

FY2000 Annual Report
University of New Hampshire Cooperative Extension
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Introduction

The University of New Hampshire Cooperative Extension provides New Hampshire residents with research-based information, enhancing their ability to make informed decisions that strengthen youth, families and communities; sustain natural resources; and improve the economy. As a University outreach program, we have a network of professional Extension staff located in all 10 New Hampshire counties. County staff work with local volunteers and specialists on the UNH campus to design and conduct educational programs that meet societal, environmental and economic needs. While many of our programs are conducted locally, we also use current communications technology including computer networking and interactive television. As part of the national land-grant university system, we also access the knowledge and expertise of other state land-grant universities throughout the U.S. Cooperative Extension derives its name from the partnership structure that combines federal, state and county funding. This "cooperative" effort ensures all people have local access to their state university and the knowledge and resources available to address needs and problems. The principle partner is the University of New Hampshire. As a state land-grant university it is charge by Congress to conduct resident instruction, research, and outreach to people beyond the classroom.

UNH Cooperative Extension employs approximately 90 Extension Educators and other program staff who plan, conduct and evaluate educational programs. Programs are conducted in two broad program areas - Youth, Families and Communities; and Natural Resources. These are supported by staff in program groups: 4-H Youth Development; Family and Community Development; Agricultural Resources; Forestry & Wildlife; and Sea Grant, Water and Marine Resources. Each program is lead by a state Extension Program Leader.

UNH Cooperative Extension is also committed to increasing programming for under-served and under-represented audiences. These individuals are reached through many program efforts with the majority reached through the Nutrition Connections and Family Lifeskills Programs, part of the state's welfare reform effort. Staff working in these areas are instrumental in building trust and rapport with under-represented audiences, and are key in helping Extension advisory councils understand the audience's needs and circumstances. The needs of the under-served and under-represented groups are incorporated into the state's plan of work and accomplishments during FY2000 are highlighted in this report.

Program accomplishments in this report respond to high priority needs in New Hampshire as identified through a comprehensive statewide needs assessment conducted in 1999. Extension advisory councils

and stakeholders were systematically involved in the analysis of data collected and identification of highest priority needs. They are:

Natural Resources Needs (includes land use, the environment, agriculture, forestry, wildlife, water and marine resources)

1. Land use, land & water conservation, and open space preservation.
2. Sustaining the economic value and impact of natural resources and natural resources -related industries.
3. Increasing the visibility and marketing of Extension's expertise and assistance to support natural resources and natural resources-related industries.

Family and Youth Needs

1. Strengthening families - balancing work, family and community roles; parent education/pre-parenting education; resiliency and family functioning.
2. Lifeskill development for youth - workforce preparation; character education; social responsibility.
3. Families need to better manage their resources - time, money, other.
4. Wellness - healthy lifestyles including nutrition, physical activity, food safety.

Broad State Needs

1. Community Involvement/Sustainability - community decision-making; educating elected officials; leadership development; community forums; balanced growth; user-friendly town government.

Based on the statewide needs assessment and final analysis and ranking by the State Extension Advisory Council, the following goals were established as the basis for the FY2000-2004 Plan of Work. These goals also provide the framework for FY2000 program accomplishments that follow.

A. Planned Programs

Goal 1 - An Agricultural System that is Highly Competitive in the Global Economy

Executive Summary

- a. Aquaculture, Geospatial Information Systems and responding to problems and needs related to lawns and gardens were the focus of programs under this goal. Both fresh and salt water aquaculture hold promise as alternatives for traditional agricultural commodities, and will potentially augment the diminishing stock for commercial saltwater fisherman. Cooperative Extension also remains a primary source of information and problem-solving for homeowner lawn and garden needs.
- b. Freshwater aquaculture is a new and slowly growing industry in New Hampshire. Cooperative Extension has been a primary source of education and support for those pursuing this field. There is also high demand for GIS courses and workshops. Much of the interest at this point is for land use and master planning. A major accomplishment and success this year was establishment of the Family, Home & Garden Information Center.
- c. Opened in January 2000, the Center volunteers who staff a toll-free Info Line responded to over 8,000 calls for information about insect and disease problems, soil testing, and related questions.
- d. Accomplishments under this goal are limited due to the focus in this state on sustainable agriculture

and minimizing environmental impacts reported under Goal 4. Aquaculture holds significant promise for New Hampshire agriculture but the industry is still in its infancy. We have also been successful meeting the growing demand for GIS training.

e. Total Expenditures:

Funding: Federal Smith-Lever b&c - \$124,904

State Matching Funds - \$393,380

County Funding - \$182,000

FTEs - 13

Key Theme - Aquaculture

- a. For this industry to reach its potential in our state, a great deal of technical assistance is needed. Extension works with both current and prospective aquaculturists in an effort to: 1) increase family income, 2) increase access to fresh, high-quality fish, 3) increase farm diversity, and 4) find new uses for unproductive land and old buildings. Extension provides individual assistance, technical seminars, workshops and short courses to help with start-up or improving profitability of existing businesses. Development of the this industry in New Hampshire is still new, as is this Extension program.
- b. Impact - The economic impacts of this Extension program are just beginning to become evident. However, the number of active fish-farming families in the state has more than doubled in the past four years. There is an equal number of families who haven't yet started aquaculture businesses, but plan to do so within the next 2-3 years. As this industry grows, more ancillary businesses will develop, such as feed producers and small-scale seafood processors. This in turn creates more jobs. One current farmer has already branched into feed distribution, and a number of feed stores across the state have begun carrying fish feed. The main societal impact of increased aquaculture production in New Hampshire is that of general economic development, particularly in rural areas, increased cash flow in the community and increased jobs. As well, the addition of an aquaculture enterprise to an existing farm adds diversification, leading to a reduction in risk. Locally produced seafood products also increase food freshness and consumer choice. This past summer, a group of New Hampshire aquaculturists sold fish and crayfish at the Manchester farmers' market. They sold out every week, and have been asked to come again next year. One facet of this program has been working to demonstrate the use of cages to grow fish in ponds that are otherwise not harvestable. In just two years, five new farms have begun rearing trout in cages.
- c. Source of Funding - Smith-Lever 3b.
- d. Scope of Impact - State specific

Key Theme - GIS/GPS

- a. Two Extension courses were developed, Community Mapping and GIS for Community Decision Makers, to help communities access GIS technology and New Hampshire GIS data for natural resources planning and protection. Both combine learning about natural resources management and planning with developing skills in using ArcView GIS software. Participants are primarily community decision makers and teachers. In addition to instruction, participants receive GIS data for their community.

- b. Impact - Fourteen schools received free GIS software and supporting materials (valued at \$31,430) from the Environmental Systems Research Institute as a result of the teacher's participation in the Community Mapping course. Nine communities and the Great Bay Research Reserve received free software (valued at \$9,000) and training as a result of their participation in the GIS for Community Decision Makers course. Another outcome of the training is that towns invest in their own capacity for technology utilization. For example, the chair of the Wakefield Planning Board, after participating in the Community Mapping course, saw the need for Wakefield to make GIS technology available to the town boards. As a result of his efforts, the town voted at town meeting to purchase a computer designated for GIS. Similarly, the town of Hollis, after participating in Community Mapping, acquired GIS software for use in land use planning and conservation. The Durham Town Planner is using the data and skills he gained to integrate natural resources into the Town Master Plan. Similarly, maps created by a participant for Seabrook will be integrated into the town Master Plan. Northwood used GIS to assess potential flooding areas for emergency management. The Northwood Water District used GIS to look at how their monitoring wells and well-head protection areas fit into the town's larger natural resources picture. A Town of Hollis Planning Board member and town employee, after participating in a Community Mapping course, used GIS to inventory the town's natural resources, update the Dept. of Public Works street book and create a town road map for the police and fire departments that included recently built roads. She also created maps for the Land Protection Committee that identify large parcels located near existing protected lands for the committee to visualize patterns of open space lands.

- c. Source of Funding - Smith Lever 3b&c, grant funding

- d. Scope of Impact - State Specific

Key Theme - Home Lawn and Gardening

- a. Five years in the planning, the *Family, Home and Garden Education Center* opened last year with its toll-free Info Line at the UNH-Manchester campus. New Hampshire residents with questions about homes, lawns, gardens or other topics can now call a toll-free number. The center is staffed by professionals and intensively trained volunteers who can answer questions about gardens, lawns and

landscapes, household food safety and food preservation, water quality, integrated pest management, tree planting and care, backyard livestock and more.

- b. Impact - The Center has been able to answer approximately 8,000 calls from all 10 counties in New Hampshire in its first year of operation. Volunteers provided over 3,000 hours of time helping callers with answers to a diverse array of questions. The most frequently asked questions fall in the categories of trees and shrubs, insects, vegetables, fruits, annual and perennials, wildlife, lawns, food preservation, diseases, soil testing, weeds and composting. In the future programs will be expanded to include a diagnostic clinic, designing and renovating Manchester's Stark Street Crossing Park for demonstration gardens, establishing a speakers' bureau, workshops and seminars for the public, and promoting and improving Manchester's community garden.
- c. Source of Funding - Smith-Lever 3b&c, State matching funds, County funds
- d. Scope of Impact - State Specific

Goal 2 - A Safe and Secure Food and Fiber System

Executive Summary

- a. The primary effort this year was education of food service managers and workers. Workshops and newsletter are both used to reach this audience with the goal to reduce foodborne disease and illness, particularly important in a state highly dependent on the tourist industry.
 - b. UNH Cooperative Extension has earned recognition and reputation for its expertise and success in food safety education.
 - c. Participants have reported increased knowledge and adoption of practices and techniques to maintain food safety and reduce the incidence of food-borne illnesses.
 - d. Food safety continues to be a successful program that has achieved its level of accomplishment due partly to partnerships with university faculty and state agencies.
 - e. Total Expenditures:
 - Funding - Smith-Lever 3b&c - \$48,040
 - Smith-Lever 3d - \$25,000
 - State Matching Funds - \$151,300
 - County Funding - \$70,000
- FTEs - 5

Key Theme - Food Handling

- a. Food safety programs address food safety needs from farm to table and help ensure a safe food supply by training food workers. Food service workers and managers learn to think critically about and make choices between safe and risky food handling practices. The Safety Awareness in the Food Environment (SAFE) program was developed to provide food

managers in New Hampshire and Vermont with research-based information about food sanitation and handling. The program includes the Risky Business newsletter and a two-hour food safety and sanitation workshop for food workers and managers.

- b. Impacts - This past year the Risky Business newsletter was distributed to every licensed food service facility in the state - approximately 4,000 sites. Seventy-five percent increased their overall knowledge base of food handling practices. Seven hundred seventy food workers attending a SAFE workshop adopted at least one safe food handling practice.
- c. Source of Funding - Smith-Lever 3b&c, State matching funds
- d. Scope of Impact - Multistate Extension (NH, VT)

Goal 3 - A Healthy, Well-Nourished Population

Executive Summary

- a. The Nutrition Connects program is a major program in New Hampshire and is targeted to limited income families. It includes the Expanded Food and Nutrition Education Program and the Food Stamp Education Program.
- b. A very successful component of this program is the Great Beginnings program which provides nutrition education for pregnant and parenting teens.
- c. A USDA funded in-depth research study provided data confirming the program's success in improving birth weight. This curriculum, developed by UNH Cooperative Extension has been shared with other states via satellite conference and sale of the curriculum.
- d. Nutrition Connections has been a successful and visible program in New Hampshire. We have been fortunate to staff this program with competent and committed individuals, and county Extension advisory councils highly value and support these programs for limited-income families.
- e. Total Expenditures:

Funding - Smith-Lever 3b&c funds - \$30,000
 Smith-Lever 3d - \$230,130
 State matching funds - \$44,680
 County funding - \$252,000
 Grants, Contracts, Other - \$432,671

FTEs - 18

Key Theme - Birth Weight

- a. UNH Cooperative Extension developed a program called "The Great Beginnings Nutrition Curriculum for Pregnant and Parenting Teens." Participation gives each teen the opportunity to realize the important role she plays in shaping her own health and her baby's health and development. The curriculum consists of presentations, discussions and hands-on activities.

Topics include healthy food choices, appropriate weight gain, breast versus bottle feeding, infant and toddler feeding, skillful shopping, and the role of snack and fast foods. It's designed for teen parent groups, health education classes or wherever pregnant teens receive care. The short term goal provides practical nutrition and wellness information to adolescent mothers.

Underweight infants are at a greater risk for many health implications. Long term goals are for healthier moms giving birth to healthier babies.

- b. Impact - This program reached more than 500 pregnant and parenting teens. Eighty-five percent learned more about nutrition specific to issues of pregnant and parenting teens and 87% planned on changing one or more behaviors. This program is funded by USDA Food and Nutrition Service and the NH Food Stamp Program. Funding has continued over the past 10 years, with many collaborators. A study was recently conducted to determine the link between nutrition education and birth outcomes of pregnant teens. The project was funded by USDA Economic Research Service and Food and Nutrition Service. It sought to answer this question: Can a nutrition intervention, such as "Great Beginnings" be successful at reducing the risks of pregnancy during adolescence, or is poor reproductive outcome in pregnant adolescents due solely to the biological immaturity of the young woman? The study design included 136 subjects in the NH Experimental group who received "Great Beginnings" and who were compared to three control groups. The first control group was comprised of 65 pregnant adolescents from Massachusetts who weren't exposed to the curriculum. The second control group consisted of 50 non-pregnant high school students who received the "Great Beginnings" curriculum. The third control group was made up of 50 non-pregnant high school students who had no exposure to the "Great Beginnings" curriculum. The study revealed nutrition intervention reduced the risks of adolescent pregnancy. The low income, pregnant teenagers who completed "Great Beginnings" met or surpassed national standards for healthy childbearing. The five-year study of 136 expectant teens in New Hampshire demonstrated statistically significant increases in nutrition knowledge and diet quality, and statistically significant reductions in the incidence of low birth weight among teens who completed the six-week session "Great Beginnings" curriculum.
- c. Source of Funding - Smith-Lever 3c, State matching funds, grants
- d. Scope of Impact - Multistate Extension (NH, MA, RI)

Key Theme - Human Nutrition

- a. Nutrition Connections is comprised of two programs designed specifically for at-risk audiences: The Expanded Food and Nutrition Education Program (EFNEP) and the Food Stamp Nutrition Education Program (FSNEP). EFNEP's goal is to improve the health and nutritional status of families and individuals. It works to achieve lasting improvements for families while promoting immediate changes in food habits. The target audience for EFNEP is low income New

Hampshire residents below 185% of the poverty level. EFNEP's strength is the high quality nutrition education it provides to families and youth at risk. Legislators continue to say they fund EFNEP because of the quality of education provided. The success factor is the EFNEP staff member working closely with low -income families. The Food Stamp Nutrition Education Program (FSNEP) targets food stamp participants and residents eligible for food stamps. It enhances food stamp allotments with nutrition education and financial management education to help families make the most of their food dollars. Nutrition Connections families and individuals are taught in a one-to-one home visit, small group learning experience, or other innovative learning methods.

- b. **Impact** - This year, Nutrition Connections Program Associates in all 10 New Hampshire counties worked with 350 program families, representing 950 people. The majority graduated from the Nutrition Connections program within five months. More than 65 percent of these families had incomes below the poverty level. Also, 290 families increased their ability to manage food budgets by participating in the "Planning Ahead, Staying Ahead," supplemental family resource management program. Over 250 volunteers contributed 10,918 hours to extend the resources of the Nutrition Connections by \$131,016. Volunteers served in many roles including teaching, recruiting, development of educational materials, shopping and location of space. With agency collaboration, Nutrition Connections staff graduated 2,653 youth at risk who were taught a nutrition education curriculum. One hundred eighty three youth participated in youth garden projects in nine counties and learned the basics of food production as well as nutrition. Emphasis this year has been placed on recruitment of high risk youth and working with those youth in an established series of lessons.
- c. **Source of Funding** - Smith-Lever 3c, County funding, grant funding
- d. **Scope of Impact** - State Specific

Goal 4 - Greater Harmony between Agriculture and the Environment

Executive Summary

- a. This goal encompasses a large part of the UNH Cooperative Extension program in FY2000. The natural environment and the state's natural resources are highly valued by New Hampshire residents. Protecting and preserving the environment is among Extension's highest priorities. This includes the preservation of land and open space, and minimizing the impact of chemicals, erosion and pollution. Programs also focus on the land and forest management and stewardship to help maintain the environment and quality of life for all residents.
- b. Many accomplishments and successes are reported under this goal in the areas of forest management and harvesting, Integrated Pest Management, management of a broad range of natural resources, sustainable agriculture, water quality, commercial fishing and wildlife habitat. Cooperative

Extension is well-known in New Hampshire for its expertise and educational programs in these areas. An advantage, too, is the close working cooperation and partnerships between Cooperative Extension, state and federal agencies, and public and private organizations all concerned with natural resources - related industries and protecting the environment.

c. Impacts include acres of forest land managed, reduced use of pesticides and chemical fertilizers, use of season extenders to aid crop production, water quality monitored, wildlife habitat developed or protected, and towns assisted in protecting farmland and open space.

d. We are pleased with the many accomplishments reported below and intend to continue to place a high priority on these high priority programs. To a large extent Cooperative Extension with its research and academic base and a statewide network of offices and educators is in the best position to conduct the array of programs necessary to support agriculture while also protecting the environment.

e. Total Expenditures:

Funding - Smith-Lever 3b&c - \$694,912

Smith-Lever 3d/special projects - \$1,028,143

Hatch Funds - \$39,134

State matching funds - \$1,936,640

County funding - \$896,000

Grants, Contracts, Other - \$613,710

FTEs - 64

Key Theme - Forest Crops

- a. Cooperative Extension is actively involved in providing information and education to the many sectors of the forest industry to improve the use and marketing of wood products. The focus is on the logging and primary processing (sawmilling) sectors with a purpose of improving the utilization of the resource, minimizing environmental impact, and increasing economic vitality. The program enhances the state's economic development through improved use of the forest resource and increasing the viability of NH's forest-based industries by helping companies analyze the harvesting and manufacturing process and providing research-based information and technical assistance to aid them in making informed decisions. The program also addresses resource and community sustainability, and workforce development. Extension works closely with other organizations, both public and private to support the forest industry.
- b. Impact - Direct technical assistance was provided to approximately 85 businesses. Specific assistance was provided regarding expansion/retention (6 businesses), improving efficiency (10 businesses), establishing new businesses (3 businesses), and improving marketing (5 businesses). The Specialist also provided input to numerous feasibility studies, business plans and procurement programs. Business development materials and information regarding markets were also distributed. Specific activities targeted to the logging community include program support for the NH Timber Harvesting Council's Professional Logger Program. Workshops topics include safety, first aid, law, forestry,

business, and trucking. Industry workshops improve technical skills, efficiency and employment opportunities. Programs targeting the communication between industry and the local communities (6 open houses have been held at mills around the state) have improved the business climate and economic opportunity. SII programs and workshops have a safety component to positively influence work environment. *Over 500 businesses and individuals* have received assistance either directly through individual contact or through workshops.

- c. Source of Funding - Smith-Lever 3b&c, State matching funds, state agency funding, county appropriations
- d. Scope of Impact - State Specific

Key Theme - Forest Resource Management

- a. Extension works with many public and private partners to help landowners become aware of the benefits to themselves and others, of good stewardship. Extension provides the technical and educational help to landowners and natural resource professionals through site visits, publications, workshops and seminars. The NH Forest Stewardship Program, administered nationally by the USDA Forest Service, is directed in the state by Extension jointly with NH Dept. of Resources and Economic Development and Division of Forests and Lands.,
- b. Impact - This year on-site technical assistance was provided to nearly 2,000 landowners. Extension provided over 300 natural resource related seminars, workshops and programs throughout the state reaching over 13,000 participants. In encouraging landowners to practice forest stewardship, Extension Educators often provides information about the Stewardship Incentives Program (SIP). This cost share program provides financial incentives to landowners who implement stewardship plans and practices on their properties (funds are also available to mitigate damage from the 1998 ice storm). Between 1992 and 2000, \$1,707,009 in cost share funds were provided to NH landowners through SIP. Cost share rates varied between 50-75%, bringing the actual dollar impact to over \$2.4 million. Technical assistance was provided to nearly 2,000 landowners this year. Extension Educators had an influence on over 47,000 acres of forest land through woodland examinations and discussions with landowners regarding forest management, timber harvesting, recreational opportunities, wildlife habitat, water resource considerations and other stewardship topics. Direct technical assistance was provided affecting recreational enhancement (14,362 acres), wildlife habitat improvement (5,736 acres), wood fiber production (7,692 acres), and watershed protection (1,159 acres). This year, comprehensive stewardship plans were written by public and private foresters for 127 landowners covering 30,000 acres. Since 1990, plans have been written for 1,990 properties covering over 450,000 acres in New Hampshire.

- c. Source of Funding - Smith-Lever 3b&c, State matching funds, County funds, grant funds
- d. Scope of Impact - State Specific

Key Theme - Integrated Pest Management

- a. Cooperative Extension's Integrated Pest Management (IPM) program teaches a combined approach to pest problems, rather than relying on a single pest reduction method. Monitoring populations of pests, beneficial insects, or weather conditions is a key component. Pest prevention techniques are also important, like rotation, destruction of crop residues, and preservation of biological control agents. Direct controls (like spraying) are recommended only when field monitoring indicates it is needed. Growers learned to use insect traps, hand lenses to identify predator mites, and equipment to compute degree days. A 24 hour a day telephone for fruit growers gives callers a pre-recorded message about current pest conditions and is changed every Tuesday, April 1 - Sept. 15.
- b. Impact - For 2000, IPM program economic impacts were estimated at \$480,000; a \$400,000 reduction in spraying apples (compared to pre-IPM levels), and an \$80,000 increase in apple profits from reduced pest injury on an 850,000 bushel crop. Using a grant from NH's Dept. of Agriculture, UNH Cooperative Extension monitored rootworm numbers in 129 fields in six of New Hampshire's 10 counties. Growers were shown that rootworm numbers were low; in most cases far below levels that would require treatment, saving a number of growers from needlessly applying soil insecticides. Field corn insecticide application was eliminated on 600 acres (783 lbs a.i. of insecticide), for a \$12,000 savings, mostly in one of New Hampshire's largest counties, Hillsborough County. For strawberries, there was a \$25,000 savings to growers, from reduced tarnished plant bug injury. *Peristenus digoneutis*, a tarnished plant bug parasite UNH Cooperative Extension introduced in 1991, has now spread throughout the state and is significantly reducing TPB numbers in alfalfa. It also attacks some TPB's in strawberries. *Typhlodromus pyri*, a predator mite UNH Cooperative Extension introduced in 1996, is now established in several apple orchards. UNH Cooperative Extension plans to spread this predator to several new orchards for each of the next three years. Once this predator is established, the grower won't need to apply any chemicals to control European red mite, a major apple pest. The reduction in pest control costs and pest injury have resulted in higher profits for farmers. This has been particularly important for apple growers, facing tougher competition and lower prices for their fruit.
- c. Source of Funding - Smith-Lever 3b&c, State Matching Funds
- d. Scope of Impact - Multistate Extension (NH, MA, ME, CT, RI, VT)

Key Theme - Natural Resources Management

- a. The NH Ecological Reserve System Project (“NH Ecoreserve Project”) was established in 1995. It started with a 27-person public-private steering committee designing a blueprint for a system of ecological reserves within three years. This year Extension’s Wildlife Specialist shifted positions to become full-time coordinator of the Ecoreserve Project, facilitating this collaborative public-private partnership.
 - b. Impact - This partnership program provided educational programs on New Hampshire’s biological diversity, and worked with the state’s land conservation community to guide protection of ecologically significant areas. This was accomplished through: (1) Partnerships with landowners, land trusts, communities, conservation groups, researchers, land managers and public agencies, implementing its mission to establish and support for a well-coordinated, comprehensive system of public and private lands voluntarily dedicated to protecting the full spectrum of biological diversity; (2) Science-based information developed through collaborations with researchers from UNH and other public and private agencies, organizations and colleges; (3) Field workshops for natural resource professionals, land trusts, conservation commissions, and landowners on the ecology and management of rare natural communities, critical wildlife habitats, lakes and streams, unique geologic sites, or other ecologically significant areas; and (4) Educational resources distributed through Extension’s publications center, website and educational programs. An award-winning video, New Hampshire’s Living Legacy: A Blueprint for Biodiversity Conservation, was produced and used by teachers, environmental educators, faculty and others.
 - c. Source of Funding - Smith-Lever 3b, Grant funding
 - d. Scope of Impact - State Specific
- a. In partnership with UNH researchers and fishermen, Sea Grant Extension has sought alternative business opportunities for fishermen and their vessels. One of the most successful efforts has been the Northeast Consortium Cooperative Research Program created by Congress in 1999 to encourage and fund effective collaborative research projects between commercial fishermen, researchers and other stakeholders that focus on the development of selective fishing gear technology. The program enables commercial fishermen to participate in cooperative research and lend their expertise to fisheries management problems. It gets fishermen and researchers working

together, sharing ideas and expertise to solve fisheries' problems.

- a. Impact - In 2000, 12 research projects were selected involving some 20 fishermen and their vessels. Extension's role is to identify appropriate commercial fishermen to work with scientists on selected research projects as well as lend assistance to fishermen with proposal writing guidance. A Hampton fisherman, partnering with UNH researchers, is involved in a project, *Determining Groundfish Species Movement Patterns in Closed Areas*. His boat, along with five other fishing vessels, will be used in catching, tagging and releasing cod and other groundfish species. Movement patterns will be determined by comparing when and where the fish are tagged and where and when they are caught.
 - b. Source of Funding - Sea Grant funding, State matching funds, County funding, Grants
 - c. Scope of Impact - State Specific
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- a. The nationally and internationally recognized UNH Marine Docent volunteer program is the backbone of Extension's marine science education programs, traveling many miles to bring programs to schools, clubs, gatherings and organizations. High quality, hands-on experiences help educators, students and the general public become more scientifically literate participants in conserving and wisely using coastal and fresh water resources. Marine docents also work as field interpreters and instructors at the Seacoast Science Center and the Great Bay National Research Reserve's Sandy Point Discovery Center. In addition, Docents serve on decision-making bodies such as planning boards and conservation committees in their
 - b. Impact - The Floating Lab and the Great Bay Living Lab worked with more than 2,000 students and equipped teachers to include eight to 30 hours of marine science in their classes. Thirty docents staffed 26 Discovery cruises to the Shoals Marine Lab providing a better understanding of estuarine and coastal ecology, current water-related research and marine career opportunities. All-school Day of the Coast celebrations and accompanying teacher workshops provided a full day of marine activities for about 2,000 teachers and students with most teachers including an additional three to 10 hours of instruction as a result of their participation. The Great Bay Coast Watch, a companion volunteer monitoring program, involves student and adult volunteers in estuarine sampling, coastal surveys, toxic phytoplankton sampling and cooperation with other projects involving state and local agencies are applied learning situations that reinforce interest and knowledge about science and conservation of the environment.

- a. Source of Funding - Smith-Lever 3b&c, Sea Grant funding, grant funding
- b. Scope of Impact - State Specific

Key Theme - Sustainable Agriculture

- a. Sustainable agriculture education issues include regulations which impact agricultural production, issues which directly impact business profitability, identification and development of marketing education, educational programming for consumers, work with regional and local planners to help in development of natural resource plans and to provide educational help for business entry and maintenance of farm families. The program also helps protect the net income of diversified farms in event of crop or market loss. It contributes to the preservation of family farms and agricultural and natural resources. The program also attempts to improve the public image and understanding of agriculture in New Hampshire.
- b. Impact - Reduced fertilizer purchases, saving more than \$22.4 million, was the result of more effective use of manure. The reduction in nitrogen and phosphorus fertilizer applied to crop lands also decreased the potential of leaching of nutrients into aquifers. Approximately 2,800 pounds of food waste and 2,100 pounds of carbonaceous materials were composted on Star Island at the Isles of Shoal. Composting the food waste has prevented this material from being dumped into the sea. In vegetable production, education on the use of high tunnels and plastic mulches reduced the use of herbicides and the potential for pollution by up to 50 percent. Use of trickle irrigation reduced water use by approximately 50 percent as well. This means there is both less water and less energy used for pumping. Basic Integrated Pest Management (IPM) practices were employed on virtually all of New Hampshire's 3,877 acres of apples, reducing spraying significantly from pre-IPM levels. Maintaining rural character in New Hampshire is the best way to sustain agriculture. The NH Coalition for Sustaining Agriculture, which Extension coordinates, is a working group of over 20 organizations and producers. This Coalition developed a resource kit for community officials which offers insights, tools and resources to help prevent unintended negative consequences of land use regulations and decisions on agriculture. It also offers specific suggestions for enhancing and supporting agriculture. This notebook, "Preserving Rural Character Through Agriculture: A Resource Kit for Planners," has been distributed to all the towns and municipalities in New Hampshire.
- c. Source of Funding - Smith-Lever 3b&c, Hatch Act Funds, State matching funds, County

funding, grants

- d. Scope of Impact - Multi-State Extension (NH, ME, MA, VT, RI, CT, NY, PA)
- Integrated Research and Extension (NH)

Key Theme - Water Quality

- a. The NH Lakes Lay Monitoring Program, a joint effort of UNH Cooperative Extension and the university's Center for Freshwater Biology, began in 1979. The Great Bay/Coast Watch was established 10 years later. A recent effort, the Connecticut River Watershed Partnership, was established to support volunteer monitoring in the North Country. All are grassroots water quality monitoring programs and their key to success are the many active volunteers across the state. These volunteers assume responsibility for sampling water, carrying out basic tests and performing visual surveys. These efforts in the state's watersheds provide timely and extensive monitoring data to assess water quality and detect if any significant long-term changes are occurring. In addition, these programs provide screening alerts to state agencies responsible for environmental protection.
- b. Impact - Over 500 monitors sampled 250 lakes sites and over 300 tributary sites for over 120 lake watersheds. Samples collected by volunteers as well as quality control samples collected by Extension staff are processed and analyzed. UNH. Each year's data are analyzed by program staff with the help of University students with the final results published in an individual report for each association distributed to participants and their communities. Hot spots, problem areas, trends and recommendations are discussed in detail. In addition, an item of current interest such as statewide trends, zebra mussels, mercury in fish, acid rain, etc. is highlighted.
- c. Source of Funding - Smith-Lever 3b, State matching funds
- d. Scope of Impact - State Specific

Key Theme - Wildlife Management

- a. Since 1985, UNH Cooperative Extension has partnered with NH Fish and Game Department on a Wildlife Habitat Conservation Program. The program goal is to increase the amount of public and private land managed with good stewardship practices, conserving and managing wildlife and their habitats. Extension's educational program reaches licensed foresters and

other natural resource professionals, local and regional planning officials, landowners, community volunteers and environmental educators.

- b. Impacts - Over 200 private foresters were provided technical information on wildlife habitat management. Each forester manages upwards of 10,000 acres of private land annually. A Habitats newsletter was developed and distributed to over 4,000 natural resource professionals, landowners, volunteers and educators. Twenty workshops were conducted last year on wildlife natural history, habitat management, and biodiversity conservation to natural resource professionals, volunteers, environmental educators, landowners, community decision-makers and regional planners. Guidance was provided to local and regional planning commissions in 25 communities on incorporating wildlife habitat considerations into community planning and land use decisions. Educational materials were developed for use in programs throughout the state including a comprehensive wildlife habitat activity kit for K - 8 educators, a full-color video on New Hampshire's Living Legacy: The Biodiversity of the Granite State, and fact sheets on wildlife and habitat management. 140 landowner volunteers were mobilized through the NH Coverts Project, an education and outreach program that promotes wildlife habitat conservation and forest stewardship. Twenty-five new people are trained each year to add to the statewide network of powerful stewardship advocates. During the year 2000, Coverts Cooperators: impacted over 20,000 acres, helped develop Master Plans in 14 towns, protected 13,276 acres of land in their towns, hosted 25 forestry or wildlife field tours on their lands with 561 participants, organized or presented 45 wildlife programs with 1,559 attendees, wrote 92 forestry or wildlife articles, reaching thousands of readers, hosted 21 programs on their land for 600 youth, and presented another 24 programs at other venues for 912 youth.
- c. Source of Funding - Smith-Lever 3b, state agency funding, grants
- d. Scope of Impact - State Specific

Goal 5 - Enhanced Economic Opportunity and Quality of Life for Americans

Executive Summary

- a. UNH Cooperative Extension conducts a wide array of programs under this national goal. These include implementation of a State Strengthening grant for work with youth and families at risk; programs targeted to limited-income/low-income families that include Nutrition Connections and the Family Lifeskills Program which is part of NH's welfare reform effort; parenting programs offered through various deliveries including a program for incarcerated parents and their families; family

finance education for various audiences including a volunteer counseling program for seniors needing assistance with Medicare and Medicaid insurance; community development including Extension's successful Community Profiles program; and youth development programs including traditional 4-H programs, 4-H camping and the Teen Assessment Program. Another key aspect of this goal is the extensive use of trained volunteers in implementing many of UNH Cooperative Extension's program.

b. Key successes described in detail below include: establishing community-based youth programs that impact and provide support for at-risk families; continued accomplishments in teaching nutrition and health protection to limited-income families; continued contract funding from the State Dept. of Health and Human Services for Extension to provide the Family Lifeskills Programs for individuals in transition from welfare to work; parenting education delivered through a comprehensive newsletters series, workshops conducted by certified volunteers; and a program conducted for parents in prison with axillary support for their families; financial education programs targeted to midlife and older women, families with debt, families unable to manage finances, and elders needing assistance dealing with Medicaid and Medicare insurance; continued success and demand from new communities for Extension to conduct a Community Profile; and success in teaching youth life skills, project skills, and in providing positive, healthy learning experiences through summer residential camping programs.

c. Significant impacts have been achieved for all of the programs identified and are described below. Based on these impacts all programs have been continued in FY2001.

d. We are proud of the accomplishments reported under this goal that are described below. Also significant is the impact achieved through the involvement of over 5,000 volunteers during FY2000. The involvement of volunteers is a high priority for UNH Cooperative Extension and we have mobilized volunteers to conduct a wide variety of programs. These include lake and bay water monitoring, teaching landowners to protect wildlife habitat, master gardeners who conduct community service projects or provide other educational services, 4-H leaders, marine education docents, parenting educators, and trained counselors who advise seniors on health insurance. The most significant accomplishment in FY2000 is opening of Extension's Family, Home & Garden Education Center. Several years in the planning, the Center opened in January 2000 and responded to over 8,000 requests for information. The Center's Info Line is staffed by 50 extensively trained volunteers who contributed over 3,000 hours to provide this service.

e. Total Expenditures:

Source of Funding - Smith-Lever 3b&c - \$600,992

Smith-Lever 3d - \$150,000

State matching funds - \$2,327,983

County appropriations - \$784,000

Grants, Contracts, Other - \$517,877

FTEs - 56

Key Theme - Children, Youth and Families at Risk

- a. The Family Connections Project is a partnership between Extension, UNH faculty and the NH Department of Corrections. Its goal is to increase the protective factors and decrease risk factors associated with delinquent behavior and the use of alcohol, tobacco, and other drugs in children with incarcerated parents. The Family Connections Project targets parents who are incarcerated and the children and spouses/partners of these parents. This year there are approximately 300 children with incarcerated parents at the facility.

- b. **Impact - Project accomplishments include:** an assessment of the needs of the incarcerated parents; training of staff to conduct Extension's Family Focus parenting education program; the renovation of a wing of the facility by inmates to create a family resource center where parent-child visitations take place in a play room for younger children and a recreation room for youth; the establishment of a library in the family resource center containing parenting resources and children's books; and the hiring of a family resource center program administrator. Last year, UNH Cooperative Extension received a grant to develop curriculum for incarcerated parents, to hire additional staff to conduct parent support groups in the prison, develop curriculum to build resiliency in families with an incarcerated parent, conduct training for Extension staff and correctional officers at the prison, supervise and observe parent-child interactions in the play and recreation rooms, and provide feedback to incarcerated parents regarding their interactions with their children. The research components of the project promise to make an important contribution to our understanding of these families and how we can effectively support them.

- c. **Source of Funding -** Smith-Lever 3b, State matching funds, grants

- d. **Scope of Impact -** State Specific
 - a. Cooperative Extension's Family Lifeskills Program is designed to provide personal and family skills, self esteem and social support skills needed to deal successfully with individual and family issues that occur before, during and after the transition from public assistance to employment. The Family Lifeskills Program educates two audiences. The first curriculum is Lifeskills for Employment, Achievement and Purpose (LEAP) for NH Employment Program participants making the transition from public assistance to work. The second is Lifeskills Impacting Families Today (LIFT) for those who don't need to make the transition immediately. The curricula provides skills for the individuals as well as for their children to adjust to change. Woven into the curriculum is a teaching model that

uses workplace expectations of attendance and punctuality and a continual reinforcement of the participant's ability to be successful. Due to a large number of Spanish-speaking individuals, the curriculum has been translated into Spanish and is culturally sensitive.

- a. Impact - The LEAP curriculum has made a difference. Results of tests show that overall scores on food and nutrition, money management and balancing work and family, as well as individual indicators, increased significantly. The self-esteem of participants, over 200 this past year, increased significantly as well by the end of LEAP. LEAP changes people dramatically and increases their family and personal skills, self-esteem, social support and self-efficacy resulting in a more successful transition from public assistance to work. As one participant noted, "LEAP helped me better manage my time, make back-up plans, better manage conflict and my anger. I learned problem-solving techniques. LEAP has helped me set aside a lot of my fears about me going back to work, fears that my kids won't be well taken care of and what would they do without me. I have found that my family isn't going to fall apart just because I am gone eight hours a day."
- b. Source of Funding - Smith-Lever 3b
State Matching Funds
State Contract
- c. Scope of Impact - State Specific

Key Theme - Community Development

- a. Since 1989, 50 different communities, one region (eight communities) and one county have conducted a Civic or Community Profile. Follow-up help was provided to communities that had previously completed a Profile. The Community Profile process engages community members in assessing current issues, building a vision for the future, and forming groups to implement community-defined projects. It provides a method for citizens to affirm community strengths, meet challenges through collaboration, and manage change. Tangible outcomes include projects addressing community-defined issues. Other outcomes include increased civic, community and human capacity.
- A. Impacts - Projects resulting from a Profile include community newsletters, downtown revitalization projects, enhanced master planning and open space preservation. Following each Community Profile a comprehensive report is produced. These reports are used extensively in

development of town Master Plans and as documentation for seeking grants. A Community Profile is a neutral forum at which players come together to discuss issues. As a result, citizen participation increases, new residents get involved in their communities, and the process builds human capacity within a community. The Community Profile process effectively brings diverse interests together in a community to develop clear action plans to address community concerns.

B. Source of Funding - Smith Lever 3b, State matching funds, County funding

a. Scope of Impact - State Specific

a. Vision 2020 is a five year project funded through the Cooperative State Research, Education, and Extension System (CSREES) of the U.S. Department of Agriculture (USDA). This project redirects a significant portion of Extension's efforts in the Family and 4-H Youth Development program to help communities address complex changes affecting families and children. Vision 2020 strives to help targeted New Hampshire communities provide the safe, secure and sustainable environments necessary for the healthy and productive development of children, youth and families. The Vision 2020 project draws on the research and proven practices in the fields of community development, youth development, family development and parenting education. It provides communities and community coalitions with technical assistance and resources through grant funds, volunteer management, curriculum, and access to technology.

b. Impacts - This past year, five communities acquired new and continuing grant funds of \$2.2 million (county incentive grants, Dept. of Education 21st Century Community Learning Center grants, CYFAR State Strengthening grants) to address issues of school age children being left home alone after school and summers. Also last year, limited income families in Conway, Claremont, Boscawen and North Haverhill were provided with new options to ensure children are supervised after school. Schools revised policies and programs to facilitate after school programs. Community agencies joined together on "visioning teams" to pool skills and resources, develop program policies and handbooks, develop marketing plans and strategies to sustain programs. County funds were allocated for after school programs and youth were diverted from court to these programs. Pre-post evaluation on three after-school programs

serving 93 4th to 8th graders from 42 families (82% poverty) indicate "most" youth improved at all sites: they increased "volunteering at school," improved academic (homework completion, self confidence, attitude towards school) and social skills (sharing, cooperation, solving conflicts, respect, anger management). Parents cited fewer conflicts at home.

- c. Source of Funding - Smith-Lever 3b&c, State matching funds, County funding
- d. Scope of Impact - State Specific

Key Theme - Family Resource Management

- a. HICEAS (Health Insurance Counseling Education Assistance Service) provides initial and continuing education training of volunteers so they can accurately answer and provide free, confidential information to NH Medicare beneficiaries' questions about Medicare, Medicare Supplemental Insurance, Medicare Managed Care and Long-Term Care Insurance, ultimately saving the Medicare beneficiary money
- b. Impact - In 2000, 11,105 contacts were made with HICEAS trained volunteers resulting in a savings of \$95,672. The financial savings was as a result of inaccurate billing, changing coverage from Medicare to Medicare Managed Care, changing supplemental insurance policies and appealing a Medicare decision. UNH Cooperative Extension wrote an extensive training manual, updating it annually. It also develops and teaches a three-day training for new HICEAS volunteers.

Continuing education is provided through an annual recertification training and quarterly newsletters. HICEAS volunteers access Extension's HICEAS trainers throughout the year to help with individual issues.

- c. Source of Funding - Smith-Lever 3b, State matching funds, County funding, grant funding
- d. Scope of Impact - State Specific

Key Theme - Leadership Training and Development

- a. UNH Cooperative Extension invests in its volunteers by providing training and support; the volunteers in turn invest their time in conducting and support Cooperative Extension programs.

Extension multiplies its educational efforts by using trained volunteers as educators, middle managers, and as resource persons. Volunteers extend and support Extension programs in the areas of Family Development, Agricultural Resources, Sea Grant, Marine and Water Resources, Forestry and Wildlife, and 4-H Youth Development. They work in rural, suburban and urban communities.

- b. Impact - Over 5,000 volunteers helped deliver UNH Cooperative Extension programs in 2000. Collectively, they gave 172,012 hours of service. Using the Independent Sector volunteer value of \$14.83 per hour, this volunteer contribution to UNH Cooperative Extension is valued at \$2,550,937. If Extension hired full time staff to equal the time donated by volunteers, it would mean hiring over 85 full -time employees. Over 3,100 youth and adult volunteers work with Extension 4-H Youth Development Programs providing learning opportunities for close to 42,000 New Hampshire youth this year. Family, Home and Garden Education Center volunteers provided over 3,000 hours to answer 8,000 calls from all 10 counties in New Hampshire. HICEAS volunteers provided answers to questions about Medicare and Medicaid; those residents saved \$95,672 as a result of this volunteer support. The state's natural resources benefit as well from Extension's volunteer effort. N.H. Lakes Lay Monitors contribute by providing local and state decision makers with information needed for resource stewardship and management. The number of volunteers in the NH Coverts Project, an education and outreach program that promotes wildlife habitat conservation and forest stewardship, has grown to 140. Twenty-five new people are trained each year to add to the statewide network of powerful stewardship advocates.
- c. Source of Funding - Smith-Lever 3b&c, State matching funds, County funds, Grant funding
- d. Scope of Impact - State Specific

Key Theme - Parenting

- a. Cooperative Extension conducts parenting programs teaching parents about a variety of effective parenting techniques. Parents gain friendship and support from other parents, and become aware of the many state and local resources available. Parents of all age, income, and educational levels were enrolled in classes, including parents who were incarcerated, transitioning from welfare to work, or referred by the courts. Extension reaches large numbers of parents and conducts programs in communities where parenting education isn't usually offered. This includes sending a Cradle Crier and Toddler Tales newsletter series to parents

through the mail, using parent educator volunteers who are trained by Extension to deliver programs face-to-face, and by distributing videos and publications through county Extension offices.

- b. .Impact - By attempting to help families before crisis occurs, it is estimated Family Focus parenting programs saved the state \$242,500 in 2000 dollars. 1,488 parents, parenting 2,482 children, participated in Family Focus parenting education programs in 2000. Parents who attended a series of parenting classes gained knowledge in areas such as child development, child management, and effective parent-child communication. About 84 percent changed their behavior. Over half of the parents reported improved parent-child relations and child behavior. During 2000, over 9,700 parents received Cradle Crier and another 4,200 received Toddler Tales, both age paced newsletters. Close to 90 percent of the individuals and families who received these newsletters reported feeling more knowledgeable and able to talk more to their spouses/partners about their infants and toddlers.
- c. Source of Funding - Smith-Lever 3b, State matching funds, County funding
- d. Scope of Impact - State Specific

Key Theme - Youth Development/4-H

- a. Developing and practicing critical life skills and increasing personal assets is the foundation of Extension's 4-H Youth Development program. It addresses these youth needs through long term investments. Youth and adults work together over time in informal, out-of-school, educational settings. 4-H volunteers, peers, and staff provide ongoing support to youth. And, when youth are positively engaged in structured, out-of-school youth development programs, they are developing personal assets and valuable life skills which contribute to their future success as a contributing member of society. Trained volunteers use developmentally appropriate curriculum to reach youth with relevant projects and activities. These are delivered in an environment which fosters positive internal and external assets.
- b. Impact - Last year, 3,171 volunteers worked with 4-H youth in New Hampshire. Using the Independent Sector volunteer value of \$14.83 per hour, this volunteer contribution to UNH

Cooperative Extension is valued at \$1,740,226. The program helps youth develop positive physical and mental health practices, personal and social competence, cognitive and creative competence, vocational awareness, and citizenship and leadership skills. In 2000, over 3,900 youth were enrolled in more than 550 4-H Clubs. Over 7,200 youth were involved in 181 separate short-term special interest programs, and 4-H school enrichment programs reached an additional 30,100 youth. Youth are equal partners in the 4-H program; they participate in the many advisory boards and committees that provide input into program direction and development, 4-H foundations, the 4-H Camp Advisory Board, program planning and curriculum committees, and on the county 4-H Advisory Councils.

- c. Source of Funding - Smith-Lever 3b&c, State matching funds, County appropriations, private sector contributions
- d. Scope of Impact - State Specific
 - a. The Teen Assessment Project (TAP) was developed to promote positive youth development at the individual, family and community level. TAP's primary goals are to increase community awareness and knowledge of teen issues and to encourage collaboration to address areas needing attention. TAP starts with formation of a local steering committee which coordinates the review and administration of a survey on teen attitudes and worries, sexuality, alcohol and other drug abuse, depression and suicide, health and safety, interactions with peers, family relationships and values, use of time, perceptions of school and community and future aspirations. Data are analyzed and a parent newsletter series distributed. Topics include Parent-Teen Communication, Teen Use of Alcohol, Tobacco and Other Drugs, Teen Sexuality, Depression and Suicide, Parent-Teen Relationships and Working Together: Youth, Families, Schools, and Communities. TAP survey results provide a vehicle for education and action among youth, parents, schools and communities. These results also help to secure local funding, stimulate program and policy changes, and strengthen community linkages.
 - b. Impact - TAP has reached 21,439 youth, the parents of 18,750 youth and 10,000 others in 19 school districts/regions. Results from a survey of parents in one school district show 62 -84% of high school parents increased their knowledge of various youth issues, such as parent/teen communication, alcohol and drugs, sexuality and depression and suicide. In addition, public presentations were made in the communities at school assemblies and parent/teen forums reaching approximately 6,000 youth and 1,500 adults. A parent telephone survey found 79% of middle and high school parents are now more aware of youth issues in their community and

92% consider the newsletters of value to the community. TAP also provides documentation that enables communities to receive funding for local initiatives. To date, \$600,000 has been received in the form of grants and awards to complete TAP in communities throughout the state and to initiate new programs as well as enhance existing programs.

- c. Source of Funding - Smith-Lever 3b, State matching funds, County funding, Grant funding
- d. Scope of Impact - State Specific
- a. New Hampshire 4-H Camps are one of the most intense youth service delivery systems for UNH Cooperative Extension, addressing current trends in adolescent development. The camping experience is specifically designed to help youth acquire skills and knowledge in such areas as science and environmental stewardship. The Camps' programs emphasize life skills such as personal and group leadership, respect of self and others, effective participation in a community, acceptable practices for emotional, social and physical health and respect for the natural environment.
- b. Impact - Over 816 children ages 6-16 attended 4-H Camps this past summer, with a total of 1,112 camper weeks. The camping program is promoted and used by youth organizations, state agencies, social service agencies, schools and other youth groups representing many diverse audiences. Since 4-H camping was established in NH in 1921 over 70,000 youngsters have participated. NH 4H Camps recruit counselors from around the world, with many coming from Europe, adding a unique feature to a child's camp experience. Staff members are trained in child development, behavior management, activity leadership, health care and first aid, risk management, safety issues, and other topics relevant to the maintenance of a safe and healthy camp environment.
- c. Source of Funding: Smith-Lever 3b & c
State matching funds
- d. Scope of Impact - State Specific

B. Stakeholder Input Process

UNH Cooperative Extension actively involves stakeholders in Plan of Work development and in monitoring its implementation and evaluation. Included are County and State Cooperative Extension Advisory Councils, program committees, commodity committees, state agencies and organizations, external relations volunteers and clientele input and feedback.

County Advisory Councils play a key role in monitoring Plan of Work implementation and outcomes. Each council is comprised of 12 citizen volunteers plus a county commissioner and one local member of the state legislature. The State Advisory Council provides oversight for the statewide Extension program. It is comprised of two members from each of the state's ten advisory councils, the state CARET (Council for Agricultural Research, Extension and Teaching) representative, plus five members at large, for a total of 26 members. Monitoring of outcomes and impacts is an appropriate role since council members represent the state's population and because council members have voiced a desire for an increased role in the program development process.

Program outcomes and accomplishments are shared with advisory councils in a variety of forms. Specific program presentations, reports and discussions are routinely scheduled as part of advisory council meetings. Annual accomplishment reports and impact statements are widely distributed to advisory council members, elected officials and other stakeholders. The UNH Cooperative Extension web page is being increasingly used as a means for stakeholders and advisory council members to track program implementation and assess the value and relevancy of efforts and outcomes. In addition, Cooperative Extension works closely with many partners and other stakeholders. These include state and federal agencies, public and private organizations, town government and non-profit agencies. Key individuals representing these partners and stakeholders are routinely involved with Extension in planning, implementing and evaluating programs.

C. Program Review Process

There are no significant changes in the program review process since development and submission of the FY2000-2004 Plan of Work.

D. Evaluation of the Success of Multi and Joint Activities

1. Multi-State Extension activities include a wide-range of partnership and collaborative efforts that have been in place for many years. Many of the activities reported are joint efforts with the National

Cooperative Extension System, Northeast Region and the New England Region. A particular emphasis is placed on joint activities with other New England states due to our common regional issues, individual programming limitations and close proximity to neighboring states. This has been enhanced and encouraged through joint funding of the New England Extension Consortium planning and implementation grants. Up to 9 grants will be awarded for regional projects in 2001. Cooperative Extension has also benefitted from the closer relationship with research. The Agricultural Experiment Station at the University of New Hampshire functions under the agricultural dean while Cooperative Extension is a separate entity functioning under its own dean. This separate administrative structure has limited collaborative efforts in the past but the current joint activities demonstrate substantial progress in this state and the beginning of greater collaboration and partnerships between research and extension.

2. Planned programs include under-served and under-represented among the targeted audiences. The regional EFNEP collaboration primarily targets this audience. It continues to be successful due to competent, experienced staff and the support of local advisory councils and decision-makers. Several agricultural and forestry programs include women as a targeted audience and also include financial management components important to producers whose income is limited by their business management skills. Several of the integrated Extension and Research projects are focused on profitability and sustainability. Due to our short growing season, lack of fertile soils and limited open space, many agricultural producers are only marginally profitable and will potentially benefit from research addressing these factors.

3. All planned multi-state and integrated Extension and Research projects have clear goal, objectives and expected outcomes. Program evaluation is a planned part of all Extension programs with outcomes and impacts to be clearly identified.

4. Both multi-state programs and integrated Research and Extension programs have improved effectiveness and efficiency. Through UNH Cooperative Extension's active partnership in the National Cooperative Extension System, we can access and use the combined resources and expertise of the total system. Joint planning strengthens the entire system through agreement on common initiatives, goals and procedures. This collaborative effort encourages and supports joint programming due to similar structures and operations within which each partner can easily connect. Integrated Extension and Research has also improved effectiveness in New Hampshire. Because of Extension's responsibility to extend the university's knowledge and research for application in the state, joint work facilitates this role. As Extension Educators and faculty research scientists work more closely together, both sides will benefit. Extension staff will know and be better equipped to convey research results to those who need it. Researchers, through their closer relationship with Extension, will better know the research needs of the state.

E. Multi-State Extension Activities (Form CSREES-REPT)

<u>Title of Planned Program/Activity</u>	<u>Actual FY2000 Expenditures</u>
1. New England Extension Consortium	\$ 0
2. Eastern States Exposition	2255
3. Natural Resources, Agriculture & Engineering Service (NRAES)	0
4. Northeast Leadership Development	2500
5. National Extension Leadership Development	513
6. Northeast Land-Grant Group	1629
7. Nat. Assoc. of State Universities and Land-Grant Colleges (NASULGC)	5534
8. American Distance Education Consortium (ADEC)	6250
9. Regional/National Program Leader Meetings	2295
10. Multi-State Program Planning and Implementation	34835
11. New England/Multi-State meeting/conferences/trainings	5574
12. Participation of Director, Associate Director, Business Administrator, CIT Manager and Educational Marketing & Information Manager in regional and national meetings	21485
	=====
Total FY00 Expenditures -	\$82,870

Brief Report of Progress in Planned Multi-State Programs

1. New Hampshire continues its active partnership in the New England Extension Consortium. A major activity in FY00 was the awarding of 9 regional planning and implementation grants in the amount of \$23,000 to support multi-state Extension programs. Note FY00 assessment fee paid from state funds.
2. Eastern States Exposition continues to provide valued youth education opportunities for 4-H members throughout New England. This opportunity is highly appealing to 4-H members and leaders and provides a strong incentive for youth to set goals and reach their potential.
3. Participation in the Natural Resources, Agriculture and Engineering Service (NRAES) continues to provide essential technical publication support for New Hampshire, and provides important coverage for topics and subjects for which we lack staffing or expertise. Fees paid from state funds.
4. New Hampshire is a funding partner in the Northeast Leadership Development Program and currently has one staff member enrolled in the program.
5. New Hampshire is a funding partner in the National Extension Leadership Development but currently has no state participant in the program.
6. Both the Dean & Director and Associate Director are active participants in the Northeast Land-

Grant group which meets at least twice annually to promote multi -state Extension programs and the further integration of Research and Extension throughout the Northeast. John Pike, New Hampshire's Dean and Director is currently vice-chair of the Northeast Extension Directors groups and a member of the planning committee for the summer 2001 Northeast joint meeting.

7. New Hampshire Cooperative Extension is a funding partner in the National Association of State Universities and Land-Grant Colleges. The Dean and Director attended the FY2000 NASULGC national meeting. New Hampshire also supports a representative on NASULGC's Council on Agricultural Research, Extension and Teaching.

8. New Hampshire is an active funding member of the American Distance Education Consortium (ADEC) and accesses numerous satellite training and educational opportunities available through the consortium.

9. New Hampshire's five state Extension Program Leaders actively participate in periodic regional and national Program Leader meetings for program planning, collaboration, networking and implementation of national initiatives.

10. Cooperative Extension staff in New Hampshire actively participate in multi -state program planning and implement, many of which are New England regional efforts. Examples include groups addressing IPM, nutrition and food safety, dairy management, nursery and greenhouse production, fruit and vegetable production, plant diagnostics, youth entrepreneurship, and sustainable agriculture.

11. During FY2000 New Hampshire Extension staff participated in regional and New England planning meetings for producer/grower association events, professional development conferences, and multi -state collaboration including development and implementation of New England Extension Consortium program grants.

12. In support of the National Cooperative Extension System, New Hampshire's Associate Director, Business Manager, CIT Manager and Educational Marketing and Information Manager participated in national civil rights training, Administrative Officers Meeting, National Leadership Conference, National Extension Technology Conference, Agricultural Communicators in Education meetings and Extension Directors national meetings.

F. Integrated Research and Extension Activities (Form CSREES-REPT)

<u>Title of Planned Program/Activity</u>	<u>Actual FY2000 Expenditures</u>
1. William Lord	\$2808
2. Dr. Peter Erickson	4980
3. Dr. William MacHardy	3445
4. Dr. John Roberts	8562
5. Dr. Stefan Seiter	1306

6. Dr. David Kopsell	5210
7. Dr. Catherine Neal	5291
8. Dr. Paul Fisher	5374
9. Dr. Charles Schwab	281
10. Dr. J. Brent Loy	424

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Total FY2000 Expenditures - \$37,681

Brief Report of Progress

1. Salary support provided for William Lord, Extension Fruit Specialist, to conduct research projects: (1) Intensive Production for Strawberries, and (2) Multi-disciplinary Evaluation of New Apple Cultivars.
2. Salary support provided for Dr. Peter Erickson, Extension Dairy Specialist, for research in Management Systems for Improved Decision-Making and Profitability of Dairy Herds.
3. Salary support provided for Dr. William MacHardy, Extension Pathology Specialist, for research in Epidemiology and Control of Apple Scab.
4. Salary support provided for Dr. John Roberts, Extension Turf Specialist, who functions in a split Extension and Research position.
5. Salary support provided for Dr. Stefan Seiter, Extension Agroecology Specialist, who functions in a split Extension, Teaching and Research position.
6. Salary support for Dr. David Kopsell, Extension Vegetable Specialist, for research in Mild Onion Production in New England.
7. Salary support for Dr. Catherine Neal, Extension Ornamentals Specialist, for research in Nutrient Management for Production and Maintenance of Ornamental Plants.
8. Salary support for Dr. Paul Fisher, Extension Ornamental Specialist, for research in A Decision-Support System for Control of pH in Soilless Container Media.
9. Salary support for Dr. Charles Schwab, Professor of Animal & Nutritional Science, for research projects: (1) Metabolic Relationships in Supply of Nutrients in Lactating Cows; and (2) Management of Systems for Improved Decision-Making and Profitability of Dairy Herds.
10. Salary support for Dr. Brent Loy, Professor of Plant Biology and Genetics, for research projects: (1) Conservation and Utilization of Plant Genetic Resources, and (2) Genetics and Breeding of Cucurbits.