S. 105-130.5(b)(5) for the items for which a credit is claimed under this section. Any unused portion of the credit may be carried forward for the succeeding five years.

(b) The following definitions apply to this section:

(1) "Fresh produce" means fruits and vegetables that have been subjected to only minimal, if any, processing

(2) "Market price" means the average wholesale price for the particular kind of fresh produce in the nearest local market for the month in which the produce is donated.

(3) "Nonprofit organization" means an organization to which charitable contributions are deductible from gross income under the Code.

SECTION 4. This act becomes effective July 1, 2001 and applies persons allowing the gleaning of crops and persons donating fresh produce during or after the 2001 fiscal year.

APPENDIX D

North Carolina Department of Agriculture and Consumer Services-Plant Industry Division
North Carolina State University-Entomology Department

Current Status of the Imported Fire Ant in North Carolina

Meeting Agenda

Objective: The primary purpose of this session is to provide members of the Agriculture and Forestry Awareness Study Commission with a general review of the current status of the Imported Fire Ant (*Solenopsis invicta* or *S. wagneri)* in North Carolina. Agency participants will also provide recommendations for responding to this pest in the near future.

I. Pest Description and Background
- A. Pest Description and Biology-*Dr. Ed Vargo, NCSU Entomology*
- B. Why is the IFA considered to be a pest in the United States and North Carolina?-*Dr. Charles Apperson, NCSU Entomology*
- C. Introduction of the IFA into the United States and North Carolina-*Dr. Lloyd Garcia, NCDA&CS Plant Industry Division*
- D. Overview of IFA Expenditures in the United States-*Dr. James Harper, NCSU Entomology*

Break (10 minutes)

II. Current IFA Program in North Carolina
- A. Current Statutory Authority and Regulations-*Gene Cross, NCDA&CS Plant Industry Division*
  1. North Carolina Plant Pest Law (*Article 36, Chapter 106 of the General Statutes of North Carolina as amended in 1971)*
  2. Imported Fire Ant Regulations (*NCAC TO2: 48A .0700-.0706)*
  3. Federal and State Quarantines
- B. Survey, Regulatory Enforcement and Quarantine Treatments-*Dr. Lloyd Garcia, NCDA&CS Plant Industry Division*
- C. Community Assistance Program-*Dr. Lloyd Garcia, NCDA&CS Plant Industry Division*
- D. Extension and Education Activities-*Dr. Charles Apperson, NCSU Entomology*
- E. Research Activities-*Dr. Ed Vargo, NCSU Entomology*
- F. Biological Control Initiatives-*Kathy Kidd, NCDA&CS Plant Industry Division*

Break (10 minutes)

III. Agency Recommendations-*W. A. Dickerson, NCDA&CS Plant Industry Division, Dr. James Harper, NCSU Entomology Department*

IV. Question and Answer Period

V. Follow-up Requests for NCSU and NCDA&CS

North Carolina Department of Agriculture and Consumer Services-Plant Industry Division
North Carolina State University-Entomology Department

Current Status of the Imported Fire Ant in North Carolina

Agency Recommendations-*Dr. James Harper, NCSU Entomology, W. A. Dickerson, NCDA&CS Plant Industry Division*

University Recommendations

Research Initiatives:

- ✔ Increase efforts in basic and applied research on fire ant biology and management in North Carolina. To develop long-term solutions to the fire ant problem in this state, a sound understanding of fire ant biology and ecology is required. Although there are a number of methods available for short-term control in small geographic areas, additional research is needed to determine the best methods or combination of methods to treat fire ants under conditions in North Carolina.

Educational Initiatives:

- ✔ Develop a proactive educational and outreach program on the imported fire ant in North Carolina.
    1. Utilize the existing County Cooperative Extension System to deliver information.
    2. Develop a multi-media educational program including newsletter and training manual for agents, slide sets for self study and for use in speaking engagements, video tapes, and the world wide web.
    3. Develop a website for immediate access of information on the identification, biology, and control of the IFA in real time.
    4. Promote public awareness about fire ants through the use of the media (newspapers, TV, and radio) and publications.
    5. Develop prescription insecticide treatments for high-risk public use areas such as parks, school grounds or golf courses.
    6. Conduct field demonstrations of best management practices in urban and agricultural areas.
    7. Provide assistance to communities and neighborhoods that are interested in organized fire ant control.
    8. Develop state action committee to focus on specific issues related to fire ants. Relevant state and federal agency representatives may be NCSU, NCDA&CS, USDA, EPA, DOT, DENR and military bases).

North Carolina Department of Agriculture and Consumer Services-Plant Industry Division
North Carolina State University-Entomology Department

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NCDA&CS Recommendations

The imported fire ant now encompasses nearly half of North Carolina's counties. Currently available technologies do not permit the eradication of this pest throughout a wide geographical area. The initiatives outlined below serve to minimize long-range spread and secondary establishment, reduce adverse impacts on infested communities, and establish long-range approaches to management of this pest.

Biological Control Initiatives

- ✔ Biological control offers the most promising long-term approach for the management of this pest. In order to encompass the full range of opportunities associated with biological control, expanded program activities are needed.

Statutory Authority

- ✔ The North Carolina Plant Pest Law as last amended in 1991 provides a regulatory framework to deal with the imported fire ant and other defined plant pests. As currently written, the N. C. Plant Pest Act needs to be reviewed and possibly revised to provide fines, penalties, and other authorities to deal effectively with current needs including language consistent with pending federal authority or National Plant Board standards.

General Statewide Issues

- ✔ The imported fire ant program has expanded and now encompasses approximately half of North Carolina's counties. Additional staffing within the quarantine area would help to more effectively manage the major increase in program activities. Additional staffing in those areas outside of established quarantine areas would improve the prompt detection and eradication of small, isolated infestations of the imported fire prior to their establishment and secondary spread.

Community Assistance Program

- ✔ The community assistance program provides necessary resources to local governments within the quarantine area to deal with high-risk sites including schools, parks, playgrounds, and other heavily visited sites. Additional resources would reduce the impact of the imported fire ant on these areas.

Agriculture and Forestry Awareness Study Commission (1999-2000)
Thursday, February 10, 2000

Imported Fire Ant Resources on the World Wide Web

Http://fireant.tamu.edu

Http://www.uaex.edu/natural/fireant/firehome.htm

Http://www.ag.auburn.edu/dept/ent/FireAnts/fireant.html

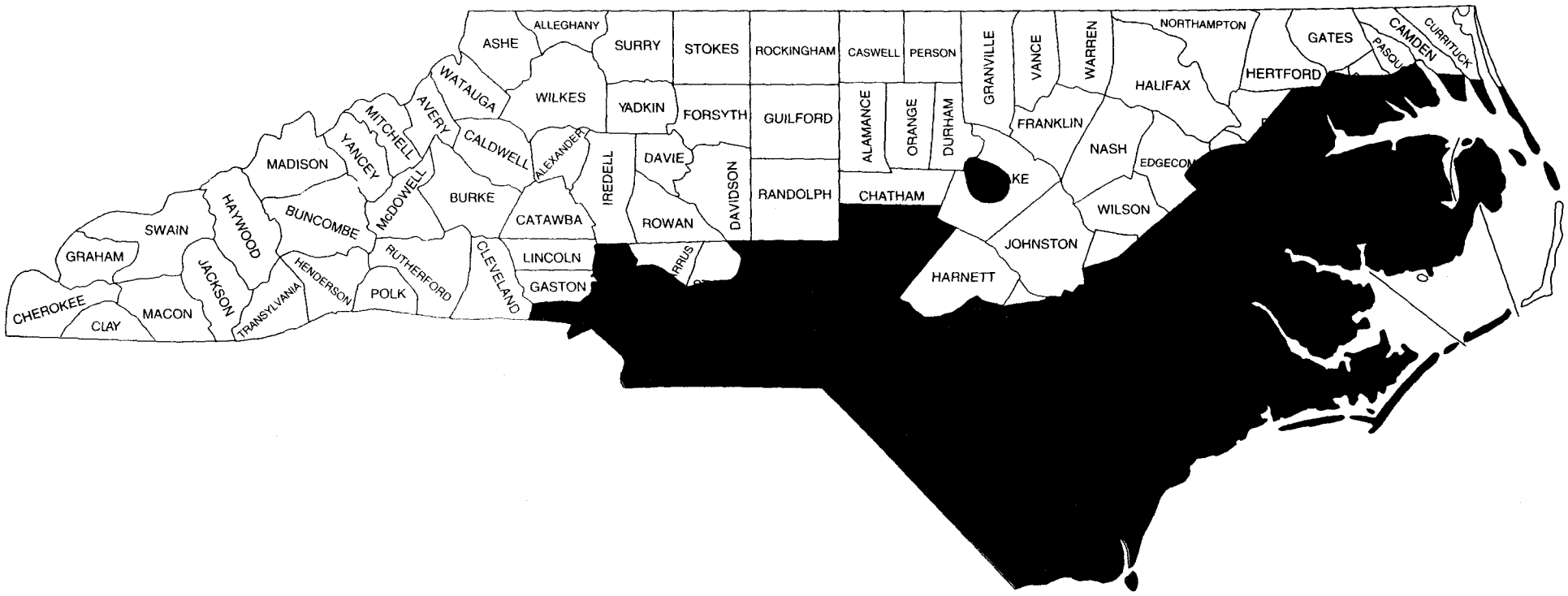
Http://www.ces.ncsu.edu/TurfFiles/pubs/insects/ag486.html

Http://www.agr.state.nc.us/plantind/plant/entomol/entomol.htm

Imported Fire Ant Quarantine Area

NorthCarolina - 2000

www.agr.state.nc.us/plantind/plant/entomol/ifamap.htm

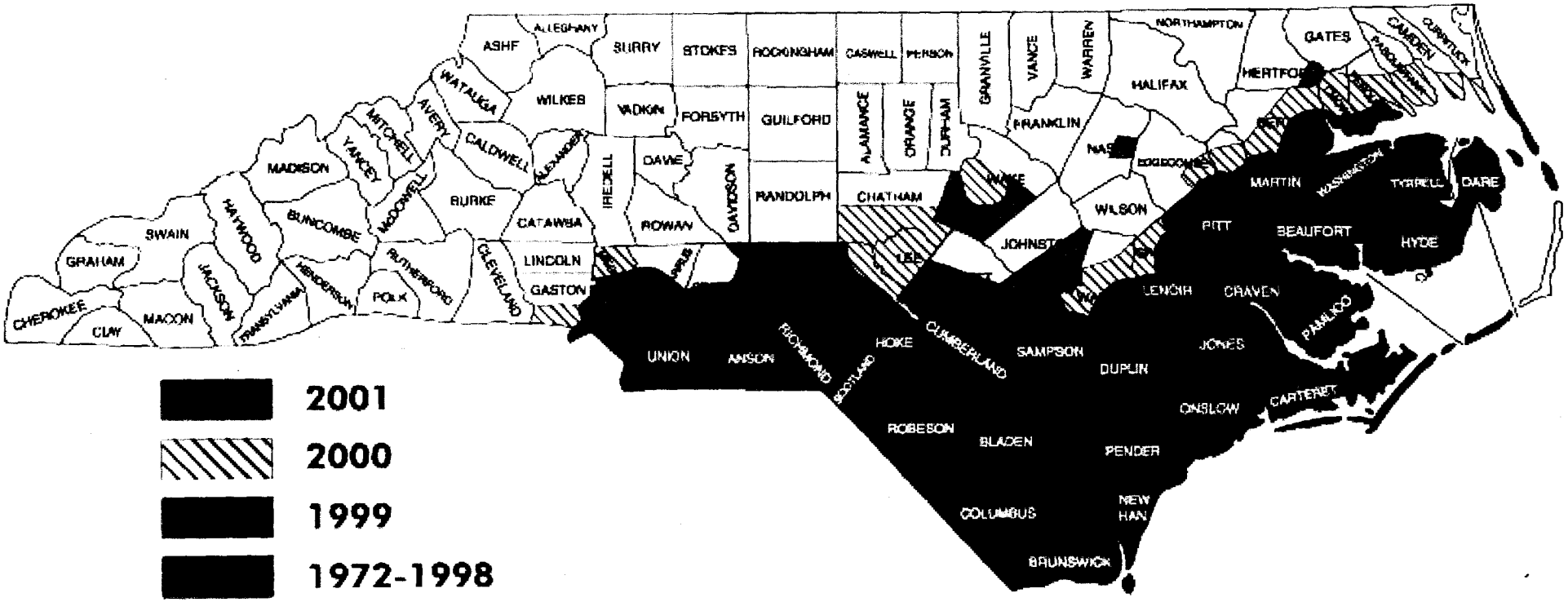


Regulated Area - Movement of regulated articles from this area into or through white area requires inspection.

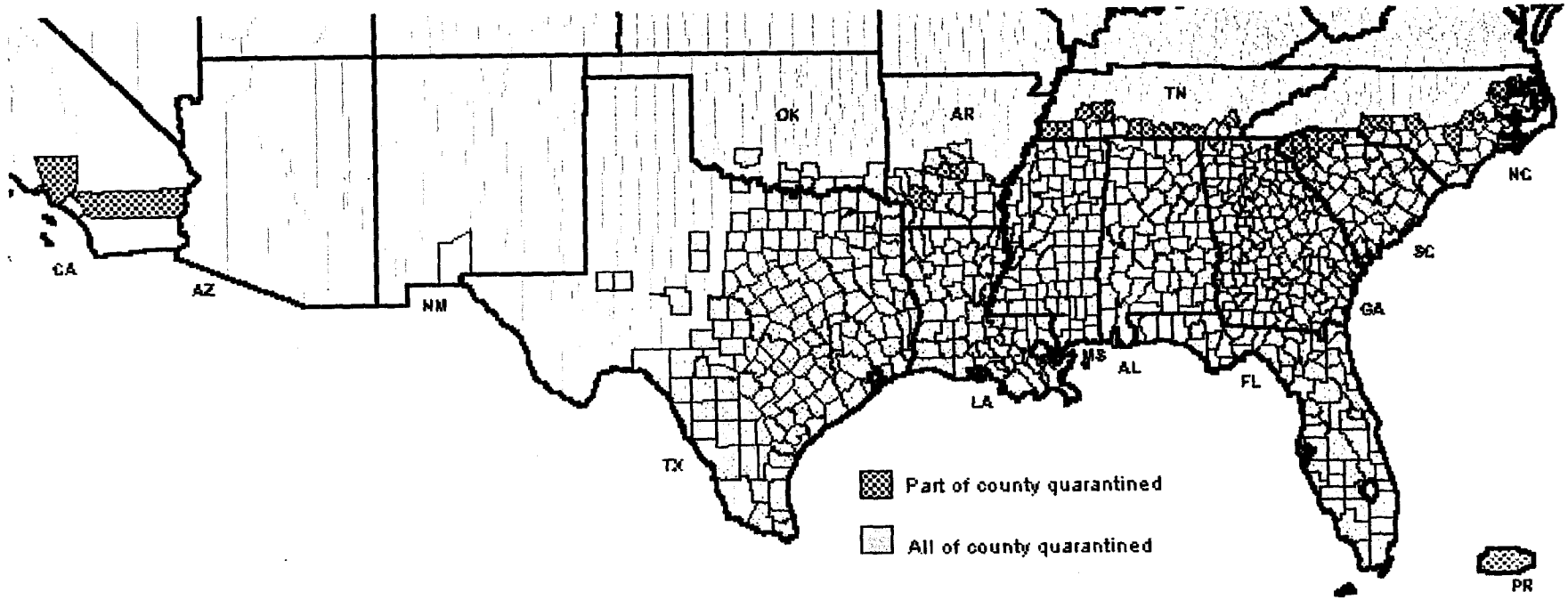
Non Regulated Area - Movement of articles from or through these areas does not require inspection.

11/99

Imported Fire Ant Quarantine Areas in North Carolina



Imported Fire Ant Quarantine



Restrictions are imposed on the movement of regulated articles from the quarantined (shaded) areas into or through the unshaded areas.

June 10, 1999

Consult your State or Federal plant protection inspector or your county agent for assistance regarding exact areas under regulation and requirements for moving regulated articles. For detailed information see 7 CFR 301.81 for quarantine and regulations.

North Carolina Department of Agriculture and Consumer Services-Plant Industry Division
North Carolina State University-Entomology Department

Current Status of the Imported Fire Ant in North Carolina

Current Statutory Authority and Regulations-*Gene Cross, NCDA&CS Plant Industry Division*

Plant Industry Division-Plant Protection Section Mission Statement

The mission of the Plant Protection Section is to enhance the quality of life in North Carolina by protecting agriculture and the environment from injurious plant pests, by promoting beneficial organisms, and by protecting rare native plants of the state.

Plant Protection Section Objectives

Protect agricultural crops, horticultural crops and native flora, by preventing or controlling the invasion and spread of injurious insects, plant pathogens, weeds, and other pests of regulatory concern.

Respond to constantly changing threats to crops, rare native plants, and honey bees by drafting effective and reasonable regulations and by achieving public compliance.

Support agriculture, horticulture and related industries by providing inspection and export services to facilitate the movement of regulated commodities.

North Carolina Plant Pest Law-*Article 36, Chapter 106 of the General Statutes of North Carolina as amended in 1971*

The N. C. Plant Pest Law serves as the basic authority for plant pest regulatory work conducted by NCDA&CS in the state.

Plant Pest Defined: A plant pest is hereby defined to mean any insect, mite, nematode, other invertebrate animal, disease, noxious weed, plant or animal parasite in any stage of development, which is injurious to plants and plant products.

North Carolina Plant Pest Law-General Provisions

The Board of Agriculture is authorized to adopt reasonable regulations to eradicate, repress, and prevent the spread of plant pests.

Enter into agreements with agencies or organizations for the purpose of eradicating, suppressing, controlling or preventing the spread of plant pests.

Declaration as plant pests as public nuisances

Notification and responsibility of owner

For noncompliance, the Commissioner of Agriculture or designee may take measures to eradicate, compute actual costs, and require owner to pay.

The Commissioner of Agriculture or designee shall have the authority to inspect to determine the presence or absence of injurious plant pests.

North Carolina Plant Pest Law-General Provisions-Criminal Penalties:

Individual violating any provisions of this article may be guilty of a misdemeanor and shall be fined not less than five nor more than fifty dollars, or imprisoned for not less than ten nor more than thirty days, for each offense. Each day's violation shall constitute a separate offense.

Imported Fire Ant Regulations adopted pursuant to the Plant Pest Law

As authorized in the Plant Pest Law, specific regulations may be adopted for defined plant pests.
Imported Fire Ant Regulations-NCAC Title 2, Chapter 48, Subchapter 48A, .0700-.0706

Imported Fire Ant Regulations-Regulated Articles

The imported fire ant (Solenopsis invicta Buren, Solenopsis richteri Forel) in any living stage of development;

Soil, compost, decomposed manure, humus, muck and peat, separately or with other things;

Plants with roots with soil attached, and/or roots and rhizomes of plants with soil attached (example: sweet potatoes);
Grass sod;
Hay and straw;
Logs, pulpwood, and stumpwood;
Used mechanized soil-moving equipment;
Any character whatsoever, not covered by Items (1) to (7) of this Rule,
when it is determined by an inspector that they present a hazard of spread of imported fire ant and the person in possession thereof has been so notified.

Imported Fire Ant Regulations-Exemptions

Soil samples of one pound or less which are packaged so that no soil will be spilled in transit and are consigned to laboratories operating under compliance agreement;
Soil samples of any size collected and shipped to any U.S. Army Corps of Engineers soil laboratory;
Compost, decomposed manure, humus and peat, if dehydrated, ground, pulverized, or compressed;
Logs and pulpwood, provided, the loading site has been treated;
Stumpwood, if free of excessive amounts of soil, provided, the railroad loading site has been treated and the stumpwood is consigned to a designated plant;
Used mechanized soil-moving equipment, if cleaned and repainted;
Material being safely transported to a U.S. Department of Agriculture approved laboratory.

Imported Fire Ant Regulations-Conditions for Movement

A certificate or permit must accompany the movement of regulated articles from any regulated area into or through any point outside thereof.
Compliance Agreement-A written agreement between an individual, or concern, engaged in growing, dealing in, or moving regulated articles and the North Carolina Department of Agriculture, Plant Industry Division, wherein the former agrees to comply with conditions specified in the agreement to prevent the dissemination of the imported fire ant.

Federal Imported Fire Ant Quarantine
Imported Fire Ant Quarantine Area January, 2000

North Carolina Department of Agriculture and Consumer Services-Plant Industry Division
North Carolina State University-Entomology Department

Current Status of the Imported Fire Ant in North Carolina

Survey, Regulatory Enforcement and Quarantine Treatments-*Dr. Lloyd Garcia, NCDA&CS Plant Industry Division*

Outside the quarantined area, NCDA&CS employs six temporary (March-November) RIFA inspectors. These individuals are situated along the leading edge of the advancing fire ant front from Williamston to Charlotte. They together with NCDA&CS Plant Protection Specialists conduct surveys to determine the distribution of fire ants. Surveys are initiated following reports from private individuals, companies and NCSU Cooperative Extension personnel, in addition to "windshield surveys" in areas adjacent to the RIFA leading edge. This information is submitted to the United States Department of Agriculture, Animal & Plant Health Inspection Service each year for publication in the *Federal Register* and subsequently used to update the federally quarantined area in the state. NCDA&CS RIFA temporary employees also perform eradication treatments to eliminate isolated infestations and instruct local citizens on control techniques in an effort to slow the spread and establishment of fire ants in the non-regulated area.

All nurseries and turf farms, as well as establishments that ship soil and straw, located within the quarantined area are required to operate under a compliance agreement with the NCDA&CS. The objective of each compliance agreement is to eliminate the threat of movement of fire ants on regulated articles (commodities that have a soil component) to destinations outside the quarantined area. Compliance agreement stipulations are established following an inspection conducted by NCDA&CS Plant Protection Specialists. The stipulations are therefore, specific to each commodity and operation. Typically they involve either the application of approved pesticides either to the commodity or to the premises, and/or the maintenance of a physical fire ant barrier. Compliance agreements are updated yearly.

North Carolina Department of Agriculture and Consumer Services-Plant Industry Division
North Carolina State University-Entomology Department

Current Status of the Imported Fire Ant in North Carolina

Community Assistance Program-*Dr. Lloyd Garcia, NCDA&CS Plant Industry Division*

NCDA&CS offers Community Assistance Programs within the quarantined area to assist affected counties in dealing with their urban fire ant concerns. These programs are initiated by a governmental agency at the county level. Once a program has been requested, NCDA&CS then provides technical assistance and limited quantities of an approved fire ant pesticide bait to a designated county governmental employee for distribution within the county.

North Carolina Department of Agriculture and Consumer Services-Plant Industry Division
North Carolina State University-Entomology Department

Current Status of the Imported Fire Ant in North Carolina

Extension and Education Activities-*Dr. Charles Apperson, NCSU Entomology*

Extension and Outreach

· County Cooperative Extension Agents respond to requests for assistance from the general public, farmers, landscape professionals, nurserymen, etc.

· New infestations (outside of the quarantine zone) are often detected through samples of ants submitted by agents to the NCSU Insect Clinic. Entomology specialists report these new infestations to the NCDA.

Extension and Outreach

· Recommendations for insecticidal control of the IFA are available at Cooperative Extension Centers and in the Agricultural Chemicals Manual.

· Training for agents is available on request and workshops are held periodically (egs. Cooperative Extension's annual conference, phase II training sessions)

Extension and Outreach

· A library of audiovisual and other educational materials for use by agents is maintained at NCSU.

· Entomology specialists are available to speak at grower meetings and civic clubs on request.

· Entomology specialists provide information on fire ants on request to the media (newspapers, TV, radio).

Extension and Outreach

· Hard copies of AG-486 ("Control of the Red Imported Fire Ant in North Carolina") are available to the general public at Cooperative Extension Centers.

· A electronic version of this leaflet is available on-line (http://www.ces.ncsu.edu/TurfFiles/pubs/insects/Ag486.html).

North Carolina Department of Agriculture and Consumer Services-Plant Industry Division
North Carolina State University-Entomology Department

Current Status of the Imported Fire Ant in North Carolina

Pest Description and Biology-*Dr. Ed Vargo, NCSU Entomology*

Origin and spread of the red imported fire ant

A native of South America, the red imported fire ant, *Solenopsis invicta*, is an exotic pest in the U.S. It arrived in Mobile Alabama in the 1930s and quickly spread throughout the southeastern and south central U.S., where it currently occupies more than 300 million acres in all or parts of 14 states. It has recently infested California and New Mexico. The red imported fire ant first became established in North Carolina in the late 1950s. Although the red imported fire ant is primarily found in the southeastern third of North Carolina, it continues to spread north and westward, and models predict it will eventually occupy all of the counties in the Piedmont and Coastal Plain.

Identification

Fire ants are social insects that live in highly organized colonies, consisting of workers, a queen and winged reproductive forms. Worker ants are the most commonly encountered. Workers are red and black and are 1/8-1/4 inch long. The queens are about 1/3 long. Winged males and females are about 1/3 inch long.

Fire ants build conspicuous dome-shaped mounds that range in size from 2-3 ft. in diameter and 1-3 ft high. When disturbed, worker ants will boil out of the mounds to attack, inflicting a painful sting.

Reproduction

During the spring and summer, winged males and females leave the mound and mate in the air. After mating, females can fly a mile or more from the parent colony. These young queens then land, shed their wings, dig a small chamber in the ground and lay eggs. One month after the mating flight, the first workers emerge. The workers then collect food to feed the queen and developing workers. The colony grows quickly, attaining a size of some 25,000 workers after 1 year. By 3 years, the colony reaches maturity. A mature colony can have 240,000 workers and can produce 10,000 winged reproductive forms annually that leave to start new colonies.

Eating habits

Although they prefer oily foods, fire ants eat a wide variety of substances, including both plant material and animal flesh. Fire ants have a painful sting that they use for subduing prey, as well as defending their nest.

Different forms of the red imported fire ant

Most colonies of the red imported fire ant contain a single queen. Typical mound densities of single-queen colonies are 25-50 mounds per acre. However, there is also a multiple-queen form of the fire ant in which colonies contain 10 –500 queens per mound. This multiple-queen form has much higher mound densities, often reaching 250 mounds per acre or more. Multiple queen colonies present two major problems: 1) they are harder to control because it is difficult to eliminate all the queens in the colony, allowing the colony to persist and rebound after treatment;

and 2) the much higher mound density results in greater impact of the ant. Multiple-queen colonies have been found in North Carolina.

Fire ant control: the ecological context

The red imported fire ant is an exotic pest that was introduced to the U.S. free of its natural enemies. History has taught us that the use of broad spectrum insecticides to control fire ants can give very temporary relief at best. Long-term control over large geographic areas can only be achieved by species-specific methods, such as biological control or other biologically-based techniques. Development of target-specific methods will require research on the biology and ecology of the red imported fire ant.

North Carolina Department of Agriculture and Consumer Services-Plant Industry Division
North Carolina State University-Entomology Department

Current Status of the Imported Fire Ant in North Carolina

Why is the IFA considered to be a pest in the United States and North Carolina?- *Dr. Charles Apperson, NCSU Entomology*

Red Imported Fire Ant: An Overview of Economic Impacts

- **Nuisance and medical problems resulting from stings**
- **Loss of biodiversity and effects on wildlife**
- **Agricultural impacts**
- **Cost of control**

The RIFA is a medically important pest of people.

RIFA stings are painful.

In Fort Stewart, GA in 1980, more outpatient visits to emergency rooms resulted from IFA stings than from all other arthropod attacks combined.

In SC in 1998, 33,000 people required medical treatment with 55% of the victims being children.

In GA in 1991, the average medical cost per household was $4.95, with the total yearly cost for the RIFA infested area estimated to be $13.365 million.

The RIFA is an agricultural pest.

A 1975 windshield survey of 129 farmers in NC revealed an average estimated loss of $322.91 per farm.

Losses resulted from:

- Unharvested soybeans due to combine skips
- Refusal of labor to enter infested fields
- Mortality of young pigs

The cost of unharvested soybeans has been estimated to be $5 per acre in NC.

Reduced soybean yields in NC and GA have been correlated with the abundance of IFAs in farm fields.

In GA in 1991, the estimated cost of damage to farm equipment (mowers, balers, etc.) was $130,000.

The feeding activity of fire ants has been documented to cause economic damage to:

- Soybeans, corn
- Potatoes, okra and other vegetable crops
- Citrus

RIFA infestations result in a loss of biodiversity. These losses have not been economically quantified.

- **When the IFA becomes established it displaces native ants.**
- **The omnivorous habits of fire ants result in a loss of arthropod species diversity and a simplification of ecosystems.**
- **The N. C. Nature Conservancy has recently expressed concern over the impact of the IFA on endangered species.**

The IFA has a negative impact on wildlife. These losses have not been economically quantified.

In TX, IFA infestations reduced white-tailed deer fawn recruitment.
Populations of northern bobwhite quail are adversely impacted by IFA infestations.
Feral rodent population abundance and diversity is reduced.
Lizards and snakes populations experience losses in species diversity and negative impacts on abundance.

Costs of IFA control are sizeable.

Average treatment costs per GA household for lawns and surrounding areas was $20.90.
These costs extrapolated over the IFA infested area amount to $36.7 million annually.
In SC, the average annual expenditure for control was $42 per household.
This cost extrapolates to > $55 million annually.
Forty-six percent of households surveyed indicated a willingness to pay for IFA control.
The estimated average willingness to pay was $86 per year, or $120 million for SC's household sector.

Fire ant has many impacts

Poultry industry--poultry mortality
Infestations in electrical and telephone junction boxes
Losses to turf and sod farms
Cost of "fire ant free" status

Dr. Lynne Thompson of the University of Arkansas-Monticello estimated in 1995 that the overall cost of the fire ant infestation across the South was $3.8 billion annually.

References

ADAMS, C. T. and C. S. LOFGREN. 1982. Red imported fire ants (Hymenoptera: Formicidae): frequency of sting attacks on residents of Sumter County, Georgia. J. Med. Entomol. 18:378-382.
ADAMS, C. T., J. K. PLUMLEY, W. A. BANKS, and C. S. Lofgren. 1977. Impact of the red imported fire ant, *Solenopsis invicta* Buren (Hymenoptera: Formicidae) on harvest of soybeans in North Carolina. J. Elisa Mitchell Soc. 93:150-152.
ADAMS, C. T., W. A. BANKS, C. S. LOFGREN, B. J. SMITTLE, and D. P. HARLAN. 1983. Impact of red imported fire ant, *Solenopsis invicta* (Hymenoptera: Formicidae), on the growth and yield of soybeans. J. Econ. Entomol. 76:1129-1132.
ADAMS, C. T., W. A. BANKS, and C. S. LOFGREN. 1988. Red imported fire ant (Hymenoptera: Formicidae): Correlation of ant density with damage to two cultivars of potatotes (*Solanum tuberosum* L.). J. Econ. Entomol. 81:905-909.
ALLEN, C. R., R. S. LUTZ, and S. DEMARAIS. 1995. Red imported fire ant impacts on norther bobwhite populations. Ecol. Appl. 5:632-638.
ALLEN, C. R. , S. DEMARAIS, and R. S. LUTZ. 1997. Effects of red imported fire ants on recruitment of white-tailed deer fawns. J. Wildl. Mgt. 61:911-916.
APPERSON, C. S. and C. T. ADAMS. 1983. Medical and agricultural importance of red imported fire ant. Fla. Entomol. 66:121-126.
APPERSON, C. S. AND E. E. POWELL. 1983. Correlation of the red imported fire ant (Hymenoptera: Formicidae) with reduced soybean yields in North Carolina. J. Econ. Entomol. 76:258-263.

APPENDIX E

North Carolina Apple Industry

The current status of the apple industry in North Carolina is one of desperation. Currently, apple growers that have invested all of their resources and years of hard work into producing last year's crop are facing the decision to either sell their crops for less than the cost of growing the apples, or to simply dump their apples into the gullies surrounding their farms, or to let them rot on the trees-for the third year in a row. Neither of these options are providing the income to pay the bills for this year, and these factors almost guarantee that there will be less apple farming in the future. After the last two year's market disasters, 20-25% of the total orchard production was idled or pushed out of the ground. This year, that number of acres of orchard taken out of production will easily be reached again, and most likely will increase. As few as seven years ago, apple production in North Carolina was over 10 million bushels, but this year it will be somewhere between 4-5 million bushels, and appears to be steadily declining.

The constant flow of foreign apple juice concentrate into this country has succeeded in displacing agriculture in Western North Carolina. The fact that the rest of the nation's economy is roaring along in many other respects only makes the plight of the apple farmer all the more frustrating. North Carolina apple growers are facing severely decreased prices and drastically reduced demand, to the point of abandoning orchards and the constant flow of what was once productive orchardland is falling to the constant pressures of development. This is all coming from an industry that has consistently ranked seventh nationally in the production of apples, and provided one of the major economic components of the region.

One of the major contributing factors to this decline is due to the loss of local markets. A fact that is not commonly known is that North Carolina has historically grown apples that were used to make apple juice, baby food, applesauce and pie fillings. Over 75% of the apples grown yearly are sold to the food processing industry, versus only 25% which are sold as apples destined for fresh apple consumption.

For over 35 years, Henderson County, and all of Western North Carolina have benefited greatly from the fact that there were two local apple processing facilities located in the area. Gerber Products Co. and National Fruit Products Co., both operated processing facilities in the immediate area. These two plants consumed over 75% of the market for juice and processing apples in Henderson County. Apple growers were able to transport fruit to the plants on their own trucks, saving the growers considerable amounts for freight as well as having direct access to markets and purchasing personnel. These outlets provided the markets for not only processing grade fruit, but also a market for fruit that did not meet the quality requirements for fresh market apples.

Unfortunately within the last twenty-four months, the local apple industry has had several severe setbacks coming with the closing of these two local plants. Both Gerber and National Fruit have discontinued operations at their local facilities. This has forced several devastating factors on local apple growers. First, overall demand for apples has been dramatically decreased, as the facilities that these companies transferred operation

apples. By using this method, it will allow the apple growers to help themselves to stabilize their industry and regain some of their marketing abilities.

There are many other positive economic impacts that can be made with a project of this magnitude. This is a small jump-start to help a declining agricultural industry before it reaches a point of no return. And the best effect of this program would be the partnering between supplying and manufacturing industries, facilitated by a governmental assistance, both from a financial and managerial standpoint. These types of programs could be used in situations to help many of the struggling agricultural industries both across North Carolina and nationwide. The apple industry realizes that it is one of many struggling farming oriented businesses, but a project like this could provide a template for success in many areas. This industry is not looking for a handout, just the opportunity to help a struggling agricultural industry to begin to start helping themselves.

APPENDIX F

Testimony before the Agriculture and Forestry Awareness Study Commission of the N.C. General Assembly
Betty Bailey, Executive Director RAFI-USA
October 17, 2000

Thank you for the opportunity to make this presentation to the Study Commission. You have a very important task.

I am Executive Director of the Rural Advancement Foundation International-USA. RAFI-USA is small non-profit organization headquartered in Pittsboro, North Carolina, Chatham County. We work to sustain farms and healthy rural communities. We focus on fairness, diversity and community in agriculture. We work both on practical programs at the farm community level and on state, national and international agricultural policy.

Today I want to review state policy and program options which can support family farm agriculture. These options are drawn from our own experience and research. You will find that they often parallel other recommendations made by the National and State Small Farm Commissions, the Governor's Rural Prosperity Task Force and other agricultural organizations.

OPTIONS AND RECOMMENDATIONS:

1. Enterprise Cost-Share program:

Establish a cost-share granting program to support on-farm and community based agricultural enterprise development. Target support to those enterprises which add value to agricultural products at the farm and community level. Provide technical support in business development, marketing, production and processing to grantees. Use a process that is accessible to farmers, has direct delivery with as few bureaucratic layers as possible and has transparent decision-making criteria. Target cost-share grants to modest sized farms and to cooperative community efforts.

RAFI-USA has operated a pilot Tobacco Communities Reinvestment Fund for the last three years. Farmers with practical experience in diversifying income through innovative marketing, processing and production techniques make up half the board. The other members of the board bring special expertise in banking, agricultural research, marketing and community development.

In 1997 and 1999 RAFI in collaboration with Wake Forest University interviewed 1,200 farmers in major tobacco producing counties. The farmers identified these key barriers to diversifying and improving farm income: lack of capital, grants or low interest loans for new enterprise development, lack of markets and lack of processing facilities. RAFI's pilot Reinvestment Fund addresses these barriers.

The Reinvestment Fund currently supports 17 demonstration projects in 6 major tobacco producing counties. Producer and community cost-share grants have been made for researching and developing enterprises which have the potential to supplement or replace tobacco income. The program puts emphasis on innovative marketing, processing and production. Projects include conversions of tobacco greenhouses for off-season high value produce. Also funded are cooperative processing and marketing ventures. Value-added soybean production, equine services, sod production and educational farm tours are among the projects.

The pilot is modeled on three other programs the USDA Sustainable Agriculture Research and Education Producer Grant, the Ways to Grow Program operated by NCA&T State University, and the conservation cost share program. As the public good is served by installing conservation techniques on farms, then the public shares the cost in the states' conservation cost share program. The same principle could apply to the public interest in supporting agricultural enterprise development.

Farmers told us that they often do not benefit from government programs because of redtape. We set up the pilot cost-share program to have as few bureaucratic layers as possible, to have clear and transparent rules and to recognize that farmers are not professional grant writers. We reality -tested our application process with farmers who serve on the board.

2. Value-Added Agricultural Enterprise Incubator

Create agricultural enterprise incubators similar to the technology incubators now in existence. The incubator would provide "one stop shopping" to farmers and community groups who are developing value-added marketing and processing businesses for agricultural products. The incubator would provide mentor relationships for new entrepreneurs. The program would identify and recruit a stable of resource people who could serve as mentors, integrate services and information for agricultural entrepreneurial development, link to associated services within and outside the state, and provide a training and support program for entrepreneurs.

Place special emphasis on providing incubator support to small businesses and to those entrepreneurial ventures which have potential to return more profit to local farmers and communities. Focus on those enterprises which can help North Carolina's farmers and communities keep a greater share of the food dollar. While the price of food continues to rise, the value farmers get for their products continues to fall. What we have to do is capture more that food dollar at the farm and local level.

When we asked farmers who have been successful in adding value to their farm products about what they did to be successful and where they got help. Most described a set of steps involving finding a lot resources in a lot of different locations. The value of an incubator, which could be without walls, would be to

integrate services to provide a kind of "one stop shopping" for would-be agricultural entrepreneurs.

3. Value-Added Processing

Give priority to development of farm community owned, valued added enterprises where profits flow to and within the community, where wage-laborers are paid a living wage; where efforts result in more local and regional competition in the market; where natural resource stewardship is rewarded through the market.

Support facilities within rural communities which use products from local farms and add-value by further processing, labeling, packaging and distributing these products. Support processing facilities which convert existing facilities such as tobacco warehouses or empty manufacturing facilities for new uses.

Seize opportunities in processing and marketing for "green consumers" by, for example, producing and labeling food products grown with certain stewardship practices and utilizing local resources in a way that sustains that resource over generations. This is one of the largest growth areas in food marketing averaging 20% growth annually. RAFI-USA has studied 50 labels which give farmers premiums for the stewardship practices they use while tapping into the growing consumer preference for foods grown locally and/or in particular ways.

Give priority to processing operations which increase the value of farm products at the farm and community level.

North Dakota has a program to support cooperative value-added processing facilities. A North Dakota pasta coop, organized by farmers who were growing raw wheat for market when the wheat prices collapsed, was supported by the state program and is now one of the leading pasta processors in the country.

4. On Farm Sustainable Production Research and Development

Inside RAFI we call this our Apollo 13 project. Perhaps you remember the scene in the movie Apollo 13 where the astronauts are losing air and the commander on the ground brings a batch of materials into the room, dumps it on the table and says, " this is what we have to work with and we have 15 minutes to turn it into this."

Four years ago the federal peanut program started to be phased down. Farmers were taking a cut of about $100/acre and using a production system that had to be adjusted quickly if they were going to survive.

Externally we called our project the Peanut Project. It brought farmers together with each other, university researchers and others to quickly figure out how to cut costs to keep peanut farms viable.

RAFI-USA 's model program, the Peanut Project, reduced farmer costs by an average $100/acre while maintaining yields and profitability. By reducing active pesticide ingredient by 225,000 pounds on 18,000 acres, the farmers saved money and protected the environment. In this model farmers, university researchers and others work as peers to solve problems. Everyone advances learning by working together to solve problems.

We recommend that the Commission support use of state research dollars for a similar program for farmers. One that supports on-farm research to develop sustainable production methods which can reduce farmer and environmental costs. Support on-farm research programs which place farmers at the center of problem solving along with a team of ag advisors, university researchers, and agricultural non-profits.

Summary

To support farmers in today's agricultural economy, we need to support farmers own inventiveness, innovation and business entrepreneurship. We need to focus on those things that add-value to farm products and increase farmer's share of the food and fiber dollar. We need to make sure that a fair share of the wealth generated from small farming stays in the community and on the farm.

We have a variety of tools to do this: direct marketing, cooperative marketing, value-added processing, product labeling, and business incubation.

Thank you for considering these recommendations.