

Connecticut Plan of Work Update FY 2005-2006

Connecticut Cooperative Extension System
Storrs Agricultural Experiment Station

This certifies that the University of Connecticut has submitted their FY 2005-2006 Plan of Work Update to USDA as of April 1, 2004.

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CSREES FY 2005-2006 Plan of Work Update

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

Since preparation of the FY 2000-2004 Plan of Work, most programs have been continued and enhanced, a few programs were discontinued, and several programs added. Areas of primary focus for the 2005-2006 period will be in the key theme areas of: biotechnology, emerging infectious diseases and animal health, animal production efficiency, managing change in agriculture, and agricultural competitiveness.

Programs Continued - The bulk of the programs cited in the FY 2000-2004 Plan of Work will continue during the FY 2005-2006 planning period. In particular, programs will be continued in the key theme areas of biotechnology (rhododendron root rot, new horticultural plants development, and reproductive biotechnology), emerging infectious diseases and animal health (viral vaccines, poultry diseases, and aquatic animal pathology), animal production efficiency (livestock management, dairy nutrition, vegetable and greenhouse production, animal production/pest management) and agriculture competitiveness (food marketing policy, marketing, economic viability, national and international trade, and product differentiation for environmental policy).

Programs Discontinued - A few programs identified in the FY 2000-2004 Plan of Work have been discontinued due to faculty and staff departures or refocused research or Extension programs. Programs discontinued include economic viability of agricultural biotechnology (faculty departure), master livestock volunteers (program refocus), agriculture in New England transitions (grant ended), and commercial wineries (faculty retirement).

Programs Added - Programs added since preparation of the FY 2000-2004 Plan of Work reflect a focus in the biotechnology area, public health, risk management and organic production. More specifically, program thrusts in these areas include:

- **Tolerance to Abiotic Stresses in Transgenic Plants** - The natural resources needed for optimal agricultural production are shrinking as the population of the world increases. Research focuses on improving the tolerance of plants towards abiotic stresses like high salinity and drought by working with plants to enhance their capability to accumulate solutes in their vacuoles.
- **Transgenic Swine** - The research focus is to produce swine that possess and express human genes that will help allow swine tissue to be transplanted into humans with the objective to produce transgenic swine by breeding swine that are known to possess human genes.
- **Animal Cloning** - Research areas include both basic and practical research in the areas of reproductive physiology and animal biotechnology, particularly cloning and transgenic technology.

- **Lobster Diseases** - Research focus is on understanding the effects of pesticides on lobsters, particularly on their defense mechanisms, which could predispose the animals to infections such as paramoeba.
- **West Nile Virus** - Research is focused on the calibration of diagnostic tests for West Nile for application in surveillance and on the development of sets of monoclonal antibodies (mAb) anti-llama/alpaca IgG and mAbs against West Nile virus with the objective of developing a rapid test for diagnosis of West Nile Virus.
- **Risk Management Education** - This Extension program is designed to improve the viability and financial health of Connecticut agricultural producers through risk management education.
- **Organic Vegetable Production** – This Extension program is designed to respond to increased interest in organically grown food by teaching organic producers to manage pests without synthetic pesticides, to improve soil fertility through the addition of natural materials and to develop farm management skills that will increase sustainability.

Allocated Resources

FY 2005 Goal 1		
Funding Source	Expenditures	FTEs
Smith-Lever	262,328	5.24
Hatch	42,908	1.00
Multi-state research	-	-
State funds	6,430,639	113.85
Competitive grants	896,557	22.90
Animal health	-	-
Total	7,632,432	142.99

FY 2006 Goal 1		
Funding Source	Expenditures	FTEs
Smith-Lever	270,197	5.24
Hatch	44,195	1.00
Multi-state research	-	-
State funds	6,430,634	113.90
Competitive grants	923,454	22.90
Animal health	-	-
Total	7,668,480	142.99

Goal 2: A Safe and Secure Food and Fiber System

Since preparation of the FY 2000-2004 Plan of Work, programs identified in that plan have been continued and enhanced. Areas of primary focus for the FY 2005-2006 period

will be in the key theme areas of hazard analysis critical control point (HACCP) regulations and good agricultural practices.

Programs Continued - The program areas cited in the FY 2000-2004 Plan of Work will continue during the FY 2005-2006 planning period. Programs will be continued in the key theme areas of HACCP (good agricultural practices, farmstead cheesemakers, apple cider producers and meat processors).

Programs Discontinued – No programs have been discontinued since preparation of the FY 2000-2004 Plan of Work.

Programs Added – No new programs have been added since preparation of the FY 2000-2004 Plan of Work.

Allocation of Resources

FY 2005 Goal 2		
Funding Source	Expenditures	FTEs
Smith-Lever	63,292	0.85
Hatch	-	-
Multi-state research	-	-
State funds	541,513	7.85
Competitive grants	-	-
Animal health	-	-
Total	604,805	8.72

FY 2006 Goal 2		
Funding Source	Expenditures	FTEs
Smith-Lever	65,191	0.87
Hatch	-	-
Multi-state research	-	-
State funds	554,258	7.85
Competitive grants	-	-
Animal health	-	-
Total	619,449	8.72

Goal 3: A Healthy, Well Nourished Population

Since preparation of the FY 2000-2004 Plan of Work, all cited programs have been continued and enhanced, and some programs added. Areas of primary focus for the 2005-2006 period will be in the key theme areas of human nutrition and human health.

Programs Continued - Most of the programs cited in the FY 2000-2004 Plan of Work will continue during the FY 2005-2006 planning period. Programs will be continued in the key theme areas of human nutrition (obesity, athletic nutrition, Expanded Food and

Nutrition Education Program, family nutrition program for infants/toddlers/children, Senior Nutrition Assistance Program, food security, pediatric nutrition and physical activity), and human health (diets of pregnant women, heart disease, cholesterol and eggs, and anemia).

Programs Discontinued – No programs have been discontinued since preparation of the FY 2000 – 2004 plan of work.

Programs Added – Programs added since preparation the FY 2000 – 20004 plan of work reflect a focus in special dietary needs and healthy lifestyles. More specifically, program thrusts in these areas include:

- Children with Special Dietary Needs – This Extension program is designed to address nutritional needs of children with special health care needs. These children now comprise approximately ten percent of the pediatric population and among multi-ethnic, low-income groups; rates of certain birth defects and conditions are higher than the general population.
- Healthy Lifestyles Workgroup – This Extension program is designed to promote a healthy lifestyle through eating a variety of nutrient dense foods and through the promotion of regular exercise and physical activity for youth enrolled in 4-H youth programs. Obesity, sedentary lifestyle and inadequate consumption of nutrient dense foods are some of the health concerns for today’s youth. African Americans, Hispanic Americans, women and adolescents from poor households are proportionally higher at risk for obesity than Caucasians, men and adolescents from middle to higher income households.

Allocation of Resources

FY 2005 Goal 3		
Funding Source	Expenditures	FTEs
Smith-Lever	316,820	7.98
Hatch	45,700	1.25
Multi-state research	-	-
State funds	1,187,103	11.97
Competitive grants	365,198	8.49
Animal health	-	-
Total	1,914,821	29.69

FY 2006 Goal 3		
Funding Source	Expenditures	FTEs
Smith-Lever	326,325	7.98
Hatch	47,071	1.25
Multi-state research	-	-

State funds	1,190,687	11.97
Competitive grants	376,154	8.49
Animal health	-	-
Total	1,940,237	29.69

Goal 4: An Agricultural System Which Protects Natural Resources and the Environment

Since preparation of the FY 2000-2004 Plan of Work, most programs have been continued and enhanced, one program discontinued, and several programs added. Areas of primary focus for the 2005-2006 period will be in the key theme areas of integrated pest management, natural resource management, forest resource management, land use, water quality, and wildlife management.

Programs Continued - The bulk of the programs cited in the FY 2000-2004 plan of work will continue during the FY 2005-2006 planning period. Programs will be continued in the key theme areas of integrated pest management (fruits, greenhouses, vegetables, weeds, invasive species/purple loosestrife, and pesticide management), natural resource management (marine resource economics and policy, and fisheries management and conservation), forest resource management (forest stewardship, urban and community forestry and volunteer initiatives and Coverts), land use/water quality (residential water quality, Nonpoint Education for Municipal Officials (state-level), farm scale nutrient management planning, atmospheric-hydrologic interactions, and landscape architecture), and wildlife management (fisheries management, wildlife resources).

Programs Discontinued – The turfgrass IPM program, identified in the FY 2000 – 2004 plan of work, was discontinued due a staff departure.

Programs Added - Programs added since preparation of the FY 2000 – 20004 plan of work reflect a focus in the IPM, water quality and land use areas. More specifically, program thrust in these areas include:

- IPM/The Connecticut Curriculum – This Extension program is designed to teach Connecticut teachers and other educators the principles of Integrated Pest Management (IPM) and impacts on IPM on environmental problems so as to increase the knowledge of Connecticut citizens on environmental concerns in the state, and IPM methods that are available to them to restore and preserve the environment.
- Invasive Species/Non-Native Plants – The spread of invasive species is ranked second, behind habitat loss, as the greatest threat to biological diversity in the U.S. This Extension project is designed to address invasions of non-native plant species into residential properties, public lands or other natural areas that may cause a significant decline in biological diversity and reduce the quality of these important habitats.

- Turfgrass Management –Proper management of turfgrasses is critical for turf performance and quality in addition to preventing losses of nutrients and turf chemicals offsite, which have become a major environmental and public health concern in recent years. This research and Extension program focus will benefit professional grounds keepers, golf course superintendents, managers of athletic fields and parks, and homeowners.
- National NEMO Network - Many national agencies and organizations have recognized that better land use practices are needed to protect our nation's natural resources, particularly given the fact that nonpoint source pollution, or polluted runoff, is the number one source of water pollution in the United States. The Connecticut NEMO Project, which serves as the coordinating “hub” of the National NEMO Network, provides training, advice, and a wide range of communication services to the Network.
- Center for Land use Education And Research - The Center for Land Use Education and Research (CLEAR) integrates the missions and capabilities of the Land, Sea and Space Grant College systems to focus on advancing the knowledge and understanding of the effects of land use on natural resources. CLEAR conducts remote sensing research, develops geospatial tools and applications, and develops and delivers outreach education programs.
- Green Valley Institute - The Green Valley Institute (GVI) is a comprehensive educational initiative resulting from a partnership between CANR and the Quinebaug-Shetucket National Heritage Corridor. This Extension program is designed to improve the knowledge base from which land use and natural resource decisions are made and to build local capacity to protect and manage natural resources.
- Landscape Characterization - Landscape characterization is a complex set of goals, objectives, analyses, information extraction, visualizations, and many other sub-components. Land use planning requires many forms of landscape characterization. The research objective is to examine and develop improved methods for landscape characterization as they pertain to land use planning.

Allocation of Resources

FY 2005 Goal 4		
Funding Source	Expenditures	FTEs
Smith-Lever	678,815	10.22
Hatch&Mc-Stennis	82,177	0.95
Multi-state research	-	-
State funds	2,920,666	36.37
Competitive grants	414,683	8.91
Animal health	-	-
Total	4,096,341	56.45

FY 2006 Goal 4		
Funding Source	Expenditures	FTEs
Smith-Lever	699,179	10.22
Hatch&Mc-Stennis	84,642	0.95
Multi-state research	-	-
State funds	2,933,122	36.37
Competitive grants	427,123	8.91
Animal health	-	-
Total	4,144,066	56.45

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

Since preparation of the FY 2000-2004 Plan of Work, many programs have been continued and enhanced, and some programs added. Areas of primary focus for the 2005-2006 period will be in the key theme areas of: Family resource management, consumer management, and 4-H youth development.

Programs Continued - Most of the programs cited in the FY 2000-2004 plan of work will continue during the FY 2005-2006 planning period. Programs will be continued in the key theme areas of family and consumer resource management (family strengthening, identity theft, healthy environment for children and parent education and family economics), community development (people empowering people, urban gardening), and in 4-H youth development (workforce preparation, leadership, citizenship, communication and expressive arts, environmental education, plant and animal science, and camp resource).

Programs Discontinued - No programs have been discontinued since preparation of the FY 2000 – 2004 plan of work.

Programs Added - Programs added since preparation of the FY 2000 – 2004 plan of work reflect a focus in the financial management area. More specifically, program thrusts in these areas include:

- Financial Management/Post 9/11 - Following the September 11th terrorist attacks charity fraud became an important consumer education and protection issue. The objective of this Extension program is to keep well-meaning consumers from becoming victims of charity fraud and to make consumers aware of the necessity of making or updating a personal inventory and to adequately insure personal property.
- Managing Your Money - Connecticut’s economic climate and welfare reform have increased the number of families seeking financial assistance and counseling from social service agencies. The target audiences for this Extension program is limited resource families and individuals enrolled in programs sponsored by agencies working with families-at-risk. The

objectives are to provide program participants with skills necessary to manage their money, become good consumers, and to give parents the skills necessary to teach their children the basics of money management.

Allocation of Resources

FY 2005 Goal 5		
Funding Source	Expenditures	FTEs
Smith-Lever	771,153	14.01
Hatch	-	-
Multi-state research	-	-
State funds	1,056,643	12.49
Competitive grants	122,192	3.10
Animal health	-	-
Total	1,949,988	27.90

FY 2006 Goal 5		
Funding Source	Expenditures	FTEs
Smith-Lever	794,288	14.01
Hatch	-	-
Multi-state research	-	-
State funds	1,056,643	12.49
Competitive grants	125,858	3.10
Animal health	-	-
Total	1,979,489	28.60