



# **2004 PLAN OF WORK**

**NORTH CAROLINA COOPERATIVE EXTENSION  
SCOTLAND COUNTY CENTER**

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## **MISSION**

**North Carolina Cooperative Extension  
is an educational partnership helping  
people put research-based knowledge to work  
for economic prosperity, environmental stewardship,  
and an improved quality of life.**

# **Scotland County Cooperative Extension 2004 Plan of Work**

## **Executive Summary**

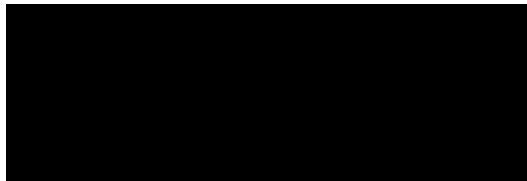
Scotland County is located in southeastern North Carolina adjacent to the South Carolina border. The county has a total area of 204,262 acres. Spanning 18 miles east to west and 25 miles north to south, Scotland County is located halfway between Charlotte and Wilmington. According to the 2000 census, the population is 35,998 with approximately 52% White, 37% Black, 8% American Indian, and 3% other.

Nearly 17,000 people live in Laurinburg, the county seat. Gibson, Wagram, East Laurinburg, Laurel Hill, and a part of the town of Maxton make up the various other communities in the county. Of the approximately 36,000 people living in the county, 18,472 are considered rural with 546 living on farms.

According to the North Carolina Department of Agriculture's website, 123 farms are located in the county with an average farm size of 435 acres. The major crops produced are cotton, soybeans, corn, and small grains. Major animal production includes swine, cattle, and poultry. The value of agricultural commodities produced yearly in the county is approximately 41 million dollars.

The median family income is \$31,010 with a total of 13,407 households in the county. Approximately 21% of the population lives below the poverty level. In 2002, the number of pregnancies reported for 10 - 19 year olds was 112 (state rate is 64 per 1,000; Scotland's rate is 76.5). The unemployment rate for September 2003 was 10.6%.

The Scotland County School system has 15 schools which enroll approximately 7,000 children annually. The 2003 average SAT score in Scotland was 907, the state average is 1001. Additionally, St. Andrews Presbyterian College is located in Scotland County with an average enrollment of 700 students.



## **Focus Areas and Objectives in the Extension Long Range Plan**

North Carolina Cooperative Extension is an outreach of North Carolina State University and North Carolina A&T University in Scotland County as well as the other 99 counties and Cherokee Reservation. The 2004 Plan Of Work will address the five priority program areas undertaken by Cooperative Extension, which are:

- **Enhancing Agricultural, Forest and Food Systems**
- **Developing Responsible Youth**
- **Strengthening and Sustaining Families**
- **Conserving and Improving The Environment and Natural Resources**
- **Building Quality Communities**

Cooperative Extension is supported through the cooperation of county, state, and federal governments; also a variety of organizations, groups, and individuals. Cooperative Extension has an educational role in addressing county issues which were identified through an extensive needs assessment process. Cooperative Extension is dedicated to enhancing the economy, the environment, and the quality of life in Scotland County.

North Carolina Cooperative Extension is in a unique position to provide educational programming to the all the various groups involved in agriculture in the county. Farmers continue to seek advise concerning the ways to grow crops more economically and efficiently as well as dealing with pests that can reduce yields and quality. Producers are continually meeting the challenges of dealing with increasing environmental concerns, regulations and record keeping especially as they relate to waste management, and the need for proper storage, handling, and clean up of pesticides. The educational programs provided by the Extension Service are research based and provide growers with non-biased information that can be implemented to improve net profits.

Taking research based information generated at N.C. State, and N.C. A&T State Universities can provide citizens with much needed information to meet the challenges of an ever changing world. Uncertainty is now the norm not the exception. Increasingly, agriculture is competing in a world market and must strive to adopt those methods that will make us competitive. Traditional agriculture is changing and giving way to more farmers looking at alternatives such as vegetables, and agro-tourism. Assisting growers with these transitions has and will continue to be the focus of Cooperative Extension.

# Enhancing Agriculture, Forest and Food Systems

## Needs determined by local focus groups are:

- Need for Poultry and Swine Waste Management
- Need for storage, proper handling, and clean up of pesticides
- Drainage assistance for row crops
- Row crop tillage
- Alternative Crops as well as supporting current crops produced
- Nematode problems in row crops
- Timber management for marginal soils
- Translators for Mexican farm workers
- Beaver control
- Preparation of tax records on the internet

## OBJECTIVE A-1

**Animal producers will implement practices or enterprises that will achieve individual and family goals related to profitability and quality of life.**

**Tiffanee Conrad**, Area Livestock Agent (Robeson, **Scotland** and Hoke)

**Jody Smith**, Area Specialized Poultry Agent (**Scotland**, Richmond, Union, Cabarrus, Stanley, Montgomery, Anson)

## PROGRAM DESCRIPTION

North Carolina is the 2<sup>nd</sup> largest hog producing state in the country. Contract animal production provides a major source of income for many farmers across the state, especially in Robeson, Hoke and Scotland counties. The swine industry in this area has resulted in almost exclusive contract production, providing new opportunities for Extension educational programming.

Beef cattle production ranks 8<sup>th</sup> among North Carolina commodities, and is one of the faster growing segments of our agricultural economy. Many producers establish beef operations as a means of using available resources on the farm. Other part-time and limited resource farmers try to produce beef cattle as a means of improving cash flow and generating additional income for the farm. Unfortunately, these cattle often do not receive proper attention and management and therefore very few beef operations are as profitable as they could be.

Meat goat production is growing rapidly in North Carolina. The US Census Bureau reports that 1.2% of Scotland County's population is Hispanic, and it is estimated that more than 420 Hispanics reside in Scotland County. The demands from this group, as well as from traditional consumers, contribute to the increased demand for goat meat. Some of this growth results from "hobby" farmers with the desire to produce a few animals on the farm.

The horse industry in North Carolina is growing due to the demand for recreational animals. Although most of these animals do not provide a means of income for farm families, they do require care, management, and feed just as all other farm animals. Certain diseases associated with horses pose both an economic concern, as well as a concern for human health.

Forage production is required for most meat and pleasure animals, as well as to provide suitable land for the application of animal waste. Many forage producers are concerned about production not only for their own animals, but because straw and hay production can be a major source of income for the farm.

Farm diversification has led to a second wave of new poultry house construction at a slower but steady pace since the first commercial poultry houses were built in the early 1990's. This expansion will continue for a couple more years. At the same time, 10-year veterans of commercial poultry production find themselves with diminishing loan amounts but faced with poultry house renovations and equipment upgrades to remain competitive. Imposing regulations affect all commercial farms with added expenses in handling poultry waste.

### **SITUATION STATEMENT**

Contract swine production in **Scotland**, Robeson, and Hoke counties has almost totally replaced the traditional independent swine producers. There are approximately 100 contract swine operations in the three county area, with the vast majority of them in Robeson County. Major issues for swine producers have shifted away from breeding stock, herd health, feed rationing, and marketing options since these issues are handled exclusively by the contracting company. Today, major issues include waste management, labor management, fly and odor control, and overall business management.

Swine waste is most often applied to coastal Bermuda fields, creating an abundance of hay that must be either used or sold. Beef production is one of the fastest growing segments of the local agricultural economy resulting from the need to utilize large amounts of hay. Many part-time and limited resource farmers have beef cattle on their farm as a means of using the existing resources with the least amount of labor, or as a means of generating additional income or additional cash flow for the farm operation. Currently beef cattle generates approximately \$2.5 million for an estimated 175 producers in the 3 county area.

Meat goats generate approximately \$400,000 income for an estimated 225 producers in the 3 county area. While most of the goats are produced for sale, many are produced simply as 'hobby' animals on small farms. Others are used to control brush on farm land. Most goat producers give little thought to issues such as herd health, marketing, and breeding.

There are approximately 4,500 horses in the 3 county area. Although most of these are pleasure animals, there is a need for Extension to provide timely information related to diseases, forages, pest control, and basic animal care.

Over 60,000 acres of land in the 3 county area is devoted to forage production. Most of this land is used for swine waste applications, and the hay generated is feed to beef animals on the farm or is sold to other beef or horse producers. Approximately 20% of these acres are for commercial hay production, and the hay produced on these farms is sold not only locally but throughout the east coast and into some mid-west states. Major concerns of hay producers are variety selection, weed control, proper fertilization, and marketing.

## **TARGET AUDIENCES**

- Commercial animal producers (swine, beef, and goats)
- Commercial contract swine companies
- Horse owners
- Hay farmers
- Agricultural suppliers
- Small and part-time farmers
- Local veterinarians
- Other private companies: feed stores, lenders, and equipment suppliers
- Agricultural organizations: Farm Bureau, NC Pork and Horse Councils
- Government leaders/elected officials

## **TEACHING POINTS**

- Waste management training
- Production practices and systems on contract grower farms related to insurance, electrical service, water quality, equipment maintenance, rodent control/insect management
- Compliance with regulations
- Basic agronomic practices for forage production
- Herd health
- Bio security
- Marketing
- Alternatives to land application of litter
- Information technology use

## **PROGRAM DELIVERY STRATEGIES**

- One-on-one contacts
- Group meetings
- Tours and field days
- Research trials and on-farm demonstrations
- Mass media
- Extension publications and bulletins
- Notebooks
- Videos
- Internet and Homepages
- E-mail
- Networking with agriculture businesses, agencies and organizations
- Specialized Advisory Committees
- Distance education (due to disease contact and transmission concerns)

## **EVALUATION STRATEGIES**

- Review existing records
- Review NCDA testing services results
- Documentation of NRCS cost share participation
- Observations
- Feedback from Specialized Advisory Committee
- Feedback from Extension staff
- Feedback from farmers and agricultural businesses

- Feedback from companies and company representatives
- Surveys
- Pre and Post program testing

### **PROGRAMMING RESOURCES**

- Cooperative Extension Specialists
- Commercial Poultry company resource people
- Government agencies: NRCS/SWCD; DENR/DWQ; NCDA&CS Robeson County Health Department
- Extension publications and bulletins
- Intranet and Internet
- Waste Applicator Notebook
- North Carolina Agricultural Chemical Manual
- Videos
- Commodity Conferences
- Equipment and services suppliers
- Agricultural organizations: Farm Bureau, Livestock Association

### **OBJECTIVE A-2**

**Citizens (farm and non-farm) will respond to issues of mutual concern that relate to production agriculture, including human nutrition, nuisance identification, food quality assurance, quality of life, economic impacts, disaster preparedness, the appropriate treatment of farm animals and environmental stewardship.**

**Tiffanee Conrad**, Area Livestock Agent (Robeson, **Scotland**, Hoke)

**Jody Smith**, Area Specialized Poultry Agent (**Scotland**, Richmond, Union, Cabarrus, Stanley, Montgomery, Anson)

### **PROGRAM DESCRIPTION**

Conflict between the benefits of animal production and problems as viewed by various communities is a delicate balance and is ever shifting. Livestock production in Scotland County requires tremendous capital investments resulting in sizable property taxes for the county. Producers generate additional profits; jobs are created; additional business is created for suppliers of building materials, other products, and services; and the waste from the animals provides a valuable alternative to commercial fertilizers. However, animal activists, neighbors next to litter application fields, neighbors next to confinement animal operations, and those encountering trucks hauling live animals or animal feed on public highways often object to these situations.

Extension's primary focus is to provide accurate and timely information to those affected and to local decision makers, and to propose possible alternatives to alleviate and/or mitigate confrontation. This involves being recognized and accepted as an unbiased educational resource of the university.

### **SITUATION STATEMENT**

Existing confinement animal operations as well as some poultry house expansion throughout Scotland County creates conflicts with rural, non-farm residents. Increasingly, neighbors living near the actual sites, are concerned when animal waste is spread on fields throughout communities. Implications for the future are guidelines, recommendations, and further

regulations for how, where and when litter can be land applied (e.g., surface application vs. incorporation).

The use of antibiotics and other medications has negative impacts on the global trading of animal products and creates concerns from domestic consumers as well. Alternatives can prove costly to companies and contracting farmers in terms of production efficiency, animal health, and growth. Restrictions on exports of animal products can severely affect the economy in Scotland County because there are five (5) animal processing facilities either in or near the county, and many county residents work in these facilities. In addition, local animal producers rely on these facilities as a market for their animals.

Stocking densities in confinement animal operations as well as the treatment of other farm animals can create concerns from animal rights/welfare groups. These concerns can result in increased government regulations requiring additional expenses for contracting companies, contract growers, and animal farmers in general. Concern for prevention and quick response to poultry and animal disease threats may seem intrusive to small backyard poultry flock owners and to part-time or limited resource animal producers.

Biosecurity and agriterrorism are becoming major issues for animal producers, contracting companies, and the general public. Extension can play a major role in leading the effort to educate all those concerned about basic security measures and the strategies needed to ensure a safe food supply. Increasingly, food safety and quality assurance is making its way to the farm which will create more diligence and additional practices on the part of contracting growers to ensure meat safety and quality. In many cases there is a need to educate consumers about food safety and food buying strategies.

The North Carolina State Animal Response Team (SART) is an interagency group, which coordinates efforts dedicated to preparing, planning, responding and recovery activities during animal emergencies in North Carolina. The team's mission is to develop and implement procedures and train participants to facilitate a safe, environmentally sound and efficient response to animal emergencies on the local, county, state and federal level. The team is organized and operates under the direction of the State Emergency Response Team (SERT) utilizing the principles of the Incident Command System. Each county will have a team and emergency plan coordinated by the County Animal Response Team (CART) on the local level. This team will provide prevention, response, and recovery for animal emergencies. The team consists of key animal leaders and supporters in Scotland County.

## **TARGET AUDIENCES**

- Employees of commercial animal and poultry production companies
- Commercial contract animal and poultry growers
- Litter clean-out companies
- Non-poultry farmers utilizing poultry litter waste
- Rural non-farm residents
- Consumers
- Government agencies: NRCS/SWCD; DENR/DWQ; NCDA&CS, DOT
- Scotland County Health Department
- Private companies: feed stores, lenders, and equipment suppliers
- Agricultural organizations: Farm Bureau, Livestock Association

- Civic Clubs
- Small backyard flock owners, including Hispanic immigrants
- Government leaders and elected officials
- CART coordinators and team members

### **TEACHING POINTS**

- Compliance with regulations
- Alternatives to land application of litter
- Critical and proper information acquisition for decision making
- Information technology use
- Understanding modern animal production practices
- Costs and benefits associated with alternative production practices
- Farm disaster preparedness (hurricane, disease, mass burial)

### **PROGRAM DELIVERY STRATEGIES**

- One-on-one contact
- Group meetings
- Tours
- Field days
- Research trial results and demonstrations
- Mass media
- Direct mailings and targeted email
- Extension publications and bulletins
- Videos
- Internet and Homepages
- E-mail
- Public hearings

### **EVALUATION STRATEGIES**

- Existing records
- NCDA testing services results
- NRCS cost share results
- Document number of complaints
- Observation of changes made and recommendations implemented
- Feedback from various Specialized Advisory Committees
- Feedback from Extension staff
- Feedback from contracting companies and agriculture businesses
- Feedback from farmer
- Feedback from citizens
- Surveys
- Pre and Post program testing
- Needs assessment meetings

### **PROGRAMMING RESOURCES**

- Extension Specialists
- Extension publications and bulletins
- North Carolina Agricultural Chemicals Manual

- Government agencies: NRCS/SWCD; DENR/DWQ; NCDA&CS
- Scotland County Health Department
- Commercial poultry production companies
- Commercial contract animal growers
- Litter clean-out companies
- Other private companies: feed stores, lenders, and agribusinesses
- Agricultural organizations: Farm Bureau, Livestock Association
- Civic Clubs
- Grant opportunities
- Intranet and Internet
- SART grants for microchipping

### **OBJECTIVE A-3**

**Youth involved in animal projects will improve personal development and learn leadership and life skills related to animal husbandry including: record keeping, finances, producing high quality animal products, sportsmanship, and appropriate treatment of animals.**

**Tiffanee Conrad**, Area Livestock Agent (Robeson, **Scotland**, Hoke)

**Jody Smith**, Area Specialized Poultry Agent (**Scotland**, Richmond, Union, Cabarrus, Stanley, Montgomery, Anson)

**Sharon English**, 4-H Agent

### **PROGRAM DESCRIPTION**

All areas of North Carolina, including rural counties like Scotland, are becoming more urban. Many residents living in rural areas are not directly involved in production agriculture, nor live on farms where animals are normally produced.

Because of these trends many youth do not have an opportunity to be involved in animal production in order to develop related skills or to increase their knowledge of and compassion for animals by participating in animal projects and events. Many of those that do have the resources to grow animals on farms or in rural settings still lack the ability to be involved in structured activities and events related to their animals.

Most youth that have farm animals as pets, or grow animals as hobbies, enjoy the opportunity to be involved in shows that allow them to compete against other youth. If given the opportunity, these youth develop additional skills and knowledge by participating in local, regional, and even national livestock shows, events, and contests. Even youth that live in urban area with strict restrictions about livestock within city limits can participate in animal projects involving rabbits and other allowable animals, or through working arrangements with existing animal producers on their farms. Youth involved in animal projects learn responsibility and financial management skills as they care for their animals. They also demonstrate enhanced personal development, as well as organizational and leadership skills such as public speaking and improved decision making. Youth involved in animal projects are often able to generate additional income for themselves or their families from premiums earned by showing the animals, by selling animals they have grown, or by selling animal products such as eggs, wool, etc. Many youth that show animals in competitive events are able to receive income above the realistic market price from community supports and agricultural businesses. Those youth that excel in scholastics and

animal projects are often afforded many additional opportunities to compete for scholarships that are available from livestock related associations and groups.

### **SITUATION STATEMENT**

The Scotland County 4-H program has the ability to offer animal science and livestock related events and activities for youth. With financial support from United Way and livestock producers, many limited resource youth are able to secure animals for projects, and to grow these animals on their farms. Many times these animal projects serve as a means of generating additional income for the youth and their families. Youth living in urban areas are given the opportunity to participate in animal science projects involving rabbits and embryology which do not require much land for them to prosper.

Those youth selected to participate in animal science projects are properly screened to ensure they have suitable facilities for their animals and have parental support and assistance to ensure the animals are properly cared for. In addition, these youth are required to participate in and complete specific components of their animal science projects such as record keeping, showmanship, and exhibits.

Leadership is provided to youth to prepare them to compete in animal events beyond the local level. Many times financial assistance is provided to help offset the additional expenses of travel and meals.

Although horses are considered pleasure animals rather than farm animals by most, many youth have horses as pets and must be provided basic information about health, care, diseases, environmental issues, and waste management. Cooperative Extension has an opportunity to provide needed assistance to both youth and adult horse owners.

Many youth animal science projects are centered around regional/county fairs, the state fair, and other national level competitions. After being provided animals or participating in animal science projects, youth have an opportunity to show their animals at the fair, to compete for prizes/ribbons, and to prepare themselves to compete at higher levels.

As local agriculture becomes more diverse and as our society continues to shift to a more urban, non-farm population, there are increasing opportunities to involve youth in various structured animal science projects. Efforts should be made to instill youth skills related to responsibility, financial management, animal care, and leadership.

### **TARGET AUDIENCES**

- All youth ages 5-19
- Limited resource and minority youth in the county
- Youth expressing an interest in animal science
- Parents of youth involved in various animal science projects
- Livestock related agricultural businesses
- Rural non-farm residents, consumers, and the general public
- Scotland County Health Department
- Private companies: feed stores, lenders, and equipment suppliers
- Agricultural organizations: Farm Bureau, Livestock Association

- Civic Clubs
- Government leaders and elected officials

### **TEACHING POINTS**

- Responsibility and decision-making
- Record Keeping
- Leadership and personal development
- Communications and problem solving skills
- Animal care and judging
- Feeding and rations
- Animal health
- Showmanship
- Animal welfare
- Environmental concerns
- Understanding modern animal production practices
- Costs and benefits associated with alternative production practices

### **PROGRAM DELIVERY STRATEGIES**

- One-on-one contact
- Group meetings, workshops, tours and demonstrations
- Local, regional and state livestock shows and sells
- Mass media
- Direct mailings and targeted email
- Extension publications and bulletins
- Videos
- Internet and Homepages
- E-mail

### **EVALUATION STRATEGIES**

- Documentation of successes of judging teams
- Examination of existing records
- Record book judging
- Observation of changes made and recommendations implemented
- Feedback from various Specialized Advisory Committees
- Feedback from Extension staff and other County Agents
- Feedback from parents, farmers, citizens, and key county leaders
- Surveys
- Pre and Post program testing

### **PROGRAMMING RESOURCES**

- Extension Specialists and other County Agents
- Extension publications and bulletins
- High School Vocational Agriculture Teachers
- Scotland County Health Department
- Private companies: feed stores, lenders, and agribusinesses
- Agricultural organizations: Farm Bureau, Livestock Association
- Civic Clubs

- Grant opportunities
- Intranet and Internet

#### **OBJECTIVE A-4**

**Field Crop growers will implement recommended and potential production practices and systems, investigate innovative agricultural opportunities, develop business and human resource plans, and explore marketing options to ensure continued farm productivity and profits and quality of life.**

David Morrison, Agricultural Extension Agent

#### **PRIMARY DELIVERY STRATEGIES**

- Grower meetings
- Individual contact
- Newsletters
- News releases
- On-Farm demonstrations
- Field Days
- Tours
- E-Mails
- Internet
- Radio Program

#### **EVALUATION STRATEGIES**

- Documentation of farm profits remaining viable
- Tobacco growers remain profitable through contracts or auction system
- Peanut growers remain profitable due to proper use of contracts
- Documentation of the adoption of new practices
- Direct observation of changes, improvements, and increased production
- Surveys
- Feedback from producers and agribusiness
- Documentation of utilization of options as a marketing strategy

#### **OBJECTIVE A-5**

**Commercial horticulture growers will implement recommended and potential production practices and systems, investigate innovative agricultural opportunities, develop business and human resource plans, and explore marketing options to ensure continued farm productivity and profits and quality of life.**

David Morrison, Agricultural Extension Agent

#### **PRIMARY DELIVERY METHODS**

- Grower meetings
- Individual contact
- Newsletters
- News releases
- On-Farm demonstrations

- Field Days
- Tours
- E-Mails
- Internet
- Evaluation Strategies
- Documentation of farm profits remaining viable
- Vegetable growers remain profitable through contracts or marketing
- Documentation of the adoption of new practices
- Direct observation of changes, improvements, and increased production
- Surveys
- Feedback from producers and agribusiness
- Documentation of utilization of options as a marketing strategy
- Documentation of increased sales

#### **OBJECTIVE A-7**

**Part-time, limited resource and other farmers will increase the quality of life and the sustainability of their farms through crop diversification, integration of appropriate alternative opportunities and enterprises, intensive management practices, water and nutrient management, business management, and expanded markets.**

**David Morrison**, Agricultural Extension Agent

#### **PRIMARY DELIVERY METHODS**

- On-farm demonstrations of recommended production practices
- Farm visits
- One-on-One contacts
- Newsletters
- Field Days
- Grower meetings
- NC Vegetable Expo

#### **PRIMARY EVALUATION METHODS**

- Documentation of adoption of new practices
- Documentation of farmers implementing new or alternative crops
- Survey of meeting participants
- Direct observation of improvements, changes, and increased yields

#### **OBJECTIVE A-9**

**Program participants will improve the economic and environmental sustainability of North Carolina's forest resources.**

**David Morrison**, Agricultural Extension Agent

#### **PRIMARY DELIVERY METHODS**

- Meetings
- Individual consultations

- Newsletters
- News releases
- Field days and tours
- Forestry Video Teleconferences
- Email
- Internet
- Primary Evaluation Methods
- Documentation of increased profits resulting from better management
- Surveys of those currently using Extension resources for forestry management
- Adoption of new practices and technology
- Feedback from foresters, agricultural suppliers, landowners

#### **OBJECTIVE A-15**

**Through the consumer horticulture program, consumers will increase their knowledge and adopt practices concerning proper plant selection, cultural practices, and pest management strategies that maximize plant performance while minimizing inputs, and protect environmental resources.**

**David Morrison**, Agricultural Extension Agent  
Scotland County Extension Master Gardeners

#### **PRIMARY DELIVERY METHODS**

- Educational meetings
- Workshops
- Tours
- Visits
- News releases
- Internet
- E-mail

#### **PRIMARY EVALUATION METHODS**

- Pre- and post-knowledge tests
- Follow-up surveys to determine changes
- Number of requests for information
- Feedback from email messages
- Number of hits on homepage

#### **HOW TO REACH NEW AUDIENCES AND UNDER SERVED AUDIENCES:**

Minority and under served groups can provide a new client group in agriculture. Many of the individuals in the under served group are part time farmers that have regular jobs and farm on the week end or after work. These individuals do not use Extension resources because they may not know we exist or simply may not have or take the time to contact us. Many do not use beneficial services such as soil and nematode testing to determine problems and increase yields. Also many of these individuals, don't use proper selection of varieties for integrated pest management or yield enhancement. Proper identification of these individuals is of the up most importance in reaching them. Development of a list of part time farmers and getting them on mailing lists is critical for them to receive proper, up to date information.

Providing services such as soil and nematode testing, and plant tissue analysis for them to see the benefit of these services may be critical to increase yields. Many are also interested in new and alternative crops as well. Taking extra time with these individuals can pay dividends with others in the community as they talk about the help they received from Cooperative Extension.

# Developing Responsible Youth

The mission of the 4-H youth development program is to create helping relationships to enable youth to become responsible, productive citizens. Four-H creates learning experiences where youth can build their self-esteem and become competent, coping and contributing members of a global society. Instilling positive values like citizenship, teamwork, and leadership in our youth is of utmost importance. The 4-H staff with the assistance of volunteers help our young people learn how to make a living, improve our communities, and become lifelong learners.

## **OBJECTIVE Y-1**

**Long-term support systems will develop competent youth by building internal and external assets through life skill development.**

**Sharon English**, 4-H Agent

**Hazel McPhatter**, 4-H Youth EFNEP (Expanded Food and Nutrition Education Program)

**Cathy L. Graham**, County Extension Director

**Barbara Lucas**, School Age Child Care (SACC) Coordinator

### **Objectives to address this need:**

- Increase knowledge of value of community service
- Increase communication skills
- Increase the number of youth participating in county, district and state activities
- Increase knowledge gained through participation in activities
- Increase leadership skills
- Increase decision making skills
- Increase number of new clubs for youth ages 5-19
- Increase number of new families actively involved in 4-H
- Sustain current families actively involved in 4-H

### **TARGET AUDIENCE**

- All youth ages 5-19
- community club participants
- special interest program participants
- project club participants
- after-school program participants
- camp program participants
- 4-H EFNEP youth
- school enrichment youth
- Youth involved in county 4-H activities
- Parents and families of youth ages 5 to 19
- Home-schooled youth ages 5 to 19 and their families

### **TEACHING POINTS**

- Leadership skills
- Decision making skills
- Civic responsibilities
- Citizenship skills

- Importance of volunteerism
- Community service
- Parliamentary procedure
- Communication skills
- Positive problem solving skills
- Mediation
- Acceptable social behavior
- Goal setting and progress measure
- Building and maintaining of peer and adult relationships
- Public speaking and presentation skills

#### **4-H DELIVERY METHODS**

- Newsletters/News Releases
- 4-H Community Clubs
- 4-H Special Interest Clubs
- E-mail
- Providing positive role models for youth
- Youth focused activities and events

Scotland County 4-H will strive to develop and sustain long-term support systems that will allow youth to learn and/or develop life skills that will carry with them into adulthood. There will be special effort given to the recruitment of positive leaders, role models and mentors that will assist in this process. This will be accomplished through many types of 4-H programming such as 4-H clubs, summer camp, and special interest programs.

#### **EVALUATION METHODS**

- Dollars saved by the community from 4-H Community Service Projects
- Scholarship dollars received by 4-Hers
- Dollars earned by 4-Hers as a result of their 4-H project work
- Dollars earned by 4-Hers as a result of their 4-H project work
- Increased competency in youth demonstrated by managing relationships
- Improved communication skills
- Improved decision making self
- Increased self-confidence

Programs will be evaluated by the 4-H Staff based on number of participating youth, program quality, feedback from youth, parents, 4-H leaders, volunteers and other participating community members.

#### **PROGRAMMING RESOURCES**

- 4-H Curriculum
- United Way
- Volunteer Training
- Project Books
- 4-H County Council
- 4-H Leader's Association

- 4-H Advisory Board
- Internet and Intranet

### **OBJECTIVE Y-3**

**Youth involved in short-term educational programs will show increased life skill knowledge and subject matter skill.**

**Sharon English**, 4-H Agent

**Hazel McPhatter**, 4-H Youth EFNEP (Expanded Food and Nutrition Education Program)

**Barbara Lucas**, School Age Child Care (SACC) Coordinator

#### **Objectives to address this need:**

- Workshops in each curriculum area
- Workshops that focus on the development of life skills
- Workshops with varying lengths of instruction and frequency
- Determine number of participants in special interest programming
- Know cost of workshops
- Insure volunteers are trained with experiential methodologies before interacting with youth in special interest programming

#### **TARGET AUDIENCE**

- All youth ages 5 to 19
- Youth ages 5 to 19 who have participate in short term educational programs on the county, district and state levels
- Parents and families of youth ages 5 to 19
- Youth at risk
- Limited resource youth

#### **TEACHING POINTS**

- Citizenship and Civic Education
- Communication and Expressive Arts
- Consumerism and Family Science
- Environmental and Earth Education
- Healthy Lifestyles
- Personal Development and Leadership
- Plants and Animals
- Science and Technology

#### **4-H DELIVERY METHODS**

- Newsletters/News Releases
- 4-H Clubs
- Youth focused activities and events
- Internet
- Group activities
- Positive role models for youth

Scotland County 4-H will provide youth with opportunities to increase knowledge and develop life-skills through short-term educational programs. These programs will use research based 4-H curriculum provided by trained staff members and volunteers.

### **EVALUATION METHODS**

All programs will be evaluated by 4-H staff, based on number of participants and program quality. Leaders, parents, and youth will be asked for feedback concerning program quality.

### **PROGRAMMING RESOURCES**

- 4-H Curriculum
- United Way
- Internet and Intranet
- 4-H Staff Training
- 4-H Volunteer Training
- 4-H Clubs

### **OBJECTIVE Y-8**

**To increase the quality of after-school programs by providing safe, nurturing and appropriate environments for children.**

**Barbara Lucas**, School Age Child Care (SACC) Coordinator

**Sharon English**, 4-H Agent

**Hazel McPhatter**, 4-H Youth EFNEP (Expanded Food and Nutrition Education Program)

**Cathy L. Graham**, County Extension Director

### **TARGET AUDIENCE**

- Youth ages 5 to 19
- Students in Scotland Scholars Program
- Parents and families of youth ages 5 to 19
- School administration including teachers
- County officials and key community leaders

### **TEACHING POINTS**

- Community Service
- Citizenship
- Parliamentary Procedure
- Decision making
- Self esteem
- Leadership
- Mediation
- Effective problem solving
- Goal setting
- Communications
- Acceptable social behavior
- Developing and maintaining relationships
- Civic responsibility

- Volunteerism
- Integrity

#### **4-H DELIVERY METHODS**

- 4-H After-school clubs
- Newsletters/news releases
- Providing positive role models for youth
- Youth focused activities and events

Scotland County 4-H will provide adults with researched experiential learning techniques that will allow them to provide youth with opportunities to achieve success. Youth will experience leadership and learn life-skills that will enable them to grow into competent adults.

#### **EVALUATION METHODS**

- Increased involvement of parents, business leaders, and volunteers
- Increased providers knowledge and skills in following areas
- Increased social-emotional, cognitive and physical development of youth as reported by parents, providers and school personnel
- Increased knowledge in health, safety, and nutrition

The 4-H Staff will evaluate programs based on number of participants and overall program quality. Youth, parents, leaders, volunteers and other participating community members will be asked to provide feedback.

#### **PROGRAMMING RESOURCES**

- 4-H Curriculum
- 4-H Staff Training
- 4-H Volunteer Training
- United Way
- Internet and Intranet

#### **OBJECTIVE Y-11**

**Provide youth experiential educational opportunities in cooperative, nurturing, residential camping environments that stimulate the development of life skills, while focusing on the mental, physical and social growth of the individual.**

- Increase number of 4-H club members attending summer camp
- Increase number of non 4-H members attending summer camp
- Increase knowledge of the value of camping experiences
- Increase/sustain number of youth attending specialty camps

**Sharon English**, 4-H Agent

**Hazel McPhatter**, 4-H Youth EFNEP (Expanded Food and Nutrition Education Program)

**Barbara Lucas**, School Age Child Care (SACC) Coordinator

#### **TARGET AUDIENCE**

- Youth ages 5 to 19

- Parents
- Volunteers
- Community/County leaders
- Other youth serving agencies
- Students in the Scotland Scholars Program

### **TEACHING POINTS**

- Decision-making skills
- Teamwork
- Mediation
- Leadership
- Problem-solving
- Relationship building
- Self-confidence
- Social skills
- Sports skills
- Environmental skills
- Lifeskills

### **4-H DELIVERY METHODS**

Youth will be provided a short-term program in a safe, fun, learning focused environment with trained staff and volunteers in which youth can learn about camping, nature, teamwork, and developing life-skills. Scotland County will continue to promote the positive impact that 4-H summer camp has on youth. This will be accomplished through extensive marketing in newsletters, fliers, news releases and word of mouth.

### **EVALUATION METHODS**

- Camping participants demonstrating improved self-confidence
- Camping participants demonstrating improved overall behavior
- Camping participants demonstrating improved social skills
- Camping participants demonstrating improved life-time sports skills
- Camping participants demonstrating improved knowledge of a healthy, safe and sustainable natural environment

The program will be evaluated by the 4-H Staff based on the number of youth attending 4-H camp, feedback from youth attending 4-H camp, parents, and volunteers.

### **PROGRAMMING RESOURCES**

- 4-H Camp Staff
- 4-H Camp activities
- 4-H Volunteers

### **OBJECTIVE Y-13**

**Youth and adults will be engaged in positive community leadership roles.**

- Youth and adult leaders gaining increased knowledge of leadership basics

- Youth and adult leaders gaining increased knowledge regarding effective teen/adult partnerships

**Sharon English**, 4-H Agent

**Hazel McPhatter**, 4-H Youth EFNEP (Expanded Food and Nutrition Education Program)

**Barbara Lucas**, School Age Child Care (SACC) Coordinator

### **TARGET AUDIENCE**

- Youth ages 5 to 19
- Adult Volunteers
- Parents
- Key county/community leaders
- Other youth serving agencies

### **TEACHING POINTS**

- Leadership
- Decision-making
- Teamwork
- Mediation
- Volunteerism
- Parliamentary procedure
- Relationship building
- Self-esteem
- Communication
- Community service
- Government and civic education/responsibility
- Goal setting
- Social skills
- Life skills

### **4-H DELIVERY METHODS**

Youth and adults will be provided training opportunities in a safe and nurturing environment. The goal will be to strengthen both their 4-H experience as well as their personal growth. Scotland County 4-H will continue to provide opportunities for both youth and adults to grow in their skills and abilities in the area of leadership. This will be accomplished through training, participation in county, district and state level 4-H programming and community leadership opportunities.

### **EVALUATION METHODS**

- Number of youth and adult leaders serving in additional/expanded 4-H leadership positions
- Number of youth and adult leaders serving in additional/expanded non-4-H community leadership positions
- Number of teens and adults engaging in expanded/additional teen/adult partnerships
- Programs will be evaluated by 4-H Staff based on number of participating youth and adults, program quality, feedback from youth, parents, 4-H Leaders, volunteers and other participating community members.

## **PROGRAMMING RESOURCES**

- 4-H Curriculum
- United Way
- Volunteer Training
- Project books
- 4-H County Council
- 4-H Leaders Association
- 4-H Advisory Board
- Internet and Intranet

# **Strengthening and Sustaining Families**

## **Needs determined by local focus groups are:**

- Parenting Education
- Teenage Pregnancy Prevention
- Budgeting and money management
- Childhood Obesity
- Increase Membership in Extension & Community Association (ECA)
- Nutrition Education
- Public Awareness, Resource Information, Communication and Networking

## **OBJECTIVE F-1**

**Scotland County residents including limited resource individuals/families will improve the quality of their lives through eating healthy, being active, handling food safely, managing resources for food security, and practicing health-promoting behaviors.**

**Pamela Riemer**, Family and Consumer Science Agent

**Donna Faye Barton**, EFNEP Program Assistant

## **Objectives to address this need:**

- Increase the number completing at least 75% of the sessions of the program
- Increase the number of servings of fruits and/or vegetables eaten each day
- Increase the number of people who learn about 5 A Day for Better Health
- Increase the number of people who changed at least one habit to decrease fat consumption
- Increase the number of people who changed at least one habit to decrease sodium consumption
- Increase the number of people who increased their level of physical activity
- Increase the number of adults who plan meals ahead of time
- Increase the number of older adults able to name at least one change in their eating habits or lifestyles that would lower their risk of chronic disease
- Increase the number of older adults who can identify food portions sizes for each of the Food Guide Pyramid food groups
- Increase the number of older adults who can identify the recommended number of daily servings from each food category of the Food Guide Pyramid
- Increase the number of older adults identifying at least one dietary change that will add fruits, vegetables, or milk products
- Increase the number of older adults who have taken steps to develop or maintain a healthy weight
- Increase the number of preschool teachers who see positive changes in the children with respect to their attitude toward physical activity
- Increase the number of people who increased their amount of physical activity
- Increase the number of participants who increase knowledge about safe food handling
- Increase the number of participants who adopt at least one safe food handling practice

## **TARGET AUDIENCE**

- Limited resource homemakers
- Obese youth and adults
- Persons desiring to reduce chronic disease risk

- Persons diagnosed with diabetes, heart disease, and/or high blood pressure
- Persons with diet-related health conditions
- Persons preparing family meals
- Childcare providers
- Home food preservers
- General public

### **TEACHING POINTS**

- Promoting healthy weight in children and adults
- Promoting physical activity in all populations
- Choosing healthy diets
- Reducing risk factors related to chronic diseases
- Reducing incidence in food borne illness in homes
- EFNEP will focus on healthy food preparation, managing resources for food security, promoting prenatal care, and promoting physical activity.

### **PRIMARY DELIVERY**

- Certification or contact hour credit for childcare providers.
- Color Me Healthy
- Expanded Food and Nutrition Program
- Noonlighting/Moving toward a healthier you (weight reduction classes)
- Training of childcare providers
- Health promotion classes and obesity workshops for youth using Sybershop
- Promote physical activity through activities of local physical activity councils
- Food safety classes for those preparing family meals
- Respond to request for information related to food preservation
- Provide classes on fast food choices
- Grocery store tours focusing on selection on healthy foods
- Classes on food labels
- Newsletter
- Newspaper
- Radio/TV
- E-mail

### **EVALUATION METHODS**

- Pre- and post-knowledge tests
- Surveys to determine changes in behavior and/or recipes used
- Attendance at programs and events
- Amount of weight lost by program participants
- Number of requests for food preservation information
- Feedback from clients about information in newsletters
- Feedback from clients about information in newspaper/radio/television

### **PROGRAMMING RESOURCES**

- NCSU and NC A&T Extension Specialists
- Local physical activity council
- FCS Advisory Committee

- Staff of Scotland County Health Department
- Staff of Scotland Memorial Hospital
- Extension Area Nutrition Programs Supervisor
- Scotland County Partnership for Children/Smart Start
- Child Care Directions
- Local grocery stores
- UNC-Pembroke Department of Health Education
- UNC-Pembroke/Healthy Start

### **OBJECTIVE F-2**

**Families, including those with limited resources, and those who work with families will gain knowledge and proactive skills in understanding life span development, positive interpersonal relationships, and improving quality of life.**

**Pamela Riemer**, Family and Consumer Science Agent  
**Cathy L. Graham**, County Extension Director

### **Objectives to address this need:**

- Increase the number of parents attending programs
- Parent knowledge will increase through parent training and education
- Parents will increase knowledge by adopting practices in motivating and guiding children
- Limited resource parents will adopt practices to reduce family conflicts and manage stress.
- Limited resource parents will learn to use available community resources to meet their needs
- Child care teachers will increase knowledge and skills to lead to safer, more nurturing, appropriate environments for pre-school children
- Increase knowledge in principles of growth and development
- Increase the number of individuals adopting 1 or more specific practices in managing personal and family stress
- Increase the of individuals attending programs on family care giving for older adults or other special needs adults
- Increase the number of persons attending educational programs focused on positive aging, Multi-session Aging with Gusto! programs, single session programs on positive aging.

### **TARGET AUDIENCE**

- Limited resource homemakers
- Diverse populations
- Childcare providers
- Single parents
- Teen parents
- Older adults caring for grandchildren
- General public
- Even Start Participants
- Project Trust Participants

### **TEACHING POINTS**

- Parenting

- Stress management
- Financial management
- Human development
- Time management

### **PRIMARY DELIVERY**

- Training childcare providers
- Participate in local family events
- Respond to request for information related to family issues
- Newsletter
- Newspaper/Radio/TV
- E-mail
- Serving on boards relating to family/children well-being in community
- Cherished Moments bi-weekly news column

### **EVALUATION METHODS**

- Pre- and Post-knowledge tests
- Surveys to determine changes in attitude
- Surveys to determine changes in behavior
- Attendance at programs and events
- Feedback from clients about information in newsletters, newspapers, radio, and TV

### **PROGRAMMING RESOURCES**

- NCSU and NC A&T Extension Specialists
- Videos and Workbooks
- Staff of Scotland County Health Department
- Staff of Scotland Memorial Hospital
- Scotland County Partnership for Children/Smart Start
- Child Care Directions
- UNC-Pembroke/Healthy Start
- UNC-Pembroke Department of Health

### **OBJECTIVE F-3**

**Scotland County residents, including those with limited resources, will develop skills and strategies to effectively manage their personal finances through expected and unexpected economic change and life events.**

**Pamela Riemer**, Family and Consumer Science Agent

#### **Objectives to address this need:**

- Increase knowledge and skills in goal setting, budgeting, and record keeping (basic money management)
- Increase knowledge on how to develop money management plans, write financial goals, and have a debt management plan
- Increase knowledge on how to implement steps to prevent credit fraud, repair credit, improve credit worthiness, and compare credit options
- Increase knowledge on how to develop and implement a savings plan

- Increase knowledge on how to develop and implement savings plans to increase financial security in later years
- Increase awareness and knowledge of improved consumer decision- making skills
- Increase knowledge on how to adopt best management practices in the selection and care of consumer goods that extend use and reduce costs
- Increase awareness and knowledge of consumer credit options and concerns
- Increase knowledge of how to adopt practices to extend or increase income
- Increase awareness and knowledge of housing financial decisions
- Increase awareness and knowledge of best management practices related to home maintenance, repair or improvement
- Increase awareness and knowledge of best management practices related to moisture control
- Increase awareness and knowledge of best management practices related to residential energy management
- Increase the number of families who will develop an estate plan appropriate for their circumstances
- Increase the number of people who will prepare for possible future incompetence and dependency

### **TARGET AUDIENCE**

- General public
- Diverse populations
- Limited resource homemakers
- Young single or married adults
- Single-parent families
- Even Start Participants
- ECA Members

### **TEACHING POINTS**

- Budget analysis
- Credit management
- Estate planning

### **PRIMARY DELIVERY**

- Classes for targeted populations
- Participate in local family events
- Confidential consultation
- Respond to request for information
- Newsletter
- Newspaper/Radio/TV
- E-mail

### **EVALUATION METHODS**

- Pre- and post-knowledge tests
- Surveys to determine changes in attitude
- Surveys to determine changes in behavior
- Surveys of improvements made
- Attendance at programs and events

- Feedback from clients about information in newsletter, newspaper, radio, & TV.
- Proof of money saved and/or invested

### **PROGRAMMING RESOURCES**

- NCSU and NC A&T Extension Specialists
- Videos
- Local businesses and industries
- Local banks
- Scotland County Partnership for Children
- UNC- Pembroke
- FCS Advisory Committee

### **OBJECTIVE F-4**

**Individuals and groups will develop leadership skills and take action to maximize development and use of community resources leading to improved quality of life for all families.**

**Pamela Riemer**, Family and Consumer Science Agent

**Juanita Bowen**, Extension & Community Association (ECA) Liasion

### **Objectives to address this need:**

- Increase the number of volunteers recruited
- Increase the number of ECA volunteers
- Increase the number of volunteers trained in volunteer management
- Increase the number of ECA volunteers
- Increase the number of volunteers recognized for continued contributions
- Increase the number of volunteers seeking training or knowledge in diversity/ multiculturalism
- Increase the number of volunteers reporting knowledge of how policy and procedure decisions are made and how to participate in the process
- Increase the number of volunteers participating in organization policy development process

### **TARGET AUDIENCE**

- Diverse populations
- General public
- Non-working adults
- Work First applicants
- Single parents
- Older adults caring for grandchildren
- ECA members

### **TEACHING POINTS**

- Volunteer management
- Diversity/multiculturalism
- Policy procedures
- Decision-making skills
- Community service
- Communication skills

- Civic responsibility
- Problem-solving skills
- Leadership skills
- Goal Setting skills
- Progress measurement
- Public speaking skills
- Presentation skills
- Building relationships

### **PRIMARY DELIVERY**

- Training workshops
- Participation in planned events
- Respond to request for information related
- Newsletters, newspaper, radio, and TV
- Feedback from clients

### **EVALUATION METHODS**

- Pre- and post-knowledge tests
- Surveys to determine areas of interest
- Dollars saved by volunteers
- Dollars earned for worthwhile causes and activities

### **PROGRAMMING RESOURCES**

- NCSU and NC A&T Extension Specialists
- Videos
- Local businesses and industries
- Scotland County Partnership for Children
- UNC-Pembroke
- FCS Advisory Committee
- Reference books

### **OBJECTIVE F-5**

**Scotland County residents, including those with limited resources, will improve the safety and health of their working and living environments.**

**Pamela Riemer**, Family and Consumer Science Agent

#### **Objectives to address this need:**

- Increase the number of participants who attend workshops, discussion groups or training addressing children's environmental health issues
- Increase the number of participants receiving information on the health effects of chemicals/pesticide hazards and children
- Increase the number of parents, grandparents, landlords and homeowners who receive information on the health effects of lead poisoning in children
- Increase the number of participants who increased awareness and knowledge of disaster preparation for themselves and their family prior to a disaster
- Increase the number of citizens who prepare a stay-at-home disaster kit

- Increase the number of citizens who prepare a evacuation disaster kit
- Increase the number of citizens who know safe evacuation routes and traveling by car in a disaster
- Increase the number of citizens who know foods that don't require cooking
- Increase the number of citizens who know the safe areas in the home and can prepare for a power outage
- Increase the number of citizens of flood insurance issues
- Increase the number of participants who complete a ServSafe certification program
- Increase the number of participants who successfully pass the ServSafe certification examination
- Increase the number of participants who increase knowledge about safe food handling
- Increase food safety training for employees of local restaurants and the school system.
- Increase the number of participants who score a 75 or higher on a safe food handling knowledge test

### **TARGET AUDIENCE**

- General public
- Over 65 years of age population
- Persons building and remodeling homes
- Church groups preparing and selling foods for fundraisers
- Civic Club groups preparing and selling foods for fundraisers
- Managers of senior feeding sites
- Childcare providers
- Limited resource families

### **TEACHING POINTS**

- Children's environmental issues
- Lead poisoning
- Accessible housing
- Indoors air quality
- Home safety
- Disaster preparation and response
- Food safety in childcare facilities
- Food safety in senior feeding sites
- Food safety for civic/church groups preparing meals for others

### **PRIMARY DELIVERY**

- Educational programs and exhibits
- Educational programs on children's environmental issues
- Educational programs on lead poisoning
- Educational programs on disaster preparation and response
- Home maintenance classes for residents of Housing Authority and other subsidized housing units
- Food safety and hand-washing training for child care providers
- Food safety and hand-washing training for senior feeding sites
- Food safety and hand-washing training for church groups and civic groups
- Newsletters

- Newspapers, Radio, TV
- E-mail

### **EVALUATION METHODS**

- Attendance at programs and events
- Pre- and post-knowledge tests
- Documentation of attitude and behavior changes made
- Number of requests for additional information in targeted areas

### **PROGRAMMING RESOURCES**

- NCSU and NC A&T Extension Specialists
- Educational bulletins
- Environmental Health Specialists at Scotland County Health Department
- Child Care Directions
- Scotland Memorial Hospital
- Doctors in the community

### **OTHER PROGRAMS**

The Baby Think It Over (BTIO) program is an innovative approach to Scotland County's teenage pregnancy challenge. The curriculum is designed to help 8<sup>th</sup> grade students enhance their ability to make wise choices and informed decisions about matters that can affect the rest of their life. BTIO is a teenage pregnancy prevention initiative.

**Pamela Riemer**, Family and Consumer Science Agent  
 Alvina Boyd, BTIO Volunteer  
 Brenda Rogers, BTIO Volunteer

### **Objectives to address this need:**

- To prevent teenage pregnancy
- To ensure the understanding that becoming a parent at an early age has lifelong consequences.
- To help students understand the importance of interpersonal relationships
- To understand the financial sacrifices brought about by early pregnancy

### **TARGET AUDIENCE**

- 8<sup>th</sup> grade students in all the middle schools in Scotland County and the Alternative Learning Academy
- Students whose parents ask for the BTIO program on an individual basis or in a small workshop setting

### **TEACHING POINTS**

- Accept responsibility for own behaviors
- Abstinence is the only 100% effective birth control method
- Demonstrate skills and strategies for remaining or becoming abstinent from sexual activities
- Describe constructive and risky means of expressing independence
- Demonstrate understanding of financial aspects of being a parent

**PRIMARY DELIVERY**

- A 12-hour interactive session including demonstrations, illustrations, and participatory activities in a classroom environment
- The experience of a BTIO infant simulator for 120 hours (5 days) upon completion of the course work
- A computer printout of the results of the parenting experience
- Parent meetings to convey the role of the parent in the educational process
- Newspaper article on the successes of the students
- Radio interview with students participating in the program

**EVALUATION METHODS**

- Pre- and post- questionnaire
- Survey to find which strategy was the most effective for discouraging sexual activity at an early age
- Daily journal entries
- Budget and financial management worksheets

**PROGRAMMING RESOURCES**

- NCSU and NC A&T Extension Specialists
- Reality Works, Inc. (BTIO company's name now)
- FCS Advisory Committee
- Staff of Scotland County Health Department
- Staff of Scotland County Memorial Hospital
- Child Care Directions
- UNC-Pembroke Department of Health Education
- UNC-Pembroke/Healthy Start
- Work First program
- Richmond Community College Human Services Department
- Scotland County Schools
- North Carolina Department of Public Instruction

# **Conserving and Improving The Environment and Natural Resources**

## **OBJECTIVE E-1**

**Livestock and poultry producers will adopt and promote economically and environmentally sound practices to manage water and waste materials for the purpose of improving air and water quality protection.**

**Tiffanee Conrad**, Area Livestock Agent (Robeson, **Scotland**, Hoke)

**Jody Smith**, Area Specialized Poultry Agent (**Scotland**, Richmond, Union, Cabarrus, Stanley, Montgomery, Anson,)

## **PROGRAM DESCRIPTION**

Federal EPA/USDA regulations have been established for applying waste from liquid swine lagoons, as well as for waste applications from other regulated confinement animal operations. Federal EPA/USDA regulations have now been released and will be incorporated into state waste regulations. Similarly, air quality regulations from poultry and animal house farm sites are next on the horizon. The how and other specifics are being developed. With the new requirement for the Waste NPDES permits farmers face new challenges for how to measure sludge accumulation in lagoons. These producers look to Cooperative Extension for help.

## **SITUATION STATEMENT**

Although certification requirements are in place for North Carolina swine producers, poultry producers have been exempt from animal waste regulation scrutiny. Increasing state regulations will now totally coincide with federal regulations. Of particular interest and concern is that now phosphorous is the limiting factor when considering animal waste applications to traditional fields, thereby increasing the cost of waste handling. NRCS EQUIP monies are available to some extent to offset expenses. What began as a voluntary program of poultry litter plans with few farm and records inspection will become more regulated. With it, are “production” expenses and the possibilities of fines – particularly if the state government budget situation is alleviated and farm inspections are increased with hired personnel.

Scotland County poultry and animal operations generate enough waste to meet all the phosphorous needs and much of the nitrogen needs of all growing crops (NCSU Soil Science Department). Proper distribution and transportation expense of animal waste to nutrient deficient fields is one key to abiding by phosphorous regulations. In addition, efforts are being made to finding alternative uses for poultry litter and possibly for other animal waste.

Competition for existing fields for land application of poultry litter may result if future swine waste handling technologies/regulations require solids to be separated from liquid waste and be land applied. Until now, swine waste has been stored in lagoons and has been applied through irrigation systems only to fields located very close to the lagoons.

While odor from farms and application fields have long been complaints, odor is difficult to objectively measure and monitor. Recent and future emphasis will be placed on air quality with measurable parameters such as particulate matter, carbon dioxide, ammonia, and sulfur emitted from poultry and livestock houses. However, accurate and reliable data is not currently available upon which to base future regulations. Poultry companies and farmers are reluctant to participate in research that may some day impose regulations upon themselves. Convincing them to

participate in the process is an ongoing challenge, but would be more beneficial than being regulated.

### **TARGET AUDIENCES**

- Commercial animal production companies
- Commercial contract animal producers
- Litter clean-out companies
- Non-poultry farmers utilizing poultry litter waste
- Rural residents
- Government agencies: NRCS/SWCD; DENR/DWQ; NCDA&CS
- Scotland County Health Department
- Other private companies: lenders, suppliers, and technical representatives
- Agricultural organizations: Farm Bureau and Livestock Association
- Government leaders
- Elected officials
- Key county leaders
- General public

### **TEACHING POINTS**

- Production practices and systems for handling poultry litter
- Production practices and systems for handling swine waste
- Compliance with regulations (plan, land application, records)
- Alternatives to land application of litter
- Sludge and lagoon level control
- Water conservation
- Acquiring critical and proper information for decision making
- Information technology use
- Incineration, mass burial
- Insect and rodent control
- Waste regulations
- Soil nutrient management
- Analyzing sample reports

### **PROGRAM DELIVERY STRATEGIES**

- One-on-one contacts
- Group meetings
- Tours
- Field days
- Research trial results and demonstrations
- Mass media
- Direct mailings
- E-mail
- Publications
- Notebooks
- Videos
- Internet and Homepages
- Possible distance education due to disease contact and transmission concerns

## **EVALUATION STRATEGIES**

- Review of existing records
- Review of NCDA testing services results
- Review of NRCS cost share
- Direct observations
- Feedback from Specialized Advisory committees
- Feedback from Extension staff
- Feedback from farmers
- Feedback from contracting companies and other businesses
- Surveys
- Pre and Post program testing

## **PROGRAMMING RESOURCES**

- Extension specialists
- Extension publications and bulletins
- Commercial animal production companies
- Commercial contract animal growers
- Litter clean-out companies
- Government agencies: NRCS/SWCD, DENR/DWQ, and NCDA&CS
- Waste applicators training and certification program
- Robeson County Health Department
- Private companies: feed stores, lenders, and agrisuppliers
- Agricultural organizations: Farm Bureau and Livestock Association
- Grant programs such as SARE
- Internet and web pages

## **OBJECTIVE E-2**

**Field crop producers will adopt and promote economically and environmentally-sound practices to manage water, soil, nutrients and pesticides for the purpose of enhancing environmental quality.**

**David Morrison**, Agricultural Extension Agent

## **PRIMARY DELIVERY METHODS**

- Meetings
- On-farm demonstrations
- On-farm research plots
- Tours
- Conferences
- Publications
- Fact Sheets
- News releases
- Field visits
- E-mail
- Internet

## **PRIMARY EVALUATION METHODS**

- Pre- and post tests
- Individual feedback
- Surveys
- Increased use of plant analysis
- Increase in amount of minimum or reduced tillage operations

## **OBJECTIVE E-5**

**Participants, particularly youth, will increase their appreciation for and knowledge of biological diversity and ecosystem management.**

**David Morrison**, Agricultural Extension Agent

## **TARGET AUDIENCE**

- 6<sup>th</sup> Grade Students In All County Middle Schools

## **TEACHING POINTS**

- Air/Water Quality
- Bees/Insects
- Animals
- Wildlife Enforcement
- Forestry
- Recycling
- Composting

## **PRIMARY DELIVERY METHODS**

- Environmental Field Day

## **PRIMARY EVALUATION METHODS**

- Survey of Teachers

## **OBJECTIVE E-8**

**All commercial pesticide applicators, public operators, consultants, dealers and private pesticide applicators will be certified and trained in pesticide BMP to protect worker health, crop safety, beneficial insect populations and other environmental protection issues.**

**David Morrison**, Agricultural Extension Agent

## **PRIMARY DELIVERY METHODS**

- Meetings
- Classes for applicators
- One-on-one consultation
- Farm visits
- Pesticide Container Recycling
- Unwanted pesticide collection
- Newsletters
- E-mail

**PRIMARY EVALUATION METHODS**

- Documentation of number of private applicators that re-certify
- Documentation of number of commercial applicators that receive training
- Number of pesticide containers recycled
- Pre and posttest of those attending training sessions
- Observation of pesticide and empty container storage methods on farms
- Knowledge learned at training sessions

## **Building Quality Communities**

Cooperative Extension works very closely with county government during emergencies and/or natural disasters. Our major area of responsibility is to educate the public and specific clientele groups in preparing for, planning for, responding to, and recovering from natural disasters, hazards, and other emergencies. Educational materials are available in areas such as food safety, crop damage assessment, stress management, financial information, caring for animals, and much more. The County Extension Director is also available to assist in the operation of the emergency command center if needed. Extension agents are also on call if needed.

### **OBJECTIVE C-1**

Citizens and local officials will become more aware, better informed, and more involved in issues regarding community growth and change, land use, and community design, community infrastructure, and organizational and community leadership.

### **MEASURES OF PROGRESS**

- Number of citizens and public officials participating in educational programs who gain increased knowledge of constructive solutions to community issues
- Number of persons who demonstrated improved leadership and problem solving skills
- Number of persons who demonstrated acquired/improved facilitation knowledge and skills
- Number of persons who participated in a community collaborative problem solving process
- Number of persons who participated in community/public policy leadership training experience

### **OBJECTIVE C-3**

Limited resource and other non-traditional participants in public decision making will identify, investigate and resolve problems in their community and county that impact the well-being of self, family and community and gain skills to participate in community development.

### **MEASURES OF PROGRESS**

- Number of participants who demonstrated proper application of leadership skills and problem solving techniques learned
- Number of participants who developed and implemented action plans to resolve community problems
- Number of community issues resolved or community enhancement projects completed projects

### **IMPACT INDICATORS**

- Increase in the number of limited resource and non-traditional individuals with the capacity to provide valuable service to the community (assume some leadership roles in church, school, community etc., volunteer)

### **OBJECTIVE C-8**

Individuals, communities, and businesses will increase knowledge and adopt practices to

improve preparedness and response to natural and man-made disasters and emergencies and to increase safety in the personal and work environment.

#### MEASURES OF PROGRESS

- Individuals, businesses and communities gaining knowledge of preparations and responsiveness strategies to disasters and emergencies

#### IMPACT INDICATORS

- Individuals, businesses and communities establishing disaster plans
- Producers, businesses and communities implementing disaster prevention or preparedness practices

## **Relationship to County Government Objectives**

The Scotland County Strategic Initiative, Our Future Begins With Us - Today has 5 major areas that are linked to Cooperative Extension's Plan Of Work:

### **A) Crime & Drugs**

- Provide at-risk children with increased supervision, either at home or elsewhere.
- Provide parents with more skills to handle at-risk teen children.
- Break the welfare chain.
- Improve the communication skills among at-risk subjects in order to help change their behaviors.
- Cause early intervention into the drug-use cycle.
- Reduce peer pressure for young people to use drugs.
- Provide more help to the offenders and victims of family dysfunctionality.

### **B) Community Development**

- Encourage the public to be more involved in and aware of local government.
- Identify and develop projects and special events which will include all of Scotland County's citizens.
- Identify and promote the special historic and natural places which exist in the county.
- Beautify the county with landscaping, flowers and planting areas.
- Promote the positive things which are happening in Scotland County.

### **C) Economic Development**

- Obtain the necessary financial support for Richmond Community College for the purposes of upgrading the education and skill levels of existing workers and addressing the critical educational and training needs of “at-risk” individuals who have the potential for becoming productive workers.
- Increase the number of successful placements of participants in Work First.

### **D) Education**

- Involve K-12 students in active learning.
- Improve behavior and respect among students.
- Reduce or eliminate fighting.
- Engage various sectors of the community to support planned efforts to improve marketable skills.
- Establish programs to prepare a trained workforce.

### **E) Social Concerns**

- Improve social resource integration and cooperation.
- Gain acknowledgement and commitment from the community by increasing awareness of social issues and their impact.
- Strengthen the family through improving parenting skills. Focus programs on effective communications, self-esteem, child development, decision-making, conflict resolution and values.

Furthermore, the mission statement for both the County of Scotland and North Carolina Cooperative Extension are very similar. These similarities allow the Cooperative Extension staff to develop many educational programs which focus on high priority needs in the county.

#### **County of Scotland Mission Statement**

To protect the Health, Safety, and Welfare of our citizens and ensure peace and dignity within the county.

#### **North Carolina Cooperative Extension Mission Statement**

North Carolina Cooperative Extension is an educational partnership helping people put research-based knowledge to work for economic prosperity, environmental stewardship, and an improved quality of life.

### **Diversity Statement**

Scotland County Cooperative Extension is committed to embracing the value of diversity and the elimination of discrimination on the basis of irrelevant characteristics such as race, nationality, socio-economic status, religious beliefs, ethnicity, family and marital status, gender, age, or disability. These differences are the basis for our values, attitudes, beliefs, and perceptions that allow us to develop educational programs for the betterment of our county. The following methods will be utilized to promote the importance of diversity.

- To be inclusive, relevant, and responsive in planning, designing, implementing, and evaluating program for diverse audience.
- Incorporate diversity into publications, exhibits, mass media, and other marketing efforts.
- Utilization of curriculum that emphasizes diversity.
- Incorporate measures of diversity into Extension Management And Performance System (EMAPS).

This plan of work when implemented provides a framework to assist Extension staff in accomplishing the programmatic goals in a manner consistent with the Extension vision, mission and values.

# Advisory Leadership System Membership

## 2004 Scotland County Advisory Leadership Council

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