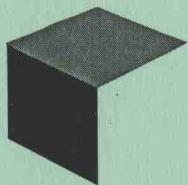


# Foundations



for the  
**Future**

North Carolina  
Cooperative Extension Service

## 1996 PROGRAM ACCOMPLISHMENT OVERVIEW

*North Carolina Cooperative Extension Service*

*North Carolina State University*

*North Carolina A&T State University*

# NORTH CAROLINA COOPERATIVE EXTENSION SERVICE

## *PROGRAM ACCOMPLISHMENT REPORT 1996*

### Program Overview

The North Carolina Cooperative Extension Service provides educational programs to help North Carolinians improve the quality of their lives. North Carolina State University and North Carolina A & T State University deliver a coordinated Extension educational program available to all people in North Carolina.

At the beginning of 1996, the North Carolina Cooperative Extension Service embarked on its new four year plan, *Foundations For The Future*. This report represents the results of Extension educational programs during the calendar year of 1996. The accomplishments indicated in this report reflect the vast array of impacts that Extension programs are having on the people of North Carolina. These results are the end products of educational programs coordinated by the two cooperating land-grant universities in each of the state's 100 counties and the Cherokee Reservation. The programs are supported through the cooperation of county, state and federal governments, and a wide variety of organizations, groups, and individuals.

Extension's educational programs were planned and implemented in collaboration with thousands of the state's citizens. These programs reach all areas of the state, and a vast proportion of the state's population. The programs were evaluated to assess the resulting contributions to a profitable and sustainable agriculture; a protected and enhanced environment; stable communities; responsible youth; and strengthened families. The cumulative information that is reflected in the reported accomplishments demonstrates a part of the scope and quality of Extension's programs for the benefits of the state's citizens.

The *Foundations For the Future* long range plan consists of twenty State Major Programs, and within the construct of Extension's mission, these programs address priority needs of the state's citizens. Program accomplishments that have accrued during the calendar year, 1996 from implementation of these State Major Plans are included in this report.

# **Agricultural, Natural Resources, and Community and Rural Development Extension Programs**

There are nine State Major Programs that represent the educational program efforts in Agriculture, Natural Resources, and Community and Rural Development. These programs have produced significant accomplishments during the first year of the *Foundations For The Future* program plan. Brief reviews of the many accomplishments in the respective SMP programs are provided in the overviews that follow.

## **SMP 02 Agriculture and Natural Resource Policy**

This program focuses on improving the efficiency and effectiveness of agriculture and natural resources policy through informed stakeholders, decision-makers, and the general public. Sixteen counties reported program activities and accomplishments. Program delivery methods include seminars; conferences; facilitated, collaborative problem-solving exercises; and educational materials. Models such as citizen associations and advisory boards, training in collaborative community problem-solving, consensus-building and advisory boards have been employed as means of helping communities deal effectively with issues that often leave groups of citizens at odds with one another. The program has heightened the awareness of over 6,500 people to the need for active involvement in agriculture and natural resource policy issues. The primary benefits are realized when informed citizens participate in the policy process. Over 550 people increased their participation in policy making after having been involved in this program. In addition, 539 people participated in collaborative problem-solving processes to resolve community or public issues, and three specific community or public issues were resolved through collaborative problem-solving methods. The methods taught in this program have been used effectively to help local governments and citizens deal with local environmental regulations, with water quality and pollution issues, with development and impacts of a causeway over a coastal river, and with land use planning discussions.

## **SMP03 Agriculture and the Environment**

The Agriculture and the Environment program is focused on improving customer understanding of the complex relationships between agriculture and the environment and to equip them with the knowledge and skills to maintain economically viable and environmentally sound animal, field crop, horticultural crop, turf, and agribusiness operations. At least 71 counties reported against one or more of the objectives. Over 2,600 volunteers contributed more than 20,000 hours to supporting the program with a value in excess of \$200,000. Impacts: Over 600,000 tons of soil loss through erosion was prevented by implementation of soil management BMP s on crop, pasture

and livestock feedlots or lounging areas. Over 18,500 operators were trained and certified in land application of animal wastes, as registered landscape contractors, certified plant professionals, certified landscape technicians, and pesticide applicators. Best management practices to protect or enhance soil and water resources were implemented on an estimated two million-plus acres of crop, pasture and other lands.

Integrated pest management strategies, scouting, and biological control methods were applied on 474,772, 594,699, and 112341 acres, respectively. Through these and other approaches, pesticide use was decreased by over 130,000 pounds. Over 2,500 livestock and poultry growers managed waste nutrients under the guidelines of their approved waste management plans. Numerous additional livestock, row crop and horticultural crop growers used practices such as soil testing, waste analyses, plant tissue analyses, and alternative fertilization strategies or schedules to make more efficient use of added nutrients. Almost 9,000 acres were involved in establishment of wildlife habitat.

### **SMP04 Animal Production and Marketing Systems**

This program focuses on two primary objectives: 1) producers of livestock, poultry and aquatic species will select and implement practices or enterprises that will help them achieve individual and family goals of profitability and quality of life; and 2) citizens will address issues of mutual concern related to animal agriculture, including human nutrition, nuisance management, food quality assurance, quality of life, economic impacts and appropriate treatment of farm animals. This program reaches most counties in the state through a variety of delivery methods. Major management impact categories include nutrition management, breeding and selection, marketing strategies and safe and functional facilities. Estimated financial impacts of programs in these categories are listed below for each producer type:

Economic impact from management improvements,	
Dairy producers	\$4.6 million
Beef producers	2.8 million
Hog producers	1.8 million
Sheep and goat producers	.1 million
Poultry growers	2.3 million
Aquatic species producers	.4 million
Limited resource animal farmers	.2 million

These financial impacts are associated with the following and additional management and production changes implemented by growers. Average sale weights of state graded feeder cattle have continued increasing; weights were eight pounds heavier in 1996 than in 1995. Applied to all cattle in the state, this figure mean that cattle producers realized an additional \$1.73 million by implementing practices emphasized in Extension programs. In addition, calf quality increased and was worth about \$1 million. An Extension lead effort helped organize Eastern Foods, Inc., a network of hog 51 producers who benefit from collective input purchasing and marketing strategies. 70% of the state s dairy farms formulate rations based on feed analyses,



resulting in an estimated \$3.2 million in additional profits. Over 110 producers have participated in DairyWise, a program aimed at improving the management skills and competitiveness of dairy operations. Adult horse owner shortcourses provide management training techniques. In 1996, follow up surveys of participants indicated a 61% average adoption level for 20 feeding management practices. Rapid shell-egg cooling technology, when implemented in the industry will save producers \$200,000 annually and enhance marketability. In addition, feeding probiotics to quail chicks to reduce mortality results in a savings of \$300,000 annually to 200 growers. Farm-gate value of aquaculture products is about \$15.25 million. The growth and technology of this industry is a major emphasis of the aquaculture program. About 30,000 animal farmers, non-farm citizens and others increased their understanding of animal agriculture, food supply facts, food quality standards and related issues through educational programs.

### **SMP06 Community Economic Development**

The Community Economic Development program has four objectives: 1) to integrate special audiences into community development processes(19 counties); 2) to teach economic development concepts to local leaders(10 counties); 3) to inform local leaders and citizens about economic trends and their impacts in the community (13 counties); and 4) to facilitate business development by bringing together local expertise and local needs (16 counties). Delivery methods included leadership development workshops, community workshops, various printed materials and video and TV programs. Teaching models used included parks, agriculture and tourism to demonstrate consensus-building among citizens with diverse views on economic development. Two thousand one hundred eighty volunteers contributed over 22,000 hours to the program valued at \$222,530. The program has involved a significant number of community leaders and citizens in educational and training meetings and workshops to enhance their awareness of the community development process, development concepts, and economic trends and their impacts in the community. As a result of this program, 18 new community organizations were formed, and 41 new community development projects were initiated. Through training provided to 37 participants in the Community Voices Program, 10 people became facilitators and conducted several leadership sessions.

### **SMP07 Crop Production and Marketing Systems**

The goal of this program is to provide unbiased, research-based information on production practices, marketing options, new technologies, environmental concerns and government regulations to farmers, agribusinesses and non-farm citizens. Seventy-three counties reported programs and accomplishments under one or more of the objectives.

An estimated 3,200 tobacco and peanut farmers adopted alternative practices (greenhouse production of transplants; fertility management; diversification; no-till systems; Integrated Pest management (IPM) methods; marketing strategies) on over

124,500 acres, increase in profits by \$7.1 million. In addition, 375 farmers employed alternative marketing strategies to increase income by over one-half million dollars.

Special emphasis is given to enhancing the sustainability of part-time and limited resource farms. Through these efforts in 30 counties, 200 farmers added new crops to their farming systems, representing 3,830 acres and increasing profits by almost \$1 million. Furthermore, 200 growers increased income by modifying marketing strategies.

Best management practices often help increase profits and at the same time, may reduce agrichemical use, improve the efficiency of labor use, and enhance management skills. It is estimated that crop producers saved over \$7 million through enhanced pest management strategies alone. Furthermore, through application of IPM practices on other crops on 665,000 acres, over 3,000 growers reduced pesticide applications by over 717,000 pounds, and \$11.7 million were saved in the nursery industry through the use of best management practices for production, fertility and crop protection. Over 20,000 non-farm citizens became aware of the technology involved in efficient production systems.

Genetically engineered crops were produced on about 39,000 acres, increasing profits by an estimated \$1.7 million and reducing pesticide use by over \$400,000.

Implementation of new or different marketing strategies by almost 900 growers was associated with an increase in returns of \$5.1 million to their operations.

### **SMP10 Food and Forest Products Manufacturing**

Educational programs for the food and forest products manufacturing industries are served primarily by the Departments of Food Science and Wood and Paper Science. This program is focused on three major areas of opportunity: enhancing food safety and quality; assisting small businesses, including food product entrepreneurs; and increasing the competitiveness and profitability of the forest products industry. Training and certification programs, in-plant problem-solving, and assisting new economic development through food and wood products manufacturing are strategies involved in this program. The impacts of this program area are realized when customers of the program have the knowledge and skills to apply processes that enhance food safety, increase the efficiency of manufacturing processes and enhance economic output to the firm, the community and the state.

To that end, 1,850 people were trained in techniques of quality assurance to ensure regulatory compliance and at the same time maintain output and profitability, particularly in the area of Hazard Analysis Critical Control Point (HACCP) techniques. One hundred twenty firms adopted new manufacturing techniques, and 15 consumers adopted new practices related to selection, use and maintenance of wood products. In addition, 97 small businesses and entrepreneurs received assistance with their businesses. Through the direct and indirect efforts of the program, manufacturers

saved over \$2.25 million by improving utilization of raw materials or through increased productivity. In addition, 42 new small businesses were established. A new program, ProLogger, focused on loggers, is designed to improve logger safety, environmental concern and business management. The 24 credit hour program results in participants receiving a Professional Logger designation and a diploma. Fifty logging firms participated in 1996.

### **SMP14 Marketing and Production of Alternative Income Opportunities**

The goal of this program is to assist commercial and small, part-time and limited-resource farmers in selecting and implementing alternative opportunities to increase their income. Twenty-three counties are actively participating the program. Four hundred eighty three farmers have gained sufficient information from the program to enable them to initiate alternative enterprises, methods and practices. New investment is critical to initiating additional enterprises or methods, and over \$640,000 has been invested by growers in these efforts. These new investments have been associated with an increase in gross returns of \$1,85 million from the production and marketing on new enterprises. Almost 1,600 growers have participated in programs and have gained enhanced knowledge about alternative production and marketing strategies.

### **SMP15 Natural Resources Conservation and Management**

Educational programs dedicated to increasing value to society and private landowners from natural resources produced an estimated \$18,753,970 value by increasing environmental awareness among youth, increasing the involvement and quality of decision-making by all citizens, increasing the market value of timber and recreational leases on private lands, and increasing fisheries and wildlife value accruing to landowners and lease holders. Volunteers are important to the success and impacts of this program; 915 volunteers joined with Extension agents and specialists to deliver targeted educational programs to 20,354 citizens. A total of 102,098 acres of forested and wild lands and waters were managed through implementation of improved management practices in the Forest Stewardship Program and through fisheries and wildlife management programs.

### **SMP17 Residential and Community Horticulture, Turf, Forestry and Pest Management**

This state major program is focused on educating and assisting Extensions audiences in adopting best management practices for residential and public facility pests and in the proper selection and management of plants for residential landscapes, including turf, edible plants, and ornamental plants and trees. The program is a part of the total Extension program in 66 counties; 57 counties reported under one or more of the objectives. Much of the program efforts have been devoted to enhancing the public's awareness of issues and appropriate decision-making regarding practices for



managing pests in residential and public facilities, adoption of tree, shrub, turn and ornamental selection and management practices, and the adoption of practices for managing residential and community edible landscapes. To these ends, over 32,000 people demonstrated adoption of Integrated Pest Management (IPM) practices in pest control methods; almost 135,000 people demonstrated enhanced capabilities in proper selection of landscape plants and their care and protection from pests. Almost 146,000 citizens indicated increased satisfaction with the aesthetic appearance and ecological protection associated with residential and community landscapes. Finally, over 20,478 gardeners adopted BMP s to minimize water pollution and maximize water conservation. The following financial gains, environmental benefits, and quality of life benefits were reported: \$1.3 million saved through reduced pesticide use 16,243 fewer pesticide exposures through reduced or targeted insecticide use \$3.75 million increase in property value from enhanced landscapes 46,153 people implemented practices to protect the environment and ecosystems through plant care and IPM methods Over 82,000 citizens were satisfied with the improved aesthetic appearance of landscapes Using BMP s in managing edible landscapes saved \$460,000 Almost 5 million square feet of garden space is maintained by participants Water management BMP s helped reduce water use by 9.5 million gallons.

## **FAMILY AND CONSUMER SCIENCES**

Each day, the North Carolina Cooperative Extension Service helps to strengthen our North Carolina Families and communities. Our mission and our work are dedicated to improving the quality of people's lives. We rely on research-based information to develop educational programs based on issues and the needs of our communities and citizens.

The following overview highlights programs during 1996.

### **SMP-01 AGING WITH GUSTO!**

The aging process is a continuum, beginning at birth and ending with death. It is a relative process, different for each person. Extension aging programs are designed to help people age with gusto by teaching them how to achieve optimum financial, physical and mental well-being in their later years. Older adults learn how to prepare for and cope with problems related to finances, legal issues, health, caregiving, housing, and self-care.

A sample of statewide program impacts include:



Improving their financial status through adoption of consumer and financial management practices has been accomplished by 3,498 people in 31 counties. People reported that they increased their savings and/or retirement contributions for future financial stability by \$459,590. Estate plans were developed by 562 individuals. In 17 counties 3,100 people increased their knowledge of healthy "behaviors" such as lowering fat or increasing fiber in their diets. In 7 counties 929 people increased knowledge of housing options, financial options, accessibility options that lead to affordable or accessible housing. New collaborations were established with housing related agencies to foster affordable and accessible housing. Over 3,251 people increased their knowledge of health for limited resource families practices in order to use medicines more appropriately. 399 people increased utilization of community resources by participants caring for older adults. 44 counties had 921 volunteers donate 5,594 hours of their time, valued at \$55,886 for program initiative in the Aging with Gusto State Major program.

### **SMP05 CHILD CARE STATE MAJOR PROGRAM**

The Child Care State Major Program focuses on opportunities to impact the quality, accessibility, and availability of child care. Extension improves the quality of child care through training and technical assistance for child care providers, by providing volunteers to work in centers and by supporting child care credentialing efforts. The need for more available and accessible child care is addressed by working with existing organizations to educate the public, by providing grant support to agents working to expand centers and create new centers, and by providing a variety of other child care resources to their communities.

A sample of statewide program impacts include:

In 48 counties 10,625 child care providers were trained with 6,405 individuals improving and adapting new skills. Child care centers were able to be licensed or registered in 270 locations. Over 1,770 volunteers donated 19,700 hours to working in child care centers. This contribution of time is valued at \$197,300.

Seventeen counties reported that almost 2,500 new child care slots were established, and 103 new centers were opened with the assistance of extension's educational programming and grant funding. The volunteers have established or expanded over 178 program collaborations. Playground safety training which was a requirement of the Department of Human Resources in order to implement the state rules was provided with Extension being the critical link to implement it. Many agents have been instrumental in facilitating the "Smart Start" program. By offering their expertise to this program they are bringing needed resources to their counties.

And now more child care is offered for all ages in early childhood, full summer programs, after school programs, intersession and for all ages in locations of the state formerly underserved. Families who were not being served are finding resources through Cooperative Extension. Enhancement (including training) programs for child care professionals are becoming far more available in rural areas.

### **SMP 08 FAMILY AND CONSUMER ECONOMICS**

The Family and Consumer Economics State Major Program promotes informed personal finance and other consumer decision making by individuals and families. Serious financial problems affecting families at all income levels can in many cases be prevented, and this program emphasizes education for prevention.

A sample of statewide program impacts include:

Over 7,000 limited-resource individuals achieved such financial goals as purchasing their first home, saving money by learning to do their own taxes, avoiding being drawn into fraudulent consumer transactions, and reducing the level of debt. In 29 counties 65,613 people increased knowledge of financial resources with over 3300 people demonstrating goal setting, making financial plans and record keeping skills. Housing financial decisions in 20 counties were adopted by 1200 people who were able to improve their housing choice.

Other programs involved 11,377 individuals in 33 counties who increased consumer decision making skills in such areas as financial services, insurance, transportation, health care, and elder care. Over 3,000 volunteers contributed 15,573 hours of time which is valued at \$755,700 towards helping Extension address the goals in this state major program. Seventeen counties conducted educational programming for 346,700 individuals and families to extend income and/or increase income.

### **SMP 09 FAMILY AND PARENT EDUCATION**

The Family and Parent Education State Major Program is helping parents and families acquire and develop the skills needed to foster qualities of responsibility, cooperation, courage and self esteem. Appropriate actions are being taken to provide quality information on how to strengthen family relationships through improved parenting skills, financial management, problem-solving skills, empowerment, conflict resolution, effective communication, and stress management. In addition, Extension personnel are equipped to make appropriate referrals for family services, support services, and self-help support groups.

A sample of statewide program impacts include:

Over 1,693 limited-resources parents in 14 counties demonstrated proper application of

techniques learned to resolve financial conflicts. In 16 counties 6,657 people increased awareness and knowledge of skills in critical thinking, leadership, managing finances and managing stress. As a result of Extension programs 11,445 parents in 52 counties reported improved responsibility toward their children. Another 10,063 persons said they improved the quality of their family life through the adoption of techniques such as proper discipline strategies, stress reduction, and improved communication. The estimated net cost benefits for participants in Extension parenting programs was \$204,201. In 14 counties 837 people said they improved their quality of family life through utilization of community services. 2,122 volunteers played a major role in parenting programs donating 14,416 hours of time valued at \$144,160 to Family and Parent Educational programming.

### **SMP 11 FOOD SAFETY & QUALITY**

Safety of the food supply is a shared responsibility. Food producers, processors, preparers and consumers must all follow appropriate food safety procedures so food safety enters and leaves their portion of the food supply chain for human consumption. Consumers not only deserve a safe food supply but one delivered in such a manner that they can determine it meets their nutritional quality needs.

A sample of statewide program impact include:

Consumers in 29 counties increased their knowledge about safe food handling and 49,711 adopted safe food handling practices. 881 food service personnel increased their knowledge in order to prepare food safely in restaurants, day care centers, congregate nutrition sites, hospitals and schools.

### **SMP 12 HEALTH AND HUMAN SAFETY**

Health and human safety are pressing public concerns at the individual, family and community levels. The Extension Service has developed community-based programs to enable individuals and communities to address health and safety needs including, healthy lifestyles, home safety and crime prevention, agricultural health and safety, and community capacity building.

A sample of statewide program impacts include:

Over 17,106 youth and adults adopted healthier lifestyles by reducing high-risk behaviors and taking responsibility for their health related decisions. Through reduced high risk behavior \$858,500 in costs were avoided. 8,391 individuals and families adopted one or more home safety practices for a healthier living environment. In an era of increasing awareness of farm health and safety issues, farmers, farm workers, wives, youth and



medical personnel increased awareness of personal protective, safety and other equipment, and agricultural related illness and injuries. Twenty-one strategic partnerships and coalitions were formed for improving health status. Program participants avoided \$62,710 in medical costs. In the 37 counties reporting, it is estimated that 1,478 volunteers contributed 21,800 hours to local programs impacting positively on health and human safety. The dollar value of their contributions is estimated at \$218,000.

### **SMP 16 NUTRITION AND WELLNESS**

The Nutrition and Wellness program promotes optimum nutrition and healthy lifestyles management for positive outcomes throughout the life on continuum. Nutrition needs change throughout life and have a direct impact upon health, quality of life and the ability to achieve physical and mental potential. Diet related risks involved in chronic diseases can be lowered through improved (healthier) behaviors and positive pregnancy outcomes can result from better prenatal nutrition.

A sample of statewide program impacts include:

Nutrition programs focus on diets and healthy lifestyles with 25,438 participants adopting diets consistent with dietary guidelines for good health. In 49 counties 8,538 participants decreased high blood cholesterol and 2,208 decreased high blood pressure. Parents in 23 counties and 4,940 children adopted food behaviors consistent with the Dietary Guidelines and Food Guide Pyramid. In the Expanded Food and Nutrition Education Program 3,216 graduated limited resource homemakers learned to save at least \$10 per month (\$386,000/yr) through improved skills in shopping for groceries. Of 1,384 WIC mothers, in the EFNEP In-Home Breastfeeding support program, 64% were still breastfeeding at six weeks postpartum which is about 10% higher than the general WIC population. Over 5,458 volunteers contributed 45,655 hours of time which is valued at \$456,550 toward helping extension address the goals in this major program. In fifty churches in ten counties, 1,129 individuals increased their fruit and vegetable consumption by a half a serving while 1,159 participants in the control group did not significantly change theirs.

### **SMP 18 RESIDENTIAL AND COMMUNITY WATER AND WASTE MANAGEMENT**

Residential and Community Water and Waste Management has environmental and economic impact on both the private and public sectors in North Carolina. Proper management of solid waste, wastewater and watersheds ultimately effect water quality.

A sample of statewide program impacts include:

In 18 counties 8,606 people increased their knowledge and/or adopted of best management water quality practices to prevent contamination of water. 19,977 people in 26 counties increased their knowledge and awareness of waste management principles. 75,871 gallons of used oil were

recycled by farmers and do-it-yourselfers. \$1,151,930 was saved through reduced waste in landfills. 3,706 persons were reached with educational programming in watershed education, including environmental field days, groundwater models, water quality protection methods and best management practices.

## **CELEBRATING 4-H IN NORTH CAROLINA**

### **The 1996 Executive Overview**

#### **Celebrating Our Mission**

The mission of the 4-H youth development program in North Carolina is to create helping relationships to enable youths to become responsible, productive citizens. Those helping relationships are created through 4-H and in the related missions of 4-H, the North Carolina Cooperative Extension Service, the College of Agriculture and Life Science, and North Carolina State University. Celebrating 4-H in North Carolina is a celebration of the youth, families, and communities of our state.

The treasure that is 4-H actively involves youth, adult volunteers, and donor/sponsors in the creation, implementation, and maintenance of educational program designs which celebrate both tradition and innovation. We strive continuously to "Make the Best Better."

#### **Celebrating Tradition and Innovation**

4-H programs in 1996 were productive and efficient through both traditional and innovative educational program designs. Each program strives to help young people:

- learn to live
- learn to make a living
- learn to make our communities better
- become lifelong learners

Basic programs respond to innovations found in four related and collaborative Extension State Major Programs:

- Child Care
- Leadership and Volunteer Development
- Resilient Youth, Families, and Communities
- Youth Development

### **Participation Demographics**

In 1996 a total of 190,160 youth participated in one or more of 4-H's basic programs. Of these 29,854 were active in 1,472 4-H clubs, 92,727 were active in the 3,214 short term or special interest programs. 94,417 youth participated in the 3,160 K- 12, school enrichment programs offered statewide. Another 25,557 young people were involved in 418 after school child care designs managed by 4-H.

11,142 kindergarten age youth were active. Every grade is involved including high points at 31,984 third graders and 29,342 fourth graders. 269 post-high school youth were involved. 4-Hers continue to come from Farm: 12,751; Small Towns: 106,915; Big Towns: 43,076; Suburbs: 5,836; Cities: 21,583; to total: 190,160.

Adult volunteers continue to be the heart and legs of 4-H. It would be difficult to estimate the value of the 21,533 adult volunteers involved in 1996. 14,231 of these were direct youth contact volunteers. 448 were master volunteers in support of volunteer skill development. A total of 13,071 adult and youth volunteers completed structured training to invest in their friendship groups, families, and communities, of these 3,972 were youth volunteers.

### **4-H Camping: A Legacy of Excellence**

North Carolina youth and families continue to "Discover the World Through 4-H Camps." Camps and educational center operations continue to grow in celebration of being exemplary units in the certification system managed by the American Camping Association.

Over 4,000 youth "discovered the world" during twenty unit weeks of junior camping and 14 weeks of speciality camps including: Marine Science and Sailing, Cloverbud Camping (ages 6-8), Fur, Fish, and Game Camp, Horsemanship, Shooting Sports, Mountain Biking, Science and Technology, Adventure Camp, and Teen Leadership Opportunity camps.

Our American Camping Association pledge, to provide a safe place for youth, was successfully challenged by hurricanes Bertha and Fran, two tornadoes, two lightning strikes, and a fire, without a single injury.

### **State Major Program Impacts**

#### **Child Care (SMP 05)**

The Child Care State Major Program focuses on opportunities which Cooperative Extension has to impact the quality, accessibility, and availability of child care and has two objectives.

Forty eight counties targeted the first objective: improving the quality of child care. 10,625 child care providers were trained. Of these, 214 were credentialed, and 270 different sites were licensed. The list of collaborators is long and varied. It includes, Community Colleges, the



Department of Human Resources, Head Start, the Red Cross, the North Carolina School-Age Care Coalition, the North Carolina Day Care Association, the Corporation for National Service, the public schools, and the Partnership for Children.

More and more agents report that their work is augmented by grant funds. Typical funders include the Appalachian Regional Commission, Child Care and Development Block Grants, CDA funds, Smart Start and AmeriCorps.

The second objective is to increase the accessibility and availability of child care. \$1,408,173 worth of new resources were involved at 103 new centers to expand the number of available child care slots by 2492. There were 178 collaborations increasing awareness by 1666 people.

Working to increase availability, Cooperative Extension agents have used a variety of means to achieve their goals. They have used needs assessments to determine the exact locations where child care is most lacking. They have secured funding to address the need, often serving on Smart Start boards but also helping to write proposals for S.O.S. (Support Our Students) middle school and after school initiatives.

Key elements of this goal include:

1. more child care is now offered (early childhood, full summer programs, after school, intersession and in sections of the state formerly underserved),
2. families who were not being served are finding resources through Cooperative Extension,
3. enhancement (including training) programs for child care professionals are becoming far more available in rural areas.

### **SMP 13 Leadership and Volunteer Development**

Thirty five counties work to accomplish two objectives. Objective one is the development of leadership skills targeting limited resource and other non-traditional audiences. The skills learned help individuals and groups of community leaders work to identify important issues and solve problems related to those issues in their community and county.

4,203 limited resource and non-traditional individuals increased their capacity to provide valuable service to the community (assume some leadership roles in church, school, community, etc., volunteer). \$360,360 dollars were saved by increased involvement in addressing community concerns by limited resource and non-traditional leaders. \$719,547 dollars of economic value was invested in community/county for community projects/solving community problems. 142 community organizations were developed to continue resolving community problems.

Objective 2 is designed to empower volunteers, paid staff and other professionals to act on a shared vision by empowering individuals in manager roles to accomplish more by sharing leadership. 1,252 volunteer systems were empowered with: an economic value of \$1,684,424,

and with value of volunteer hours of \$1,325,030 for 132,503 hours worked by 9,047 volunteers at \$10.00 per hour.

Many counties are embracing the master volunteer concept to partner with paid staff in teaching other volunteers or helping with various training programs. They are also serving as mentors to new leaders in their program area such as 4-H club leaders.

Many counties are reporting new organizations emerging from their leadership and volunteer development programs. One county cited a renewed 4-H program committee with three focus areas of involvement of the 26 members.

Another area of progress is involvement of volunteer managers who are responsible for programs. Nash County has an exemplary program to involve senior citizens with day care centers and other youth programs.

### **SMP 19 Resilient Youth, Families and Communities**

The "Resilient Youth, Families, and Communities State Major Program" of the North Carolina Cooperative Extension Service takes action to strengthen the resiliency of youth, families, and communities. Resiliency is the ability to cultivate strengths to positively meet challenges. The program focuses on prevention programming which strengthens "protective factors" and reduces "risk factors." Participants bring together and involve educators, researchers, agency and organizational personnel, youth, families, and communities, advocates, and practitioners who share an interest in strengthening the resiliency of North Carolina's youth, families, and communities.

Objective one states: youth in high risk environments will participate in community based programs resulting in youth acquiring coping skills, making informed decisions and developing a sense of purpose and future.

Thirty eight counties report 25,874 youth with: increased communicating, decision making, working in groups, understanding self, and relating to significant adult life skills: 6,232 with increased literacy: 6,656 with increased community involvement; and 16,899 with increased knowledge and awareness of alternatives to drugs and alcohol use.

16,231 demonstrated increased life skills: 3,932 improved academic performance; 2,845 reduced use of drugs and alcohol; 644 reduced judicial involvement; 633 reduced incidence of violence.

Objective 3 states: community groups will take action to strengthen communities by creating environments which reduce youth and family risks through collaborative intervention and prevention programs in high risk communities.

Twenty one counties reported: 209 collaborations established; 117 prevention programs developed; 114 reductions in criminal activity in targeted communities;

73 economic and community development programs established; 118 support programs established for families (i.e. child care; counseling, etc.); 1,974 increasing knowledge and skills among participants about community collaboration and prevention programs.

## **SMP 20 Youth Development**

North Carolina 4-H focuses on life skills taught through a broad spectrum of subject matters. Life skills are defined as abilities, knowledge, attitudes and behavior that must be learned for success and happiness. Life skills enable people to adapt to and manage their life situations. They give individuals a frame of reference for perceiving and responding to life situations and enabling them to achieve an inner satisfaction and happiness (National 4-H Curriculum Manual for Youth K-3, 1994).

Objective one states: long term support systems will develop competent youth in the following life skill areas: 1.) managing relationships; 2.) decision making; 3.) communications; 4.) serving the community.

Impacts are measured in dollars to benefit youth. Eighty six counties reported: \$576,035 dollars saved by the community from 4-H Community Service Projects; \$345,365 scholarship dollars received by 4-H'ers; \$588,022 dollars earned by 4-H'ers as a result of their 4-H project work; \$731,727 dollars saved by 4-H'ers as a result of their project work.

Life skills provide a measure of increased competency in youth as illustrated by the following areas: 24,381 managing relationships; 54,916 communication skills; 30,571 making decisions; and 31,380 self-confidence.

Objective 2 states youth involved in targeted knowledge transfer development activities will demonstrate improved academic performance. Fifty eight counties reported the following impacts as reported by their teachers using 4-H school enrichment materials:

75% of the 30,927 students demonstrated some or great change in their class attendance. 81% of the 24,587 students reported some or great change in homework completed. 77% of the 24,782 students demonstrated some or great change in the quality of their homework. 84% of the 28,562 students demonstrated some or great change in their science grades.

Additionally, 4-H school enrichment teachers estimated a savings of \$168,718 to school systems. And 2888 volunteers worked 41,682 hours which could be valued at \$416,820.

Objective 4 states limited income youth residing in Diverse/Public Housing will increase life skills development which will ultimately result in making informed decisions about life choices to manage life situations and transitions. (Saying "no" to peer pressure without guilt, defining and establishing aspirations, communicating feelings, pregnancy prevention, agricultural health and safety, conflict resolution, and understanding consequences of one's actions are some of the life skills that will be addressed.)

Twenty seven counties reported: 1,115 youths improving their resistance to peer pressure; 568



youths defining aspirations; and 1,649 youths (5-8) increasing competency within the environment as related to play, clothing, the outdoors, bug out, community, safety, grooming and the other relevant topics.

\$24,234 was saved as a result of community service. 556 volunteers donated 10,183 hours valued at \$101,830.

### **Youth at Risk**

The Youth-At-Risk Initiative was designed to develop support systems for youths who live in environments which may hinder or prevent them from becoming competent, coping, and contributing members of society.

The North Carolina Cooperative Extension Service through 4-H has provided leadership in building coalitions and designing educational programs for youths in high risk environments. During the past five years, more than 500 coalitions worked to address youth-at-risk issues. Approximately 291 long-term coalitions worked to accomplish the long-range goals. More than 16,660 volunteers donated over 44,000 days to the Youth-At-Risk Initiative. Over \$2,191,700 of federal, \$3,069,900 of state, \$182,900 of local government, and \$368,200 of private dollars were used to support youth-at-risk.

Over 2,540 adjudicated youths have reduced their involvement in the judicial system. Nearly 37,600 youths improved their academic performance as a result of Extension programs. Nearly 7,800 youths decreased their alcohol and other drug usage after participating in Extension programs. Career training and preparation have been provided to over 33,550 youths. Over 1,790 science and technology programs have been conducted. Nearly 3,430 youths improved their literacy skills as a result of Cooperative Extension programs.

### **Summary**

The North Carolina 4-H Program created helping relationships to enable youths to become responsible, productive citizens during the 1996 programming year. The youth, families, and communities of North Carolina were well served by the mission accomplishment of 4-H through the related missions of the North Carolina Cooperative Extension Service, the College of Agricultural and Life Sciences, and the North Carolina State University.

1996 proved to be a great year of productive traditional and innovative programs focusing on four Extension State Major Programs: Child Care; Leadership and Volunteer Development; Resilient Youth, Families and Communities; and Youth Development. A total of 190,160 youth and 21,533 adult volunteers worked to involve 29,854 youth in 1,472 4-H Clubs; 92,727 youth in 3,214 special interest programs; 94,417 youth in 3,160 K-12, school enrichment designs; and 25,557 young people in 418 after school, child care settings. Over 4,000 youth "discovered the world" during twenty unit weeks of junior camping and 14 weeks of 4-H specialty camps.

Forty eight counties targeted child care to train 10,625 child care providers and license 270 different sites. \$1,408,173 in new resources was invested at 103 new centers to expand

available child care slots by 2492.

Thirty-five counties worked to expand Leadership and Volunteer Development by involving 4,203 limited resource participants toward more valuable services for their community with a value of \$1,684,424.

Thirty eight counties focused on Youth at Risk and Resilient Youth, Families and communities. In Youth at Risk efforts over 2,540 adjudicated youth reduced their involvement with the judicial system while 37,600 youths improved academic performance. More than 16,660 volunteers worked over 44,000 days during the past four years.

Resilience programs report 25,874 youth with increased life skills; 3,932 improved academic performance, 2,845 reduced drug and alcohol use, 644 reduced judicial involvement, and 633 reduced violence. 209 collaborations were established; and 117 prevention programs were developed.

Eighty six counties targeted youth development and increased life skills in 141,248 youth while investing \$2,241,149 in community savings, youth scholarships, project work earnings, and project work savings. Studies of representative 4-H school enrichment programs indicated that 75% of the 30,927 students improved attendance; 81% of 24,587 students improved completing homework; 77% of 24,782 students submitted better quality homework; and 84% of 28,502 students received better science grades. Teachers reported these results plus savings of \$168,718 to school systems, and 41,682 volunteer hours from 2,888 volunteers valued at \$416,820.

North Carolina's 4-H program is a treasure shared by our state's youth, families and communities. It demonstrates the value of collaborating effort and fiscal efficiency in the spirit of locally based, educational design. Youths, parents, educators, community, and regional and state leaders work to create the treasure that is 4-H. In 1996, that treasure blazed brightly across the state of North Carolina.

# VOLUNTEER INVOLVEMENT 1996 NCCES STATE MAJOR PROGRAMS

	Number/Hours/Dollar Value
smp 1-1 443/2577/25770	
smp 1-2 158/977/9770	
smp 1-3 150/1006/10060	914/5,594/55,940
smp 1-4 21/62/620	
smp 1-5 142/972/9720	
smp 2-1 576/875/8750	
smp 2-2 39/166/1660	654/1,437/14,370
smp 2-3 39/396/3960	
smp 3-1 299/1849/18490	
smp 3-2 345/2596/25960	
smp 3-3 105/1089/10890	
smp 3-4 323/1784/17840	2,622/20,177/201,770
smp 3-5 548/4152/41520	
smp 3-6 658/3924/39240	
smp 3-7 344/4783/47830	
smp 4-1 1480/15065/150650	2,090/33,800/338,000
smp 4-2 610/3670/36700	
smp 5-1 1773/19730/197300	3,212/25,767/257,670
smp 5-2 1439/6037/60370	
smp 6-1 1368/11894/118940	
smp 6-2 114/3165/31650	2,180/22,253/222,530
smp 6-3 624/4097/40970	
smp 6-4 74/3097/30970	
smp 7-1 240/3133/31330	
smp 7-2 136/763/7630	
smp 7-3 638/5765/57650	
smp 7-4 642/2909/29090	2,409/17,271/172,710
smp 7-5 360/1624/16240	
smp 7-6 96/516/5160	
smp 7-7 297/2561/25610	



**Number/Hours/Dollar Value**

smp 8-1 381/1507/15070	
smp 8-2 470/1952/19520	
smp 8-3 181/1453/14530	3,022/15,573/155,730
smp 8-4 1375/7444/74440	
smp 8-5 615/3217/32170	
smp 9-1 1252/9356/93560	
smp 9-2 115/302/3020	2,122/14,416/144,160
smp 9-3 448/1450/14500	
smp 9-4 307/3308/33080	
smp 10-1	
smp 10-2 10/200/2000	10/200/2000
smp 10-3	
smp 11-1 458/1800/18000	459/1810/18,100
smp 11-2 1/10/100	
smp 12-1 750/8634/86340	
smp 12-2 345/4290/42900	1,478/21,800/218,000
smp 12-3 86/531/5310	
smp 12-4 297/8345/83450	
smp 13-1 6056/49898/498980	
smp 13-2 9226/138803/1388030	21,248/245,975/2,459,750
smp 13-3 5966/57274/572740	
smp 14-1 81/515/5150	300/1,732/17,320
smp 14-2 219/1217/12170	
smp 15-1 483/2340/23400	
smp 15-2 297/649/6490	
smp 15-3 110/703/7030	1,035/4,289/42,890
smp 15-4 120/112/1120	
smp 15-5 25/485/4850	
smp 16-1 2333/19398/193980	
smp 16-2 646/11027/110270	
smp 16-3 733/2485/24850	5,458/45,655/456,550
smp 16-4 1746/12745/127450	

smp 17-1 670/6311/63110	
smp 17-2 1749/35513/355130	3,200/51,579/515,790
smp 17-3 781/9755/97550	
smp 18-1 386/3129/31290	
smp 18-2 37/958/9580	1,148/17,313/173,130
smp 18-3 99/594/5940	
smp 18-4 626/12632/126320	
smp 19-1 2021/35736/357360	
smp 19-2 645/5189/51890	3,051/63,311/633,110
smp 19-3 1285/22386/223860	
smp 20-1 10125/166152/1661520	
smp 20-2 2888/41682/416820	13,569 / 218,017 / 2,180,170
smp 20-3 (inactive objective)	
smp 20-4 556/10183/101830	

**1996**  
**GRAND TOTALS      70,171 VOLUNTEERS**  
**827,769 HOURS**  
**\$8,277,690 VALUE**