

VISIONS
FOR THE
FUTURE

PROGRAM OVERVIEWS

AND

1995 FEDERAL REPORTS

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NORTH CAROLINA COOPERATIVE EXTENSION SERVICE

ANNUAL REPORT 1995

Program Overview

The North Carolina Cooperative Extension Service, with its strategic plan, "Our Commitment to Excellence", and its four-year plan of work, "Visions for the Future", provide 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.

This annual report represents the cumulative results of four years of Extension educational programs from 1992 to 1995. The accomplishments indicated in this report reflect the 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 wide variety of organizations, groups, and individuals.

Extension's educational programs were planned in collaboration with over twenty thousand of the state's citizens. These programs were effectively implemented, reaching all areas of the state, and a vast number 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 the scope and quality of Extension's programs for the benefits of the state's citizens.

HIGHLIGHTS OF NATIONAL INITIATIVES

FOOD SAFETY AND QUALITY

Twenty-nine thousand six hundred thirty-two participants in programs adopted safe food handling practices such as temperature control and sanitation

that minimize risk; over 19,000 agricultural participants adopted practices that protect the food supply, including appropriate use of drugs and chemicals in agriculture and safe food processing. Nineteen thousand three hundred forty-seven people increased their knowledge of food safety public policy issues such as irradiation, e. coli contamination and salmonella. Almost 26,000 participants increased their knowledge of the risks and benefits of specific food components, such as salt, fat and cholesterol, processing technologies or food protection chemicals. Eight thousand nine hundred seventy-three new private pesticide applicators were certified, and 25,560 applicators were recertified.

North Carolina's Food Safety and Quality Initiative was chosen by 28 counties (28%) as a major programming effort. Over 135,000 people were reached with food safety information. Specific programming was conducted for targeted groups such as food service employees, day care providers, livestock and dairy producers, occasional quantity food preparers, populations at greater risk for foodborne disease, home food preparers, commercial and private pesticide applicators, senior nutrition site food service personnel, and the commercial seafood industry.

The Extension Crisis Management Plan was in place to respond to food safety concerns such as corn mold infestation and national incidence like E. coli O157:H7 outbreaks.

Extension was a major provider of food safety training for food service providers. In a sample of 21 counties over 3300 food service employees received food safety training or over 150 employees per county.

SUSTAINABLE AGRICULTURE

One hundred twenty-two agents received training in sustainable agriculture systems. Over 40 counties implemented programs addressing sustainable farming systems. Statewide, over 38,000 people participated in 751 sustainable agriculture meetings, workshops and tours, and 524 on-farm demonstrations were conducted. These activities, including program planning, delivery and evaluation involved a diverse mix of people with interest in sustainable agriculture issues, such as farmers, non-governmental organization representatives, and others. Members of the Sustainable Ag Task Force of the College of Agriculture and Life Sciences were in lead roles in projects funded by Z. Smith Reynolds Foundation, SARE/ACE, SARE Training Consortium and the W. K. Kellogg Foundation.

During the program period, Extension played a lead role in the establishment of an environmental farming systems demonstration farm where sustainable agriculture systems will be examined and demonstrated, based on selection by producers, NGO's, land-grant personnel and the North Carolina Department of Agriculture.

As a consequence of collaborative efforts of research and extension faculty, farmers, other agencies and NGO partners, county reports indicate the following implementation of sustainable practices and approaches.

Practice/approach	No. farmers	No. acres	No. animals
New income sources	1,055	24,140	564,644
Conservation tillage	2,775	144,602	53,090
IPM or IRM practices	1,774	115,608	4,172
Organic production	346	9,120	320
Animal manure use	1,269	55,915	175,125
Biocontrol	914	15,096	905
Cultural pest control	1,598	127,227	1,325
Farm wildlife management	217	60,003	0

WATER QUALITY AND WASTE MANAGEMENT

Over 52,800 individuals attended 1302 meetings to discuss water quality policy. In addition 17,425 individuals inquired about and received information on drinking water quality. Seven thousand farmers started applying nitrogen at rates based on realistic yield expectations on approximately 7,400 acres as recommended by Extension. Eight hundred farmers installed new drainage control structures to reduce nitrate concentration on 86,323 acres. Eighteen thousand seven hundred and six farmers and forest landowners implemented BMPs to reduce soil erosion and surface water contamination from sediments and associated nutrients and pesticides with 990,315 acres impacted. One thousand six hundred and seventy-one farmers calibrated spreaders and irrigation systems to apply manure at optimum rates and application patterns on 268,230 acres.

Fourteen thousand and eighty-two clientele initiating backyard composting with Extension assistance. More environmentally responsible purchasing decisions were reported by 38,045 clients. Over 500 communities were assisted in successfully implementing new solid waste management options and 613 implemented new recycling programs. Over 300,000 individual clients and families reporting increased participation in recycling programs.

Thirty thousand volunteers assisted in water and waste management programs. In addition approximately three million dollars of non-extension resources were acquired to assist these efforts.

PLIGHT OF THE YOUNG CHILD

385 community groups designed or implemented plans to reach limited-resource families with young children. The Extension Service continues to work to improve the lives of its youngest citizens. Agents in many counties are leaders in securing and

implementing Smart Start programs. Agents also work with Headstart and WIC clients in the areas of parent education and nutrition.

YOUTH AT RISK INITIATIVE

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. A primary reason for the success of Extension's efforts in youth-at-risk programming was the effective use of coalitions. During the past four years, more than 373 coalitions worked to address youth-at risk issues. Coalition members were active as teachers, mentors and role models for at-risk youths. Coalitions have helped to maximize scarce resources and bring together the expertise needed for effective and efficient youth-at-risk programming. Over \$1,289,378 of federal, \$2,259,856 of state, \$141,817 of local government, and \$245,761 of private dollars were used to support youth-at-risk.

The Cooperative Extension Service youth-at-risk programs have a positive impact on youths. Nearly 27,049 youths have improved their academic performance as a result of Extension programs. Improved study habits and grades, increased school attendance, and reduction of out-of-school and in-school suspension were reported.

Approximately 5,610 young people have decreased their alcohol and other drug usage after participating in Extension programs.

Preparing for the future is the focus of the work force preparedness programs sponsored by 4-H for young people 13 to 19 years old. Over 25,338 young people participating in work force preparedness programs learned resume writing and interview skills, obtained an in-depth look at a variety of career options, gained goal setting and decision making skills and learned about the world of work.

DECISIONS FOR HEALTH (Health and Human Safety)

Thirty-one County Extension Centers and seven special project counties, or a total of 38% of North Carolina Extension Service Centers reported activities under Health and Human Safety in 1995. This represents an increase of 53% over the prior three years when 18 counties participated in these activities. Additionally, much of the health and safety effort within the North Carolina Cooperative Extension Service is reported under core programs such as Foods, Nutrition and Health or the Farm Safety Program.

365,442 adults and youth have participated in programs aimed at increasing knowledge about or changing attitudes or behavior affecting health status or preventing disease and injuries.

105,843 community leaders and community members have participated in workshops, seminars or other educational opportunities on health and health related issues.

Over 24,094 farmers and farm workers or their families have participated in programs on the proper use and handling of pesticides and the correct use of pesticide contaminated clothing.

Three hundred and forty nine communities have organized and maintained on-going health promotion and disease and injury prevention programs.

Early childhood immunization continues to be a focus of the Rural Health Program. Agents continue to be players in county immunization efforts and in several instances have assumed leadership of county immunization education programs.

The National Cancer Institute-funded Southern Appalachia Leadership Initiative on Cancer (SALIC) project has been operating for the past three years. Four cancer control coalitions were operative in North Carolina. Approximately 40 community action groups were formed under the auspices of the coalitions and have become involved in breast and cervical cancer prevention and control activities.

The North Carolina AgrAbility Partnership has been functioning for the past two years. The AgrAbility project staff worked with Extension personnel in three counties to reach out to disabled farmers, farm families and farmworkers with information and assistance in meeting special needs. Initial steps were taken to expand AgrAbility to fifteen counties in Eastern North Carolina.

COMMUNITIES IN ECONOMIC TRANSITION (RURAL REVITALIZATION)

Strategic plans/economic analyses which identified opportunities for diversification, deterrents to development and/or infrastructure improvements, started or revised were developed in 866 communities. Improved leadership and problem solving skills were demonstrated by 45,429 citizens/emerging leaders .

Increased economic knowledge was demonstrated 21202 young adults and emerging leaders. Over 14,500 new current and potential entrepreneurs were assisted to analyze their enterprise. Of these, over 2308 made informed decisions about a business start-up as a result of extension assistance. Estimates of investment in new business start-ups amounted to over \$116,000,000. Seven hundred thousand citizens were impacted by Extensions involvement and assistance to 1,023 communities with almost 1,500 communities that planned or initiated beautification projects. Over 1,023 communities assisted with waste, water supply or waste-water management problems. Over 91,000 volunteers provided 101,100 hours of service in these efforts. In addition, more than \$1,688,370 in non-extension dollars were raised to support these programs.

HIGHLIGHTS OF 3 (d) AND SPECIAL FEDERAL FUNDED PROGRAMS

INTEGRATED PEST MANAGEMENT

Seventy-nine counties reported IPM activities involving alfalfa, apples, Christmas trees, corn, cotton, Irish potatoes, greenhouse crops, pastures, peanuts, small grains, soybeans, tobacco, turf, vegetables, cattle, swine, and poultry. County accomplishment reports indicate that 24,327 growers farming 2.7 million acres are now using three or more of the following IPM methods: 1) pesticide applications based on scouting and thresholds; 2) pesticide applications based on predictive models; 3) crop rotations to hinder or destroy establishment and survival of pests; 4) pest resistant plant varieties; 5) early maturing varieties to avoid pest problems. This impact represents 68% of the row crop acres in North Carolina.

An animal IPM project with 25 poultry and five swine fieldmen, impacting 12 million head of pigs and poultry, was initiated. Another 200 industry fieldmen were trained in IPM strategies, affecting the pest management decisions of 20 integrators and over 1,000 growers raising 180 million animals.

The Christmas tree IPM program identified environmentally sound pest management methods and helped reduce community conflict over tree production.

Several key IPM programs reported significant reductions in pesticide use and cost savings, including:

- * swine operations monitored roach populations and targeted treatments, reducing pesticide applications from one to two per month to one treatment every three months .
- * in 1995, cotton growers used .8 fewer bollworm control applications, due to lower pest pressure, eliminating 16,000 lb a statewide and saving \$4 million.
- * cotton aphids were controlled biologically, saving \$550,000 in pesticide costs.
- * 80% of peanut growers use a leafspot advisory system developed by Extension, and they have reduced fungicide use by 250,000 lb and saved \$2.5 million.
- * 50% of the apple growers in the largest producing county used pheromone traps to monitor codling moth and eliminated two insecticide treatments on 6,000 acres, saving \$180,000.
- * computer-based environmental monitoring systems installed on two golf

courses were used to predict insect pest pressure. One course saved \$250,000 by revising pest management strategies. All golf courses in the coastal region have adopted at least part of the current IPM program.

PESTICIDE APPLICATOR TRAINING

North Carolina has 29,570 private pesticide applicators. During the program period, 8,973 new applicators were certified to use restricted use pesticides, and 25,560 applicators were recertified. Fifty-six two-day schools were held to train 5,890 new commercial pesticide applicators, public operators, consultants and dealers. Recertification classes were taught to over 9,000 members of these groups. To support these training efforts, two new commercial applicators manuals were written, the N. C. Pesticide Laws Manual was revised, Worker Protection Standard material was incorporated into the curriculum, and other manuals and educational materials were updated. Two-hour Worker Protection Standard training meetings were attended by 9,220 employers in 100 counties.

PESTICIDE IMPACT ASSESSMENT

Mail surveys of 6,367 growers were conducted to determine pesticide use patterns on sweetpotatoes, cotton, tomatoes, poultry, Irish potatoes, and Christmas trees. Data were collected on herbicides, insecticides, miticides, nematocides, fungicides, growth regulators and non-chemical pest management practices. These data were added to data bases collected in 1988, 1989 and 1990, and the combined data bases were used to respond to inquiries for pesticide use data from USDA and other organizations. Information was provided to extension and research personnel in North Carolina on current pesticides registered with US EPA and N. C. Department of Agriculture using the National Pesticide Information Retrieval System. Information was also provided to farmers, agribusinesses and other professionals working with chemical and non-chemical pest management strategies.

NORTH CAROLINA RENEWABLE RESOURCE EXTENSION ACT

Increased earnings of approximately \$16,915,510 resulted through better applications of timber products marketing techniques and increased hunting and fishing leases as a direct result of extension programs. Increased savings and earnings of approximately \$2,680,000 resulted through renewable resources being more efficiently utilized.

Public policy educational programs enhanced approximately 1,931,563 acres of timberland. Approximately 15,875 contact hours of continuing education for renewable resource professionals were provided. Approximately 232,975 people increased their understanding of environmentally appropriate practices after using extension materials or after participating in extension programs.

CONSERVATION AND FORESTRY TITLES OF THE 1990 FARM BILL

Twenty-seven thousand people gained knowledgeable about the Conservation Title of the 1990 Farm Bill. Waterways, strip cropping, transplanting, field borders, subsurface irrigation with water structures, conservation tillage, sequential and continuous no-till, diversions, terraces, sediment ponds, cross-slope farming, fencing, critical area treatment, spring development, filter strips, ponds were some of the 9777 practices installed.

Seven thousand six hundred and seventy-five people gained knowledge about the Forestry Title of the 1990 Farm Bill. Timber management, thinning; stream-side filter strips; recreational trails; wildlife plantings; tree planting (longleaf and Atlantic white cedar); prescribed burning were some of the 1817 practices installed.

North Carolina was a pilot state for the wetlands reserve program. In the initial sign-up 4,800 acres were included. In subsequent sign-ups, 2,176 were described as eligible or intended to participate.

In Urban Forestry, workshops and meetings were held to train master gardeners, arborists and other professionals. Over 500 people were reached. Assistance was provided to 25 communities or organizations about hazard trees, tree ordinances, planning and renovation. During 1995 educational materials were developed for use by agents and others in the identification and management of urban trees and trees and plants of the maritime and coastal forests. These will be of great use for landowners, particularly homeowners and communities desiring to manage for the urban forest.

Forty-three volunteers contributed 74 days of service to assist the efforts of these programs. Approximately \$380 of non-extension resources were raised to assist these efforts.

ENVIRONMENTAL EDUCATION

Almost 400,000 individuals and families increased their awareness of public policy issues related to environmental action and 442,000 increased their participation in public policy. Practices designed to increase environmental quality were adopted by 1,323,355 people with over 52,700 best management practices adopted. Major issues addressed include drinking water quality, nonpoint source pollution, residential and municipal solid waste management, animal waste management, outdoor air quality, radon and indoor air quality, and natural resource management. Targeted programs included limited resource citizens, the Cherokee Indian Reservation, schools and many local communities and municipalities. Emphasis has been placed on public issues education and conflict resolution through agent training and the use of interdisciplinary teams to address specific conflicts. Networking has occurred with state and federal agencies, schools, non-governmental organizations and the private sector. Two

hundred and thirty-five volunteers have played a key role in the delivery of programs, particularly to youth audiences. In addition \$13,500 of non-extension resources were raised to assist these efforts.

FARM SAFETY

Over 60 counties devoted one or more programs to farm safety and health topics, including victim extrication from farm machinery, use of respirators in confinement livestock barns, handling of breeding boars, and noise in swine facilities. These programs were presented to farmers, Health Department officials, landscape operators, emergency rescue personnel and youth. Fifty- one thousand participants received information during educational activities; there were almost 8,000 requests for farm safety materials; and 22,732 farmers and other persons adopted one or more safe farming practices. Over 6,000 people improved their knowledge of farm accident rescue procedures. Over 235 farmers, landscapers and greenhouse operators were trained in Worker Protection Standards.

Halifax County initiated an Agricultural Safety Advisory Program, involving over 60 limited resource farmers and ag workers in a peer advisor program focused on agricultural injury prevention. One hundred twenty-one injury prevention actions were taken by participants, and 63% reported making safety improvements to their property or equipment.

Special efforts provided educational materials for Spanish speaking workers. A Spanish and English booklet on pesticide use was produced and distributed, and a video on healthy housing was produced.

LIMITED RESOURCE/LOW INCOME INDIVIDUALS AND FAMILIES

The Cooperative Extension Program at NC A & T State University, through its staff development efforts, have trained 199 field staff and 775 volunteers to reach, teach and have a positive influence on the behavior of 23,451 limited resource individuals and families.

Training objectives focused on programming strategies to reach and teach this audience; using appropriate strategies and subject matter to address needs and measuring program impact. As a result of these efforts to better prepare the staff to work effectively with this clientele, the number of requests for information and programs for this audience has increased tremendously. A Profile of Families in NC Public Housing Communities was distributed to one hundred one (101) extension units, ninety-nine (99) housing authority offices and other 1890 Land Grant Universities. This document provided a descriptive profile of the addressing needs and developing curricula.

Four hundred thirty-two (432) new limited resource adults and teen volunteers were recruited and participated in at least four training workshops to enhance skills

to design learning experiences for community youth. Volunteers indicated improved programming skills, organizational skills and increased subject matter knowledge. An average of twelve hours of volunteer service was rendered by these volunteers. Community Voices, a participatory shared leadership development program for rural individuals and families, reached over 800 community leaders who completed fourteen learning modules enabling them to experience a feeling of self achievement, improve their decision making skills within their families and communities. Participants have indicated increased involvement in community affairs that affect the quality of life in their community and county.

Problems associated with poverty are complex and often difficult for any one organization to address. County and state staff were encouraged to develop linkages with other agencies and organizations, foster a congenial helping relationship, and create a non-threatening atmosphere. Forty (40) coalitions have been established. The average agency or organization involvement in any one coalition included three others in collaborative efforts with the Cooperative Extension Program. Four thousand-thirty four (4,034) limited resource clientele were referred to other agencies and organizations for assistance.

A grant from the Governor's Crime Commission has made possible an innovative program designed to assist victims of crime in public housing communities. A collaborative effort with the Durham Housing Authority, Durham Police Department, NCCU Law School and Ministers provided residents in eleven (11) public housing communities in Durham County, NC with information and services to assist victims of crime in understanding the dynamics of victimization and explored strategies for stabilizing their lives. According to Housing Authority personnel, counseling and support groups have helped the residents and victims restore their sense of dignity, self-esteem and coping mechanisms. The coalition has become vital in obtaining outside funding.

Limited resource individuals and families in North Carolina are improving their quality of life. Eighty (80) percent of the twenty three thousand four hundred fifty-one (23,451) limited resource persons participating in educational programs indicated having improved or adopted new practices. Basic life skills continued to be the focus of many programs for limited resource clientele. Highlights of selected programs include: Twenty (20) handicapped adults increased their knowledge relative to budgeting, comparative shopping and decision-making. Pre- and post-test scores showed a 65% increase in the subject matter being taught. Male and female inmates have participated in programs to assist them with budgeting, patenting, building self esteem and managing conflict.

One hundred forty-two (142) limited resource family members participated in time and money management workshops; seven (7) of these participants set and followed through on goals to purchase a house and car. Sixty-five (65) families

reported record-keeping systems and increases in knowledge and skills in the management of finances. In cooperation with a local family violence program, a workshop on spouse abuse was held. Twenty-five (25) people attended and were able to learn more about spouse abuse, how it affects families. Fifty (50) small/part-time farmers participated in a comprehensive educational program on alternative agricultural enterprises. Participants as a result of this effort developed and implemented a plan of action leading to the establishment of 48 on-farm demonstrations on various alternatives. A special teen leadership program attracted over 40 teens who are currently community leaders and are positive role models for younger youth.

EXPANDED FOOD AND NUTRITION EDUCATION PROGRAM

The EFNEP program has reached more than 24,000 adults and 26,000 youth during the four years ending in FY:95.

While most of them were reached through traditional EFNEP program efforts with individuals and small groups, increased opportunities arose to teach preformed groups referred by cooperating agencies. Percent of adult participants being worked with in groups rose from 56% in FY:92 to 72% in FY:95. Some of the less traditional adult groups reached were in community shelters and correctional centers. Youth were taught in Alternative school programs, After-school Programs, Youth Foster Homes, Boys and Girls Clubs as well as in community groups.

Grant funding for cooperative projects has allowed EFNEP to grow in several new directions. Through the ES/WIC initiative, Wake Co. Dept. of Health and Smart Start funds, nine counties have participated in breastfeeding support projects. In four years, over 4300 WIC clients in both urban and rural settings had received in-home breastfeeding support through EFNEP. Results showed increased numbers of mothers choosing to breastfeed, and a significant increase in breastfeeding duration.

ES/WIC grant funds also supported a special program for pregnant teenagers allowing for development of a curriculum ("Hey, What's Cookin'") which emphasizes experiential learning and skills development. After field testing and evaluation of the curriculum, it was introduced in training to all EFNEP staff early in FY:95. Since then, over 1000 were enrolled, bringing the four-year total to more than 3000 pregnant teenagers being worked with in EFNEP.

MULTICULTURAL DIVERSITY

The North Carolina Cooperative Extension Service as at total organization is committed to and is currently working toward achieving and sustaining multicultural diversity within its programs, operations, personnel and audiences.

Designing programs for special needs populations has been a successful

experience. County staffs continued innovative programming for this audience. County programming has illustrated that special needs youth can benefit from traditional 4-H activities. Programs and learning experiences provided positive reactions among special needs youth and their families as they realized school, communities, and 4-H are interested in their well being.

In addition, 101 county directors and 22 department extension leaders participated in leadership institutes. They took the Human Patterns Assessment which determined work styles and characteristics in working with people. This tool has helped county directors, specialists and administration better understand the overall attitudes and patterns of each other's work style. As a group they have a greater sensitivity to individual differences and Extension Administration is demonstrating greater appreciation of the differences and similarities of the group.

As Extension has expanded its partnership with other agencies and organizations, the diversity of our audiences has increased our outreach to form unique collaborations. In the Youth-at-Risk program, approximately 200 long-term coalitions worked to address long-term goals. More than 12,515 volunteers donated over 33,977 days to the initiative. Over \$1,289,378 federal; \$2,259,856 state; \$141,817 local government, and \$245,761 private dollars were used to support youth-at-risk programming.

As the organization places greater emphasis on diversity programming and recognition of outstanding efforts, additional success stories will surface. One of the strengths of programming in North Carolina is a positive environment supporting programming for diverse audiences.

PARENTING AND FAMILY - YOUTH

Problems facing families in North Carolina are interconnected and complex, and require innovative, multi-disciplinary solutions.

Staffs at North Carolina State University and N. C. A & T State University focused their efforts on providing information to help families develop their capacity to enhance the growth and development of children and to strengthen families. Target programming included: child care, parent education, family strengths, aging, and family legal issues.

76,540 parents and 37,193 youth acquired the knowledge and skills associated with effecting parenting.

Over 22,000 child care workers adopted recommended practices for classroom management, scheduling and curriculum development in order to increase their overall professional competency.

Increased networking efforts by Family and Consumer Educators proved

beneficial in terms of funding, as well as the planning and implementation of programs.

Literally thousands of individuals and families benefit each year from the educational, collaborating, and referral work done by Extension professionals. New technologies are making possible more rapid access to researched-based information, and the delivering of that material to clientele. Mass media strategies enable thousands more to access needed information disseminated by Extension.

VOLUNTEER DEVELOPMENT AND MANAGEMENT

Volunteers working toward successfully improving the quality of family life are essential to the local community and the Cooperative Extension Service. This program offers volunteers an opportunity to improve their leadership skills and their ability to analyze issues and understand political processes in order to achieve desired goals.

North Carolina Family Literacy Program

Literacy programs have been conducted in all 100 counties in North Carolina. Extension Homemakers' volunteer hours in local, state and global awareness and literacy have totaled over 2 million hours.

Family Community Leadership

The North Carolina Family Community Leadership program strongly emphasizes leadership development and challenges communities to effectively participate in resolving public issues. The program focuses on public policy education and targets women and families. All 100 counties have conducted an FCL training session with more than 7,480 persons graduating. Eighty-four donors have contributed more than \$186,365 to the North Carolina Family Community Leadership Programs.

HIGHLIGHTS OF STATE MAJOR PROGRAMS

ALTERNATIVE INCOME OPPORTUNITIES

Fifteen thousand five hundred seventy-seven individuals enhanced their knowledge of income diversification, how to produce and market new products and ways to integrate new income generating enterprises into existing operations. New opportunities include meat goats, dairy beef, intensive fruit and vegetable production on small acreages, ornamentals and rabbits. The total program provided 253 meetings and 226 demonstrations to 8,744 people interested in alternative income opportunities.

Statewide, 946 individuals generated income from the production and marketing of alternative enterprises. Estimated gross income from these new enterprises is \$2.9 million or \$3,107 per person. Net income varied from a few hundred dollars to several thousand dollars, depending on the enterprise and cost of production. For example, in one county, seven farmers began growing plastic-culture strawberries. By improving their management, production and marketing skills, they netted about \$16,000 per acre in 1995.

FARM BUSINESS MANAGEMENT

Twelve thousand eight hundred and fifty employers of agricultural labor improved their understanding of labor rules and regulations. As a result of labor law and regulations workshops in one county, 61 farmers gained working knowledge of the H2-A program; they hired 246 workers with a labor value of almost \$1.2 million. Over 15,500 farmers and tax preparers improved their understanding of income tax laws and tax management; 23,427 farmers improved their management decision-making skills; and 14,437 farmers and agribusiness and agency personnel improved their knowledge of domestic food and agricultural trade and environmental policies. Over the four years, 471 farmers adopted FBMS (farm business management system) and 2,318 farmers adopted other formalized record-keeping systems. Seven hundred eighty-two farm lenders improved their understanding of FBMS and integrated farm financial analysis. Almost 12,600 crop farmers were made aware of the requirements and provisions of the Crop Insurance Reform Act and of the implications of failing to make timely decisions. Over 100 people reported tax savings of \$300,000 due to information gained at a series of workshops on estate planning. As a result of financial analysis education in one county, three farmers reported making accurate investment decisions with an estimated value of \$2 million.

LIVESTOCK PRODUCTION, PROCESSING AND MARKETING

This program provided educational and technical assistance to beef, dairy, swine, horse and small ruminant producers and related agribusinesses. County program reports indicated the following impacts: one thousand five hundred sixty-two livestock producers initiated management intensive grazing systems; another 3,500 started or expanded grazing on forages fertilized with animal manures, with an estimated economic impact of over \$1.9 million. Housing ventilation systems were improved by 483 producers. Three thousand five hundred twenty-eight growers improved their marketing strategies; in the case of beef cattle the estimated economic impact on over 2,200 farms was at least \$900,000. Feed analyses were implemented on 2,407 operations, and 2,277 farmers formulated animal production diets with assistance from Extension programs. Nine hundred twenty-one growers implemented IPM or IRM programs, with an estimated impact of over \$1.5 million. In addition, 2,382 producers initiated quality assurance programs to maintain and improve animal product quality and safety. Over 1,300 new small farm livestock enterprises were started.

Producers and the consuming public both play key roles in understanding the benefits and impacts of livestock production on farms, in communities and in society. To this end, 24,000 producers increased their knowledge and ability to communicate about animal welfare; 18,000 became knowledgeable about environmental issues; and over 14,000 producers enhanced their knowledge of food safety issues. Likewise, consumers gained knowledge of animal welfare issues (215,000), environmental issues (296,000), and food safety (212,000). In many cases collaborative efforts among many individuals and organizations would be expected to provide these types of information to many more than those just contacted directly through extension activities.

POULTRY PRODUCTION, PROCESSING AND MARKETING

Fifteen hundred sixty-nine contract poultry growers gained knowledge on keeping enterprise records for use in decision making. New technology was adopted by the following number of growers: efficient lighting techniques (563 growers in 885 houses); efficient ventilation (758 growers in 1,274 houses), and labor savings (602 growers in 608 houses). Efficient lighting technologies decreased production costs by \$535 per house for a total savings of \$473,475 over the four-year period. Ectoparasite and pest monitoring as a part of pest control strategies was practiced by 1,299 growers and industry personnel. Mortality composting or other recycling technology was used by 1,152 growers, affecting 3,253 houses. Four hatcheries implemented a hatchery offal composting recovery program, saving \$100,000 annually in landfill charges. Best management practices for litter management and use were implemented by 1,410 growers, impacting 2,256 poultry houses. Additional efforts assisted growers with decisions on new house construction; and hatchery managers also received assistance from Extension.

AQUACULTURE AND COMMERCIAL FISHERIES PRODUCTION, PROCESSING AND MARKETING

Aquaculture production, processing and marketing has continued to gain strength compared to the early nineties. There currently are 399 growers of food fish with a total production value of about \$26 million annually. Educational efforts were devoted to helping potential growers explore opportunities in aquaculture and to training lending agencies in these opportunities. Several new catfish and hybrid striped bass operations were established during the four years with Extension assistance. Five new hybrid striped bass operations began in 1994; the total production is 290 acres. While production of hybrid striped bass has increased, the program has also responded to challenges facing the industry, such as insufficient fingerlings and a parasitic grub. The state now has two fingerling producers, and Extension personnel helped develop a mechanism to provide veterinarian expertise to examine fingerlings for the yellow grub. Educational programs to help crawfish producers improve production practices enabled growers to average over 700 pounds per acre.

Both warm water and cold water recirculating fish production systems continued to be developed and refined. Plans were developed to assist farmers in establishing production scale recirculating fish production systems.

Efforts in cold water aquaculture focused on enhancing profitability to growers. Through cooperative efforts with North Carolina Department of Agriculture and the N. C. Trout Growers Association, two growers began contract trout production and eight detailed production plans have been developed for trout farms. Five waste management systems are now in various stages of completion and operation, utilizing hydroponics, composting and sand-filtration technology. All are serving as demonstration farm sites. Three active farm record keeping demonstrations were initiated with growers.

Educational efforts were devoted to influencing the development and implementation of HACCP procedures and regulations for the seafood industry. As a result of these activities and other educational approaches, one catfish processor was the third plant in the US to qualify to participate in the National Marine Fisheries Service HACCP inspection program.

FIELD CROP PRODUCTION, PROCESSING AND MARKETING

Continued adoption of recommended nutrient management practices and systems resulted in a decrease of over 10 million pounds of phosphorus applied to corn, tobacco and soybean acreage than was applied in 1990-91. The 153,168 soil samples taken in 1995 alone represented a 29% increase in the number of annual soil samples analyzed compared to the base years. This information is critical to efficient and environmentally sound fertilization programs. In Greene County, field crop

producers reduced nutrient costs by over \$345,000 by using manure and soil testing to minimize costs and environmental impacts.

Broad acceptance of soil management practices has occurred. Nearly 70% of farms are utilizing at least two best management practices (BMP's) for soil management, impacting over 2.45 million acres of farm land. No-till planting of corn, burley tobacco and soybeans has increased significantly. Statewide soybean acreage planted no-till increased to 38% in 1994 from 26% in 1991. This and other soil management practices have resulted in 1.9 million tons less soil erosion on soybean acreage alone.

A statewide survey of agents indicates that 49% of growers have adopted a system of three or more integrated pest/crop management practices impacting over 2.35 million acres. A peanut leafspot advisory system is widely used; in two major peanut producing counties, this program reduced fungicide applications and saved farmers about \$2.5 million.

Other efforts focused on improved marketing of field crops and the need to increase the competitiveness and quality of tobacco; the switch to greenhouse production of tobacco seedlings resulted in labor cost savings of \$4.3 million statewide.

HORTICULTURAL CROPS PRODUCTION, PROCESSING AND MARKETING

In the tree fruit area, approximately 400 acres of apples were planted using the high density orchard system being introduced by Extension. The system produces high quality fruit earlier in the life of the orchard, is safer and easier for labor and has greater efficiency in pesticide application. Another emphasis was an integrated orchard management system with a goal to reduce pesticide use by 50%. Growers are educated to apply pesticides on an as-needed basis rather than a rigid schedule. Accurate timing of early season fungicide applications reduced total chemical use by 50%. By using weather-based disease prediction models, insect monitoring, foliar and tissue analysis for fertility requirements, BMP's, and disease resistant cultivars, several growers have reduced pesticide use by 33%. Alternative crops being produced are pecans, persimmons, chestnuts and nectarines.

For small fruits, the acreage of strawberries on plastic has grown from 200 acres in 1991 to 1,000 acres in 1995, with an estimated farmgate value of \$10 million.

Potato growers successfully managed Colorado potato beetle through land and insecticide rotations, sound recordkeeping and IPM efforts fostered by Extension. Pesticide surveys indicated adoption of IPM practices by over 90% of potato growers.

Postharvest handling efforts indicated that improving sweetpotato curing and storage facilities reduced losses by one third, and a new high pressure sprayer design

resulted in a 50% reduction in sweetpotato packing line water use.

Crop diversification continued. Onion acreage has increased from nearly zero to 300 acres over the last five years; several growers raised luffa gourds and demonstrations were conducted with specialty melons, herbs, lettuce and elephant garlic.

URBAN HORTICULTURE, FORESTRY AND PEST MANAGEMENT

The demand for urban horticulture information has grown significantly during the four years, not only for plant material selection and cultural practices, but also in water quality, waste management and pesticide management. Three thousand five hundred fifty-one people participated in the Master Gardener training program; their volunteer time commitment is valued at \$1.2 million. Environmentally sound horticultural practices were adopted by 15,000 urban horticultural professionals and an estimated 308,000 homeowners. Thirty-seven new professional landscape contractors were registered.

IPM strategies have been accepted and implemented in commercial turfgrass operations, including monitoring weather conditions and predicting pest outbreaks, using new application technology, and alternative pest control approaches.

One hundred fifty local governments and communities were assisted with urban forestry management plans or practices. Public fears over aerial spraying of 133,000 acres to eliminate Asian Gypsy Moth were minimized through a public education and information dissemination program led by Extension in cooperation with the N. C. Forestry Service, N. C. Department of Agriculture and federal agencies.

NORTH CAROLINA FOREST RESOURCES, WILDLIFE PRODUCTION, PROCESSING AND MARKETING

Improved forest management and better application of marketing techniques by 5,780 landowners, on almost 1 million acres, resulted in increased earnings of \$14,339,270. New forest management plans were implemented by 1,730 landowners with 219,240 acres impacted. Landowners increased their income by \$606,160 by altering their land use on 62,465 acres for wildlife activities. Over 1,600 Christmas trees growers started soil and plant tissue testing. Adoption of improved practices helped deliver top quality trees. Over 3,400,1000 trees of the approximately 7 million sold had a USDA grade #1 or better.

Sixty wood products firms adopted new manufacturing techniques such as quality control, thin kerf machines or computerized networks and saved \$2,158,500 with Extension assistance. In addition, 135 jobs were created with 135 new or expanded wood products manufacturing facilities.

Over 5,000 volunteers provided 5,145 days of service to assist in these program efforts. In addition, \$756,465 were raised from non-extension sources.

ENVIRONMENT AND CONSERVATION OF NORTH CAROLINA'S NATURAL RESOURCES

Almost 1,000 elected and appointed officials increased their knowledge of forest management, wetlands, endangered species, or air quality issues. Two hundred fifty-nine new wildlife management plans were developed for 141,058 acres. Approximately 170 landowners leased land for recreational purposes with value of these new leases being assessed at \$89,716. Longleaf pine was established on 2,140 acres with an additional establishment of 115 acres in white cedar. Almost 1,000 pond owners improved fish production and water quality.

The Forest Stewardship Program has been a major educational effort in North Carolina. Extension has had primary responsibility for the development of educational materials and the training of professionals in the development and implementation of forest stewardship plans. From 1992 through 1995 there have been 705 plans written and certified. There has been a steady increase in the number written each year.

The Wetlands Reserve Program has interested landowners in North Carolina. In the 1995 sign-up, landowners representing 1176.7 acres signed intentions of entering the program. Extension has had the responsibility of developing educational materials and disseminating them to potential counties and landowners.

Approximately 1,100 volunteers provided 2,381 days of service to assist in these programs. In addition, \$672,275 were raised from non-extension sources.

SMALL FARMS

Six hundred fifty-seven small farmers were informed of and accessed USDA services, resulting in \$632,641 in benefits. Six hundred twelve farmers improved their managerial skills by developing and adopting a farm record keeping system. Alternative enterprise opportunities for small farmers were presented to 3,972 farmers, and 658 of them diversified their income stream by adding new enterprises that generated \$1.9 million in additional gross income. Improved marketing plans were adopted by 665 small farmers, resulting in an economic impact of \$1.4 million added income. Six hundred ninety-four minority farmers who own almost 64,000 acres became familiar with way of retaining ownership of their land.

NUTRITION, FOOD SAFETY AND HEALTH

Nutrition, health and food safety programming focused on diet and cardiovascular disease, nutrition for infants and preschoolers, chronic disease risk reduction, maternal and infant nutrition, and nutrition for special needs, handicaps and pregnant teens.

The demand for food, nutrition, and health-related programs in North Carolina is growing daily; this is especially true of programs that educate consumers about health disease prevention, diabetes management, weight control and cancer prevention. Dietary habits are improving slowly and the rising trend of deaths attributable to these chronic diseases is flattening somewhat in response to these dietary changes.

Approximately 441,673 citizens participating in nutrition, diet and health programs increased their knowledge of how to promote health and reduce the risk of chronic diseases by selecting, preparing and consuming foods according to the National Dietary Guidelines.

While proper nutrition is critical to the good health of all Americans, older adults are at disproportionate risk for a number of reasons including: difficulty in eating or swallowing, low income, adverse drug-nutrient interactions, alcohol abuse, depression, reduced appetite, functional disabilities, impaired taste and smell and others. Over 350 professionals (including home economists) attended and networked during a workshop.

This effort was in collaboration with the N. C. Departments of Environment, Health and Natural Resources (Divisions of Adult Health Promotion and Dental Health), N. C. Department of Human Resources (Division of Aging) and the American Association of Retired Persons (AARP). One of the foci of the program was implementing the National Nutrition Screening Initiative. Results of the first screening of over 10,500 elderly across North Carolina indicated that 69% were at moderate or high nutritional risk.

A good indicator of maternal and child health is the number of babies who die before their first birthday. Maternal and child programs are designed to address the risk factors of infant mortality. Programming in the areas of prenatal care, teenage pregnancy, infant feeding and parent education reached 20,759.

FAMILY ECONOMICS

Basic Money Management-Financial Planning

Over 56,740 adults and youth gained knowledge of recommended money management, credit control, record keeping, and saving and investment practices during 1991-95; 142% of the 4-year projection of 40,000.

Elder Care - Financial/Legal/Health Care Planning

North Carolina is far ahead of most states in addressing the elder care information needs of aging and older adults and caregivers, with maintenance-level programs continuing on 1) elder care awareness, 2) planning ahead for elder care decisions, 3) volunteer information provider programs, and 4) training family caregiver programs.

Approximately 57,491 adults and families gained knowledge during 1991-95 about elder care decision making. This represents 115% of the 4-year projection of 50,000 -- reflecting the self-sustaining, ongoing expansion of elder care programming by Extension.

Estate Planning and Retirement Planning

Over 21,760 individuals and families acquired information about estate programming and retirement planning during 1991-95; 44% of the 4-year projection of 50,000.

Improved Housing/Affordable Housing

29,367 individuals and families adopted practices during 1991-95 to improve housing (through repairing, remodeling or upgrading) to meet family needs through the lifecycle; 84% of the 35,000 projection for the entire four years.

Consumer Education/Expense Reduction and Consumer Protection.

47,946 adult and young consumers gained knowledge of their marketplace rights and responsibilities in the selection, use and care of consumer goods and services during 1991-95; 193% of the 25,000 4-year projection.

Resource Management/Income Production

43,035 individuals and families developed and used skills to increase or extend income during 1991-95; 518% of the 4-year projection of 8,300.

HUMAN ENVIRONMENT AND HEALTH

Special wastes are an emerging problem in North Carolina's waste stream. Educated volunteers continue to provide leadership to the educational efforts in the community, as well as public policy education. Collaborative efforts with other local agencies continue to be an effective outreach strategy. Waste reduction, including enviro-shopping and source reduction, is an emerging area where the Cooperative Extension Service can be a leader. Environmental equity continues to emerge as a community waste issue.

Water Quality

Residential water quality issues are still a primary concern for North Carolina residents. During the past four years, major focus has been on residential water quality education and screening programs for lead/nitrates and their health effects, especially on youth and children. 1,230 lead and 1,129 nitrate samples have been

screened with over 1,400 participants. Three percent of samples screened for nitrates and 10% for lead had elevated readings. Some homeowners with private wells have had to install new wells as a result of the screening program. Those with elevated lead levels have learned to flush pipes before consuming the water or have plumbing updated or replaced.

Energy

During the past four years, county Extension agents reached over 84,000 homeowners, builders, youth, educators and other interested persons with energy education programs. 135 neighborhood energy workshops were held reaching approximately 2,000 residents.

Dependent Living

Thirty-three counties reported conducting programs on independent living and lifecycle housing. More than 16,497 senior citizens, housing providers, caregivers, and others attended seminars and programs on adapting housing for accessibility and developing skills to maintain independence.

Environmental Health and Safety

More than 44,484 North Carolina households learned about radon health risks, tested their homes for radon, or adopted measures to reduce radon levels in their homes.

More than 200 homebuilders and county building inspectors received training on radon resistant new construction.

Over 10,000 individuals including private and commercial pesticide applicators, and farm families gained knowledge in selection, handling and laundering of pesticide soiled clothing; with an estimated 6,500 making practice changes.

FAMILIES IN CRISES

Family problems addressed within the parameters of the Families in Crises State Initiative are complex and many have no clear cut solutions. To address the problems of families in crises, the Cooperative Extension Service is striving to collaborate with other agencies and organizations to help families help themselves.

In North Carolina all families are vulnerable to experiencing some type of crisis. Many times a family in crisis incurs economic, social and/or legal stresses. Specialists at North Carolina State University and A & T state University in conjunction with twenty-nine county staffs focused their efforts on developing and implementing coping programs and strategies to help families who are experiencing one or more crises.

Thirty counties implemented 863 programs to reach families in crises audiences as a result of collaborating with 445 agencies.

Eighteen counties presented over 300 work-site programs to 12,104 people in 149 industries.

Thirty-two counties give 321 programs on Family Preparedness for Natural Disasters, reaching 8,876 persons face-to-face. Over 2,067,692 were reached through mass media (radio and newspapers).

Twenty-five counties implemented 2,283 programs targeted at the working poor and homeless, reaching 19,459 persons with family resource management, consumer credit and housing information.

Thirty-two counties reported participating in the Economic Development for Women Project, reaching 1,628 limited-resource women; 98 of whom found a job as a result of the training. Over 450 participants reported developing better self-esteem and increased confidence.

4-H PROGRAM MANAGEMENT

The 4-H club/long term unit by design offers young people an environment in which they can develop communication, decision making, leadership and critical thinking skills that will allow them to become contributing citizens. Over the last 4 years, one thousand three-hundred ninety one (1,391) new 4-H clubs responsive to the needs of youth , families and communities were established. In addition to new unit formation, one hundred four thousand two hundred and sixty three (104,263) 4-H club members were retained. The stability and growth of clubs illustrated program excellence and the quality of club maintenance.

4-H advisory groups which seek to identify needs and implement focused local programs continued to grow in number. Three hundred eighty six new 4-H specialized committees were reported by 87 counties. This is a strong indication of expanding collaboration with the educational, economic, and governmental units valuable to community group systems development, maintenance and renewal. The growth of 4-H Foundations (73) reflect a viable and productive youth program management and community group support.

4-H AND LEADERSHIP VOLUNTEER DEVELOPMENT

The volunteer leadership development program has grown in strength and maturity over the last 4 years. Introduction of the TAXI curriculum has facilitated volunteers assuming more complex leadership roles. Another innovation has been the introduction of continuous quality improvement strategies into the volunteer program.

The Master Volunteer Program has developed a strong volunteer management system with 75 counties now involved in the program. Since 1992, 1,104 volunteers have received advanced training as master volunteers. The youth volunteer

opportunities have also increased over the last 4 years. In 1995 sixty nine (69) counties reported teens involved in either a Teens Reaching Youth Program or a Peer Helper Program representing a 46% increase in county participation in the program since 1992. Since 1992, 90,500 adults served as 4-H volunteers along with 29,500 young people.

SCIENTIFIC LITERACY OF YOUTH

Improving the scientific literacy of young people in North Carolina has been supported by 4-H through primarily the school enrichment program and formation of local science clubs. Agents reported that 350,044 youths and 20,410 leaders participated in extension science programs such as embryology, agricultural field days, fire safety, food and nutrition, and economics in action. Young people ages 8 to 13 learned how to avoid home fires, where their food comes from, nutrition, food safety, soil erosion, recycling, embryology, and economic principles.

Students organized 1,200 4-H science clubs with a membership of more than 23,000.

Teachers find that 4-H school enrichment materials were helpful in the classroom. More than 7,200 teachers reported that students participating in 4-H school enrichment improved their perception of science as shown in increased enjoyment and increased class participation.

Examples of County successes:

In Person County, 100% of the eight classrooms involved embryology reported that science grades increased by at least one letter grade during the quarter in which embryology was taught.

The Embryology Program in Gaston County showed an increase in school attendance of 26%, an increase in class participation of 60%, a 15% increase in students completing their homework and a 18% increase in the quality of home work completion. In addition 40% of the youth showed an increase in science grades and a 33% increase in positive behavior.

Lincoln County used a vermiculture curriculum to capture interest of middle school students. They learned how worms make compost, reproduce, and react to various stimuli.

HUMAN DEVELOPMENT NEEDS OF YOUTH

One of the important goals of 4-H programming is to design educational programs that meet the development needs of youth. During the past four years, an emphasis on training agents and volunteers on human development subject matter has

resulted in a conscious shift toward development of life skills and subject matter knowledge through the 4-H Program. Training opportunities in the area of child development occurred through the Child Development Institute cosponsored by the 4-H Youth Development Program and the Department of Child and Family Relations at the University of North Carolina at Greensboro.

The verbal communication skills were enhanced among 7,751 youths participating in public speaking/presentations and 20,609 4-H'ers participating in noncompetitive public speaking opportunities.

The 4-H club is one of the most successful environments we have to teach young people life skills. From 1992 to 1995, 140,000 4-H'ers were enrolled in 4-H clubs giving them an opportunity to gain leadership skills, pro-social skills, communication skills and planning skills

HEALTH AND SAFETY NEEDS OF YOUTH

Many counties have been successful in raising the public's awareness of specific safety and health issues affecting young people and adults alike. Though impact assessment was difficult to measure through exhibits, fairs and screening experiences, those that both observed and participated experienced a heightened realization/knowledge as to healthy living or hazard reduction. The preparation and management of such exhibits by the young people themselves was an experience that prepared them to handle specific situations and develop the confidence to share with others what they have learned. Agents reported sponsoring 101 exhibits, screening and health fairs targeting youth health and safety need of youth reaching 64,045 participants.

"Peers Empowering Peers" is a program designed to provide educators with the resources to establish and manage peer based, prevention programs which are productive, renewing and collaborative. This program continues to be funded by grants from the United States Department of Education at the Alcohol and Drug Defense Section of the Division of Student Services of the North Carolina Department of Public Instruction. Fifty-five teams involving one hundred seventy-eight educators representing thirty-three counties received the ten hour core training. Given average productivity, between four and five hundred middle school peer mediators have been trained each mediating three conflicts a week; therefore, a conservative estimated of twelve hundred conflicts have been resolved. PATH (Peer Athlete Team Helper) program was packaged in collaboration with the N.C. High School Athletic Association. This program targeted steroid/drug risk reduction by athletics by using a mentor relationship between junior or senior athletics and ninth or tenth grade rookies. Focus of the program was on academic and athletic performance. The program was piloted in six schools in New Hanover County with twenty four educator/coaches involved with 120 athletes to target steroid/drug risk reduction. The program has also involved an additional thirty-seven educators/coaches and approximately four hundred and twenty mentors and rookies in the Cumberland

County Student Athlete Summer Institute and sixteen high schools.

SAFE (Sexual Attitudes Family Education) program was conducted in Ashe County involving all elementary school students in the county. Project Graduation drew 93% of the high school seniors in Ashe County in 1994. The county can boast of no incidents of injury or crime on graduation night due to alcohol or drug abuse over the last three years since the project began.

EFNEP received a Cooperative Extension Service and Women, Infant and Children Project Grant to develop and pilot a curriculum for pregnant teens. Two counties participated in the study with 82 women enrolling of which 60 were pregnant. A pre/post curriculum survey indicated increased knowledge in prenatal diet requirements, skill development in food preparation and planning of balanced meals, and practiced adoption of prenatal health practices that lead to positive outcomes of the pregnancies. The average birth weight for the babies was 7 lbs., a pound and a half above the 5 1/2 lbs. minimum standard. Only 5 births were below low-birth weight. Three of those 5 were within 2 ounces of the minimum. Those babies that were above low-birth weight were able to leave the hospital within the normal stay of delivery avoiding expensive hospital cost.

CARE AND EDUCATION OF SCHOOL AGE CHILDREN

Improving the quality and quantity of school age child care is a priority of the 4-H Youth Development Program. Approximately 37 counties have reported involvement in school-age child care. The school-age child care program varies from county to county. Some counties worked with existing child care programs to provide 4-H curriculum and organize clubs at the sites while others have employed personnel to manage 4-H organized after school sites. The 4-H agent or school-age child care manager acted as a resource person for child care providers and parents, collaborated with public schools and private sites to start new programs or increased the size of existing sites, acted as a curriculum resource person for school-age care providers and coordinated training for school-age child care providers. Since 1992, 22,491 children were served by child care programs established with Extension involvement. Over 2,400 children were placed in newly created child care slots created by Extension. Another 71,845 children were served by child care programs that use extension curriculum.

Thirty three counties reported that 1,310 child care facilities improved the quality of their program as a result of Extension child care training and support.

This program is an excellent example of partnerships. Locally, Extension Agents have formed partnerships with agencies such as local school systems, day care providers, YMCAs, and public recreation departments to improve the quality and quantity of child care in their community. The 4-H Youth Development has formed partnerships with the Department of Human Resources, Child Care Division and the

Corporation for National and Community Service Care. Since 1992 over \$1,600,000 have been received by the 4-H Youth Development Department to support this program, with much of the funding going directly to support county programs.

Agents in 37 counties reported training over 6,792 child care providers. The providers gained knowledge in food preparation and nutrition, scheduling, summer planning, discipline, developmental characteristics of children, space utilization and stress reduction. They also learned how to use 4-H Activity Boxes and 4-H curriculum such as Puppet Making, Talking with TJ, Ghost Writer, Kids and Gardening and Crafts. Child care providers also received First Aid and CPR training.

SPECIAL NEEDS POPULATION

The Special Needs Population in 4-H Programming focused on primarily adjudicated youth, teen parents, youth in diverse/public housing, impaired youth, partners-in-learning participants (5-8 year olds) and youth EFNEP participants. Accomplishments can be illustrated as follows:

1. Eighteen thousand six hundred sixty five (18,665) youth from special need populations increased their self-esteem, family communications skills, parenting skills and other life skills through involvement in educational experiential activities and support groups.
2. One thousand one hundred twenty nine (1,129) teen parents gained knowledge in child growth and development and care, stress management, parenting skills, effective parenting techniques, and self-esteem.
3. Four thousand seven hundred ninety (4,790) youths residing in Diverse Housing gained better decision making skills, exhibited an increase in positive behavior, and developed a positive attitude toward themselves.
4. Through the Partners-in-Learning program, two thousand six hundred forty three (2,643) youths participated in Cloverbud camps and community-based programs.

ENVIRONMENTAL STEWARDSHIP

Environmental education programs at the 4-H Centers were offered for 28 weeks each year. The program involved 7,403 youth and 599 adults in residential programs generating 96,024 hours of contact with the curriculum. An additional 9,996 youth and 651 adults participated in day programs resulting in 63,882 curriculum contact hours. A total of 70 different schools from 23 counties took part in the programs over the four years.

Over 13,800 young people participated in a minimum of 6 hours of environmental education as participants in the 4-H summer junior camping program. The junior camping program and specialty camps gave campers an opportunity to learn outdoor skills, recreational skills, to develop an appreciation of the environment, and through group living continue to develop communication skills, teamwork, leadership skills and decision making. Some of the environmental concepts campers learned were relationships between organisms and their habitat, how elements are recycled by the environment, respect for living things and life cycles and how energy is transmitted through the environment.

Teachers and agents have learned to design and support after school environmental education clubs. During the past four years, 1,200 science clubs have been formed to serve an audience of over 23,000 elementary and middle school youth. The majority of these clubs included environmental science as the primary focus.

The accomplishments reported in this overview represent only a portion of the 4-H programs youth have participated in throughout the year. In summary, 4-H'ers have been involved in over 1,800,000 educational experiences each year. Most of the learning experiences were between 3 and 6 hours in duration and were taught by trained volunteers. Major categories of participation annually were around:

Animal Science and Poultry	125,412
Natural Resources	103,497
Energy and Engineering	58,679
Health and Safety	52,078
Family Resources and Nutrition	54,362
Citizenship and Community Invol.	36,584

Local 4-H programs were designed to meet the needs and strengthen children, families and communities. Many of the needs addressed in the last 4 years remain with us today. As we plan for the future, we will continue to address the issues of developing supportive programs that foster positive growth in young people, school age child care, youth-at-risk, environmental quality, and other many others.

The partnership of ES-USDA and the land grant universities in North Carolina has resulted in a significant 4-H youth outreach program.

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NORTH CAROLINA 1995 ANNUAL REPORT:
FOOD SAFETY AND QUALITY(01)

NARRATIVE SUMMARY OF ACCOMPLISHMENT

North Carolina's Food Safety and Quality Initiative was chosen by 28 counties (28%) as a major programming effort. The remaining 72 counties were engaged in food safety and quality programming at various levels, therefore state-wide programming occurred. In those 72 counties an additional 135,006 people were reached with food safety information. The Initiative was addressed by multidisciplinary teams at both state and county levels. Specific programming was conducted for targeted groups such as foodservice employees, day care providers, livestock and dairy producers, occasional quantity food preparers, populations at greater risk for foodborne disease, home food prepares, commercial and private pesticide applicators, senior center foodservice personnel and the commercial seafood industry. Other programs addressed consumer food handling and food safety concerns. Programming reached all ages, sexes, income levels and a ethnically diverse audience.

Programming was conducted in a variety of settings to reach the intended audiences. Clientele were reached in school systems, day care facilities, youth alternative classrooms, Youth Clubs, Senior Nutrition sites, processing plants, worksite wellness programs, animal production facilities. Other groups were assembled in workshops conducted in the community, at continuing education programs and at food safety certifications programs. Continuing education credits and certification programs were approved for programs delivered to pesticide applicators, foodservice employees and day care personnel.

A variety of educational methods were used to reach audiences. Mass media assisted in providing timely information at teachable moments such as following a foodborne illness outbreak and during events that require special food handling practices. Television, radio, newspapers and newsletters were used to disseminate information to a wide audience. The Extension Crisis Management Plan was in place to respond to food safety concerns such as corn mold infestation and national incidences of E. coli 1057:H7. Day care personnel were reached via satellite transmission of a cooperative program between Georgia and North Carolina Extension in the Safe Food, Healthy Children program. Students interested in food safety and quality participated in a week-long program of workshops, tours and interaction with university and industry faculty in the Food Safety and Quality Fellows program. Print media, bulletins and fact sheets were developed to reinforce the food safety message.

Extension is a major provider of food safety training for foodservice providers. In a sample of 21 counties over 3300 foodservice employees received food safety training or over 150 employees per county. In a sample of 8 counties food safety certification credits were awarded to over 990 foodservice employees. An additional 700 successfully completed the extension taught ServSafe program. In a two-year period 113 food processors received certification in the Acidified Foods Course. Approximately 20 food product entrepreneurs were assisted in product safety evaluation, product formulation, labeling and other processes in establishing a food processing business. Food Safety and Sanitation Certification courses, HACCP programs and inservice/continuing education programs were attended by foodservice employees including day care providers, restaurant employees and managers, Head Start educators, Senior Meal site managers, Hospice workers, and Home Health Care Aides. Special topic classes were provided in areas such as IPM practices and food safety, seasonal food safety handling concerns, food laws and regulations governing food safety, meat products and handling and foodborne illness concerns, pesticide residues and food safety, foodborne disease and at risk groups and animal medications and food safety.

Cooperative Extension agents received training in food safety. HACCP was taught to food processing personnel and foodservice employees. Inservice was conducted on food safety issues for youth involved in food preparation. At risk populations of elderly and immunocompromised individuals were addressed in other inservice classes. Thirteen extension agents received certification as teachers in the National Restaurant Association's ServSafe food safety course.

Many programs and materials produced through USDA grants in this state and from across the nation were used by agents in providing consumer food safety education for consumers and foodservice personnel. Bulletins such as the Home Food Safety Audit, and fact sheets on Safe Food for Your Family were developed to support programming focuses. The NOTEBOOK of Food and Food Safety Information was revised. In addition to this information being available to agents in NC, the information has been transferred to CDROM and an on-line computer retrieval program by two states and is available nationwide.

Food Safety and Quality Initiative Team members received USDA grants to a) develop and participate in food safety training for day care providers. A four-hour satellite program was developed and piloted in North Carolina and Georgia. Data were collected on 263 participants. Knowledge scores increased an average of 16 points on a 100 point scale (from 76 to 92). At the two-months followup, 94% indicated they had made at least one food safety behavior change in their day care facility. The taped program and program materials are used statewide to conduct programs following the satellite date. b) develop and conduct a Food Safety and Quality Science Fellows week-long program for high school youth. Twenty youth participated in laboratory experiences, industry tours, and discussions with professionals in food related fields. Nineteen students completed the evaluation with all giving the overall learning experience as good to excellent. The total Symposium received the same rating. The program will be offered annually with increased enrollment to 40-60 students in future years.

The major focuses and breadth of statewide food safety and quality program in NC is seen in the following reports from individual counties. Each bullet is selected from a single county's report but similar programming is occurring in other counties.

- o Poultry producers (265) attending a Regional Poultry Conference increased knowledge in poultry product packaging and handling.

- o Extension agents trained 103 volunteers who assisted with 152 food safety education programs.

- o In an urban county mass media routes were used to disseminate timely food safety messages: 32 public safety announcements to an audience of 100,000+ listeners, 11 one-half hour radio talk shows, 6 television food safety spots, and a 3-part series on food safety aired on local CBS affiliate.

- o Food safety training provided to commercial foodservice establishments (39 sessions), Senior Meal sites (15 sessions), for 192 day care homes and 10 non-profit child care centers.

- o Articles appeared in agent's biweekly newspaper column which is published in two local newspapers with a combined circulation of 30,000.

- o In a rural county 78 day care providers received continuing education credits in food safety education.

- o Eight indepth training provided for day care providers reaching 269 providers in 3 years in a rural county.

- o Shigella outbreaks in neighboring counties was seen as an opportune time for extension agent to offer food safety and sanitation training to the 15 day care providers in her county. Some day care centers in the neighboring counties were forced to close following the disease outbreaks. The extension

agent offered a 25 hour Safe Food Handling and Sanitation Practices course. Twenty-five child care providers received certification. No shigellosis outbreaks occurred in day care centers in that county.

- o The Safe Food, Healthy Children program was supported by the governor's Smart Start program. Seventy-seven (77) day care providers were trained. Ninety-nine percent (99%) increased their knowledge scores on the posttest. At the 2-month delayed evaluation 97% indicated they had made at least 2 food handling practice changes. Sixty-two (62%) had made more than 2 behavior changes.

- o A Spanish speaking interpreter aided the extension agent in providing food safety programming for 32 Spanish speaking parents with young children. In addition food safety programs were conducted for migrant day care staffs.

- o Extension agent developed a video in Spanish to teach chemical safety for farm workers.

- o EFNEP Program Assistants were trained to assist families in safely preserving foods.

- o Forty-five Girl Scout leaders trained to teach safe food handling to their troupes.

- o A program on Food Safety Pesticides and Biotechnology presented to 51 participants.

- o Eighty senior citizens attended a program on Safe Food Storage focused on their particular needs.

- o Fifty-four percent (54%) of the telephone calls to one county were concerning food safety. All callers indicated they would follow the recommendations made by the extension agent in handling their requests.

- o Forty-three calls to county office requesting more information on Salmonella poisoning and control in response to a newspaper article written by agent.

- o In response to a positive Hepatitis A test of a grocery store employee, agent held workshop for store employees and store customers. All 73 attendees indicated they now wash all fruits and vegetables prior to preparation/consumption. Twenty-four attendees indicated other food safety/personal hygiene practices they adopted as a result of programming.

- o Radio used to disseminate food safety information in 32 taped segments.

- o Livestock owners (315) were taught the Quality Assurance Program information on proper use of animal health products and FDA rules.

- o The correct use of pesticides in home gardens and orchards was included in 12 home horticulture programs.

- o Thirty-five radio programs on food safety aired over a 10-county radius.

- o After-school care workers (257) were trained in safe food handling practices.

- o Twenty-six (26) television programs with a 3-state viewing audience were aired on "Food Safety and Health Concerns".

- o Two to three 3-day Food Safety Certification courses were conducted yearly in cooperation with the local health department reaching 261 restaurant managers and employees. Attendees quotes: 'When I return to work this evening there will be a lot of improvements in reheating {food} and sanitation', 'My only suggestion is to strive to make something like this course mandatory to anyone in foodservice supervision', and '...will recommend that the rest of our managers in the company attend the next session'.

- o Agent and committee of four other agency personnel planned and conducted three 15-hour Food Handler, Food Safety Certification Course. Foodservice employees for the school system, restaurants, and day care facilities attended.

- o Of the 128 attendees 122 passed the comprehensive exam.

- o County extension office supervised and trained the staff of the Indian Reservation Cannery. Residents bring their produce and jars and pay 25 cents per jar for preparation and processing.

SUCCESS STORIES

NC COOPERATIVE EXTENSION SERVICE QUICK TO RESPOND TO FOOD SAFETY CRISES

Outbreaks of shilellosis in Day Care Centers in eastern North Carolina prompted an extension agent in a non-outbreak county to organized and delivery a 25 hour course on Safe Food Handling and Sanitation Practices for Child Care Providers.

Some Child Care Centers in outbreak counties were forced to close when high numbers of children in their care developed the dysentery associated with the disease. The disease is most often transmitted by a food handler with contaminated (unwashed) hands handling food that is then served without reheating.

In this small rural county there are 15 registered Day Care Providers. Managers and food handler from all Day Care Centers attended the Food Safety Course. A total of 25 child care workers received certification that they had successfully completed the course. There were no outbreaks of Shigellosis in Day Care Centers in this county.

In an urban county consumers became concerned about the spread of Hepatitis A when it became known that a grocery store employee tested positive for Hepatitis A. Hepatitis A is most often transmitted by an infected food handler who does not properly wash hands after using the restroom. The extension agent offered a Safe Food Handling class for customers of this store so they became knowledgeable of how Hepatitis A is transmitted and steps they could take in food handling at home to reduce the risk of consuming contaminated foods. Seventy-three customers attended the Safe Food Handling classes.

The Cooperative Extension Service not only respond in food safety crisis situation but provides a major portion of food saftey training foodservice employees received as a routine part of their on-the-job training. For example in one county the Cooperative Extension Service Family and Consumer Sciences agent and the county Public Health Department sanitarian offer a three-day Foodservice Food Safety Certification Course two to three times a year and certify approximately foodservice employees.

Attendees say the following about the Food Safety program. " The only way I know that we may further prevent the outbreak of foodborne illness is to educate more people. I learned a tremendous amount. I would like to send more of my employees to a course such as this". "This program has been ver informative, and it has been an eye-opening experience. Needless to say, when I return to work this evening, ther will be a lot of improvements on reheating, sanitation, etc. I feel that every food service manager should attend this class and will recommend that the rest of our managers in the company attend the next session."

OBJECTIVES, INDICATORS, DATA COLLECTION METHODOLOGIES

OBJECTIVE 1

Extension clientele will increase their adoption of recommended food handling practices.

INDICATOR 1

Enter the number of participants, and the percent of participants who incr their adoption of recommended practices. (Press F2 for explanation.)

6yr Proj	75.0	4700

	Percent	Number of
	Increasing	Program
	Adoption	Participants

1992	75.0	2552
1993	75.0	9761
1994	75.0	6351

1995	75.0	10968
1996	0.0	0
1997	0.0	0

Total		29632

Data Collection Methodology

The indicators for Food Safety and Quality programs include the collection of total participation data (from enrollment records) and assessment of impact on clientele. It is recommended that measurement of clientele impact be done on the basis of sampling at the state (vs. county) level to minimize burden and standardize methods. Evaluation methodology and sample size should be determined for each program based on the characteristics of that program.

OBJECTIVE 2

Extension clientele will improve practices and processes that promote the production and protection of a food supply with minimal risk.

INDICATOR 1

Enter the number of program participants, and the percent of participants who increased their adoption of practices that protect the food supply. (Press F2 for explanation.)

6yr Proj	95.0	1200

	Percent	Number of
	Increasing	Program
	Adoption	Participants

1992	95.0	1673
1993	95.0	4728
1994	95.0	2022
1995	95.0	10605
1996	0.0	0
1997	0.0	0

Total		19028

Data Collection Methodology

The indicators for Food Safety and Quality programs include the collection of total participation data (from enrollment records) and assessment of impact on clientele. It is recommended that measurement of clientele impact be done on the basis of sampling at the state (vs. county) level to minimize burden and standardize methods. Evaluation methodology and sample size should be determined for each program based on the characteristics of that program.

OBJECTIVE 3

Extension clientele will improve their understanding of risks and responsible practices in relation to food and health.

INDICATOR 1

Enter the number of program participants, and percent of participants who increased their knowledge of food safety public policy issues. (Press F2 for explanation.)

6yr Proj	95.0	2300

	Percent	Number of

	Increasing Knowledge	Program Participants
1992	95.0	87
1993	95.0	11867
1994	95.0	2556
1995	95.0	4837
1996	0.0	0
1997	0.0	0
Total		19347

Data Collection Methodology

The indicators for Food Safety and Quality programs include the collection of total participation data (from enrollment records) and assessment of impact on clientele. It is recommended that measurement of clientele impact be done on the basis of sampling at the state (vs. county) level to minimize burden and standardize methods. Evaluation methodology and sample size should be determined for each program based on the characteristics of that program.

INDICATOR 2

Enter the number of program participants, and percent of program participants who increased their knowledge of the risks and benefits of specific food components, processing technologies or food production chemicals. (Press F2 for explanation.)

6yr Proj	95.0	3400
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	Percent Increasing Knowledge	Number of Program Participants
1992	95.0	257
1993	95.0	2400
1994	95.0	6494
1995	95.0	16825
1996	0.0	0
1997	0.0	0
Total		25976

Data Collection Methodology

The indicators for Food Safety and Quality programs include the collection of total participation data (from enrollment records) and assessment of impact on clientele. It is recommended that measurement of clientele impact be done on the basis of sampling at the state (vs. county) level to minimize burden and standardize methods. Evaluation methodology and sample size should be determined for each program based on the characteristics of that program.

PART B OBJECTIVES AND INDICATORS

ESTIMATED PROGRAM COST

Year	Est. Cost
1992	575000

1993	575000
1994	575000
1995	575000
1996	0
1997	0
Total	2300000

ESTIMATED FTE COMMITMENT

	Professional			Paraprofessional		
	1862	1890	Other	1862	1890	Other
1992	10.0	0.2	0.0	1.0	0.5	0.0
1993	10.0	0.2	0.0	1.0	0.5	0.0
1994	10.0	0.2	0.0	1.0	0.5	0.0
1995	10.0	0.2	0.0	1.0	0.5	0.0
1996	0.0	0.0	0.0	0.0	0.0	0.0
1997	0.0	0.0	0.0	0.0	0.0	0.0
Total	40.0	0.8	0.0	4.0	2.0	0.0

ESTIMATED VOLUNTEER PARTICIPATION

Year	Volunteers
1992	550
1993	550
1994	550
1995	550
1996	0
1997	0
Total	2200

ADDITIONAL COMMENTS

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NORTH CAROLINA 1995 ANNUAL REPORT:
SUSTAINABLE AGRICULTURE(03)

NARRATIVE SUMMARY OF ACCOMPLISHMENT

The Sustainable Agriculture Task Force, made up of faculty of the two land grant universities, federal and state agency staff, farmers and NGO personnel, has continued to provide leadership for sustainable agriculture activities. These activities include:

1. The development and submission of a state strategic plan for sustainable agriculture training in response to chapter 3 of the 1990 farm bill. This plan was developed and reviewed by a diverse group of individuals representing those mentioned above.
 2. Two types of training were provided for extension faculty: a. in-depth training on bio-control methods held in Raleigh for 22 agents using a two day field and class room format, b. basic understanding of sustainable agriculture concepts held at Annual CES Conference in Raleigh for all agricultural agents (100+).
 3. The third annual Sustainable Agriculture Forum was held in November in Raleigh and was attended by a broad range of farmers, agriculturalists and Agency and NGO staff. The purpose of the Forum is to bring together stakeholders in North Carolina's agriculture in a discussion of the key issues of agricultural sustainability.
 4. CES faculty from both land grant universities attended the first NGO/Land Grant Summit on sustainable agriculture, held in March at the Avilla Retreat Center near Durham, NC. CES faculty from both institutions were instrumental in the planning and implementation of this meeting.
 5. Seven collaborating organizations, including NCSU and NCA&TSU, have been awarded a \$993,000 grant from the W. K. Kellogg Foundation. This project called "Partners in Agriculture" is focusing work on sustainable agriculture in four community sites in rural North Carolina. Activities are beginning with community listening projects. This project is one 18 nationwide that are a part of The W. K. Kellogg Foundation's "Integrated Farming Systems Initiative".
 6. The Center for Environmental Farming Systems (CEFS) located near Goldsboro, NC is a direct outgrowth of the Sustainable Agriculture Task Force. This farm is now being developed to address sustainable agriculture issues including production practices, environmental impacts and economic returns. Organic farming research is one of the key focus areas at CEFS since the land area needed for this type of research is currently not available elsewhere.
- County efforts in sustainable agriculture have impacted in several ways Conservation tillage, filter strips and riparian zone protection are receiving emphasis. Cotton production in one county is estimated at 45% no-till as a direct result of county educational efforts. In another county NRCS and CES staff have helped a farmer more than double his peanut yields while at the same time providing excellent protection to erodible soil by using cover crops, crop rotation and strip tillage. In another county CES has help to provide a program that has converted over 2500 acres of marginal land to permanent pasture. With CES help small growers were able to pool resources and arrange for the sprigging of hybrid bermuda grass. Soil fertility management has focused on soil sampling and efficient fertilizer use to avoid non point pollution of surface water. In one county CES educational

programs have helped to reduce application of low analysis fertilizer by over 70% and increased soil samples submitted for analysis by 100%. Local farmers markets are stimulating growers to try new, alternate enterprises involving cut flowers, ornamentals as well as vegetables. In one county this has resulted in 3 new greenhouse operations and over \$130,000 in new income sources during past few years.

SUCCESS STORIES

Turning Fish Wastes into Compost:

Coastal counties need innovative ideas to deal with seafood waste disposal and solid wastes. In most counties this is carried out by using county landfills as well as other (illegal) methods. In Pamlico county there was a need to reduce or eliminate solid waste volume (waste paper and yard waste) as well as find alternate method to dispose of seafood wastes. At the same time a group of organic growers needed a source of high quality compost as a soil building amendment. Meetings were held with NRCS, Extension Specialists, local business men and organic growers to discuss the possibility of composting the waste into marketable compost product. This group visited existing nearby composting operations in order to assess feasibility of the project. After visiting two composting sites the group applied for and received an grant of \$50,000 to purchase a waste paper shredder and two roll-off boxes for paper storage. Next the group secured yard waste from the landfill and fish waste from seafood houses. An on-farm-demonstration was conducted on land adjacent to the composting site in order to demonstrate to organic growers and other potential customers the value of the composted material. Since the demonstration site had not been farmed for several years, wood ash from the from a wood-burning power plant in a neighboring county was used as source of lime and potash. Information concerning the site was presented to organic growers and gardeners at 3 meetings and tour was conducted at the demonstration site. The compost is being marketed in 100 lb. bags (\$8.00) or as pick-up truck loads (\$25.00). Plans are underway for marketing several sizes of bags and for assigning a brand name. It is estimated that 2,000 bags and 200 pick-up loads per year could return \$21,000 for handling and processing. The development of this project has resulted in a reduction of 35 tons of solid waste to the landfill site, an environmentally sound method of waste disposal/recycling for a \$2 million fish filleting industry, the creation of a new recycling enterprise and a valuable compost product for organic growers. (submitted by Fred May & Pamlico Co. staff)

OBJECTIVES, INDICATORS, DATA COLLECTION METHODOLOGIES

OBJECTIVE 1

Extension improves the use of integrated, interdisciplinary systems approach to the development of sustainable agriculture programs by Extension staff members and its clientele.

INDICATOR 1

Enter the number of Extension staff trained on sustainable agriculture concepts and approaches.

6yr Proj	50

Number of Staff Trained	

1992	64
1993	41
1994	29

1995	122
1996	0
1997	0

Total	256
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Data Collection Methodology

Staff survey. Use a definition of "sustainable agriculture" that fits Sta context.

INDICATOR 2

Enter the number of sustainable agriculture programs and demonstrations implemented.

6yr Proj	50	50
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	Number of Programs Implemented	Number of Demos. Implemented
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1992	22	2
1993	42	190
1994	41	243
1995	751	524
1996	0	0
1997	0	0

Total	856	959
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Data Collection Methodology

Maintain a roster of State and county staff involved in sustainable agriculture programs. Conduct an annual survey to identify programs and demonstrations implemented, projects submitted and, if successful, source of funds.

INDICATOR 3

Enter the number of producers adopting recommended sustainable agriculture practices and the total number of all practices adopted by all producers.

6yr Proj	50	0
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	Number of Producers	Number of Practices Adopted
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1992	0	0
1993	4989	9
1994	4744	9
1995	9949	9
1996	0	0
1997	0	0

Total	19682	27
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Data Collection Methodology

Survey an appropriate sample of producers, selected in the most practical way, and project statewide estimates.

OBJECTIVE 2

Public and private research and Extension organizations cooperate and coordinate efforts to develop sustainable agriculture systems in the US.

INDICATOR 1

Enter the number of projects developed for funding by the Sustainable Agriculture Act of the U.S. Congress.

6yr Proj 2

Number of
Projects
Implemented

1992	0
1993	6
1994	4
1995	6
1996	0
1997	0

Total 16

Data Collection Methodology

INDICATOR 2

Enter the number of projects developed for and funded by sources other than the Sustainable Agriculture Act of the U.S. Congress.

6yr Proj 2

Number of
Projects
Developed

1992	0
1993	1
1994	2
1995	14
1996	0
1997	0

Total 17

Data Collection Methodology

PART B OBJECTIVES AND INDICATORS

ESTIMATED PROGRAM COST

Year	Est. Cost
1992	1368750
1993	1368750
1994	1368750
1995	1368750
1996	0
1997	0
Total	5475000

ESTIMATED FTE COMMITMENT

	Professional			Paraprofessional		
	1862	1890	Other	1862	1890	Other
1992	16.0	1.3	0.0	6.0	6.0	0.0
1993	16.0	1.3	0.0	6.0	6.0	0.0
1994	16.0	1.3	0.0	6.0	6.0	0.0
1995	16.0	1.3	0.0	6.0	6.0	0.0
1996	0.0	0.0	0.0	0.0	0.0	0.0
1997	0.0	0.0	0.0	0.0	0.0	0.0
Total	64.0	5.2	0.0	24.0	24.0	0.0

ESTIMATED VOLUNTEER PARTICIPATION

Year	Volunteers
1992	120
1993	120
1994	120
1995	120
1996	0
1997	0
Total	480

ADDITIONAL COMMENTS

PROGRAM CONTACTS

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NORTH CAROLINA 1995 ANNUAL REPORT:
WASTE MANAGEMENT (04)

NARRATIVE SUMMARY OF ACCOMPLISHMENT

Over 1,100 communities were assisted in successfully implementing new solid waste management options. Over 38,000 clientele reported more environmentally responsible purchasing decisions, 300,267 reported increased participation in recycling programs, 14,082 initiated backyard composting and 613 communities implemented new recycling programs. This helped many counties reach the 1991 Solid Waste Management Act Requirement of a 25% reduction of waste going to landfills.

SUCCESS STORIES

"Earth Angel"

Project "Earth Angel" is a multi-faceted environmental education program conducted over the last 3 years in one county to provide "user friendly" public education related to waste reduction and recycling/composting. Major funding for the project came from an EPA environmental education grant. Components of the project include point-of-purchase posters and shelf tags in supermarkets; recipe sheets for making non-hazardous household cleaning supplies; costumed characters who taught at fairs, after school sites and in conjunction with store displays; a puppet show; coloring/project books designed to help young children learn about recycling and waste reduction; and family environmental retreat and field days held at a 4-H Camp. Over 60 volunteers were involved with the project, educating nearly 34,000 county residents with positive messages about waste reduction and recycling/composting.

"Clean Cat"

"Clean Cat", a youth component of a five-county recycling program designed by Extension Home Economists, was selected by a school's kindergarten class. "Clean Cat" made a personal visit with the Extension Home Economist assisting with the litter/recycling lesson. The 78 students were encouraged to complete their workbooks, with their teachers's direction, and learn the song and rap that accompanied the project. Their kindergarten graduation focused on the environmental theme, "It's Our World." The Extension Home Economist was invited to return to address the students' parents about local environmental issues and to encourage parents to actively support what their children had learned. Then the students performed the project's song and rap. "Clean Cat" also made another popular personal appearance at graduation. She made a big impression, so much so that one kindergarten student called the Extension Home Economist at the Extension Office after the close of school to see if "Clean Cat" could visit her home. When asked why, the student responded, "I want my little brother to meet 'Clean Cat'!!!" After much inquiry, the student reluctantly accepted the fact that "Clean Cat" would not be able to make personal home visits!

'Trash Safari'

The Extension solid waste educational efforts in a county have been enhanced by the networking activities with county government, business, industry, schools, and civic groups. The County Board of Commissioners formerly requested the Extension Service assume the responsibility of solid waste education within the county. County commissioners were among the groups that participated in a "Trash Safari", an educational tour of the county solid waste facilities, landfill and convenience site. Agents conducted a four-hour formal training session for the county's convenience site attendants and several sessions at the convenience sites. Extension educational efforts resulted in the county recognizing the need for a full-time solid waste ordinance officer/recycling coordinator which was hired in 1993. Three Extension Solid Waste Task Force members served on the initial county Solid Waste Advisory Board which developed

a solid waste ordinance which was adopted by county commissioners.

"County-wide Solid Waste Plan"

The North Carolina Office of Waste Reduction published a report in the early '90's of all the counties in the state showing the current status of waste collection, recycling, landfill operations and projected life expectancy. The county had a landfill that was expected to last 15 years, had 25 un-manned green box sites for collecting household waste and had no recycling program. On the basis of this report and a recommendation from the county's advisory leadership, an Extension Solid Waste Task Force was organized and immediately started exploring what could be done, what needed to be done, and the alternatives and consequences. This group and the Extension staff consulted with many experts, Council of Government, "Keep America Beautiful" representatives, waste management professionals, county and city government officials and employees. The Task Force conducted an "educational needs" survey, conducted two pilot recycling projects, and assisted with the development of the county's solid waste plan.

"County Solid Waste Management Program"

A county completed a new solid waste management program, constructing eight homeowner convenience waste sites, closing the county landfill, and contracting with a private company to remove all garbage and recyclable materials. The old landfill site will continue to be used to assemble materials, take construction and yard wastes. Extension played a major role in the entire program, providing all educational materials, brochures, handouts, and other support. Extension trained master waste managers and volunteers, and extension staff conducted an exhaustive telephone survey to support planning of the new system, one of the few volume/fee based programs in the country. The county is now approaching a 38% (of a required 40%) reduction in the amount of solid waste generated, with more than two years left to reach the goal. Extension, in cooperation with the county, received a \$2000 grant to support recycling of pesticide containers, further reducing the waste stream and increasing the total amount of materials recycled within the county.

"Vermicomposting"

As a result of grant monies, one county's Master Gardeners developed a Yard Waste Backyard Composting Demonstration Center. The mission of the center is to help residents gain knowledge on the composting process, how to make compost, uses and benefits of compost, and proper soil management using compost.

With nine composters and demonstration gardens, the Master Gardeners have given over 1,000 hours to maintain the center and teaching persons of all ages as well as developing the vermicomposting technique. The county contributed \$140 to help the Master Gardeners produce a brochure entitled, "Vermicomposting, Natures Recycling Machines."

OBJECTIVES, INDICATORS, DATA COLLECTION METHODOLOGIES

OBJECTIVE 1

Consumers will make purchasing decisions consistent with environmental responsibility, including increased purchases of recycled materials.

INDICATOR 1

Enter the number of clientele reporting more "environmentally responsible" purchasing decisions.

6yr Proj 79950

Number of
Clientele

1992	19212
1993	52025
1994	9902
1995	38045
1996	0
1997	0

Total	119184
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Data Collection Methodology

Follow-up surveys (sample).

INDICATOR 2

Specify types of purchasing decisions made.

1995 ACTUAL RESULT(S)

Data Collection Methodology

Follow-up surveys (sample).

OBJECTIVE 2

Community decisionmakers will increase their capacity for analyzing solid waste management options, including comparative costs and benefits, giving meaningful attention to disempowered populations.

INDICATOR 1

Enter the number of communities assisted in successfully implementing new solid waste management options.

6yr Proj	100
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Number of Communities

1992	40
1993	259
1994	1162
1995	504
1996	0
1997	0

Total	1965
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Data Collection Methodology

Staff reports.

OBJECTIVE 3

Community decisionmakers and consumers will be able to implement strategies that enhance marketing recycled materials.

INDICATOR 1

Enter the number of communities that implemented successful recycling programs.

6yr Proj	100
----------	-----

Number of Communities

1992	24
1993	443
1994	186
1995	613

1996	0
1997	0

Total	1266

Data Collection Methodology

Follow-up surveys of participating communities (sample).

INDICATOR 2

Enter the number of clientele reporting increased participation in recycling programs.

6yr Proj	70850
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Number of
Clientele

1992	18560
1993	280093
1994	192122
1995	300267
1996	0
1997	0

Total	791042

Data Collection Methodology

Follow-up surveys of participating communities (sample).

PART B OBJECTIVES AND INDICATORS

ESTIMATED PROGRAM COST

Year	Est. Cost
1992	2150000
1993	2150000
1994	2150000
1995	2150000
1996	0
1997	0
Total	8600000

ESTIMATED FTE COMMITMENT

	Professional			Paraprofessional		
	1862	1890	Other	1862	1890	Other
1992	41.0	0.0	0.0	1.0	0.0	0.0
1993	41.0	0.0	0.0	1.0	0.0	0.0

1994	41.0	0.0	0.0	1.0	0.0	0.0
1995	41.0	0.0	0.0	1.0	0.0	0.0
1996	0.0	0.0	0.0	0.0	0.0	0.0
1997	0.0	0.0	0.0	0.0	0.0	0.0
Total	164.0	0.0	0.0	4.0	0.0	0.0

ESTIMATED VOLUNTEER PARTICIPATION

Year	Volunteers
1992	3819
1993	3819
1994	3819
1995	3819
1996	0
1997	0
Total	15276

ADDITIONAL COMMENTS

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NORTH CAROLINA 1995 ANNUAL REPORT:
WATER QUALITY(05)

NARRATIVE SUMMARY OF ACCOMPLISHMENT

During 1995 the swine industry has continued to expand in the state with much of it occurring in Sampson, Wayne, and Duplin Counties. Agency assistance has been utilized on the design and management of 7 new waste treatment lagoons and waste utilization plans have been developed for 28 producers with 465 acres. In addition, 135 producers with 2700 acres have calibrated spreaders or irrigation systems to apply manure at optimum rates and application patterns.

Nutrient management plans have been developed for 75 percent of the cropland in the target area. This year 95 producers with 3400 acres have certified that they have followed the plan that was developed for their farm. These plans account for all forms of nitrogen available on the farm and ensure that they are applied at optimum times for crop utilization. The amount of nitrogen that is to be applied is based on the specific crop, the soil type, and the realistic yield expectations.

Pest management plans have been adopted by 4 producers with 53 acres of specialty crops. Two pesticide container recycling sites were operated with approximately 2000 pounds of container collected.

There have been 20 meetings/tours to discuss water quality related topic with 620 participants. These meetings have involved public policy makers, private sector interest groups and private land owners.

SUCCESS STORIES

There are between 500 - 600 swine producers in Sampson County, NC who by regulation must operate under the auspices of the present 0200 water quality non-discharge regulations. Although these regulations require a mandatory waste management plan, they lack an important area of concern. That concern is the proper application of swine waste in regards to both uniformity of application and actual application rates.

In response to these concerns a 1.5 hour training session was prepared for swine producers in the area which dealt with nitrogen rate applications based on actual waste analysis, uniformity of application, and waste irrigation records documentation. This training material was presented at 13 meetings to a total of 619 swine producers.

Seventy-five farmers cooperated with EPA in a special ground water quality study. EPA was very pleased with the cooperation they received and the water quality in those wells was good. There were very few pesticide detects and none were above the health advisory limit.

OBJECTIVES, INDICATORS, DATA COLLECTION METHODOLOGIES

OBJECTIVE 1

NUTRIENT MANAGEMENT

Agricultural producers will reduce/prevent water degradation from plant nutrients.

INDICATOR 1

Enter the average annual rate of application of commercial nitrogen fertilizer in the identified problem area for the crop, the nitrogen fertilization of which is expected to pose the greatest nitrate threat to water quality in the state/territory over the next four years. (Press F2 for definitions and suggestions).

6yr Proj	corn	110	15117
Name of Crop	Average Lbs/acre of	Total Acres of Crop in	

		N Applied	Problem Area
1992	corn	165	0
1993	corn	155	16000
1994	corn	130	16000
1995	corn	130	16000
1996		0	0
1997		0	0

Data Collection Methodology

1. Fertilizer recommendation for corn is 120-140 lbs/acre.
2. Published recommendations in North Carolina Agricultural Chemical Manual and Extension Soil Fact Sheets are used.
3. Data is collected by project personnel which survey all farms.

INDICATOR 2

Please list in this narrative section the THREE highest priority practices for producer adoption that potentially result in reduced rates of application of commercial nitrogen to the identified crop and/or potentially reduced rates of loading of nitrate to water resources in the identified problem area. And, DESCRIBE Extension plans to get these practices adopted. Choose specific practices from the list available via the F2 key. Modify and add to the list as necessary.

1995 ACTUAL RESULT(S)

1. Nitrogen recommendations are bases on crop needs, soil type, and yield potential.
2. Credit is given for all sources of nitrogen including animal waste, le crops, and cover crops which are plowed in.
3. Split application of nitrogen is used on soils with high leaching potential.

Data Collection Methodology

1. Fertilizer recommendation for corn is 120-140 lbs/acre.
2. Published recommendations in North Carolina Agricultural Chemical Manual and Extension Soil Fact Sheets are used.
3. Data are collected by project personnel which survey all farms.

OBJECTIVE 2

PESTICIDE MANAGEMENT

Agricultural producers will reduce/prevent water degradation from pesticides.

INDICATOR 1

Enter the acres of application of the most water quality sensitive pesticide for the selected crop. This pesticide has the active ingredient which is expected to pose the greatest pesticide threat to water quality in the state or territory over the next four years. (Press F2 for definitions and suggestions).

6yr Proj	alachlor	corn,soybeans	13537	27073
	Name of Pesticide	Name of Crop	Acres Applic. of Pesticide to Crop	Total Acres of Crop in Problem Area
1992	alachlor	corn,soybeans	13537	27073
1993	alachlor	corn	9000	16000
1994	alachlor	corn	8200	16000
1995	alachlor	corn	8000	16000
1996			0	0
1997			0	0

Data Collection Methodology

Crop: Corn

Data Collection: From ASCS reports.

INDICATOR 2

Please LIST in this narrative section the THREE highest priority practices for producer adoption that potentially result in reduced acres of application of the pesticide to the crop and/or potentially reduced rates of loading of the pesticide to water resources in the identified problem area. And, DESCRIBE Extension plans to get these practices adopted. Choose specific practices from the list of examples available via the F2 key. Modify and add to the list as necessary.

1995 ACTUAL RESULT(S)

1. Plan planting to reduce potential for pest infestation.
2. Select the pesticide with the least potential for negative water quality impacts.
3. Use scouting to determine the timing of pesticide application.

Data Collection Methodology

OBJECTIVE 3

ANIMAL WASTE MANAGEMENT

Agricultural producers will reduce/prevent water degradation from animal wastes.

INDICATOR 1

Enter the type of animal waste that is expected to pose the greatest threat to water quality in the state/territory over the next four years. Then, enter the number of animal units (of the species of animal producing the identified type of animal waste) for which producers use one or more practices to hold to an acceptable degree the runoff and/or infiltration from concentrations of the specified type of animal waste. (Press F2 for definitions and suggestions.)

6yr Proj	swine	22800	57000

	Specified Animal Waste	Animal Units for which Practs. Used	Total Animal Units in Prob. Area

1992	swine	22800	57000
1993	swine	34000	60000
1994	swine	45000	71000
1995	swine	58000	75000
1996		0	0
1997		0	0

Data Collection Methodology

Type of waste: Lagoon Liquid

Data Source: Extension Agent Survey

INDICATOR 2

Please LIST and discuss in this narrative section the THREE highest priority practices for producer adoption that potentially result in holding animal waste runoff and infiltration to an acceptable degree and/or potentially reduced rates of loading of animal wastes to water resources in the identified problem area(s). And, DESCRIBE Extension plans to get these practices adopted.

Choose specific practices from the list of examples available via the F2 key. Modify and add to the list as necessary.

1995 ACTUAL RESULT(S)

1. Upgrade existing waste storage facilities.
2. Properly construct new waste storage facilities.
3. Follow waste utilization plans.

Data Collection Methodology

OBJECTIVE 4

QUALITY OF WELL WATER/WELLHEAD PROTECTION

Households will protect/improve quality of private domestic use well water.

INDICATOR 1

Enter the number of domestic-use wells in the problem area, the number of such wells tested, and the number of those wells tested found to be polluted, i.e., do NOT meet health standards, due to biological, nitrate and/or pesticide contaminants. (Press F2 for definitions and suggestions.)

6yr Proj	150	750	1500
	Number of Tested Wells Polluted	Number of Wells Tested	Total Number of Wells in Problem Area
1992	40	189	1500
1993	24	98	1500
1994	24	120	1500
1995	24	120	1530
1996	0	0	0
1997	0	0	0

Data Collection Methodology

Data sources are:

1. North Carolina Extension Groundwater Education and Testing Program and EPA Well Testing Program

INDICATOR 2

Please LIST in this narrative section the THREE highest priority wellhead protection practices that potentially result in minimizing the number of polluted wells in the identified problem area(s). And, DISCUSS Extension plans to get these practices adopted. Choose specific practices from the list of examples available via the F2 key. Modify and add to the list as necessary.

1995 ACTUAL RESULT(S)

1. Properly site household waste system away from the well.
2. Mix and load chemicals away from the well.
3. Properly maintain the septic system.

Data Collection Methodology

OBJECTIVE 5

PUBLIC POLICY EDUCATION

Public officials and citizens will act at the local level to protect and/or improve water quality.

INDICATOR 1

Enter the number of counties in the identified problem area(s) where Extension conducts public policy education to improve/protect water quality, and the total number of counties in the identified problem area. (Press F2 for definitions and suggestions.)

6yr Proj	3	3
	Counties	Total Number
	Recv. Ext.	of Counties
	Pub. Pol. Ed.	in Prob. Area
1992	3	3
1993	3	3
1994	3	3
1995	3	3
1996	0	0
1997	0	0

Data Collection Methodology

INDICATOR 2

Please LIST in this narrative section the THREE highest priority public policy education processes that potentially result in strengthening public policy regarding water quality in the identified problem area. And, DESCRIBE Extension plans to get these processes implemented relative to community leaders, local government, etc. Choose specific processes from the list of examples available via the F2 key. Modify and add to the list as necessary.

1995 ACTUAL RESULT(S)

1. Inform policy makers, public officials, and citizens on the risks and of impaired water quality and alternative solutions.
2. Inform policy makers and public officials on sources and utilization of water quality data, scientific studies, and state/federal regulations and guidance documents.
3. Involve all key persons, public sector agencies, and private sector organizations in identifying water quality problems and evaluating alternative solutions.

Data Collection Methodology

PART B OBJECTIVES AND INDICATORS

ESTIMATED PROGRAM COST

Year	Est. Cost
1992	4497500
1993	4497500
1994	4497500
1995	4497500
1996	0
1997	0
Total	17990000

ESTIMATED FTE COMMITMENT

	Professional			Paraprofessional		
	1862	1890	Other	1862	1890	Other
1992	79.3	0.0	0.0	12.3	0.0	0.0
1993	79.3	0.0	0.0	12.3	0.0	0.0
1994	79.3	0.0	0.0	12.3	0.0	0.0
1995	79.3	0.0	0.0	12.3	0.0	0.0
1996	0.0	0.0	0.0	0.0	0.0	0.0
1997	0.0	0.0	0.0	0.0	0.0	0.0
Total	317.2	0.0	0.0	49.2	0.0	0.0

ESTIMATED VOLUNTEER PARTICIPATION

Year	Volunteers
1992	3500
1993	3500
1994	3500
1995	3500
1996	0
1997	0
Total	14000

ADDITIONAL COMMENTS

PROGRAM CONTACTS

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NORTH CAROLINA 1995 ANNUAL REPORT:
YOUTH AT RISK(06)

NARRATIVE SUMMARY OF ACCOMPLISHMENT

During the past four years, 49 North Carolina counties have been involved with the youth-at-risk initiative. This initiative has involved total staff participation and has allowed the Cooperative Extension Service to expand its programming effort to new audiences.

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. Effective youth-at-risk programs must be holistic in design, involve the expertise of various groups and agencies, and use the ecological model to encompass all factors which place youth at risk. Coalition of agencies must identify the needs of youths and design programs to address the needs and build support systems for youths and families. The North Carolina Cooperative Extension Service has provided leadership in building coalitions and designing educational programs for youths in high risk environments.

Although youth at risk was a new programming area for the Cooperative Extension Service, Extension agents and state specialists have been extremely successful in designing and implementing programs to support youths and families in at risk environments. A primary reason for the success of Extension's efforts in youth-at-risk programming is the effective use of coalitions. During the past four years, more than 373 coalitions worked to address youth-at-risk issues. These groups were involved with needs assessments and helped Extension agents plan, implement, and evaluate programs for youth-at-risk. Coalition members were active as teachers, mentors, and role models for at-risk youths. Coalition members also identified financial and human resources; prioritized needs and programs, and provided accountability to stakeholders. Coalitions have helped maximize scarce resources and bring together the expertise needed for effective and efficient youth-at-risk programming. Approximately 200 long-term coalitions worked to monitor the long-range goals. More than 12,515 volunteers have donated over 33,977 days to the Youth-At-Risk Initiative. Over \$1,289,378 of federal, \$2,259,856 of state, \$141,817 of local government, and \$245,761 private dollars were used to support youth-at-risk.

School-age child care programs were also used to support at-risk youths and families during the past four years. Extension agents provided training for over 5,114 school-age child care workers. These workers provided care for nearly 64,078 youths. Youths in before and after school child care participated in many Extension sponsored educational programs, including 4-H, home economics, and agriculture.

The Cooperative Extension Service youth-at-risk programs have had a

positive impact on youths. Over 1,893 adjudicated youths have reduced their involvement in the judicial system. Nearly 27,049 youths have improved their academic performance as a result of Extension programs. Improved study habits, increased school attendance, and reduction of out-of-school and in-school suspensions have also occurred. Nearly 5,610 youths have decreased their alcohol and other drug usage after participating in Extension programs. There had been a reduction of behavior problems at home, school, and with authority figures. Many youths are postponing sexual involvement. There has also been a reduction in teenage pregnancy. Career training and preparation have been provided to over 25,338 youths. Many youths

have improved their literacy skills as a result of youth-at-risk programs. Over 1,301 science and technology programs have been conducted. Nearly 1,900 youth improved their literacy skills as a result of Cooperative Extension programs.

In addition to these results, youths have improved their life skills, self-esteem, and decision-making skills. Youths have developed conflict resolution skills and improved their interpersonal skills. Youth-at-risk are being mainstreamed into 4-H and are increasing their knowledge in numerous 4-H subject matter areas. These youths are participating in summer day and residential camps, public speaking and fashion revue contests, county fairs, presentations, and various citizenship and leadership roles. Many have improved their communication skills with peers, parents, and other adults. Parenting classes have been provided to help parents be more effective at communicating with and relating to their children.

Cooperative Extension's work in youth-at-risk has also helped develop many other successful programs for youth and families who live in at-risk environments. In 1994, Governor Hunt initiated the Support Our Students Program (SOS). The SOS program is an after school program which targets at-risk, middle school age youths. The 52 non-profit agencies in 52 counties which received these grants, 6 of them are 4-H programs, are being supported by State and County Extension personnel in the areas of training, technical assistance, and curriculum.

The Governor's Smart Start program, and early childhood initiative started in 1992-93, is also being supported by Extension agents. The program is in more than 36 counties and many Extension agents serve on Smart Start Advisory committees and steering groups.

Extension agents were also involved with the development of Family Resources Centers in numerous counties. During the development of the centers, the Department of Human Resources sought the support of county Extension agents to help plan, design, and implement programs to support the work of the Family Resource Centers. Resources of the Cooperative Extension Service serve an important role in the success of the Centers. Extension agents have been very successful in building collaborative relationships with schools and other groups to improve the quality and availability of school-age care programs. Through Dependent Care, Block Grant, AmeriCorps, and Support Our Students funds, more than \$3.3 million have been used to help create safe and developmentally appropriate child care for children and youths in most of the North Carolina 100 counties. These have helped decrease many of the negative consequences associated with children being home alone (i.e. accidents, pregnancy, substance abuse, loneliness, depression, and over exposure to television).

Over the past four years, the Cooperative Extension Service has demonstrated its capacity to have a positive impact on families and youths who live in at-risk environments. The impact of the youth educational opportunities planned and conducted by Cooperative Extension has prevented many youths from dropping out of school, becoming pregnant, getting involved with substance abuse, and being incarcerated. These youths will become productive, contributing, and successful members of society. The impact of Extension's youth-at-risk programs will benefit society for many years. However there are still many youths and families who live in at-risk environments and who need the support of the Cooperative Extension Service.

The term "Youth At Risk" and the efforts of youth work four years ago seemed to carry the implication that the Cooperative Extension Service could direct its work to this issue and solve the youth-at-risk problem. The fact is that dual

working parents, single parents, poverty, and negative peer pressure will continue to place youth at risk of failing to reach their potential. Many youth do not have support systems to help them cope with risk factors (e.g., poor parenting, negative peer pressure, poverty, poor school performance, etc.) which they face. Research suggests that protective factors at various levels -- individual, family, peer group, school, and community -- must be in place to support youth-at-risk audiences. The global society of today is creating greater competition in the marketplace. Many youths are not prepared for the job market. School dropout, low academic achievement, teen pregnancy, drug abuse, child abuse, crime, violence, and other adverse behavior prevent youths from being competent, coping, and contributing members of society.

During the past four years Extension agents in 49 counties demonstrated a need for youth-at-risk programming. These agents have been successful in building coalitions to identify youth needs and designing programs to address these needs. The agents have secured funds to support youth-at-risk work. Agents have been effective in utilizing volunteers and other resources to build support systems for youth-at-risk audiences. Agents are using long-term impact on targeted audiences. Agents have developed holistic programs which involve all aspects of the youths' environments: parents, families, schools, peers, and community. Appropriate resource people are being used to ensure effectiveness and efficiency of programs delivered.

In summary, there continues to be a need for youth-at-risk programming. Extension agents have been successful in building coalitions, utilizing diverse volunteers, and securing funding to help establish support systems for youths. The Cooperative Extension Service is an important component in helping communities develop effective youth-at-risk programs. Therefore, there is a need for Cooperative Extension to continue providing leadership in helping design programs for youths who live in high-risk environments. However, these programs must be holistic and involve all aspects of a youth's environment (i.e. family, peer group, community, school, and work). The work of Cooperative Extension personnel has increased Extension's credibility among various groups and agencies. More and more groups are looking to Extension to provide leadership in youths and family programs. It is imperative that Cooperative Extension take the opportunity to provide leadership in this important societal issue. With Extension's leadership and support, programs can be designed to help youths become competent, coping and contributing members of society.

SUCCESS STORIES

Halifax County

Operation Restart, funded by Community-Based Alternative funds and the County of Halifax, is designed specifically for adjudicated youth. Operation Restart is a therapeutic program for youth. The major goal of the program is the reduction of repeat offenses and a reduction of court petitions of youth. The program focuses on improved academic achievement, increased self awareness and self-esteem, increased family involvement and reduced involvement in the judicial system. The program is designed to serve 40 youth per semester, 80 total, and 20 in a special summer program. Weekly work sessions, camping experiences and community service activities are vital to the success of the program.

For the past four years, the CBA program has served 810 youths. Michael Pittman, the director, has become a featured speaker at nearly every school, every church, and every community in the county. He was invited to address the NC Legislative Assembly to share the successes of participating youths.

Repeat offenses have been drastically reduced as well as court petitions

for program youths. Adjudicated youths have become honor roll students and are regularly attending school. Referrals are from Juvenile Services and the Juvenile Judge. Because of the increase the number of referrals in 1994 CBA funded a female employee to work in the program to serve the female adjudicated population. A van has also been purchased to support the program.

Guilford County

During 1994-95, Extension Agents in Guilford County conducted a fourteen session group leadership development program entitled, "Community Voices" for the Smith Homes Public Housing Community in Guilford County in cooperation with the Greensboro Housing Authority. The program focused upon teaching group leadership techniques such as communicating effectively, gathering information through surveys and interviews, getting people to work together effectively, and systematically solving community problems. The Smith Homes Community is one of the first public housing communities in Guilford County to participate in a group leadership development program.

Eight individuals successfully completed the program. Since the training, one individual ran for and was elected to the office of Vice-President of her community's Resident Council. She stated that she had never realized the importance of being involved in the Resident Council until her participation in the "Community Voices" program. In addition, the eight graduates are now working with the Resident Council to solve the problems of drug infestation and lack of supervised activities for the children in their community. Participation in the "Community Voices" program also helped to instill a great deal of pride in the graduates. They now feel that they have something positive to offer to their community.

Cherokee Indian Reservation

Approximately 410 high risk youths have participated in Extension sponsored programs that at some point dealt with drug and alcohol prevention. Many youths have been utilized as teen leaders to teach younger youths the subject matter they received. Through these efforts, they have built stronger self-esteem and positive leadership qualities. Not only have these teens shown development, but they have also become positive role models for the younger youths.

Nash County

A Nash County 4-H Fire Safety program has helped Nash County youths stay safe. Many youths are members of a two-parent working family and are left alone at home after school for three hours. In order to reduce some of the risk factors for 9-12 year olds at home, 4-H and the Nash County volunteer fire departments conducted Fire Safety and Control program. The program taught youth the "Nature of Fire", "Use of Fire Extinguishers", "Smoke Detectors and Fire Alarms", "Identifying Fire Hazards in the Home", "Developing a Home Fire Escape Plan", "and "How to Call the Emergency System". A total of 681 youths completed the program. The impact of this program, according to the fire departments, was a reduction in fire calls in the community. It also reduced property damage and loss.

Alleghany County

Extension agents in Alleghany County coordinated the Twenty-Fourth Annual Special Opportunity Camp (SOC) a week-long residential camp for 28 economically or socially disadvantaged youth that is run by volunteers. These children learned the basic tools to fit in to society and develop into leaders of tomorrow. Special Opportunity Camp was developed to meet the needs of the less fortunate in Alleghany County and help them to become useful members of, and not a menace to society. Each camper learned about savings accounts and opened up a notebook account with money from NAE4-HA Youth at Risk grant.

Davie County

Three years ago in Davie County, a school councilor nominated a by-racial child whose parents had limited income. The councilor believed that the family did not encourage "William" to participate in activities because of his racial situation, and as a result he often seemed lonely and withdrawn. William has attended 4-H Camp for the past three years and his school councilor credits his camp experiences as being a large part in the turn-around in his personality by proving to both him and his family that he can be accepted for who he is.

EXEMPLARY PROGRAMS

Johnston County

In Johnston County during 1993 a \$12,000 block grant from North Carolina 4-H and Department of Human Resources was used to conduct the first needs assessment for after school child care for children in K-5th grades in Johnston County. The results indicated 1 in 4 children needed a place to stay after school. Parents also indicated they would be willing to pay \$2.25 an hour for service.

Two subsequent grants have provided start-up funds for three after school programs. Three summer programs have 55 students ages 5-10. Ten child care providers have been trained by a 4-H system manager in quality after school care. Two schools with 40 youth began in fall 1994 for the 94-95 school year. Twenty high school senior students have volunteered up to 15 hours of community service time supporting the teachers by helping with activities, playground supervision, reading, homework and free play.

Greene County

The 4-H S.T.A.R. (Stop Think Act Responsibly) program in Greene County is a life-skills educational program designed to help youth and families identified by juvenile court learn and benefit from 4-H educational programming. Sixteen youth were referred to 4-H S.T.A.R. from the court system and schools. Youth received 4 hours of contact each week with 4-H educational materials. The program networked with the Greene County Sheriff's Department which provided a liaison officer who coordinated law enforcements resources such as jail tours, drug abuse curriculum and scared straight materials. Greene School System provided meeting facilities and transportation. Through utilization of 4-H CareersSmarts, 4-H SPACES, and 4-H Stepping Into Tomorrow, the 16 participants developed self-confidence, improved self-esteem and increased their academic abilities. Eight 4-H S.T.A.R. participants successfully graduated from the program at an awards banquet. They received their awards in front of parents, peers and local government officials.

Teachers of 4-H S.T.A.R. participants declared that students behavior, classroom conduct and academic skills have improved as a result of participation in the program activities.

As of June 30, 1995 : 93% of 4-H S.T.A.R. participants have no petitions filed in the juvenile court which is a savings of court cost and time.

93 % of participants have displayed no violence at school.

Only two participants were suspended from school while enrolled in S.T.A.R.

45 % of participants increased their academic achievement.

Harnett County

During the past three years, more than twenty public and private agencies and more than 1,800 volunteer hours have contributed to the success of the After School Enrichment Program in Harnett County. There is one Before & After

School program and three After School programs. Our newest site was opened in May, 1995 at the Washington Heights and Harnett Terrace Housing Developments, Dunn. Approximately 194 children were served through the After School Program.

In order to provide wrap-around care, the After School Programs operated during the full school year, teacher workdays and during Christmas and Easter break.

The After School Program not only enriches the lives of the youth enrolled in the program, but it also offers parents a safe alternative to child care. Some parents would not be able to work if it were not for the program. Parents can relax knowing that their child is not "home alone". Homework tutoring offered through the program is not only helpful to the children but to the parents and teachers as well.

Wake County

In Wake County, Che Bland, a rising eight grader, has benefited significantly from the SOS (Support Our Students) program. Che has been an SOS participant since the first day of the program at Daniels Middle School and is continuing his participation through the SOS Summer STARS program. Che has shown improvement in behavior, attitude and academics.

Through SOS, Che has received academic tutoring, conflict resolution training, career development counseling and leadership development training. Perhaps most important of all, Che has had a place to come after school where he receives structure, positive reinforcement, role modeling, discipline, and fun. His guardian commented, "SOS has been a lifesaver. I no longer have to worry about what Che is doing after school. I know he is safe".

Che was a student with a long history of in-school disciplinary problems. He created problems in the classroom and showed little respect for teachers. Since he joined the SOS program, his school records reflect decreased discipline problems. By the end of the school year, his teachers reported that his attitude was more positive and that he was beginning to demonstrate academic improvement as evidenced by increased homework completion and higher test scores.

Che has an SOS tutor with whom he enjoys working. He speaks highly of his tutor and looks forward to his visits. Che attended summer school to improve his academic performance. He completed his homework and expresses his determination to get A's in summer school. Che used to have difficulty getting along with peers. He now develops positive relationships and is well liked and well respected among SOS participants and staff. He has also used his artistic talent in positive ways, including winning third place among seventh graders in a Sickle Cell Anemia poster contest.

Che Bland continues to show improvement daily, with few setbacks. He shows determination to get himself on the right track. With the help and guidance of SOS peers, staff and volunteers, he is now able to recognize his mistakes and learn from them. Continued assistance will enable him to lead a productive and successful life.

Multi-County Success

More than 65 campers and 45 volunteers took part in the first ever CBA/4-H Youth Forum sponsored by the Cooperative Extension Service and the CBA Programs in Carteret, Craven, Onslow, Granville, Cherokee, Pamlico and Wake counties. This event was held at Mitchell 4-H Center in Swansboro, NC.

Students spent 4 days learning about personal grooming, manners, sexually transmitted diseases, AIDS, self-control, cooperation, etc. Recreational

activities included basic snorkeling, sailing, canoeing, a field trip to Bear Island, etc.

All events and activities including campers fees were obtained through the grant writing team and were in excess of \$35,000.00. In addition to this activity, students were selected from a local high school and were trained and given the opportunity to oversee and supervise many of the activities. More than 15 students participated.

OBJECTIVES, INDICATORS, DATA COLLECTION METHODOLOGIES

OBJECTIVE 1

SCHOOL AGE CHILD CARE EDUCATION: Extension will help communities establish school age child care educational programs for ages 5-14 and encourage existing providers to adopt Extension curriculum.

INDICATOR 1

Enter the number of communities needing School Age Child Care (SACC) out of the total number of communities surveyed.

6yr Proj	41	30

	Number of Communities Surveyed	Number Needing SACC

1992	11	9
1993	430	430
1994	372	372
1995	388	388
1996	0	0
1997	0	0

Total	1201	1199

Data Collection Methodology

Community needs assessment.

INDICATOR 2

Enter the number of children served by child care programs established with Extension involvement.

6yr Proj	5000

	Number of Children Served

1992	1000
1993	23475
1994	15554
1995	25049
1996	0
1997	0

Total	65078

Data Collection Methodology

Survey child care providers.

INDICATOR 3

Enter the number of existing provider staff receiving training.

Enter the number of provider staff adopting Extension curriculum.

6yr Proj	4000	3000
	Number of Provider Staff Trained	Number Adopting CES Curriculum
1992	1610	1175
1993	2060	2060
1994	1357	1357
1995	1697	1697
1996	0	0
1997	0	0
Total	6724	6289

Data Collection Methodology
Survey child care providers.

OBJECTIVE 2

YOUTH LITERACY: Extension will enhance the reading and science/technology literacy of program participants.

INDICATOR 1

Enter the percent of the total number of participants involved in literacy programs showing literacy improvements.

6yr Proj	15.0	15000
	Percent Showing Improvement	Number of Participants
1992	0.0	0
1993	56.0	9491
1994	100.0	1474
1995	100.0	395
1996	0.0	0
1997	0.0	0
Total		11360

Data Collection Methodology
Staff records of participation and enrollment, supplemented by narrative description of accomplishments.

INDICATOR 2

Enter the number of science/technology programs and/or projects initiated or projects rewritten to emphasize science and technology content and approaches.

6yr Proj	5
	Number of Sci/Tech Programs
1992	0
1993	353
1994	532

1995	416
1996	0
1997	0

Total	1301
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Data Collection Methodology

Staff records of participation and enrollment, supplemented by narrative description of accomplishments.

OBJECTIVE 3

COLLABORATION FOR HIGH RISK YOUTH: Extension will obtain commitment of other academic resources at the Land Grant University and work with community agencies to provide training and other educational components for the developmental needs of high risk youth.

INDICATOR 3

Enter the number of longer-term collaborations/coalitions organized to address complex issues.

6yr Proj	15
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Number of Cooperations/ Coalitions
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1992	3
1993	67
1994	85
1995	48
1996	0
1997	0

Total	203
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Data Collection Methodology

Survey university and community collaborative efforts.

INDICATOR 4

Specify the purpose(s) of longer-term collaboration/coalitions to address complex issues.

1995 ACTUAL RESULT(S)

The long-term coalitions were used for many of the same purposes as coalitions addressed above; however, the long-term coalitions developed holistic programs designed to address issues of families and their children. The primary goal of the long-term coalitions was to develop resources which would improve the quality of life for families. Many of the programs had parent components in addition to the youth-at-risk aspect. Coalitions were used to identify long term goals and reduce and prevent duplication of services. These coalitions provided long-term tracking and evaluation of educational programs provided to youth-at-risk audiences. Specific roles coalition members included accessing needs, prioritizing needs and program funding, referral services, networking to maximize resources, tutors, advisors, teachers, mentors, expanding quality child care services, providing services for children with special needs and increasing availability of child care. Subject matter taught and programs addressed were identical to those listed Number 10 above.

Data Collection Methodology

Survey university and community collaborative efforts.

ESTIMATED PROGRAM COST

Year	Est. Cost
1992	680000
1993	680000
1994	680000
1995	680000
1996	0
1997	0
Total	2720000

ESTIMATED FTE COMMITMENT

	Professional			Paraprofessional		
	1862	1890	Other	1862	1890	Other
1992	9.4	1.8	0.0	3.4	1.3	0.0
1993	9.4	1.8	0.0	3.4	1.3	0.0
1994	9.4	1.8	0.0	3.4	1.3	0.0
1995	9.4	1.8	0.0	3.4	1.3	0.0
1996	0.0	0.0	0.0	0.0	0.0	0.0
1997	0.0	0.0	0.0	0.0	0.0	0.0
Total	37.6	7.2	0.0	13.6	5.2	0.0

ESTIMATED VOLUNTEER PARTICIPATION

Year	Volunteers
1992	1040
1993	1040
1994	1040
1995	1040
1996	0
1997	0
Total	4160

ADDITIONAL COMMENTS

PROGRAM CONTACTS

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NORTH CAROLINA 1995 ANNUAL REPORT:
EXPANDED FOOD AND NUTRITION EDUCATION PROGRAM(07)

NARRATIVE SUMMARY OF ACCOMPLISHMENT
NC07 Expanded Food and Nutrition Education Program

A. Objectives

Three thousand seven hundred and fifty (3,750) EFNEP families will acquire the knowledge, skills, attitudes and changed behavior for nutritionally sound diets and to contribute to their personal development.

Ten thousand (10,000) 4-H EFNEP youth will acquire the knowledge, skills, attitudes and changed behavior necessary for nutritionally sound diets and to contribute to their personal development.

The EFNEP state program will increase interagency cooperation.

Pregnant and parenting teenagers will increase knowledge of maternal/infant nutrition, resulting in improved maternal and infant health.

To increase numbers of WIC mothers establishing lactation (beyond two weeks post-partum: baseline - 75%) and duration of breastfeeding past two months post-partum: (baseline - 17%).

B. Non-Extension Resources

Total of \$807,500 in additional funds. This includes \$430,000 in federal grants mostly from ES/WIC Nutrition Education Initiative funds; \$338,000 in state grants (Health Dept. and Smart Start funds); and \$39,500 from local and private contributions.

Non-Extension agencies providing training, support and/or referrals: Local agencies (Health Dept., WIC program, Social Services-AFDC, DSS/JOBS programs, Governor's Smart Start Program, Schools, Technical Community Colleges, Division of Child Nutrition, Head Start), N. C. Food Bank, Habitat for Humanity, Parks & Recreation programs; Private sector (banks, agribusiness, local business, medical community) Advisory Councils/Committees, Law Enforcement, Churches, Civic groups, United Way, Women's shelters, Women's correctional centers, Day Care sites, Boys and Girls Clubs, After-school programs, Mass media, Le Leche League, homeless shelters, Housing authorities, Youth Foster Homes, Florence Crittendon Homes; graduated program participants. Volunteers who assist in teaching the ERIB2 curriculum.

D. Other Indicators and Accomplishments

Interagency Cooperation

Evidence of increased agency cooperation during the four-year period is clear. The numbers and percent of enrollments of WIC participants in EFNEP rose from 3883 (63%) in FY:92 to 5853 (68%) in FY:95; percent enrollment in the Food Stamp program remained above 50% throughout the four year period when total enrollment increased. Enrollment of WIC participants increased considerably because of ES/WIC grant-funded projects, such as the breastfeeding support program in nine counties, and the pregnant teen program with its expansion throughout the state.

During the same period, EFNEP staff increased their teaching efforts with groups, largely with preformed groups referred from other agencies. Percent of

EFNEP participants being taught in groups rose from 56% in FY:92 to 72% in FY:95. (Note: These numbers excluded 1832 breastfeeding participants in FY:95, who were all taught on an individual basis).

In two large urban counties, EFNEP staff were teaching WIC clients on a fulltime basis, using a modification of the ERIB curriculum, and using a computerized program to reconcile the two reporting systems. It was found that agencies were more responsive to offering the ERIB curriculum when the curriculum proposal had been tailored to their interests, needs and scheduling constraints. By tailoring the curricula, more on-site teaching opportunities have occurred, thus allowing EFNEP to reach more participants with fewer EFNEP funds. Such innovative programs as well as night group meetings have become a necessary delivery mode as more low-income homemakers are employed outside the home.

By the end of FY:95, ten paraprofessional positions for carrying out EFNEP programs in four counties were funded through Smart Start, a state initiative which provided funds to coalitions at the community level. This would not have happened without EFNEP being an important part of the community partnerships.

Dietary Improvement

Of 13,810 homemakers who graduated from EFNEP during the four-year period, 11324 (82%) improved their diets to include at least one serving of foods from each food group (38% increase from program entry). Three thousand five hundred and ninety homemakers (26%) achieved recommended food servings in all food groups, an increase of 23% from program entry.

Breastfeeding Support Programs

Breastmilk provides infants with optimal nutrition for healthy growth and development, in addition to protection from infection and allergic reactions. Breastfeeding is the preferred method of feeding infants.

Beginning in 1992, a pilot program in breastfeeding support to WIC mothers was carried out in Wake Co. Funded by WIC, a specially trained EFNEP paraprofessional carried out in-home breastfeeding support with WIC clients. Analysis of data indicated that greater numbers of women established lactation and were still breastfeeding at 2 weeks postpartum than with a control group. Breastfeeding duration also increased significantly among those who received EFNEP support.

By FY:95, the breastfeeding support program had expanded to eight additional counties, a mixture of urban and rural sites. Seven were established through federal ES/WIC grants and one through the state Smart Start program. In four years, over 4300 WIC clients had received breastfeeding support from EFNEP staff in nine counties.

Results showed that numbers of WIC clients choosing to breastfeed had increased, and that a significantly greater number and percent were still breastfeeding at two weeks, six weeks and eight weeks postpartum when compared with baseline WIC records. These effects were independent of urban or rural status. Similar results were reported in Michigan where the Wake Co. model was carried out with ES/WIC project funds.

In addition to improved infant health, benefits of the program included cost savings from reduced distribution of infant formula to WIC clients while breastfeeding.

Pregnant Teen Program

An ES/WIC grant has addressed the need of support to pregnant teens in achieving positive pregnancy outcome. An experiential curriculum emphasizing

nutrition and peer support involves the teens in interactive learning. The curriculum was piloted tested, edited and printed during the initial year. Delivered in school groups and individually to homebound teens, the project is being evaluated for nutrition knowledge and preparation skills. The ultimate outcome is the birth of babies who exceed the minimum desired birth weight.

Data indicates 90% of the live births exceeded the minimum weight with a mean birth weight of 7 lbs. 6 ounces. Presently 97% of the enrolled teens are WIC recipients at graduation.

The pre/post curriculum survey indicates that the biggest improvement made by the participants is in diet knowledge, followed by knowledge of other prenatal practices. Of the possible 18 lessons, the pregnant teens participated in an average of 12.3. Analysis of the 24-hour food recall showed improvement in the minimum food consumption pattern, but only a slight increase in achievement of the recommended pattern.

The pregnant teen program has experienced success with counties other than the pilot with more than 3,000 pregnant teens being reached through EFNEP in the 4-year period, FY:1992-95. One of the project objectives in the 1994-95 proposal was the training of all EFNEP program assistants against the curriculum "Hey What's Cooking". Since the completion of the training, over 1,000 pregnant teens have been involved. Funding for additional program assistants to target pregnant teens in several counties was secured through a State program "Smart Start".

Northampton County offered "Hey What's Cooking" in two high schools and one middle school. All twelve teens who enrolled delivered healthy babies. The middle school counselor felt that her two students who participated in the program made more progress and a better adjustment to the situation than the student who refused.

Forsyth County gained entry and monetary support of two schools and a home for unwed mothers. Of the babies delivered none have been below the minimum desired weight.

Robeson County took the program into one junior high school. The success of the one program has resulted in plans made to reach more schools in 95-96 and the school system will supply the materials for the hands-on curriculum.

*Expended FTE's

	Prof	Para	Vol	No. Diff. People
1992	8	73.0	13.6	2147
1993	8	76.0	12.0	1821
1994	8	78.3	9.1	1763
1995	9	88.0	11.5	1910

E. Narrative and Implications

The EFNEP program has reached over 24,000 adults and 26,000 youth during the four years ending in FY:95.

While most of them were reached through traditional EFNEP program efforts with individuals and small groups, increased opportunities arose to teach preformed groups referred by cooperating agencies. Percent of adult participants being worked with in groups rose from 56% in FY:92 to 72% in FY:95. Some of the less traditional adult groups reached were in community shelters and correctional centers. Youth were taught in Alternative school programs, After-school

Programs, Youth Foster Homes, Boys and Girls Clubs, as well as in community groups.

Evaluation data indicated that adult and youth participants during FY:92-FY:95 achieved knowledge, skills and dietary improvements similar to those of past years. This indicates that increased teaching in groups has not compromised program results.

Grant funding for cooperative projects has allowed EFNEP to grow in several new directions. Through the ES/WIC initiative, Wake Co. Dept of Health and Smart Start funds, nine counties have participated in breastfeeding support projects.

In four years, over 4300 WIC clients in both urban and rural settings had received in-home breastfeeding support through EFNEP. Results showed increased numbers of mothers choosing to breastfeed, and a significant increase in breastfeeding duration. Similar results were reported in Michigan where the North Carolina breastfeeding support model was implemented through the ES/WIC initiative.

ES/WIC grant funds also supported a special program for pregnant teenagers allowing for development of a curriculum ("Hey, What's Cookin'") which emphasizes experiential learning and skills development. After field testing and evaluation of the curriculum, it was introduced in training to all EFNEP staff early in FY:95. Since then, over 1000 were enrolled, bringing the four-year total to more than 3000 pregnant teenagers being worked with in EFNEP.

Future funding for EFNEP is of critical concern. While some growth of the special projects (breastfeeding and pregnant teen programs) is possible through state Smart Start funds, maintaining the current level of EFNEP will be possible only by leveraging additional local support. Efforts are underway to achieve this goal.

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SUCCESS STORIES

Youth Volunteer Training

Harnett County put into place before the present Plan of Work a volunteer training program that is still preparing adults to work with 4-H EFNEP groups. During the current Plan of Work the county has involved 2,175 youth and graduated them from 167 clubs. Led by 335 volunteers who contributed over 10,903 hours, the youth groups have experienced a standardized core curriculum and the support of belonging to a club.

Youth Summer Day Camps

Northampton County received EFNEP innovative funds to conduct three-week summer

day camp experiences at four locations. One of the economic depressed areas of the state, the county offers few opportunities to its youth. However, the School Food Service provided breakfast and lunch daily through the schools. The project became a collaboration between School Food Service, Public Schools, County Recreation Director and EFNEP. Site selection was based on community family clusters who were in walking distance of the school. The curriculum included nutrition, gardening, fitness, self-esteem, agricultural production and processing enterprises and arts. Trained staff managed the programs but were supported by volunteer teachers. The project resulted in a collaboration that has continued to work together providing positive experiences for the young people.

Program for Obese Youth

Orange County received 15 referrals from their Health Department, Schools, hospital dietitian doctors and other agencies to work with overweight youth. These high risk youth had medical problems, borderline diabetes, asthma, which became exacerbated by the excess weight. In addition, there were family histories of heart disease, asthma and diabetes. Initially, the EFNEP program assistants worked with a few of these youth individually and in groups, but did not feel the special needs of the youth nor their families were met. There was very little parent involvement. EFNEP initiated a 10-week, once a week program for parents and youth as partners focusing on changing eating habits. The Health Department Nutritionist was an integral part of the team so proper attention could be given to the medical problems.

Some lessons were presented to parents and youth in joint sessions. Others were taught separately to allow tailoring to different needs of the youth and parents. Other agencies were involved in teaching the fringe content such as self-esteem, body image, limit setting, and the family tree.

Perhaps one major factor in the success of the program, beyond knowledge gain concerning good nutrition and health, was the development of the support group. The program also addressed the needs of the whole family not just the teen.

The relationships that developed served as motivators for real behavior change reported by the participants:

- 1) Reading labels with focus on fat, calories, and sugar.
- 2) Practicing portion control and selection of nutrient dense foods.
- 3) Parents and youth exercising more.
- 4) Parents and youth working together to make wise food choices.
- 5) Preparation of meals and snacks as a family.
- 6) Improved self-esteem.
- 7) Participants consuming more fruits and carbohydrate foods.
- 8) Less consumption of fast foods, more preparation of meals at home.

Clearly, involvement of the total family proved important in educational programs designed to bring about behavioral change of obese youth.

Adult EFNEP

A young homemaker in a rural mountain county who lived in a very remote area was so inspired after graduating from EFNEP that she began baking many new recipes. During the summer of 1993, she opened her own business, a bakery, in the county seat. Her husband constructed her work tables and display case. They have three small children and need to help support parents who live nearby. The bakery is still in operation going into its third year.

With an award of \$3,000 from the Tennessee Valley Authority, 126 families in a seven-county unit developed family gardens. Each family received \$40 in garden

supplies, which produced an average of \$250 in fresh produce per family (total benefit: \$31,500, from an investment of \$3,000). Several youth groups learned how to preserve their produce and exhibited in the county fair.

OBJECTIVES, INDICATORS, DATA COLLECTION METHODOLOGIES

OBJECTIVE 1

EFNEP families will acquire the knowledge, skills, attitudes and changed behavior necessary for nutritionally sound diets and to contribute to their personal development.

INDICATOR 1

In the table below, enter the total number of EFNEP families who participated in programs to improve diet, and the percentage of those families who actually improved their diets.

6yr Proj	28000	90.0
Number EFNEP Families Participating	Percentage Improving Diets	
1992	3054	88.0
1993	3955	87.0
1994	0	0.0
1995	0	0.0
1996	0	0.0
1997	0	0.0
Total	7009	

Data Collection Methodology
EFNEP data management records.

INDICATOR 2

In the table below, enter the total number of EFNEP families who participated in programs to increase their knowledge of the essentials of human nutrition, and the percentage of those families who actually increased their knowledge.

6yr Proj	15000	80.0
Number EFNEP Families Participating	Percentage Increasing Knowledge	
1992	6179	86.0
1993	4618	89.0
1994	5438	97.0
1995	8635	79.0
1996	0	0.0
1997	0	0.0
Total	24870	

Data Collection Methodology
EFNEP data management records.

INDICATOR 3

In the table below, enter the total number of EFNEP families who participated in programs to increase their ability to select and buy food that satisfies nutritional needs, and the percentage of those families who actually improved food selection.

6yr Proj 12000 90.0

	Number EFNEP Families Participating	Percentage Increasing Ability
1992	0	0.0
1993	3832	78.0
1994	4322	83.0
1995	6959	87.0
1996	0	0.0
1997	0	0.0
Total	15113	

Data Collection Methodology
EFNEP data management records.
INDICATOR 4

In the table below, enter the total number of EFNEP families who participated in programs to improve practices in food production, food preparation, storage, safety and sanitation, and the percentage of those families who improved practices.

6yr Proj 15000 80.0

	Number EFNEP Families Participating	Percentage Improving Practices
1992	0	0.0
1993	3804	72.0
1994	4331	79.0
1995	6682	81.0
1996	0	0.0
1997	0	0.0
Total	14817	

Data Collection Methodology
EFNEP data management records.
INDICATOR 5

In the table below, enter the number of EFNEP families who participated in programs to increase their ability to manage food budgets and related resources (such as Food Stamps), and the percentage of those families who actually improved food management skills.

6yr Proj 15000 67.0

	Number EFNEP Families Participating	Percentage Increasing Ability
1992	6179	63.0
1993	3792	69.0
1994	3317	74.0
1995	5162	82.0
1996	0	0.0
1997	0	0.0

Total 18450

Data Collection Methodology
EFNEP data management records.

OBJECTIVE 2

4-H EFNEP youth will acquire the knowledge, skills, attitudes and changed behavior necessary for nutritionally sound diets and to contribute to their personal development.

INDICATOR 1

Enter the number of EFNEP youth who participated in programs to eat a variety of foods, and the percentage of those youth who actually eat a variety of foods.

6yr Proj 40000 63.0

	Number EFNEP Youth Participating	Percentage Increasing Variety
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1992	6295	87.0
1993	3952	70.0
1994	5301	71.0
1995	8479	90.0
1996	0	0.0
1997	0	0.0

Total 24027

Data Collection Methodology
EFNEP data management records.

INDICATOR 2

In the table below, enter the number of EFNEP youth who participated in programs to increase their knowledge of the essentials of human nutrition, and the percentage of those youth who actually increased their knowledge.

6yr Proj 40000 80.0

	Number EFNEP Youth Participating	Percentage Increasing Knowledge
--	--	---------------------------------------

1992	6295	87.0
1993	5399	75.0
1994	6076	83.0
1995	6517	91.0
1996	0	0.0
1997	0	0.0

Total 24287

Data Collection Methodology
EFNEP data management records.

INDICATOR 3

In the table, enter the total number of EFNEP youth who participated in programs to increase their ability to select low-cost, nutritious foods, and the percentage of those youth who actually improved food selection.

6yr Proj 40000 50.0

	Number EFNEP Youth Participating	Percentage Increasing Ability
1992	4155	87.0
1993	3631	64.0
1994	5301	74.0
1995	6856	82.0
1996	0	0.0
1997	0	0.0
Total	19943	

Data Collection Methodology
EFNEP data management records.
INDICATOR 4

In the table, enter the number of EFNEP youth who participated in programs to improve practices in food preparation and safety, and the percentage of those youth who demonstrated improvement.

6yr Proj	40000	50.0
	Number EFNEP Youth Participating	Percentage Improving Practices
1992	4155	87.0
1993	1868	58.0
1994	5301	66.0
1995	7709	77.0
1996	0	0.0
1997	0	0.0
Total	19033	

Data Collection Methodology
EFNEP data management records.
Survey to track eating patterns

OBJECTIVE 3

EFNEP State programs will increase interagency cooperation.

INDICATOR 1

Enter the number of WIC offices within EFNEP communities and the percent whose clients are served by EFNEP.

6yr Proj	70	100.0
	Number of WIC Offices	Percent Served by EFNEP
1992	35	100.0
1993	63	75.0
1994	70	100.0
1995	74	100.0
1996	0	0.0
1997	0	0.0
Total	242	

Data Collection Methodology
 EFNEP data management records.
 INDICATOR 2

Enter the number of Food Stamp offices within EFNEP communities and the percent whose clients are served by EFNEP.

6yr Proj	43	100.0
	Number of Food Stamp Offices	Percent Served by EFNEP
1992	35	100.0
1993	43	91.0
1994	41	88.0
1995	45	100.0
1996	0	0.0
1997	0	0.0
Total	164	

Data Collection Methodology
 EFNEP data management records.
 INDICATOR 3

Enter the number of formal agreements and/or coalitions with public or private organizations providing assistance to limited resource audiences.

6yr Proj	2
	Number of Agreements/ Coalitions
1992	21
1993	58
1994	79
1995	153
1996	0
1997	0
Total	311

Data Collection Methodology
 EFNEP data management records.
 INDICATOR 4

Enter the amount of money (in dollars) obtained by grants, contributions or other sources to supplement Federal EFNEP allocations.

6yr Proj	20000
	Non-Federal Dollars Obtained
1992	33542
1993	24949
1994	193385
1995	807500

1996	0
1997	0

Total	1059376
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Data Collection Methodology
EFNEP data management records.

ESTIMATED PROGRAM COST

Year	Est. Cost
1992	2500000
1993	2500000
1994	2500000
1995	2500000
1996	0
1997	0
Total	10000000

ESTIMATED FTE COMMITMENT

	Professional			Paraprofessional		
	1862	1890	Other	1862	1890	Other
1992	8.0	0.0	0.0	73.0	0.0	0.0
1993	11.0	0.0	0.0	81.0	0.0	0.0
1994	11.0	0.0	0.0	81.0	0.0	0.0
1995	11.0	0.0	0.0	81.0	0.0	0.0
1996	0.0	0.0	0.0	0.0	0.0	0.0
1997	0.0	0.0	0.0	0.0	0.0	0.0
Total	41.0	0.0	0.0	316.0	0.0	0.0

ESTIMATED VOLUNTEER PARTICIPATION

Year	Volunteers
1992	2000
1993	2000
1994	2000
1995	2000

1996	0
1997	0
Total	8000

ADDITIONAL COMMENTS

PROGRAM CONTACTS

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NORTH CAROLINA 1995 ANNUAL REPORT:
FARM SAFETY(08)

NARRATIVE SUMMARY OF ACCOMPLISHMENT

County Extension Agents are providing information on health and safety to farmers, Health department professionals, landscape operators, emergency personnel and youth organizations. This information was presented during hands-on workshops, seminars, newspaper publications, radio programs, and demonstrations. Over 25 counties offered trainings to emergency rescue squads on victim extrication techniques and skills for removing people entangled or trapped in farm machinery. Farm safety programs were given to area pork producer groups demonstrating different types of respirators to use in confinement facilities. Some samples were given to producers to use and to let their workers use. Safety around the boars was discussed, especially in the breeding pens and when collecting boars for use with artificial insemination. Some charts were used to explain the severity on noise in swine facilities and how workers can be protected by using ear plugs or ear muffs. Over 235 farmers, greenhouse operators, and landscapers were trained in the requirements for the Worker Protection Standards that took effect January 1, 1995. An addition 300 health professions were involved in training sessions on safe use of pesticides, agricultural pesticides available being used in their communities and symptoms of pesticide contamination. Requests for educational agricultural safety and health materials from agents, volunteer leaders and health professionals amounted to over 5000 pamphlets and brochures. Over 3000 agricultural and landscape managers adopted two or more safe pesticide handling practices.

SUCCESS STORIES

While agriculture poses many hazards, injury prevention actions can result in a reduced risk of illness and injury. The Halifax Agricultural Safety Advisory Program (ASAP) involved over 60 limited resource farmers and farm workers in a peer advisor educational program focusing on agricultural injury prevention. The project involved agricultural health and safety training, surveys of farm machinery and property, hazard reduction on machinery and property and incorporation of safety devices in the agricultural work place. There was a 10% increase in agricultural safety knowledge for the ASAP member. One hundred twenty-one specific injury prevention actions were taken by participants. Sixty-three percent of project participants reported making improvements on their property or equipment.

Rescue and ambulance workers are better equipped to deal with farm accidents as a result of the three hour trainig coordinated by Cooperative Extension Service and Farm Bureau. Twenty-three emergency personnel participated and received credits toward certification and fourteen farmers volunteered and participated. Ten of the most common and hazardous pieces of farm equipment were displayed. Emergency personnel were taught how to turn off and extricate a victim from each implement. Emergency personnel gave an excellent evaluation, particularly since none were reared on farms and had no knowledge of farm equipment.

OBJECTIVES, INDICATORS, DATA COLLECTION METHODOLOGIES

OBJECTIVE 1

Extension will promote farm safety awareness and adoption of safe farming practices.

INDICATOR 1

Enter the number of participants in educational programs.

6yr Proj 11600

Number of

Program
Participants

1992	3500
1993	16300
1994	17200
1995	14000
1996	0
1997	0
<hr/>	
Total	51000

Data Collection Methodology

taff reports.

INDICATOR 2

Enter the number of requests for farm safety materials.

6yr Proj	2500
<hr/>	
Requests for Farm Safety Materials	
<hr/>	
1992	750
1993	715
1994	1500
1995	5000
1996	0
1997	0
<hr/>	
Total	7965

Data Collection Methodology

Staff reports.

INDICATOR 3

Enter the number of Extension clientele adopting one or more safe farming practices.

6yr Proj	500
<hr/>	
Clientele Adopting Practices	
<hr/>	
1992	95
1993	7137
1994	8000
1995	7500
1996	0
1997	0
<hr/>	
Total	22732

Data Collection Methodology

Data collection methods should reflect the total resources allocated to the individual state's farm safety program, and the most effective means of obtaining that data. It is recommended that measurement be obtained from a representative sample, and that

this measure be used to estimate the total impact on all clientele taught. The number reported, therefore, will reflect the estimated impact on all clientele taught.

OBJECTIVE 3

Farm workers, rescue and medical personnel will increase knowledge of appropriate injury prevention and accident response.

INDICATOR 1

Enter the number of clientele improving their knowledge of farm accident rescue procedures.

6yr Proj	10000
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Number Increasing Knowledge

1992	2800
1993	1541
1994	1800
1995	0
1996	0
1997	0

Total	6141
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Data Collection Methodology

Pre- and post-test for professional rescue and medical personnel receiving education credit is recommended. Post-test questionnaires, surveys or other equally effective means are recommended for all others.

ESTIMATED PROGRAM COST

Year	Est. Cost
1992	987000
1993	987000
1994	987000
1995	987000
1996	0
1997	0
Total	3948000

ESTIMATED FTE COMMITMENT

	Professional			Paraprofessional		
	1862	1890	Other	1862	1890	Other
1992	18.0	0.0	0.0	0.5	0.0	0.0
1993	18.0	0.0	0.0	0.5	0.0	0.0
1994	18.0	0.0	0.0	0.5	0.0	0.0

1995	18.0	0.0	0.0	0.5	0.0	0.0
1996	0.0	0.0	0.0	0.0	0.0	0.0
1997	0.0	0.0	0.0	0.0	0.0	0.0
Total	72.0	0.0	0.0	2.0	0.0	0.0

ESTIMATED VOLUNTEER PARTICIPATION

Year	Volunteers
1992	1600
1993	1600
1994	1600
1995	1600
1996	0
1997	0
Total	6400

ADDITIONAL COMMENTS

PROGRAM CONTACTS

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NORTH CAROLINA 1995 ANNUAL REPORT:
INTEGRATED PEST MANAGEMENT(09)

NARRATIVE SUMMARY OF ACCOMPLISHMENT

IPM activities were reported in 79 counties involving alfalfa, apples, Christmas trees, corn, cotton, I. potatoes, greenhouses, pastures, peanuts, small grains, soybeans, tobacco, turf, vegetables, beef, swine, and poultry. This effort has resulted in widespread adoption of IPM techniques by growers. Extension agent reports show that 24,327 growers farming 2.7 million acres are using 3 or more of the following IPM methods: 1) pesticide applications based upon scouting and thresholds, 2) pesticide applications based upon predictive models, 3) crop rotations used to hinder or destroy pest establishment and survival, 4) pest resistant varieties are used, 5) use of early maturing varieties to avoid pest problems. This represents 68% of the harvested row crop acres in NC. 4,382 growers tried new IPM methods on 499,841 acres. Horticultural crop IPM was practiced by 1,032 growers on 39,094 acres. 96 scouting schools were held with 3,500 grower participants. IPM on-farm demonstrations were conducted in cooperation with 322 growers on 145,000 acres.

A special animal IPM project with 25 poultry and 5 swine fieldmen affecting 12 million animals (turkeys, broilers, layers, hogs) was initiated. Another 200 industry fieldmen were trained in IPM affecting the pest management decisions of 20 integrators and over 1,000 producers impacting 180 million animals. A special project was initiated for roach control with a large swine integrator on 4 farms. Insecticide use was reduced from 1-2 applications/month to 1 application every 3 months by careful monitoring and targeted treatments.

This year it became evident that the interests of row crop growers affected IPM programs and will for years to come. First, growers are more interested in the cost of inputs. They see that crop prices will likely not change appreciably upward and yields are not going up enough to offset input costs. The price of pesticides is getting all growers attention. Secondly, they are more interested in biological control and pest biology/ecology. They see these areas as a way to gain a better understanding of pest problems and institute permanent solutions. IPM training is targeting this need.

Cotton acreage almost doubled this year (to 800,000) acres in response to higher crop prices. Much of this acreage was planted by new growers (500) with little or no experience in cotton pest management. Profits can quickly be eliminated by pest damage or the cost of poorly planned pest management. This is especially true for new growers as cotton pest management is complex with any difficult decisions. Many "experienced" growers have been growing cotton for less than 5 years. All of the cotton acreage is scouted so it is important that IPM information be readily available and current. 56 cotton scouting schools (661 attending) were held just before and during the season to give growers every opportunity to learn new pest monitoring methods. 1,857 growers attended winter cotton pest management training. Due to the high level of IPM implementation average insecticide treatments were down 0.8 applications this year due to lower than average bollworm pressure demonstrating that IPM programs can, and do, modify grower behavior resulting in pesticide use only when necessary. Insecticide reductions equals an average savings of \$4 million and 16,000 lbs/ai statewide. The IPM program established light traps in all counties with new growers to monitor insect levels and alert growers when more intensive scouting was needed. These light traps were added to a state-wide series of light traps (44 total) that serve as an insect early warning system for growers and consultants. Light trap catches are widely circulated via print and electronic methods. The bollworm egg threshold, developed by NCSU researchers, is now employed by all cotton growers saving \$20-25/acre (\$16 - 20 million statewide) in insect damage with no increase in insecticide costs.

Cotton aphids were controlled during the season entirely by beneficial arthropods and a fungus disease due to the extension pest management emphasis on biological control. Notification through the computer bulletin board system and radio advising growers and consultants to the high efficacy of natural control led to widespread acceptance by growers. Avoiding insecticide treatments for aphids saved growers statewide an estimated \$550,000. Despite constant warnings from special interests to cotton growers of plant bug dangers, producers and consultants followed extension IPM recommendations to monitor square retention and sweep for plant bugs. Through this approach growers treated less than 1% of the acreage saving unnecessary treatments. Special attention in cotton was focused on post-directed weed treatments so growers can effectively control weeds after emergence depending less on preplant or preemergent treatments and proper fertilization to reduce plant attractiveness to insects.

Corn and soybean IPM efforts continue to increase grower returns. One county reports a \$1.1 million savings in corn and soybeans over a 3 year period as a result of growers adopting IPM practices. Tobacco IPM has increased the use of disease resistant varieties by almost 50% in some counties. A demonstration project in one county showed that a rye cover crop to suppress root-knot nematode was as effective as a conventional nematocide treatment increasing profits by \$938/acre. A shorter, simplified scouting guide was developed for burley tobacco and distributed to growers. Pasture weed IPM programs are focused on 2 biological control agents; goats and insects. Goats alone and mixed with beef/dairy cows control weeds in pastures and along fence rows. This program is especially targeted at multiflora rose and kudzu. Pasture grass in one test increased from 15% of vegetation to over 70% due to control of weedy species. This eliminates the need for herbicides and represents a permanent solution to a pest problem. Goat meat is increasing in popularity so growers can solve pest problems and market the control agent for a profit. In cooperation with NCDA, a program to release thistle weevils has begun in 8 counties. This biological control program will not only reduce herbicide use, reducing input costs for producers, but will improve pastures. It also represents a permanent solution to a persistent pest problem.

Fraser fir Christmas tree IPM programs continue to expand to include new growers. Projects were developed in 5 new counties this year and now is covering all the major tree growing counties representing 83% of the state's production capacity. Because Christmas trees are grown at high elevations in the mountains there are special problems with how pesticides are used and which ones are selected. Due to the steep slopes and nearby moving surface waters the IPM program has addressed problems of soil erosion and off-site movement of pesticides. In the past growers used pre-emergent herbicides to control all vegetation under trees leading to soil erosion problems. The IPM program introduced the idea of using natural ground cover but making it non-competitive by using extremely low rates of post-emergence herbicides leaving plants less able to compete with trees but not dead. By Fall these plants have recovered but it is too late in the season to damage trees. One county, in only the second year of an IPM program, reports that 43% of their growers are using the ground cover suppression method of management. A grower survey in the largest Christmas tree producing county found that pesticide reductions averaged 35% and 77% of the growers were using the ground cover suppression method of weed management. Agent reports indicate that IPM is the model for tree production in that county. One of the first year IPM demonstration counties reports a 5% reduction in pesticide use and an increase in tree quality. Another first year county reports that in a grower survey conducted before and after the growing season, grower knowledge of IPM grew from a 2.5 at the beginning to 7.5 after the project (on a 10 point scale where 1 represents little knowledge). A Fraser Fir IPM guide was developed and distributed to 500 growers. IPM training was provided to 20 agents during annual conference and 16 participated

in field instruction during the growing season. There is little doubt that this 5 year effort has had results. Growers are able to scout and evaluate their own pest problems and respond in an appropriate manner. This came at a time when growers were facing land use and watershed regulations. The IPM program helped growers improve their pest management, deal with new pests in an intelligent manner, and handle water and/or land use concerns.

Peanut leafspot forecasting is an important part of the IPM program because fungicides have traditionally been applied on a scheduled 2-week basis. The forecasting system gives growers the information needed to treat only when conditions are favorable for disease development. All peanut producing areas have implemented a leafspot forecasting system resulting in 80% of the growers using the system to time fungicide applications. Half the peanut producing counties have upgraded to computer based forecasting system which will enhance accuracy and ease of use. Growers are contacted through a variety of ways from call-in messages to faxing results. This system saves peanut growers 1.5 - 2.5 treatments a year reducing the amount of pesticide applied by approximately 250,000 lbs. ai and \$2.5 million. One large peanut growing county reports that the advisory system saves growers \$2 million annually.

Private consultants provide IPM services for 1 million acres so maintaining close communication to exchange IPM information is important. Effective contact with private consultants is maintained with an Extension IPM computer based pest alert system and bulletin board. Through this system weekly pest updates by university extension specialists are posted. Consultants can post and read observations. To further insure close communications with consultants, an annual round table with NCSU faculty is held to provide a forum for idea interchange. The program is developed from consultant's suggestions. 22 consultant's attended this year's round table.

Intensive agent training in IPM continued this year. 8 agents participated in a 16 week IPM course that met 3 hours each week. This course covers both the principles and practice of IPM for field crops, horticultural crops, and urban environments. A 2 day biological control (insect and plant pathogens) training program offered during the growing season was attended by 26 agents. This instruction utilized both classroom and field components with agents making field collections and using lab facilities to identify beneficial insects. The purpose of this training was to insure that Extension agents can confidently identify beneficial insects and explain how natural control of plant pathogens can be enhanced. A beneficial insect training slide set has been developed for use by Extension agents in grower meetings.

New apple IPM methods are being adopted by growers. In the largest apple producing county routine insecticide sprays for codling moth are being replaced by treatments based upon pheromone trap catches. Almost 50% of the growers eliminated 2 insecticide treatments on 6,000 acres saving growers \$180,000. A special effort is underway to replace traditional miticide treatments on strawberries with predaceous mites. This project also includes nursery growers and greenhouse growers. Greenhouse IPM programs are targeting screening as a means to eliminate traditional hard to manage pests such as whiteflies. This is especially important since the number and effectiveness of insecticides for greenhouses is dwindling. A test of 30 screening materials claiming insect exclusion found that only 2 would actually provide adequate protection for whiteflies and thrips. Using the proper screening materials will save the greenhouse industry millions of dollars.

Turf IPM programs continue to increase the number and availability of decision aids for this commodity. Computer based environmental monitoring systems were installed at two golf courses to demonstrate insect pest prediction capabilities. One golf course documented a \$250,000 savings due to enhanced

pest management programs. All golf courses in the coastal region (where insect problems are most severe) have adopted at least part of the current IPM program.

Aquatic weed IPM demonstrations were established in ponds at 11 locations in 9 counties and at one large recreational lake. A combination of management methods (biological, cultural, herbicides) was used to suppress a variety of submerged, floating, and emergent aquatic weeds to reduce herbicide impacts.

SUCCESS STORIES

Fraser fir Christmas tree growers in North Carolina became concerned about a number of problems in the early 1980s:

1. Pest problems involving soil borne diseases and insects.
2. Loss of labeled pesticides for use with Fraser firs.
3. Chronic fertility problems with the crop
4. Reduction in tree quality with second and third rotations in older fields.

Citizens outside the agricultural community, noticed another set of problems:

1. Widespread use and misuse of pesticides and fertilizers.
2. Soil erosion in Christmas tree fields that had bare-ground weed control.
3. The impact of the Christmas tree industry on drinking water.

The North Carolina State University Cooperative Extension Service initiated numerous on-farm demonstrations beginning in 1989. Initial efforts were directed toward evaluating current pest treatments and better defining the basic pest life cycles described in the literature. Also studies were started to determine scouting methods and economic treatment thresholds.

It became apparent that IPM could address the entire package of issues related to Fraser fir, including managing pests, fertility concerns, soil quality, and excessive inputs that had negative environmental consequences. Extension worked to provide growers with the education and tools they needed to improve their tree production while minimizing the impact to the environment.

Eight counties representing over 80% of the NC tree production have implemented a county wide IPM demonstrations to support education IPM programs for Fraser fir. Cooperating growers sign up two to five acres, provided site history records, and paid a user fee.

The IPM programs's original goals were to test current pest-monitoring techniques and treatment thresholds and to develop growers' confidence in catching pests before they caused damage. Scouts checked fields at short intervals with high intensity; each field is visited nine to 11 times the first season. This intensity was necessary to monitor spruce spider mites (SSM) populations, which had the potential to expand rapidly and cause severe damage. Fields are also monitored for other insects, weeds, diseases, and weather patterns. Growers are provided with mid-season and year-end scouting reports.

By 1992, scouting efforts became more flexible, while technique became more precise. The scouting demonstration emphasis shifted from developing practical techniques to training cooperating growers. Growers started meeting with

scouts on every field visit, and participating in field scouting, soil and tissue sampling, and record keeping. Training was concentrated on sites with more active pest problems to develop growers' scouting skills.

Growers have been provided with pest-alert and monitoring information through news articles, newsletters, and educational meetings. Growers and others have learned useful IPM concepts that affect Fraser fir through a variety of meetings, clubs, and environmental-awareness programs.

This IPM program has been a primary emphasis in agent-training events. Over 500 Fraser Fir IPM Guides have been distributed to growers to support grower education efforts.

In the largest Fraser fir producing county, more than half of the cooperators have reduced their fertilizer use by a third, which equates to an individual savings of more than \$1,000 per year per grower. Pesticide reductions averaged 35% and 77% of the producers had adopted the ground cover suppression method of weed control. Almost 90% of cooperating farmers have shifted their use of pesticides to more environmentally compatible materials than used before. In another county, after the first year of an IPM program, a before and after grower survey indicated that grower's knowledge of pest management increased 3 fold. Other counties have reported that in the first year of operation the IPM program reduced pesticide use by 5% and increased tree quality. Pesticide reductions equates to substantial savings for producers. For example, if by scouting, a grower can catch a balsam woolly adelgid problem at a two-tree, as opposed to a 20-tree, level, the per-acre savings would be about \$360. On a county level, this could represent a savings of more than \$500,000 worth of trees annually.

IPM has the advantage over many programs in that it reduces growers' inputs in exchange for more knowledgeable management while resulting in an increase in quality of the Fraser fir Christmas tree.

OBJECTIVES, INDICATORS, DATA COLLECTION METHODOLOGIES

OBJECTIVE 1

Clientele will increase use of recommended integrated pest management practices which involve alternatives to chemical pest controls, including rotations, biological controls and reduced pesticide use as shown in Extension demonstrations.

INDICATOR 1

Enter the number of farmers using IPM practices.

6yr Proj	300

	Number of Farmers Using IPM

1992	800
1993	2200
1994	4000
1995	24000
1996	0
1997	0

Total	31000

Data Collection Methodology

Staff estimates.

INDICATOR 3

Enter the number of county and regional pest control demonstrations conducted.

6yr Proj	10	0
	Number of County Demos.	Number of Regional Demos.
1992	12	0
1993	21	0
1994	0	0
1995	0	0
1996	0	0
1997	0	0
Total	33	0

Data Collection Methodology

Staff reports.

OBJECTIVE 2

Private crop consultants will gain knowledge of integrated pest management practices.

INDICATOR 1

Enter the number of consultants trained by Extension.

6yr Proj	15
	Consultants Trained by Extension
1992	25
1993	25
1994	25
1995	0
1996	0
1997	0
Total	75

Data Collection Methodology

Staff reports.

ESTIMATED PROGRAM COST

Year	Est. Cost
1992	1625000
1993	1625000
1994	1625000
1995	1625000
1996	0
1997	0

Total	6500000
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ESTIMATED FTE COMMITMENT

	Professional			Paraprofessional		
	1862	1890	Other	1862	1890	Other
1992	25.0	0.0	0.0	20.0	0.0	0.0
1993	25.0	0.0	0.0	20.0	0.0	0.0
1994	25.0	0.0	0.0	20.0	0.0	0.0
1995	25.0	0.0	0.0	20.0	0.0	0.0
1996	0.0	0.0	0.0	0.0	0.0	0.0
1997	0.0	0.0	0.0	0.0	0.0	0.0
Total	100.0	0.0	0.0	80.0	0.0	0.0

ESTIMATED VOLUNTEER PARTICIPATION

Year	Volunteers
1992	200
1993	200
1994	200
1995	200
1996	0
1997	0
Total	800

ADDITIONAL COMMENTS

PROGRAM CONTACTS

H. M. Linker
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 N.C. State University
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Table IV
Pest Management Programs - Annual Report
FY - 95
State- NC

Commodities or Other Project Designations

Program Costs (\$):	1. row crops	2. animals	3. urban	4. fruit/veg	5. C. trees	Totals
1. Smith-Lever 3(d)	64,588	41,800	65,817	25,540	14,670	212,415
2. other CES funds	1,105,000	580,000	520,000	460,000	119,000	2,784,000
3. grower payments to:						
a. extension	35,000	0	0	5,000	5,000	45,000
b. consultants	7,500,000	0	0	100,000	0	7,600,000
c. grower organizations	70,000	0	0	10,000	0	80,000
4. others						

Acres or units handled by:

1. CES programs	16,800	0	50,000	6,000	1,500	74,300
2. Private consultants/firms	310,000		1,000,000	20,000	0	1,330,000
3. Grower organizations/coops	35,000	0	0	0	0	35,000
4. industry fieldmen	25,000	5,000,000	0	10,000	1,000	5,036,000
5. others influenced by extension	2,700,000	100,000,000	1,000,000	25,000	2,000	103,727,000

CES Staff Years:

1. State specialists	12.5	2	2	2	1.5	20
2. Multi-County Staff	4.5	4.5	3	3	0.5	16
3. County Staff	10	10	10	8	0.8	39

Number of Scouts Trained:	661			3	5	669
Number of growers trained:	2,857	0	0	300	180	3,337
Number providing IPM services:						
1. Extension sponsored programs	68	0	10	8	6	92
2. Private consultants/firms	25	5	250	3	0	283
3. Grower organizations/coops	82	5	0	0	0	87
4. Industry fieldmen	67	250	0	15	5	337
5. Others influenced by extension	30,000					30,000

State advisory committee:	one advisory committee for all commodities
No. people on committee	15
No. agencies and departments represented	4 depts., 1 agency, 2 NGO's, 2 farmers
No. times committee met	3

NORTH CAROLINA 1995 ANNUAL REPORT:
PESTICIDE APPLICATOR TRAINING(10)

NARRATIVE SUMMARY OF ACCOMPLISHMENT

E. Narrative and Implications
North Carolina has 29,570 private pesticide applicators. During the four year period 8973 applicators were certified to use restricted use pesticides. Applicators can be certified by attending a 4 hour class with emphasis on new Federal Core manual. Five slide/tapes sets were prepared in North Carolina for this program. These lessons are (1) Pest Control/Labeling/Formulations, (2) Pesticides in the Environment, (3) Harmful Affects/Protective Clothing, (4) Handling/Missing/Applications and (5) Calibration/Transportation, Storage/Disposal. A sixth slide/tape sets covers Federal and N. C. Laws and Regulations. A second certification method involves filling in an Applying Pesticides Correctly Programmed Instruction Workbook and then meeting with the County Pesticide Coordinator for a 30 minute review and test. This manual is also used by applicators who fail to get re-certified and must pass a State Administered Test to get recertified. This manual was revised in 1994 and a chapter on the Worker Protection Standard was added.

Private pesticide applicators (farmers) must be re-certified every three years. Of the 29,570 applicators 25,560 were recertified during the 1992-95 period. Applicators are certified by attending a 2 hour class conducted by the County Pesticide Coordinator. In 1993-94, the program covered the Worker Protection Standard, Pesticide/Container Disposal, Farmer Record keeping, Preventing Ground/Surface Water Contamination, The Agricultural Health Study and Label Review. This is the fourth 3 year recertification cycle conducted for farmers. Every 3 years pertinent subjects and a current review of laws and regulations are covered. An Agricultural Healthy Study sponsored by the National Center Institute is being conducted in N. C. by SRA, Survey Research Associates, Inc. in Durham, N.C. The farmers are reached during the recertification meetings where they fill out an initial survey and take comprehensive pesticide use forms home for the grower and spouse to complete. Follow ups to check on farmer health and possible relationships with pesticide used will continue.

North Carolina has 9,259 commercial pesticide applicators, public operators and consultants. It has 1007 restricted use pesticide dealers. Fifty-six two day schools were held across the State to train 5890 new applicators/dealers in 1992/95. One day was spend on core material Applying Pesticides Correctly and N. C. Federal Laws/Regulations and 1/2 day on the Specialty Subjects (Ornamental-Turf, Structural, etc.) On the second afternoon the N. C. Department of Agriculture offers tests in all commercial applicator categories. In N. C. we have persons licensed as follows: Aquatic 348, Public Health 246, Forest 451, Right of Way 766, Regulatory 71, Ag. Animal 142, Ag. Plant 1483, Ornamental/Turf 4305, Seed 34, Demonstration & Research 612,

Wood Treatment 82, Aerial 92, Structural 1106 and Dealers 1007. In addition to the 14 two-day schools 22 one-day schools were held for specialty groups such as Electric Power Companies, Public School Employees, Vo. Ag. Teachers, University Workers and others.

During 1992-95, 2221 recertification classes were held for over 9,000 commercial applicators, public operators, consultants and dealers. These applicators/dealers/consultants need 3-20 hours of recertification hours per 5 year period depending on licensing specialty and number of specialties in which they are licensed. These sessions are typically 1-3 hours in length but some offer up to 6 hours of credit. They are held on county, commodity and state meeting levels. Over 70 slide tapes sets and 109 video's are available for this type of training and are used in 40% of the classes.

245 special two hour worker Protection Standard Meetings for 9,220 employers are held in our 100 counties. WPS supplies were delivered to 100 counties and the agents trained to help employers train their handlers and workers. Extension will not train workers/handlers directly nor issue EPA verification cards. Certain agencies/groups will issue these cards after meeting N. C. Department of Agriculture training, testing and record keeping requirements.

Other pesticide applicator training activities involved an attempt to establish a pesticide container recycling program statewide, an agromedicine program (with Julia Storm, M. B. Genter, others) protective clothing workshops (with Jennings and Mock), water quality programs (with Humenik) safety programs (with McLymore) A manual "Dancing with Danger" for Spanish speaking workers (with Steve Derthick) pest management programs (with M. Liner and Patty Pritchard) impact assessment programs (with S. Toth), Master Gardener programs with (L. Bass) and aerial applicator programs (with S. Southern).

SUCCESS STORIES

F. Success Story

Pesticide training sessions to help landscape professionals to prepare for the licensing examination for their North Carolina Pesticide License in Ornamentals and Turf were held at 60 (four years) locations throughout the state. Each three-hour session covered topics on ornamental and turf diseases, insect, weeds, environment concerns and calibration of equipment. This session was part of a two-day program that included topics on laws and regulations and applying pesticide safely. This training was a cooperative program between North Carolina State University, local county extension agents and the North Carolina Department of Agriculture. Mr. John Wilson in the Horticulture Science Department arranged the meetings as part of his Pesticide Education Program for North Carolina, county agents arranged the meeting sites and participated in the two day training sessions and the Department of

Agriculture gave the examinations at the end of the program.

Over 1000 landscape professionals from private companies and government agencies attended these training sessions. The average percentage of the people taking the difficult test and passing it was about 80 percent. These educational sessions are the first contact many of the people have had with the Cooperative Extension Service and many indicated an interest in obtaining more information from the Extension Service in the future. The pesticide license recertification program in North Carolina requires 10 hours of credit over the next five years to renew their license. With about 4500 people currently having a license in Ornamentals and Turf, the Extension Service has the opportunity to offer 45,000 contact hours over the next five years to help these professionals meet these requirements. Recertification credits are offered at Landscape Maintenance Schools that are arranged by county agents, at annual landscape and turf conferences and field days and at other meetings that are approved by the N. C. Department of Agriculture. Many of the 2500 people at the Annual N. C. Turfgrass Conference and the 1200 at the Turf and Landscape Field Day indicate that obtaining recertification credits is one reason for attending these events.

This program is an example of a cooperative program between several departments of the School of Agriculture and Life Sciences at N. C. State University, the 100 counties in North Carolina and the N. C. Department of Agriculture. Useful information for the rapidly growing landscape industry on the proper management of landscape plants and turf, the safe use of pesticides when needed and alternatives to pesticides are presented to the citizens of North Carolina through this very successful program.

Dr. L. T. Lucas
Turf Specialist

G. Compiled by John H. Wilson, Project Leader

OBJECTIVES, INDICATORS, DATA COLLECTION METHODOLOGIES

OBJECTIVE 1

Pesticide applicators improve their knowledge and attitudes.

INDICATOR 1

Number of trainees attending PRIVATE applicators training for certification or recertification.

6yr Proj	3000	9000

Trainees Attending for Certification	Trainees Attending for Recertificat.	

1992	1248	9228
1993	520	9248
1994	3225	9450
1995	3980	5560
1996	0	0
1997	0	0

Total	8973	33486
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Data Collection Methodology

Program records.

INDICATOR 2

Number of trainees attending COMMERCIAL applicators training for certification or recertification.

6yr Proj	1400	3000
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	Trainees Attending for Certification	Trainees Attending for Recertificat.
--	--	--

1992	993	2213
1993	1404	3201
1994	1350	4000
1995	1143	852
1996	0	0
1997	0	0

Total	4890	10266
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Data Collection Methodology

Program records.

INDICATOR 3

Number of trainees trained, other than in the previous two tables, as required by state regulations (e.g., Registered Technician).

6yr Proj	5000
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	Number of Trainees
--	--------------------------

1992	0
1993	0
1994	0
1995	0
1996	0
1997	0

Total	0
-------	---

Data Collection Methodology

Program records.

INDICATOR 4

Number of Extension clientele obtaining pesticide education (i.e., urban gardeners, IPM) NOT through traditional certification training.

6yr Proj	5000
----------	------

	Number of Trainees
--	--------------------------

1992	0
1993	5000
1994	5000

1995	5000
1996	0
1997	0

Total	15000
-------	-------

Data Collection Methodology

Program records.

INDICATOR 5

PRIVATE APPLICATOR TRAINING MATERIALS (Table 1 of 2)

Specify training materials developed or updated in the following areas (enter "N" for new materials and "U" for updated materials).

6yr Proj	na	u	na	na
	Agriculture (Plant)	Agriculture (Animal)	Vegetable	Small Fruit

1992	
1993	u
1994	N
1995	u
1996	
1997	

Data Collection Methodology

Program records.

INDICATOR 6

PRIVATE APPLICATOR TRAINING MATERIALS (Table 2 of 2)

Specify training materials developed or updated in the following areas (enter "N" for new materials and "U" for updated materials).

6yr Proj	na	u	na	n--aquatic
	Chemigation	Greenhouse/ Nursery	Fumigation	Other

1992	
1993	u
1994	
1995	n
1996	
1997	

Data Collection Methodology

Program records.

INDICATOR 7

COMMERCIAL APPLICATOR TRAINING MATERIALS (Table 1 of 4)

Specify training materials developed or updated in the following categories (enter "N" for new materials and "U" for updated materials).

6yr Proj	N	U		
	Agriculture	Agriculture	Forest	Ornamental

(Plant)

(Animal)

and Turf

1992

1993

1994

1995 u

1996

1997

u

N (2)

N

Data Collection Methodology

Program records.

INDICATOR 8

COMMERCIAL APPLICATOR TRAINING MATERIALS (Table 2 of 4)

Specify training materials developed or updated in the following categories (enter "N" for new materials and "U" for updated materials).

6yr Proj

na

n

na

na

Seed
Treatment

Aquatic

Right-of-way

Non-ag.
Industrial

1992

1993

1994

1995

1996

1997

u

u

u

u

Data Collection Methodology

Program records.

INDICATOR 9

COMMERCIAL APPLICATOR TRAINING MATERIALS (Table 3 of 4)

Specify training materials developed or updated in the following categories (enter "N" for new materials and "U" for updated materials).

6yr Proj

na

n

na

u

Non-ag.
InstitutionalNon-ag.
StructuralNon-ag.
Health
RelatedPublic
Health

1992

1993

1994

1995

1996

1997

u

Data Collection Methodology

Program records.

INDICATOR 10

COMMERCIAL APPLICATOR TRAINING MATERIALS (Table 4 of 4)

Specify training materials developed or updated in the following

categories (enter "N" for new materials and "U" for updated materials).

6yr Proj	N	na	na
	Regulatory	Demonstration	Other
1992			
1993			u
1994			
1995	u		u
1996			
1997			

Data Collection Methodology

Program records.

INDICATOR 11

Enter the number and approximate FTEs of STATE SPECIALISTS involved in training and in developing materials (enter numbers reflecting only staff involved in PAT work).

6yr Proj	14	2.0	8	0.5
	Specialists Training (Number)	Specialists Training (FTE)	Specialists Develop. Mat. (Number)	Specialists Develop. Mat. (FTE)
1992	0	0.0	0	0.0
1993	15	2.0	4	0.5
1994	15	2.0	3	0.5
1995	15	2.0	2	0.1
1996	0	0.0	0	0.0
1997	0	0.0	0	0.0
Total	45	6.0	9	1.1

Data Collection Methodology

Program records.

INDICATOR 12

Enter the number and approximate FTEs of COUNTY/AREA AGENTS involved in training (enter numbers reflecting only staff involved in PAT work).

6yr Proj	100	5.0
	Agents Training (Number)	Agents Training (FTE)
1992	0	0.0
1993	100	5.1
1994	100	5.0
1995	100	4.0
1996	0	0.0
1997	0	0.0
Total	300	14.1

Data Collection Methodology

Program records.

OBJECTIVE 2

Pesticide applicators use safe, environmentally sound pesticide practices.

INDICATOR 1

Enter the number of pesticide applicator trainees who adopted different pesticide-use practices as a result of PAT.

6yr Proj	9000

	Number of
	Trainees
	Adopting

1992	0
1993	9248
1994	9100
1995	9220
1996	0
1997	0

Total	27568

Data Collection Methodology

Follow-up survey.

INDICATOR 2

Specify the practices adopted by private and commercial applicators. Identify private and commercial separately.
1995 ACTUAL RESULT(S)

Data Collection Methodology

Follow-up survey.

ESTIMATED PROGRAM COST

Year	Est. Cost
1992	200000
1993	225000
1994	250000
1995	275000
1996	0
1997	0
Total	950000

ESTIMATED FTE COMMITMENT

	Professional			Paraprofessional		
	1862	1890	Other	1862	1890	Other
1992	11.6	0.0	0.0	0.0	0.0	0.0

1993	11.6	0.0	0.0	0.0	0.0	0.0
1994	11.6	0.0	0.0	0.0	0.0	0.0
1995	11.6	0.0	0.0	0.0	0.0	0.0
1996	0.0	0.0	0.0	0.0	0.0	0.0
1997	0.0	0.0	0.0	0.0	0.0	0.0
Total	46.4	0.0	0.0	0.0	0.0	0.0

ESTIMATED VOLUNTEER PARTICIPATION

Year	Volunteers
1992	0
1993	0
1994	0
1995	0
1996	0
1997	0
Total	0

ADDITIONAL COMMENTS

NC 20 - Pesticide Applicator Training
1992 - 95 Four year Summary

A. Objectives

The objectives of this program are to train and re-train (certify and recertify) commercial and private applicators, dealers and consultants in the safe and proper use of pesticides.

B. Non-Extension Resources

1. Value of federal government funding 188,583
2. Value of internal school/manual incomes 80,200

C. Template Indicators/Accomplishments

Private Applicators trained/certified	8,973
Private Applicators re-trained/re-certified	5,560
Commercial/Public Applicators/Dealers trained/licensed	5,890
Commercial/Public Applicators/Dealers re-trained/re-certified	10,266*
Other extension clientele obtaining pesticide education	20,200

NORTH CAROLINA 1995 ANNUAL REPORT:
PESTICIDE IMPACT ASSESSMENT(11)

NARRATIVE SUMMARY OF ACCOMPLISHMENT

1. Surveys of Pesticide Usage on North Carolina Agricultural Crops

Conducted mail surveys of 940 sweetpotato producers in 17 counties, 1,115 cotton producers in 18 counties, 281 tomato producers in 25 counties, approximately 3,000 poultry producers in 54 counties, 95 potato producers in 14 counties, and 936 Christmas tree producers in 24 counties in North Carolina to determine pesticide use patterns on sweetpotatoes in 1991, cotton in 1992, tomatoes and poultry (i.e., broilers, broiler breeders, egg layers and turkeys) in 1993, and potatoes and Christmas trees in 1994. Data on herbicides, insecticides, miticides, nematicides, fungicides, rodenticides, disinfectants, growth regulators, and/or nonchemical pest management practices used by sweetpotato, cotton, tomato, poultry, potato and Christmas tree producers were collected and stored in a database along with pesticide use data for the 1988 peanut crop, 1989 potato and flue-cured tobacco crops, and 1990 apple and cucumber crops. Information in the database includes the chemical and nonchemical pest management alternatives used, percentage of acreage treated with the alternatives, application rates, number of applications, methods of application, costs of application, and yield and quality effects of alternatives. The database is used to respond to inquiries for pesticide use data from the USDA's NAPIAP and other organizations. The database also serves to document the acceptance and implementation of integrated pest management (IPM) by growers in North Carolina and to evaluate extension and research programs in the state.

2. Pesticide Benefit/Use Assessments

Provided information to USDA's NAPIAP on the benefits and uses of methyl bromide on tobacco (plant beds), broccoli, cauliflower, apples, eggplant, melons, peppers, strawberries, tomatoes (plant beds and fields), forest tree transplants, ornamentals, stored tobacco and peanuts, and field corn in North Carolina. Extension specialists in the state participated in the NAPIAP five-state benefits assessment of methyl bromide, attending a regional meeting held in Columbia, South Carolina on April 28, 1992. The benefit/use information on methyl bromide submitted to the NAPIAP was included in a USDA publication on the economic effects of banning methyl bromide for soil fumigation.

3. Pesticide Product Registration Information

Provided extension and research personnel in North Carolina with current information on pesticide products registered with the U. S. Environmental Protection Agency and North Carolina Department of Agriculture via the National Pesticide Information Retrieval System (NPIRS). A total of 128 NPIRS searches were performed from 1992-1995. Information retrieved was used by extension and research personnel to assist North Carolina growers with the management of pests.

3. Information on Pesticide Issues and Programs

Prepared and distributed a pesticide newsletter containing information on pesticide registration, use and safety. Twenty-seven issues of the newsletter were mailed to approximately 250 persons from 1992-1995. The newsletter was also distributed to state and county extension personnel on a statewide extension electronic news network and an undetermined audience on the internet (World Wide Web) from 1994-1995. Pesticide information, including notices from

the NAPIAP's Reregistration Notification Network, was distributed on the statewide extension electronic news network. Fifty-nine articles were posted on the network from 1992-1995. A fact sheet describing pesticide-related extension electronic and research programs in North Carolina was prepared and distributed to 100 county extension centers, extension specialists and researchers, North Carolina Department of Agriculture personnel, growers, commodity organizations and other interested persons. State and county extension personnel, growers, commodity organizations, pesticide dealers, agricultural consultants and others were educated on pesticide issues and programs through newsletters, electronic news articles and fact sheets.

4. Information on Pest Management Practices Used in North Carolina

Educational displays containing information on insecticide use on the 1990 apple crop, 1990 cucumber crop, 1991 sweetpotato crop and 1992 cotton crop in North Carolina and pest management practices used in the production of agricultural crops in North Carolina were presented at six professional meetings and approximately 20 state and county grower meetings. Three extension bulletins containing pesticide use information collected through surveys of peanut, potato and cucumber growers in North Carolina, a fact sheet containing pesticide use information collected in the survey of cotton growers, and a fact sheet containing information on pest management practices in the production of agricultural crops in North Carolina collected through grower surveys were published and distributed to state and county extension personnel, the USDA's NAPIAP, growers, commodity organizations and other interested persons. These educational displays, extension bulletins and fact sheets informed scientists, growers, the NAPIAP and others on the use of pesticide and nonchemical pest management practices on North Carolina agricultural crops.

5. Educational Publications for NAPIAP State Liaison Representatives

Thirteen publications relating to pesticide use and safety, pest management, and crop production were purchased and distributed to NAPIAP state liaison representatives in 50 states, 5 U. S. territories, and the District of Columbia from 1994-1995. The publications provided the NAPIAP state liaison representatives with knowledge of these subjects.

6. National Pesticide Impact Assessment Workshop

Developed, in cooperation with the USDA Extension Service and other USDA agencies, a National Pesticide Impact Assessment Workshop to train state NAPIAP personnel on the NAPIAP benefits assessment process and discuss the respective roles of federal and state NAPIAP personnel in the process. A total of 100 persons from 45 states, Guam, Puerto Rico and the District of Columbia received training at the workshop held on February 26-27, 1992 in Raleigh, North Carolina. Proceedings of the workshop were published and distributed to workshop participants, state and federal NAPIAP personnel, and other interested persons.

7. Evaluation of Pesticide Benefits Assessment Computer Model

Evaluated the Pesticide Benefits Assessment (PBA2) computer model for its potential use in NAPIAP pesticide benefits assessments. Pesticide benefit/use data for apples, cucumbers and peanuts were used to evaluate the model. This model will be used in future assessments of pesticide benefits by the NAPIAP.

SUCCESS STORIES

The pesticide use database maintained by the North Carolina Pesticide Impact Assessment Program was recognized as a source of accurate pesticide use data by a subcommittee of the North Carolina Pesticide Board's Pesticide Advisory

Committee. The North Carolina Pesticide Board is considering a recommendation by the North Carolina Center for Public Policy that the North Carolina Department of Agriculture compile accurate data on the amounts of pesticides used in the state. Also, the database will provide baseline data on the use of pesticides and non-chemical pest management practices for two federally-funded projects at North Carolina State University which will evaluate the success of IPM implementation by North Carolina apple and peanut growers.

SPECIAL FUNDS ABSTRACTS

Stephen J. Toth, Jr. A Survey of Pesticide Use on Cotton in North Carolina. \$16,614. USDA/Extension Service National Agricultural Pesticide Impact Assessment Program (Project # 92-EPIX-1-0071).

Stephen J. Toth, Jr. A Survey of Pesticide Use on Poultry and Tomatoes in North Carolina. \$20,223. USDA/Extension Service National Agricultural Pesticide Impact Assessment Program (Project # 93-EPIX-1-0130).

Stephen J. Toth, Jr. Purchase, Production, and Distribution of Pesticide-Related Educational Materials. \$61,366. USDA/Extension Service National Agricultural Pesticide Impact Assessment Program (Project # 93-EPIX-1-0145).

Stephen J. Toth, Jr. A Survey of Pesticide Use on Potatoes and Christmas Trees in North Carolina. \$20,501. USDA/Extension Service National Agricultural Pesticide Impact Assessment Program (Project # 94-EPIX-1-0174).

Stephen J. Toth, Jr. A Survey of Pesticide Use on Peanuts in North Carolina. \$23,176. USDA/Extension Service National Agricultural Pesticide Impact Assessment Program (Project # 95-EPIX-1-0222). Abstract: Comprehensive data on pesticide use/benefits in peanut production in North Carolina are needed due to the economic importance of peanuts in the State. A mail survey of producers will be conducted to obtain data on their pesticide use during 1995. Additional pesticide use/benefit data will be furnished by extension specialists at North Carolina State University.

H. Michael Linker. An IPM Analysis of NAPIAP Surveys. \$22,000. USDA/Extension Service National Agricultural Pesticide Impact Assessment Program. Abstract: A direct linkage between IPM adoption and non-chemical pest management should be established. Information collected for NAPIAP surveys contain data that may be helpful in finding this linkage. NAPIAP data require careful analysis to determine the relationship between non-chemical use and IPM. This project is designed to identify linkages by developing a detailed description of the IPM program for 3 crops (peanuts, Irish potatoes and apples) and using previous NAPIAP survey data to analyze non-chemical pest management activities.

OBJECTIVES, INDICATORS, DATA COLLECTION METHODOLOGIES

OBJECTIVE 3

Extension develops and maintains a pesticide usage database.

INDICATOR 1

List databases maintained and describe variables in each.

1995 ACTUAL RESULT(S)

Databases maintained;

Pesticide Usage/Benefits for North Carolina Agricultural Crops

Variables:

Crops (peanuts, flue-cured tobacco, potatoes, apples, cucumbers, sweetpotato, tomatoes, poultry, and Christmas trees); crop variety; average yield acres planted; acres harvested; target pests; herbicides, insecticides, miticides, nematocides, rodenticides, fungicides, growth regulators, and

disinfectants used; nonchemical pest management practices (i.e., scouting, cultivation, resistant varieties, insect monitoring traps, nematode sampling, crop rotation, soil testing, and others); percentage of acreage treated with pesticides; average number of applications of pesticides per acre; treatment rates; treatment costs; yield and quality effects of pesticide used.

Data Collection Methodology
Program records.

ESTIMATED PROGRAM COST

Year	Est. Cost
1992	106250
1993	106250
1994	106250
1995	106250
1996	0
1997	0
Total	425000

ESTIMATED FTE COMMITMENT

	Professional			Paraprofessional		
	1862	1890	Other	1862	1890	Other
1992	1.5	0.0	0.0	0.0	0.0	0.0
1993	1.5	0.0	0.0	0.0	0.0	0.0
1994	1.5	0.0	0.0	0.0	0.0	0.0
1995	1.5	0.0	0.0	0.0	0.0	0.0
1996	0.0	0.0	0.0	0.0	0.0	0.0
1997	0.0	0.0	0.0	0.0	0.0	0.0
Total	6.0	0.0	0.0	0.0	0.0	0.0

ESTIMATED VOLUNTEER PARTICIPATION

Year	Volunteers
1992	0
1993	0
1994	0
1995	0

1996	0
1997	0
Total	0

ADDITIONAL COMMENTS

1. The following publications contain data generated from pesticide use surveys conducted by the North Carolina Pesticide Impact Assessment Program:

- a. Bailey, J. E., Johnson, G. L., and Toth, S. J., Jr. 1994. Evolution of a weather-based peanut spot advisory in North Carolina. Plant Disease 78:530-535.
 - b. Toth, S. J., Jr., Duncan, H. E., Monks, D. W., Sorensen, K. A., and Wilson, L. G. 1993. Potato Pest Management 1989: A Survey of Pesticide Use and Other Pest Management Practices by North Carolina Potato Producers. AG-497. North Carolina Cooperative Extension Service, Raleigh. 20 pp.
 - c. Toth, S. J., Jr., Bailey, J. E., Brandenburg, R. L., Sullivan, G. A., York, A. C., and Linker, H. M. 1994. Peanut Pest Management 1998: A Survey of Pesticide Use by North Carolina Peanut Producers. AG-498. North Carolina Cooperative Extension Service, Raleigh. 20 pp.
 - d. Toth, S. J., Jr., Averre, C. W., Monks, D. W., Schultheis, J. R., and Sorensen, K. A. 1994. Cucumber Pest Management 1990: A Survey of Pesticide Use and Other Pest Management Practices by North Carolina Cucumber Producers. AG-499. North Carolina Cooperative Extension Service, Raleigh. 20 pp.
 - e. Toth, S. J., Jr., Wilson, J. H., Sheets, T. J., Bromley, P. T., James, P., Linker, H. M., Mock, J. E., Southern, P. S., and St. Clair, M. B. 1992. Pesticides: Extension and Research Programs in North Carolina. ENT/pia 1. Department of Entomology, North Carolina State University, Raleigh. 4 pp.
 - f. Toth, S. J., Jr. and Bacheler, J. S. 1995. Insecticide Use by North Carolina Cotton Growers in 1992. ENT/pia 2. Department of Entomology, North Carolina State University, Raleigh. 5 pp.
 - g. Toth, S. J., Jr. and Linker, H. M. 1995. Pest Management in the Production of Agricultural Crops in North Carolina. ENT/pia 3. Department of Entomology, North Carolina State University, Raleigh. 6 pp.
 - h. Toth, S. J., Jr. 1995. The National Agricultural Pesticide Impact Assessment Program. ENT/pia 4. Department of Entomology, North Carolina State University, Raleigh. 2 pp.
2. The following educational displays were presented at professional meetings and state and county grower meetings:
- a. Toth, S. J., Jr. and Walgenbach, J. F. Insecticide Use by North Carolina Apple Growers in 1990.
 - b. Toth, S. J., Jr. and Sorensen, K. A. Insecticide Use by North Carolina Cucumber Growers in 1990.
 - c. Toth, S. J., Jr. and Sorensen, K. A. Insecticide Use by North Carolina Sweetpotato Growers in 1991.

d. Toth, S. J., Jr. and Bacheler, J. S. Insecticide Use by North Carolina Cotton Growers in 1992.

e. Toth, S. J. and Linker, H. M. Pest Management in the Production of Agricultural Crops: Mail Surveys of North Carolina Growers.

3. The following educational seminars reporting pesticide use data generated by the North Carolina Pesticide Impact Assessment Program were presented:

a. Toth, S. J., Jr. Pesticides: Federal Laws, Impact Assessment and Agricultural Usage in North Carolina. Department of Entomology, Clemson University, Clemson, South Carolina. January 23, 1995.

b. Toth, S. J., Jr. The North Carolina Pesticide Impact Assessment Program. Department of Entomology, North Carolina State University, Raleigh. February 13, 1995.

PROGRAM CONTACTS

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NORTH CAROLINA 1995 ANNUAL REPORT:
RENEWABLE RESOURCE EXTENSION ACT(12)

NARRATIVE SUMMARY OF ACCOMPLISHMENT

Production

Increased earnings of approximately \$16,915,510 resulted through better applications of timber products marketing techniques and increased hunting and fishing leases as a direct result of extension programs.

Utilization

Increased savings and earnings of approximately \$2,680,000 resulted through renewable resources being more efficiently utilized.

Environmental Quality

Public policy educational programs enhanced approximately 1,931,563 acres of timberland.

Continuing Education

Approximately 15,875 contact hours of continuing education for renewable resource professionals were provided.

Environmental Education

Approximately 232,975 people increased their understanding of a environmentally appropriate practices after using extension materials or after participating in extension programs.

SUCCESS STORIES

NORTH CAROLINA FORESTRY BEST MANAGEMENT PRACTICES (BMP'S)

The State of North Carolina amended The Guidelines to the Sedimentation Pollution Control Act in January 1990. These guidelines set nine performance standards for all forestry activities in North Carolina. These amendments maintained the forestry exemption, but only on the condition that forest site disturbing activities were done in accordance with the forest practices guidelines related to water quality. The North Carolina Cooperative Extension Service had the primary responsibility to educate the public on these guidelines. However, this educational program was a cooperative effort between the North Carolina Forestry Association (NCFA), the North Carolina Division of Forest Resources and North Carolina's forest industry.

Extension received a \$29,000 grant from the Sedimentation Pollution Control Commission to support extension educational programs relative to sedimentation control on forestry operations. The extension educational program consisted of the production of five videotapes, one slidetape, publications and educational workshops and evening meetings.

Approximately 3,000 forest industry professionals, landowners and loggers having a yearly impact on five million acres of timberland attended over 50 meetings on sedimentation control in forestry. Over 20,000 copies of "Pocket Guide to the Forest Practices Guidelines Related to Water Quality" were distributed. Numerous copies of a Woodland Owner Note (Maintaining Your Exemption Under The Sedimentation Pollution Control Act), videotapes and slidetapes were also distributed.

The Division of Forest Resources provided technical assistance, responded to initial complaints and monitored compliance to the performance standards. If the activities were judged to be out of compliance and no progress was made to correct the situation, the operator was turned over to the State's Land Quality Division or other departments for enforcement. Enforcement not only included fines and court action, but might also require filing Sedimentation Control Plans.

The North Carolina Division of Forest Resources FY 1994-95 third quarter compliance report on forest practice guidelines for water quality and best management practices showed a 95 percent compliance rate. The Division had conducted 2,866 inspections and issued 132 notes of non-compliance. Of these, only six have been referred to other agencies for enforcement actions. Compliance rates have improved from 83 percent in FY 1991-92, to 91 percent in FY 1992-93, and 95 percent in FY 1993-94. Extension educational impact has and will continue to be critical to the continued success of the BMP's program. A representative from the NCFA summed it up by stating, "This shows that a reasonable regulatory program developed by knowledgeable people and supported by education, training and technical assistance can yield very positive results."

To build on this success, Extension received a USDA-Extension Service grant (three in the nation) for conducting silvicultural educational programs for loggers and the forest industry. This was a cooperative effort between the North Carolina Division of Forest Resources, the North Carolina Forestry Association, the Natural Resources Conservation Service and North Carolina's forest industry. This program involved the development of educational materials and conducting workshops and on-the-job training in an effort to expand logging contractors' understanding of the background in developing the forestry BMP's and the impact of harvesting activities on forest growth, soils and water quality.

Approximately, 1,000 individuals have already attended workshops and field days to understand the ecological and silvicultural basis of BMP's and how they contribute to good stewardship of our land, timber and water. In addition, Prologger continuing education programs are being conducted for three months at nine different community colleges throughout North Carolina. Participants must complete 24 credit hours of training. Primary study areas include safety, environmental concerns and business management. The program concludes with an outdoor session that incorporates most of the elements the loggers learn in class including: planning before the job begins; best management practices; site productivity impacts from equipment; what the public sees and understands; elements of a crew safety meeting; and safety considerations including hazards, unsafe acts and conditions. Upon completing the program, participants receive Professional Logger designation and a certificate. Approximately 375 loggers have already graduated from this program. Graduates of this program are projected to be at the 1,500 level by the end of 1997.

OBJECTIVES, INDICATORS, DATA COLLECTION METHODOLOGIES

OBJECTIVE 1

Renewable resource producing enterprises will enhance their economic viability. (Same as RREA Objective A, "Production")

INDICATOR 1

Enter dollars save or earned as a direct result of Extension FORESTLAND programs to enhance economic viability. (Press F2 for

definitions of "Actual" and "Other".)

6yr Proj	5544000	0

	Actual Dollars Earned/Saved	Other Dollars Earned/Saved

1992	1386000	0
1993	3719700	0
1994	5258790	0
1995	5037280	0
1996	0	0
1997	0	0

Total	15401770	0

Data Collection Methodology

Survey audience reached. (ES will provide questionnaire information later.)

INDICATOR 3

Enter dollars saved or earned as a direct result of Extension FISH & WILDLIFE programs to enhance economic viability. (Press F2 for definitions of "Actual" and "Other".)

6yr Proj	64000	0

	Actual Dollars Earned/Saved	Other Dollars Earned/Saved

1992	16000	0
1993	102600	0
1994	230800	0
1995	250000	0
1996	0	0
1997	0	0

Total	599400	0

Data Collection Methodology

Survey audience reached. (ES will provide questionnaire information later.)

INDICATOR 5

Enter dollars saved or earned as a direct result of Extension ENVIRONMENT & PUBLIC POLICY programs to enhance economic viability. (Press F2 for definitions of "Actual" and "Other".)

6yr Proj	8000	0

	Actual Dollars Earned/Saved	Other Dollars Earned/Saved

1992	2000	0
1993	2000	0
1994	2000	0
1995	2000	0
1996	0	0
1997	0	0

Total	8000	0
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Data Collection Methodology

Survey audience reached. (ES will provide questionnaire information later.)

OBJECTIVE 2

Renewable resource products will be more efficiently utilized.

(Same as RREA Objective C, "Utilization")

INDICATOR 1

Enter dollars saved or earned as a direct result of Extension FORESTLAND programs to utilize resource products more efficiently. (Press F2 for definitions of "Actual" and "Other".)

6yr Proj	1340000	0
	Actual Dollars Saved/Earned	Other Dollars Saved/Earned
1992	335000	0
1993	845000	0
1994	1000000	0
1995	500000	0
1996	0	0
1997	0	0
Total	2680000	0

Data Collection Methodology

Survey audience reached. (ES will provide questionnaire information later.)

INDICATOR 3

Enter dollars saved or earned as a direct result of Extension FISH & WILDLIFE programs to utilize resource products more efficiently. (Press F2 for definitions of "Actual" and "Other".)

6yr Proj	62000	0
	Actual Dollars Saved/Earned	Other Dollars Saved/Earned
1992	15500	0
1993	446000	0
1994	143600	0
1995	1455	0
1996	0	0
1997	0	0
Total	606555	0

Data Collection Methodology

Survey audience reached. (ES will provide questionnaire information later.)

INDICATOR 4

Enter dollars saved or earned as a direct result of Extension OUTDOOR RECREATION programs to utilize resource products more efficiently. (Press F2 for definitions of "Actual" and "Other".)

6yr Proj	40000	0
	Actual Dollars Saved/Earned	Other Dollars Saved/Earned
1992	10000	0
1993	153000	0
1994	111785	0
1995	5000	0
1996	0	0
1997	0	0
Total	279785	0

Data Collection Methodology

Survey audience reached. (ES will provide questionnaire information later.)

INDICATOR 5

Enter dollars saved or earned as a direct result of Extension programs ENVIRONMENT & PUBLIC POLICY programs to utilize resource products more efficiently. (Press F2 for definitions of "Actual" and "Other".)

6yr Proj	20000	0
	Actual Dollars Saved/Earned	Other Dollars Saved/Earned
1992	5000	0
1993	5000	0
1994	5000	0
1995	5000	0
1996	0	0
1997	0	0
Total	20000	0

Data Collection Methodology

Survey audience reached. (ES will provide questionnaire information later.)

OBJECTIVE 3

Landowners/decisionmakers will be better able to act to protect and improve the environment on renewable resource lands through better information about the consequences of their actions. (Same as RREA Objective B, "Environmental Quality")

INDICATOR 1

Enter the number of acres protected but not enhanced or protected and also enhanced as a direct result of public policy educational programs concerning FORESTLAND. (Press F2 for definitions of "Actual" and "Other".)

6yr Proj	0	792000	0	0
	Actual Acres Protected	Actual Acres Enhanced	Other Acres Protected	Other Acres Enhanced
1992	0	198000	0	0

1993	0	635000	0	0
1994	0	372511	0	0
1995	0	168800	0	0
1996	0	0	0	0
1997	0	0	0	0
<hr/>				
Total	0	1374311	0	0

Data Collection Methodology

Survey audience reached. (ES will provide questionnaire information later.)

INDICATOR 3

Enter the number of acres protected but not enhanced or protected and also enhanced as a direct result of public policy educational programs concerning FISH & WILDLIFE. (Press F2 for definitions of "Actual" and "Other".)

6yr Proj	0	20000	0	0
<hr/>				
	Actual Acres Protected	Actual Acres Enhanced	Other Acres Protected	Other Acres Enhanced
<hr/>				
1992	0	5000	0	0
1993	0	65967	0	0
1994	0	168249	0	0
1995	0	1000	0	0
1996	0	0	0	0
1997	0	0	0	0
<hr/>				
Total	0	240216	0	0

Data Collection Methodology

Survey audience reached. (ES will provide questionnaire information later.)

INDICATOR 4

Enter the number of acres protected but not enhanced or protected and also enhanced as a direct result of public policy educational programs concerning OUTDOOR RECREATION. (Press F2 for definitions of "Actual" and "Other".)

6yr Proj	0	8000	0	0
<hr/>				
	Actual Acres Protected	Actual Acres Enhanced	Other Acres Protected	Other Acres Enhanced
<hr/>				
1992	0	2000	0	0
1993	0	2000	0	0
1994	0	906	0	0
1995	0	4130	0	0
1996	0	0	0	0
1997	0	0	0	0
<hr/>				
Total	0	9036	0	0

Data Collection Methodology

Survey audience reached. (ES will provide questionnaire information later.)

INDICATOR 5

Enter the number of acres protected but not enhanced or protected and also enhanced as a direct result of public policy educational programs concerning ENVIRONMENTAL & PUBLIC POLICY. (Press F2 for definitions of "Actual" and "Other".)

6yr Proj	0	280000	0	0
	Actual Acres Protected	Actual Acres Enhanced	Other Acres Protected	Other Acres Enhanced
1992	0	70000	0	0
1993	0	100000	0	0
1994	0	133000	0	0
1995	0	5000	0	0
1996	0	0	0	0
1997	0	0	0	0
Total	0	308000	0	0

Data Collection Methodology
Survey audience reached. (ES will provide questionnaire information later.)

OBJECTIVE 4

Extension will provide continuing education to renewable resource professionals. (Same as RREA Objective E, "Continuing Education")

INDICATOR 1

Enter the number of contact hours of FORESTLAND training provided. (For explanation, press F2.)

6yr Proj	4000	0
	Classroom/ Workshop Contact Hours	Indirect Media, etc. Contact Hours
1992	1000	0
1993	1750	0
1994	2500	0
1995	1500	0
1996	0	0
1997	0	0
Total	6750	0

Data Collection Methodology
Staff report of continuing education conducted or arranged by Extension. Also count exposure hours of professionals to Extension provided media designed to enhance professional competence.

INDICATOR 3

Enter the number of contact hours of FISH & WILDLIFE training provided. (For explanation, press F2.)

6yr Proj	2000	0
	Classroom/ Workshop Contact Hours	Indirect Media, etc. Contact Hours
1992	500	0

1993	500	0
1994	750	0
1995	500	0
1996	0	0
1997	0	0

Total	2250	0
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Data Collection Methodology

Staff report of continuing education conducted or arranged by Extension. Also count exposure hours of professionals to Extension provided media designed to enhance professional competence.

INDICATOR 4

Enter the number of contact hours of OUTDOOR RECREATION training provided. (For explanation, press F2.)

6yr Proj	400	0
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	Classroom/ Workshop Contact Hours	Indirect Media, etc. Contact Hours
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1992	100	0
1993	125	0
1994	200	0
1995	150	0
1996	0	0
1997	0	0

Total	575	0
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Data Collection Methodology

Staff report of continuing education conducted or arranged by Extension. Also count exposure hours of professionals to Extension provided media designed to enhance professional competence.

INDICATOR 5

Enter the number of contact hours of ENVIRONMENT & PUBLIC POLICY training provided. (For explanation, press F2.)

6yr Proj	3600	0
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	Classroom/ Workshop Contact Hours	Indirect Media, etc. Contact Hours
--	---	--

1992	900	0
1993	1400	0
1994	2000	0
1995	2000	0
1996	0	0
1997	0	0

Total	6300	0
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Data Collection Methodology

Staff report of continuing education conducted or arranged by Extension. Also count exposure hours of professionals to Extension provided media designed to enhance professional competence.

OBJECTIVE 5

Public (including youth) will improve understanding of renewable

resource issues. (Same as RREA Objective D, "Environmental Education")

INDICATOR 1

Enter the total number of people, including youth, adopting environmentally appropriate practices after participation in Extension FORESTLAND programs and the total number of such practices they adopt. (For questions to ask, press F2.)

6yr Proj	204000	0	0	0
	People Adopting Actual	People Adopting Other	Practices Adopted Actual	Practices Adopted Other
1992	50970	0	0	0
1993	54650	0	0	0
1994	18760	0	0	0
1995	30420	0	0	0
1996	0	0	0	0
1997	0	0	0	0
Total	154800	0	0	0

Data Collection Methodology

Survey audience reached. (ES will provide questionnaire information later.)

INDICATOR 3

Enter the total number of people, including youth, adopting environmentally appropriate practices after participation in Extension FISH & WILDLIFE programs and the total number of such practices they adopt. (For questions to ask, press F2.)

6yr Proj	42000	0	0	0
	People Adopting Actual	People Adopting Other	Practices Adopted Actual	Practices Adopted Other
1992	10515	0	0	0
1993	9265	0	0	0
1994	5129	0	0	0
1995	2196	0	0	0
1996	0	0	0	0
1997	0	0	0	0
Total	27105	0	0	0

Data Collection Methodology

Survey audience reached. (ES will provide questionnaire information later.)

INDICATOR 4

Enter the total number of people, including youth, adopting environmentally appropriate practices after participation in Extension OUTDOOR RECREATION programs and the total number of such practices they adopt. (For questions to ask, press F2.)

6yr Proj	6000	0	0	0
	People Adopting	People Adopting	Practices Adopted	Practices Adopted

	Actual	Other	Actual	Other
1992	1500	0	0	0
1993	900	0	0	0
1994	4688	0	0	0
1995	300	0	0	0
1996	0	0	0	0
1997	0	0	0	0
Total	7388	0	0	0

Data Collection Methodology

Survey audience reached. (ES will provide questionnaire information later.)

INDICATOR 5

Enter the total number of people, including youth, adopting environmentally appropriate practices after participation in Extension ENVIRONMENT & PUBLIC POLICY programs and the total number of such practices they adopt. (For questions to ask, press F2.)

6yr Proj	20000	0	0	0
	People Adopting Actual	People Adopting Other	Practices Adopted Actual	Practices Adopted Other
1992	5015	0	0	0
1993	11346	0	0	0
1994	13321	0	0	0
1995	14000	0	0	0
1996	0	0	0	0
1997	0	0	0	0
Total	43682	0	0	0

Data Collection Methodology

Survey audience reached. (ES will provide questionnaire information later.)

ESTIMATED PROGRAM COST

Year	Est. Cost
1992	2000000
1993	2000000
1994	2000000
1995	2000000
1996	0
1997	0
Total	8000000

ESTIMATED FTE COMMITMENT

	Professional			Paraprofessional		
	1862	1890	Other	1862	1890	Other
1992	29.9	0.5	0.0	3.0	1.5	0.0
1993	29.9	0.5	0.0	3.0	1.5	0.0
1994	29.9	0.5	0.0	3.0	1.5	0.0
1995	29.9	0.5	0.0	3.0	1.5	0.0
1996	0.0	0.0	0.0	0.0	0.0	0.0
1997	0.0	0.0	0.0	0.0	0.0	0.0
Total	119.6	2.0	0.0	12.0	6.0	0.0

ESTIMATED VOLUNTEER PARTICIPATION

Year	Volunteers
1992	6900
1993	6900
1994	6900
1995	6900
1996	0
1997	0
Total	27600

ADDITIONAL COMMENTS

PROGRAM CONTACTS

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NORTH CAROLINA 1995 ANNUAL REPORT:
CONSERVATION AND FORESTRY TITLES OF THE 1990 FARM BILL(13)

NARRATIVE SUMMARY OF ACCOMPLISHMENT

Major efforts related to the Farm Bill were related to the Forestry Title. In the Forest Stewardship Program, county committees were active in working with other agencies to educate and assist landowners interested in the program or otherwise interested in forest management or conservation of their resources. Over 705 forest stewards are in North Carolina. Emphasis has been placed on quality of plans with the expectation that landowners will implement them.

The Wetlands Reserve Program has also received attention in North Carolina. Extension was involved in discussions regarding criteria for inclusion and acceptable management. Primary efforts were on the development of educational materials for District Conservationists and Extension Agents to use when acquainting landowners with the program and its provisions. Over 4,800 acres were accepted into the program in the initial sign-ups with another 1176 acres were submitted in the 1995 sign-up.

Although not a major program emphasis, landowners are always encouraged in the proper management practices whether in farming, forestry, or other land land-use.

SUCCESS STORIES

Forest Stewardship - This program has been successful on several fronts. There are over 705 landowners actively managing their property as forest stewards. Numerous others have been reached and acquainted with the principles of the program, and have either chosen not to participate or have not decided. However, those not participating are encouraged to use the appropriate management practices on their lands. From Extension's perspective we have accomplished many things - 1) it has created a working relationship among agencies in some counties where it had not existed before, 2) it has provided an opportunity to work with professional resource managers in training situations, 3) it has provided the means to develop and disseminate much needed information on forestry, wildlife, and land aesthetics management. Over 25 publications have resulted from this effort and are being requested throughout the U.S. and from other countries. The information is currently available hardcopy or on the World Wide Web.

The North Carolina Wildlife Resources Commission funded "Economics of Filter Strip and Ditch Bank Management for Quail." This resulted in a report that will help private landowners evaluate investing in wildlife habitat and water quality conservation practices. Investments in these practices are likely to increase the attractiveness of large parcels of private lands for recreationists, thus generating income for the landowners.

OBJECTIVES, INDICATORS, DATA COLLECTION METHODOLOGIES

OBJECTIVE 1

Landowners and managers will understand the Conservation Title of the 1990 Farm Bill.

INDICATOR 1

Enter the number of land owners/managers and agency representatives who are knowledgeable concerning the Conservation Title of the Farm Bill.

6yr Proj 20000

Number of
Knowledgeable

Owners/Mgrs.

1992	18000
1993	3755
1994	2227
1995	3022
1996	0
1997	0

Total 27004

Data Collection Methodology

Staff records.

OBJECTIVE 2

Farm owners/operators will successfully implement conservation plans and practices.

INDICATOR 1

Enter the number of practices in conservation plans installed with CES involvement.

6yr Proj 15000

Number of
Practices
Installed

1992	2000
1993	1896
1994	3980
1995	1901
1996	0
1997	0

Total 9777

Data Collection Methodology

SCS records on Plan Implementation, cross-referenced with staff reports for CES input.

OBJECTIVE 4

Landowners and managers will understand the Forestry Title of the 1990 Farm Bill.

INDICATOR 1

Enter the number of land owners/managers and agency representatives who are knowledgeable concerning the Forestry Title of the Farm Bill.

6yr Proj 5000

Number of
Knowledgeable
Owners/Mgrs.

1992	4500
1993	1000
1994	1200
1995	975
1996	0
1997	0

Total 7675

 Data Collection Methodology
 Staff records.

OBJECTIVE 5

Land owners/managers will successfully implement forestry practices.

INDICATOR 1

Enter the number of practices in forestry installed with CES involvement.

 6yr Proj 2000

Number of
 Practices
 Installed

1992	500
1993	176
1994	670
1995	471
1996	0
1997	0

 Total 1817

Data Collection Methodology
 Staff records.

INDICATOR 2

Specify the forestry practices installed.

1995 ACTUAL RESULT(S)

Data Collection Methodology
 Staff records.

ESTIMATED PROGRAM COST

Year	Est. Cost
1992	306250
1993	306250
1994	306250
1995	306250
1996	0
1997	0
Total	1225000

ESTIMATED FTE COMMITMENT

	Professional			Paraprofessional		
	1862	1890	Other	1862	1890	Other
1992	5.8	2.5	0.0	0.0	2.2	0.0

1993	5.8	2.5	0.0	0.0	2.2	0.0
1994	5.8	2.5	0.0	0.0	2.2	0.0
1995	5.8	2.5	0.0	0.0	2.2	0.0
1996	0.0	0.0	0.0	0.0	0.0	0.0
1997	0.0	0.0	0.0	0.0	0.0	0.0
Total	23.2	10.0	0.0	0.0	8.8	0.0

ESTIMATED VOLUNTEER PARTICIPATION

Year	Volunteers
1992	0
1993	19
1994	20
1995	20
1996	0
1997	0
Total	59

ADDITIONAL COMMENTS

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NORTH CAROLINA 1995 ANNUAL REPORT:
ENVIRONMENTAL EDUCATION(14)

NARRATIVE SUMMARY OF ACCOMPLISHMENT

Almost 400,000 individuals and families increased their awareness of public policy issues related to environmental action and 442,000 increased their participation in public policy. Major issues addressed include drinking water quality, nonpoint source pollution, residential and municipal solid waste management, animal waste management, outdoor air quality, radon and indoor air quality, and natural resource management. Targeted programs included limited resource citizens, the Cherokee Indian reservation, schools and many local communities and municipalities. Over 1,300,000 citizens adopted one or more best management practices that improved the environment. Public policy training has included conflict resolution and the use of facilitation teams to develop consensus. Networking has occurred with state and federal agencies, schools, non-governmental organizations and the private sector. Volunteers have played a key role in the delivery of programs, particularly to youth audiences.

SUCCESS STORIES

Recycling: Jones county implemented a school recycling program that included 6 schools. The program was so successful that the recycling efforts will be continued as part of the schools standard maintenance and management programs. Hopefully, as we teach our youth about recycling and the environment, they will become stewards of our planet and teach their parents.

EXEMPLARY PROGRAMS

Wayne County Recycling Program

Through Master Gardner Training, a major yardwaste community project was implemented reaching over 4,000 base personnel at Seymour Johnson Air Force Base, with > 3,000 cubic yards of solid waste being composted.

11 Master Gardners became certified Master Composters and they conducted 4 community demonstrations.

2,500 citizens became aware of yardwaste composting through 7 news articles and feature news columns.

150 citizens adopted backyard composting systems.

30 volunteers (1,000 volunteer hours) installed yardwaste compost demonstrations throughout the county

24 E>H> environmental Issues Chairmen developed expertise in Composting, cleaner cleaners, recycling decorations, effective recycling, propagaion of houseplants. They in turn trained 2,200 others in the county.

124 young adults and teens developed environemntal related skills in three subject areas: what and how to recycle, furniture refinidhing, make your own cleaners.

OBJECTIVES, INDICATORS, DATA COLLECTION METHODOLOGIES

OBJECTIVE 1

Extension will conduct environmental education programs designed to create environmental awareness and enhance the development of an environmental ethic in adults and youth.

INDICATOR 1

Enter "y" in the POW Estimate if you intend to develop a strategic plan for environmental education, and in the Annual Report, enter a

"Y" for the appropriate year in which the plan is developed. (See F2 help screen for criteria.)

6yr Proj	Y
	Strategic Plan Developed?
1992	N
1993	N
1994	N
1995	N
1996	N
1997	N

Data Collection Methodology

Results of needs assessment which includes:

- o Citizen opinion on important current and emerging environmental education needs
- o Interdisciplinary, interorganization inventory of environmental education resources and materials.

OBJECTIVE 2

Extension will serve as a catalyst to develop and deliver research-based environmental educational programs targeted to help private citizens solve environmental problems.

INDICATOR 1

Enter the number of individuals, families or communities which increase AWARENESS of public policy issues related to environmental action.

6yr Proj	190000	0	0
	Individuals Increasing Awareness	Families Increasing Awareness	Communities Increasing Awareness
1992	140103	0	0
1993	71099	0	0
1994	87294	0	0
1995	101504	0	0
1996	0	0	0
1997	0	0	0
Total	400000	0	0

Data Collection Methodology

Pilot programs that include evaluation of participant pre/post practices, attitude and commitment change.

INDICATOR 2

Enter the number of individuals, families and communities which increase PARTICIPATION in public policy issues related to environmental action.

6yr Proj	57500	0	0
	Individuals Increasing Participation	Families Increasing Participation	Communities Increasing Participation

1992	36258	0	0
1993	19321	0	0
1994	276000	0	1162
1995	110421	0	0
1996	0	0	0
1997	0	0	0
Total	442000	0	1162

Data Collection Methodology

Pilot programs that include evaluation of participant pre/post practices, attitude and commitment change.

ESTIMATED PROGRAM COST

Year	Est. Cost
1992	5426000
1993	5426000
1994	5426000
1995	5426000
1996	0
1997	0
Total	21704000

ESTIMATED FTE COMMITMENT

	Professional			Paraprofessional		
	1862	1890	Other	1862	1890	Other
1992	38.8	1.0	0.0	87.0	1.0	0.0
1993	38.8	1.0	0.0	87.0	1.0	0.0
1994	38.8	1.0	0.0	87.0	1.0	0.0
1995	38.8	1.0	0.0	87.0	1.0	0.0
1996	38.0	1.0	0.0	87.0	1.0	0.0
1997	38.0	1.0	0.0	87.0	1.0	0.0
Total	231.2	6.0	0.0	522.0	6.0	0.0

ESTIMATED VOLUNTEER PARTICIPATION

Year	Volunteers
1992	27853

1993	27853
1994	27853
1995	27853
1996	27853
1997	27853
Total	167118

ADDITIONAL COMMENTS

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NORTH CAROLINA 1995 ANNUAL REPORT:
LIMITED RESOURCE/LOW INCOME INDIVIDUALS AND FAMILIES(15)

NARRATIVE SUMMARY OF ACCOMPLISHMENT

Reaching and teaching the limited resource audience presents many challenges that are different from those encountered with other extension clientele. Challenges are often viewed as roadblocks and employees possess many skills and talents to work successfully with this audience. They need certain knowledge and skills to understand the plight of the limited resource individual and must realize the potential impact educational programs could have on their quality of life. The Cooperative Extension Program at NC A&T State University, through it's staff development efforts, have trained 199 field staff and 775 volunteers to reach, teach and have a positive influence on the behavior of 23,451 limited resource individuals and families. Staff development opportunities included workshops at the annual extension training conference, special workshops such as one conducted for county staff who had received grant funds from A&TSU to conduct short-term innovative programs for limited resource audiences, individual conferences, and county cluster groups. Training objectives focused on programming strategies to reach and teach this audience; using appropriate strategies and subject matter to address needs and measuring program impact. As a result of these efforts to better prepare the staff to work effectively with this clientele, the number of requests for information and programs for this audience has increased tremendously. A Profile of Families in NC Public Housing Communities was distributed to one hundred one (101) extension units, ninety-nine (99) housing authority offices and other 1890 Land Grant Universities. This document provided a descriptive profile of the family structure in public housing communities and implications for addressing needs and developing curricula. Participants have indicated being more sensitive to the real needs associated with poverty and having limited resources. A learning experience, "SENSI," assisted staff to explore themselves and families with financial, social and educational limitations. Participants described experiences, feelings and situations that help dispel the many myths and stereotypes often associated with the limited resource audience. Training efforts with 35 paraprofessionals have impacted the assistance provided to this audience. Workshops have increased their awareness of the programming process thus building their capacity to interact more effectively with clientele on a day-to-day basis. Efforts have increased to train professionals and paraprofessionals in the same setting. Paraprofessionals expressed the value of this type of training which promotes feelings of teamwork. Four hundred thirty-two (432) new limited resource adults and teen volunteers were recruited and participated in at least four training workshops to enhance skills to design learning experiences for community youth. Volunteers indicated improved programming skills, organizational skills and increased subject matter knowledge. An average of twelve hours of volunteer service was rendered by these volunteers. Community Voices, a participatory shared leadership development program for rural individuals and families, reached over 800 community leaders who completed fourteen learning modules enabling them to experience a feeling of self achievement, improve their decision making skills within their families and communities. Participants have indicated increased involvement in community affairs that affect the quality

of life in their community and county.

Problems associated with poverty are complex and often difficult for any one organization to address. County and state staff were encouraged to develop linkages with other agencies and organizations, foster a congenial helping relationship, and create a non-threatening atmosphere. Forty (40) coalitions have been established. The average agency or organization involvement in any one coalition included three others in collaborative efforts with the Cooperative Extension Program. Four thousand-thirty four (4,034) limited resource clientele were referred to other agencies and organizations for assistance. The impact of these partnerships have connected families to more comprehensive education and services. A state effort to collaborate with other agencies and organizations relative to issues related to Pregnant and Parenting Adolescents was established with three other agencies (Girls Scouts, Parks and Recreation, Health Department). As a result, this coalition provided the initial input needed to develop educational curriculums to address this complex issue. A grant from the Governor's Crime Commission has made possible an innovative program designed to assist victims of crime in public housing communities. A collaborative effort with the Durham Housing Authority, Durham Police Department, NCCU Law School and Ministers provided residents in eleven (11) public housing communities in Durham County, NC with information and services to assist victims of crime in understanding the dynamics of victimization and explored strategies for stabilizing their lives. According to Housing Authority personnel, counseling and support groups have helped the residents and victims restore their sense of dignity, self-esteem and coping mechanisms. The coalition has become vital in obtaining outside funding.

Limited resource individuals and families in North Carolina are improving their quality of life. Eighty (80) percent of the twenty three thousand four hundred fifty-one (23,451) limited resource persons participating in educational programs indicated having improved or adopted new practices. Basic life skills continued to be the focus of many programs for limited resource clientele. Highlights of selected programs include: Twenty (20) handicapped adults increased their knowledge relative to budgeting, comparative shopping and decision-making. Pre- and post-test scores showed a 65% increase in the subject matter being taught. Male and female inmates have participated in programs to assist them with budgeting, parenting, building self esteem and managing conflict. Ten (10) mothers assigned by the courts to a correction program indicated a better understanding of the difference between discipline and punishment and how they can influence the self esteem of their children. Extension agents reported that several of the participants had requested additional information on parenting from the Extension office. Parenting classes for young parents helped participants learn about the social, intellectual and emotional development of their children. Participants as a result improved their communication skills and were able to react in a more positive manner to the behavior of their children. One hundred forty-two (142) limited resource family members participated in time and money management workshops; seven (7) of these participants set and followed through on goals to purchase a house and car. Sixty-five (65) families reported record-keeping systems and increases in knowledge and skills in the management of finances. In cooperation with a local family violence program, a workshop on spouse abuse was held. Twenty five

(25) people attended and were able to learn more about spouse abuse, how it affects families and the resources that are available to provide assistance to families. Fifty (50) small/part-time farmers participated in a comprehensive educational program on alternative agricultural enterprises. Participants as a result of this effort developed and implemented a plan of action leading to the establishment of 48 on-farm demonstrations on various alternatives. A peer education program has been instrumental in the development of teen leadership in one NC county. Teens were involved in programs such as decision making, enhancing self esteem, African Heritage, teen sexuality, conflict mediation, environmental concerns and community service. The program attracted over 40 teens who are currently community leaders and are positive role models for younger youth.

SUCCESS STORIES

Success Story #1

Community Voices: Leadership Development for Public Policy Decision-Making Program (CV) helped citizens (486) in the Northwest Community of Brunswick County turn their dreams into reality. Twenty-three of 486 participated in the (CV) program and utilized the leadership skills developed to work together in identifying community issues/problems and forming action committees for the development of an organizational plan so that they might resolve some of those problems within the community. Using consensus building skills the organizational committee and the community residents decided to develop a package to present to the General Assembly to be incorporated as a town.

Incorporating benefits included: 1) citizens wish to take advantage of services of town government; 2) a town is authorized to provide the entire range of urban services we associate with city/town government: police/fire protection, street maintenance, solid waste collection and disposal, water and sewer services, recreation, etc. North Carolina law permits all towns to provide a full range of city services; 3) a town of 400 has the same powers as the city of 15,000 plus. But the law does not require any service. Each town, through its elected governing board, decides which services it will provide; 4) a town may regulate its citizens and their property through the ordinance-making power. Common ordinance are those that zone property, control dogs and other animals, limit Sunday sales, and restrict the use of firearms; 5) Incorporation forecloses the possibilities of annexation of a community by a neighboring city. No city may annex territory that is within another city or town; 5) a town is eligible for certain federal or state grants or loans that an unincorporated community is not.

The organizational committee saw need to incorporating to prevent some of the issues/problems they were facing: annexation, police protection, fire protection, water, sewer, etc. The organizational committee and community members prepared the package for incorporating and on July 25, 1993, the freshman Representative Thomas Wright's first legislative victories changed the face of the region slightly, adding a new town, City of Northwest, in Brunswick County.

A Community Voices Program graduate is a member of the 5 member

counsel governing the City of Northwest and continues to seek advice from the Extension Service to help improve services in their community. The City of Northwest accomplishments included volunteer fire department, police protection, emergency equipment/facilities, and an organized training program for Northwest citizens to carry out these services/programs.

Success Story #2

The Caswell Coalition For Teen Health Promotion (THP) was established with 11 agencies working together with students to promote teen health in Caswell County. This office has provided leadership to the coalition in the development of the only pocket size resource brochure available in the county. This brochure has been distributed to 2,991 students and limited resource families. This office also provided leadership in organizing four Health Fairs in the high school and junior high school with 1,877 students attending. Individual agencies set up educational booths on general health, nutrition, AIDS, child abuse, oral hygiene, eye care, mental health, personal hygiene, domestic violence and suicide prevention. The Extension Program manned educational booths focusing on general nutrition, nutrition during pregnancy, and lowering the sugar and fat content in the diet during the Health Fairs at the local schools.

Success Story #3

A pregnant adolescent, after being in and out of the hospital several times because of high blood pressure and diabetes, was referred to the Cooperative Extension Food and Nutrition Program for pregnant adolescents. She was four months pregnant and had lost seven pounds. The program provides nutritional information to improve the health of pregnant adolescents and their babies. Since Lisa was a diabetic and had problems with high blood pressure, lesson plans were changed to meet her specific needs. She was shown how to and the importance of the following:

1. Eating less fat
2. Eating more carbohydrates (starches and breads), especially those high in fiber
3. Eating less sugar
4. Using less salt

A diabetic meal plan was used with the six exchange list. Her meal plan had to be changed as her pregnancy advanced. Home visits were made once a week and sometimes more if needed.

Lisa had a healthy full term baby boy weighing in at 8 lbs., 6 oz. She gives thanks to Extension Food and Nutrition Program for help in keeping her diabetes and high blood pressure under control.

Success Story #4

"Successful Goal Reaching"

The Making Things Happen Series was initiated with ten family members located in the Kimberly Park Housing Development. The participants

went through a four-week series on mapping out their financial future by developing a plan. The participants developed a vision for reaching their goals by identifying their means of attainment. This included understanding resources (monetary and non-monetary) to get their needs and wants taken care of.

As the participants progressed through the series, they were able to identify goals, values, needs, and resources available to them, etc., to progress from "Wanting to do better" vs "Doing better with a vision." The participants looked at the "whole family" in planning their financial picture. As a result of this series, the participants did cite a clear vision of their needs and goals and how to reach them. Five participants did start a written budget and one participant bought a car. The other four participants are working on goal setting.

OBJECTIVES, INDICATORS, DATA COLLECTION METHODOLOGIES

OBJECTIVE 1

Extension will train staff and volunteers to effect behavioral change with limited resource adults and youth through coordinated programs involving two more subject areas (e.g., money management, nutrition and health, and individual and family development).

INDICATOR 1

Enter the number of CES staff trained and the number of CES staff implementing programs as a result of training.

6yr Proj	100	65
	Number of CES Staff Trained	Number Implementing Programs
1992	38	13
1993	48	54
1994	40	40
1995	199	170
1996	0	0
1997	0	0
Total	325	277

Data Collection Methodology

Staff reports (statistical and narrative).

INDICATOR 2

Enter the number of volunteers trained and the number of volunteers implementing programs as a result of training.

6yr Proj	300	0
	Number of Volunteers Trained	Number Implementing Programs
1992	115	115
1993	110	110
1994	280	259
1995	775	674
1996	0	0
1997	0	0

Total	1280	1158
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Data Collection Methodology

Staff reports (statistical and narrative).

OBJECTIVE 3

Limited resource participants in Extension will improve basic life skills.

INDICATOR 1

Enter the number of limited resource participants in Extension programs.

6yr Proj	700
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Number of
Audiences
Reached

1992	3993
1993	3456
1994	16002
1995	23451
1996	0
1997	0

Total	46902
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Data Collection Methodology

Survey participants (sample or total population) using pre/post tests, telephone or personal interviews.

INDICATOR 3

From a sample of participants, enter the number sampled and, of that total, the percent who adopted practices to manage resources, choose nutritious foods and/or strengthen families.

6yr Proj	700	0.0
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Number of
Participants
In Sample

Percent
Adopting
Practices

1992	700	50.0
1993	620	52.0
1994	7557	47.2
1995	0	0.0
1996	0	0.0
1997	0	0.0

Total	8877
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Data Collection Methodology

Survey participants (sample or total population) using pre/post tests, telephone or personal interviews.

ESTIMATED PROGRAM COST

Year	Est. Cost
1992	625000
1993	625000

1994	625000
1995	625000
1996	0
1997	0
Total	2500000

ESTIMATED FTE COMMITMENT

	Professional			Paraprofessional		
	1862	1890	Other	1862	1890	Other
1992	0.0	10.0	0.0	0.0	0.0	0.0
1993	0.0	10.0	0.0	0.0	0.0	0.0
1994	0.0	10.0	0.0	0.0	0.0	0.0
1995	0.0	10.0	0.0	0.0	0.0	0.0
1996	0.0	0.0	0.0	0.0	0.0	0.0
1997	0.0	0.0	0.0	0.0	0.0	0.0
Total	0.0	40.0	0.0	0.0	0.0	0.0

ESTIMATED VOLUNTEER PARTICIPATION

Year	Volunteers
1992	300
1993	300
1994	300
1995	300
1996	0
1997	0
Total	1200

ADDITIONAL COMMENTS

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NORTH CAROLINA 1995 ANNUAL REPORT:
MULTICULTURAL DIVERSITY (16)

NARRATIVE SUMMARY OF ACCOMPLISHMENT
NORTH CAROLINA 1995 ANNUAL REPORT:
MULTICULTURAL DIVERSITY (16)
NARRATIVE SUMMARY OF ACCOMPLISHMENT

The North Carolina Cooperative Extension Service as a total organization is committed to and is currently working toward achieving and sustaining multicultural diversity within its programs, operations, personnel and audiences.

During FY94 the State Diversity Task Force renewed its efforts to provide stronger leadership and response to programming for diversity. The Task Force reviewed goals and identified training needs. The Task Force conducted four trainings reaching approximately 50% of the counties. Additionally, all the county teams in Children, Youth and Families Institute received training on pertinent diversity issues.

Designing programs for special needs populations has been a successful experience. County staffs continued innovative programming for this audience. County programming has illustrated that special needs youth can benefit from traditional 4-H activities. Programs and learning experiences provided positive reactions among special needs youth and their families as they realized school, communities, and 4-H are interested in their well being.

In addition, 101 county directors and 22 department extension leaders participated in leadership institutes. They took the Human Patterns Assessment which determined work styles and characteristics in working with people. This tool has helped county directors, specialists and administration better understand the overall attitudes and patterns of each other's work style. As a group they have a greater sensitivity to individual differences and Extension Administration is demonstrating greater appreciation of the differences and similarities of the group.

North Carolina submitted applications to the National Diversity Award program in FY94 and 95. The Economic Development Program for Women - Project DREAM was recognized as programming for diversity, and the Halifax County Extension Program.

As Extension has expanded its partnership with other agencies and organizations, the diversity of our audiences has increased our outreach to form unique collaborations. In the Youth-at-Risk program, approximately 200 long-term coalitions worked to address long-term goals. More than 12,515 volunteers donated over 33,977 days to the initiative. Over \$1,289,378 federal; \$2,259,856 state; \$141,817 local government, and \$245,761 private dollars were used to support youth-at-risk programming.

As the organization places greater emphasis on diversity programming and recognition of outstanding efforts, additional success stories will surface. One of the strengths of programming in North Carolina is a positive environment supporting programming for diverse audiences.

SUCCESS STORIES
Basic Money Management Success Story

A single mother in a Head Start parent meeting attended a session on "Budgeting: Managing for a Better You." At the close of the session, mothers could sign up if they wanted individual help, and this mother did. She attended many educational meetings offered, and began to volunteer to help with the Head Start activities. An opportunity for part-time employment was offered to her and she accepted. Seeing that this mom wanted to help herself and her children, I invited her to participate in a multi-county Economic Development for Women project, "Investing in Yourself." At first she was very hesitant about leaving home, leaving her children and all the other unknowns for an overnight out-of-town trip. After much persuasion she did go and it was extremely helpful for her and her family. She came back, changed the way she dressed, prepared more nutritious meals for her family, learned to set goals for herself and her family. She said the seminar really made a difference in her life. She said, "I now think more positively about myself...I try to teach my children good values." It must have had effects that others could see because she is now a full-time employee with Head Start, has taken two Child Care Credential classes from the local community college and has gotten married. She said, "I want to set a good example for my children and make them proud of me!"

Youth-at-Risk

During the past four years, 49 North Carolina counties have been involved with the youth-at-risk initiative. This initiative has involved total staff participation and has allowed the Cooperative Extension Service to expand its programming effort to new audiences. 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 Cooperative Extension Service youth-at-risk programs have had a positive impact on youths. Over 1893 adjudicated youths have reduced their involvement in the judicial system. Nearly 27,049 youths improved their academic performance as a result of Extension programs. Improved study habits; increased school attendance, and reduction of out-of-school and in-school suspensions have also occurred. Nearly 5,610 youths decreased their alcohol and other drug usage after participating in Extension programs. Nearly 1,900 youths improved their literacy skills as a result of Cooperative Extension programs.

Davie County

In Davie County, a school counselor nominated a biracial child whose parents had limited income for a 4-H camp experience. The counselor believed that the family did not encourage "William" in activities because of his racial background, and as a result he often seemed lonely and withdrawn. William has attended 4-H Camp for the past three years. His school counselor credits his camp experiences for the turn-around in his personality by proving to him and his family that he can be accepted for who he is.

Alleghany County

Extension agents in Alleghany County coordinated the Twenty-Fourth Annual Special Opportunity Camp (SOC), a week-long residential camp for 28 economically or socially disadvantaged youth that is run by volunteers. These children learned the basic tools to fit into society and develop into the leaders of tomorrow. Special

Opportunity Camp was developed to meet the needs of the less fortunate and help them to become useful members of, and not a menace to society.

OBJECTIVES, INDICATORS, DATA COLLECTION METHODOLOGIES

OBJECTIVE 1

Extension will achieve multicultural diversity within the organization and with its clients.

INDICATOR 2

Describe milestones achieved in multicultural diversity.
1995 ACTUAL RESULT(S)

DATA COLLECTION METHODOLOGY

OBJECTIVE 1

Extension will achieve multicultural diversity within the organization and with its clients.

INDICATOR 2

Describe milestones achieved in multicultural diversity.

Families in Crisis

Over 2,000 North Carolina women from 36 counties and the Cherokee Reservation participated in the Economic Development for Women project. The purpose of the program was to improve the economic sufficiency of families from all types of diverse family structures. As a result of the program: 32 adults completed high school or received GED's; 112 youth completed high school or its equivalent; 68 enrolled in training programs, and 73 enrolled in college. Additionally, 106 made decisions about starting or changing jobs. Ninety individuals were able to get off welfare. As they learned more about leadership development, 245 took more initiative in leadership roles. Many small strides were made by the individuals in the program including improvement of self-esteem, improved self-confidence, better time management, greater appreciation for each other, and better insight into understanding themselves and others. (See the Families in Crises - NC03 report for other details and the templated indicators.)

Home schooling groups are another diverse audience we reach in North Carolina. In Buncombe County in Western, North Carolina, seven home-school 4-H clubs involving 125 youth and 35 adults have been formed.

See the EFNEP report for accomplishments of EFNEP youth who improved their diet and nutrition skills through special interest programs, after school programs, and summer mini-day camps.

DATA COLLECTION METHODOLOGY

County Annual Reports

INDICATOR 3

Describe multicultural diversity achieved.

More than 10,000 families have been served through worksite programs, Chapter 13 bankruptcy classes, home study courses, consultations, and other activities. Worksite programs have reached more than 3,000 working families.

Hispanics are being served in our programs across the state, especially in contacts that relate to health and nutrition issues, child care, housing problems, and family financial issues. This is an emerging audience for us and data are compiled using other

descriptors such as limited-resource audiences rather than highlighting Hispanics as a group receiving specialized programming.

Housing

Personal Budgeting/Home Buying

Nine "Personal Budgeting/Home Buying" workshops were conducted in Edgecombe County, North Carolina with the Tarboro Housing Development Association, Old Town Realty, Edgecombe County Planning Department, and Nations Bank. Each series involved 12 hours of training with 182 participants. Credit reports and training materials were provided by Nations Bank. Twenty-five low-income families who have participated in the training have purchased homes for a total value of \$1,350,000. Sixty-four participants are continuing to keep monthly detailed reports of their spending and five are in contact with the Extension Agent for specialized, individualized information. The success stories from previous classes are motivating others to improve their financial situation. The waiting list holds names of individuals who are interested in future classes.

Eviction Prevention

Five hundred forty-four limited-income family members who were in danger of eviction due to poor safety conditions or unacceptable home maintenance practices received training from 20 leaders, and were successful in being able to remain in their public housing units instead of becoming homeless. The impact of this crisis management program assisted the participants in meeting the requirements of their lease agreements, and taught them useful skills in order to maintain a clean, safe, and healthy home environment.

DATA COLLECTION METHODOLOGY

County Annual Reports

OBJECTIVE 2

Extension will sustain multicultural diversity within the organization and with its clients.

INDICATOR 1

Describe multicultural diversity sustained.

Diversity has been sustained in numerous programs across the state. Examples follow:

In Halifax County the youth program has targeted "challenged" youth, especially troubled youth. A major impact is that about one-half of the youth are now on the honor roll, after having spent more time missing school last year than they attended.

By cooperating with the Services for the Blind, the Halifax County Extension Service sponsored a two-day summer camp which paired a visually impaired person with a 4-H volunteer. The purpose of the camp was to improve communication and understand obstacles visually impaired individuals face and how rich their lives can be by exposing each group to each other. This program, in its sixth year, improved aspects of intergenerational communication with approximately 50 participants.

Community Voices

In the Community Voices program which is active in 14 North Carolina counties, primarily black participants became leaders committed to improving their community. In Columbus County, a

group of Community Voices graduates applied what they learned about public policy and were able to get a traffic signal installed at a dangerous intersection. In a central city neighborhood in Charlotte, a group of senior citizens completed Community Voices and decided to get involved with bridging the inter-generational gap by launching a program called "Rocking and Ready" at a local day care center. In Swain County an old drugstore was revived when a Community Voices group stepped in and redirected its future into a community center. The Community Voices program has been sustained in many communities across the state since the participants have found their voice in their community.

Data Collection Methodology

Staff reports.

INDICATOR 3

Describe multicultural diversity achieved.

1995 ACTUAL RESULT(S)

Data Collection Methodology

Staff reports.

OBJECTIVE 2

Extension will sustain multicultural diversity within the organization and with its clients.

INDICATOR 1

Describe multicultural diversity sustained.

1995 ACTUAL RESULT(S)

Data Collection Methodology

Staff reports.

ESTIMATED PROGRAM COST

Year	Est. Cost
1992	625000
1993	625000
1994	800000
1995	800000
1996	0
1997	0
Total	2850000

ESTIMATED FTE COMMITMENT

	Professional			Paraprofessional		
	1862	1890	Other	1862	1890	Other
1992	12.0	0.0	0.0	2.0	0.0	0.0
1993	12.0	0.0	0.0	2.0	0.0	0.0

1994	16.0	0.0	0.0	2.0	0.0	0.0
1995	16.0	0.0	0.0	2.0	0.0	0.0
1996	0.0	0.0	0.0	0.0	0.0	0.0
1997	0.0	0.0	0.0	0.0	0.0	0.0
Total	56.0	0.0	0.0	8.0	0.0	0.0

ESTIMATED VOLUNTEER PARTICIPATION

Year	Volunteers
1992	0
1993	0
1994	0
1995	0
1996	0
1997	0
Total	0

ADDITIONAL COMMENTS

PROGRAM CONTACTS

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NORTH CAROLINA 1995 ANNUAL REPORT:
PARENTING AND FAMILY-YOUTH PROGRAMS(17)

NARRATIVE SUMMARY OF ACCOMPLISHMENT

Various programming techniques and delivery systems were used in providing Extension clientele with successful parent and family/youth educational opportunities.

Parents in North Carolina continue to struggle to rear their children in a safe and comfortable environment in a culture that is becoming increasingly dangerous for youth. Much work is still needed to deal with some prominent social ills, such as teenage pregnancy, child abuse and neglect, child care, and family instability.

Continued networking efforts with local agencies such as Headstart and Community Service Council have resulted in the formation of parenting classes for pregnant teens and teens with young children.

In one county, over 200 family members were given training on parenting, communication, resource management, and leadership at a one-day Family Focus which targeted young families. Extension Homemakers set up special exhibits including teen pregnancy, teen suicide, literacy, nutrition, global issues, and recycling.

Several county Extension professionals provided leadership to their respective county's participation in the governor's Smart Start initiative. Collaborative efforts in this program have resulted in spin-off groups such as Partnership for Children.

Other interagency collaborations, as well as volunteer involvement, helped to deliver a variety of programs to diverse individuals and families. Innovative ways to impact more and diverse clientele remain continual challenges for Extension.

SUCCESS STORIES

In looking at any program one can rate its success by the many people it has helped. The B.A.M. (Becoming A Mother) support group, a program designed to make better teen mothers, has done just that. Betty Harris, finished high school, and after a brief period in the Army, became pregnant. She then moved in with her parents, got pregnant with her second child, and gave up all hopes and dreams of becoming a nurse. Struggling to make ends meet, she moved into Womack Apartments where she attended her first B.A.M. meeting. It was there that she found out about educational opportunities available to her at Rockingham Community College and about grants and scholarships that she didn't even know existed. Through encouragement from the members of B.A.M., she made it through college, combating hardships of lack of transportation and having to depend on taxis and friends. She survived and is now off welfare. She works as a nurse in Greensboro. She will never forget the day she went to her first B.A.M. meeting.

OBJECTIVES, INDICATORS, DATA COLLECTION METHODOLOGIES

OBJECTIVE 1

Parents and youth will acquire and use the knowledge and skills associated with effective parenting.

INDICATOR 1

Enter the total number of PARENTS participating in parenting programs. Using a sample of participants, enter the percentage

reporting increased intended or actual use of effective parenting practices.

6yr Proj	35000	75.0	0.0
	Number of Parents Participating	Percent Increasing Intended Use	Percent Increasing Actual Use
1992	14674	100.0	0.0
1993	12395	75.0	69.0
1994	20521	80.0	75.0
1995	24473	73.0	71.0
1996	0	0.0	0.0
1997	0	0.0	0.0
Total	72063		

Data Collection Methodology

Report aggregate number of participants. Select a sample of programs and provide percent reporting increases. Use pre-post questionnaire and if possible a 3-6 month follow-up evaluation.

OBJECTIVE 2

Parents and youth will improve parent-youth relations.

INDICATOR 1

Enter the total number of parents and/or youth participating in parent-youth programs. Using a sample of participants, enter the percentage reporting improved parent-youth relations.

6yr Proj	8000	60.0	0	0.0
	Number of Parents	Percent Reporting Improvement	Number of Youth	Percent Reporting Improvement
1992	5664	58.0	0	0.0
1993	3164	78.0	2000	84.0
1994	14713	80.0	7001	79.0
1995	10857	69.0	2092	69.0
1996	0	0.0	0	0.0
1997	0	0.0	0	0.0
Total	34398		11093	

Data Collection Methodology

Report aggregate number of participants. Select a sample of programs and provide percent reporting increases. Use pre-post questionnaire and if possible a 3-6 month follow-up evaluation.

OBJECTIVE 3

Parents and youth will understand and use effective family coping strategies.

INDICATOR 1

Enter the total number of parents and/or youth participating in family coping programs. Using a sample of participants, enter the percentage reporting increased use of effective family coping strategies.

6yr Proj	8000	0.0	0	0.0
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	Number of Parents	Percent Reporting Increased Use	Number of Youth	Percent Reporting Increased Use
1992	6092	0.0	0	0.0
1993	8914	0.0	2000	85.0
1994	9153	0.0	7001	79.0
1995	16781	0.0	6579	72.0
1996	0	0.0	0	0.0
1997	0	0.0	0	0.0
Total	40940		15580	

Data Collection Methodology

Report aggregate number of participants. Select a sample of programs and provide percent reporting increases. Use pre-post questionnaire and if possible a 3-6 month follow-up evaluation.

OBJECTIVE 4

Parents and youth will set and achieve financial goals.

INDICATOR 1

Enter the total number of parents and/or youth participating in financial management programs. Using a sample of participants, enter the percentage showing improved financial management practices.

6yr Proj	4000	50.0	0	0.0
	Number of Parents	Percent Reporting Improvement	Number of Youth	Percent Reporting Improvement
1992	3492	57.0	0	17.0
1993	8968	79.0	0	0.0
1994	15691	90.0	0	0.0
1995	20489	73.0	0	0.0
1996	0	0.0	0	0.0
1997	0	0.0	0	0.0
Total	48640		0	

Data Collection Methodology

Report aggregate number of participants. Select a sample of programs and provide percent reporting increases. Use pre-post questionnaire and if possible a 3-6 month follow-up evaluation.

ESTIMATED PROGRAM COST

Year	Est. Cost
1992	3300000
1993	3300000
1994	3300000
1995	3300000
1996	0

1997	0
Total	13200000

ESTIMATED FTE COMMITMENT

	Professional			Paraprofessional		
	1862	1890	Other	1862	1890	Other
1992	70.0	0.0	0.0	0.0	0.0	0.0
1993	70.0	0.0	0.0	0.0	0.0	0.0
1994	70.0	0.0	0.0	0.0	0.0	0.0
1995	70.0	0.0	0.0	0.0	0.0	0.0
1996	0.0	0.0	0.0	0.0	0.0	0.0
1997	0.0	0.0	0.0	0.0	0.0	0.0
Total	280.0	0.0	0.0	0.0	0.0	0.0

ESTIMATED VOLUNTEER PARTICIPATION

Year	Volunteers
1992	0
1993	0
1994	0
1995	0
1996	0
1997	0
Total	0

ADDITIONAL COMMENTS

PROGRAM CONTACTS

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NORTH CAROLINA 1995 ANNUAL REPORT:
VOLUNTEER DEVELOPMENT AND MANAGEMENT(18)

NARRATIVE SUMMARY OF ACCOMPLISHMENT

Volunteers working toward successfully improving the quality of family life are essential to the local community and the Cooperative Extension Service. This program offers volunteers an opportunity to improve their leadership skills, their ability to analyze issues and understand political processes in order to achieve desired goals. It continues to flourish in North Carolina.

Volunteers networking with other agencies and groups must continue to maximize efforts in these times of hard economics and high demand. Volunteers are continually being trained to leadership roles in organizations as well as for specific tasks. More emphasis is being given the role that needs to be played in the public arena in regards to public policy and public policy education.

SUCCESS STORIES

RESOURCE DEVELOPMENT

On-going training, support and encouragement has been provided to enable agents and volunteers to continue marketing Extension through external funding. Over \$1,163,000 resource development funds have been reported. Twenty-five thousand volunteers have demonstrated ownership of programs by participating in resource development activities. Educational sponsorships and other program endorsements have brought in more than \$100,000 a year.

LEADERSHIP DEVELOPMENT

Agents and volunteers have participated in national Extension programs, North Carolina Extension programs and University programs. North Carolina Extension Homemakers have become active at all levels in the volunteer organization. Four North Carolinians have served at the national level on the Board and one volunteer has chaired the National Foundation Board of Trustees. At the university level, volunteer leaders serve on the Dean of College of Agriculture and Life Sciences Advisory Board while one serves on the North Carolina State University Board of Trustees.

FAMILY COMMUNITY LEADERSHIP

The North Carolina Family Community Leadership Program strongly emphasizes leadership development and challenges communities to effectively participated in resolving public issues. The program focuses on public policy education and targets women and families. All 100 counties have conducted an FCL training session with more than 7,480 persons graduating. Eighty-four donors have contributed more than \$186,365 to the program. In addition, a North Carolina Family Community Leadership Network has been created to address issues and programs of the North Carolina Cooperative Extension Service, College of Agriculture and Life Sciences and North Carolina State University.

The North Carolina Family Community Leadership Scholars Graduate Program was initiated to prepare participants to function successfully in an elected or appointed "power brokers" position. The participants have demonstrated progress toward achieving these goals. One participant was elected to the North Carolina House of Representative, two are school board members, one is a mayor and others are members of local, county and state boards.

NORTH CAROLINA FAMILY LITERACY PROGRAM

North Carolina Extension Homemakers Association Literacy Task Force formed to

address literacy problems in North Carolina and conducted a special conference to review educational programs for improving literacy in the state. Literacy programs have been conducted in all 100 counties. Extension Homemakers' volunteer hours in local, state and global awareness have totaled over two million hours. As a result of efforts of the Task Force, House Bill DRH4156-LF366 was passed by the North Carolina General Assembly earmarking \$100,000 to be used for volunteer programs in literacy in North Carolina. The program was recognized by the National Association for Family and Community Education as the best literacy program in the nation.

OBJECTIVES, INDICATORS, DATA COLLECTION METHODOLOGIES

OBJECTIVE 1

VOLUNTEERISM: Volunteers, resource persons and officers and chairpersons of Extension-related programs and organizations gain skill for performing middle management functions in the Extension organization or program they serve.

INDICATOR 1

Enter the number in each category below who for the FIRST TIME during the past year ORGANIZED PROGRAMS, EVENTS OR ACTIVITIES.

6yr Proj	760	0	0	500
	Volunteers	Resource Persons	Officers	Chairpersons
1992	180	0	0	120
1993	221	0	0	168
1994	265	0	0	200
1995	273	0	0	204
1996	0	0	0	0
1997	0	0	0	0
Total	939	0	0	692

Data Collection Methodology

Program records.

INDICATOR 3

Enter the number in each category below who for the FIRST TIME during the past year TRAINED OTHER VOLUNTEERS OR RESOURCE PERSONS.

6yr Proj	600	100	700	0
	Volunteers	Resource Persons	Officers	Chairpersons
1992	265	40	125	0
1993	243	62	131	0
1994	250	70	150	0
1995	256	54	141	0
1996	0	0	0	0
1997	0	0	0	0
Total	1014	226	547	0

Data Collection Methodology

Program records.

INDICATOR 7

Enter the number in each category below who for the FIRST

TIME during the past year SUPERVISED OTHER VOLUNTEERS, RESOURCE PERSONS, ETC.

6yr Proj	600	0	620	0
	Volunteers	Resource Persons	Officers	Chairpersons
1992	305	0	80	0
1993	321	0	112	0
1994	340	0	123	0
1995	314	0	131	0
1996	0	0	0	0
1997	0	0	0	0
Total	1280	0	446	0

Data Collection Methodology
Program records.

OBJECTIVE 2

LEADERSHIP: Volunteers, resource persons and officers and chairpersons of Extension-related programs and organizations gain specific leadership competencies.

INDICATOR 1

Enter the number in each category below who used DELEGATING SKILLS (e.g., defining work, organizing roles, giving authority) learned as a result of volunteer/officer training.

6yr Proj	10000	0	1000	1500
	Volunteers	Resource Persons	Officers	Chairpersons
1992	3444	0	120	320
1993	0	0	0	0
1994	4428	0	153	369
1995	2585	0	145	415
1996	0	0	0	0
1997	0	0	0	0
Total	10457	0	418	1104

Data Collection Methodology
Case study narratives.

INDICATOR 2

Enter the number in each category below who used GROUP ORGANIZATION SKILLS (e.g., recruiting, building teams, articulating needs and interest) learned as a result of volunteer/officer training.

6yr Proj	6000	1000	5000	2000
	Volunteers	Resource Persons	Officers	Chairpersons
1992	1722	220	1235	425
1993	0	0	0	0
1994	1899	248	1441	502

1995	1542	250	1331	561
1996	0	0	0	0
1997	0	0	0	0
Total	5163	718	4007	1488

Data Collection Methodology

Case study narratives.

INDICATOR 3

Enter the number in each category below who used CONFLICT RESOLUTION SKILLS (e.g., strategies for identifying points of similarity and difference, priority setting, communication skills, techniques for bridging differences) learned as a result of volunteer/officer training.

6yr Proj	5000	1000	1000	3000
	Volunteers	Resource Persons	Officers	Chairpersons
1992	980	220	60	425
1993	0	0	0	0
1994	1010	270	82	450
1995	842	341	96	253
1996	0	0	0	0
1997	0	0	0	0
Total	2832	831	238	1128

Data Collection Methodology

Case study narratives.

INDICATOR 4

Enter the number in each category below who were INVOLVED IN PUBLIC POLICY DECISION MAKING (e.g., influencing policy makers and other influentials, teaching or learning the content of issues) as a result of volunteer/officer training.

6yr Proj	5000	1000	5000	1500
	Volunteers	Resource Persons	Officers	Chairpersons
1992	1844	210	2620	410
1993	0	0	0	0
1994	1925	260	2810	533
1995	1846	217	2010	483
1996	0	0	0	0
1997	0	0	0	0
Total	5615	687	7440	1426

Data Collection Methodology

Case study narratives.

ESTIMATED PROGRAM COST

Year	Est. Cost
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1992	6750000
1993	6750000
1994	6750000
1995	6750000
1996	0
1997	0
Total	27000000

ESTIMATED FTE COMMITMENT

	Professional			Paraprofessional		
	1862	1890	Other	1862	1890	Other
1992	36.0	0.0	0.0	10.0	0.0	0.0
1993	36.0	0.0	0.0	10.0	0.0	0.0
1994	36.0	0.0	0.0	10.0	0.0	0.0
1995	36.0	0.0	0.0	10.0	0.0	0.0
1996	0.0	0.0	0.0	0.0	0.0	0.0
1997	0.0	0.0	0.0	0.0	0.0	0.0
Total	144.0	0.0	0.0	40.0	0.0	0.0

ESTIMATED VOLUNTEER PARTICIPATION

Year	Volunteers
1992	80000
1993	85000
1994	90000
1995	95000
1996	0
1997	0
Total	350000

ADDITIONAL COMMENTS

PROGRAM CONTACTS

Linda F. McCutcheon
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NORTH CAROLINA 1995 ANNUAL REPORT:
PLIGHT OF YOUNG CHILDREN(19)

NARRATIVE SUMMARY OF ACCOMPLISHMENT

The North Carolina Cooperative Extension Service continues to work to improve the lives of its youngest citizens. Agents in many counties are leaders in securing and implementing Smart Start programs. Agents also work with Headstart and WIC clients in the areas of parent education and nutrition. Agents continue to train volunteers in the Master Parents and Grandparents curriculum. Quality child care is an issue being addressed in many ways by the NCCES. Agents continue to be leaders in the state in training day care workers in food safety, meal planning, nutrition, and child development. Agents in many counties help day care owners form child care associations. These associations serve to help smaller organizations maximize resources by sharing training materials, videos, books, etc. Agents have also collaborated with agencies such as AFDC, WIC, JOBS, civic groups and others to reach parents with children 0-5 with needed information on nutrition, immunization, and money management. Several counties have successful programs that reach out to teen parents to help them stay in school and become better parents.

SUCCESS STORIES

Twenty-five different groups and organizations have been working together as part of the coalition to improve the immunization rate in a rural NC county. During the month of April in 1994 and 1995, over 300 youth were immunized. This is three times the number immunized during an average month. Coalition members set up clinics, including evening hours and Saturdays, and distributed over 10,000 fliers each time special clinics were held. Three or four promotions were held during each year. Magnets with the immunization schedule were printed and distributed. Grants were written, and Smart Start money was received for the work of the Coalition. Two grants totaling \$22,779 were received. Money was used to purchase an auto dialer computer program for two health service agencies to call and remind parents when their child was due for a vaccine. The coalition has also promoted more networking among agencies and groups, in addition to getting children immunized. The grants received allowed the clinics to offer free vaccines at all locations. Money from the grant was used to subsidize the cost of vaccine to physicians. There were five physicians on the program when the coalition first organized. Eighteen physicians now participate in the free state vaccine, this translated into reduced cost to families. A grant for 1995-96 has been awarded to the Extension Service in the amount of \$17,800. A part-time person will be hired to work on immunization education and awareness.

OBJECTIVES, INDICATORS, DATA COLLECTION METHODOLOGIES

OBJECTIVE 2

Extension, limited resource families, agencies (public and private), child care providers, local organizations, and volunteers will collaborate to (a) identify gaps in programs and services for limited resource families with young children; (b) design and implement collaborative solutions; and (c) assess their impact upon limited resource families and the community at large.

INDICATOR 1

Enter the number of community action groups Extension assisted during the year in designing and implementing a plan to meet the needs of limited resource families with young children.

6yr Proj	45	30
Community	Community	

	Groups Planning	Groups Implementing
1992	0	0
1993	0	0
1994	113	74
1995	120	78
1996	0	0
1997	0	0
Total	233	152

Data Collection Methodology

Records kept at the county level on the following:

- community groups planning and implementing Plight of the Young Child Initiative
- activities carried out as a result of community groups

INDICATOR 2

Enter the number of limited resource parents of young children and the number of young children (prenatal through age five) living in limited resource families that were reached directly by Extension staff and volunteers.

6yr Proj	1500	600
	Parents Reached	Children In Families Reached
1992	0	0
1993	0	0
1994	4482	4841
1995	4625	4950
1996	0	0
1997	0	0
Total	9107	9791

Data Collection Methodology

Records kept at the county level on the following:

- number of families with young children reached through Extension programming or programs with Extension involvement
- volunteers trained

INDICATOR 3

Enter the number of trainers reaching limited resource families with young children (e.g., agency personnel, religious leaders, child-care and other service providers) whom Extension instructed.

6yr Proj	2500
	Number Service Providers
1992	0
1993	0
1994	2369
1995	2425
1996	0
1997	0

Total 4794

Data Collection Methodology

Records kept at the county level on the following:

- Volunteers trained
- Service providers trained

When appropriate other data collections methods will be employed to evaluate specific programs.

PART B OBJECTIVES AND INDICATORS

ESTIMATED PROGRAM COST

Year	Est. Cost
1992	0
1993	0
1994	0
1995	0
1996	0
1997	0
Total	0

ESTIMATED FTE COMMITMENT

	Professional			Paraprofessional		
	1862	1890	Other	1862	1890	Other
1992	0.0	0.0	0.0	0.0	0.0	0.0
1993	0.0	0.0	0.0	0.0	0.0	0.0
1994	3.0	0.0	0.0	0.0	0.0	0.0
1995	3.0	0.0	0.0	0.0	0.0	0.0
1996	0.0	0.0	0.0	0.0	0.0	0.0
1997	0.0	0.0	0.0	0.0	0.0	0.0
Total	6.0	0.0	0.0	0.0	0.0	0.0

ESTIMATED VOLUNTEER PARTICIPATION

Year	Volunteers
1992	0
1993	0

1994	5
1995	7
1996	0
1997	0
Total	12

ADDITIONAL COMMENTS

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NORTH CAROLINA 1995 ANNUAL REPORT:
COMMUNITIES IN ECONOMIC TRANSITION(20)

NARRATIVE SUMMARY OF ACCOMPLISHMENT

While many rural North Carolina communities continue to be affected by social and economic changes taking place at the state and national level, local effects vary widely. As the local citizenry experience these transitions they sense the need to take stock of what is happening and address their opportunities and limitations. Strategic planning is a collaborative method of doing this. Successes in strategic planning underscore the importance of a concerned citizenry that is capable of analyzing the local economic base and willing to act to take advantage of their opportunities. It also requires local leaders who are knowledgeable of and willing to use public participatory processes to address local concerns. Hence, strategic planning and leadership development continue to be effective thrusts in helping rural communities revitalize.

Although reported accomplishments in entrepreneurial education reflect a reduction in FTE's at the state and area levels of the organization over the past two years, the indicators point to the effectiveness of Extension's entrepreneurial programs. The greatest successes continue to occur when our personnel are available to new entrepreneurs over a period of time. Many businesses continue to fail within a three to five-year period because of inadequate skills and information. As rural areas continue to experience social and economic transitions and unemployment or underemployment persist, the need for entrepreneurial education will continue.

SUCCESS STORIES

NCSU RURAL DEVELOPMENT COUNCIL PROVES TO BE
VIABLE PARTNER TO RURAL HALIFAX COUNTY

The Rural Development Council, a group of NCSU faculty members interested in rural development, has proven that university faculty can be effective in aiding local development efforts. Over the past four years the group, under the leadership of Dr Jim Clark, has been working with Halifax County Extension to find ways it can affect local development efforts. "A bond has been formed and the ripple effects of the educational programs conducted has been overwhelming," reports Wanda Sikes, County Extension Director. "The impetus for many of the activities arose from the county's strategic plan," reports Sikes. The following are some of the results of this partnership. The School of Design conducted a semester long collaborative study of the Town of Halifax involving local citizens to identify visions of what the county seat might be. A revitalization group was then organized to implement the plan. Members from the School of Forestry, Tourism and Recreation Department conducted a tourism study for the entire county, which is presently being used to develop the long range tourism plan. As a result of these efforts the county funded a School of Design graduate to work under the direction of Extension with local developers, historians, the State Historic Site, the Conservation Fund and Rails on Trails to plan a number of

Greenway projects.

In 1994 a charette was held in the county involving 70 School of Design students and 8 Professors from NCSU and A&T to further develop potential tourism and historical plans for the county. Recommendations from the charette were published and are presently being incorporated into local planning efforts. In addition, a School of Design student was engaged to develop a long-range plan for the 4-H and Youth Day Camp properties, now known as the 4-H Rural Life Center. The county commissioners were so impressed with the plans that a separate budget of 135,000 has been allocated for the development of the plan in the 1995-96 budget.

Other activities generated from these efforts include a newly established Agricultural Commission with the purpose of preserving the county's agricultural heritage in a museum on the 4-H properties, an annual Halifax Harvest Days celebration of the county's agricultural heritage which attracts more than 15,000 persons, and the establishment of Independence Station, a cooperative of 60 artisans who produce and sell their products to augment their family incomes. Presently, the county is revising its strategic plan with assistance from three interns from the Board of Science and Technology, Governor's Office, arranged through the Rural Development Council.

OBJECTIVES, INDICATORS, DATA COLLECTION METHODOLOGIES

OBJECTIVE 1

Communities will analyze their economic base and implement strategic economic development planning.

INDICATOR 1

Enter the number of strategic community-based economic development plans developed and implemented with extensive Extension support.

6yr Proj	40
----------	----

	Number Devel. and Implemented
--	-------------------------------------

1992	0
1993	0
1994	13
1995	14
1996	0
1997	0

Total	27
-------	----

Data Collection Methodology

Specialists' reports; county staff reports; surveys, both immediate and follow-up; interviews.

INDICATOR 2

Enter the number of economic analyses conducted with communities.

6yr Proj	25
----------	----

Economic Analyses Conducted

1992	0
1993	0
1994	11
1995	0
1996	0
1997	0

Total	11
-------	----

Data Collection Methodology

INDICATOR 3

Enter the number of business retention and expansion programs implemented communities.

6yr Proj	4
----------	---

Business
Programs
Implemented

1992	0
1993	0
1994	0
1995	0
1996	0
1997	0

Total	0
-------	---

Data Collection Methodology

INDICATOR 4

Enter the number of community-based targeted industry studies conducted to support strategic economic development.

6yr Proj	5
----------	---

Studies
Conducted

1992	0
1993	0
1994	0
1995	0
1996	0
1997	0

Total	0
-------	---

Data Collection Methodology

INDICATOR 6

Enter the number of community-based tourism development plans initiated.

6yr Proj	4
----------	---

Tourism
Devel. Plans
Initiated

1992	0
1993	0
1994	1
1995	0
1996	0
1997	0

Total	1

Data Collection Methodology

OBJECTIVE 2

Communities will enhance ability to support job creation and enterprise development.

INDICATOR 1

Enter the number of entrepreneurial activities undertaken at the community level.

6yr Proj	40

Entrepren. Activities	

1992	0
1993	0
1994	11
1995	0
1996	0
1997	0

Total	11

Data Collection Methodology

INDICATOR 4

Enter the number of new enterprises created as a result of Extension programming.

6yr Proj	50

New Enterprises Created	

1992	0
1993	0
1994	0
1995	0
1996	0
1997	0

Total	0

Data Collection Methodology

INDICATOR 5

Enter the number of new jobs created via new/expanded enterprises.

6yr Proj	1000

New Jobs	

Created

1992	0
1993	0
1994	0
1995	0
1996	0
1997	0
<hr/>	
Total	0

Data Collection Methodology

OBJECTIVE 3

Existing businesses and small industries will improve competitiveness, profitability, and marketing capabilities.

INDICATOR 2

Enter the number of small firms entering new domestic and/or foreign markets via Extension educational activities.

6yr Proj	20
----------	----

Firms
Entering New
Markets

1992	0
1993	0
1994	0
1995	0
1996	0
1997	0
<hr/>	
Total	0

Data Collection Methodology

PART B OBJECTIVES AND INDICATORS

ESTIMATED PROGRAM COST

Year	Est. Cost
1992	0
1993	0
1994	0
1995	0
1996	0
1997	0
Total	0

ESTIMATED FTE COMMITMENT

	Professional			Paraprofessional		
	1862	1890	Other	1862	1890	Other
1992	0.0	0.0	0.0	0.0	0.0	0.0
1993	0.0	0.0	0.0	0.0	0.0	0.0
1994	30.8	0.0	0.0	1.0	1.0	0.0
1995	30.8	0.0	0.0	1.0	1.0	0.0
1996	0.0	0.0	0.0	0.0	0.0	0.0
1997	0.0	0.0	0.0	0.0	0.0	0.0
Total	61.6	0.0	0.0	2.0	2.0	0.0

ESTIMATED VOLUNTEER PARTICIPATION

Year	Volunteers
1992	0
1993	0
1994	4000
1995	4000
1996	0
1997	0
Total	8000

ADDITIONAL COMMENTS

PROGRAM CONTACTS

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NORTH CAROLINA 1995 ANNUAL REPORT:
DECISIONS FOR HEALTH 21

NARRATIVE SUMMARY OF ACCOMPLISHMENT

Thirty-one County Extension Centers and seven special project counties or a total of 38% of NCCES Centers reported activities under the Decisions For Health Initiative in 1995. This represents an increase of 65% over 1994 and is even more impressive considering that much of the health and safety effort within NCCES is reported under Extension's core programs such as Foods, Nutrition and Health or the Farm Safety Program.

External funding for Extension health and safety programs also increased with \$456,319 originating in the counties and approximately \$800,000 at the state level. The Rural Health Program alone received \$522,000 to support the Southern Appalachian Leadership Initiative on Cancer and the AgrAbility Project.

While in 1995 there was a temporary de-emphasis on the health reform issue overall, two Extension sponsored regional conferences were held on health reform and its meaning for the consumer. These conferences stressed the role of the state in health reform and both increased awareness of the current state of health care and encouraged consumer involvement in community decision making. These are to be followed by a statewide resurgence of Extension health policy issues education on managed care in 1996.

Early childhood immunization continues to be a focus of the Rural Health Program. Thirty-five additional agents underwent training on immunization's effect in the primary prevention of childhood diseases. Agents continue to be players in county immunization education efforts and in several instances have assumed leadership of county immunization education programs (Halifax, Orange and Richmond counties in particular).

The NCI funded Southern Appalachian Leadership Initiative on Cancer Project was in year 3 of 5 years. County-wide cancer control coalitions were operative in all 11 project counties in the Carolinas and Georgia. Four of these coalitions are in North Carolina. Approximately 40 community action groups were formed under the auspices of the coalitions and have become involved in breast and cervical cancer prevention and control activities. As a celebration of the success to date and the initiation of community level efforts, an all SALIC Summit was held which brought together SALIC staff, tri-state and county coalition members and local community volunteers for two days of training and sharing. Thirty Extension agents from non-SALIC counties also received training on the importance of the early detection of breast cancer in cancer control.

AgrAbility project staff organized the initial three counties to reach out to disabled farmers, farm families and farm workers with information and assistance in meeting special needs. They also planned and prepared for the inclusion of an additional 12 counties and for securing support to provide direct services to disabled agricultural workers.

The community health advisor programs either as the Community Health Advocacy Program (CHAP) or a similar program such as HealthWatch in Bladen County or the Rural Health Advocacy Program in Macon county continue to prosper with several new programs coming online in 1995.

Other activities reported by counties under the Decisions for Health Initiative include 4-H health activities, child safety training for day care workers, community education programs on cardiovascular disease, cancer and other

nutrition related diseases, pesticide application training, farm and household hazardous waste disposal, and Agrimedecine related activities.

SUCCESS STORIES

1. The Otto Community Health Advocacy Program, Macon County.

a. This Extension sponsored community-based health group has been in existence since 1991. Among its achievements has been the securing of low cost mamograms for womwn in the small mountain community of Otto and throughout Macon County. Fifty older women in Otto became convinced of the need for having a mamogram as a result of Otto's Community Health Program community coordinator's efforts. The women, some of whom had never been screened for breast cancer, were preparing to travel to an out of county facility offering considerably less expensive screening than the local hospital dispite the difficulties involved in time and travel. Upon hearing of the women's plans the local hospital reduced the cost of mamograms to \$50 each for a limited time. All of the women were screened, with funds for those not being able to pay even the \$50 being provided by the Otto community.

These women could rest assured that at least for now they did not have breast cancer. As a result of this first early detection project, other women in Otto and throughout Macon County are getting mamograms otherwise unavailable to them.

b. Another instance of the impact of the Otto Community health program involves a community health advocate (lay-health advisor) and a man having diabetes. The man's wife became concerned about her husband's condition and relayed her concerns to the advocate. Having been trained as to when and how to secure medical assistance, the advocate arranged for immediate medical care. The man was hospitalized with an out of control blood sugar level and the advocate credited with saving his life. The attending physician later met with the Otto community to discuss diabetes and its treatment.

2. The Beyond Breast Cancer Celebration

The Southern Appalachian Leadership initiative on Cancer (SALIC) county coalitions are in four NC counties. Although not specifically meant to serve cancer survivors, SALIC coalitions have found that a number of coalition members have experienced cancer and many other county residents with or having survived cancer are in need of support themselves (as well as wanting to reach out to others to prevent cancer or to detect cancer early enough for a cure to be possible). The four county coalitions joined together, raised funds for, and held a "Beyond Breast Cancer Celebration" for cancer survivors throughout the area. In addition to linking cancer survivors for mutual support, the conference publicity has helped to dispel the widely held belief that there are no cancer survivors.

3. The Orange County Coalition for Immunization

The Extension initiated Orange County Coalition for Immunization has joined county government and agencies, community organizations such as the Kiwanis Clubs in an effort to raise the two year old and under immunization rate from 60% in Orange County to 90%. Community- and mall-based health department staffed immunization clinics had, in the past, failed to draw more than one or two families. By the second year of the coalitions county-wide immunization awareness campaigns, children were being reached at the remote sites and a half-time position for an immunization coalition coordinator had been

established out of the Extension center with coalition raised grant funds.

EXEMPLARY PROGRAMS

All of the programs within the NCESS Rural Health Program and many other health or health related programs in NCCES could be considered exemplary. If they were not, Extension staff would not be spending the considerable time, effort and resources on them. Since this report is already late and defining each program per the outlined in the Help section will require more time than permitted under the circumstances, a detailed description of each of our programs will follow under separate cover.

SPECIAL FUNDS ABSTRACTS

The North Carolina AgrAbility Partnership

The North Carolina AgrAbility Partnership is in its second year. The first year was devoted to establishing the program in the first three of fifteen eastern North Carolina counties. AgrAbility aims to empower disabled farmers, farm families and farm workers to work on their own behalf to overcome deficits resulting from physical or other disabilities. It provides direct educational and assessment services to the disabled in order to assure their participation in agriculture.

OBJECTIVES, INDICATORS, DATA COLLECTION METHODOLOGIES

OBJECTIVE 1

People will adopt healthy life styles and reduce risk behaviors by taking responsibility for their health decisions.

INDICATOR 1

Enter the number of people reached directly and indirectly about adopting healthy life styles and reducing risk behaviors. Then of the number of people reached directly, enter the number who adopted a healthier life style or reduced a specific risk behavior.

6yr Proj	1000000	0	0
	Number Reached Directly	Number Reached Indirectly	# Reached Directly Adopting
1992	0	0	0
1993	0	0	0
1994	79141	0	0
1995	160381	0	0
1996	0	0	0
1997	0	0	0
Total	239522	0	0

Data Collection Methodology

Extension County Accomplishment Reports, Southern Appalachia Leadership Initiative on Cancer (SALIC) and AgrAbility monthly reports.

OBJECTIVE 2

Individuals will make informed use of available health-related services and facilities. Extension, agencies (public and private), community groups, health care providers, and volunteers will partner to improve the availability of existing health-related services and facilities.

INDICATOR 1

Enter the number of people reached directly who have learned (a) about available health related services and facilities and how to use them, and

to make informed decisions about health care.

6yr Proj	65000	0
	(a) Learned About Services	(b) Learned To Make Decisions
1992	0	0
1993	0	0
1994	65000	0
1995	85000	55000
1996	0	0
1997	0	0
Total	150000	55000

Data Collection Methodology

Extension Annual County Accomplishment Reports, SALIC and AgrAbility month reports.

INDICATOR 2

Enter the number of counties in which Extension participated in an immuniz campaign and the percent of children in these counties who were immunized age two.

6yr Proj	80	0.0
	Counties Partipated	Percent Children Immunized
1992	0	0.0
1993	0	0.0
1994	80	0.0
1995	0	0.0
1996	0	0.0
1997	0	0.0
Total	80	

Data Collection Methodology

INDICATOR 3

Enter the number of counties in which Extension collaborated to improve th availability of existing health-related services and facilities other than those related to immunization of young children.

6yr Proj	19
	Counties Collabored
1992	0
1993	0
1994	19
1995	0
1996	0
1997	0
Total	19

Data Collection Methodology

OBJECTIVE 3

Communities (counties) will improve their capacity to assess and take action related to health and health-related infrastructure needs not met by existing services and facilities.

INDICATOR 1

Enter the number of community (or county) action groups (e.g., health coun that Extension (a) established or enhanced whose purpose includes identify and closing gaps in health-related needs, (b) assisted in assessing health needs and designing a community health plan to address those needs, and (c number of community (or county) action groups implementing a community hea plan during the past year with Extension assistance.

6yr Proj	110	52	20
	Groups Established Or Enhanced	Groups Assisted in Assessing	Groups Implementing Plan
1992	0	0	0
1993	0	0	0
1994	110	52	20
1995	151	65	46
1996	0	0	0
1997	0	0	0
Total	261	117	66

Data Collection Methodology

Extension annual accomplishment reports, SALIC and AgrAbility monthly repo

PART B OBJECTIVES AND INDICATORS

ESTIMATED PROGRAM COST

Year	Est. Cost
1992	0
1993	0
1994	811602
1995	1257319
1996	1600000
1997	0
Total	3668921

ESTIMATED FTE COMMITMENT

	Professional			Paraprofessional		
	1862	1890	Other	1862	1890	Other
1992	0.0	0.0	0.0	0.0	0.0	0.0

1993	0.0	0.0	0.0	0.0	0.0	0.0
1994	16.0	0.0	0.0	0.0	0.0	0.0
1995	14.0	0.0	0.0	0.0	0.0	0.0
1996	16.0	0.0	0.0	0.0	0.0	0.0
1997	0.0	0.0	0.0	0.0	0.0	0.0
Total	46.0	0.0	0.0	0.0	0.0	0.0

ESTIMATED VOLUNTEER PARTICIPATION

Year	Volunteers
1992	0
1993	0
1994	2095
1995	3830
1996	5000
1997	0
Total	10925

ADDITIONAL COMMENTS

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Civil Rights Report - Summary for 1992-95 Plan of Work

CR01 - Civil Rights Training

A. Objectives

Overall:

All employees of the North Carolina Cooperative Extension Service are expected to be aware of and comply with Civil Rights legislation.

All employees of the North Carolina Cooperative Extension Service are to understand the human aspects of Civil Rights.

Specific:

1. All employees are expected to be knowledgeable of the principles and laws of our nation regarding Civil Rights.
2. All employees are expected to be knowledgeable of Civil Rights policies and sensitive to equity issues.
3. All employees are expected to assess the quantity and quality of educational programs delivered to minority individuals by comparing benefits delivered to non-minority individuals.

B. Indicators of Success and Accomplishments

The period of 1992 through 1995 was extremely busy in the area of Civil Rights training. Most of 1992 was spent planning for an in-depth Civil Rights training that was launched at the November 1992 State-wide conference. A comprehensive Affirmative Action plan was written as a key resource to this training. In 1992 all county staff received a full day of Civil Rights training. This training included a broader view of diversity in addition to the standard Affirmative Action principles. In 1993 one day of in-depth diversity training for all faculty was provided at the annual state-wide conference. The training on diversity has been expanded and now includes sensitivity to the disabled as well as an extensive list of other aspects of diversity (education, culture, religion, etc.).

The approach since the comprehensive training has been to keep the topics refreshed. New faculty attend orientation training in which Civil Rights and related Affirmative Action issues are introduced and explained. Monthly administrative video briefings have been used to remind all employees. Because of related travel expenses, video will most likely be used more frequently in the next Plan of Work.

C. Implications

The training opportunities provided critical knowledge and skills to facilitate the continuing commitment to Civil Rights. The training was well received and the overwhelming realization by the state teams was that the county faculty truly wanted to do what was right as opposed to simply meeting minimum legal expectations.

The summary data reflect an overall progress in minority representation. As a result, the training efforts are considered to have been successful.

Civil Rights Report - Summary for 1992-95 Plan of Work

CR02 - Public Notification

A. Objectives

Overall:

That all people who can benefit from Extension educational programs be aware of their availability.

Specific:

1. Every county be accountable for a public notification plan.
2. Make organizations which request Extension assistance aware of Extension position on non-discrimination.
3. Adopt and utilize on all printed material a common non-discrimination statement.

B. Indicators of Success and Accomplishments

This four year period has been very successful in the area of public notification. Every county is made accountable through annual reporting; there is a specific form to report public notification efforts. All printed material now has a prominently displayed non-discrimination statement. All counties were provided the "And Justice For All" posters for display.

For the first couple of years into the plan, each effort was tallied (i.e. how many counties used newspapers). In every category we found that more than a third of the 100 counties focused public notification efforts beyond minimum requirements. County reports indicate the frequent use of mass media, personal contacts with minority leaders, posters placed at grocery stores and other high volume businesses, announcements on school intercom systems, networking with other agencies to market our programs, and providing information to migrant workers' crew leaders for dissemination.

The organization began a 1-800 phone line that individuals can call anonymously with any complaint. There have been no civil rights related complaints on this line.

C. Implications

This was the first plan of work cycle following the now famous, 19 year old Bazemore case; this case dealt with charges of salary inequities of employees. The organization has shown great effort in ensuring that public notification standards are not only met but surpassed.

Civil Rights Report - Summary for 1992-1995 Plan of Work

CR03-On-Site Civil Rights Compliance Review

A. Objectives

Overall:

Achieve parity of participation for all clientele served by County Extension offices.

Specific:

1. All counties to determine their present level of participation of various groups and set numerical goals for reaching underserved/underrepresented groups.
2. All counties not in compliance to show progress toward compliance within the 4-year period.

B. Indicators of Success and Accomplishments

North Carolina has 100 counties and 1 Cherokee Nation Reservation. Comprehensive Program Reviews/Reports are scheduled on a biennial cycle so that 50 are done each year. During the Plan of Work, several strategies were enacted to accomplish the stated goals. A "check-off" form was designed for the review team to utilize in examining Civil Rights data in the county. The performance appraisal process and related documentation was revised to include an assessment of Civil Rights programming efforts. This actually is a component of on-site review and is done with every employee annually by the District Director/County Director team. The annual reports from all counties include data on public notification, program delivery, all reasonable efforts, and club membership summaries. These are forwarded to the District Directors and Personnel Director (Affirmative Action Officer) who in turn can review and provide individual feedback and strategies on a regular basis. The purpose here was intended for Civil Rights strategies to be recognized as a daily part of one's responsibilities as opposed to an annual event.

C. Implications

The Civil Rights/Affirmative Action Officer retired last year. The Federal Early-Out Retirement options also allowed three of the seven district directors to retire during the past four year cycle. The overall responsibilities of Civil Rights/Affirmative Action were reassigned to the Personnel Director. The new District Directors and the Personnel Director have been working to ensure that the necessary attention continues to be devoted to these efforts. The bottom line result is a good basis on which to build the next plan of work.

Civil Rights Report - Summary for 1992-1995 Plan of Work

CR04 - Equal Employment Opportunity

A. Objectives

1. Increase the number of minorities and females in agriculture and administrative positions.
2. Continue to ensure salaries are unaffected by race/sex.
3. Increase the cultural diversity of employees.

B. Indicators of Success and Accomplishments

Specific tasks associated with the objectives and related activity during the past year are as follows:

1. Enlist the help of all current employees to locate and recruit minorities.

This four year period was very busy in terms of recruiting. Video briefings were used to encourage current faculty to assist in recruiting minorities. A new recruiting brochure was developed to enhance the image of the organization as a career choice. Agents were given the opportunity to to accompany recruiters as their schedule permitted.

2. Continue intern programs which are aimed at creating an interest in employment with Extension.

The intern program generally had three minority students each summer who were studying agriculturally related disciplines. The internship served to make the graduates more marketable and all interns were able to find better paying jobs elsewhere. As a result of funding concerns, it is unclear whether this program will receive funding in the future.

3. Aggressively recruit at traditionally black and female institutions in the southern region.

Our goal is to ensure that at least 1/3 of all recruiting efforts are done at colleges traditionally focused towards females and minorities. This goal has been met annually. We focus on traveling to institutions either within North Carolina or mostly within a contiguous state. (Institutions include: NC Central, Virginia State, Meredith College, Tennessee State, NC A&T, Fort Valley College, Tuskegee, and Pembroke State University.) Position vacancy announcements are sent to all 1890

Institutions. We also revised and reprinted placement notebooks and distributed to college placement offices.

4. Train within for progression to leadership positions.

The organization has done well in promoting minorities and females to the position of County and District Director. Currently, 19 (20%) of the 93 county directors are female, 11 (12%) are black and 2 are American Indian. The seven member district team has three white females and two black males.

5. Monitor employment procedures to ensure that qualified minorities are given equal opportunity to available positions throughout the organization.

Standardized University employment procedures remain in place; no changes.

C. Implications

The table below outlines faculty and staff population for county operations. Overall there was little statistical change during the four year period in race. We began the period with 21% black employment in EPA (faculty) positions; we ended the period with 20% representation. The general state-wide black population is 22% so we are very proud of our continuing balance in representation.

EPA EMPLOYEES
RACE BY GENDER

	Sept. 30, 1991			Sept. 30, 1995			Change		
	<u>M</u>	<u>F</u>	<u>Total</u>	<u>M</u>	<u>F</u>	<u>Total</u>	<u>M</u>	<u>F</u>	<u>Total</u>
Black	30	104	134	27	104	131	-3	0	-3
White	260	249	509	241	271	512	-19	+22	+3
Other	1	8	9	0	12	12	-1	+4	+3

Gender Only

Males	291			268					-23
Females		361			387				+26

SPA EMPLOYEES
RACE BY GENDER

	Sept. 30, 1991			Sept. 30, 1995			Change		
	<u>M</u>	<u>F</u>	<u>Total</u>	<u>M</u>	<u>F</u>	<u>Total</u>	<u>M</u>	<u>F</u>	<u>Total</u>
Black	0	39	39	0	33	33	0	-6	-6
White	0	186	186	0	196	196	0	+10	+10
Other	0	0	0	0	2	2	0	+2	+2

Gender Only

Males	0			0					0
Females		225			231				+6

Civil Rights Report - Summary for 1992-95 Plan of Work

CR05 - Program Delivery

A. Objectives

1. Provide the same level of educational service to all people of the state without regard to race, sex, age, disability, color, national origin, or religion.
2. Advisory system members reflect all groups in the state with regard to race, age, sex, disability, color, national origin, or religion.

B. Indicators of Success and Accomplishments

As part of the Plan of Work, all counties developed a program delivery plan. Progress was projected in minority representation on the county Advisory Leadership System and Extension group participation. Counties completed community mapping data for reporting and comparison of group enrollments. Focused efforts included parallel examples of Public Notification such as personal contacts in addition to program delivery efforts such as relocating program offering locations and times, recruiting club leaders from minority communities, and specialized efforts on topics such as composting and pesticide education.

The large majority of counties reached parity of representation on their Advisory Leadership Councils during this four years.

C. Implications

After the completion of the mapping, agents could see the impact of some of their program delivery efforts in the past. There was an overall heightened sensitivity to program delivery efforts.

**CR01 - Civil Rights Training Plan of Work
1996-1999**

*** Situation:**

The 1992-1995 Plan of Work was the first for North Carolina following a 19-year Civil Rights lawsuit concerning salary inequity and a 1991 Compliance Review by ES-USDA. The review was predominantly positive and provided feedback and guidance in focusing the 1992-1995 efforts. Several efforts were incorporated to address any noted weaknesses. Also during this time period, the Director and the Affirmative Action Officer retired.

The overall intention of this plan is to continue the efforts outlined in the previous plan of work with few modifications.

*** Goals:**

Overall:

All employees of the North Carolina Cooperative Extension Service are expected to be aware of and comply with Civil Rights legislation. This includes the Americans with Disabilities Act.

All employees of the North Carolina Cooperative Extension Service are to understand the human aspects of Civil Rights.

Specific:

1. All employees are expected to be knowledgeable of the principles and laws of our nation regarding Civil Rights.
2. All employees are expected to be knowledgeable of Civil Rights policies and sensitive to equity issues.
3. All employees are expected to assess the quantity and quality of educational programs delivered to minority individuals by comparing benefits delivered to non-minority individuals.

*** Procedures:**

1. Training will be offered as follows:
 - A. All employees will receive video training during the 1996-1999 period.
 - B. All new employees will be provided Civil Rights training as part of the county and state orientation.
 - C. All new county Extension administrators will be provided Civil Rights training emphasizing the management role.
 - D. Civil Rights information will be incorporated into major in-house meetings such as county director meetings.
2. Counties will be encouraged to include Civil Rights topics in staff meetings and Extension Administration on campus will include Civil Rights items on their agenda.

CR02 - Public Notification

1996-1999 Civil Rights Plan of Work

*** Situation:**

The 1992-1995 Plan of Work was the first for North Carolina following a 19-year Civil Rights lawsuit concerning salary inequity and a 1991 Compliance Review by ES-USDA. The review was predominantly positive and provided feedback and guidance in focusing the 1992-1995 efforts. Several efforts were incorporated to address any noted weaknesses. Also during this time period, the Director and the Affirmative Action Officer retired.

The overall intention of this plan is to continue the efforts outlined in the previous plan of work with few modifications.

*** Goals:**

Overall:

That all people who can benefit from Extension educational programs be aware of their availability.

Specific:

1. Every county will be accountable for a public notification plan.
2. Make organizations which request Extension assistance aware of Extension position on non-discrimination.
3. Continue to utilize a common non-discrimination statement on all printed material.

*** Procedure:**

1. Every county will develop a local plan of work that will incorporate plans for public notification. Annual reports will be required to assess progress.
2. Every county will expected to continue to display the "And Justice for All" (or any update) for public view.
3. Counties will continue to inform organizations by letter of the non-discriminatory provisions of the Cooperative Extension Service. Organizations which practice discrimination will be refused significant Extension educational assistance.

**CR03 - On-Site Civil Rights Compliance Review
1996-1999 Plan of Work**

*** Situation:**

The 1992-1995 Plan of Work was the first for North Carolina following a 19-year Civil Rights lawsuit concerning salary inequity and a 1991 Compliance Review by ES-USDA. The review was predominantly positive and provided feedback and guidance in focusing the 1992-1995 efforts. Several efforts were incorporated to address any noted weaknesses. Also during this time period, the Director and the Affirmative Action Officer retired.

The overall intention of this plan is to continue the efforts outlined in the previous plan of work with few modifications.

*** Goals:**

Overall:

Achieve parity of participation for all clientele served by County Extension offices.

Specific:

1. All counties are expected to determine their baseline level of participation of various groups and set numerical goals for reaching under served/under represented groups.
2. All counties not in compliance are expected to show progress toward compliance within the 4-year period.

*** Procedures:**

1. Compliance reviews will be conducted as part of the county program reports done biannually. Counties not in compliance will be expected to employ Affirmative Action procedures to reach underserved/under represented groups.
2. Counties will keep records of clientele contacts and make the data available upon request.

**CR04 - Equal Employment Opportunity
Plan of Work 1996-1999**

*** Situation:**

The 1992-1995 Plan of Work was the first for North Carolina following a 19-year Civil Rights lawsuit concerning salary inequity and a 1991 Compliance Review by ES-USDA. The review was predominantly positive and provided feedback and guidance in focusing the 1992-1995 efforts. Several efforts were incorporated to address any noted weaknesses. Also during this time period, the Director and the Affirmative Action Officer retired.

The overall intention of this plan is to continue the efforts outlined in the previous plan of work with few modifications.

The 1995 population mix of county-based employees in North Carolina is as follows:

	WM	WF	BM	BF	OM	OF	Total
EPA	241(.37)	271(.41)	27(.04)	104(.16)	0	12(.02)	655
SPA	0	196(.85)	0	33(.14)	0	2(.01)	231

North Carolina's black population is approximately 22%.

*** Goals:**

- 1.. Increase the number of minorities and females in agriculture and administrative positions.
2. Continue to ensure salaries are unaffected by race/sex.
3. Increase the cultural diversity of employees.

*** Procedures:**

1. Enlist the help of all current employees to locate and recruit minorities.
2. Aggressively recruit at traditionally black and female institutions in the southern region or at institutions that have a high percentage of minorities in the student body.
3. Train within for progression to leadership positions.
4. Continue to monitor employment procedures to ensure that qualified minorities are given equal opportunity to available positions throughout the organization.

CR05 - Program Delivery
Plan of Work 1996-1999

*** Situation:**

The 1992-1995 Plan of Work was the first for North Carolina following a 19-year Civil Rights lawsuit concerning salary inequity and a 1991 Compliance Review by ES-USDA. The review was predominantly positive and provided feedback and guidance in focusing the 1992-1995 efforts. Several efforts were incorporated to address any noted weaknesses. Also during this time period, the Director and the Affirmative Action Officer retired.

The overall intention of this plan is to continue the efforts outlined in the previous plan of work with few modifications.

*** Goals:**

1. Provide the same level of educational service to all people of the state without regard to race, sex, age, disability, color, national origin, or religion.
2. Advisory system members reflect all groups in the state with regard to race, age, sex, disability, color, national origin, or religion.

*** Procedures:**

1. When necessary, educational programs and related activities will be modified to meet the needs of under represented groups. This would include the time and place of offering.
2. The membership makeup of the advisory system will be monitored to ensure proportionate representation of citizens.
3. Each county will have a program delivery component of their plan of work and will report annually.

FEDERAL REPORTS FOR 96 & 97

Food Safety and Quality

Sustainable Agriculture

Water Quality

Youth at Risk

EFNEP

Farm Safety

IPM

Pesticide Applicator Training

Pesticide Impact Assessment

Renewable Resources Extension Act

Plight of Young Children

Communities in Economic Transition

Decisions For Health