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Education in Action:
A Story of Commitment, Challenge, and Change

Connecticut Cooperative Extension System
University of Connecticut
1960—2008

By Nancy H. Bull, Anne H. Rideout, Nancy P. Weiss
Edited by Hadley Rosen
This history of the Connecticut Cooperative Extension System is dedicated to all of the University of Connecticut employees and volunteers, both past and present, who believed in people, their hopes, and aspirations; to the people of the state who had faith in the land-grant philosophy of life-long learning, self-determination, and leadership; to the University administration that believed in the role of the public institution and the engagement of the people of Connecticut with the institution; and to the public and private organizations whose engagement, participation, financial support, and advice contributed to Extension’s success throughout our history. This book is dedicated to all who forfeited private gain to work together for the public good of the state, nation, and world.
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From the early days when county farmer groups organized, to our current employees, participants, and supporters, the Connecticut Cooperative Extension System has impacted the lives of millions of people, and hundreds of communities and businesses. Historically, the Connecticut Cooperative Extension System has been and continues to be an integral component of the College of Agriculture and Natural Resources. The land-grant mission of the University is one of access for all to the resources of higher education.

My own experience with Extension started at age nine with my 4-H sheep projects. I learned how to shear sheep using the Australian method. Through the money I earned shearing sheep and working with Cooperative Extension Service leaders, I achieved my dream of attending the university and becoming a veterinarian. One of my personal priorities, as my career as a university administrator came to a close, was to document the outstanding work of the Connecticut Cooperative Extension System.

For me, as I am sure it is for many of you, it is difficult to imagine what life would have been without the influence of the Cooperative Extension System. I invite you to read the pages that follow and to consider the unique experiences and accomplishments of Extension. This history tells the story of our 127 years as a college, focused particularly on the past forty-eight years of our highly successful Extension program. The story brims with pride that reflects the enthusiasm of all those lives changed by the work of your land-grant university system, the University of Connecticut.

Sincerely,

Kirklyn M. Kerr
Dean and Director
1993–2008
Greetings from the Dean and Director

UConn Cooperative Extension has been actively engaged in extending UConn to Connecticut citizens for many years, as the history clearly documents. Programs have evolved and changed as the needs of Connecticut have changed, but UConn Extension has remained connected with Connecticut communities, businesses, and families through its commitment to work for the public good. UConn Cooperative Extension has had a distinguished history of actively working with Connecticut citizens; but the story is not complete.

UConn Extension is an important part of the College of Agriculture and Natural Resources. Along with our academic programs and research, Extension delivers unbiased, research-based information directly to those who will benefit most from that knowledge, and put that information immediately to work. A recent survey documented nearly one million contacts with Connecticut citizens annually through a wide variety of means, including Web-based information, workshops, training programs, meetings, and one-on-one contacts. Nearly every Connecticut citizen benefits from Cooperative Extension programming in some way, often without realizing it. The UConn Cooperative Extension System will continue to evolve and deliver non-formal educational programming to Connecticut citizens, as long as the need exists. I truly look forward to continuing the story.

Sincerely,

Gregory J. Weidemann
Dean and Director
(2008–)
Foreword: *Cooperative Extension from 1960 Onward*

The legacy of the Cooperative Extension System programs is one of adaptation, change, and innovation. As society moved toward a broader umbrella of inclusion, Extension was at the forefront with practical solutions to the problems of new audiences. Work with inner-city families, especially early educational efforts in housing projects, kept Extension relevant and connected to the forces of change. The volunteer skills, practical knowledge, and hands-on learning that had once been applied so successfully in agricultural and rural settings proved just as viable in the newly developed suburban and inner-city environments. The development of consumer education programs, the Expanded Food and Nutrition Education Program (EFNEP), urban 4-H, the Coverts Project, Green Valley Institute, and work with the Hispanic Health Council are among the outstanding efforts of Extension personnel to deliver programs to new audiences.

At the same time, Extension agents, later called Extension educators, assumed new roles within communities through community resource development programs and related spin-off efforts. As the number of farms in Connecticut and the amount of land dedicated to farming declined, agents turned their expertise to the difficult questions of land use and the balance between protecting the environment and meeting the demands of families for housing, commercial use, and recreation.

The synergy that developed in the interaction of Extension professionals and local citizen groups, including elected officials, brought University specialists to community tables with new ideas and options. Extension educators developed levels of expertise that made them welcomed in complex discussions regarding the future direction of the state in myriad areas. The application of remote sensing, GIS technology, Nonpoint Education for Municipal Officials (NEMO), the Marine Advisory Service, urban forestry, the Eastern Connecticut Landowners Association, and water quality were key programs that fundamentally changed the face of Connecticut, and the health of its natural and developed environment.
Extension responded to pressing issues with the development of the energy Extension program. In the 1970s as the country faced long lines at the gas pumps and rising oil prices, innovative staff members worked tirelessly on energy-saving educational efforts. Citizens flocked to programs on wood-burning stoves, ways to measure the efficiency of furnaces, how to make window quilts, greenhouse efficiency, and personal and public discussions about energy policy. As the country adjusted to higher energy prices and attention moved to other issues, staff members shifted their focus, and some of the inherent creativity the program spawned was lost.

The agricultural program shifted emphasis from production farming to niche markets, diversified operations, waste management for livestock operations, and an increased emphasis on the plant and nursery industry. New suburban homes required new landscaping, and as the industry developed, Extension agents and specialists offered programs in town beautification, urban forestry, and home grounds management. Use of indigenous plants and the application of fewer herbicides on lawns became important to homeowners. The Master Gardener program flourished.

Extension efforts have spawned numerous related not-for-profit organizations such as the Connecticut Poultry Association (1906); the Connecticut Milk Producers Association, a marketing cooperative (1917); the Connecticut Christmas Tree Growers Association (1960); the Maple Syrup Producers Association of Connecticut (1977); and the Master Gardener Association (1987) to name a few. These organizations developed a framework of their own to give back to the Extension System and the College of Agriculture and Natural Resources, University of Connecticut.

Of all the original program areas, the Extension home economics program experienced perhaps the most change. Once comprised of hundreds of homemaking clubs, the program transformed itself by evolving with the radical changes in the decades of the 1970s and onward. As a larger number of women moved into the paid work force, single-parent families grew in number, and intergenerational families and conflicts arose. Extension home economists used new techniques to meet clientele needs and to diversify programs to reflect the total state population. Extension was an early and prominent force in empowering consumers in a new movement that now seems inevitable, but was innovative at the time. Training consumers regarding their rights and responsibilities in a variety of settings, including at factories, and using the emerging power of new media, especially television, brought Extension home economic programs to more people in more places than ever before.
The broad area of food and nutrition was the focus of increased federal funding with the development of the Expanded Food and Nutrition Education Program (EFNEP). Specialists working with county home economists trained teams of women to return to their communities to teach hands-on classes in food and nutrition. Challenges were overcome, and new audiences were developed as publications were translated into multiple languages. Programs were offered in community centers, senior citizens centers, housing projects, inner-city schools, and camps. Interest in home food preservation rose and waned during the decades. At one time, a program called Master Preservers was developed to meet the needs of families interested in home food preservation. Extension began programs in the 1950s on kitchen renovation, improved efficiency, and stretching a dollar, which expanded into issues of water quality, food safety, and food security.

A significant number of staff retirements occurred in the late 1980s and into the early 1990s, creating a fundamental change to the Cooperative Extension System. Some county and state level positions were not refilled due to decreases in budgets and changing priorities. Some positions were transferred from permanent state or federally-funded positions to end-date employment. Some previous tenure-track positions were refilled as short-term grant-funded positions. As federal funding declined, Extension educators found support from a variety of grant sources with a specific time limit and focus. Individuals developed programs, made an impact, and when the funding ended, so did the program and the personnel. However, the impact lived on.

This fundamental change in funding of positions enabled county-based educators to work in more disciplined-based roles, where possession of specific discipline-based expertise was required. Throughout this period of environmental change and organizational transition, Extension demonstrated its strength and flexibility while holding fast to the core values that had made it successful. Collegial relationships between Extension educators and academic department faculty members strengthened. However, this change has led to short-term programs that last three to five years, and has focused the hiring of new employees, in specific program areas, rather than as generalists.

With few exceptions, there is at least one Extension staff member working in each of the 3,150 counties of the United States. Extension is based on a two-way communication system that addresses the needs of the state. People identify problems and employees provide University research-based information, thus engaging in problem resolution and changing communities. Across the globe, Extension is the most copied American institution.
Through the Depression, the two world wars, recessions, and international conflict, Extension has assured people of a healthy food supply at a cost less than in any other industrial nation. When Congressman Lever reported the bill creating the Extension Service to the House (1914), he noted that education through demonstration would not be limited to production agriculture. Extension was to provide leadership among all rural life. When President Woodrow Wilson signed the Smith-Lever Act into law on May 8, 1914, he stated, that it was “one of the most significant and far-reaching measures for the education of adults ever adopted by the government.”

At the beginning of the twenty-first century, the Connecticut Cooperative Extension System is significantly different from the organization it was in the 1960s. It stands on the foundation developed in the enabling legislation (1914), but it has been altered to meet current needs. The principle of bringing educational programs outside the classroom to the public has remained. The mechanisms for reaching audiences, the process of determining the content and topics of educational programs, the geographical orientation of programs, and the educators’ responsibilities have changed. The level of expertise and the connection to the University base have been maintained and expanded. The mission of Cooperative Extension remains the same (1914): economic and community development for an improved quality of life. The result is a vibrant, flexible organization capable of meeting the challenges of programming for the next one hundred years.
Prologue

This history attempts to capture the spirit, dedication, resourcefulness, and contributions of the men and women who were and are today part of the Connecticut Cooperative Extension Service/System (CES). The focus is on the past forty-plus years, highlighting our collaborative activities with other groups that synergized our efforts. We trace the CES path from our origin to the present to see how the future of Cooperative Extension in Connecticut will be shaped. The history of the Cooperative Extension System from 1914 to 1964 was addressed in the publication *Fifty Years of Extension in Connecticut*. The pages that follow extend Extension’s history through 2008.

This publication could not include all of the educational programs, problem-solving, and technology transfer work for which Extension has provided leadership. We have highlighted examples of the overall CES mission, significant areas of focus, and programs that demonstrate the adaptability of the Cooperative Extension System to change to meet current challenges. CES programs focus on those for the public, as opposed to the private, good.

This document is organized by decade, describing programs of the times, changes in organizational structure, and the environment in which we lived, to set the historical context. Chapter 1 lays the groundwork for this book with a summary of Extension’s history prior to 1960. The chapters that follow each tell the story of a decade, starting with the 1960s. Within the decades, material is organized by program focus and by administrative action. The appendices contain general information that spans the decades.
4-H dairy champions James Meehan, Henry Child, and Howard Johnson at a Club Camp Exposition (undated).
Early 4-H leaders at a training session.

This timeline highlights events of significance to Extension, the University, and the world.
Introduction: Setting the Stage for Our Future

Formative Years
Mission and Purpose
Volunteers: The Multiplier Effect
Farm Bill Overview

Formative Years

The early history of the Extension movement was strongly influenced by the Chautauqua system of education. Founded in 1874, Chautauqua combined instruction, recreation, and entertainment. Subjects were studied, home readings were organized, and correspondence courses introduced.

A second significant influence was the university extension movement started in England around 1866. The system was introduced in the U.S. through city libraries. By 1890 the American Society for the Extension of University Teaching was organized. The State of New York appropriated $10,000 for the organization and supervision of university extension work. The University of Wisconsin established (1906) a department of university extension. Between 1906 and 1913, twenty-eight institutions organized university extension. Agricultural colleges were influenced by this movement.

An 1887 presentation by B.C. Buffum at the Association of American Agricultural Colleges and Experiment Stations highlighted the work of the University of Wyoming which, like the Chautauqua efforts, included correspondence courses and lectures in towns. Pennsylvania State College organized (1882) the Chautauqua course of home reading on agriculture. By 1896 Extension work had expanded to include local experiments as a means of teaching, generating readable bulletins, extending instruction by correspondence, and administering reading courses.

The University Extension movement starts in England.
Classes begin at UConn—then called the Storrs Agricultural School.
The leaders who conceived the Cooperative Extension System envisioned a three-way educational partnership. This included the United States Department of Agriculture (USDA) at the federal level, the land-grant university at the state level, and the local government at the county level. The vision included an educational organization that would be flexible enough to rapidly modify programs in response to new knowledge, clientele needs, and changes in socio-economic environments.

Nationally, 1914 is considered to have been the year Extension was established. (President Benjamin Koons established a series of extension courses in the fall of 1896, including lectures, readings, and discussions. An extension Home Study course was first offered in 1893.) The beginning of Extension work in Connecticut was 1910, the year the Board of Trustees of the Connecticut Agricultural College, now the University of Connecticut (UConn), asked the Connecticut General Assembly for $5,000 to support orchard demonstrations and to hire lecturers. The 1912 University trustees’ report contained an offer by USDA to pay one-half of the salary of a state superintendent of agricultural Extension, and to match one-half of the salary amount for an agricultural advisor in each county in the state.

Organized in 1913, the Boys’ Corn Club of Mansfield was the forerunner of today’s 4-H club work in Connecticut as well as the beginning of organized Extension work in the state. By 1927 there were county Extension 4-H club agents working in each of the eight counties with volunteer leaders and 4-H youth members.

The initial mission of the Cooperative Extension Service was articulated in the Smith-Lever Act (1914):

To aid in diffusing among the people of the United States useful and practical information on subjects relating to agriculture and home economics and to encourage the application of the same.

The Smith-Lever Act proposed the basic tenets for Extension work, which are still in place today. Among these was that the nature of the work to be accomplished would be agreed upon prior to the release of funds by USDA:

That cooperative agricultural Extension work shall consist of the giving of instruction and practical demonstrations in agriculture and home
economics to persons not attending or resident in said colleges in the several communities and imparting to such persons information on said subjects through field demonstrations, publications, and otherwise; and this work shall be carried on in such manner as may be mutually agreed upon by the Secretary of Agriculture and the State agricultural college or colleges receiving the benefits of this act.

The first Connecticut home demonstration agent, Eleanor Moss, New Haven County, was hired in 1919. The University was just thirty-eight years old (1881-1919), and yet there was a definite interest in extending the knowledge of the institution to the public. Following World War I, educational efforts focused on improving nutrition. Of special note were weight control, combating food misinformation, and nutrition for children, teens, and retirees. A food budget was introduced that included the type of foods and quantity of each to store as well as garden plans to harmonize with the family budget and nutrition needs.

Prior to World War I, Extension agricultural educational efforts focused on production. Following the war, the economic problems of farmers were so great that attention turned to marketing and distribution of farm products.

University of Connecticut president A.N. Jorgensen signed (1955) a memorandum of understanding (MOU) between the University and USDA for Agricultural Extension work, the organization name at that time. The University agreed to organize and maintain a definite and distinct administrative division for the conduct of Extension work, to administer through this division any and all funds, and to accept responsibility for conducting all educational work authorized by the Smith-Lever Act. Likewise, USDA agreed to maintain a federal Extension service, to act as the liaison with the land-grant colleges, and to conduct all outreach efforts through Extension in the state. All state and county personnel were to be joint representatives of the University and USDA. The cooperation between USDA and the University was to be clearly stated in all publications. An annual report was to be made to USDA that was to be approved prior to the release of federal funding to the University. This example is representative of agreements between UConn and USDA starting in 1914 and continuing in 2008.
As a result of an extensive self-study (1958), Extension increased its focus on the intricate business of marketing products for profitability. To improve the movement of products from grower to consumer, Extension intensified its agricultural education programs to teach management principles and pricing of product. Farmers continued to need help to lower unit costs of production and increase net income.

The Extension program developed a greater appreciation of the economic and recreational values of natural resources and their related benefits. Farmers and non-farmers had mutual concerns regarding local and national issues. The complex interdependence of agriculture and other segments of the state’s economy meant that non-rural people must be served by Extension. The 4-H youth development program focused (1959) on work experience, ownership and management of property, marketing, record keeping, and reporting of achievements. Extension self studies and reports of accomplishments have been regularly produced over time.

**Mission and Purpose**

From inception, Extension’s mission has been economic and community development for an improved quality of life. The 1976 Extension mission statement focused on specific program targets such as the production of an adequate supply of products and services at realistic costs, expansion of economic opportunities, protection of the natural environment, protection of the public’s food supply, and improvement in the nutritional status of the general population.

The mission of the federal partner, USDA Cooperative State Research, Education, and Extension Service (CSREES) is to advance knowledge (2008) for agriculture, the environment, human health and well-being, and communities by supporting research, education, and Extension programs in the land-grant university system and other partner organizations. The federal CSREES is not responsible for actual research, resident instruction, or Extension, but rather helps to fund these efforts at the state and local level, and provides program leadership.

MOU signed between UConn and USDA for Agricultural Extension work.  Name changes from Agricultural Extension Service to Cooperative Extension Service.
The 2008 mission of the Connecticut Cooperative Extension System (CES) is to create learning partnerships that enhance the lives of adults and youth. As the organization evolved and the needs of society changed, so did the areas of focus for Extension. However, the original purpose of Extension was and still is to diffuse the research of the university to meet the needs of the people of the state for the public good of all and not for the private gain of a few.

Since 1914 the campus of the CES has been the five thousand square miles of Connecticut and the student body has been the people of the state. Educational efforts are concerned with economic, social, physical, and mental well-being for the public good.

Working across all states and territories, the national Extension system consists of seventy-four 1862 and 1890 land-grant universities, and thirty 1994 institutions. The 2008 focus is on issues of national importance including obesity, water quality, reducing pesticide usage, and working for the public good.

Volunteers: The Multiplier Effect

Volunteers were the catalyst for starting Extension programs and have been critical over history in partnering with the Cooperative Extension System to fulfill its mission. Trained and supervised by Extension professional staff members, volunteers have served as teachers, program advisors, and in organizational support roles. Volunteers have expanded the educational outreach of Extension programs, and increased the efficiency and effectiveness of educational programs. They have provided a link between Cooperative Extension and local communities, assisting with the identification of local needs and issues, program implementation, and program evaluation.

The opportunities for volunteers have expanded greatly since the first 4-H club leaders in the early 1900s. The Extension family has grown in its diversity with changes in society, expanding Extension’s presence in urban and suburban Connecticut. Expanded program opportunities facilitated the involvement of new volunteers from urban areas, school systems, community agencies and organizations, and the business community. Volunteer management systems have grown in complexity as volunteers have taken on greater responsibilities.
Volunteerism has become more professionalized, and standards of care and excellence have increased. Volunteer advisory groups have focused on youth issues, and such concepts as multi-level program involvement, master volunteers, and middle management volunteers have surfaced as important components of a comprehensive volunteer program. Volunteers have been provided quality education and training so that they may share their expertise with Extension clientele.

Farm Bill Overview

The Farm Bill is primarily a collection of law, policies, and objectives related to agricultural production, food distribution, and hunger reduction issues. The 1933 Agricultural Adjustment Act was the first Farm Bill. It was designed to curtail the supply of agricultural production so that prices would not fall below a set level.

Approved by Congress every five years since 1933, the Farm Bill sets the base authorization for USDA's allocation of funds to Cooperative Extension. Upon expiration, should a Farm Bill not pass, farm policy would revert to the program as authorized in the 1949 legislation.

The 1949 bill established mandatory agricultural commodity programs; the 1953 Farm Bill added rural energy to Extension responsibilities for an effective agricultural industry. The 1949 and 1953 bills did little to keep surpluses in balance. The 1977 Food and Agriculture Act focused on rural water quality to reduce pollution from farm runoff. The Agriculture and Food Act (1981) amended the 1977 Farm Bill to increase funding to historically black institutions established by the 1890 Morrill Act. Changes in Farm Bill language created formula funds focused on renewable natural resources with the passage of the Renewable Resources Extension Act (1978). In the late twentieth and early twenty-first century, program areas blended to be more holistic and interdisciplinary in addressing needs.
The 1985 Farm Bill created the Conservation Reserve Program (CRP), referred to as “Freedom to Farm.” The 1990 Farm Bill created the Wetlands Reserve Program (WPR), while the 1996 bill created the Wildlife Habitat Incentives Program (WHIP) and the Environmental Quality Incentives Program (EQIP). The Grassland Reserve Program (GRP) was created in the 2002 Farm Bill. Each of these changes provided either program direction or direct funding for Extension.

The Food, Conservation and Energy Act (2008) reflected priorities of a growing and diverse group of agricultural stakeholders. Funding increased for nutrition programs such as Women, Infants, and Children (WIC) and focused on the production of specialty crops. Specialty crops that include fruits, vegetables, and nursery products generate the majority of Connecticut’s agricultural income.

Throughout periods of environmental change and organizational transition, the Cooperative Extension System (CES) has demonstrated its strength and flexibility while holding fast to the elements that form the core of its educational philosophy. These include the concept of life-long learning; the potential to positively affect the quality of life through leadership development, problem solving, and skill building; the belief that when given appropriate information, people will make good decisions; the belief in the importance of partnerships; the importance of CES as a community-based educational model; the critical roles played by volunteers; and the importance of a strong research base.

Factors that converged to influence Extension programs during the latter part of the twentieth century made this one of the most stimulating and challenging periods in our history. The 1960s brought unprecedented national attention to society’s consciousness, especially to the needs of those in urban areas and with limited incomes. The 1970s heralded almost two decades of social and economic change. The 1980s reflected growth in administration to manage all of the changes that had occurred. By 1990, the information age had arrived, family structures were in flux, youth in crisis were gaining national attention, and electronic technologies were emerging at a pace more rapid than projected or expected. CES worked hard to change with the times and yet to remain the same. The beginning of the twenty-first century saw CES thrive in times of limited resources and new program direction.
Extension has always been a social network built on the knowledge and people skills of employees, volunteers, and supporters. As an organization, Extension formulates solutions to emerging problems while facilitating productive and civil discourse on local issues. The Extension image and reputation is built on objective and scholarly research that emanates from the land-grant university and is communicated in everyday language. While Extension honors its traditions, the application of new knowledge is used to solve tomorrow’s problems. The challenge continues to be how to deliver programs in a manner effective for the greatest impact on the public good.
4-H camp provides time for drama and relaxing.

Staff and Extension agents work together.

Teaching occurs in the field addressing real life issues.

Department of Extension is officially established at Storrs campus.

UConn celebrates 125 years.
Finalists by W.C. Griffith shows Connecticut Extension Agent Don Gaylord judging sheep at a 4-H fair.

Image courtesy of USDA CSREES National 4-H headquarters.
In the Beginning

The cotton boll weevil arrived in the southern states in the early 1900s. On-farm demonstrations by farmers, working with researchers to combat the pest, established one of the most important principles of Extension work. Demonstrations conducted by or with farmers had greater impact than those conducted for farmers. The early adopters of new ideas were eager to learn, creating a strong foundation for the Smith-Lever Act, the federal legislation that created the Extension Service.

Changes were on the way for the University of Connecticut that laid the groundwork for Extension. With the appointment of Professor Stimson (1901), as acting president, and shortly thereafter as president, there came significant program expansion at Storrs. Summer schools, nature schools, extension reading courses, short courses, and a wide offering of two- and four-year courses on the campus covering the full range of agriculture, and non-agricultural subjects were listed, some open to common school graduates and some open only to high school graduates.
When the Smith-Lever Act was passed (1914), the model for successful Extension work was already in place. Recommendations by the American Association of Land-Grant Colleges, the predecessor to the National Association of State Universities and Land Grant Colleges (NASULGC), were included in the widely supported legislation.

In presenting the bill, Congressman A. F. Lever, South Carolina, chairman of the House of Representatives Agricultural Committee, said:

This bill provides for the inauguration of cooperative agricultural Extension work through field demonstrations, publications, and otherwise to be carried on in accordance with plans mutually agreed upon by the Secretary of Agriculture and the land-grant colleges receiving the benefit of the first Morrill Act. It carries to the farm the improved methods and practices of the agricultural colleges, experiment stations, the Department of Agriculture, and the best farmers, and demonstrates their value under the immediate environment of the farm itself.

Congressman Lever emphasized the need to also address the concerns of farm women. This was the first time in the history of this country that the federal government showed a desire to assist women.

The Smith-Lever Act set aside funds for developing the 4-H youth development program. Rural youth were encouraged to become interested and efficient in farm and home activities. 4-H provided the organization and follow-up for projects such as growing field crops and gardens, canning, and finding markets for agricultural products. The Extension agent sought cooperation from schools, business interests, and other organizations.
State and Local Organizational Support

In the early years, state and local support for Extension emerged in a variety of ways, in various sections of the country. There were a few special Extension informal advisory councils in the south. In the northern states, Extension work was the outgrowth of organized groups, such as soil and crop improvement associations, better-farming associations, and state granges. One group of farmers organized under the title “county farm bureau,” a name adopted in New York, New England, and California to designate local cooperating farmers. A 1916 meeting of agricultural leaders of the northern and western states decided that the term “farm bureau” would be the universal term used whenever the cooperating county Extension organization of farmers was referenced, regardless of its local name.

In 1913 the Connecticut General Assembly appropriated $5,000 for a two-year period to be used in Extension work. This created the Extension Service with C.D. Jarvis as director (1913–1915). By 1914 educational work was inaugurated with a staff of seven including Karl Musser as Extension dairyman (1914–1918).

Following passage of the 1914 Smith-Lever Act, state legislatures authorized counties to support county Extension work. Support was often limited to the amount of funds necessary to employ an individual to do a specific job. In some cases, local expression of need or desire that Extension work be initiated in that area was required. Gradually, the legislation became more complicated, particularly in the northern states. Specific county organizations were recognized as official local cooperating parties. Until the mid-1950s, the official Connecticut local sponsor was the county farm bureau.

Leslie Geer, Bone Hill Road, Hadlyme was Connecticut’s champion corn grower for three straight years (1912, 1913, 1914).

The total national funding for Extension amounted to $990,504, of which 67 percent came from state appropriations, 16 percent from local sources, with no federal funds yet appropriated (1913).
In the first Connecticut Extension annual report (assumed to have been written in 1915), H.J. Baker, state leader (1915–1923), wrote:

One of the most important functions of the county agent, if not the most important, has been to act as a medium through which the forces of the State College of Agriculture, the State Experiment Station, and the United States Department of Agriculture, and other public and semi-public forces working for agricultural development might be brought to bear on the individual and community problems of the country.

When the United States entered World War I (1917), the U.S. Department of Agriculture (USDA) strongly urged farmers to cooperate with national efforts. This resulted in 700,000 members being enrolled in what were known as “emergency” county farm bureaus.

The end of World War I (1918) brought a period of agricultural depression. Plans were proposed for a national private organization to protect farming interests, resulting in the formation of the American Farm Bureau Federation (AFBF). Members were predominately interested in legislative corrections to mitigate adverse economic conditions, instead of Extension’s educational efforts. The situation was further complicated by laws enacted before the organization of the AFBF, in which the local county farm bureau was designated as the legal cooperating sponsor of Extension work. County farm bureaus proved to be a new organization with an old name.

A 1920 Memorandum of Understanding signed by the national director of the USDA State Relations Service and the president of the American Farm Bureau Federation (the private group), agreed that the national farm bureau would assume full responsibility for the work of the county bureaus. The Extension Service would then cooperate with the new organization on the same basis as with all other farm organizations. Complicated by old ways and state laws that took years to revise, there was confusion regarding what Extension work should be, and what work would more appropriately be performed by farmer organizations. Informal advisory committees were initiated to assist in determining Extension programs.

The Hatch Act passes. The second Morrill Act passes.
From the beginning of Extension, work at the county level was sponsored by a group organized locally within the county. Extension workers, particularly those connected with county agricultural work, devoted a large proportion of their time to developing county-based Extension organizations or farm bureaus. The nominal membership fee of fifty cents to one dollar was often used to provide the county agricultural agent with office support or equipment. The 1922 membership fee in Windham County was $5.00 per member.

From 1923 through 1956 local sponsorship in Connecticut was provided by the county farm bureaus. A memorandum of agreement with the University of Connecticut Board of Trustees documented the relationship. During the 1950s a gradual transition occurred, so that by 1959 in seven of the eight Connecticut counties, Extension work was sponsored by a local, not-for-profit, volunteer agricultural Extension council. In 2008 the sole purpose of these not-for-profit incorporated boards was to sponsor Extension work. Extension councils were composed of volunteers who represented a number of aspects of Extension programs.

The first Connecticut county to transition from farm bureau sponsorship to the new model was Hartford, where the agricultural Extension council assumed sponsorship on July 1, 1956. Fairfield and Tolland Counties followed (1957). On July 1, 1958 Middlesex, New London, Windham, and New Haven counties changed, followed by Litchfield County (1960). Sponsorship involved providing office space, managing the facility, providing program input, and raising funds. The hiring and management of employees, a role that had been performed by the Farm Bureau, was now assumed by the University, and thereafter was not part of the new Extension council structure.

“*If you give a man a fish, you feed him for today. If you teach him how to fish, you feed him for a lifetime.*” This quote has long been the adage of Extension.
Another organizational change was the development of agricultural centers, built or renovated specifically for Extension work. In Litchfield, New Haven, Tolland, and Fairfield Counties, private not-for-profit corporations were established, sometimes independent of the Council, for the purpose of developing adequate facilities for the conduct of Extension-related work. The Middlesex (1957) and Windham County (1960) centers were provided through action of the county commissioners during the dissolution of county government in Connecticut. By 1962 the University assumed ownership of the Hartford, Middlesex, and Windham County facilities with funding provided through Public Act No. 152 Section 52 (See Appendix B: Cooperative Extension System Facilities for details on each center).

This fundamental shift in the partnership from Farm Bureau to Extension councils, and the diversification of the volunteer programmatic base of Extension would, become hallmarks of the organization well into the twenty-first century.

**Funding Partnerships**

Between the time that the Smith-Lever Bill became law (1914), and the close of 1918, not one of the New England states had received its appropriate share of the federal funds. As a result Extension work in New England was stifled. According to the terms of the original bill, communities of 2,500 inhabitants were classed as urban and were not counted in the agriculture population. This was a key variable in the formula on which financial support was based, and which penalized the small towns of New England. Starting in 1919 the distribution was changed and Extension in New England shared proportionally with all other states.
Nationally, the leaders who conceived the Cooperative Extension Service envisioned a federal, state, and local educational partnership that could rapidly modify its programs and approach in response to new knowledge, clientele needs, and changes in the social and economic environments. The partnership included the United States Department of Agriculture agency titled Extension Service (ES), changed (1994) to Cooperative States Research, Education, and Extension Service (CSREES); state land-grant universities; and local county government. CES has been defined as Cooperative funding partners, for the Extension of the university, in the Service to the state.

From its inception, the Cooperative Extension Service was designed to be a fiscal partnership, as well as a program partnership. The national average funding distribution and percent contribution of funding for Cooperative Extension was envisioned to be 34 percent from the U.S. Department of Agriculture, and 66 percent from within the state (33 percent state and 33 percent county and local sources). Starting in 1915–1916 federal dollars were matched with state-based resources. These were categorized by state, college, county, and local sources of funds.

Financial support frequently did not keep pace with central program needs. The current federal allocation to states, based on a prorated formula, provides for 20 percent of the federal appropriation to be divided equally among all states and territories, 40 percent to be divided based on each state or territory’s farm population, and 40 percent to be based on rural population. Data are updated every ten years based on the state’s census.

The 1959 breakdown of the financial contributions to the Connecticut Cooperative Extension System was federal 31 percent, state 38 percent, county 29 percent, and local 2 percent of the total budget. When the 1959 percentages were compared with 1947, the state share had increased by 12 percent, the federal share of funding had decreased by 7 percent, and contributions from local sources were down by 5 percent. Contributions from county government remained constant. The state share had increased at a faster rate than either the federal or county rate.

**Timeline:**
- 1908: Henry Ford produces the first Model T automobile.
- 1909: NAACP is founded, commemorating the 100th anniversary of Abraham Lincoln’s birth.
The Early Extension Agent

One of the early challenges to developing Extension programs was that the national average length of service for employees was less than two years. The hardships of the job, including long and irregular hours, extended overnight trips to meetings, exposure to all kinds of weather, and the relatively low compensation for employees posed challenges for employee retention.

Life for early (1914–1922) Extension agents was difficult. The agricultural agent left home on Monday morning and returned Saturday night. He lived with farm families and often stayed with key producers or with those whose support was important. He helped with the chores and often stayed to talk with the farmer after the rest of the household had retired. He carried improved seed and demonstration equipment with him. He was truly an itinerant teacher. All Extension agents were males at that time. The first female agricultural agent in Connecticut was not hired until the 1970s.

As early as 1919 W.A. Lloyd, USDA States Relations Service, strongly suggested that while the county agent was a joint employee of the farm bureau and the university, supervision should be a university responsibility. In the early 1920s the farming community realized that financial support for Extension must come from public sources. Extension agents worked within financially-driven program limitations.

By 1924 positive changes had occurred. The average county agent was an agricultural college graduate with farm experience. He devoted twelve months to Extension and had an equipped downtown office that included a secretary. He kept regular office hours and worked with an advisory council comprised of farmers with whom he developed programs and arranged demonstrations. He traveled in an automobile and usually...
returned home every night. He worked less with individuals and more with groups as the program became more an expression of people’s needs. Still an itinerant teacher who worked long hours, the agent needed to be resourceful as he met unusual and unexpected conditions.

Farmers’ Week short courses on campus started as early as 1914. The August 1917 Farmers’ Week was cosponsored by the Connecticut Poultry Association, the Dairymen’s Association, the Beekeepers’ Association, the Pomological Society, and the Extension Service. Each association had a one or two-day program of workshops and meetings. The Dairymen’s meeting included demonstrations for women. The 1919 Farmers’ Week was held August 4-7, and included a meeting of the Vegetable Growers’ Association.

University of Connecticut (then called Connecticut State College) President Jorgensen’s inaugural address (1936) acknowledged that the position of Extension in the institution was of supreme importance. The recognition of the interdependency of Extension, teaching, and research was necessary for the future of Extension to address changing economic and social conditions. Connecticut State College existed to meet the needs and advance the interests of the state. This theme was repeated in the inaugural address of University of Connecticut’s fourteenth president, Michael Hogan, on April 13, 2008. Extension’s three functions are to take research results to the people, to help people develop themselves, and to work for the public good.

With the construction of the College of Agriculture Building (1950), named the W.B. Young Building (1979), the state administrative staff in agriculture and 4-H moved into the building. In the early 1970s Doris Lane, assistant director, home economics and community development (1955–1979); and Anne (Holloway) Rideout, associate director of Extension (1964–1974, 1978–1992) moved from the Home Economics Building to join the rest of the state administrative group in the Young Building. Agricultural specialists were housed in their departments, and home economics specialists were housed in the School of Home Economics. In July 1970 Janina (Czajkowski) Esselen, Extension

Demonstrations given at the Hartford Fair proved conclusively that jelly could be made without sugar. Grape and apple jelly were shown in which corn syrup replaced the sugar. The jelly had a very good flavor (1918).

Cooperative Extension had thirty-five specialists at the University and fifty county agents working in agriculture, home economics, 4-H, and farm labor (1945).

Murray G. Lincoln is the state’s first county agent.

The federal Smith–Lever Act is signed by President Woodrow Wilson (1913–1921).
nutritionist (1947–1983), moved from the School of Home Economics to the Department of Nutritional Sciences, when that department joined the newly-named College of Agriculture and Natural Resources.

### Early Community Development Efforts

The Connecticut milk campaign (1919) reflected an early partnership of the College with visiting nurses and welfare organizations. Producers and distributors provided financial backing. Bulletins and mimeographed sheets of recipes were distributed to encourage milk consumption. One little girl told her teacher that her papa saw the exhibit staged by Extension of four children eating a milk supper in the window of a local furniture store. Papa decided that his children must have more milk, and took home two quarts to supplement their usual pint per week. There were nine people in the family. Samples of milk recipes were distributed during noon gatherings in factories. Talks were given to religious groups, proving an effective means to reach Slavonians, Lithuanians, Greeks, and people of color. An outcome of this effort was the formation of the Connecticut Milk Food Council.

Early in 1940 many rural homes and farms in Connecticut were still without “high line” electric service. In order to get rural service, individual farmers and home owners would request service from the electric power company. The power company then asked rural residents to pay minimum guarantees of up to $20.00 per month, a price many people could not afford.

New London County Extension Service organized town committees to address this need. Residents without service were surveyed to determine how much electrical power they would use within a reasonable time period following installation of service. This information, together with the total number

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The March 1923 Windham County Farmers’ Association (W.C.F.A.) News noted that H.B. Buell was the president of the Quinebaug Valley Fruit Growers’ Association, a group that in 2005 had twenty-four people at their annual meeting held at Woodstock Orchard.

Connecticut Assembly accepts the provisions of the Smith-Lever Act and makes Extension education available to the people of Connecticut.

The first Connecticut Extension publication is Cooling Milk on the Farm by H.F. Judkins, associate professor, dairy husbandry (1913–1918).
of people in a town without electrical service, and the total number of miles of construction, determined that the customer density by town was much higher than anticipated.

New London CES provided this information to the power companies. The suggestion was made that lines be extended by areas, rather than by individual roads or by individual customers. The argument was made that it would be cheaper to build fifty miles of line than one or two miles. Instead of high monthly guarantees, all users would sign up at the minimum rate as the large users would be exceeding the higher usage rate. One provision was that all town residences were required to enroll under these terms.

The power companies accepted this agreement and construction proceeded town by town. As a result New London County was the first county in the state to achieve 100 percent rural electrification. Connecticut was the first state to achieve 100 percent, or nearly so, rural electrification. This was an excellent example of collaboration among Cooperative Extension, the power companies, elected officials, and town volunteers.

Originally developed (1929) as a USDA circular, the Connecticut Council of Churches’ (1945) committee on rural life and work documented the common ground on which rural churches and Extension worked. The basic tenet was that each should know what the other was trying to accomplish. Rural ministers should be acquainted with their county Extension staff members and engage them in church needs. Ministers should be familiar with all farm agency programs in order to suggest suitable resources to parishioners.
Farm cooperative marketing associations became important in the 1930s as the demand for economics and marketing education rose. Extension provided assistance to groups wishing to form financial and operating policies. These groups included vegetable auctions, the Farmers’ Wholesale Service Association, the Connecticut Potato Growers Association, and the Connecticut Agricultural Credit Association. The curtailment of tobacco acreage led to a conversion of approximately 7,000 acres of land to vegetable crops. This abundance of vegetables made marketing them difficult.

Homemaker Programs

Pioneers in Extension programming for women included Eleanor Moss, Litchfield County home demonstration agent (1919–1946); Edith Mason, Extension clothing specialist (1921–1926) and home demonstration state leader (1926–1943); and Lisbeth Macdonald, home nursing Extension specialist (1922–1947), who stressed the need for preventative healthcare.

Records of 1934 indicated considerable time was committed by Extension to the teaching of home canning and meat curing. Of the 1933 total household income, 25.5 percent was expended on food. The Cooperative Extension Service’s programs from 1940–1945 showed a return to an emphasis on food preservation. Special food preservation agents were hired during the summers to give demonstrations and write newspaper articles. Due to World War II rationing restrictions, Extension nutritionist and home demonstration agents (now called family and consumer sciences educators) were busy providing recipes for meatless, butterless, eggless, and sugarless meals. Home demonstration agents certified who would be allowed to purchase pressure cookers. Preference was given to teaching groups of people, rather than individuals.

The price per pound of veal in Putnam was between $0.14 and $0.20, and green string beans were between $0.03 and $0.25 per pound in Webster, Massachusetts (1934).
The post-World War II period brought rapid changes in programs, methods, and personnel in home economics Extension. As additional federal funds were provided, assistant home demonstration agents were appointed in several counties based on the program’s success.

Ruth R. Clark, New London and Hartford counties home demonstration agent (1928–1955), was appointed home demonstration state leader (1943–1955). Staff members broadened programs and tried new methods to reach people. Sidney Korando, assistant professor, home management specialist (1945–1954), encouraged good management practices in the home, including work simplification, and conducted programs on furnishings for the home (1945).

Janina (Czajkowski) Esselen, Extension nutritionist (1947–1983), stressed improved nutritional practices and developed programs on weight control, combating food misinformation, and nutrition for specific groups such as children, teenagers, and retirees. Fay Moeller, family life specialist (1947–unknown), started programs on the development and total well-being of all family members. She worked with community and state agencies on problems of families, and trained home demonstration agents to work with local agencies. During the 1940s, 4-H and adult clothing programs concentrated on selection and care of garments and fabrics, and on clothing construction. Instruction focused on the fabrics made from the new man-made fibers that appeared on the market after the war.

More than 1,900 women served as project or community leaders in Connecticut prior to 1920. Starting in 1920 women met in small groups to study specific educational topics and to develop needed skills. Extension organized these groups and agreed to work with them as Extension homemakers. The home demonstration groups

A December 1944 Connecticut Homemaker newsletter suggested using pieces of wool fabric left from making your coat to make mittens for the child next door.

A 1951 demonstration taught participants how to recover furniture for a fresh look.

American Farm Bureau Federation is formed.

Women’s suffrage ratified.
were considered a foundation clientele for the Extension home economics program during this period. In Connecticut there were 141 home demonstration groups with a membership of 2,809 (1945).

A major change in the teaching methods for Extension during the mid-1940s was the development of the train-the-trainer model. Instead of the county agent attending every meeting of home demonstration groups in the county, two women from each group attended a leader training meeting. These leadership meetings varied in length from one day to several depending upon the subject being taught. The agent or specialist taught current information and instructed participants on how to teach the subject to their local groups. This new method of Extension teaching provided a chance for women to develop poise in speaking before a group, leadership skills, and to become more involved in civic affairs. The student then became the teacher of her peers. This model also afforded an opportunity for women to develop into strong community leaders and to qualify for jobs not previously open to them.

Cora Webb, Tolland County Extension home economist and county administrator (1945–1975), noted that the agent (as was her title) would arrive early at the educational meeting place to be sure the fire to heat the room was started. Once Webb didn’t have any matches, so she rolled up a newspaper, anchored open the door to the meeting room, took the top off of the stove, and drove her car up to the door. She lit the newspaper from the car’s cigarette lighter and ran to the stove to start the fire. Webb’s description of her early duties captures the personal resourcefulness and “sheer spunk” that characterized the women who assumed county Extension positions.

During the late 1940s and into the 1950s, the Extension program shifted emphasis from a skill-oriented program to one that taught basic principles of self-help. Agents still taught skills such as clothing construction and how to clean and adjust sewing machines but, instead of giving specific answers to certain problems, people were encouraged to learn how to solve their problems using basic principles. Two or more specialists in different fields developed programs
together. For example, the clothing and the family life specialists taught children’s clothing selection based on the developmental needs of children. The home management specialist and agricultural engineers guided people on the selection and remodeling of homes.

Short Courses

The short course known as Farm and Home Week resumed after World War II, affording rural men and women an opportunity to attend a week of workshops and fellowship held on the University’s Storrs campus. A popular feature of every Farm and Home Week was the square dance festival held on the athletic field, preceded by a chicken barbeque. Square dancers and callers came from hundreds of miles to participate in this gigantic event. The bleachers lining the field behind Hawley Amory were filled with spectators.

The poultry barbecue concluded the Connecticut Poultrymen’s Association meeting on Monday. The Dairy and Livestock Breeders had a beef barbecue on Tuesday and, on Wednesday the Connecticut Rabbit and Cavy Breeders offered rabbit on the menu. Tuesday’s attendance totaled 500 farmers and homemakers with meetings for beekeepers, berry, and livestock men and women (1947).

The development of high energy poultry feed by UConn College of Agriculture professors Singsen and Matterson, revolutionized the amount of time it took to raise a chicken to a marketable size, thus expanding the poultry industry in the state (1940s).
Immigrant Producers Change Connecticut Agriculture

The years following World War II brought many Finnish families to Connecticut. They became involved in the poultry business, which was highly profitable if the entire family participated. Chicken coops sprang up across Windham County, many of which now slump dejectedly across the landscape on back roads or behind new housing developments. In 1945 the greatest demand for new farm buildings was for poultry houses. Extension’s Plan Service assisted 161 farmers with poultry house plans and sixty-three farmers with plans for miscellaneous farm buildings. Questions included purchasing, financing, and long-term planning. Families arrived with useful skills, as the men could do carpentry and the women raised vegetables to augment family income.

The 1949 outlook for Windham County farms, which were primarily poultry and dairy, was that farm income which had been relatively high the previous few years was expected to decrease, as shortages of labor and equipment were likely. To accommodate this change, farmers would have to be more efficient in production methods and adopt better marketing practices. Vegetable producers were encouraged to develop roadside markets to overcome the danger that more produce would be raised than the normal distribution channels might handle.

Jewish families fleeing Europe settled in Colchester, and began raising chickens and selling both eggs and meat. By the late 1950s Windham County was the fifteenth largest poultry producing county in the country.

French Canadian families in the Plainfield area became involved as well. With the chance of making fifty cents on every chicken in just twelve weeks time, the race was on to build more...
and more coops. Cooperatives were formed to provide feed for expanding flocks, and processing plants in Danielson and Willimantic completed the cycle. Co-ops also provided important economic incentives as the business prospered and members received dividend checks.

Jacques Makowksi, originally from Poland, started an innovative business in Pomfret called Idlewild Farm. He raised, processed, and sold Rock Cornish game hens and brought a new, rather exotic offering to American tables. His plant, (once the home of Steak-umm) was modern for the time, and his marketing skills were legendary. He mixed the tradition of European wild bird hunting with American's growing demand for food, fancy enough for a dinner party, but affordable to the growing middle class. Hundreds of people were employed in all aspects of the poultry business, and countless acres were dedicated to the housing and distribution of the odiferous by-product, chicken manure (See Appendix I: The Poultry Industry in Connecticut, a Postscript for further details).

### Reaching Audiences by Media

From its early days, Extension has effectively used mass media. Bulletins on topics related to agriculture, home economics, and youth development kept audiences informed while the long-running radio programs of the mid-twentieth century ushered in a new era of high-tech communication that now includes television and the Internet. Initially farm and home visits and well-defined audiences allowed early Extension staff members to address many needs face-to-
Helen Pepper Loomis, Litchfield County 4-H member from the 1950s, recalled radio programs with Frank Atwood: 4-H camp, 4-H fairs, dress revues, and food shows were great experiences. The baby chick program was sponsored by the Kiwanis Club of Torrington. Western Connecticut Camp was probably the favorite. I served as a camper, counselor, and camp nurse, and helped open and close camp each year.

In April 1917 the Farm Bureau News started with I.G. Davis as editor. The name was later changed to Extension Service News, and eventually to the Connecticut Agricultural College Review.

Erwin Kelsey, Middletown 4-H member, builds a house from 4-H member-earned income.

Great Depression begins.

face. However as the demand for services became too great for programs and individualized attention, Extension utilized mass media for the dissemination of information.

Extension bulletins, numbering in the millions, have been distributed on almost every subject on which CES provides education. Newsletters, newspaper articles, and columns kept audiences up-to-date on subject matter of special interest. As programs grew, new media outlets were sought. Staff members became regulars on radio programs as early as 1934. On January 7, 1939, a half-hour Extension Service, Connecticut State College radio program was initiated each Saturday on WTIC Hartford from 12:30 p.m. to 1:00 p.m. This evolved until a number of Extension staff members had their own programs. A familiar voice on WTIC radio was that of Frederick Nelson, Hartford County agricultural agent and administrator (1955–1984).

One example of a skilled radio host was Frank Atwood, assistant college editor (1928–1946). Atwood left the College to accept a full-time position with WTIC where he served until 1970 as farm program director. Known as the “voice of New England agriculture,” Atwood conducted daily morning radio farm shows and a weekly television program called RFD #3 on Channel 3. In addition, he directed the station’s farm youth program, which made 838 loans between 1947 and 1970, totaling more than $132,000 to farm youth for the purchase of dairy calves.

A 1964 radio schedule included topics of Safe Use of Pesticides by Milton Savos, associate professor, Extension entomologist (1960–1988); Fall Car Checkup by Jim Whitaker, associate professor, agricultural engineering (1947–1977); and Your Income Tax by John Brand, assistant professor, agricultural economics (1962–1994). The recording schedule was coordinated by Doug Wardwell, radio and TV specialist (1960–1966). The College radio studio closed in 1966 when the equipment was transferred to the University radio-television center. Alexander (Bud) Gavitt, agricultural news editor
(1961–1992), continued to write a weekly roundup that was used on WTIC.

From 1962 into the early 1990s an annual farm and garden supplement was developed by the department of agricultural publications for use in the *Hartford Courant*. Home and garden columns or supplements, developed by Extension, ran in the *Willimantic Chronicle*, *Waterbury Republican*, *Litchfield County Times*, *Norwich Bulletin*, *Manchester Journal Inquiry*, *Middletown Press*, *Danbury News Times*, and a variety of weekly newspapers across the state.

By the early 1970s county staff members were writing publications on topics related to clothing, lawn and turf, consumer education, and nutrition. Arland Meade, professor and department head, agricultural publications (1963–1986), reported (1973) that the sale of publications to other states had increased dramatically in the previous five years. One in particular, *Credit Cards: 30 Days to Reality*, sold nationwide. The percentage of for-sale items was still minimal and included farm account books and household budget books. Press releases were sent to fifty-six weekly newspapers and twenty-six daily papers in-state and along the state’s perimeter.

In the 1950s as television became readily available, staff members were featured as guests or hosted their own shows. Several used the inter-branch closed-circuit television system of the University to train and present statewide programs. In December 1958 Tolland County 4-H agents and agricultural agents shared a weekly five-minute radio program that was aired on Saturdays at noon on WINF, a small station in Manchester. In the fall of 1959 the program time was changed from Saturdays to 2:00 p.m. on Fridays, but was soon replaced by local football games.
Progressive technology applications evolved to include movies, videos, cassette tapes, CDs, DVDs, the Web, podcasts, in color and audio display. With cultural changes, CES’ use of technology also changed to improve communications with its audience.

In the early 1950s agricultural editors nationwide recognized the urgent need to improve communication skills for the audiences that Extension served in each state. A professional improvement committee of the American Association of Agricultural College Editors applied for and received a grant from the W.K. Kellogg Foundation, to establish a national agricultural communications project. A two-week intensive training for agricultural college editors, at selected universities, was held around the country. In turn, the editors staged workshops for state and county Extension staff members on how to write for newspapers, radio, bulletins, newsletters, direct mail, meeting notices, and external and internal publications.

The staff members in UConn’s Department of Agricultural publications (1961) invited Ed Roche of the federal Extension Service to assist with a three-day direct-mail workshop. Over fifty people attended. The publications staff continued to present periodic news writing, publications editing, and production workshops at the College and county Extension centers. The goal of these one-day sessions was to improve the writing and broadcast skills of Extension educators for the various rural and urban audiences they served.
Volunteers Expand Programs

Outstanding among Extension’s contributions to the welfare of Connecticut has been the development of volunteer local leaders. Due to gasoline rationing, volunteer local leaders became an important part of the Extension organization as early as the mid-1940s. The 1955 CES annual report indicated that 6,785 local leaders throughout Connecticut helped with the organization, planning, and conducting of Extension programs. These leaders conducted 8,067 meetings attended by 105,919 people. Over two-thirds of these were adults who had volunteered to work with the youth of Connecticut through the 4-H club program. A great many men and women now recognized as leaders in the state had their start in 4-H club work.

Leadership development was important in county programs. When the 4-H volunteer leader of a dairy and poultry club in Mansfield moved to another state, members asked two parents to be their leaders. Foster Richards, a dairy farmer, agreed to be the leader when he was assured he would receive guidance from the county 4-H club agents. Other leadership roles followed with Richards serving as chairman of the Mansfield 4-H town committee, and as a Mansfield state representative (1957–1969), all the while operating his dairy farm.

At the outbreak of World War II, two 4-H club agents who were Army reserve officers were immediately called for service. They were Henry Seften, Tolland County (1935–1951), and James Case, Fairfield County (1922–1953). Case returned to work in Storrs and completed the 40 years in 4-H publication. Also called to serve was Henry Hansen, associate county agent in charge of farm labor programs in Hartford County (1943–1973).

4-H Youth Development Programs

Nationally, 4-H began (1902) as a means to involve the heads, hearts, and hands of farm youth for practical, hands-on education in agriculture and home economics. In 1915 there were 3,129 Connecticut youth enrolled in eleven types of 4-H clubs. From the beginning, 4-H has had few paid program leaders; the majority have been volunteers. In 1915 the first statewide egg laying contest was held. In 1916, 130 Connecticut club members exhibited at the National Dairy Show in West Springfield, Massachusetts, at the Eastern States Exposition, now commonly known as The Big E.
By 1918 there was a 4-H club leader employed in each Connecticut county. By 1929 twelve 4-H club agents covered all eight counties. In 1919 the first Junior Short Course was held at the Agricultural College in Storrs.

When Elsie Trabue began her career as assistant state leader (1920), homemaking 4-H clubs involved 570 girls. Twenty-five years later upon her retirement, the number of participants was 3,865.

Following World War I, the 4-H club program stimulated the rapid expansion of the state poultry industry. A.J. Brundage, state 4-H leader (1917–1948), challenged a Goshen club (1918–1921) to clear a profit of $1,000 on a flock of 400 hens over a one year time period. Roy E. Jones, the first and only Extension poultry specialist at the local level until he retired (1912–1951), supervised the youth. In just nine months the boys cleared $1,437. By the end of the year the profits were $1,750. Several members brought their birds when they came to study at the College and continued to earn funds to defray expenses while attending college.

Ten years later, two of the boys owned home farms, three were on the home farm with their fathers, one was a student at an agricultural college, one was a caretaker on an estate, one was a county 4-H club agent, one was in the brass industry, and the tenth was at Yale. Eight of the ten were still connected to agriculture. These statistics reaffirmed the 4-H slogan to “learn by doing.”

A 1953–1954 study of how county 4-H club agents spent their time, encouraged local staff members to change the way they worked. This was followed by a 1958 4-H conference that examined the differences the time study had made in methods used by agents to save time and do a more efficient job. Evaluation studies were conducted on state 4-H programs including the 4-H junior leader conference.

35 million acres of U.S. farmland are destroyed due to drought.

Bankhead-Jones Act passes, increasing federal funds for land-grant colleges.
Local events (1929) included the county 4-H club round-up (a member achievement program), the county 4-H club exhibit, county field trips, and tours. One example of a county program was the 4-H fair. The first 4-H fair in Connecticut (1924) organized by a fair board consisting of youth members, was held at Ridgewood Farm, Middletown. Upon request of the 4-H Fair Association (1929), the Durham Fair Association voted to allow the 4-H fair to be held on the Durham fair grounds. F.H. Page, Alvin Rich, and Howard Birdsey formed a committee to draw up an agreement regarding the use of the grounds. The 1933 Middlesex County 4-H fair was held as part of the Durham fair. Two tents were erected for this purpose, and passes were issued to 4-H exhibitors.

Statewide events included the state 4-H club round-up and the junior short course. The first state dress revue was held in 1930. Regional and national events included Camp Vail at Eastern States Exposition, Eastern States Dairy Camp, the National 4-H Dairy Show, National 4-H Club Congress, and the National Poultry Judging Contest. The first National 4-H Club Camp, now called National 4-H Conference, was held in 1910 in Washington, DC.

Due to the increasing cost of food, the rates for the 1934 junior short course were raised to $7.75 per youth, an increase of $1.50. The rate for the senior 4-H club conference was $9.50, an increase of $2.00. Three hundred and forty-four youth and twenty-seven leaders attended the 1935 state junior short course held in Storrs.

County 4-H club workers (1935) included James Case (1922–1953), and Marjorie Green (1934–1935), Fairfield; Randolph Whaples (1926–1959), Hartford and New London; Charlotte Grove (dates unknown), Hartford; Donald Gaylord (1927–1965), Litchfield; Elizabeth Alling (dates unknown), Middlesex; Warren Brockett (1931–1955), and Maria Shaw (1929–1934), New Haven; Tiflod Cocks (1932–1966), and Kathryn Strouse (1934–unknown), New London; Dorothy Morton Dowding (1937–1945), and Henry Seften (1935–1951), Tolland and Middlesex; and Benton Cummings (1933–1935), Windham.
Windham County 4-H club agent Paul Latimer (1945–1948) asked Clarence Salmon, farmer, if he would start a 4-H club in Brooklyn. Later, when the club members learned that Latimer had died of a heart attack on the job with no insurance, the club donated $1,000 from their treasury to the Latimer family (1948).

The Windham County 4-H Club Committee held a meeting (1941) of leaders of 4-H clubs in the county for the purpose of discussing youth participation in national defense. A.J. Brundage, state club leader (1917–1948); and Elsie Trabue, assistant state club leader (1920–1945), were present and discussed the work being done in other counties. Members at this meeting made the following proposals for building a statewide program for 4-H club members: 4-H club work is good national defense – there should be twice as many 4-H clubs; more emphasis on health: annual physical examinations, good nutrition and health habits, good health habits including posture and an annual trip to the dentist, first aid, safety first, and home nursing; youth discussion groups and citizenship training; more living from the farm—gardens, home-grown meat, fruit, eggs, wood for fuel, care and repair of clothing; a 4-H labor project; 4-H fire patrols; low-cost recreation; 4-H club ethics (minority rights, etc.).

During the 1948 Farm and Home Week, 500 people attended the 4-H dress revue where twenty-one county blue ribbon winners modeled their garments. The revue was conducted by Katherine Tingley, Extension clothing specialist (1941–1960). Irene Morris, Warehouse Point, Hartford County, was the winner and attended the National 4-H Dress Revue held at National 4-H Club Congress in November.

*Helps for 4-H Leaders* (1951) defined the 4-H club uniform for boys as white duck trousers and white broadcloth shirt, green four-in-hand tie, and black shoes. The green and white 4-H chevron patch was to be worn on the left pocket of the shirt. The outfit for girls consisted of a green and white striped seersucker jacket and skirt with white accessories—dicky, shoes, and a crocheted beanie. A shoulder bag of matching seersucker was desirable. The green and white 4-H chevron was to be worn on the left of the jacket six inches from the shoulder seam centering on the dart. The style of club uniform would vary from year to year based on changing fashion.

Connecticut 4-H enrollment reached 10,667 youth with a total of 1,748 volunteer leaders (1952).
4-H club work focused on having fun while learning. Songs, bands, and dancing were an integral component of 4-H. One song in the 1951 dress revue program was titled “Hymn of the 4-H Hosts” to be sung to the tune of the “Battle Hymn of the Republic.” Spirited singing was remembered by one 4-H member as an integral component of the senior conference at UConn. 4-H songs included “The Plowing Song (known as “The Boys’ Song”),” “The Dreaming Song (known as “The Girls’ Song”),” “4-H Field Song,” “Song of the Open Country,” “4-H Friendship,” and “4-H Health Song.”

The Connecticut federation of rural youth helped to develop democratic principles while teaching youth the value of shared responsibilities, cooperation, and service. The federation consisted of representatives of senior 4-H clubs, service clubs, and fair associations. Opportunities were provided to expand acquaintanceships, broaden viewpoints, exchange ideas, and sponsor statewide activities of interest. The New London County senior 4-H club was organized (1930) by Randolph Whaples, county 4-H club agent (1926–1947), with Paul Holdridge as the first president. In 1940 Raymond Helmboldt served as president.

The 1951 week-long Connecticut 4-H short course included sessions on dairy, animal husbandry, conservation, poultry, song leading, tractor driving, dance, personality plus, and news writing. A daily newspaper for the short course reported on happenings as well as the scores of major league baseball games.

By 1950 New Haven County Farm Bureau income receipts had increased to $32,294.97 while the county agricultural agent salary had increased to $3,180, the home demonstration agent to $1,980, and the 4-H club agent to $2,400.
4-H horse projects were very popular. The first 4-H riding club was organized in Somers in October 1949. The sixteen members of the Somers 4-H Mountain Riders organized a drill team (1955). Weekly practice sessions were held with instruction and training by the adult club leaders. Uniforms were later purchased by the club for the members. Public performances were given at horse shows and public events.

Poultry record books from the 1950s reflected hints for managing a laying flock that included selection, preparing the laying house, and good management practices. Records of flock production as well as money spent and received by month helped to develop sound business practices.

Four Connecticut youth were national winners at the 1955 National 4-H Club Congress in Chicago. Six Connecticut 4-H members were national winners in 1956. George Dudley was honored that year with the National Congress Alumni Award, an event he had attended, as a Connecticut delegate (1928).

1953 ushered in a decade of expansion for 4-H nationwide with strong growth in special interest groups. Citizenship and science projects received particular attention.

Connecticut initiated the country’s first 4-H Favorite Food Show (1956). Participants planned, developed, and prepared exhibits related to their foods and nutrition projects. At the show an adult advisor discussed the project with the 4-H member and evaluated the member’s learning.

The number of youth participating in Connecticut 4-H (1958) increased to 7,665 with 641 clubs. Randolph Whaples (1926–1959) counseled county club agents on the important role of 4-H committees for 4-H program growth. In 1958, 7,999 adult 4-H club leaders participated in 338 county training sessions.

Public Law 229 authorizes Extension to administer and supervise the intrastate aspects of wartime farm labor programs including recruiting and placing farm labor.

Sheep in Connecticut number 359 is reprinted by Donald Gaylord, animal husbandry Extension specialist (1927–1965), and is revised again in 1956.
meetings, compared to 1,440 leaders participating in 124 meetings in 1948. Trained volunteers developed into a strong force to work side-by-side with professional staff members.

Like adult Extension programs, 4-H evolved to fit the needs of its audience. From the creation of 4-H (1902) to give farm youth practical, hands-on education in agriculture and home economics, to its current status as an international organization, 4-H educated Connecticut residents on a variety of topics, and provided leadership development from youth through adulthood.

Margaret Lamb, a former 4-H member, remembers that:

My mother and her sisters (Olive, Marjorie, and Anne Lord) were introduced to the “new” idea of 4-H in the late 1920s when the New London Extension agent came to talk with their class in the one-room schoolhouse on Babcock Hill Road in Lebanon. They became active in club work: cooking, dress revues, pageants, camp, and short courses when they were youth and—in the case for Annie and Marjorie—secretarial work in county 4-H offices, club leadership, and various volunteer roles as adults.

The 4-H slogan of “learning by doing” was evident in the early projects that included short courses, Farm and Home Week, and the now-famous 4-H fair. Connecticut youth were national winners at the National 4-H Club Congress and participated in popular horse projects. The 1950s was a decade of expansion for 4-H that included the creation of the 4-H favorite food show and saw enrollment expand to 7,665 (1958) members.

4-H members in the 1950s show the uniform of the time.

Beulah Shanley (Baldwin), Wethersfield, remembered that as 4-H agent in Fairfield County [1943–1947] during the war and as a part-time agent in Litchfield County:

I helped start many clubs and helped spread up-to-date agricultural and nutritional information to boys, girls, and leaders. There were local exhibits during the war when there was a gas shortage. When the war ended, we started a county fair and we could again have dairy tours.

Average cost of new house is $5,600.

A.J. Brundage retires as longest serving State Club Leader in the United States.
College Honorary Recognition

The following men and women received honorary recognition for outstanding devotion and fruitful service for their noteworthy contributions to agriculture and rural life in Connecticut. Since the custom was instituted at Farmers’ Week (1924), people have viewed the event as a fitting testimonial to the importance and dignity of farming and of the place that agriculture occupies. For 200 years Connecticut has pioneered in agricultural advancement. The state has every reason to be proud of this record and of the present status of its agriculture. Leadership in this field has always been abundant, and it is to this leadership that the honorary recognition paid tribute.

1924—C.J. Abel, Lebanon
   E.H. Jenkins, New Haven
   Elijah Rogers, Southington

1925—Edward W. Hazen, Haddam
   Clifford E. Hough, Windsor
   Samuel Rogers Scoville, Cornwall

1926—Charles E. Bacon, Middletown
   George A. Cosgrove, Willington Hill
   Wilson H. Lee, Orange
   M. Estella Sprague, Templeton, Mass.

1927—John D. Avery, North Stonington
   Burton C. Patterson, Torrington
   Charles Palmer Viets, East Granby

1928—Henry T. Child, Woodstock
   Charles R. Treat, Orange
   J. Arthur Sherwood, Easton

1929—Charles L. Beach, Storrs
   Fred H. Beers, Brookfield
   John T. McKnight, Ellington

1930—Alexander T. Pattison, Simsbury
   Lewis Catlin Root, Farmington

1931—Robert C. Mitchell, Southbury
   James M. Whittlesey, Morris

1932—Walter C. Wood, New Canaan
   Esther Frink, Lakeville

1933—John B. Cannon, West Suffield
   Mr. and Mrs. A.H. Benton, Andover
   George H. Jennings, Jewett City

1934—Charles L. Gold, West Cornwall
   Lydia Hartig, Moosup
   H.B. Buell, Eastford

1935—George Perkins Clinton, New Haven
   S. McLean Buckingham, Watertown

1936—Wilton E. Britton, New Haven

1937—Mrs. Eugene Woods, Stonington
   John Marsh Wadhams, Torrington
   Albert Beach Plant, Branford

1938—Mrs. Waldo S. Kellogg, Derby
   C. Marsden Bacon, Sr., Middletown
   Frank Peet, Kent
   Howard C. Thrall, Windsor

1939—Samuel H. Graham, Suffield
   Mr. and Mrs. Victor Lucchini, Meriden
   Henry C. C. Miles, Milford

State 4-H Club Leader Betty Carr
led the Connecticut delegation trip
to the National 4-H Club Camp in
Washington, DC.
Chapter 1 Prior to 1960: Building the Foundation

1940—Tudor Holcomb, West Granby
Dwight J. Minor, Bristol

1941—Mrs. Dwight J. Minor, Bristol
Joseph W. Alsop, Avon

1944—William Curtiss, Bridgewater
Mrs. Philip H. Jones, Shelton

1946—John Lyman, Middlefield
Mrs. Howard Peck, Old Mystic

1947—John Christensen, Wilton
Mrs. John Wetherbee, Pomfret

Farm demonstrations conducted by farmers for farmers had a greater impact than those programs conducted for farmers. This founding principle of Extension work created the foundation for the Smith-Lever Act, the legislation that created the Extension System. Community development became a focus of Extension with the Connecticut milk campaign (1919) and the rural electrification process of New London County (1940).

World Wars I and II brought significant changes to Extension, including a shift in emphasis from a skill-oriented program to one that encouraged self-help and problem solving, and an influx of immigrant producers to the state. The creation of 4-H (1902) gave farm youth practical, hands-on education in agriculture and home economics.

This brief overview of the first decades of Cooperative Extension in Connecticut highlights the depth of the organization’s roots and its flexibility to change. The decades to follow brought new, exciting, and challenging times to the organization.

Members of the agricultural cooperative movement, a major presence in the Connecticut farm economy, met at the annual Co-Op Day on Saturday, October 4, 1958, at the College of Agriculture. The Co-Op men represented credit, dairy, tobacco, poultry marketing, farm supply, and artificial breeding cooperatives operating in the state. About 300 members were expected for the morning meetings. In the afternoon they would attend the UConn–American International College football game as guests of the University.

Yearly inflation rate is 2.73%. The average cost of a loaf of bread is $0.20.
Elizabeth Corso, a volunteer with the Home Economics program, works on clothing construction with a resident of the Dutch Point Colony in Hartford.
Chapter 2
The Sixties: Social Unrest—A Time for Redirection

Setting the Stage

The 1960s brought unprecedented national attention to society’s conscience, especially to the needs of those in urban areas and with limited resources. President Lyndon B. Johnson (1963–1969) challenged the nation to use its wealth to enrich and elevate the quality of life for all citizens. The Great Society domestic programs of the sixties demanded an end to poverty and racial injustice as well as a place where the quality of water, air, and food were important. Open land was vanishing and educational opportunities had to be expanded. The Great Society social reforms focused on changing cities, the countryside, and the educational system.

With its history of success in working in rural areas, Cooperative Extension was a logical choice for an organization to facilitate positive change in urban areas.
A rich history of understanding and responding to the needs of diverse and distinct audiences created a unique foundation for meeting the Great Society challenge.

The opportunities of this decade also fundamentally altered the Cooperative Extension System. Suburbanization, urban blight, a focus on equity, an increased number of women employed outside the home, the exodus of younger generations from the farm, and emerging technologies affected the social and economic fabric of America. Cooperative Extension continued in the role of change agent for the public good.

The number of family farms in Connecticut declined as pressures on land use, rising transportation costs, and competition from other markets eroded profitability. Increased efficiency in on-farm production resulted in dramatic increases in the poultry industry and in per cow milk production. Agricultural agents worked closely with family farms, and provided the support for farm production through new technologies. However, the greatest changes occurred in areas other than agriculture where some of Extension’s most exciting programs were initiated.

**Sweeping Changes for Home Economics**

Perhaps no other segment of Cooperative Extension programs experienced as much fundamental change during the sixties as home economics. The title “home demonstration agent” described the early educational program delivery system. This teaching method resulted in a close relationship between the Extension professional and local homemakers. During the second half of the twentieth century, two societal shifts impacted Extension home economics programs: women sought more involvement outside of the home, and urban audiences and related issues came to the forefront. As new agents were hired, different skills and training were needed to meet the needs of these audiences.

Connecticut has 125 independent broiler and meat growers. *Journal of Extension* is first published.

Webb recalled when:

Gas rationing encouraged the formation of neighborhood homemaker groups, which focused on good conservation, cutting down adult clothes for children, and the use of sewing machines.

An often heard quote during the Depression years was “Use it up. Wear it out. Make it do, or do without.” By the 1950s, the focus shifted to refurbishing homes, which had been untouched during the war years. By the 1960s, the nation’s attention turned to poverty and the needs of low-income families.

Rhea Lawton, Hartford County Extension home economist (1963–1981), initiated programs to help residents of the Dutch Point Colony low-income housing project in Hartford with money management, clothing, nutrition, child care, and care of their surroundings (1964). Soon Extension joined forces with other agencies to promote the physical health of families.

Simultaneously, there were requests to expand the program to families in Bridgeport and Waterbury. Veronica Zanelli, Middlesex County Extension home economist (1964–1980), worked with families in Portland to develop programs, including building a playground, and establishing a neighborhood workroom for sewing and dressmaking.

By 1968 under the direction of Doris Lane, Extension assistant director, home economics (1955–1979), local women from the Dutch Point Colony low-income housing project were hired as program assistants, and trained for twelve weeks to teach volunteers nutrition, sewing, child care, and home management skills. Apartments were rented as sites to conduct programs for low-income families and 4-H clubs.

The theme of homemaker groups in Tolland County was a reflection of the changes taking place in society at that time: walls of homes must expand to include our communities, and fences around our communities must expand to include the world (1960-1970).
Food and Nutrition Education Program

The largest single area of emphasis in the 1960s grew out of a combination of Extension’s historic expertise in food and nutrition education, and federal initiatives to fight hunger and to improve the nutritional status of children. Under the leadership of Janina (Czajkowski) Esselen, professor and Extension nutritionist (1947–1983), Connecticut was one of several states to initiate a nutrition education program (1965). Nutrition educators from low-income areas were trained to teach their neighbors. Throughout the mid-1960s, support grew for Cooperative Extension to establish such a program nationwide.

When Congress funded the Expanded Food and Nutrition Education Program (EFNEP), they created the largest organizational change in Extension’s history (1969). New funding shifted the focus of Extension from production agricultural issues to the consumers of food, especially in urban, underserved areas.

From Esselen’s work came years of funding, training of personnel, and documented changes in participants’ behavior. Figures compiled for the thirty-fifth anniversary (2004) celebration of EFNEP indicated that, since inception, more than 37,000 low-income families with over 118,000 family members had been enrolled in Connecticut EFNEP. Another 80,000 families with some 325,000 family members were reached through short-term community education programs. And almost 10,000 volunteers had assisted EFNEP staff members in their community efforts. EFNEP staff members still work in some of the poorest areas of Hartford, New Haven, and eastern Connecticut. The number of staff members working in this program has ranged from a high of thirty-five (1972) to seventeen (1979) to eight (2007), due to reduced federal funding and increased operating costs.

Each summer for many years, Wanda Little, New Haven County 4-H agent (1970–2002), trained teens in nutrition education in conjunction with Hill Cooperative Youth Services. The New Haven summer program started (1976)
as a nutrition education model where teens were trained, and then taught younger youth. Partner organizations and agencies that jointly funded the program included the Human Resource Administration of New Haven, Title XX, Private Industry Council, Inc., and the City of New Haven. As a result of participating in the program, several of the teens pursued college degrees in nutrition. Upon Little’s retirement (2002), Umekia Taylor, Extension associate educator in residence (1993–); and Wanda Hamilton, program assistant I (1999–), continued this work. Little served as co-author of the *Double Dutch 4-H Health and Fitness* training manual, which was pilot tested in twenty-three states (2002).

### Consumer Education

The late 1960s saw a growing interest in the rights of consumers. In response, Elsie Fetterman, professor, family economics and Extension home management specialist (1966–1979), initiated consumer education programs. As increasing numbers of women entered or returned to the workplace, changes occurred in family finances. From the national level to local communities, people were feeling empowered as consumers and wanted to know their rights.

Anne (Holloway) Rideout, associate director of Extension (1964–1974, 1978–1992), worked with Fetterman to develop a series of workshops called Family Finances: From the Woman’s Point of View. The workshops were offered as professional development training to agencies and organizations that worked with families. The program was recognized (1967) by the National Association of Extension Home Economists Florence Hall Award for outstanding programs in home economics.
Fetterman also worked with Title XX Social Service block grant providers to offer consumer issues courses at twenty-three locations around the state. Consumer education classes were held during the lunch hour at factories and other business locations. While conducting lunch-and-learn sessions was considered an innovative concept for the time, Extension had once again been in the forefront. As part of the Connecticut milk campaign, Extension personnel had presented talks in factories during the noon hour as early as 1919.

Production Agriculture

Extension Agronomy

Walt Washko, Extension agronomist (1964–1986), was known across New England as the agronomist. Washko’s work focused on production of silage corn, forage grasses, and legumes used as dairy and beef cattle feed. Research was conducted on cooperating dairy farms using a silage corn variety test that was the most comprehensive of its kind in New England. Research programs on the formulation of cropping recommendations contributed to the viability of dairy farms in the state. When ten inches of rain flooded and leached many corn fields (1982), Washko reacted quickly. Farmers were advised to top-dress their corn fields. Growers top-dressed 22,000 acres and increased income by $3.2 million.

Soil Nutrient Testing Laboratory now known as the Soil Nutrient Analysis Laboratory

The Soil Nutrient Testing Laboratory, believed to have started in the early 1920s, is one of the oldest and still most-relevant programs of Cooperative Extension. Administratively, the laboratory is housed in the plant science department. As early as 1929 a New London County soil improvement program offered testing of soil and liming recommendations. Ninety-four farms responded and tests were conducted during the spring and summer. Soil-Tex kits were kept at the Farm Bureau office for a farmer’s use. Early notes about the testing laboratory are scarce. In the early 1950s, Alan King, instructor, plant science department (1938–1964), was the director. From 1964 until his retirement in 1992, Gary...
Griffin, professor, was the director of the laboratory. In 1995 Thomas Morris, assistant professor (1993–), was appointed as director, and Dawn Pettinelli was later named supervisor of the laboratory (1997). Pettinelli was also appointed director of the Home and Garden Education Center (2005).

A milestone in the soil testing program was the 1965 purchase of an Auto Analyzer to automate the chemical analysis of soil extracts, which in the past had been performed by a manual spot plate procedure. By 1972 the volume of soil samples required the use of technology. A computerized program was developed for lime and fertilizer recommendations of agronomic crops. A computer program for home ground crops and plant recommendations (1975) enabled the laboratory to reduce the amount of staff time devoted to analyses.

Consumer concerns regarding heavy metals in soil led to the (2007) addition of soil sample scanning equipment for lead and to analyze the samples for micronutrients. The cost to have a soil test analyzed (2007) was only $8.00—one of the best bargains on the market. Each soil test report stated the exact amount of each soil amendment needed. Soil tests provide growers and homeowners with guidelines for the efficient and environmentally sound use of fertilizers, lime, and other soil amendments.

In the mid-1980s Griffin obtained funding to evaluate the hypothesis that the nitrogen fertilizer needs of corn could be predicted when corn was six to twelve inches tall by measuring soil nitrate concentrations of cornfields. The completed research supported the hypothesis, originally formulated by Fred Magdoff, University of Vermont, and changed how frequently producers fertilized, thus reducing production costs.

Connecticut and Vermont were the only two states (1988) in the nation to offer soil testing for nitrate to predict nitrogen fertilizer needs of corn. An aggressive education program demonstrated how to use the new soil nitrate test. Farmers quickly adopted the test and reduced their nitrogen use by an average of 30 percent, thus increasing profits and decreasing the nitrate pollution of water supplies.
Morris expanded the soil nitrate testing program to include testing the lower cornstalk for nitrate at harvest. Research determined that the nitrate concentrations in the lower cornstalk of silage corn at harvest could be used as a report card to evaluate whether nitrogen applications for the growing season were deficient, optimum, or excessive. Information provided by the cornstalk test allowed farmers to reduce nitrogen applications without reducing yield. Connecticut and Iowa were the only two states (1995) in the nation offering cornstalk nitrate testing for farmers.

Morris and Richard Meinert, Litchfield County Extension educator (1988–), instituted a statewide nutrient management program for farmers (1997). The program was a joint venture with the USDA Natural Resources Conservation Service (NRCS) and the Connecticut Department of Environmental Protection (DEP). Funding from NRCS and DEP supported a full-time nutrient management specialist that continues in 2008. By 2006 about 30 percent of the corn acres in Connecticut were under nutrient management plans.

Morris was selected as coordinator of the professional development program for the Sustainable Agricultural Research and Education (SARE) program in the Northeast Region (2004). The long tradition of Extension specialists and educators in Connecticut promoting progressive and sustainable farming practices continues.

In 2008 the Master Gardener class was still conducted at the Bartlett Arboretum, in partnership with the Arboretum Association.

World population reaches three billion people.

John N. Dempsey becomes Governor of Connecticut.
Consumer Horticulture

Outside of its work in production agriculture, Cooperative Extension has been perhaps best known as a reliable source of information concerning lawns and gardens for both flowers and home food production. As homeowner questions and responses to them became more complex, county-based Extension professionals required more specialized knowledge. Local efforts were reinforced by faculty members at the University working through what is now called the Home and Garden Education Center.

Housed in the Ratcliffe Hicks Building, Storrs campus, the Center is the umbrella for the Soil Nutrient Analysis Laboratory, the Plant Diagnostic Laboratory, and the Master Gardener program. These programs are all under the direction of Morris and staffed by employees and volunteer Master Gardeners (2008).

The Home and Garden Education Center had its origin as the Consumer Horticulture Center (1976), staffed by Edward Marrotte, program specialist, plant science department (1976–2003). Originally the Center was a small room on the first floor of the W.B. Young Building, Storrs campus, that functioned as a one-person operation supported by the expertise of faculty members. During the growing season, a steady stream of people carried in an assortment of unhealthy plants or captured insects. While Marrotte examined pests through the microscope, the telephone rang continuously. The demand (2008) remains high as phone calls, emails, digital photos, and overnight packages keep the staff of two full-time and two part-time people busy.

Dairy Science Programs

Throughout the 1960s and 1970s, dairying was either the first or second leading source of farm income in Connecticut, with more than 2,000 dairy farms and approximately 78,000 cows. The artificial breeding program, sponsored by Extension, was a significant contributor to increased milk production.

The bedding plant industry increased rapidly during the 1960s, and was valued at over $1 million in New Haven County alone. Earle Prout, Middlesex county agricultural agent (1946–1973), reported that Simazine was the primary herbicide being used for weed control in the nursery industry (1964).
Most farms operated with family labor. Milk production per cow was higher than in most states east of the Mississippi River. Connecticut also had numerous small milk processing plants, many of which delivered milk to individual homes. There were two milk marketing cooperatives, which later merged with large multi-state cooperatives.

Each of the eight county Extension offices (1960) had at least one agent (Litchfield had two) whose primary responsibility was to work with dairy farmers. As the number of dairy Extension staff members decreased, agents were assigned to work in more than one county. For several years during the 1970s and 1980s, CES had three agents (now called educators) who covered dairy responsibilities. These educators had experience on farms and in industry, as well as in Extension education. John F. Nye (1959–1988) in Litchfield, Keith Goff (1967–1991) in central Connecticut, and Preston Roberts (1954–1985) in eastern Connecticut provided programs for dairy farmers, and were respected throughout the Northeast.

Several specialists at the University also made significant contributions to the dairy Extension education program. Robert (Bob) Benson, professor and Extension dairyman (1955–1986), advised people involved in the Dairy Herd Improvement Association (DHIA) programs and the artificial breeding associations. He also provided educational programs in genetics, selection, management, and other aspects of dairy farming. Lynn Brown, professor, animal science (1960–1994), focused on nutrition and management of dairy cows and heifers as well as the 4-H dairy program. Others involved were Willard Daniels, Extension veterinarian (1965–1987); George Ecker, associate professor, farm management (1956–1984); Richard (Dick) Phillips, associate professor, agricultural engineering (1963–1971); Walter Washko, Extension agronomist (1964–1986); Stewart Johnson, professor, dairy marketing (1945–1973); and Irving Fellows, professor, agricultural economics, farmland preservation (1956–1981).

One of the greatest changes in the industry was the collection and processing of information in the Dairy Herd Improvement Association (DHIA) program. Supervisors collected samples and determined the fat content in milk by using the Babcock method (1960). This involved a process where the milk was warmed...
to a critical temperature, a small amount was measured into a bottle with a graduated neck, and acid was added. The bottle was then placed in a centrifuge to separate and measure the fat content. The records for individual cows were manually calculated using a handbook to track the monthly production for each cow as there were no computers or calculators for assistance. The first innovation was the calculation of records by central laboratories. Connecticut records were calculated at Cornell University. The time required to mail the information to a central office, to enter it into the computer, and get the information back to the farm was a problem for people who really wanted to use the information for daily management decisions.

As the system evolved, electronic equipment became available that would measure all milk components efficiently and rapidly. This equipment was expensive, but because each machine could do a large number of samples, large centralized milk testing laboratories evolved. Information was sent electronically to the records processing center, and the results were immediately available to individual farmers for management purposes. This technology enabled farmers to efficiently leverage the information in the system for improved management decisions. Today, large dairy operations perform this function on the farm.

Another significant change has been the genetic improvement of dairy cattle made possible by information obtained in the DHIA system. These data provided USDA with more precise equations to predict the inherited genetic value of individual animals. The artificial insemination industry improved semen handling and distribution, to better identify outstanding animals for reproduction. Better cattle, improved feed, management, and herd health lead to higher milk production per cow. The same quantity of milk and dairy products is now produced by fewer animals.
Connecticut dairy producers were early adopters of free-stall housing, bunker silos, and mixer wagons for total mixed rations. Despite modern practices, the high cost of land and limited opportunities for expansion drove many Connecticut dairy producers to move to other states where land and labor were cheaper. In 2007 there were 170 dairy farms with approximately 30,000 cows, down from 2,300 dairy farms in 1960. The average herd had 176 cows compared to the average herd of thirty-three cows (1960). However, these farms produced almost as much milk as any time in the state’s history. Connecticut farms have grown in size in order to be economically feasible.

Equine Extension Programs

The first equine Extension specialist was Robert Church, associate professor, animal science (1966–1982). Prior to his hiring, Nathan Hale, professor, animal science (1954–1985), dealt with equine issues. Originally a county agent in Pennsylvania, Church worked for a number of ranches in Montana, Kansas, and Colorado. When hired he was the first full-time equine Extension specialist in the country.

Church participated in the first Eastern National 4-H Horse Roundup, held in Harrisburg, Pennsylvania (1970s). Initiated in 1968, the Horse Science Symposium, drew 200–300 people from all over the world. Church’s main focus was working with the Connecticut Horse Council. The first 4-H horse club was sponsored by the Bissell Foundation, with Dick Woolam, Hartford County, often considered the “father of the 4-H horse project in Connecticut,” as a member.

Jenifer Nadeau, equine Extension specialist (2001–), continues the tradition of the Horse Science Symposium begun by Church. The State 4-H Horse Workshop day, now called Horsin’ in Stride at UConn, was started by Potter. Today’s focus is on environmental issues and projects such as the Horse Environmental Awareness Program (HEAP), which encourages horse owners to be good stewards of the land.

Connecticut Veterinary Medical Diagnostic Laboratory (CVMDL)

The Connecticut Veterinary Medical Diagnostic Laboratory (CVMDL), an integral component of CES, originated in the 1930s as the diagnostic arm of the Department of Animal Diseases. Since its inception, the laboratory has been concerned with the diagnosis of diseases important to the region, as well as detection and surveillance of emerging diseases.

From 1960 to 2007, the agricultural landscape of Connecticut and the region changed, due to then-new environmental toxins, changing regulations, food safety, and concerns for bioterrorism. The laboratory has responded and continues to address the changing needs of the region.

In the 1960s the laboratory consisted of animal necropsy (autopsy) services including gross necropsy and histopathology. Staff veterinary pathologists conducted both avian and mammalian necropsies daily. Bacteriology for these cases was conducted in the bacteriology laboratory, in parallel with research activities, as were serological testing and mastitis testing. The key diseases of concern were brucellosis, vibriosis, leptospirosis, and mastitis in cattle, and Salmonella pullorum infection in poultry. There were federal regulatory programs in place for brucellosis and pullorum monitoring. The Connecticut mastitis control program integrated applied research from the Department of Animal Diseases to help reduce mastitis in Connecticut dairy herds. During this decade, Connecticut achieved the status of a brucellosis-free and certified pullorum-free state.

Gross income from the sale of Connecticut farm products increased in just one year by $10 million over the year prior (1966).

90% of all U.S. households own a television set. JFK is assassinated in Dallas, Texas.
The serology and mastitis testing laboratories (1966) were reorganized as a single unit under the name Diagnostic Testing Services (DTS) Laboratory. The necropsy, histology, and bacteriology sections remained as separate units.

The animal diseases department was renamed the Department of Pathobiology (1971). During the 1970s, federal and state programs to increase surveillance for several diseases were implemented, and DTS became certified by the USDA National Animal Disease Laboratory (now known as the National Veterinary Services Laboratory). The purpose was to conduct regulatory testing for anaplasmosis, blue tongue, and equine infectious anemia.

Serological testing for mycoplasma infections of poultry (Mycoplasma gallisepticum, Mycoplasma synoviae) and Newcastle disease of poultry were also in place. At the request of the state of Connecticut, a new Microchemistry Laboratory opened (1976) to test for drug residues in racing greyhounds. Research produced a vaccine for poultry viral arthritis that is still in use in 2008.

In the 1980s, to accommodate new construction in the main facility, the DTS portion of the laboratory was moved with the Microchemistry Laboratory to a facility on Horsebarn Hill Road, Storrs, a location separate from the rest of the department. As the number of farms in Connecticut decreased, necropsy submissions shifted from farm animals to pets.

The Connecticut mastitis control program was successful in minimizing Streptococcus agalactica mastitis. By 1990 less than 5 percent of Connecticut dairy herds had this infection. Subsequently the National Mastitis Council recommended changing testing protocols to pooled vs. individual quarter samples. These factors, combined with a decline in the number of Connecticut dairies, resulted in a decrease in mastitis testing.

Meanwhile, newly-emerging diseases, particularly Lyme disease in humans and domestic animals and Salmonella enteritidis in eggs, spurred the development of new testing and surveillance protocols. The bacteriology testing service was folded into DTS (1987), where it remains in 2008. A new addition to the Pathobiology building (1989) enhanced the mammalian and avian necropsy facilities.

The Equal Pay Act is passed by the U.S. Congress. Provides equal pay for equal work for men and women.


Martin Luther King, Jr. gives his “I have a dream” speech.
In the 1990s following completion of the new Atwater building addition, DTS returned to the main departmental facility, while the Microchemistry Laboratory remained at Horsebarn Hill. The necropsy, histology, and DTS laboratories combined (1995) to form the Connecticut Veterinary Medical Diagnostic Laboratory (CVMDL). Mastitis testing continued to decrease. Diagnostic microbiology, *Salmonella enteritidis*, Lyme disease, and other serological testing increased. A focus on diseases of aquatic species (fin fish, shell fish, and marine mammals) was established, incorporating diagnostic pathology and microbiology.

The laboratory played a key role (2000) in the initial diagnosis of West Nile Virus in domestic crows, leading to a flurry of diagnostic test development and research, resulting in increased interaction with other state agencies. A compact biosafety level 3 laboratory was created to allow research and testing work with the West Nile virus. Testing for transmissible spongiform encephalopathies was initiated in conjunction with USDA surveillance initiatives. Increased interactions with the state Department of Agriculture and United States Department of Agriculture (USDA) Animal Plant Health Inspection Service (APHIS), and the Veterinary Services of New England resulted in enhanced surveillance programs for Johnes disease, West Nile Virus, Avian Influenza, and Exotic Newcastle Disease.

The Microchemistry Laboratory discontinued drug analyses on greyhound dogs for the state of Connecticut at the end of August 2003 due to a drastic reduction in the number of samples to be analyzed. All greyhound racing in Connecticut ended in 2005.

A new molecular diagnostics laboratory was established (2003), and molecular-based testing to determine the genetic material of viral and bacterial pathogens was initiated (2004). Diagnostic virology, using embryonated eggs and cell culture, was resumed in the laboratory, and increased regulatory constraints on pathogen usage were imposed. Biohazard and bioresponse preparation and training were implemented as well as a quality assurance program. The CVMDL received full accreditation from the American Association of Veterinary Laboratory Diagnosticians (2005), and became a member of the American Society for Microbiology.

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State and county Extension staff members reported making approximately 16,000 home and farm visits, held 22,000 meetings attended by over 445,000 adults and youth, prepared 5,600 news articles, made 21,000 radio broadcasts, provided 80 television presentations, and distributed 300,000 publications (1963-1964).
the newly developed National Animal Laboratory Health System. The CVMDL currently services all six New England states.

New in 2007 was the introduction of a pick-up service for deceased pets, livestock, poultry, and wildlife throughout the state. The carcasses are transported to the laboratory at UConn for necropsy.

Natural Resources and the Environment

International Development Projects

Floyd Callward, Extension forester and conservation specialist (1936–1965), had his tenure interrupted by service in World War II (1942–1945). The last two years of his career at UConn were spent in Northern Rhodesia (now Zambia) on an U.S. Agency for International Development (USAID) project. Funded at $207,000 for two years, Callward worked with Tilford Cocks, New London 4-H club agent (1932–1966); and W. Howard Martin, associate professor, agricultural education and professor, higher, technical, and adult education (1946–1971), to train fully-qualified agricultural workers in Northern Rhodesia. Work focused on reviewing and suggesting improvements in the short courses being taught, preparing an Extension teaching methods course, and analyzing curriculum to prepare an improved course of study. Cocks worked to bolster the quality and effectiveness of the young farmers’ clubs, similar to 4-H clubs.

The Connecticut Christmas Tree Growers Association was founded (1960) under Callward’s leadership, earning him the title of “father of the Connecticut Christmas tree industry.” In 2008, over 300 growers retail their trees at choose-and-cut farms throughout the state.

Faculty members with Extension appointments were frequently asked to take their expertise to developing countries. Ed Palmer, associate professor, agricultural engineering (1946–1978) worked in Zambia (1965) under a University of Connecticut
educational program. While on a special assignment there, he was asked to teach the president of the country, the vice president, and sixteen cabinet ministers how to drive a tractor. This unusual request was prompted by the need to raise the status of farming in Zambia.

Agricultural Engineering

With three full-time faculty members (1963), agricultural engineering Extension programs included farm structures, 4-H, farm safety, water and waste, materials handling, and electrification. In response to national security concerns in the early 1970s, a fall-out shelter engineer was hired. In the late 1970s when energy became an issue, additional staff members were hired to train energy associates located in the county Extension offices. These associates were part of the Energy Extension Service (EES) (For further discussion of EES, see Chapter 3: The Seventies: Settling In—A Time of Social Healing).

Regional engineering programs began in the mid-1960s, when Massachusetts and Connecticut agreed to cooperate on poultry and dairy issues. The Northeast Plan Exchange Service was started to coordinate the development of farm building plans to benefit the entire New England area. This service was expanded (1973) to the twelve northeast states. Agricultural engineers coordinated conferences and publications on a regional level. The Northeast Regional Agricultural Engineering Service (NRAES) continues to provide service to the region and nation by publishing over 150 peer-reviewed publications per year (2007).

For the federal fiscal year, the Smith-Lever 3(b)(c) allocation to Connecticut CES was $463,141. In addition, $375,490 was required in state offset funding (1968).
To remain current with changes in building materials, equipment, and methods, most programs included applied research, either at the University or on farms. This provided farmers with research data to make business operation decisions. Communities benefited from waste management and water quality, composting, recycling, zoning, and residential housing programs. A 4-H program in technology was conducted until the 1980s.

Highlights of major program areas included plans for horizontal silos for corn silage with more than 100 silos being built (1960), designs for herringbone milking parlors (1960s), and plans for anaerobic digesters (1970s).

Poultry-related designs included egg rooms (1960s), pullet rearing house plans (1960s), and fly and odor control recommendations (1980s). Designs also included rigid-frame wood greenhouses for bedding plants and vegetables (1960s), materials handling equipment and shipping containers (1970s), the use of hydroponics to increase production (1980s), the development of trickle irrigation for field crops (1980s), and garden center designs.

Farm safety innovations included the introduction of a sprayer calibration and safe application of pesticides program (1980s). 4-H programs focused on small gas engines, bicycle safety, woodworking, and lighting (1960s). Residential programs included guidelines on handling septic tank pumping (1970s). In the 1980s more than 150 programs on wood and coal stove heating were presented to more than 15,000 people and the Burning Coal bulletin was distributed to more than 25,000 people (See Appendix H: Agricultural Engineering Highlights for a complete list).

Due to financial constraints, programs were discontinued as staff members retired or departed. When the last agricultural engineer, John Bartok, Extension agricultural engineer (1966–1997) retired, the agricultural engineering program closed.
Community Resource Development

As towns expanded in the sixties, the term “urban sprawl” was coined. Problems emerged on the rural–urban fringe. Municipalities recognized the need for more systematic planning methods, protection of the water supply, and greater involvement of citizens in issues of health, education, recreation, and conservation.

Faculty members at the College have a long history of working with farmers and landowners to properly manage their land and the state’s natural resources. Building on that tradition, W. B. Young, dean of the College of Agriculture (1944–1966), appointed a community development committee (1960) charged to “outline the role of the college in stimulating development programs in the rural areas.” Lawrence Drabick, formerly of Iowa State, was named community development specialist, associate professor, rural sociology department (1961–1962). This started decades of pioneering work that placed Connecticut at the apex of innovation with the program that nationally became known as Community Resource Development (CRD).

Russell Hibbard, New London County, community resource development agent and county administrator (1967–1980), worked with small towns such as North Stonington on plans of development. Preston Roberts, Windham County dairy agent (1954–1985), worked with the Quinebaug Valley Action Committee to set the groundwork for a regional focus. Arthur Dewey, specialist, agricultural economics and rural sociology (1946–1976), suggested that the blossoming of the computer age would offer an excellent opportunity for towns to track the pattern and amount of development in their areas. Dewey conducted research on land-use planning in suburban municipalities, assessment of public improvement benefits, political-economic systems for disposing of liquid wastes, and information retrieval systems. This was all work focused on the public good that continues to impact Extension programs in the 21st century.

As funding for community resource development projects increased, programs expanded to include what had been the traditional areas of home economics and 4-H youth development. Community leaders expressed the desire to be involved in the fundamental process of long-range planning for their towns and cities. Extension responded.
Land Use Education

Land-use decisions are a key determinant of the social, economic, and environmental health of communities. Most land-use decisions and policies were developed by elected and appointed officials at the municipal level. These critical decision-makers are typically volunteers, often with little or no training, who lacked professional staff or outside assistance. Extension agents recognized this gap and sought to fill the void.

Extension’s pioneer land-use initiatives included statewide efforts to establish regional agencies. These included the Connecticut River Gateway Commission, the Connecticut River Assembly, environmental review teams, regional planning agencies, and regional selectmen associations. Donald Francis, Windham County Extension agent (1959–1987); and Gregory Curtis, Middlesex County Extension agent and administrator (1954–1975), led the way. The major issue was how to address widespread public concern through public policy. Curtis worked with numerous groups to develop the Connecticut River estuary planning region. Land-use inventories, identification of programs through interviews with community leaders, development of compatible land-use patterns, and methods to improve community health, recreation, and pollution were among the areas of emphasis.

The 1960s and 1970s saw changes in town populations.

Connecticut Extension initiates nutrition education program.

Auto Analyzer is purchased to automate soil analysis.
Extension helped towns establish planning, zoning, economic development, and conservation commissions. Extension staff members developed and disseminated technical reports on land-use issues and presented seminars featuring the responsibilities of local land-use commissioners, land-use regulations, and land-use planning. By 1965 the town of Durham had established a conservation commission and developed a comprehensive open space plan, an example of Extension’s educational efforts.

Extension partnered (1972) with the state’s newly established Department of Environmental Protection (DEP) to sponsor a four-part workshop series titled, The Use of Natural Resource Data by Municipal Land-Use Decision-Makers. This series was presented twice a year for three years. An evaluation of the series (1975) resulted in several changes, including the addition of field trips and three new sessions. The revamped workshop series was presented for the next six years. After the 1982 series DEP ceased being a sponsor. Following a year hiatus, Extension stepped in to provide full leadership responsibility and condensed the six sessions to three that addressed the roles and responsibilities of land-use commissioners, the legal procedures that commissions must follow, and map reading and site plan review. Extension has presented the three-part workshop series since 1984 for newly elected or appointed land-use commissioners.

Two statewide reports, the Final Report of the Governor’s Blue Ribbon Commission on Property Tax Burdens and Smart Growth Incentives (2003), and the Connecticut Office of Policy and Management’s Report on Land Use Training and Education Available to Members of Local Land Use Agencies (2006) resulted in new funds to the Extension System. These funds supported the three-part workshop series now called the Land Use Academy, with Jim Gibbons, Extension natural resources and land use specialist and administrator (1976–), serving as director.

A fourth quarter report of one Connecticut Extension employee recorded a total of fifty farm, home, and out-of-office visits, thirty-two office calls, 372 phone calls, ten radio broadcasts, one television broadcast, and 370 publications distributed (1964).

Extension takes its expertise to Zambia to raise the status of farming.

4-H lowers age eligibility to nine years of age.
Community resource development agents and Extension specialists helped formulate Connecticut’s agricultural land preservation bill. Extension’s efforts in mapping farmlands served as a model for mapping the entire state. Extension developed a Food Plan for Connecticut. Both the farmland maps and food plan were incorporated into the final farmland preservation legislation (1974).

Extension agents also published a handbook entitled Conserving Connecticut’s Agricultural Resources in 1980. The Manual of Mapping Techniques for Farmland Preservation (1980) has been used by local officials in developing local farmland preservation strategies. Two publications, Keeping Horses in Residential Areas (1985) and Regulating Farm Stands (1993), received national attention, and were reproduced by the American Planning Association for worldwide distribution to professional land-use planners.

Nonpoint Education for Municipal Officials (NEMO)

The Nonpoint Education for Municipal Officials (NEMO) program was created in 1991 by Chester Arnold, Extension water resource specialist (1987–); and Gibbons. NEMO focuses on the impact of land use on water quality. A major objective is to demonstrate the effectiveness of using remote sensing and geographic information system (GIS) technologies to inform and enhance educational programs directed at local land-use decision-makers. The original pilot project, funded by USDA, focused on two coastal towns: Waterford and Old Saybrook; and the Sasco Brook watershed in Westport and Weston, Connecticut. NEMO has worked with all of Connecticut’s 169 municipalities, and serves as the coordinating center for the National NEMO Network, a confederation of thirty-two NEMO projects in thirty-one states (2007).
4-H Youth Development Program

With President Lyndon Johnson’s (1963–1969) focus on the War on Poverty, 4-H responded with almost one-third of the membership coming from low-income families. Nationally, the age eligibility for 4-H members changed from ten to twenty-one years of age, to nine to nineteen years of age (acted upon in 1962 and implemented in 1965).

Nationwide, the 1960s saw an increase in federal appropriations for urban 4-H. This was designed to better prepare urban youth to learn to live in the world of today and tomorrow. By the late 1960s, Connecticut had begun 4-H programs for urban youth, and later moved to school-based programs, reaching youth wherever they might be. 4-H projects were not just about cows, corn, chickens, and cooking, but included gardening, home furnishing, recreation, and woodworking. During this time, offices were added in New Haven, Hartford, Waterbury, and Stamford. Staff members experimented with different projects, materials, and methods. Young people responded quickly to the program. The search for volunteer leaders presented a challenge that continues in 2008.

When Ronald Aronson (1961–1977) became state 4-H program leader, there were two full-time 4-H agents in each county, plus three state 4-H professional staff members who conducted programs for 8,000 4-H members. The program grew to more than 11,000 members by 1977.

Senior 4-H and service clubs were organized for youth over fifteen years of age. Monthly meetings guided a self-planned program of education, recreation, and community service activities. By 1962 there was an active county-wide 4-H service or senior club in both Windham and New London Counties. Members furnished clover pins to 4-H club leaders, prepared the camp premises for the opening of the camping season, and assisted in 4-H Sunday services at the Cathedral of the Pines in Rindge, New Hampshire.

For the first time, funds were appropriated through the Expanded Food and Nutrition Education Program to carry out 4-H type programs in nutrition for youth in urban areas (1969).

Governor John N. Dempsey paid tribute to the 8,300 4-H members in 730 Connecticut clubs, and to the 4-H program that “does so much good for so many” (1962).
From 1957 through the 1970s, the Key Club Award recognized outstanding 4-H members. This national award honored members who were sixteen years old, and had completed at least five years in the 4-H program. A county committee reviewed nominations, not to exceed one percent of the county 4-H enrollment. Selected members received a 4-H Key emblem with their name and year. Cities Service Oil Company (CITGO) sponsored the award. Key Club members could also apply for a scholarship to the University of Connecticut.

Clothing construction was one of the most popular projects in the 1960s, and horseback riding was the fastest growing project. Safety was stressed in all project areas. One club, during the winter months, focused on gun safety.

Jane Rider, Windham County 4-H alumnus, remembered a 1960 photo of the Galloping Ghost 4-H Horse Club of Killingly. The photo showed:

A large covered wagon pulled by two roan horses and surrounded by boys and girls on horseback. Delia Norton was the 4-H leader, and was active in horse rescue efforts. The group made the sixteen-mile trek to Pachaug State Forest where they camped and rode horses for three days. All of the horses were owned and loved by 4-H members, who with the guidance of the club leader, would go on to many successes in local and New England-wide horse shows.

Nine and ten year-old youth living at Farnam Courts in New Haven City (1963) participated as 4-H members in nutrition projects. At Winchester School, New Haven, an indoor gardening club was initiated in addition to two science clubs. Youth members worked with volunteers from Yale University Volunteer Services and with the local 4-H professional staff members. While interest was high and the needs pressing, New Haven, like many fast growing metropolitan areas, was challenged to develop adequate youth programs for all income groups.

Connecticut had 5,000 boys and girls (1966) who participated in 4-H foods and nutrition programs. One girls' club conducted an experiment to see whether eating breakfast really made a difference in the way they felt. One boys' club learned that eating an adequate breakfast improved the safety records of airline pilots. International foods became a popular project area.
Louise Mather and Elsie Woolam, Hartford County volunteers, developed the 4-H Clover program in 1968 for youth members seven to eight years of age. Rules for 4-H fair participation were altered to lessen the emphasis on competition and to encourage parental assistance. Youth became involved with 4-H before they joined other youth organizations. This was the time when 4-H Clover camps for youth six to nine years of age started.

A national 4-H Television Review Board was established in 1969 to develop a long-range plan for instructional 4-H television programming, and to recommend the development and production of instructional 4-H television series.

The Career Exploration 4-H Members’ Guide was developed in the late 1960s to provide teens with a systematic method of studying and evaluating a series of careers that might fit their needs and interests. Twenty-seven hundred campers participated in the five 4-H camps.

Carol Whitaker, Tolland County 4-H member; and Margaret Dudley, New Haven County 4-H member, received national scholarships to the National 4-H Club Congress in Chicago. Whitaker was one of only ten 4-H’ers in the nation to be named to the 4-H Report to the Nation team.

Charles Crary, a 4-H member in the 1960s, remembered “4-H taught me humility and how to be humble; 4-H helped me to be honorable and honest; 4-H gave me the chance to be helpful; and 4-H gave me happiness.”

Janet Barnett remembered “4-H gave me the first opportunity to participate in a banquet, travel, live in a dormitory, do public speaking, and meet famous personalities.”

Andrew Popinchalk, a thirteen-year-old 4-H member, noted that the impact of 4-H was that his family attained a greater feeling of togetherness by being involved.
Administrative Changes

Babbidge Committee Studies University Outreach

By the mid-1960s, social, economic, and technological change in the state, plus recent federal legislation, emphasized the need for the University to consider a revised outreach concept, and a new organizational structure for Extension and Continuing Education. To meet the future needs of society, the institution explored how to go beyond traditional Extension-type activities. Combined, the Division of Continuing Education Services and Cooperative Extension included community service programs, county Extension programs, credit and non-credit Extension, institutes, conferences, workshops and short-courses, international programs, and summer school for credit.

UConn President Homer Babbidge (1962–1972) appointed a University Extension Study Committee in 1965 to consider concerns and make appropriate recommendations for a revised concept of outreach, and a new organizational structure for Extension and Continuing Education. The committee of seven staff members, chaired by Henry Hansen, associate director, Cooperative Extension (1954–1973), focused on the urgent need to expand beyond traditional outreach activities. According to a 1962–1963 National Opinion Research Center study, twenty-five million adults were involved in some type of adult education.

Relatively few academic units across the University participated in these activities, even though the social and economic development of the state was dependent on the broader resources of the institution. The annual rate of income generation (1966) from Extension activities across the institution was in excess of $3 million. The committee recommended that:

- Extension programs complement and support the credit programs of the institution.
- University resources be committed to a full spectrum of educational opportunities.

First equine Extension specialist is hired.
There are nearly half a million U.S. soldiers in Vietnam.
• Continuing Education be transferred, with supporting resources, to the appropriate schools and colleges. Academic units had the obligation to initiate Cooperative Extension programs and maintain jurisdiction over the subject matter in Cooperative Extension programs of the University.

• Continuing Education and the College of Agriculture’s Cooperative Extension Service be administratively combined into a single new division of the University, for which the title would be University of Connecticut Continuing Education and Extension Services. The unit would be headed by an administrator, who would report to the president or the provost.

Responsibilities of this new unit included:

• Identifying needs of the state;
• Representing the University in dealing with state and federal programs;
• Acting as a liaison with non-University groups;
• Developing an organizational structure to provide conference services;
• Addressing appointment, promotion, and tenure issues;
• Developing an advisory committee; and
• Seeking a permanent physical home.

With this proposal, almost no part of the University would be untouched by outreach. Beginning with this effort, perhaps no part of the University has been so thoroughly studied as CES in terms of structure, function, and effectiveness. The report was not implemented.
Media Expands Visibility

The College introduced Milestones in Connecticut Agriculture and Home Economics (April 1953), a magazine publication. The document was designed to inform the public of the activities and accomplishments of the College. In addition to articles about Extension, the resident instruction program, and research, a section also carried news about faculty and staff members. The magazine format under editor Alexander (Bud) Gavitt, agricultural news editor (1961–1992); and graphic artist John Allie, Graphics Designer III/Specialist 6 (1960–1987), won first place three years in a row in the magazine category of the American Association of Agricultural College Editors contest.

The fall 1963 issue of Milestones reported that Douglas Wardwell, university educational assistant I (1960–1966), was the agricultural radio editor and producer of a thirty-minute Connecticut Farm Forum show on WTIC radio each Saturday. The program aired for twenty-three years. There were eight different Extension radio programs in 1966 produced each week that aired on thirty-five stations as well as forty television features.

Elsie Fetterman hosted a television series Speaking for the Consumer with nineteen shows that aired on Channel 8 WTNH in New Haven in 1968. Her consumer programs were among the first Extension television programs. Marty Burns Wolf, assistant home economics Extension agent (1976–1980), hosted a three-part series on Extension TV that aired three times a week on Channel 8.

The fall–winter 1974–1975 issue of Milestones was the last of the magazine format. The format was reinvigorated (1976) as a sixteen-page newspaper that continued until 1982. From 1961 through 1992, the College’s daily press service reported on programs and activities which then appeared in daily and weekly newspapers.

Faculty members in local Extension centers often wrote monthly newsletters for interested program participants. Focus Extension was written by Donald Francis, Windham County Extension agent (1955–1987), to bring readers a better understanding of the community, its problems and opportunities. Newsletter issues from 1967 to 1970 focused on regional planning, waste disposal and clean water, plans of development, and open burning.

Speaking for the Consumer, an Extension television series, airs on Channel 8 WTNH.

Women from Hartford’s Dutch Point housing project are trained as Extension program assistants.
Staffing Patterns Change

Recommendations from planning documents, changing program needs, the changing role of USDA, the potential impact of electronic technology, and major budget constraints resulted in staffing and program decisions that impacted Extension’s future. Until the dissolution of Connecticut county government (1962), county lines had set the working boundaries for Extension programs. After 1962 these geographic boundaries diminished in importance, and Extension agents were housed at the office most central to their responsibilities. Staff member reassignments matched individual expertise with clientele needs, regardless of geographic boundaries, a nationally innovative concept. Some employees (1978) still worked only in one specific county, and all employees were focused within the state. In the 1980s county Extension administration was reorganized to better support disbursed staff members and programs. State Extension administrative personnel were reduced, and funds were reallocated to meet program needs. The Extension commitment to urban and special needs audiences was reaffirmed, and priority issues were defined.

Until the 1960s, Cooperative Extension field faculty members with a broad academic background and experience were considered an organizational asset. As generalists they could respond to a wide variety of problems and initiate educational programs to address local needs. Extension faculty members located at the University, with more specialized knowledge, were available to backstop the field faculty members on complex issues. Extension struggled to be all things to all people in a period of diminishing budgets.

Television’s Channel 3 offered the 4-H Electric Project for thirteen weeks. Viewers wrote in to request the Electric Project book (1960).

A Spanish speaking 4-H club agent is hired to address language barriers in CES programs.

Name changes from Agricultural Extension to Cooperative Extension Service.
As the world became more complex, clientele wanted the expertise of specialists to be available at the local level. As information-age technology made more detailed information available to citizens, the depth of knowledge needed to respond to inquiries increased. The broad-based generalists gave way to specialists at all levels, who possessed greater depth and understanding in specialized areas.

Cooperative Extension is legally mandated to provide public notification of the availability of educational programs to Connecticut citizens. Language barriers often limit program access. To address this need, Alice Blanco, Hartford County associate 4-H club agent (1968–1984), who spoke and wrote fluent Spanish, was hired. As a result, Hispanic participation in CES programs increased substantially.

A major change in staff member diversity took place when the Expanded Food and Nutrition Education Program (EENEP) was initiated (1969). In 2008, Cooperative Extension’s educational programs and materials are presented in at least three languages: English, Spanish, and Portuguese.

Federal Formula Funds Change

Until the late 1960s, the allocation of all federal Smith-Lever funds to states was determined by a formula that provided for 20 percent of the federal appropriation to be divided equally among all states and territories, 40 percent to be divided based on each state or territory’s farm population, and 40 percent to be based on rural population. Data were updated every ten years based on the state’s census. The emphasis on allocating formula dollars changed in 1969 when $10 million was targeted outside the formula allocation, to initiate the Expanded Food and Nutrition Education Program (EFNEP). Nationally, this solidified Extension’s commitment to low-income families, especially those in urban areas. By 1971 the federal allocation for EFNEP had grown to over $48 million.

The average American worker earns $8,550 per year.

2,700 campers participate in the five 4-H camps.
nationally. Funds specifically targeted for rural development were added to the federal budget (1972), followed by Integrated Pest Management (1973) and Farm Safety (1975). These targeted funds were new monies, not reallocated from the formula pools. Targeted funds are focused on national issues, and reduce the state’s flexibility to determine program priorities based on local needs. All Extension budget lines in the federal allocation roll to a bottom-line allocation, whose real purchasing power has declined over time.

Official Mail System

Extension’s affiliation with USDA allowed the organization to benefit from a special mail program designed only for Cooperative Extension. The CES mail system was often referred to as “penalty mail” from the statement “penalty for private use…” that was printed on each envelope. Penalty mail was often confused with franked mail, a different system available only to members of Congress to send official mail under their signature without postage.

Penalty mail was not without cost. USDA would reimburse the U.S. Post Office annually for the cost of Extension penalty mail, up to the amount of the state allocation. Any unused portion of the allocation was returned to the state Extension’s penalty mail account, one year later, as actual dollars. Funds were then used for mailing-related expenses such as envelopes, letterhead, and mailing equipment. The formal term for this system was “indicia mail.” USDA had a specific set of rules as part of the Federal Administrative Handbook to help assure that the mail system was used appropriately.

Extension administration (1973) discussed a possible fee for the purchase of publications. Official mail policy did not allow for fees to be charged; therefore, the price of postage was included in the cost of the bulletin. If the total fee was greater than thirty cents, a mimeographed note was included stating that the items would be sent upon receipt of the funds.
Connecticut received a postal credit (2002) at the Post Office for $102,871 that was to be spent on postage. That amount decreased (2003) to $93,900. Then in 2004 official mail was eliminated. To compensate, $89,364 were added to the base Smith-Lever 3(b)(c) budget for the state. In October 2003 the official mail system ended for Extension. Now Cooperative Extension uses electronic communication systems and the standard U.S. mail system.

The decade of the 1960s was a time of reinvention and change. The participation of females in traditionally male 4-H projects, such as large animals, forever changed the 4-H program. However, the 4-H program continues to be nimble, creative, flexible, and empowering for youth participants. Public interest in Extension-type programs greatly increased as a means to solve complex community-based societal problems. New clientele and new audiences changed Extension priorities. Public interest in environmental issues was growing, and communities needed assistance in effectively managing resources. The stage was set for the next decade.

Roy Norcross, county agricultural agent, New Haven County (1927–1960), noted in 1963 that the Extension Service had matured from an unknown quantity at its inception fifty years prior (1913) into a useful and respected institution that would not lack for challenges in the years ahead.
Meetings and learning occurs for professionals at national meetings; for producers on location in barns and greenhouses; for advisory councils in office locations, or by observing beef cattle in the field.
Programs that focused on nutrition grew in popularity in the 1970s. Above, students pose with their healthy school lunches as part of the Connecticut Nutrition education program.
The 1970s heralded almost two decades of social and economic change for the people of Connecticut. The information age had arrived, family structures were in flux, youth in crises were gaining national attention, and electronic technologies were emerging at a rapid pace. Growing concerns over the availability, cost, and increased use of energy, as well as Connecticut’s shoreline and marine resources, were gaining public prominence. Discussions proposed UConn be designated as a Sea Grant institution. Prior expertise pushed Extension to the forefront in land-use management and environmental education. Years of energy awareness and conservation led to the formation of the Energy Extension Service. This program brought staffing changes, and new programs related to energy audits, fuel alternatives, insulation, and wood stoves.

Changes in the legal environment meant that farmers would need business agreements to enable younger family members to become part of the farm operation. Legal issues included estate planning, wills, trusts, inheritance taxes,
insurance, and the role of legal counsel. The importance of early child care, and expanding educational opportunities for professionals engaged in providing day care services came to the forefront. The recognition of the rights of all people in regard to differences in economic resources, educational attainment, social status, and value orientation became part of the Extension fabric as the focus continued on the public good.

Emerging Electronic Technologies

The advent of the information age had a major impact on Cooperative Extension. The old ways of doing business, which included farm visits, conversations around the kitchen table, homemaker groups, and agent visitation to 4-H clubs were no longer viable. Changes in access to information and the way in which information could be disseminated made it necessary for Extension to examine its delivery systems. Electronic technology, primarily the computer, was envisioned to take the place of the traditional face-to-face interactions. Clientele wanted more specific information to address their problems, and they wanted it in record time. The personal touch was perceived to be not as crucial.

In the 1970s Extension was using an evolving University mainframe computer system for administrative record keeping and data analysis. CES agricultural engineers and energy agents were using thermal computer terminals connected to the University mainframe to produce home and business energy analyses and calculation reports. Energy staff members were using electronic calculators with magnetic card readers to manage data and calculations. These were innovative approaches.

In the 1970s Carole Fromer, Extension media coordinator (1965–1997), used the new technology to improve the visibility of CES, and to project a uniform image by standardizing letterheads, logos, terminology, and even road signs. Staff members were supported by professionally-produced public service
announcements, interviews, and the production of television series. The newly emerging cable television market regularly aired Extension-produced videos. During 1981 and 1982, mass media methodology was encouraged, as audience needs were expanding while staff numbers were decreasing due to budget constraints.

Home Economics

Nutrition and Food Safety

As the tides ebb and flow, so do topics of interest and issues in the state. In the mid-1970s food preservation reemerged as a major program. Kenneth Hall, professor, nutritional sciences (1966–1997), a charter member of the newly-created Department of Nutritional Sciences (1970), began Extension programs in food preservation and food safety.

Hall expanded the knowledge of county staff members through hands-on workshops, and then strengthened this knowledge for work in home food preservation. During the 1980s a Master Food Preserver Volunteer program, designed after the Master Gardener program, provided twenty-four hours of classroom training for volunteers, who then donated time to answer food preservation questions from the public. Later as interest in home food preservation waned, the emphasis shifted to programs on fitness, specific health issues such as low-sodium cooking, and fiber. Important connections to other agencies continued to impact programs and connect Cooperative Extension to broader audiences.

The Department of Nutritional Sciences was created on July 1, 1970. Faculty members were drawn from the School of Home Economics, the Health Center, the Department of Animal Industries, and the former Department of Poultry Science.

97 percent of low-income households owned at least one television set and spent 5.2 hours each day watching television [1971].
Family Life Education

From its beginnings, Cooperative Extension focused on the family. Hands-on programs for families helped homemakers keep up-to-date on the latest information on health, child care, nutrition, financial management, and home furnishings. Participation in Extension homemaker groups was frequently a way for women to learn in a social setting, and to explore potential new areas of interest. With societal changes of the late 1960s and 1970s, families sought new resources to assist in parenting roles.

Paul Nuttall, associate professor and Extension specialist, human relations (1966–1989), began a series of workshops in Manchester entitled Improving Communications for Parents of Children 6 to 12. The four-week series was the beginning of many statewide programs taught by Nuttall along with county-based Extension home economists.

Financial Literacy

The economic climate in Connecticut has often made it difficult for citizens of diverse income levels to thrive. CES family and consumer educators developed programs and delivery systems to help individuals and families maximize the use of their resources.

In the late 1970s in collaboration with the Connecticut Department of Consumer Protection, Connecticut CES provided leadership to establish the Connecticut Consumer Credit Counseling Services (CCCS). This non-profit agency continues to provide debt management services for Connecticut consumers. CES educators also provided leadership by joining with CCCS to form the Connecticut Council for Consumer Affairs, a group whose membership included state, New England region, and federal agencies who served in consumer education capacities.
Through the years, CES financial management programs included workshops for individuals and families, and train-the-trainer programs for social service providers and educators. Staff members collaborated with municipalities, state agencies, utility companies, and national organizations to develop and pilot programs later used nationally. When funding was available, materials were translated into Spanish.

Regional child advocacy centers, Headstart, transitional housing programs for homeless families, senior centers, job training programs, and health care programs have hosted CES financial literacy programs. Topics have included First-time Homebuyers’ Managing Your Money workshops, Managing Your Money in Tough Times, and Money 2000, a national project to encourage consumers to start or increase their savings and reduce debt.

Production Agriculture

Pesticide Applicator Training (PAT)

The Pesticide Applicator Training program (PAT) originated to assist growers and producers to meet the requirements of the 1974 Connecticut pesticide law. The law provided the state a means to enforce the 1972 amendments to the Federal Insecticide Fungicide and Rodenticide Act. The federal act required all commercial pesticide applicators and restricted pesticide users to follow the safe handling and use of pesticides to protect themselves and the environment.

The PAT program began with county Extension agents partnering with commodity groups to train growers and producers to meet the standards of compliance set by the Connecticut Department of Environmental Protection (DEP). Extension agents and specialists developed training materials for specific commodities (vegetables, apples, dairy), and then held training sessions around the state. Extension worked closely with DEP to develop written exams, and administer oral exams to commercial applicators.

During the 1970–1971 fiscal year, the Department of Agricultural Publications distributed 1.25 million publications in response to requests.

Connecticut 4-H Camp Director’s Manual is published.

Extension bulletin 67-64 Chinese Foods and Traditions is republished.
Connecticut PAT received nominal funding over the years ranging from a high of $67,119 (1975) to a low of $10,124 (2003). Funds come to Connecticut based on a memorandum of understanding with the USDA Extension Service and the U.S. Environmental Protection Agency. UConn Extension provides matching support.

Initially, PAT focused on and trained growers and producers on the safe use and handling of pesticides. This included protection of ground and surface water, the Endangered Species Act, the Worker Protection Standard, and spray drift minimization.

Annually the program offers three sessions of the ornamental and turfgrass short course at various locations around the state. The program also provides growers and producers in all commodity groups the opportunity to maintain their certification through continuing education. DEP administers the oral exams and assures that compliance issues are addressed in training programs.

Integrated Pest Management (IPM)

The Integrated Pest Management program (IPM) started (1979) in Connecticut under the leadership of Roger G. Adams, Jr., assistant professor in residence and Extension entomologist, Department of Plant Science (1977–), who had initially started the state’s pesticide applicator training program. The first IPM program in Connecticut was developed for sweet corn and apples, and was tested with a few growers in Hartford County. A USDA grant broadened the outreach effort. Initially, IPM was defined as the most judicious use of pesticides. Pest control methods were designed to protect public health and the environment while producing high quality food, feed, and other commodities. Lorraine Los, research assistant II (1982–), was hired to lead the apple IPM program.

When IPM methods were demonstrated in the field, growers realized that they could reduce the amount of pesticides, and thus their cost, while maintaining crop quality and harvestable yield. In successive years additional crops were

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Federal Rural Development and Small Farm Research and Education Act Title V provides authorization for the expanded work in rural communities in non-agricultural as well as agricultural fields and with small farms as defined in the legislation. Connecticut’s plant industry is valued at more than $60 million.
added to the IPM program, and staff members were hired to develop methods of implementation. Over time, field corn, small fruits, turfgrass, greenhouse crops, peaches, pears, weed management, and nursery crops were added to the original sweet corn and apples.

Richard Ashley, professor and Extension vegetable crops specialist (1968–2003), became the IPM program coordinator (1997). As portrayed through the program website, the IPM program attracted a six-year gift from the Bingham Trust to develop and publish a K-12 Curriculum for Integrated Pest Management. Following Ashley’s retirement, Donna Ellis, program specialist/APHIS/CAPS (1991–), assumed leadership of the IPM curriculum project. Ana Legrand, associate professor in residence (1999–), was appointed (2006) as IPM program coordinator.

From 1984 to 2005 the IPM program held 771 full season, one-on-one training programs for individual growers and groundskeepers in the state. Training vastly reduced the pesticide use and the amount of chemicals that could potentially contaminate groundwater.

The definition of IPM evolved as the program developed, from the safe use of pesticides, to reduced usage, to the use of beneficial insects as an alternative. Integrated Pest Management (IPM) was defined (2004) as a sustainable approach to managing pests. IPM practitioners base decisions on information that is systematically collected, as they integrate economic, environmental, and social goals. IPM can be used within the context of both agricultural and urban environments, and is flexible enough to accommodate the changing demands of agriculture, commerce, and society. IPM training has led to a reduction of ninety-two tons of pesticide active ingredients not being released into the environment.

Donna Ellis at an IPM educational outreach at Cornucopia Fest on campus.
New England Greenhouse Conference and Expo

The first New England Greenhouse Conference was held at the Colonial Hilton in Lynnfield, Massachusetts (1972). This was the first time Extension had sponsored a single growers’ conference that brought members from across New England. The two-day conference was a success with attendance exceeding 400 growers. The conference later moved (1998) to its current site in Worcester, Massachusetts.

The 2006 New England Greenhouse Conference and Expo was attended by over 1,800 growers, retailers, and industry representatives from the New England states, Pennsylvania, New York, and Canada. The group recognized (1989) the need to establish an awards program for research and Extension projects. As of 2007 more than $14,000 in projects had been funded.

New England Vegetable Growers Convention

Conceived in 1978 the New England Vegetable Growers Convention was patterned after the New England Greenhouse Conference. The New England Vegetable and Berry Growers’ Association (NEV&BGA) agreed to financially back the convention. In 1979 there were over 1,000 participants. By 1995 the name had changed to the New England Vegetable and Berry Conference and Trade Show with 1,511 attendees.

The 2003 conference relocated to Manchester, New Hampshire, and merged with the New England Tree Fruit Meeting to become the New England Vegetable and Fruit Conference and Trade Show. Farmer-to-farmer discussion groups on popular topics have been held between or after sessions ever since.
The conference represents a close collaboration between farmers, Extension, and others from throughout the region and includes grower, researcher, and Extension perspectives in almost every session. The event is sponsored by the Extension Systems of the Universities of Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont; Cornell University, the Connecticut Agricultural Experiment Station, the NEV&BGA, and the Massachusetts Flower Growers’ Association.

Small Farm Focus

The 1970s decade saw a concerted effort to reach small farm operations with Extension education programs. Deborah Cole, regional Extension agent (1974–1982), was hired to work with producers who grossed $500 to $20,000 per year. Cole worked with 3,000 small or part-time farmers across the state. Program topics included on the farm slaughtering demonstrations, pork cutting and curing, rabbit dressing, game birds, and raising homestead dairy goats. As rural towns developed, zoning regulations related to keeping livestock were addressed.

Master Gardener Program

When the Connecticut Master Gardener program began (1977), Extension launched one of its most exciting programs, comprised of eager learners who became dedicated volunteers. When classes were first announced, they filled immediately, attracting a diverse group of people, ranging from retired professionals to recent high school graduates seeking a career. Urban gardening with youth and adults became a natural partnership for 4-H and the emerging Master Gardener program. Early leadership was provided by Fred Nelson, Extension turf specialist (1955–1984); and Joseph Maisano, Fairfield County agricultural agent and administrator (1962–1990).
The not-for-profit Connecticut Master Gardener Association (CMGA) was established (1987) when forty-five people attended the first CMGA meeting held in the Middlesex County Extension Center office. Robert (Bob) McNeil, Niantic, was elected the first CMGA President. The first CMGA newsletter was published in 1987. The CES twentieth anniversary of the Connecticut program was celebrated (1997) as Connecticut hosted the Northeast Regional Master Gardener Conference for the first time.

When New Haven hosted the Special Olympic games (1995), Master Gardeners worked with young people participating in the event to create the Olympic symbol in flowers.

Certification to become a Master Gardener (2007) required participation in a fourteen-week course, followed by a sixty-hour outreach internship consisting of thirty hours as a supervised intern in an Extension center or at the Bartlett Arboretum. The second thirty hours were spent in an organized community outreach program. Required outreach projects have varied from urban and community horticulture to historical and sustainable landscapes.

Among the requirements to become a certified Advanced Master Gardener (AMG) are forty additional hours of class work beyond the Master Gardener program, and twenty additional hours of supervised volunteer time. Since the AMG program began (2000), 2,832 Master Gardeners and 790 Advanced Master Gardeners have been certified. During 2006 the Home and Garden Education Center in Storrs, in conjunction with Master Gardener volunteers in county Extension centers across the state, responded to over 10,000 questions from the public. During this same period, Master Gardeners volunteered 5,400 hours staffing the county Extension centers.
Marine Advisory Service Leads to Sea Grant Extension Program

In the September 4, 1964 issue of *Science*, Athelstan Spilhaus, oceanographer and University of Minnesota professor, suggested the establishment of Sea-Grant colleges that would parallel the development of the Land-Grant system. The Sea Grant College and Program Act (1966) established a nationwide network to support marine research, education, and outreach programs designed to foster wise use and the development of the nation’s coastal and marine resources.

The University submitted to the National Sea Grant office (NOAA) its first request for funding research proposals and a Marine Advisory Service in the early 1970s. The overall project was to be managed by the UConn Marine Sciences Institute. The project was funded for a year, but was not renewed. However, the Marine Advisory Service component was funded as a stand-alone program until 1982.

George Geer, New Haven County Extension agent and administrator (1955–1982), became (1974) the first Extension community and marine resource agent and the first Marine Advisory Service (MAS) program leader. The program was launched in July 1974, with a $28,000 grant from Sea Grant, National Oceanic and Atmospheric Administration (NOAA Sea Grant), and the U.S. Department of Commerce. The internal focus was beach erosion and acceptance of under-utilized fish species. Lance Stewart, associate marine Extension agent and marine biologist (1974–), and Geer developed programs for fin fishermen, oystermen, lobster operations, marine operators, charter boat captains, and those responsible for coastal management. Administratively housed at the UConn Avery Point campus, the program increased in outreach and financial support. Norman Bender, associate Extension agent (1978–), was hired to add business management components to the program.

The program was directed by Geer from 1974 to 1982, followed by MAS program leader by Stewart (1982–1984), Bender (1985–1994), and Nancy Balcom, program specialist and assistant educator in residence (1991–). Bender served as acting Sea Grant director (1985–1986). Balcom was initially hired as the third Long Island Sound Study (L ISS) public information coordinator. She became interim MAS program leader (1994), and was then named program leader.

Due to fuel shortage, Middlesex Extension Center is closed on weekends, and Monday and Friday evenings.

Connecticut State Energy Office is the first office of this type to be legislatively authorized.
leader (2001). In addition to that responsibility, Balcom handles fisheries, invasive species, and periodic Hazard Analysis and Critical Control Points (HACCP) training for seafood processors (2008).

During the early years, MAS programming focused on commercial fishing, aquaculture, coastal zone management, and marine economic issues. During the 1980s and 1990s, programming addressed Long Island Sound management issues, marine education, seafood marketing, and coastal resources.

Since its beginning, the Connecticut CES Marine Advisory Service has served as the outreach arm of the Sea Grant program. However, not all institutions used this title. By the mid-1990s, for nationwide consistency, the MAS program was re-titled the Sea Grant Extension program.

During the 1980s Jim Wallace, seafood quality Extension educator (1984–1987); and Tim Visel, shellfish and aquaculture Extension educator (1983–1990), joined the staff. Because of its small size, the Connecticut MAS undertook a number of innovative activities involving collaborators and cooperators. Wallace assisted fishermen and retail buyers, such as grocery stores, with selling or purchasing and maintaining a fresh high-quality catch. Visel established an annual Commercial Fishermen’s Forum and was instrumental in instituting the high school vocational aquaculture program in the state.

With changing priorities, Wallace’s and Visel’s positions were redefined when Heather Crawford, water quality specialist (1989–1994), was hired. Key educational partnerships included the K–12 marine education training and the Yale Sea Grant internship program (1994). Chester Arnold joined the program staff (1987–) as a coastal management and processes specialist. He quickly became involved with the National Estuary Program, and led the Long Island Sound Study (LISS) public participation and outreach program. Tessa Getchis, assistant Extension educator in residence (2000–) joined Sea Grant and the Department of Extension to work with shellfish growers.

In Connecticut, Melvin D. Aulston is named the first CES administrator of color at the state level when he is promoted from Extension educator to assistant director for staff training and development. The first Marine Service program leader is hired.
A television documentary titled *Long Island Sound: Worth Fighting For!* (1993) was produced and broadcast by Connecticut Public Television (CPTV). Round-table forums on uses for Long Island Sound resources provided substantial public input. This $87,000 project, co-funded by Sea Grant and CPTV, included a teacher’s guide for classroom use.

**Land Use, Renewable Resources, and Environmental Education**

As the state’s population centers expanded, increased pressure was exerted on the environment. Through the last decades of the twentieth century, Extension expanded its role in land-use education, including wildlife management, and environmental education for adults and youth.

As early as 1972 George Whitham, associate director of Extension (1946–1978); and A.J.R. Guttay, department head, plant science (1961–1974), proposed a staff member position to design Extension land-use education programs that integrated technology with social, economic, and political factors.

**Forest Land Owner Education**

The 1970s Organization of the Petroleum Exporting Countries (OPEC) oil embargoes, soaring gasoline prices, and a skyrocketing demand for home firewood left Americans reeling. In August 1978 Extension offices received a record number of calls on forest management and selecting trees for harvest. Stephen Broderick, research assistant II (1978–2008), was hired with funding from a Food and Agricultural Act Rural Development Title V grant. Donald Francis, Windham
County Extension (1955–1987); and David Miller, associate professor, natural resources management and engineering (1971–2007), co-principal investigators for the grant, created a local forest landowners education association as a model for private sector education. In February 1979 the Eastern Connecticut Forest Landowners Association (ECFLA) was created by unanimous voice vote of the eighty forest owners present at the Windham County Extension Center. Today ECFLA is a successful non-profit 501(c)(3) corporation with over 250 members and a subsidiary land trust. The trust owned and has managed (2007) over 600 forested acres as outdoor classrooms where members learn sound forest stewardship practices.

Urban and Community Forestry

Urban and community forestry projects were a natural outgrowth of programs in community beautification and forest management. From early work by Rudy Favretti, professor, landscape architecture (1955–1987), in developing home landscapes, the natural evolution was community beautification. In 1966–1967 Favretti worked with George Geer on a streetscape in Meriden, Connecticut. Soon more than forty towns were involved in landscape design projects reflecting a new spirit of urban renewal and interest in the environment. County agents and specialists from the Department of Plant Science worked with homeowners on perennial gardens and improved landscapes.

Urban forestry expanded with the 1989 formation of a multi-agency urban forestry group working across sixty-three communities in the state. Broderick, Jeffrey Campbell, Extension associate educator in residence (1988–1990); and Robert Ricard, Extension educator in residence, urban forestry (1991–), worked with town officials on conferences and outreach programs, including the development of a public service announcement and a reference library on urban forestry. An Urban Forestry Board was established in the 1990s, and a volunteer base was developed.

The statewide Meskwaka tree project was one facet of the CES urban and community forestry initiative. Participants were trained and then returned to

The New Britain Herald printed Spanish releases sent by Extension. Two New York City papers for Spanish readers were found on Connecticut newsstands. These were El Diarian-La Prensa and El Tiempo (1971).

1970

Ella Grasso becomes Connecticut’s first female governor.

1974

10,299 Connecticut youth are enrolled in 4-H clubs.
their communities prepared with an educational background on tree biology, law, media relations, fundraising, and marketing. By 1992, 243 urban and community volunteers had been trained through a partnership of the U.S. Forest Service, State Department of Environment Protection, and the Connecticut College Arboretum. This program continues in 2008.

Energy Extension Service (EES)

During the 1970s growing concern over the availability, cost, and increased use of energy resulted in the development of several important Extension programs. Extension’s efforts caught the attention of the state energy office, which was the first legislatively authorized state energy office in the nation (1974). Using an initial grant of $308,000 from the state Office of Policy and Management, Extension and the state energy office collaborated to create an Energy Extension Service (EES) in 1977. The purpose was to encourage energy conservation and to provide education on alternative energy sources. Extension took responsibility for general, residential, and agricultural conservation, while small business and public buildings issues were addressed by other state agencies.

EES became the hallmark residential energy education program in Connecticut. The initial grant supported eleven energy associates housed in ten field offices around the state. A wide-range of activities led to documented energy savings and a permanent reduction in fossil fuel consumption in the state. Some of the educational materials developed, such as the *Greenhouse Conservation Handbook* and *Alternative Fuel Cost* fact sheets, are still used in 2008. Building codes were modified based on program input, support, and testimony. Thousands of residents attended wood burning safety and solar energy workshops.

A public service announcement offering energy saving Wiz Kits aired on the noon newscast on the same day as Connecticut’s Governor Grasso (1974-1980) closed all travel in the state due to a major blizzard. By the week’s end, all Wiz Kits were gone. This project received a Meritorious Service citation from the Major Appliance Consumer Action Panel (1978).
EES was known for its innovation and experimentation. Public service spots were developed on a variety of weatherization and energy-saving techniques on both network television and community access stations, including serialized segments on news programs on Connecticut’s Channels 3 and 8. Buildings were analyzed for heat loss, and valuable information was provided on energy-saving strategies effective in Connecticut. Energy events of interest to the public were communicated in a widely distributed and reprinted weekly newsletter. Twenty thousand copies of a quarterly newsletter titled Energy Update were distributed to state residents. The credibility of CES energy outreach, with its university association, created a trust with clients stronger than other government-funded programs at the time. Connecticut Energy Council for Teachers (CONNECT) was organized by the energy agents, and influenced energy education in schools for decades.

One New Haven magnet school integrated energy and agriculture themes into class instruction. Examples from student homes were used in math classes to teach heat loss and predictive equations. Energy inputs for local agriculture were part of the curriculum as students raised chickens at West Rock Park. Independent evaluation concluded that the interdisciplinary whole-school curriculum integration provided higher student success and graduation rates than might have been expected through more traditional educational approaches.

John Bartok, Extension agricultural engineer (1966–1997); and Robert Aldrich, professor and Department of Agricultural Engineering head (1979–1989), authored the publication *Energy Conservation for Commercial Greenhouses*. Bartok and Palmer authored *Burning Coal*. Bartok became nationally recognized for his work in energy conservation. Bartok and Palmer received (1980) the Blue Ribbon Award from the American Society of Agricultural Engineers for *Burning Wood*, which was judged to be the best Extension publication in the country. Over 300,000 copies were sold over the next few years. They also received a Red Ribbon Award from the Agricultural Communicators in Education for *Burning Wood*.

Outside evaluations on effectiveness were unique to these programs at the time. Through these evaluations, the federal Department of Energy concluded that the Connecticut Energy Extension program was one of the most effective residential energy programs in the country. A 1981 Roper Center public survey found that the majority of state citizens were familiar with the program. Federal funds for energy programs dwindled as fossil fuel supplies increased in the later years of the program. While the Connecticut program formally ended (1982), components of the program were integrated into other Extension efforts for years afterwards.

### 4-H Youth Development Program

4-H programs in the 1970s included economics; jobs and careers; animal, plant, and social science; environmental and natural resources; health and safety; leadership; citizenship education and community development; creative and performing arts; leisure education and communications; mechanical sciences; and energy conservation and development. National interest in computer technology and youth-at-risk was emphasized. Youth-at-risk programs focused on school-age childcare, collaborations within communities, and developing literacy and technology skills. A national study of 4-H alumni revealed that powerful effects of 4-H expansion continued, but young people needed to be given a greater voice in decision making and leadership of the 4-H program.
During 1973 and 1974, 13,000 school-based 4-H club members participated in the chick incubation and embryology projects in Connecticut. While each school used the project for a different purpose, everyone was interested in learning how the fertile egg developed into a lively, healthy chick in a twenty-one-day period.

Connecticut was one of the first states to adopt a policy by which 4-H participants might be members of a 4-H club, a student in a 4-H school program, a participant in a short-term special interest group, or an individual 4-H member. Between 1974 and 1975, 10,299 Connecticut youth were enrolled in 4-H clubs and another 325 were enrolled as individual members. An additional 11,859 youth participated in 4-H school programs and in 4-H special interest groups. The most popular short-term programs were bicycle safety, embryology, plant growth, and human relationships.

The Sojourner Truth Drill Team (1974) was organized in Hartford County. The synchronized marching unit relied on discipline, rhythm, and natural sounds to provide entertainment at parades and other organized performances. The Hartford County Extension Council funded the purchase of equipment and fabric for uniforms. There were eighty-five youths involved with the drill team, assisted by twenty-five adults. The team helped to enhance member’s self confidence and discipline.

The state 4-H professional staff (1975) had been reduced from three full-time positions to one and one-half. The county 4-H professional staff had increased from sixteen individuals to twenty-two plus program aides and program assistants. 122,158 youth enrolled in all 4-H programs including 10,299 in clubs. A total of 3,740 volunteers worked with youth who primarily lived in rural communities.

During the 1970s 4-H professional staff members were successful in obtaining funding from the Comprehensive Employment and
Training Act (CETA) grants to conduct special 4-H health and nutrition education programs. Numerous 4-H teen leaders in New Haven and Waterbury were employed in the 1970s to work in the 4-H program. Teens worked ten hours per week after school, through the CETA in-school work-study program. For twenty-seven years, teens worked in the summer in the youth employment program for twenty-five hours per week. Fifty to sixty teens from New Haven, Waterbury, and Bridgeport worked in after-school programs with funding from anti-poverty agencies. Teen leaders provided an after-school program for seventy-five to one hundred youth at each location. One outgrowth of the strong urban 4-H program was the establishment of the Hill Cooperative Youth Services in New Haven which celebrated its thirtieth anniversary in 2002.

Robert Ferguson, Hartford County 4-H member, participated in the twenty-seventh annual four-day National Commodity Marketing Symposium. Ferguson’s experience in orchard production came from his work at the Auer Farm (now known as the 4-H Center of Auer Farm) in Bloomfield. The Chicago Board of Trade sponsored this program (1978).

4-H Urban Gardening

Community urban gardens have long been part of the 4-H program in Connecticut. 4-H literally took over four major youth garden projects (1978) within the city of Hartford. Funded by a variety of agencies and private foundations, the projects directly employed eighty-five youth. Partners included the Capitol Region Education Council, Comprehensive Youth Work Experience, the San Juan Center, Southend Community Services, Knox Foundation, Connecticut Citizens Action Group, and the Ensworth Foundation, which granted $6,400 for urban 4-H gardening projects.

For the first time (1978), the original site made enough profit to cover the start-up costs for next year’s garden. Youth transported produce to a newly-created farmers’ market in the center of the city. At the opening of the market, the 4-H booth was prominently featured on television.
Talking Bicycle Safety Program

Ed Palmer, associate professor, agricultural engineering (1946–1978), developed the Talking Bicycle, a widely-recognized program in the mid-1970s. Developed in response to parental concern over youth bicycle safety, the program was conducted in cooperation with local schools, police departments, and civic groups. Nearly 32,000 young people participated (1974). Palmer was elected chairman of the Connecticut Rural Safety Council (1961).

The 4-H Center at Auer Farm and the 4-H Development Fund

The 4-H Education Center at Auer Farm, Bloomfield, is owned by the Connecticut 4-H Development Fund Inc., a 501(c)(3) non-profit corporation. The 4-H Development Fund originally had two purposes: fundraising for statewide 4-H programs, and the operation of an educational facility at Auer Farm. Under the leadership of Ronald Aronson, assistant director 4-H and youth (1961–1983), the Development Fund was incorporated (1970) with twenty-four elected members of the board of directors, and twelve appointed Extension employees.

The Fund provided private sector financial support to the 4-H program. Initial fundraising efforts provided a $30,000 contribution to the National 4-H Center located in Chevy Chase, Maryland, and a $35,000 investment fund for Connecticut programs. President Dwight D. Eisenhower (1953–1961) opened the National 4-H Center (1959). A hallway in the wing of the J.C. Penney Center acknowledges the Connecticut 4-H donation.

Auer Farm had been owned by Beatrice Fox Auerbach, president of G. Fox and Co., Hartford, one of the leading department stores in the country in its time. She was a strong supporter of the International Farm Youth Exchange (IFYE) program as well as of teaching leadership skills to women. Mrs. Franklin D. Roosevelt stayed (1955) at the farm for a short time. On November 18, 1955, the main dairy barn burned. Within a year a new and more modern barn was built as a one-story building with a separate hay barn. The entire Auerbach herd

Nancy Weiss is the first female assistant director of 4-H and youth programs, and only the fifth female in the country to hold this title. Jessie N. Hazen, EFNEP supervisor and county administrator, is awarded Distinguished Service Award at the annual meeting of the National Association of Extension Home Economics.
(1967) of 124 cows, bulls, and calves was donated to the University of Connecticut. The property and farm buildings were later donated to the 4-H Development Fund.

The Auerbach’s two daughters and their husbands, Georgette and Richard Koopman and Dorothy and Bernard Schiro (1973), challenged Hartford County 4-H members to make the apple orchard productive again. Edward Merritt, Hartford County 4-H club agent and administrator (1963–1992), with Hartford County 4-H leaders and members, started work in the orchard, selling apples and cider, and incorporating the 4-H program. 4-H orchard sales (1975) topped $8,000, and the 1977 season generated $12,000 in sales.

The Koopmans and Schiros (1976) gave the initial seventy-five acres of the farm to the 4-H Development Fund. Stated in the deed were the following conditions: the land was given to 4-H to use for youth projects, the land was given as long as it was kept in open space, and 4-H could build on no more than four acres in addition to the current building sites.

The Connecticut 4-H Auerbach Farm Education Center was dedicated on September 28, 1978, for the purpose of providing an agricultural-based educational program for children. The Hartford Foundation for Public Giving (1979) provided $68,250 for facility renovations. A volunteer farm committee was established to maintain the operation. Following the death of Harvey Sinclair (1977), Auerbach’s farm manager, John Rowlson, chairman of the Board of the Development Fund, managed the farm for six months at no charge. An early project was the development of an outdoor classroom. A cooperative program was initiated with the University of Hartford, which used some of the existing farm facilities for storage. The relationship between the 4-H Education Center at Auer Farm and the University of Hartford ended (2002) due to the University of Hartford’s budget constraints.
The 4-H Development Fund (1977) hired Jill Hyde as a part-time program director, followed (1978) by eight CETA employees under the supervision of Carl Salsedo, Hartford County agricultural agent (1975–). Gary Curillo was hired as the first full-time, on-site farm manager (1978). In 1980 the full-time staff included executive director Mahlon Arnett, the first educational program director Keith Kohanski, and farm manager Dan Krueger. Since 1977, Elizabeth (Beth) Salsedo, 4-H program specialist (1977–), has served as the educational director at the Center.

The 1979 Hartford Foundation for Public Giving grant provided funding to convert the creamery into a learning center with a kitchen, and to initiate the conversion of the young stock barn into a learning laboratory. The learning center was first used in 1980. That same year, the fall festival attracted 550 people, and a tractor driving school was held. The main dairy barn was renovated, the hay fields were restored, raspberry and blueberry patches planted, and a Christmas tree plantation started (1978). Two farm festivals were sponsored each year: a Spring Fling that was held from 1979 to 1989, as well as the Fall Festival. A corn maze was cut (2002) for the first time in the shape of a 4-H clover.

The mission of the 4-H Education Center is to help youth and adults learn the importance of agriculture and its impact on their lives. Active learning through hands-on experiences focuses on the science of efficient production of plants and animals, and the interrelationship of agriculture and the environment.

Educational programs include Farms Produce Foods for pre-school and children in grades K-3 (2008). There are seventeen lessons that match the objectives in the state science frameworks by grade level. Lessons cover how a cow converts feed into milk, the growth of apples from flowers to fruit, and the use of green plants as a food. The summer program includes hands-on plant and animal lessons, and an interdistrict cooperative program where children from the suburbs partner with children from Hartford. Picking apples and making cider are part of the curriculum. Other programs include The Farmer
as an Environmentalist and The Farmer as a Mathematician. Along with other school systems, the Bloomfield Magnet Preschool contracts for a full year of inquiry science at the 4-H Education Center at Auer Farm. In 1996, 5,000 children, many from the Hartford public schools, participated in educational programs at the farm. In 2001, 17,970 youth participated, at an average program cost per person of $10.75.

After a facilitated strategic planning process (2002), the decision was made to focus the 4-H Development Fund on raising funds for the 4-H Education Center. This would strengthen the private giving for the educational program at the farm. As a result the name was altered to the 4-H Education Center at Auer Farm. The learning laboratory was named the William D. Lowry III Science Center (2002) in honor of longtime volunteer William Lowry, Cromwell.

The descendents of Beatrice Fox Auerbach continue to financially support the center. In February 2006 the remaining half of the dwarf orchard, approximately twenty-one acres, was given to the 4-H Development Fund. In addition the remaining half ownership of four acres, located across Route 185 from the Center, was donated to the Development Fund. Through the generosity of the Auerbach family, the original gift of seventy-five acres has now grown to 125 ½ acres.

State 4-H Leaders Conference

From the 1940s to the 1980s, the 4-H Leaders Conference was a one-day event which provided training for volunteers along with a banquet and a recognition program. From 1985 to 1989, the newly-named State 4-H Forum moved to a two-day overnight event at the Ramada Inn in Mystic, Connecticut. In 1990 the event moved back to a one-day format.

Twenty-seven young people from Japan visited Connecticut through the efforts of the 4-H International Programs and the Labo International Exchange Foundation (1979).

For twenty-four years the Extension Service had been a part of the International 4-H Youth Exchange program. Forty-seven Connecticut young men and women have been delegates to thirty-one countries. Connecticut has hosted 105 delegates from thirty-eight countries (1972).
Volunteer recognition has traditionally been a part of the conference. In the early days, awards given included the 4-H Alumni Award and the 4-H Citation. The 4-H Citation Award was established by the College of Agriculture Extension Service (1959). The people selected for this honor were judged to have made outstanding contributions to the development of the state 4-H program. Recipients were dependable, purposeful citizens, and their character exemplified the high ideals for which 4-H club work stands.

The Leadership Award (1979) replaced the Alumni and 4-H Citation Awards, and was given to outstanding 4-H club leaders. In 1991 the Meritorious Service to 4-H Award, Alumni Award, and the 4-H Leadership Award were presented to 4-H volunteers. Recipients of the 1991 awards included Theresa Fedorchek of Fairfield, Sandra Ahola of Woodstock, Frank Anastasio of Danielson, Bill and Joy Crimmins of East Hartford, Ernest Staebner of Franklin, and Patricia Weingart of Franklin.

Administrative Changes

During the 1970s changes took place that reflected a basic shift in Extension’s orientation and increased the visibility of underrepresented groups in leadership positions. George Whitham (1946–1978) was appointed to the position (1973) of associate director of Extension, following the retirement of Henry Hansen (1943–1973).

Doris Lane, assistant director, home economics (1955–1979), was given (1979) the added responsibility for Extension’s community resource development (CRD) program. She was only the second woman in the country to head such a program. Under Lane’s leadership, CRD programs expanded and received additional funding. CRD programs continue in 2008, integrated with subject matter expertise, in the form of volunteer development, land-use planning, and water quality.

Memorandum of Understanding between CES and DEP is signed relative to publicizing, distributing, and promoting the use of published soil surveys. The agreement provides for in-service training on the use of soil surveys. John A. DiBiaggio becomes UConn’s tenth president.
Anne (Holloway) Rideout (1964–1974, 1978–1992) became the first woman in the country to head the agricultural program of a state cooperative Extension service/system, and the first woman to sit on the Connecticut State Board of Agriculture. At the time of her retirement, she was the longest tenured female designated as the operating director of a state Cooperative Extension System in the country, and one of only four females in that position.

Bob Anderson, just back from the Peace Corps (1964), was the first urban 4-H agent (1957–1962, 1964–1984), with an office in a store front in the Hill section of New Haven. When Anderson transferred to Windham County (1969), Charles Derby was hired as the second urban 4-H associate Extension agent and field coordinator (1974–1979). Wanda Little was hired (1970–2002) as assistant home demonstration agent, a position that included working with Derby to expand the 4-H program, and with Luberta Sims, Extension home economist (1968–1984). Little (1974) was appointed as assistant 4-H club agent in Waterbury. When appointed, Nancy Weiss was the first female assistant director of 4-H and youth programs from 1977 to 1987 in Connecticut, and only the fifth female in the country to hold this title. During Weiss’ tenure six new 4-H programs were added, and more than a quarter of a million dollars of private resources were raised.

As roles on the state level changed, so did local responsibilities. The state Extension council met on April 10, 1972, and approved by consensus the proposal that each county have its own county administrator. The state council would continue with two members and alternates from each county council. An administrator would be appointed to be in charge of offices—in charge of offices on every two counties. The council would have a part in preparing and approving budgets, and the council would review staff members’ performance with the area administrator. These recommendations were to be incorporated in a new uniform Memorandum of Understanding (MOU) to be submitted to all councils for their approval.

Suggested ways to reduce the cost of mailings included using self-mailers instead of envelopes to reduce weight, using third class bulk mailing rates, combining smaller mailings to meet bulk rate minimums, using the smallest envelope possible, and designing publications to fit into smaller envelopes (1974).

Integrated Pest Management program begins under the leadership of Roger Adams.
According to Whitham, educational programs were the lifeblood of the Cooperative Extension Service, and energy conservation needed to become a part of every Extension program. Reversing a previous organizational structure, Extension program leaders were now assigned to work with specific counties rather than by subject matter areas across the state. They served as liaisons between the field coordinator and the assistant director. Coordinators included Ed Merritt, Hartford County Extension full educator and county administrator (1963–1992); and Joe Maisano, Fairfield County agricultural agent and county administrator (1962–1990). This model changed again (1989) as district administrators assumed responsibility for supervision and coordination.

When compared with state Extension faculty and staff members across the country, one of the unique aspects of the Connecticut Extension System is its participation in collective bargaining. The majority of employees are members of one of several collective bargaining units. Since 1976 UConn faculty members, including Extension agents/educators, have belonged to the American Association of University Professors (AAUP). The University of Connecticut Professional Employees Association (UCPEA), founded in 1971, represents professional staff members. Starting in 1981, clerical staff and some EFNEP employees became members of the American Federation of State, County, and Municipal Employees (AFSCME) collective bargaining unit. Administrative positions are classified as “management exempt” and, therefore, are not in a collective bargaining unit.

By the very nature of the Extension federal-state partnership, Equal Employment Opportunity (EEO) and affirmative action requirements have been far more stringent for CES than other sectors of the University. CES has had an affirmative action program since the early 1970s. Nationally, the move to strengthen equal employment and affirmative action efforts brought major changes in policies and procedures. Steps were taken to focus on efforts that would move CES toward greater diversity in faculty, staff, programming, and clientele. Since the CES plan was completed before the University’s, CES also worked with the greater university to develop its affirmative action plan.

4-H Leadership Award replaces 4-H Alumni and 4-H Citation awards.

Deborah King Cole is hired as the first female general agriculture agent in Connecticut.
Spanish-speaking families had unique problems in adjusting to living on low incomes in urban areas. Special efforts were made to provide illustrated, easy-to-read educational materials in Spanish, which were adapted for cultural preferences. These were designed to reach Spanish-speaking groups through Spanish community centers, institutes, mothers’ groups, churches, bilingual schools, adult learning centers, drop-in centers, and low-income housing centers. Press releases were translated into Spanish for newspapers and radio stations featuring news in Spanish. While this specific effort was discontinued as funding ended, new efforts emerged.

In order to ensure gender-based salary equity (1982) among Connecticut CES agents, Rideout requested that the University’s Office of Institutional Research (OIR) work with USDA to develop a model for a salary equity study. The study, conducted on Extension faculty members who were housed in local centers, established the baseline against which future salary recommendations could be made, and developed a model that could be used by other states.

As the 1970s drew to a close, CES began to shift from a service-based model to one that better reflected the community and incorporated changing technologies and mass media.

Programs that focused on the environment, especially conservation in the home, grew in popularity as energy shortages and increased fuel prices became a reality. Land-use education gained importance as the state’s population expanded, and residents looked towards gardens, small farms, and urban and community forestry programs to reconnect with their environment. 4-H’ers benefited from the opening of the 4-H Education Center at Auer Farm.

A shift in hiring practices changed the administrative face of CES to one that better reflected its constituency. Women and minorities were gaining leadership roles, and a new gender-based salary equity model was created.

CES was well-positioned to serve a changing and growing population in the years ahead with new programs and a new outlook.

Eastern Connecticut Forest Landowners Association (ECFLA) is formed.

The maple syrup producers association of Connecticut has 160 members. It was organized in 1977.
Milking demonstration during the annual Fall Festival at the 4-H Education Center at Auer Farm in Bloomfield.
By the early 1980s coping with change had become a way of life. For Cooperative Extension, this included changes related to federal, state, and local budget allocations. The purchasing power of the federal Extension allocation had declined dramatically. A brief national depression and a protracted Connecticut recession led to calls for increased accountability and budget cuts in the public sector.

**Home Economics**

Programs in the 1980’s focused on families coping with stress. Adult and teen communication workshops were conducted. Important linkages were established with the Navy Family Service Center in Groton. In northeastern Connecticut a rural adolescent pregnancy prevention program received federal grant funding, and four full-time professional staff members were hired. A summer youth program was conducted with ten teens employed through funding from an agency for disadvantaged youth.
Program foci in home economics during the decade included hazardous waste, healthy environments, food service training, communication skills, housing availability, and parental education. This included a newsletter series titled *Growing Pains*, focused on sexuality for parents of pre-adolescent children.

**Consumer and Financial Literacy Education**

A needs assessment (1981) indicated that money management education was clearly a strong need in New Haven County. Information on developing a family budget, stretching dollars, and controlling debt were common topics. Audiences included displaced homemakers, participants in job training programs, and people who had lost their jobs. Consumer questions regarding the purchase of home appliances such as refrigerators, stoves, freezers, and room air conditioners were common concerns. Educational programs addressed such varied topics as microwave oven selection and use, estate planning, and home repair. Cooperative Extension home economists and 4-H agents worked together in the development of *Focus on Consumer Issues*, a series of stand-alone lessons for use in high school classrooms and with youth groups.

Partnerships with other organizations have been an excellent way to share expertise and extend the reach of Extension family programming. One major effort was the Women's Financial Information Program. Developed by AARP, the program reached more than 1,000 participants during the late-1980s through a seven-part series that included one or more guest speakers sharing their expertise on a financial topic. This was followed by smaller workshop groups led by pairs of trained volunteer facilitators who guided participants through discussion and workbook exercises. The primary focus was on basic budgeting for widowed or divorced women, and those inexperienced with financial management. Extension home economics educators coordinated the series, presented at least one program, and trained volunteers to lead the discussion groups. Annette Holden (Fitzgerald), Extension home economist (1974–2002); and Faye Griffiths (Smith), assistant Extension home economist (1981–), led this effort.

Upon her retirement, Maria Russell, program evaluation and staff/volunteer development specialist (1955–1957, 1976–1992), stated: “I am in love with the idea that products of the mind [University research] can be used for the development of people and communities.”

*Connecticut population is 3.1 million.*

*Hartford youth participate in urban gardening projects.*
Another key collaboration has been with Northeast Utilities on money management education. Over the years, Extension educators have conducted workshops on basic money management education, and developed materials specifically designed to assist people who were having a difficult time paying their utility bills. Started under the leadership of Elsie Fetterman, professor, family economics and Extension home management specialist (1966–1979), this program went through various adaptations over the years. In recent years family and consumer sciences educators have trained utility company and community agency representatives to provide local workshops.

Housing Issues

With a growing elderly population, Luane Rue (Lange), Extension specialist, housing (1977–2000), initiated programs to adapt homes to better accommodate physical limitations, and to create a safe environment for physically-limited residents. The lack of a statewide directory for elderly housing resources prompted Rue to close the void. Programs in furniture refinishing, a popular legacy from the previous specialist, Evelyn Hartley, associate professor, home furnishings (1946–1976), were continued. A new program taught people to train others in furniture refinishing, serving as a model for the train-the-trainer teaching mode. In addition to housing programs for those who were physically disabled, Anita Malone (Shaffer), senior Extension home economist (1962–1988), provided leadership to the development of a traveling wardrobe for those confined to wheelchairs.

Rue was invited to join the Connecticut Department of Housing advisory committee, eventually working on a sub-committee addressing affordable housing. Her research focused on the laws and regulations for manufactured mobile housing. The report gained the attention of Mary Mushinsky, State Representative, 85th District, Wallingford (1981–). Though regulations changed, eight years passed before legislation identifying manufactured mobile housing as real estate became law. This was a major underlying issue identified by Rue.

Participants at an Extension event on energy-saving windows.
Regulations changed and mobile park owners no longer had a monopoly on the sale of new mobile homes, though they did maintain the final say regarding the saleability of existing units. Regulations were rewritten to ensure that health and safety guidelines were based on identifiable criteria.

Extension housing programs took a practical form in both urban and rural areas. Quebec Square in Brooklyn, a dilapidated public housing complex, was refurbished (1979) through funding from five grant sources. Donald Francis, community resource development Extension agent (1955–1987); Rue, and Karen Kuchta (Filchak), Extension home economist (1977–), developed a tenant education series for basic home care. During the process a sense of community developed that led to a community garden and playground.

Agricultural statistics for Hartford County (1984) showed 712 farms with the average size of ninety-five acres.

- Land in farms: 67,606 acres
- Land in crops: 41,344 acres
- Woodland: 14,012 acres
- Pastureland, (other than crops): 3,847 acres
- Land in house lots, ponds, roads, wetlands: 8,403 acres

Urban Gardening

The Bridgeport urban gardening program was established (1986) through a yearly grant of $75,000 secured from USDA. In the 1980s Bridgeport displayed typical urban problems related to poverty, financial difficulties, crime, and vacant lots littered with trash and garbage. Urban gardening created an alternative to blight. Gardens gave city residents with limited incomes an opportunity to raise part of their food. Program participants shared land, water, garden tools, seeds and seedlings, and attended educational programs. As a result, many hungry, low-income families and individuals transformed littered, vacant lots into productive community gardens.

The average American worker earns $19,500.

The Agriculture and Food Act of 1981 passes.
garden where vegetable crops flourished. For every dollar invested, participants raised $3.00 worth of produce. More than ninety percent of the participants were low-income minorities and urban dwellers.

Farm-City Event

The Connecticut Agricultural Information Council (CAIC) initiated the idea of reorganizing Farm-City Week. On February 27, 1987, Norma O’Leary, president of the Connecticut Farm Bureau, convened one of the council’s first meetings, held at the Hartford Regional Market. The committee agreed to work to bring agriculture into schools and enhance summer farm tours. The first Farm-City event was held in Hartford at Bulkeley High School November 15–17, 1988. A 1989 Farm-City open house was hosted in Waterbury, where the mayor arrived to participate in the cow milking contest wearing a complete yellow rain suit.

The event provided school children a farm experience. Over the course of three days, thousands of local children learned how to milk a cow, make butter, care for honeybees, and learned the origins of the food they eat. Master Gardeners provided home gardening hands-on experiences. Events were conducted by a diverse group of agricultural producers and agency representatives at the same location for two years. Then the event rotated to a new location in another part of the state.

The 2007 Farm-City event was held at the Jones Family Farms in Shelton. Four learning stations included “a farmer needs the right soil,” “plant the variety that will grow the best,” “know about harmful and beneficial insects,” and “learn about wildlife on the farm.”

Urban gardening allowed city dwellers to grow some of their food.
4-H Youth Development Programs

In 1980, 105,873 youth were enrolled in Connecticut 4-H with 6,886 members in clubs. A total of 3,488 volunteers worked with youth who lived mostly in rural communities. The Connecticut 4-H program staff consisted of twenty-four professionals and paraprofessionals in twelve offices across the state. 4-H Citizenship Day was an annual event in Hartford that attracted 150-200 youth (1980). 4-H members visited state representatives and senators, met with lobbyists, went to the state library and museum, and spoke with a judge.

Over 63,000 youth participated in eight 4-H school-based programs in Fairfield County (1980). The programs included veterinary science, fire prevention and safety, the environment, embryology, bicycle safety, food and nutrition, career exploration, and plant science. All of the programs were designed to teach basic life skills. Programs were taught in cooperation with local professionals, including veterinarians, firefighters, and conservationists.

Gardening

Seven acres of urban gardens involved more than 100 Hartford city youth with 4-H garden projects (1980). Working with the Hartford Food System, 4-H professional staff members and youth participated in the development of community gardens, farmers' markets, and nutrition education. John Alexopoulos, Knox Parks Foundation director (1970–1977), provided technical advice. Teenagers were employed through the federal Youth Job Corps. 4-H’ers became regular vendors at the Farmers’ Market at the Old State House in downtown Hartford. One 4-H staff member at the time said:

It’s a good feeling to help a kid sell seventy-five pounds of beans in a few hours. It’s an even better feeling to remember he was the one who planted the seeds, moaned when he had to carry water, swore when he had to weed the plot, and promised never to look at another bean after picking them. But he was smiling when they were fetching fifty cents a pound!

Ten 4-H club members were working with a small group of children, most of whom were handicapped, on a 4-H nutrition project. The 4-H club provided a peer group which supported the youth, making them feel accepted and part of a team (1981).

National unemployment reaches 9.7%.
Northeast Center for Rural Development is established.
Master Gardeners worked with 4-H professional staff members to introduce Growing Vegetables the 4-H Way in New Haven and Hartford. Working in pairs, volunteers met with the superintendent of schools in their neighborhoods and asked permission to conduct the program. Teams then visited grades three, four, and five to recruit students. Four instructional meetings were held over four months, and covered the topics of choosing a site and the right plants, soil testing, fertilizing, composting, and planting; weeding, mulching, staking, and watering; and harvesting, storing, and exhibiting at the 4-H fair. Packets of seeds were offered to students at a reduced price.

Double Dutch

Double Dutch brought urban and minority audiences into the 4-H program in the 1980s, as the first large privately funded Extension urban youth program for Connecticut. Programs were conducted in Hartford, Windham, New Haven, and Bridgeport, often in cooperation with the Girl Scouts. In Windham 283 youth participated in the program that also included a nutrition education component. In Bridgeport 794 youth participated, while the New Haven Soul Patrol conducted Double Dutch programs with 200 youth in the Hill Section of the city. Double Dutch stressed physical fitness, teamwork, and fun. The Hartford program included teams from the American School for the Deaf.

For the first ten or twelve years, United Technologies Corporation (UTC) provided funding. Connecticut National Bank then became the sponsor for three or four years. The first two-day World Double Dutch Competition (1986), sponsored by UTC, was held in the Hartford Civic Center.
4-H members in the program were required to maintain a C average or above in school to participate, and had to show their report card to their coaches. In order to travel with the program, youth had to maintain a B average or better. Connecticut Double Dutch members competed in Double Dutch tournaments in Germany, Japan, Canada, Russia, Poland, France, and England.

The World Tournaments were held on college campuses in order to expose youth to campus life, and to give them time to talk to academic recruiters. During the World Tournament, youth were also competing for scholarship money. Connecticut 4-H'ers appeared on Good Morning America, the Today Show, That's Incredible, and the Johnny Carson Show, and performed at Disney World.

Beardsley Zoo 4-H Club

A 4-H summer camp began at Beardsley Zoo in Bridgeport (1987). The camp gave seven to twelve years old children an opportunity to work with animals in the children's zoo. These included pigs, chickens, rabbits, cows, goats, ducks, sheep, and llamas. Groups of twelve to fifteen children were taught the importance of proper animal husbandry and general health checks. At the close of each camp session, members gave presentations to their family members on the animals of their choice. The summer camp received such a great response from parents and children that the Beardsley Zoo 4-H Club was born (1990).

Two leaders and fifteen members meet twice a month during the school year. A variety of activities in the summer keep 4-H'ers connected to the zoo. Since 1990 the club has grown to thirty members (2008). The Children's Zoo has become the New England Farmyard, and the animal species have expanded to include porcupines, geese, reptiles, and amphibians.
Multi-disciplinary, Issue-based, and Regional Programs

Historically, locally-identified needs have driven Cooperative Extension System program decisions. Discipline-based programs in agriculture, home economics, 4-H youth development, and community resource development addressed these identified needs. Since the early days of Extension, subject matter specialists in academic departments on campus developed programs while county-based Extension faculty implemented programs.

As everyday issues became more complex, Extension shifted to issues-based programming (1988). Issues were defined as “matters of wide public concern arising out of complex human problems.” Extension programs identified human problems in their context. The context of the problem was frequently outside Extension’s organizational structure, and without regard to subject matter, audience, or method of program delivery. This shift in the program development paradigm broadened the scope and effectiveness of Extension education. Examples included Avian influenza (AI), Water quality, the Coverts Project, Family Community Leadership (FCL), lead prevention education, New England Institute of Extension Education (NEIEE), New England Extension Consortium, New England Rural Leadership (NERL), and Extension Disaster Education Network (EDEN).

Avian Influenza (AI)

The effectiveness of Extension’s multi-disciplinary issue-based approach was evident when Avian influenza (AI) threatened the Northeast (1983). Although mild at first, AI changed its character and became a killer of broiler and laying hens in Pennsylvania. The virus mutated to a fowl plague, and demonstrated its ability to spread and invade in a devastating manner.
The Northeast poultry industry included turkey growers, fancy fowl breeders, pet bird owners, and pigeon fanciers. If the poultry industry was going to be in a position to protect itself, quick action was needed by all parties to help prevent the spread of Highly Pathogenic Avian Influenza (HPAI).


Over one weekend mailing lists were updated and computerized. Maps of industry and farm locations were compiled and feed store locations were pinpointed. Instructions and signs were presented to feed representatives and feed store managers to alert small flock owners. Daily status reports from USDA regarding the influenza situation were transmitted by email. Training programs were held internally for CES poultry specialists, administrators, county agents, and, externally with state agencies (DOA, DEP, State Police, Civil Preparedness, Consumer Protection, and the Governors’ aides in the Northeast), commercial poultry producers, live poultry haulers, pigeon flyers, feed managers, and vocational agriculture (VoAg) instructors.

The Connecticut Attorney General’s office rewrote relevant state statutes that passed unanimously as the first item of business before the 1984 General Assembly. They were signed by Governor O’Neill the same day. Poultry and allied industry people changed their methods of operation to include disease prevention techniques and strict isolation of poultry flocks as their top priorities. A special administrative unit of the Governor’s office was set up in the event that a disease alert became necessary.
In the years following the 1983 Pennsylvania outbreak, periodic sampling of live bird markets for AI was conducted in New York, Boston, Providence, and Connecticut. Alexander (Bud) Gavitt, agricultural news editor (1961–1992), acted as spokesperson for the Extension poultry team and fielded forty-five requests from newspaper, radio, and television reporters.

Water Quality

Groundwater protection evolved as an important state public health issue. A legislative inquiry led to an initial study (1984) to determine the extent of contamination in agricultural areas from the pesticide Ethylene Dibromide (EDB). CANR faculty and staff members collaborated with the Connecticut Department of Environmental Protection (DEP) to identify farmers willing to install monitoring wells that identified the nature of the EDB contamination.

By the late 1980s the federal government had recognized the need to address emerging water quality issues in agriculture. USDA Smith-Lever 3(d) funding allocated resources to each state for targeted watershed projects (1989). Connecticut Extension-led projects were conducted in the Housatonic and Scantic watersheds. This federal funding continued until 2000 when a legislative change mandated the integration of 406 projects with funding to be awarded on a regional competitive basis.

Water quality issues created multi-disciplinary connections within Extension. Karen Kuchta (Filchak), associate Extension home economist (1977–), received the National Association of Extension Home Economists (NAEHE) Grace Frysingr Fellowships (1986) to study the impact of home water quality issues. A water quality focus was a natural evolution from household hazardous waste programs of the past. Through collaboration with Roy Jeffrey, associate Extension agent (1980–2008), Kutchta provided leadership for the Connecticut water quality team. Team members partnered with agencies such as the Region One Environmental Protection Agency (EPA), state Departments of Health and of Environmental Protection, and the other five New England land-grant universities.
institutions. Local municipalities such as East Hampton, East Lyme, Branford, Pomfret, and Brooklyn, as well as organizations such as the Lake Pocotopaug Residents Association, and private individuals partnered in educational programs. This work continued in 2008.

Changes in the 1997 Farm Bill created new opportunities for national programs that were designed to better integrate research, education, and Extension efforts. Water quality was one of these areas. The newly revised (2000) water quality 406 program (formerly part of the 3(d) funding) resulted in the creation of a New England regional program to improve and protect water quality. This was accomplished through the use of science-based knowledge, building on strengths and partnerships of the six New England land-grant universities. Over the next eight years, the universities pooled research and resources, shared lessons learned, and worked collaboratively while streamlining efforts. Lessons learned from successful state-based programs conducted by UConn faculty and staff members have been implemented in the other five New England states. Of particular note was the implementation of water quality protection efforts carried out through land use and natural resource management programs conducted by NEMO and the Green Valley Institute, agricultural nutrient management for dairy producers, and sustainable landscape and turf management programs for communities and residents.

The Coverts Project

In early 1983 Stephen Broderick, research assistant II (1978–2008); and University of Vermont Extension forester Thom McEvoy were exploring more effective techniques in their respective states to reach private forest owners seeking to be active, effective stewards of the land. Together with Extension National Program Leader Andrew Weber, and Leslie Snyder, professor, communications science (1986–), a new outreach program was developed based on Evrett Rogers’ diffusion of innovations model. Dubbed

Groundwater contamination is recognized as an important public health issue. A gallon of gas is $1.09.
the Coverts Project, the program sought forest-owning opinion leaders who were trained, networked, and supported as a statewide cadre of peer-to-peer educators. The Ruffed Grouse Society provided funding. The first Coverts Project cooperators were recruited and trained in both Connecticut and Vermont in 1984.

Over the ensuing years, more than 500 forest cooperators have been recruited, trained, and supported in Connecticut. These cooperators have collectively owned and/or managed well over 100,000 acres of forest, and nearly 20,000 people have toured and viewed the forest stewardship practices in place on these lands. At least 11,000 other forest owners have received one-on-one information from cooperators, which they applied in managing over 50,000 additional acres.

Family Community Leadership (FCL)

The Family Community Leadership (FCL) program blended across discipline lines, forming a partnership between the Extension Homemakers Council and the Cooperative Extension System. Under the leadership of Esther Shoup, Tolland County Extension home economist and administrator (1975–1992), the council submitted a proposal to the W.K. Kellogg Foundation to develop community leaders (1988). The resulting grant initiated the FCL program.

Over the next six years, Connecticut’s FCL team provided thirty class hours of leadership skills development annually to community leaders in training. The course focused on the topics of leadership and communication, working with groups and team building, issue analysis and resolution, community affairs, public policy and volunteerism, and techniques for teaching others.

Participants included current and emerging community leaders who desired additional experience and knowledge in leadership and public affairs. Participants represented a variety of educational levels, ethnic diversity, and geographic locales from large cities to rural areas.
Connecticut had 108 graduates from sixty-three communities who completed the initial training. Many of the FCL program participants went on to influence community decisions. One graduate established Organized Parents Make a Difference, an after-school program for 1,500 children in six Hartford schools. Another FCL participant from Somers expressed her concerns to town officials regarding the actions of a housing developer, thus stopping a planned development. A physicist FCL participant tried team building at his place of work and because he was so successful he took additional leadership training. After retirement, he used his FCL skills as a trainer for the Connecticut AARP programs.

Environmental Health Outreach and Education

From its start, environmental health has been a multidisciplinary, issue-based program. Extension faculty and staff members have worked with federal, state, and local government agencies, Native American tribal nations, community-based organizations, nonprofits, and other University departments. These collaborations have raised awareness of such environmental health issues as lead poisoning, asthma, and radon.

Since 2004, many of these programs have been coordinated under Extension’s Healthy Environments for Children Initiative (HEC). HEC develops training materials and programs for children and adults, including books, instructor manuals, fact sheets, informational brochures, public-service announcements, videos, and websites. HEC’s materials and programs are used by agencies and organizations across the country and internationally. Most are available in English and Spanish.

HEC’s efforts have been recognized by professional, collegial, and national organizations. In partnership with the Penobscot Indian Nation (2005), HEC received the U.S. Environmental Protection Agency Children’s Environmental Health Recognition Award for How Mother Bear Taught the Children about Lead.
a lead-poisoning prevention curriculum for Native American children. HEC also received the 2008 UConn Provost’s Award for Excellence in Public Engagement for its lead-poisoning prevention program.

New England Institute for Extension Education (NEIEE)

The New England Institute for Extension Education (NEIEE) grew out of a need for newly hired Cooperative Extension employees to be well grounded in the principles of Extension work, history, and methodology (1984). Few New England states had academic programs in Extension education. County-based Extension agents (now called educators), as well as specialists, were expected to have specific subject-matter expertise. The composition of the participant groups proved to be a challenge to the planners. Maria M. Russell, program and staff development specialist (1955–1957, 1976–1992), was one of the first instructors.

New England Extension Consortium

The presidents of the six New England land-grant universities initiated discussions (1988) of regional cooperation among their institutions. At that time, the New England Cooperative Extension Systems had been involved in multi-state activities for over twenty-five years. Agreements ranged from informal consultations to institutional contracts, primarily related to agriculture. However, the extent of this cooperation and collaboration was not well documented. In May 1988 the New England Extension directors presented to the presidents a draft report that identified current multi-state activities.

After extensive discussions with a variety of Extension constituencies in each state and a review of options, the directors presented the New England presidents with a shared vision for formal regional cooperation: the New England Cooperative Extension Consortium. Dale Lick, president, University of Maine (1986–1991), agreed to work with Extension directors to develop a formal plan of institutional cooperation. On January 24, 1990, the presidents of the New England land-grant universities unanimously endorsed the project and agreed to

Federal Extension Service-USDA sets in motion the national priority initiatives process.
The first two-day world Double Dutch competition is held at the Hartford Civic Center.
contribute to its funding. Their support was followed by funding from the W. K. Kellogg Foundation, the Northeast Regional Center for Rural Development, and the Extension Service-USDA.


Other cooperative efforts among CES personnel in New England have included the New England Poultry Compact for sharing expertise and resources of poultry specialists. The regional conference for employees in EFNEP continues to be an ideal regional collaboration with EFNEP’s multi-state uniformity, federally mandated reporting, and focused subject matter content.

**New England Rural Leadership (NERL)**

By the 1980s the process for identifying Extension program priorities was changing. With limited staff members, programming became more focused as a way to maximize resources. The focus was on problems of widespread public concern where there was the potential to make an impact for the public good. Public policy was one of those areas.

Originally, the W.K. Kellogg Foundation provided national funding for an agricultural leadership program. Funding was expanded to provide state grants for generic leadership programs to encourage grassroots participation. The New England Rural Leadership (NERL) program was developed by Cooperative Extension in the six New England land-grant universities in cooperation with the Northeast Center for Rural Development (NCRD) (1982). NERL was designed in response to requests from community leaders seeking the knowledge and skills necessary to address public policy concerns. Some participants were involved with local, state, and national decision-making, while others had never been involved in community leadership roles.
The purpose of the program was to help rural communities meet the need for capable, knowledgeable people willing to take an active role in public decision-making. The program provided real-life educational experiences for potential community leaders. A six-state grant of $752,000 from the W. K. Kellogg Foundation provided financial support for four years.

During the first year, twelve Connecticut participants attended five weekend workshops that focused on local and regional problems related to the impact of rapid change in rural areas and problem-solving processes. In the second year, regional public problems were addressed in a national context.

The initial CES representative to the NERL organizing committee was Russell, followed by Rue, and then Roy Jeffrey. By the 1990s CES had developed stakeholder meetings to encourage interaction among community leaders, university specialists, and Extension field faculty members. The process focused on specific themes that prompted the active engagement of participants.

Extension Disaster Education Network (EDEN)

The Extension Disaster Education Network (EDEN) is a national collaborative multi-state effort. EDEN’s mission is to share educational resources through interdisciplinary and multi-state research and educational programs. Topics addressed included disaster mitigation, preparation, response, and recovery; anticipation of future disaster education needs and actions; timely and prompt communications; and delivery of information that meets audience needs.

Started in 1995 Connecticut formally joined EDEN in October 2000. By 2006 all fifty state land-grant institutions were members. Resources and expertise are widely shared during times of regional, national, and international disasters affecting the public, such as 9/11 and hurricanes Rita and Katrina. Through EDEN, Connecticut teams work with other states to facilitate and coordinate educational assistance to affected areas, including handouts for refugees; connecting experts on topics such as mold, hay lifts, and trauma to children; and rebuilding electronic communications.

Connecticut is ranked forty-seventh out of the fifty states in the percentage of within-state financial contributions to Extension.

The Bridgeport urban gardening program is established.
Administration

Electronic Communications

One of the most exciting changes of the early 1980s was the potential use of electronic technology on a much broader scale. A Cooperative Extension committee explored the potential uses of computers. Recommendations included using the technology for administrative as well as program support.

Extension was one of the first units of the University to develop an electronic bulletin board server. In the 1990s this was converted to a remote dial-in server as an on-and-off campus network evolved. A dial-up network system provided remote access for county Extension offices and programs. One example was when early adopters of innovations in home economics, forestry, and agricultural economics worked with clientele on spreadsheets.

While technology was rapidly changing, reliability and speed were slow. Hands-on training sessions for Extension employees were conducted under less than desirable conditions, including the lack of real computers. Paper copies of computer keyboards were used to teach the fundamentals of using a keyboard.

Computers brought a new dimension to Extension. As communication became more instant, the answers to complex problems were a click away from Extension specialists and their audiences. Continual training and support were critical for the effective use of technology, but finding the financial resources to support rapid technology change was a challenge.

Before browsers and the visually oriented World Wide Web, a data server computer provided data connections to a bulletin board service and a CES electronic mail system. The 1988 installation cost per Extension center for each computer was $12,000, plus yearly line charges. In 2008 CES networks operate through switches and electronics that are part of the University network or the local telephone company. Since 1988 data communications transfer rates have increased dramatically from Storrs to Extension centers around the state. College networks have shifted to data servers that hold Extension plant identification databases, maps, and downloadable fact sheets. While fax machines and label makers were innovative (1988), they have been replaced by universal email.
and centralized mailings. Links to world-wide data sources connect to massive, heretofore unimaginable knowledge sources seemingly without limit.

Programs built on new technologies included administrative and program newsletters, television, radios, and 4-H publications. Rideout introduced *Extension Update* (1988), an administrative newsletter, periodically distributed to all faculty and staff members with Extension appointments and to state Extension council members. This newsletter continued until December 1985 when X-10, an internal component of a total marketing plan, was inaugurated. Coordinated by Carole Fromer, senior Extension agent (1965–1997), the new communications piece was described on the masthead as “a newspaper by, for, and about the UConn Cooperative Extension Service.” The loss of key staff members ended the publication of the newsletter (1989). Rideout then initiated an administrative newsletter titled *Bi-Weekly Briefs*, which continued until her retirement (1992). *Briefs* not only contained news, but also conveyed operational policies such as public access to organizational mailing lists, consulting in state vs. out-of-state, appropriate relationships with outside organizations, and areas of potential conflict of interest.

Created in the fall of 1989, the *4-H Discover Series* provided activities for adults and children to work together to build self-esteem and positive relationships. The program concentrated on at-home activities with two opportunities each year to participate in related group activities. Open to youth ages seven to twelve, the series was designed for the out-of-school and out-of-child care hours. A newsletter with the current month’s activity was mailed along with an activity record sheet. Topics included how to build a dish garden, grow sprouts in the kitchen, adopt an insect, build model rockets, and create puppet fun.

Ronald Aronson, assistant director, agriculture and community resource development (1961–1983), wrote that the Extension agent was responsible for his or her own program. The county administrator was responsible for the county program, and the assistant director was responsible for the program area. The associate director was responsible for the total CES program. The Dean and Director position was responsible for the College, including Extension, teaching, and research (1981).

Black Monday. The stock market crashes.

A year-long study revises CES’s goals and mission statement.
Clientele had access to media sources which required new knowledge and often action on the part of Extension. CES staff members learned to operate equipment necessary to produce television programs, as technicians often were not available on campus or in television studios.

The University radio studio in the W.B. Young Building had closed in the late 1970s or 1980. Educators had worked with the University radio and television staff members to produce family living and agricultural programs that were aired around the state. They also developed programming for community television.

In the early 1980s when local cable stations were first producing programs, eighty consumer education segments were developed and broadcast in western Connecticut over a two-year period. Lynne Grant, Fairfield County home economics educator (1976–), participated on PM Magazine, a Connecticut television program, providing weekly consumer reports. Initially written and produced for listeners in western Connecticut, Consumer Minute, a radio segment, aired twice daily. By the end of its sixteen-year run, the listening audience had expanded to reach southwestern Connecticut and eastern New York State. UConn media services later produced and distributed Consumer Minute to radio stations statewide.

Throughout the 1960s, 1970s, and early 1980s, 4-H publications were available for purchase through the College of Agriculture and Natural Resources bulletin office (now called the Resource Center). Cooperative Extension specialists either authored these publications or the information was ordered from other states. In turn, local Extension centers ordered publications from the state 4-H office or directly through the bulletin office. These documents were then sold or distributed at no cost to local citizens. A national 4-H juried curriculum system was created during the 1990s. In 2008 citizens order directly from the local Extension center, the Resource Center at Storrs, or National 4-H Council.

A 1983–1984 Report to the President identified 91.89 full-time equivalent College of Agriculture and Natural Resources faculty members with an Extension assignment were located in Storrs and in twelve offices throughout the state. In addition, 7,863 trained volunteers contributed 364,136 hours of time to educational programs. Grants and contracts secured that year totaled $598,618.
Federal and State Changes

Historically, Extension program priorities were determined primarily at the local level. By the mid-1980s, federal budget allocations had become increasingly linked to national concerns and earmarked to address special needs, such as youth-at-risk, water quality, and integrated pest management. In response to increased accountability for all publicly-funded programs, USDA assumed a more directive role in the federal-state partnership.

During the 1980s the federal reporting process required a count of clientele contacts by racial and ethnic group, by program area, and by professional or paraprofessional staff, resulting in a severe workload burden. Ninety-five percent of the agriculture and natural resource contacts were of white, not of Hispanic origin, while less than 1 percent were of black, not Hispanic origin, or Hispanic (1985).

The federal Extension Service-USDA (1986) set in motion the national priority initiatives process. Cooperative Extension focused its resources on issues critical to the economic, social, and environmental progress of the country. The Extension commitment to urban and special audience needs was reinstated, and national priority issues were defined.

A new national mission statement reaffirmed research as the basis for CES programs, and emphasized education and information focused on issues, rather than bound by subject-matter disciplines, audiences, or geographic boundaries. Nationally, Extension reexamined its role and the need to modify its organizational structure and programming in light of federal and state changes and new legislative mandates. Following a year-long internal study (1987) with input from more than 1,000 individuals, the following formal, revised mission statement was proposed:

The mission of the University of Connecticut Cooperative Extension System is to: improve the economic and social well-being of the people of Connecticut by applying research and knowledge to critical issues related to community development, family living, food and fiber systems, human health and nutrition, natural resources, and youth development.
While used internally, the revised Extension mission statement was never formally approved by the University. Throughout this period of environmental change and organizational transition, the Connecticut Cooperative Extension System demonstrated its strength and flexibility, while holding fast to its core values focused on the public good.

Doris Lane, assistant director, home economics and community development (1955–1979) retired, completing a career that had infused new energy and direction into CES programs, especially in home economics. Rue became interim program leader, a post she held until Phyllis Pirner, associate professor and assistant director, home economics (1981–1984), was hired.

Connecticut ranked forty-seventh out of the fifty states (1986) in the percentage of within-state financial contributions to Extension. The state provided 47 percent of the CES budget; the federal government provided 43 percent; and grants, contracts and private support provided 10 percent. With the dissolution of county government in 1960, the state, through the University budget process, was to assume the county portion of the funding. The federal statute required a minimum of a dollar-for-dollar match of state to federal funds. Act 89-216 provided for the state treasurer to pay a minimum of $2,000 annually to an Extension organization in each county (now called Extension Councils). To receive these funds, the local sponsoring organization of Extension was to raise at least $1,000 in support of the Extension programs, providing an offset for the lack of county funding.

The direct appropriation of federal Smith-Lever funds to targeted Extension programs enabled Connecticut to become engaged in new educational areas. Referred to as Smith Lever 3(d), these funds required that a state proposal to address a national issue, such as water quality, be submitted to USDA for approval prior to the allocation of funding. Targeted funds were another step in focusing state programs on national priorities.

As a result of reduced purchasing power from federal funds, faculty and staff members increased efforts to seek outside grants. This approach resulted in the hiring and retention of personnel on a project-by-project basis. The loss of

The federal Smith-Lever appropriation was $241,158,000 (1985). By 2006 that line item in the USDA budget was $272,973,000, an increase of 13.19 percent.

| Extension Update is introduced. | George H.W. Bush wins the presidential election. |
permanent funding reduced Extension’s ability to hire tenure-track educators. As Extension educators developed specific areas of expertise, they strengthened their relationships with campus academic departments focused on the University’s research and teaching missions. Extension educators’ roles began to change from those of information providers to program developers, managers, and fundraisers.

Known for the quality and breath of educational publications, Connecticut Extension filled requests from around the globe. Until the 1980s most Extension publications were free to consumers. The confluence of tighter tracking of postal expenses by the U.S. Postal Service (1982), decreasing budgets, increased printing charges, and changes in the faculty promotion process that focused on peer-reviewed publications combined to drive the decision to implement a partial charge for the printing of selected high cost CES publications. A 1988 policy defined charges that could be assessed for Extension program delivery.

Newer ways to communicate continued this trend. Print publications (2008) are most often distributed for a specific program. Two examples of this change are funding from the Department of Social Services for *Birth through 5 News*, and the DEP support of the *Best Forest Practices* manual. However, at no point in the history of CES has a citizen been denied access to an educational material based on the person’s inability to pay. As the popularity and availability of Internet access has increased, the number of publications distributed in hard copy has decreased.

**Volunteers Support Programs**

Extension has a rich history of public policy education, including work with volunteers through the Council on Agricultural Research, Extension, and Teaching (CARET) of the National Association of State Universities and Land-Grant Colleges (NASULGC). Established in 1982, CARET members are selected...
and funded by the state land-grant institutions. CARET provides citizen support of the land-grant philosophy and its inherent programs. Appointed by Dean Edwin Kersting, the first CARET representatives from Connecticut were Charles Dimmock (1986–1988), a farmer from Salem; and Eugene (Gene) Freund (1986–1989), a dairy farmer from East Canaan. Rosemarie Hice, Stafford Springs, has served as the Connecticut CARET representative since 1990.

In the mid-1980s the Extension home economics program, traditionally composed of scores of homemaker clubs, transformed itself in keeping with the radical changes being felt in society. The interests of women were turning from matters of the home to leadership development and the teaching of organizational skills. In August 1982 at the annual meeting of the National Extension Homemakers Council, Inc., later known as the National Association of Family and Community Educators, 230 Connecticut homemakers representing fifteen clubs joined over 600,000 Extension homemakers for the Council’s annual meeting. Connecticut became a member unit of the national organization of Extension Homemakers.

Program Reviews and Plans

The latter part of the 1980s was one of organizational introspection. Leaders in public institutions were being held more accountable for program results. Budget reductions and personnel cuts were the norm. Higher education was in a position of organizational retrenchment, and critical decisions were made regarding the allocation of resources.

Part of the accountability process was the development of academic plans and program reviews to justify the continuation of funding. Recommendations from planning documents, changing program needs, the changing role of USDA, the potential impact of electronic technology on program delivery systems, and budget constraints resulted in organizational and program decisions that dramatically impacted the future of Cooperative Extension.
The University (1984) recognized CES as one of twelve university programs of excellence. That year, *Opportunities for the ‘80s* listed:

The maintenance and strengthening of the Cooperative Extension Service as one of the most significant recommendations related to the University’s responsiveness to the needs of the state. The report also recommended that: “Because of its importance to the citizens of the state, the program should receive a greater share of state general fund(s), and should receive high priority in new funding requests.

Also (1984) the New England Association of Schools and Colleges (NEASC) accreditation report for the University cited the Cooperative Extension as one of eighteen University strengths. The report commended Extension as a diversified, high quality program, meeting the needs of the state.

Hugo H. John, dean and director, College of Agriculture and Natural Resources (1983–1987); and Rideout appointed an Extension blue ribbon task force to develop a long-range plan for Extension (1986). The report became the foundation for the Extension component of the 1988 University academic plan, moving Extension toward the twenty-first century.

Recommendations from the task force including increased budgetary support, changing the organization’s name, establishing issues-based programming teams, considering new program and administrative structures, improving support services, increasing electronic technology linkages, increasing relationships with academic departments, and reviewing the location of Extension facilities.

On July 6, 1987, Governor William O’Neill signed Public Act 87-493, which established a legislative committee to study the Contributions of the University of Connecticut Cooperative Extension Service. The seventeen-member legislative task force reviewed the scope of Extension’s accomplishments and funding for Extension.

According to the Connecticut Governor’s Council on Voluntary Action, the Extension System had the largest volunteer program in the state with over 7,500 trained volunteers—a service value to Connecticut of almost $3 million (1985).

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The Family Community Leadership program is established. Extension moves to issues-based programming.
State Representative Nancy Wyman, Tolland (1987–1993), task force chair, stated:

We believe that the Extension Service has been remarkably effective in taking research-based information from the university to the public. The Service has succeeded admirably in responding to changes in Connecticut’s economy and society. It provides leadership not just in agriculture, but in the areas of family decision-making, nutrition education for low-income families, marine farming and coastal management, environmental education, and community land use education, among others.

The legislative task force report called for a strengthened public service role for Extension.

A CES internal task force report led to the development of the 1988 five-year CES strategic academic plan. This plan was the first to introduce the concept of multidisciplinary institutes within Extension. These included community development and environmental management; food, fiber, and nutrition; and family and youth development. While the proposed institutes were not implemented, the concept later led to the development of college-wide teams (1995).

In the mid-1980s the federal Extension Service-USDA began to identify Extension as a system rather than a service, to reflect Extension’s role not only as a public service organization but also as an interrelated federal, state, and local educational partnership. The change in terminology was finalized in Connecticut in 1989.

Steve Broderick, Extension educator, forestry (1978–2008), stated:

We have only begun to scratch the surface. Further opportunities for regional Extension programming abound, and we ignore them at our peril. Seizing these opportunities is not only logical, it is essential for Extension to remain relevant, dynamic, and efficient in the years ahead (1991).

Staff members distributed an estimated 1.5 million educational publications, by request, to the public (1987).
As the 1980s came to a close, program highlights indicated that planning and zoning commission members from seventy-seven towns had been trained by Extension. A lead role was played by Extension in developing and implementing statewide educational efforts in groundwater quality and management. More than 1,500 homemakers and 3,500 youth participated in nutrition education in New Haven, Bridgeport, Hartford, Waterbury, and eastern Connecticut. Extension reached 1,200 parents and 4,000 young people with the first rural adolescent pregnancy prevention program in the state.

Increased pressures on the natural resource base, the number of retired people, energy costs, and changes in media and related technology were predicted. As Extension moved into the next decade, the complexity of the environment increased but the major responsibility of Extension, that of educating people for the public good, remained center stage.

On his retirement, Jeff Nye, Litchfield County agricultural agent (1959–1988), noted that farmers want to be good citizens, and they care about the soil and the land. There had been a change in farmers’ attitudes over the years toward better land protection (1988).

More than 1,500 homemakers and 3,500 youth participate in nutrition education across the state.

The cost of a fax machine is $1,500. The cost of a scanner is $2,000.

Dawn Pintell (left) and Bonnie Burr (right) show a display of locally grown food products.

Anita Malone (Shaffer), senior Extension home economist (1962–1988) illustrates clothing for women with disabilities.
Chapter 5

The Nineties: The Start of a New Era

Moving Into the Future

Home Economics: Parent Education, Parenting Apart: Strategies for Co-Parenting, Master Teacher Leads to People Empowering People (PEP), Identity Theft Programming, Hazard Analysis Critical Control Point (HACCP) for Food Safety

Agriculture: Sustainable Agriculture, Perennial Plant and Garden Conferences

Environment: Nonpoint Education for Municipal Officials (NEMO), Geospatial Technology Program (GTP), Green Valley Institute (GVI)

4-H Youth Development: Teen Leadership Conference, National 4-H Congress, Youth-at-Risk to New Communities 4-H Projects, Respect and Integrity Through Skills and Education (R.I.S.E.), Youth Entrepreneur Program, 4-H SPACES, 4-H LIFT (Learning, Interaction, Friends, and Talents), 4-H Staffing Patterns

Administration: Organization Structure, Extension Councils

Emerging Technology Innovation


Role of Private Fundraising

Moving Into the Future

Among the greatest administrative challenges during the nineties were those that centered on meeting increased demands with fewer resources, addressing the human impacts of mandated downsizing, balancing the need for change with the need for program stability, and planning for future organizational flexibility. Challenges often turn into opportunities for positive change and revitalization, and so it was with many of the Extension challenges between the mid-1970s and the early 1990s. Technology of the information age greatly increased the quantity of information available, without regard to whether or not it was vetted through trusted neutral sources or peer-reviewed.

A gallon of gas is $1.34.

First fax machine arrives.
One of the significant changes to the Cooperative Extension System in the 1990s was the shift in organizational structure designed by Kirklyn M. Kerr, dean and director, College of Agriculture and Natural Resources (1993–2008), to encourage and support the development of integrated teams. Upon his arrival, Kerr quickly identified two missed opportunities: the ability to communicate across departments, and the need for faculty and staff members to better integrate programs. Through a college-wide strategic planning process, multidisciplinary teams were identified (1995). These included water quality, integrated crop management, 4-H youth development, family and community, economic viability, agricultural biotechnology, wildlife, food and health, and dairy and livestock. Department heads served as the administrative liaison for each team. While some teams were more effective than others, the end result was an increase in grant proposal development resulting in external funding of interdisciplinary efforts.

Home Economics

Parent Education

Instead of working primarily with family members, Extension educators in the 1990s worked with agency and community organization staff and/or volunteers. One example occurred in Danbury (1995) when a team of family service and school personnel joined to solve the unmet need to provide ongoing high quality parent education in the community. Using the Parenting People Program as the curriculum, the community organization-sponsored project, called ParenNet, partnered with Cooperative Extension to provide training for community workers. ParenNet is offered in a variety of languages including English, Spanish, and Portuguese. At least 150 parents complete the program each year.
Parenting Apart: Strategies for Co-Parenting

The 1993 Connecticut State Legislature passed P.A. 93–319 (effective January 1, 1994) which required all parents of minor-age children seeking a legal separation or divorce to attend six hours of parenting education. These mandatory parenting education classes have been designed to: focus on the impact of family restructuring on children, with particular emphasis placed on children’s responses at different stages of development; promote parental actions that would reduce children’s stress and promote adjustment to parental separation; and encourage cooperative parenting techniques that would help in dispute resolution and conflict management.

During fall 1993 Maureen T. Mulroy, assistant professor and Extension human development specialist (1991–); and Cathy Malley, Extension educator (1974–), collaborated with Ronald Sabatelli, professor, human development and family studies (1983–), School of Family Studies, on the design of a parent education curriculum to meet the P.A. 93-319 mandates. This collaboration resulted in the publication of Parenting Apart: Strategies for Effective Co-Parenting, an interactive, psycho-educational curriculum for separating, divorcing, or never-married parents (1995). The development of this curriculum led the state Judicial Branch to provide a service contract for statewide parent education classes. Since January 1994, UConn Family Studies doctoral students, trained to use the Parenting Apart curriculum, have each facilitated monthly classes of fifteen to twenty court-ordered parents. These classes are held at the Tolland, Litchfield, New London, and Windham County Extension Centers, and at the Storrs campus Marriage and Family Therapy Center.

Approximately 500 Connecticut parents who provide care for 2,500 minor-age children have enrolled in the Parenting Apart classes every year since 1994. More than 95 percent of these parents have reported learning important skills which have helped all family members deal with the stress and upset of restructuring the family. Currently, thirty-six states and municipalities have adopted the Parenting Apart curriculum.
Master Teacher Leads to People Empowering People (PEP)

Cheryl Czuba, Extension educator, community development and families (1973–), and the social services coordinator of a Windham low income housing project (1993) attended the two-day University of Massachusetts Extension Master Teacher training conference. Four months later, Czuba and the social services coordinator conducted the Master Teacher program at Windham Heights housing project. The program taught family life information and community development strategies to leaders, who in turn helped family, friends, and neighbors within the community. In the Windham program, five participants completed two ten-hour training sessions, attended monthly meetings to address community issues, committed one year to the program, and conducted a block party for their community.

Czuba replicated (1994) the Master Teacher program in Vernon, where (1995) seven participants graduated from the program. Carole Eller, senior Extension educator (1975–2001), received funding (1995) through a USDA State Strengthening grant to conduct Extension programs, including the Master Teacher program, at family resource centers. The Master teacher program was conducted in Danbury, Manchester, Hartford, East Hartford, and West Hartford, and included approximately seventy participants within the five-year grant period. Later through the support of VISTA workers, the program was conducted in Vernon by Deborah Noble (1996–1998), in Enfield by Nanette Page (1998–2000), and in Meriden by Sharon Bride (1998–1999).

The title of the Master Teacher program changed (1995) to People Empowering People (PEP). Goals, objectives, and training sessions were revised, and a manual was initiated to train facilitators, educators, and social services providers.
Page and Czuba completed (1999) the manual which included steps to conduct the program, how to work with groups, the ten training session modules, sample evaluation instruments, and supplemental materials.

The PEP program was recognized on the national and international level with interest shown in Michigan, California, Missouri, Massachusetts, and South Africa. The PEP program focuses on people changing their lives. Participants and facilitators speak effectively for the program, and Extension-trained PEP facilitators appreciate PEP’s adaptability to a wide range of audiences: incarcerated men and women, teen mothers, family resource center parents, Hispanic and Portuguese parents, Department of Children and Families (DCF) clients, and adults from community-based organizations. PEP is recognized as one of the leading parent leadership programs in Connecticut, having been conducted in over thirty-five communities and four prisons in the state.

Identity Theft Programming

The early 1990s saw an emerging concern regarding consumer privacy. The increased use of computers and databases made consumers more vulnerable to fraud and financial losses. By the late 1990s identity theft surfaced as the number one crime reported by the Federal Trade Commission (FTC). A train-the-trainer program, Preventing Identity Theft: Protecting Your Privacy and Your Good Name, was developed by Lynne Grant, Fairfield County Extension associate educator (1976–). The program’s objective was to give social service providers the necessary skills to teach clientele how to avoid identity fraud, and remedies for those who had been victimized. The program included a training manual, curriculum, and four fact sheets. Train-the-trainer programs for social service agencies continue in 2008 and are focused on some of today’s greatest challenges: data breaches, medical identity theft, and identify theft of the deceased.

Statewide training programs have been provided to law enforcement agencies, social service providers, health care providers, teachers, and area agencies on aging staff. Programs have also been conducted for senior citizens and other consumers. Information disseminated to print and broadcast media resulted in newspaper articles, radio and television interviews, and website postings.
During the Gulf War (1990–1991) at the request of the Connecticut National Guard, CES developed the financial management curriculum and training manual for National Guard families. CES educators used these resources to train National Guard family support team members for their work with the families of deployed guard members. In the 1990s Connecticut CES helped to develop and pilot the women’s financial information program in collaboration with AARP and local community leaders.

Hazard Analysis Critical Control Point (HACCP) for Food Safety

Cooperative Extension has a long history of providing food safety information to Connecticut consumers. Programming to seniors, 4-H clubs, and home food preparers has always included the basics of hand washing and food temperature control. Several events occurred in the 1990s that resulted in a new focus for the food processing industry.

In 1993, hundreds of people were sickened after eating hamburgers at a restaurant in the state of Washington. Three children died. Food safety awareness increased as consumer illnesses were traced to chicken, eggs, and seafood. The result was the adoption of federal rules that required the implementation of HACCP plans for seafood (1997), and meat and poultry processors (1998, 2000).

HACCP is a food safety management system that is increasingly employed in the food industry. Pronounced ‘hás•sip’, HACCP provides a structure for assessing food safety risks, and for putting controls in place to minimize the risks. HACCP has been widely used by the industry since the late 1970s, and is now internationally recognized as the industry standard for ensuring food safety. Presently, the fresh juice industry, including the cider industry, is required to also have a HACCP plan in place.

A voluntary HACCP program was implemented (2001) for Grade A fluid milk and milk products under the cooperative federal and state National Conference on Interstate Milk Shipments (NCIMS) program. Even food industry segments...
that are not required to have a HACCP plan adopt them to meet the demands of their food-safety conscious customers.

From the start, Extension responded to the need for food processing industry training. Training programs continue to be provided on a regular basis to the seafood (since 1996), meat and poultry (since 1997), and fresh juice industries (since 2000). These programs reach processors throughout New England and New York as few, if any, other training options are available in this region.

Diane Wright Hirsch, New Haven County Extension educator (1980–); and Cameron Faustman, head, animal sciences department (2000–2004), successfully applied for USDA-Cooperative Research, Education, and Extension Service (CSREES) funding to develop a step-by-step manual for processors to use. HACCP-like training programs and manuals have also been developed with the support of FDA and USDA-CSREES funding for the retail fresh juice and cider industry (2004), and the artisanal cheese industry (2004). State regulators have raised expectations for safe food processing in these industries as a result. Customers of these processors are also requiring proof of HACCP plans, even when not required by law.

Agriculture

Sustainable Agriculture

Sustainable agriculture practices address pest management, cultural practices, soil fertility, adding value, and farm profitability; thus, managing the farm to be both environmentally sound and economically viable. Sustainability refers to the ability of a farm to produce food and be economically viable without irreversible damage to the ecosystem. Through nutrient management research done by Connecticut Cooperative Extension, researchers found that nitrogen fertilizer applied prior to planting is often inefficient due to nutrient loss. Based on this research, the June nitrate test (See Chapter 2: The Sixties: Social Unrest—A Time for Redirection for further details) was developed to determine the need

One EFNEP office location is 1372 Barnum Avenue, Bridgeport. A gallon of gas is $1.05.
for application of nitrogen to corn for use as silage feed to dairy cattle when plants are less than knee-high. Jack Collins, Powder Hill Farm, Enfield, an early innovator in sustainable agriculture, said “if you don’t need it, don’t use it.”

Perennial Plant and Garden Conferences

The ornamental plant Extension team consisting of Mark Brand, associate professor, plant science (1988–); Richard McAvoy, associate professor, plant science (1988–); Timothy Abbey, assistant Extension educator in residence (1994–1998); and Leanne Pundt, associate Extension educator (1993–), organized the first Perennial Plant Conference held at the Bishop Center on the Storrs campus (1996). This one-day conference focused on the needs of professional horticulturists involved in herbaceous perennial production, both in nursery and greenhouse operations, landscaping and maintenance of herbaceous perennials, as well as garden designers, and retail garden center operators.

Concurrent sessions conducted by nationally known speakers from industry and academia were featured with more than 200 professional horticulturists from New England in attendance. As the conference grew in size, a larger facility was needed. The 2000 Perennial Plant Conference moved to the Lewis B. Rome Commons ballroom on the South campus, Storrs.

The ornamental plant Extension team, with added member Donna Ellis, associate Extension educator in residence (1991–); and the staff of the Home and Garden Center, held the first Garden Conference for the home gardener (2003). With the Rome Commons Ballroom as the venue, 450 gardeners participated. Since then, this one-day conference has been held the day before or after the Perennial Plant Conference so that featured speakers can be present at both events.

The CANR Office of Communications and Information Technology (CIT) offered (2005) horticultural books for sale in the conference bookstore. This added attraction has been very popular with attendees who can meet speakers, purchase autographed books, and select from a wide range of horticultural books.

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1,842 pesticide applicators were re-certified, 14 new applicators were certified, and 924 additional people received training toward certification in short courses and workshops on safe use of pesticides. These included commercial ornamental, turfgrass applicators, and golf course supervisory personnel (1995).

Victor Scottron, civil engineering professor, UConn, is named the first Sea Grant director.

William J. Clinton wins the presidential election.
Environment

Nonpoint Education For Municipal Officials (NEMO)

NEMO (Nonpoint Education for Municipal Officials) was created (1991) by Chester Arnold, Extension educator, coastal development (1987–); and James Gibbons, Extension educator, community development and land-use planning (1976–). NEMO provides information, education, and technical assistance to local land-use commission members to address the challenge of balancing growth while protecting natural resources. Built on the belief that a community’s future is dictated by land-use decisions at the local level, NEMO focuses on the impact of land use on water resources. NEMO’s premise is that research-based, non-advocacy education of local land-use officials is the most effective way to foster positive change.

The N in NEMO refers to non-point source pollution. For years, land-use decision-makers focused on the easily identified point or end-of-pipe sources of polluted storm water runoff. NEMO emphasized the need to address the harder to identify diffuse or non-point sources of polluted storm water flowing from various land uses. The amount of impervious surfaces generated by development is an indicator of both urbanization and water quality.

NEMO is unique and innovative in three ways. These include the use of geographic information system and remote sensing technology as educational tools, the promotion of natural resources-based land-use planning rather than mechanical devices as the primary alternative to water pollution, and a focus on local land-use decision-makers as the primary target audience.
The program’s strict adherence to these principles found a rapidly expanding audience. NEMO has now grown into a thirty-five-state national network. More than a decade later, communities across Connecticut and the nation are changing the way they plan, regulate, and build their landscapes, using information and education from the NEMO program.

Geospatial Technology Program (GTP)

The Geospatial Technology Program (GTP) began (1998) by providing mapping and analytical support to NEMO-related activities both in Connecticut municipalities and with national NEMO partners throughout the country. Program staff members made extensive use of Geographic Information Systems (GIS) and Satellite Remote Sensing (RS) imagery. These systems analyze relationships between impervious surfaces (development) and water quality. Informational maps and fact sheets were produced to assist municipal land-use decision-makers to better plan and manage their communities.

The Connecticut GTP was invited (2001) to join a new and growing network of geospatial Extension specialists being promoted through collaboration among NASA (Space Grant), NOAA (Sea Grant), and USDA (Land Grant). Connecticut was the fourth state to join and remains an active participant in what is referred to as Earth Grant. Fifteen states have geospatial Extension programs in 2008. The geospatial Extension specialists develop programs and coordinate activities to meet the geospatial technology needs of people in the state, and serve as a bridge between university researchers and non-university geospatial technology users.

Initially, a hands-on GIS training course was designed to introduce municipal land-use managers, staff members, elected officials, and volunteers to GIS technology. This course illustrates how GIS can be used to assist planning and management activities. The four-day course, offered annually, has grown into a five-day course, and in 2007 was offered four times, reaching approximately eighty participants each time. In addition classes were conducted for the city of Hartford and for members of the Council of Governments of the Central Naugatuck Valley.

23,000 people received pesticide education through meetings, radio, and displays. The audiences included greenhouse and nursery industry personnel, orchardists, small fruit and vegetable growers, dairy, poultry and livestock producers, legislators, and private citizens (1995).
Another hands-on training course (2007) on the use of Global Positioning Systems (GPS) was offered seven times. The course, “Pictures, Points and Places,” was developed in collaboration with the geospatial Extension specialists at the Universities of New Hampshire and Rhode Island.

In addition, the GTP was instrumental in establishing the Connecticut GIS user-to-user network, a voluntary association of professionals using geospatial technology. Organized in 2001, the network facilitates communication among the user community through meetings, an electronic discussion list, and a website maintained by the GTP.

The GTP is involved in a variety of research projects that apply geospatial technology to issues of concern in Connecticut. Examples include investigations into the use of satellite and airborne high-resolution imagery to map invasive species in coastal wetlands, and methods to characterize water allocation problems in Connecticut watersheds. GIS-based methods develop maps of land-type associations for Connecticut and Rhode Island, and are being used for regional planning efforts. From training to research, a critical component of GTP activities remains the collaborative nature of the work focused on the public good.

**Green Valley Institute (GVI)**

Green Valley Institute (GVI) is a partnership among the College of Agriculture and Natural Resources, the University of Massachusetts Extension System, The Last Green Valley (also known as the Quinebaug–Shetucket National Heritage Corridor), and The Nature Conservancy. Created in 2000, GVI provides thirty-five communities of The Last Green Valley with tools and information needed to make sound land-use decisions. GVI conducts training sessions and workshops for community leaders, landowners, and interested citizens involved in community planning and land conservation. GVI’s goal is to assist towns to protect important natural resources while planning for future growth and development.

GVI’s land conservation program offers landowners, land trust members, conservation commission members, and others training related to land stewardship, protecting family lands, and creating community open space plans.
As a result, communities develop natural resource inventories and co-occurring resource analyses to identify priority resources. GVI has assisted landowners to protect over 4,000 acres of land. Working with UConn's Center for Land Use Education and Research (CLEAR), GVI teaches Geospatial Information Systems (GIS) and Geospatial Technology Program (GPS) short courses.

GVI has assisted communities to incorporate natural resource information into plans of conservation and development, and to implement those plans through new land-use regulations. Towns have adopted new conservation subdivision regulations and design guidelines. Through GVI's seminars, website, and community planning fact sheet series, communities have learned innovative planning, development, and regulatory techniques that have changed how towns operate.

GVI also has a volunteer recruitment and training program designed to build local capacity for volunteer town commissions and land conservation organizations. GVI's weekend retreat provides training about natural systems and the impact of land-use decision making on these systems. GVI then works with these newly trained volunteers to assist them in finding volunteer positions that best fit their interests. By 2006 one hundred trained volunteers had contributed a total of 4,224 hours of volunteer time to their community.

4-H Youth Development

Teen Leadership Conference

The first 4-H Teen Connection Conference, an updated version of the short course that was first held as early as 1919, was held on the UConn Storrs Campus (1995). Bringing teens to UConn to experience college life, participate in career exploration, and leadership opportunities had been the desire of 4-H staff members for some time. With Dean Kerr's encouragement, staff members planned a conference that would give 4-H youth access to the resources at the University, and the opportunity to experience college life first hand. The 4-H Teen Ambassadors played a key role in the conference. The Teen Connection Conference provides the opportunity for teens to build connections with
themselves, to each other, to other adults, to the world, and to the resources provided by the University.

This summer conference has been held in each even-numbered year, including 2008, with some eighty teens attending each time. A variety of workshops are offered including the ever-popular ice cream-making one at the UConn dairy bar. Teen participants have the opportunity to participate in community service projects in Mansfield and Willimantic. Teens meet other teens from around the state as conference participants take part in get-acquainted activities along with a dinner and dance.

National 4-H Congress

The 1993 National 4-H Congress held in Chicago, Illinois, was the last Congress focused on state-selected recognition of individual achievement in a project area. The next Congress (1994) was held in Orlando, Florida, and the next year in Memphis, Tennessee. In subsequent years, Congress has been held in Atlanta, Georgia. Since 1994 achievements in leadership and citizenship development have been the criteria for selection at the state level, regardless of the project area. The focus of the national event is on community service.

Youth-at-Risk to New Communities 4-H Projects

Since 1991 fifteen 4-H professional staff members have held critical positions in federal or state funded projects working with children, youth, and families-at-risk. Competitive USDA grant projects, each with a five-year time frame, were designated (1) Youth-at-Risk; (2) State Strengthening; and currently, (3) New Communities projects. Nationally, over $1 million in USDA grant funds have supported community projects involving over 2,000 youth, 500 parents,
seventy-five welfare participants, and fifty Connecticut state and community organizations. Projects such as parent run school-age childcare centers, middle school enrichment programs, and technology clubs located in urban and rural schools, and local community centers consistently used 4-H programs and curricula. 4-H programming with children, youth, and families-at-risk has included programs in Hartford, New Haven, Bridgeport, New Britain, New London, Groton, Danbury, West Hartford, Norwich, Killingly, Milford, Meriden, East Hartford, Hebron, Andover, Marlborough, and Manchester.

Competitive grant-funded programs had broad impacts across the state, reaching 2,000 youth in high poverty, at-risk neighborhoods who participated in 4-H programs, and forming a five-year collaboration between the State Department of Education family resource centers and Cooperative Extension System. Grant-funded programs were also responsible for the installation of twenty-three new computers and printers along with Internet capability in low-resource community agencies and the training of fifteen low-resource community agencies and one hundred individuals on computer use.

There were 21,000 members and 2,700 volunteer adult leaders in the 4-H program (1998).

Respect and Integrity Through Skills and Education (R.I.S.E.)

R.I.S.E. (Respect and Integrity through Skills and Education), a Bridgeport-based program initiated (1991) by Edith (Ede) Valiquette, Extension educator, Fairfield County (1986–), focused on career development. One component of R.I.S.E. was the Learn and Earn program, where middle school youth increased their skills, knowledge, and abilities in goal setting, decision making, money management, problem solving, leadership, public speaking, and group process. Youth completed an application and were interviewed. Teams were then formed to research business ideas and develop a business plan. The business plan was presented to volunteers from the business community in order to raise venture capital. The team managed their business and finally dissolved the business. Youth met other entrepreneurs and honed their business skills.

Master Teacher program becomes People Empowering People. Statewide 4-H newsletter is initiated.
Although the official R.I.S.E. program ended in the mid-1990s as funding ended, its legacy continues. As part of R.I.S.E., a manual was developed. The manual is composed of two sections. The first section explains how to initiate the R.I.S.E. program in the local community. The second section outlines over one hundred activities focused on life skill development, career exploration, and employability. Over 650 manuals have been sold and the material has been used by CES 4-H staff members nationwide. The R.I.S.E. manual was selected (2005) as one of two curriculums used for a National 4-H Council grant-funded program developing workforce readiness for teens. The manual is a curriculum that fits the needs of diverse audiences from middle school to young adults. R.I.S.E. can be used in school or community-based settings as a stand-alone program or integrated into existing programs. R.I.S.E. evolved into the youth entrepreneur program.

Youth Entrepreneur Program

The UConn 4-H Youth Entrepreneur Program, a nationally recognized USDA “program that works,” is a collaborative effort between schools, businesses, and UConn. The program provides an opportunity for young people to learn important life skills and attitudes as they work together to develop youth-run businesses. The Youth Entrepreneur Program develops workplace skills including teamwork, leadership, work ethic, public speaking, personal responsibility, decision making, cooperation, math and reading skills, and civic responsibility. The program develops business and organizational related skills, and may improve the economic stability of the families involved.

Each participating youth usually makes and receives a profit of between $4.00 and $270!
4-H SPACES

4-H SPACES, stressing science and technology, was started in New Haven (1991) by Wanda Little, associate Extension educator (1970–2002). Extension administered the program through the Newhallville Family Alliance agency through 1996. The New Britain program, initiated by Laura Marek, Litchfield County associate Extension educator (1980–), in cooperation with the Boys and Girls Club, centered on the prevention of teen pregnancy. School-aged childcare programs were established in Hartford. The name SPACES refers to different spaces of personal development, outer space or science and technology, and shared space or getting along with others.

4-H LIFT (Learning, Interaction, Friends, and Talents)

The 4-H LIFT (Learning, Interaction, Friends, and Talents) program began in 1995 in Willimantic. Carole Eller, senior Extension educator (1975–2001); and Cheryl Czuba, Extension educator, community development and families (1973–), coordinated the University effort along with Maria Martinez, director, Center for Academic Programs (1986–); and Diane Wright Hirsch, New Haven County Extension educator (1980–). What started as a two-evening-a-week program serving fifteen middle school youths, grew into a program running four afternoons a week, serving over 130 students (2007). The 4-H LIFT afterschool program is a collaborative effort between Windham public schools and the University of Connecticut Cooperative Extension System. Students from Windham Middle School participate in the program from 2:35 p.m. to 5:00 p.m. with a $25.00 fee charged for the program (2007).
When students arrive, the 4-H pledge is recited and students enjoy forty-five minutes of enrichment activities. At 3:30 p.m., snacks are distributed and students engage in an hour of homework. Following distribution of daily recognition awards, transportation home is provided.

Volunteers, work-study students, interns, community service, and student labor from UConn, Eastern Connecticut State University, Windham public schools, and the community are recruited to provide supervision and interaction in the afterschool program. LIFT has many junior leaders, who were LIFT students, graduated and went to high school but continue to attend the LIFT program every day to provide assistance.

Evaluation studies showed that the students who attended the 4-H LIFT program had higher reading grades, better school attendance, and showed marked improvements in math skills. They also demonstrated growth in social skills and participated in other community activities.

4-H Staffing Patterns

Due to a lack of financial resources, the position of state 4-H leader had not been filled since the retirement of Robbins Smith, state 4-H program leader (1963–1991). Nancy H. Bull, associate dean, outreach and public service, and associate director, CES (1995–2008), served in that capacity due to her experience working with a county 4-H program in Ohio.

The number of 4-H professional staff members in 1995 was at a record low. Staff members shared counties based on the district administrative model abandoned in 1993. The staffing (1995) consisted of: Edith (Ede) Valiquette, Extension educator, Fairfield County; Laura Marek, associate Extension educator, Litchfield County (1980–); Rosemarie Syme, assistant Extension educator (1981–), Tolland County; Elizabeth Salsedo, 4-H program specialist (1977–); and Janice Melvin, program coordinator (1968–), Hartford County. Diane Lis, Extension educator (1969–), New London County, also covered Windham and Middlesex Counties, working with part-time staff member, Emily Alger, program coordinator (1997–), Middlesex County. New Haven County had two 4-H professional staff positions: Margaret Grillo, associate Extension educator (1989–); and Wanda Little, associate Extension educator (1970–2002).
In 1990, 45,158 youth participated in 4-H programs supported by 3,930 volunteers. Nearly one-third of the members lived in urban communities. There were 35,160 youth (1995) involved in 4-H programs in Connecticut of which 12,500 lived in rural areas.

Since the beginning, leadership and citizenship development have been integral to the 4-H program. Youth ages seven to nineteen learned about nutrition, animals, rockets, technology, and state government. About her experience with 4-H, Margaret Lamb, former New London County 4-H member, said:

I grew up on a dairy farm and did my share of chores from an early age. Although I was interested in the food and sewing club, I was also interested in 4-H dairy work. Either I convinced my mother to be a club leader or she convinced herself—I honestly can’t remember which it was! So, from the time I was about 12, I had another 4-H option. This led to a whole new set of challenges: owning and caring for my own cows (registered Holstein Freisens); exhibiting at local, county 4-H fairs, and Eastern States Exposition as part of the Connecticut 4-H group; and participating in cattle judging.

Administration

Organization Structure

Dean Kirvin Knox announced the move to a three district administrative structure on October 1, 1988. Each administrator was responsible for personnel supervision, performance appraisal, budget development, accountability, and resource development. The three district administrators reported to the assistant director, CES, who reported to the associate director, CES. The dean of CANR served as director of CES. Historically, Extension educators have held tenure-track positions.

Extension faculty and staff members at the eight Extension centers reported through one of three full-time Extension regional district administrators. Interim administrators were assigned until searches could be conducted. These included: Northern region, Ed Merritt; Southern, Cathy Malley; and Eastern, Barbara Ladabouche, county Extension 4-H educator (1965–1996).

In the fall of 1993 CES administration included: Dean Kerr, Roger Adams, professor and Extension entomologist, department of plant science (1977–), acting assistant director; and Latif Lighari, Wanda Little, and Paul Stake, district administrators.

Under the leadership of Kerr (1995), the reorganization of Extension eliminated the three district administrator positions. Those individuals returned to their faculty positions. Bull was hired to provide leadership across all CANR departments and units in support of Extension programs and outreach in the College. (see Appendix E for Organizational Charts.)

In April 1995 Adams was named assistant director, CES. In the new organizational structure, faculty and staff members at the eight Extension centers reported to the assistant director, CES. The Cooperative Extension Unit (CEU), a new tenure-granting unit in the College, was created.

Based on Kerr’s experience in Ohio, the Extension center coordinator assignment was created (1995). Center coordinators are tenured faculty members elected by faculty and staff members at each Extension center to serve a three-year term in a 25 percent administrative assignment. The center coordinator’s remaining time is devoted to Extension programming. Coordinator duties include supervision of support staff members, overseeing equipment and facilities, and serving as liaison to the local county Extension council. Faculty members, including center coordinators and program staff members at each Extension center, report directly to the assistant director, CES, who functions as head of the CEU.

Over 1,960 CES volunteers provided nearly 42,600 hours of service and directly reached more than 15,000 additional citizens. These hours were valued at a $555,930 contribution to the continuing education of Connecticut citizens (1995).

Phillip E. Austin becomes UConn’s thirteenth president. Congress passes the Welfare Reform Act.
With changes in organizational structure and the decentralization of many University functions, an administrative assistant position was established (1998) at each of the eight Extension centers, as well as at the CEU office in Storrs. The administrative assistants were not new employees. Existing support staff member positions were upgraded in recognition of their increased responsibilities.

Extension Councils

Volunteers play a vital role in Extension programming through their participation on local Extension councils in each of the eight counties in Connecticut. The councils serve as the local community partner for the Cooperative Extension System. First recognized by Public Act, Chap.326 (1919), each council is a not-for-profit incorporated entity. The group serves as a vital link between the community and Cooperative Extension. The three functions of the council, as delineated in their memorandum of understanding with the University, are to develop financial support for Extension programs, to assess program impacts, and to communicate information to residents of the county. The councils succeeded the farm bureau organizations, which had served as the primary local sponsor of Extension since its inception in the early 1900s.

The 1978 state Extension Council by-laws stated that the purpose of the councils was to include speaking with decision-makers on behalf of Cooperative Extension programs, public relations, financial support, and improved services offered to citizens. The state Extension council (1989) was composed of one elected or appointed director of each local council, and from the Extension Homemaker Council, Extension Master Gardeners, and the Marine Advisory Council. Each served a two-year term. The purpose of the state council was to assist the Connecticut Cooperative Extension System in securing support and resources, and to increase cooperation between local councils and other Extension-related groups.

The state council was reformatted (1997) into a less structured group referred to as the Extension partners. The partners group is open to all members of an organization directly related to Extension. The state-level group meets three
times a year (fall, winter, and spring) to learn more about the budget process and changes in Extension programs. Since the 1960s through involvement on Extension Councils, volunteers have participated in activities in Washington, DC, events at the State Capitol, and in local gatherings.

The Extension partners group met (2007) three times for updates on the budget and legislative process. At these meetings the partners plan their advocacy experience in Washington DC, held each year in late February or early March (initiated March 8-9, 2004); and plan and evaluate the partners legislative reception at the State Capitol (initiated on April 14, 2004).

The advocacy experience replaced the National Leadership Seminar that had been held in Washington, DC, from the late 1970s until 2002 for participants from across the nation.

The amount of state funds provided (2007) through the University to the councils (from the state appropriation to the University) was $2,818.28 for each council, and the amount required to be raised by each Council remained at $1,000. This was part of the 1959 agreement when councils became the legal sponsor of Extension in Connecticut.

### Emerging Technology Innovation

The personal computer (PC) was anything but personal in the early 1990s. The standard was a single networked machine per office that was used by everyone for both email and general office work. The New England Extension’s emerging technology staff members (1991) developed a white paper that called for a networked computer on every desk in two years. Networking resources were seen as critical to meeting changing realities in staffing, and providing clientele with information. In spite of the $5,000 cost of a newly available personal computer, Extension made the difficult organizational decision to support computer use for administration and program efforts. To reach the goal of a networked machine on every desk, network wiring had to be either installed or updated. Reports in the 1990s outlined continued progress in networking as budget and technology allowed.

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**The University’s state budget transitioned from specific line items to a separate block grant. Budget lines that had been allocated for CES were rolled into the block grant. This change shifted the advocacy role of volunteers from a focus on funding lines to the total University budget (1992).**

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**Connecticut population is 3.2 million people.**

**The average new car is $16,900.**
As the explosion of technology moved communications to email and voicemail, webpages were expected to meet University standards and be regularly updated. New positions were created with titles such as computer technical support consultant. Secretarial support staff members learned to update websites.

To reach the goal of one personal computer per employee, network wiring was needed. As state offices became wired and the cost of high-speed connections decreased, a secure and usually functional system became operational in each county Extension center and in on-campus offices. The application of software for performing specialized tasks, file sharing, and communication networks became commonplace.

The Department of Agricultural Publications was among the first in Extension to recognize the potential for computer use. The office was merged with technology functions and (1995) renamed to a college-wide Office of Communications and Information Technology (CIT), under Bruce Wilbur, program manager/educational outreach (1979–). Designers’ work in print media was gradually transformed to include developing and maintaining web pages. Budget planning and implementing of technology components were centralized into one office.

Electronic technology created a profound change in how Cooperative Extension and its clientele related to each other, and how clientele obtained, used, and synthesized information. A major administrative challenge with electronic technology continues to be the short lifespan of equipment and software due to constant upgrades. The growing complexity of the technology and reliance on technological advances requires a different approach to budgeting, an increase in specialization, and ways to make more information readily available. Most importantly, and even more difficult, has been the challenge of bringing the massive capability new technology offers to Extension for improved communication and knowledge transfer.

Sheila Andrew was hired as the first female Extension dairy specialist in Connecticut (1995).

HACCP plans for seafood are initiated.

Energizing Connecticut’s Economy, a supplement featuring Extension, is published in the Hartford Courant.
Communications in the Nineties

Biweekly Extension Briefs

In the late 1980s and early 1990s, print newsletters were the usual form of communication between the state Extension office and Extension faculty and staff. The associate director’s office issued a newsletter called *Biweekly Extension Briefs* that communicated changes in policies and procedures, called attention to USDA directives, announced innovative programs, and recognized accomplishments.

*Biweekly Extension Briefs* updated employees on program highlights as well. Examples included a piece on Nancy Fey-Yensan, assistant Extension educator (1985–1996), who presented a seminar on nutritional management for AIDS patients. Joyce Meader, Extension dairy/livestock educator, (1985–), was recognized for receiving the Northeast Region Award from the National Association of County Agriculture Agents (NACAA); and Ann Foster, family economics specialist (1985–1992), presented a poster session on estate planning.

In January 1991 Ruth Rodriguez, Bridgeport program associate, EFNEP (1969–1992), was honored by the city of Bridgeport for four decades of service. Frank Himmelstein, associate educator in residence (1991–2007), was hired in integrated crop management.


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1997

Agricultural Research, Extension, and Education Reform Act (Farm Bill) is passed.

Kids and Critters was a favorite after-school program for 350 children in Fairfield County. The program targeted seven-to nine-year-olds to increase their understanding of agriculture (1996).
When Kerr became dean, he noticed that a common concern of those he met was that they didn’t know what was occurring in the College of Agriculture and Natural Resources. He immediately set out to increase the visibility of the College and its programs by creating one of the most successful communications vehicles developed during his time as dean: the Journal. The first issue was published in spring 1994.

Kerr’s vision was to produce a tabloid newspaper modeled after newspapers such as USA Today with articles, color photographs, and other information for potential readers. Information was included of interest to faculty, staff, students, state and national administrators, government leaders and workers, state and federal political leaders, agricultural and natural resource commodity groups, organizations with interests in programs at the College, alumni, friends, and supporters. Initially, six issues were published each year; beginning in 1997 the Journal went to quarterly issues.

The first editor was Alexander (Bud) Gavitt, agricultural news editor (1961–1992), and a contributing editor of Pathways, the alumni newsletter. A retiree, Gavitt was assisted by Sara Putnam, assistant to the dean (1990–). She then began editing the Journal (1995).

The Journal’s design and layout were done by graphic designer Susan Schadt, Illustrator III, CIT (1994–), and has a circulation of approximately 22,000.

Since 1991 another means to increase the visibility of the College has been through regularly scheduled appearances of faculty members, staff members, and students on the Wayne Norman Show on radio station WILL 1400AM/I-98 FM in Willimantic. The station serves the northeast corner of the state. The longest continuously-running morning show in Connecticut, Norman’s show is heard by 5,000–10,000 people each day.
The *Extension Express* Newsletter

The *Extension Express* is the newsletter of the Department of Extension (formerly the Extension Unit). This quarterly electronic fact sheet is distributed internally to all departmental faculty and staff members, CANR administrators, and others. The purposes of the newsletter are to increase communications and awareness within a large geographically-dispersed department, and to enhance visibility of programs, personnel, the Extension centers, and the department within the College.

The first issue was released in July 1998 and was called *Unit News*. The newsletter reflected the name of the department at that time—the Cooperative Extension Unit (CEU). *Unit News* was renamed in February 2001 to *The Express* and to the *Extension Express* in July 2001.

*Extension Bulletin*

After assuming responsibility for the day-to-day operations of the Extension System (1995), Bull wrote a monthly electronic newsletter titled *Extension Bulletin*. This document shared updates of state and national issues, identified demographic shifts that correlated to program needs, and informed employees of opportunities for grants and conferences. Upon request, Extension partners also received the document electronically. Publication ended in 2008.

From 1997 to 2005 the New England Extension directors assessed themselves $5,000 yearly per state for the development of a competitive grants pool. These dollars were used to encourage collaborative efforts across state lines to either plan or implement new program ideas. Each year a total of six $1,000 grants were available for planning purposes, and one $10,000 grant for implementation of a successful planning project. The expected outcome was greater staff collaboration across state lines resulting in larger competitive grant submissions.

The first extension bulletin was published in June, 1888.
State 4-H Newsletter

A statewide 4-H newsletter was initiated (1995) for the purpose of sending a unified and consistent message to 4-H members, volunteers, and friends. Spring 1996 was the first issue of the Connecticut 4-H Newsletter. The newsletter continues to inform its audience of statewide programs and events. It also provides content articles to build knowledge on issues such as volunteer management, technologies, careers, life-skill development, and information on health and safety issues. After twelve years as a quarterly publication, the newsletter moved to two issues a year (2007), due to decreased funding. The newsletter is produced by Nancy Wilhelm, program coordinator, 4-H Youth Development (1989-), and is distributed to CANR faculty and staff and Connecticut legislators.

Role of Private Fundraising

The University was founded in 1881 based on a gift of land and buildings from the Storrs brothers. The role of private fundraising in developing programs increased over the years, starting with the development of the 4-H camps in Franklin (1942), Marlborough (1959), Pomfret (1953), and Moodus (1962). The Litchfield 4-H Foundation was formed (1949) to purchase and operate a camp. The camp was operated until 1968 when the property was sold and the foundation turned its attention to supporting county 4-H programs (See Appendix C: 4-H Camps and Foundations, 4-H Fairs, and International 4-H Programs for further details).

The Connecticut 4-H Development Fund was incorporated (1970) to raise dollars for the statewide 4-H program. Elsie Trabue, assistant 4-H state leader (1920–1945), provided an endowed account through her estate to support travel by 4-H members to National Citizenship-Washington Focus. In 2008 her endowment still funds the transportation costs.

On the occasion of the 4-H national centennial (2003), the UConn Foundation endowed 4-H centennial account was initiated with the goal of raising $400,000. The endowed fund is now well over the fifty percent mark,
spinning off annual interest used to support programs as well as travel for 4-H members to regional and national events.

Other Extension funds supported by private donations included the 75th anniversary of the national Extension effort (1989), family and consumer sciences fund, Rideout fund for leadership, and endowed CES innovative program fund (2008). Funding also comes from the Lathrop endowment for youth, the Gworek and Hill conservation fund, Master Gardener accounts, New Haven County youth fund, and a Foundation account in support of each Extension center.

Administrative changes and program adaptations of the nineties paved the way for a smooth transition into the next century. While challenges and opportunities continue to exist for Extension, the needs of communities evolve and change. The twenty-first century brought new leadership to programs, and offered new opportunities for CANR. Programs in sustainable environments, food stamp nutrition education, and small business development opened new doors for CES.

On February 4, 1996, an advertisement supplement to the Hartford Courant titled University of Connecticut Outreach Bringing UConn to You featured Mark Brand, associate professor of plant science (1988–), and his work in training Home Depot garden center employees. Also noted were the Connecticut 4-H camps, Chester Creek watershed project, safe food business, mentor moms, and the Regional Center for Wildlife Diseases.
Michael Altshul, Research Assistant, Green Valley Institute GIS Specialist (2001–) (second from left), conducts part of a course involving the use of GPS for land stewardship.
The beginning of the twenty-first century saw both the approach to problems and the terminology change and adjust. Extension remained focused on the public good related to economic and community development for an improved quality of life. However, the approach became more interdisciplinary and holistic with a concentration on the environment, public health, and resource development. Partnerships evolved and changed, but the fiscal partnership of federal, state, and local funding continued. Compelling issues that faced Extension included the water quality in Long Island Sound, loss of wildlife habitat to residential development, and credit risks facing families.

Recommendations were made for expanding the scope of stakeholders and partners to more accurately reflect state demographics; evaluating the state’s capacity to facilitate total engagement with and by the University; engaging in open, flexible, and expanded partnerships; considering a University-wide funding strategy for engagement; implementing learning management systems; and building agreement across campus on the definition of the scholarship of engagement.

The 2004 *State of UConn Report* identified that the University added $3.1 billion to the state’s gross product, as well as in less tangible ways by engaging in community outreach and service. Integrated Pest Management (IPM) illustrated this public–private partnership by offering assistance to professional growers. The Center for Regenerative Biology, working directly with producers in on-farm research projects, illustrated an eye to the future. Off-campus teamwork featured the family nutrition program working to improve the nutritional health of infants and toddlers. Public service was illustrated by CES’ work toward reducing childhood exposure to lead poisoning, pesticide safety education, forest stewardship, and residential water quality. Center for Land Use Education and Research (CLEAR) highlighted the environment through work with coastal habitats, urbanizing towns, and managing Connecticut forests. New programs were developed to meet emerging issues.
Strategic Planning

Building on the UConn academic plan of 2000–2005, the College Strategic Plan 2005–2010 identified core values related to efficient and effective communication; diversity through individuals, cultures, ideas, and programs; cooperation through multidisciplinary, interdisciplinary, and cross-functional teams; excellence through creativity, originality, and innovation; and integrity and accountability. Building on these, CES strategic goals focused on increasing economic opportunities for agriculture and natural resources related businesses; enhancing the sustainability of the environment; advancing public health; and strengthening families and communities in a rapidly changing environment.

Environment

Beetle Farmers for Purple Loosestrife Biological Control

Invasive non-native plants such as purple loosestrife (Lythrum salicaria) are a serious concern, as the plants expand rapidly over wide areas. The abundance of native species and the biological diversity in wetlands, meadows, forests, and other natural areas is reduced when non-native plants take hold of the landscape. Integrated Pest Management (IPM) methods taught by Donna Ellis can be used to control invasive plants in backyards, parks, and natural landscapes.

Galerucella leaf-feeding beetles, an approved biological control of purple loosestrife, were introduced into Connecticut wetlands (1996), feeding primarily on purple loosestrife while ignoring other kinds of plants.

Congresswoman Rosa DeLauro is recipient of the College’s first Charles and Augustus Storrs Award.

September 11 attacks occur. Fairfield County office prepares information related to charitable giving and avoiding fraud that is used nationally by CES educators.

Purple loosestrife expands rapidly and reduces biodiversity.
The UConn beetle farmer program was initiated in 2004, funded in part by USDA and the University. Beetle farmer workshops are conducted annually in the spring. More than 650 volunteers have been trained to raise and release the beneficial beetles in wetlands where purple loosestrife control is desired.

As of 2007 more than one million beneficial beetles have been reared and released by beetle farmers into ninety wetlands in fifty towns. Outreach efforts have resulted in television coverage, newspaper and newsletter articles, and website postings throughout Connecticut and the region. A total of 4,540 people attended sixty-two presentations conducted throughout the state by UConn IPM staff members. In addition, display presentations were viewed by over 43,000 people.

Get the Lead Out

Lead in garden soil is a concern in some parts of the state. Home gardeners are uncertain about the effect of lead in the soil on produce grown. Answers to these concerns are provided through the Connecticut soils laboratory and community garden projects.

The UConn Soil Nutrient Analysis Laboratory began screening soils that had been submitted for routine soil fertility analysis for the heavy metal lead (2007). Lead naturally occurs in soils but may be significantly elevated in areas impacted by human activities. Soil contaminated by lead may pose human health risks, and is especially risky to children. Gardeners may also be exposed to lead either through inhalation of contaminated dust or by consuming food crops that have accumulated lead in or on their tissues. Once educated about soil lead levels, steps can be taken to eliminate or minimize contact with this contaminant. Of the samples analyzed in one year (2007), 16.6 percent of lawns, 15.8 percent of vegetable or fruit gardens, and 20 percent of ornamental soils (flowers, shrub, trees, and groundcovers) contained elevated lead levels. The laboratory is presently working with the Connecticut Community Gardening Association to develop a program to test soils in established and proposed community gardens throughout the state.

Avian influenza is detected in the state.

Cost of a first-class stamp: $0.34.
Plant Diagnostic Laboratory

The Home and Garden Education Center includes a plant diagnostic laboratory designed for the identification and diagnosis of insect, disease, and plant pests of the home or garden. A 2003 USDA grant upgraded the laboratory to become an integral component of the National Plant Diagnostic Network, which includes Master Gardener volunteers.

The laboratory diagnoses and digitally documents pest incidences. A USDA plant protection and quarantine permit enables the facility to receive out-of-state samples as well as samples from select regulatory agents. During the 2005-2006 program year, the laboratory diagnosed more than 600 samples. The capacity to monitor and track diseases and insects makes the laboratory a valuable component of the national homeland security network.

Sustainable Landscape

The sustainable landscape program builds upon existing program strengths. Working closely with the Master Gardener program, an Extension team delivers information to Connecticut residents regarding ways to manage environmentally friendly home landscapes. In East Lyme where water conservation is an important town goal, certified Master Gardeners received training on ways to reduce water usage through the Water-Wise Lawn and Garden program. Starting in the spring of 2007 and continuing for one year, the Master Gardeners conducted a variety of Wise Lawn and Garden educational programs. During one in-field training program, a local resident brought a UConn Extension publication from 1959, *Connecticut Soils*, prepared by Stan Papanos, Extension agricultural agent (1946–1977); and R. I. Munsell, agronomist, plant science department (1930–1964).
The overall sustainable landscape project (2003) involved training Master Gardeners in the Windham Extension Center, the Middlesex Extension Center (2004), the New London Extension Center (2005), and the Tolland Extension Center (2006). Turf demonstration sites were developed at Extension centers in New London, Windham, and Tolland Counties, along with a native plant demonstration site—called Nature’s Garden—at the Branford community center (2003).

The sustainable landscaping program received financial support from the New England Region Water Quality Project (USDA Integrated Water Quality 406 funded). The project was designed to transfer lessons learned from educational projects in one New England state to the other five New England states.

The East Lyme Water-Wise Lawn and Garden project is part of at least two other water resource-oriented efforts targeted at southeastern Connecticut. One is a three-year project funded through the USDA Integrated Water Quality 406 program. The other is a Connecticut DEP 319 funded project to be carried out under the leadership of Karl Guillard, professor, agronomy and turf science, department of plant science (1987–). The two projects are designed to reduce contamination in the water supply.

UConn faculty and staff members have been working with the town of East Lyme on water resource issues. The town frequently experiences water shortages, especially in the summer months when the population greatly increases to enjoy shoreline activities.

One site involving UConn staff is the Hole in the Wall, which is a parking and bathhouse area next to the East Lyme town beach. Guillard is advising the town on low maintenance species of turfgrass leading to establishing demonstration plots. Susan Munger, New London County public service coordinator (2006–), is advising the town on low maintenance, sustainable landscaping featuring native plants. Crescent Beach is a community of primarily summer homes directly on Long Island Sound within

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Federal contribution to UConn’s Food Stamp Nutrition Education: $1.5 million. National unemployment is 4.8%.
East Lyme where Master Gardeners, working with Pamm Cooper, Windham County Extension Center, public service coordinator (2007–), are promoting low maintenance lawns and landscaping.

Rainwater Gardens

Reducing the impact of the human footprint on the environment was a consistent theme of this decade. Michael Dietz, assistant Extension educator in residence (2005–2007), created rain garden demonstrations at the Middlesex and New London Extension Centers. The purpose was to capture 99 percent of the runoff from the building roofs. These gardens demonstrate that capturing pollutants, which would otherwise run into state waterways, reduces the human impact on the environment.

Turf Programs

The largest segment of Connecticut agriculture is the green industry that includes residential lawn care, golf courses, sod farms, cemeteries, and athletic fields. The goal is to provide educational support to this growing industry in all aspects of turf care and management. Three turf faculty members present over forty seminars and workshops annually to the commercial industry and general public at educational meetings throughout the state. Turf faculty members communicate directly to the industry via email, telephone calls, and site visits. Their website provides timely information, photos, and fact sheets to assist turf managers.
The UConn Turf Disease Diagnostic Center was formed (2005) with John Kaminski, assistant professor, plant science (2005–2008), as director. The center provides rapid diagnosis of biotic and abiotic turf disease agents, and offers cultural and chemical recommendations for control. Digital disease updates are available through the website and email listserv. The cost for diagnostic work was (2008) $50.00 per sample for in-state and $100 per sample for out-of-state consumers.

Basic and applied turf research projects are conducted at the plant science teaching and research facility in Storrs. Over fifteen acres of turfgrass are dedicated to providing practical information for managing healthy turf. Research includes disease and weed control, cultivar selection, athletic field maintenance, traditional and organic lawn care strategies, and various other projects related to turf. The latest results of ongoing research projects are presented biennially, beginning with the first UConn Turfgrass Field Day (2008). The research facility also hosts New England’s annual landscape certification examination each October.

Center for Land use Education and Research (CLEAR)

The Center for Land use Education and Research (CLEAR) was established (2002) as an official academic center within the CANR. The Center, co-directed by Daniel Civco (NRE) and Chester Arnold (CES), provides information, education, and assistance to land-use decision-makers on how to better protect natural resources while accommodating economic growth. CLEAR incorporated programs and faculty members from the Connecticut land-use planning program, Non-point source Education for Municipal Officials (NEMO), the Green Valley Institute (GVI), the GeoSpatial Technology Program (GTP), and the Extension forestry program. CLEAR conducts remote sensing research, develops landscape...
analysis tools and training, and delivers outreach education programs. CLEAR’s focus on land use and its relationship to natural resource protection allows it to bring together three distinct university-based national research and education networks. These are the USDA Land-Grant university system, National Oceanic and Atmospheric Administration (NOAA) Sea Grant, and National Aeronautics and Space Administration (NASA) Space Grant College programs.

Extension has a long history of providing, upon request, educational programs on a variety of land-use issues. In the early 1990s Microsoft PowerPoint presentation software replaced the traditional talking head and hard slide presentations, with a more audience-friendly, animated format. CLEAR offered (2006) more than sixty PowerPoint presentations dealing with land-use planning, community resource inventories, open space protection, farmland preservation, economic development, zoning and subdivision regulations, sustainable development design, watershed planning, forest management, using GIS and remote sensing technologies, and storm water management. Each year an average of 200 workshops reach over 7,000 land-use decision makers. CLEAR applies the power of the Internet to transmit research results and educational material to target audiences, and to distribute distance learning content through web conferencing, online streaming videos, and chat boards.

CLEAR has conducted cutting-edge research using remote sensing to map impervious surface, critical landscapes, and land cover changes. One example is Connecticut’s changing landscape project (initiated in 2002) that documents land cover change from 1985 to 2002, highlighting the growth of developed land and related open space loss. Research results offer local and state officials a solid database from which issues of sprawl, smart growth, farmland preservation, and forest fragmentation are addressed. This body of research has received state and national attention, and has been cited in professional journals as well as featured on the front pages of newspapers with statewide circulation.
Natural Resources

As a result of the work of Extension through the Green Valley Institute, the towns of Scotland and Thompson have developed comprehensive open space plans for the protection of significant resources in their communities. Brooklyn and Eastford identified and prioritized key open space parcels for acquisition and protection, including a 127-acre parcel on the Quinebaug River identified as the “highest priority wildlife and riparian corridor land.” The town of Chaplin recently accepted its first open space set aside through the use of open space subdivision regulations. The Conservation Commission assisted the developer and the Planning and Zoning Commission with recommendations for land of the highest conservation value. This resulted in protection of ten acres and 1,000 feet of frontage on the Natchaug River.

From 1998 to 2007, 237 tree wardens, deputy tree wardens, and others gained new knowledge concerning tree warden duties and responsibilities through the Extension-sponsored Tree Warden School. Certified tree wardens are now better able to make informed and responsible decisions about the care and preservation of public trees, and protect the public from hazardous ones.

Connecticut’s 1.8 million acres of forest provide raw material for over 350 forest products processing and manufacturing firms which employ 3,600 citizens and contribute over $450 million annually to the state’s economy (2006). Connecticut is losing some 6,000 acres of commercially harvestable forest annually to development and fragmentation. The average forested parcel size has declined 34 percent over the past twenty years. Extension programs in natural resources are crucial to addressing the public good of forested land cover.
Sustainable Living

A national network for sustainable living education was developed (2007) by the Association of Natural Resource Extension Professionals (ANREP). Economic sustainability was defined as maintaining or increasing personal standards of living without decreasing those of others. Social sustainability implied equity and fairness in the creation of vibrant community life, both locally and globally. Environmental sustainability mandated conserving and managing ecosystems for future generations. This national focus evolved into a state-based program on sustainable living.

The National Network for Sustainable Living Education (NNSLE) is comprised of interested educators from land-grant institutions around the country as well as personnel from the USDA Cooperative States Research, Education, and Extension Service (CSREES). Curriculum materials have been developed, a database of publications has been created, and an informational website has been constructed.

Sustainable living education is an ethics-based program, where participants are encouraged to examine their personal, environmental, social, and economic values in light of research data, and to reflect on their individual behavior patterns. From these activities evolves an individual ethical foundation for developing a sustainable lifestyle.

A UConn pilot workshop series, Creating a Sustainable Community, is being developed under the guidance of Cheryl Czuba, Extension educator, community development and families (1973–); and Thomas Worthley, assistant Extension educator, forestry stewardship (1996–). Community refers not simply to a place or town but rather to stimulating a community of thoughts or ideas. Individuals examine their own personal values, establish an ethical basis for sustainable living, and try to adopt behavior changes accordingly through support from a like-minded community of people. The long-term goal is to create and encourage commitment to living a more sustainable lifestyle.
Agriculture

Reading the Farm

Reading the Farm is a whole-farm systems approach to faculty professional development. This UConn-based program is run by the Northeast Sustainable Agriculture Research and Education (SARE) Professional Development Committee. Faculty members are provided an opportunity to understand farm management and the importance of total integrated farm sustainability. Participants receive a detailed history of the environment, community, and enterprises of two different farms. The program emphasizes the importance of considering the farm as a system while providing specific crop recommendations to farmers. Faculty members have an opportunity to integrate information outside their specific area of expertise with their subject matter area. Through a presentation by faculty members, farmers receive a proposal to implement changes to their enterprise. Faculty members expand their appreciation of the complexity of issues facing production agriculture in an urban state, and are able to bring these examples back into the classroom environment.

Women in Agriculture Network

With support from UConn Extension, women agricultural entrepreneurs formed (2006) the Connecticut Women’s Agricultural Network (CT-WAgN) to assist women to succeed in new agriculture enterprises, while reducing their risk. On-farm twilight meetings, a labor conference, a listserv, and a webpage in the first two years offered learning opportunities and resource sharing to nearly 175 network members. Members range from women who are new to farming to those doing business management. Funding has been provided by the Northeast Center for Risk Management Education, USDA Risk Management Program, and the Connecticut Department of Agriculture.
Equine Herpes Outbreak

One of the greatest challenges during the spring of 2006 was the equine herpes outbreak that severely restricted the operation of the UConn horse program. Effective management limited the virus to the horse barns, and protected the major portion of the herd and pregnant mares. The entire equine team including Jim Dinger, associate professor (1977–); Jenifer Nadeau, Extension specialist and associate professor (2001–); John Bennett, academic assistant II (1986–); Kathy Pelletier, assistant farm manager (1978–); and Meg Dinger, lecturer, public service (2001–2007); with the able veterinary support of Alfredo Sanchez, Tufts University; and Sandy Bushmich, Extension specialist and professor, department of pathobiology and veterinary science (1988–), were instrumental in controlling and minimizing the negative impact of the outbreak. The quarantine was coordinated with Mary Jane Lis, state veterinarian; and Bruce Sherman, director, Bureau of Inspection and Regulation, Connecticut Department of Agriculture. As devastating as the outbreak was, the team demonstrated how best to handle this type of serious problem, and to minimize the impact on Extension equine programs.

Changing Farm Labor Population

Each year approximately 23,000 migrant and seasonal workers seek employment in Connecticut’s agricultural and landscape-related industries. However, little has been known about the educational needs of these workers, many of whom are non-English speakers. The Cooperative Extension System conducted (2004) a needs-assessment of non-English speaking workers and their farm employers. The survey evaluated the need for bilingual Extension programs and educational opportunities on issues related to hiring workers from other countries.

location and at other public sites where meetings could be scheduled. Statewide, 219 workers were surveyed. Of those participants, 79 percent were men and 21 percent were women. The mean age for the workers responding was thirty-two years. Spanish was the dominant language spoken by the interviewees, but Portuguese and Native American languages such as Mixtec and Quiche were also represented in the sample.

The mean educational level was sixth grade; however, the educational background varied from no formal education to professional degrees. Members of the assessment group were invited to a conference held on campus titled Latin American Immigration Policy and Human Rights in Connecticut which was co-sponsored by UConn Cooperative Extension.

Results from the survey have guided the development of bilingual brochures developed by Maria Berger, an undergraduate student in the department of plant science, working on an independent study with Ana Legrand, assistant Extension professor (1999–). These brochures provide information on technical terms likely to be encountered by workers in the green industry. The terms and definitions are presented in both English and Spanish. Moreover, survey results related to the arboriculture industry have been published in the *Journal of Extension*.

**Poultry Industry**

Between 1910 and 1950 the state’s poultry industry grew from a few hundred to almost 4,000 farms producing either poultry meat or eggs. Much of this growth occurred during and after World War II. These farms were relatively small scale compared to today, with anywhere from fifty birds to a few thousand. Birds were all raised on the floor or free ranged outside with access to a chicken coop at night. During the 1960s cages were introduced for laying hens, and the meat bird industry moved to the southern United States. The number of poultry farms in the state shrunk to less than 300 (1980). By 2000 there were less than twenty-five

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Unemployment reaches 6% nationwide.

A gallon of gas costs $1.83.
commercial poultry farms, but smaller backyard or family flocks of 200 or fewer birds grew to more than 2,500 in number. These birds are raised similar to the way they were prior to 1950, with floor and free range type operations being the predominant form of rearing poultry. Even a few commercial farms are going to the cage-free or free-range model.

**Avian Influenza (AI) Reappears**

In October 2001 the LPAI H7N2 virus was detected on a small broiler growing facility in Connecticut. The Connecticut Department of Agriculture, working with poultry scientists at UConn, implemented total depopulation of the flock of 16,000 broiler birds on October 12, 2001. The state of Connecticut paid full indemnity to the owner as well as the disposal costs associated with the dead birds that was in excess of $60,000. This depopulation exercise revealed issues with current depopulation and disposal methods. Better methods of transporting birds to incineration facilities for biosecurity need to be developed.

The virus testing at a major poultry farm in Connecticut indicated (2003) the presence of LPAI H7H2. Mahzar Khan, Extension poultry veterinarian (1989–), was working with the producer at the time. Test results were sent to the National Veterinary Services Laboratory in Ames, Iowa, for verification. In the meantime the suspected flocks were quarantined. Once the results were confirmed, the state became a quarantined area. An agreement with USDA allowed for all new birds coming onto the farm to be vaccinated against AI, and all birds leaving the farm to be incinerated. This option was used instead of depopulating the entire 4.7 million birds under quarantine.

This was a landmark decision, and was not generally supported by the U.S. poultry industry at the time. Up to this point, no vaccination for AI had been allowed for chicken flocks in the United States, although it had been successfully tried in Mexico on poultry broilers. The vaccine was produced by SPAFAS, a Connecticut company. The program was a success, and no other birds in Connecticut became infected with the virus at the time.

**UConn is ranked as one of the top twenty-five public universities in the country.**

**George W. Bush is reelected president, beating John Kerry.**
As a result of this outbreak, on July 23, 2003, a ban on all poultry exhibited at fairs and shows in Connecticut was issued. Alternative educational events were planned for 4-H poultry shows, such as educational posters and displays by youth to be judged in place of live birds. The ban was lifted in April 2004, once it was shown that the LPAI virus had not spread beyond the commercial farm where it was initially found.

In December 2005 Governor M. Jodi Rell (2004–) asked four state agencies, the Departments of Public Health, Environmental Protection, Emergency Management and Homeland Security, and Agriculture to work together to prepare for an Avian flu pandemic. This task force, along with other agencies and organizations across the state, including Cooperative Extension, worked to strengthen Connecticut’s level of preparedness.

Khan, Herbert Van Kruiningen, professor and department head, pathobiology and veterinary science (1966–); Joan Smyth, associate professor, pathobiology and veterinary science (2005–); and others from the department sponsored a New England AI Prevention and Control for Game Birds and Poultry Fanciers workshop on May 9, 2006. A second workshop for state animal health technicians was held May 10-11, 2006. As of July 2007 the state was AI free, a state emergency poultry disease team was in place, and a plan of action had been developed should a pandemic occur in the U.S.

Niche Markets

Farmers are seeking alternative enterprise ideas for economic sustainability and funding to implement changes. To receive state-funded grants, farmers must complete a business plan, showing the added net income to justify the grant funding. Using a Microsoft Excel spreadsheet, farmers create different scenarios of product pricing and related costs of production through the marketing of products. Five farms completed agriculture enterprise budgets as part of their application for cost sharing or bank financing. One farm received grant money to improve its maple syrup operation and marketing, thus increasing their net income by 23 percent.

A gallon of gas is $2.10.

The UConn men’s basketball team wins their second NCAA Division I title.
USDA Risk Management Program

A comprehensive Extension program offers education to assist agricultural producers on issues related to management of production, marketing, financial, legal, human resource, and environmental risks through the use of crop insurance and other available strategies. From 2001-2007 the USDA Risk Management Program reported that the number of policies earning premium declined slightly. However, liability coverage increased from $67 million to $80 million as a result of Extension programs. These data suggest that enhanced use of crop insurance by Connecticut producers is occurring. The principal investigators on the Risk Management grant are Marilyn Altobello, associate professor, department of agricultural and resource economics, (1978–); Norman Bender, New London County senior Extension educator (1978–); and Joseph Bonelli, Tolland County associate Extension educator (2005–).

Income Tax School

The University of Connecticut Income Tax School has provided up-to-date and accurate tax information for approximately 3,000 Connecticut tax practitioners and their clients over the past fifteen years. This cooperative effort has been between the Department of Agricultural and Resource Economics, Connecticut Department of Revenue Services, U. S. Internal Revenue Service, and private sector tax accountants and attorneys within the state. The tax school has been organized under the leadership of Linda Lee, professor, agricultural and resource economics (1987–). Farhed Shah, associate professor, agricultural and resource economics (1990–); and Joseph Bonelli provided leadership for the school during Lee’s sabbatical year (2007). The two-day tax school provides sixteen continuing education credits for tax practitioners in Connecticut.
The Dairy Industry

The regional milk marketing cooperatives, Agrimark and Dairylea/Dairy Marketing Services, and Connecticut and Massachusetts dairy farmers approached the UConn Food Marketing Policy Center, under the leadership of Ronald Cotterill, professor, agricultural and resource economics (1981–), with requests for an update of milk pricing, and for a long-term public solution to fluid milk channel pricing problems. On July 18, 2006, a full-day meeting was held at the University of Connecticut that included corporate economists from the two milk marketing cooperatives, University faculty members and students, and more than twelve dairy farmers from the state. *Issue Paper #21* summarized the discussion and decisions made at the meeting and can be found on the Food Marketing Policy Center’s website.

Nutrient Management Planning

The Nutrient Management Planning (NMP) program was originated by Tom Morn’s and Rich Meinert (2007) to teach farmers on eighteen farms how to manage manure environmentally as well as agronomically. The eighteen farms participated in the NMP and represented farms with 7,200 dairy cows, 161 beef cattle, twenty-four sheep, sixteen horses, and two swine. Together these livestock produce 8,487 tons of solid manure and 36,377,361 gallons of liquid manure annually. Plans were written to spread this manure on 1,453 fields, consisting of: 6,082 acres of field corn, 3,822 acres of hay, 71 acres of barley, 262 acres of soybeans, 193 acres of vegetables, 550 acres of pasture, and 283 acres of other minor crops. Results showed that no commercial dairy farms ranging from as low as fifteen cows to a high of 1,571 cows can manage manure under strict phosphorus standards.

As part of the data collection process, GIS maps of the farms were developed by Extension and provided to the farmers and their consultants. These maps ensured that data collected in the field were accurate. On average, implementing a NMP forces farms to double their manure hauling costs as the manure must be transported twice as far from the barn. Eighteen farms hauled manure a total of 43,877 miles to spread manure. Hauling costs per farm ranged from $159 to $150,738.
The majority of the phosphorus (P) coming onto Connecticut farms is in purchased feed rather than in fertilizer. Farmers have decreased the amount of P in feed rations, but cattle are only about 50 percent efficient at removing P from feedstuffs. This means that 50 percent of P in the diet passes through the animal and into the manure being applied on crop land, leading to an accumulation of P in the soil. There is limited opportunity to move manure off the farm, particularly liquid dairy manure.

Plant Database

The UConn plant database, developed by Mark Brand, professor of horticulture, receives over 100,000 website views from over 3,000 persons who visit the site daily. Numerous requests are received for the use of the information and photographs. Landscape design firms use the pictures and text as part of their design presentations. Commercial nurseries and garden centers link to the pages, and homeowners send questions in about plants. The United States government has used some of the images for publication.

The website generates about 100 email plant material questions per month (2008). Email feedback on the site has been very positive, and surveys of undergraduate students using the website as a resource in their plant materials courses have been positive. A sample of user comments includes: “Your website is one of the best online resources.” “It’s a favorite now—I think it is just wonderful!”

Pesticide Safety Education Program

The Federal Insecticide Fungicide and Rodenticide Act (FIFRA) directed (1972) the EPA to cooperate with USDA and to use the services of the Cooperative Extension System to inform and educate pesticide applicators about the accepted uses and other regulations made under the Act. Education focuses on the safe use and handling of pesticides, and provides information about pesticides and their appropriate uses.

State of UConn Report shows that the University added $3.1 billion to Connecticut’s gross product. UConn beetle farmer program is initiated.
Family and Consumer Sciences

Nutrition Education

Diet and health information provided by CES to low-income populations in the greater Hartford area resulted in 85 percent of parents participating in child nutrition workshops being able to identify healthier snack alternatives for their children. Ninety percent were able to identify dietary and sedentary lifestyle risk factors for the development of overweight and obese children. One hundred percent of the children with phenylketonuria (PKU) who attended the low protein Extension cooking school tried recipes and subsequently increased their diet variety at home. Eighty percent of incarcerated women who attended food budgeting workshops through the Paul and Lisa Program, trained by Extension, were able to better utilize food stamp dollars in the month following release from prison.

Food Stamp Nutrition Education (FSNE) Program

The Food Stamp Nutrition Education (FSNE) program is part of the food stamp program administered by USDA Food and Nutrition Service (FNS). State food stamp agencies have the opportunity to provide nutrition education for people who are eligible for the food stamp program, defined as households that fall below 130 percent of the federal poverty level. States must submit an annual plan for FNS approval, and FNS reimburses states for 50 percent of the allowable expenditures for nutrition education. The remaining 50 percent is funded by state match of either actual dollars or documented in-kind effort.

Nationally, the first FSNE program was federally funded in 1991. The University joined (1993) ten other states in submitting a food stamp nutrition education plan. Ann Ferris, department head, nutritional sciences (1990–1996), assumed leadership for the proposal submission to USDA, FNS through the Connecticut Department of Social Services (DSS). The first project was funded for the 1993–1994 federal fiscal year and matched $201,000 in federal funds. This permitted an extension of the current Expanded Food and Nutrition Education Program (EFNEP), and provided specialized programs for young mothers in Hartford and
seniors in southeastern Connecticut. The programs are based on sound formative evaluation, and community participation in setting program objectives.

Ferris worked (1995) with Kathy Cobb, Connecticut Department of Public Health (DPH), to submit a complementary plan to USDA through the Connecticut Department of Social Services. The University added (1995) the Hispanic Health Council (HHC), Hartford, as a community partner and that partnership continues in 2008.

The FSNE budget is divided among four key program areas. The food security program is headed by Linda Drake, program coordinator, Expanded Food and Nutrition Program (1970–). The 4-H summer nutrition education program was first led by Wanda Little, and then by Umekia Taylor, Extension associate educator in residence (1993–). Social marketing and outreach programs with the Hispanic Health Council are coordinated by Rafael Perez-Escamilla, professor, department of nutritional sciences (1994–); and Grace Damio, Hispanic Health Council. The Senior Nutrition Awareness program was led by Nancy Fey-Yensan, New London County Extension assistant educator (1985–1996). The food stamp connections and administrative core were led by Ferris. The administrative core responsibility transferred (2008) to Valerie Duffy, professor, allied health sciences department (1994–).

Until 2003 there was also a small program led by Sharon Gray, Hartford County Extension nutritionist (1993–), which provided nutrition education to food stamp recipient families with children born with aberrations of metabolism. That program was discontinued (2003) when food stamp guidelines disallowed programs for clinical populations.

Fey-Yensan joined (1997) the faculty at the University of Rhode Island, and Connecticut became the first state to submit a regional project with leadership for the senior nutrition awareness program coming from the University of Rhode Island. By 2001 the federal contribution to the UConn food stamp nutrition education program had reached $1.5 million annually, and that level has been maintained near ± $200,000 since (2008).
The University of Connecticut FSNE project staff has won national awards for the development of social marketing and nutrition education materials. Staff members served on national committees to advise USDA CSREES on FSNE. Grants complemented FSNE funds and supported research that provided undergraduate, masters, and doctoral students training in community nutrition. Published refereed journals added significant credibility to the educational programs. FSNE has implemented multiple approaches to deliver nutrition education to families and individuals in need. The 2005–2006 annual report indicated that an estimated 53,316 people participated in nutrition education programming, and 434,812 people were reached via social marketing campaigns.

Consumer and Financial Literacy

Following the September 11, 2001 attacks on the World Trade Center, Lynne Grant, Fairfield County associate Extension educator (1976–), produced information related to charitable giving and avoiding fraud. Using both print and broadcast media, the information was distributed statewide and used nationally by CES educators. Similar information was distributed in post-Hurricane Katrina (2005).

Connecticut Extension has a long history of working to increase the financial knowledge of youth, by training teachers, leaders, and other adults to teach teens and youth financial decision-making skills. More recently, the Welcome to the Real World, Connecticut Edition! simulation program has given high school and young adult participants the opportunity to imagine themselves at age twenty-five. They select a career, investigate the starting salary, subtract taxes, and then make spending decisions about housing, transportation, utilities, insurance, groceries, clothing, and entertainment. They learn about living within their incomes by writing checks to cover their expenses and balancing their checkbook. At the end, they also draw a chance card which represents unexpected events that may add to or subtract from their bottom line.
Faye Griffiths-Smith, New Haven County associate Extension educator (1981–), coordinated the Welcome to the Real World, Connecticut Edition! simulation eighteen times during 2007-2008, reaching 312 participants in New Haven, Hartford, Middletown, and East Haven. Early partnering organizations have promoted the simulation to their colleagues and external collaborators which has resulted in new opportunities to expand both within and beyond the current partnering organizations. Participants included young adult learners in an adult education program, students at two Job Corp Centers and a juvenile training school as well as others in a program to assist them in transitioning back into their communities, workers in a summer youth employment program, and an alternative high school.

Evaluations were completed by thirty-eight participants in the Welcome to the Real World, Connecticut Edition! simulation. Seventy-eight participants indicated that they learned to balance income and expenses, and sixty-seven participants learned how to balance a checking account.

Though specific content and educational methods change over time, Cooperative Extension continues to assist people in learning how to manage their resources to better meet their goals, and to teach young people the basics of personal finance. In partnership with colleagues across the country, Cooperative Extension has developed the Financial Security for All website. This informational resource incorporates a variety of personal finance content and provides responses to frequently asked questions.

Child Care

A statewide needs assessment survey on child care identified (2002) a lack of information and resources for providers of infant and toddlers. Coupling these results with research about the importance of the first three years of life, a new statewide collaboration was created that produced an eight-brochure educational series for parents and caregivers. Keys to Great Caregiving, let by Cathy Malley, provides information on infant and toddler development and care.
4-H Youth Development


In preparation for the National Conversations on Youth Development, local conversations were held in each county in the country. On February 9, 2002, twenty-eight youth and twenty-six adults met at the state Legislative Office Building and identified five policy areas for Connecticut. These five topics were then presented to the state legislature and the Governor. The five Connecticut topics included to provide training and recognition for youth workers who participate in youth development training programs, especially diversity training; provide more work and study experiences for youth in government; increase visibility of positive youth activities and actions to include getting the media to report on positive behaviors; seek recognition for positive youth activities; and provide free or low cost transportation to participants of youth programs on a local, regional, and statewide basis.

The National Conversation on Youth Development in the Twenty-First Century was held in Washington, DC (February 2002) with thirteen participants from...
Connecticut, consisting of eight youth and five adults. The most popular 4-H project areas nationwide in 2008 are citizenship, communications and expressive arts, consumer and family sciences, environmental education, personal development and leadership, plants and animals, and science and technology. 4-H programs are conducted in 3,051 counties of the United States, District of Columbia, Puerto Rico, Virgin Islands, Guam, America Samoa, Micronesia, and Northern Mariana Islands. There are over sixty million 4-H alumni. The strength of the 4-H program is derived from the involvement of youth as members, the commitment of caring volunteer adults, and the competency of the professional staff members, the same as (1913) when the first 4-H club was formed.

The 4-H Center at Auer Farm provided quality science and diversity education (2007) through a unique partnership. Hartford-based programs of the Center for Youth and Organized Parents Make a Difference (OPMAD) partnered with the suburban towns of Simsbury, Burlington, and Canton. This allowed sixty children from Hartford and sixty children from the suburbs to partner during a three-week science experience. By working together, urban and suburban children formed friendships and gained a better understanding of one another.

4-H Volunteer Conference

Grant funds received from National 4-H Council and the Monsanto Corporation, along with a generous contribution from the Diebold Foundation, sponsored a 4-H volunteer conference (November 3, 2007), at Northeast Utilities headquarters in Berlin, Connecticut. The conference brought together seventy-two staff members and volunteers to enhance their youth development.
skills and to network with each other. Workshops included risk management, cyber safety, dealing with bullies and cliques, building interpersonal communication, creating winning record books, conducting effective club meetings, learning about national 4-H opportunities, and mandated reporter training for volunteers regarding child abuse. Other highlights included the Great Hall of Ideas in which 4-H clubs were invited to exhibit their club’s activities, followed by dinner, and the annual awards ceremony to recognize 4-H volunteers.

National 4-H Hall of Fame

Myron Baldwin, Jr. of Wethersfield, Connecticut was named as an inductee into the 2008 National 4-H Hall of Fame. This prestigious 4-H award, made possible by the National Association of Extension 4-H Agents’ Hall of Fame Committee in cooperation with National 4-H Council and National 4-H Headquarters, honors 4-H volunteers, supporters, staff, and pioneers who have made contributions to 4-H at local, state, and national levels. Myron has worked in support of the 4-H program for over fifty years, bringing his work ethic, character, and ability to inspire countless youth and adults in Connecticut.

Myron, along with his late wife Beulah (Billie), were the leaders of The Winding Brook 4-H Club for over fifty years. The club has consistently had over 100 members who participate in gardening projects, crafts, public speaking, demonstrations, and community service. Myron has been involved in many aspects of 4-H including the Hartford County 4-H Camp, the Connecticut 4-H Development Fund, the Hartford County 4-H Advisory Committee, and Fair Association. In addition to all of his time and talents, Myron has given of his financial resources as well.

Bernice Assard of Bethlehem, Connecticut was one of the first inductees into the National 4-H Hall of Fame (2002). Bernice started her 4-H career as an assistant leader of the Bethlehem 4-H Busy Stitchers, a club that her daughter had joined in 1956. Four years later, she became the leader, and in the past fifty years, more than 100 girls have benefited from her tutelage.

The mission of 4-H is to empower youth to reach their full potential, working and learning in partnership with caring adults.

1,200 youths and adults participate in the 4-H National Conversation in Washington, DC.

Center for Land use Education and Research offers more than sixty educational presentations on land use issues.
Over the years, the club has had as many as thirty members ranging in age from seven to nineteen. Three daughters and five granddaughters have all kept her busy with 4-H. The club focuses on Home Economics activities. Each year the club embarks on a community service project. Club members participate in the 4-H fair and the Eastern States Exposition. Numerous club members over the years have been selected for Citizenship Washington Focus, IFYE, and National 4-H Congress.

Bernice passed away in 2008, but her legacy lives on as the Bethlehem 4-H Busy Stitchers continue to learn about leadership, citizenship, and life skills under the guidance of Bernice’s daughter, Elaine Brodeur. Bernice was buried with her National 4-H Hall of Fame award sash, signifying her love of 4-H and the importance she placed on it in her life.

**Connecticut Small Business Development Center (CSBDC)**

Modeled after the Extension System, CSBDC is designed to provide outreach education to small business owners or perspective owners. Following a move from the UConn School of Business (2005), CES became the administrative home for this organization through 2006. Providing services in thirteen locations around the state, CSBDC counselors guided budding entrepreneurs and seasoned veterans through the process of obtaining funding, marketing, business plan development, and starting or growing a business. The March 2006 six-month report indicated that counseling services were provided for 837 new or existing businesses, and 172 educational seminars were attended by 2,694 individuals. The CSBDC program moved from CES (2007) to Central Connecticut State University.

The appropriation for all Extension lines in the federal budget was $451,394,000 (2006).

Equine herpes outbreak restricts UConn’s horse program.

Working the Land, a video about Connecticut agriculture, is released.

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Administration

Volunteer Roles Evolve

As the competition for volunteers increased, Extension opportunities were tailored to assure that individuals clearly saw the benefits of personal growth as well as service. Through efforts in citizenship education, Extension continues to model, instill, and provide 4-H opportunities for youth to realize the importance of volunteering.

Extension programs attracting large numbers of volunteers include 4-H, Master Gardeners, urban and community forestry, Meskwaka Tree Project, Conservation and Natural Resources Management, Green Valley Institute, and People Empowering People. Partnering with community agencies, local government, not-for-profit organizations, schools, and corporations enables Extension to further spread its expertise in subject matter and community development, as well as to explore new funding sources, always working toward the public good.

Department of Extension

The Department of Extension focuses on non-credit, outreach education, engagement with partners, applied research, and service with the learners being the people and the communities of the state. Few faculty members in the department teach undergraduate or graduate courses as the department is not a degree-granting unit. Roger Adams serves (2008) as department head (1977–).

From its inception (1995), the Cooperative Extension Unit was structured and functioned like an academic department. Efforts were initiated (2000) to establish an official department of Extension based on the following factors:

- lack of an official home department within the University for Extension faculty and staff members housed at the eight Extension centers;
- lack of equality in representation in the College and University for such faculty and staff members; and
- the fact that no new resources were needed.
The department successfully completed (2004) the University’s assessment review process. The resulting review-based memorandum of understanding (MOU) (2005) stated: “The Provost’s office will work with the department to obtain official department status.” To implement the MOU recommendations, a proposal was prepared and overwhelmingly approved by vote of the department’s faculty and staff members. The proposal was then approved by a vote of the CANR faculty members (May 2006). On September 26, 2006, the UConn Board of Trustees unanimously approved the proposal, and the Department of Extension was officially created.

The department head, an administrative assistant, and two faculty and three staff members are located on the Storrs campus (2007). Three Sea-Grant Extension educators have their academic home in the department, and are housed at the Avery Point regional campus in Groton. The majority of the faculty and staff members are located at the eight Extension centers (See Appendix B: Cooperative Extension System (CES) Facilities for a history of each center).

Scholarship in Extension

Scholarship is defined as the creation of new information that is both validated and communicated to others. Outreach scholarship is knowledge for the public good, of which the two components are service and education. Service to the community, the University, and one’s profession are important. Examples of service include contributions made by answering questions and providing resources such as publications or websites. Service also includes problem solving, working on policy development, and arranging the logistics of a meeting.

Education focuses on outcomes and impacts, is multi-functional in nature (teaching, research, and service), and may cross multiple disciplines. Benchmarks to measure accomplishments are created in order to evaluate the impact of the educational process. Education is the source of on-going scholarly efforts such as risk management, lead-poisoning prevention, and highlands forest management (2006).

The effectiveness of increased networking led to $909,409 in grants and contracts for the Department of Extension, and included such programs as risk management, lead-poisoning prevention, and highlands forest management (2006).

Welcome to the Real World, Connecticut Edition!

National minimum wage increases to $5.85.
as writing publications or grant proposals, publishing peer-reviewed articles, or directing a training video. The primary focus is on the resulting accomplishments or impacts, not on the activities conducted.

Leaders’ Forum-Engaging Stakeholders

Listening to those who have an interest in the work of the College of Agriculture and Natural Resources and the Connecticut Extension System is a critical component to organizational success. During November 2000–2003, 2005, and 2007 representatives of non-governmental agencies with whom faculty and staff members work were invited to learn more on select topics of interest within the College, and to share their insights into the future. During each forum, invited faculty members presented their teaching, research, or Extension program. Topics included animal health, sustainable crop management, aquaculture, biotechnology, food science, sustainability and the environment, and workforce development (2000); nutrient management, ornamental plants, family nutrition program, land use, and biosecurity (2001). Also presented were landscape development, healthy environments for children, and the new biology (2002); Branford river stewardship project, African ecology course, and seed production in space (2003); water and private wells, GIS, and food security (2005); and stem cell, turf, and 4-H science, engineering, and technology (2007).

Following brief presentations, participants discussed what they had heard and how they would like to see the College evolve. Input from more than 100 people at each event has been used by faculty members to document stakeholder input into grant proposals, to report to USDA, and for programmatic networking among participants.

The amount of state funds paid to each Extension council was $2,818.28, and the amount required to be raised by each council remained at $1,000 (2007).

The 4-H Center at Auer Farm begins providing science and diversity education.

A 4-H volunteer conference is held to help staff and volunteers enhance their youth development skills.
Charles and Augustus Storrs Award

The Charles and Augustus Storrs Award is presented by the University of Connecticut College of Agriculture and Natural Resources. The award recognizes and honors those who, through their leadership, generosity, and belief in the future of Connecticut, support the College in its service to the state, region, and nation.

Recipients of the Storrs Award have been: Congresswoman Rosa DeLauro, District 3, New Haven (2001); Myron and Beulah “Billie” Baldwin, Wethersfield (2002); New York Farmers (2003); Robert and Dorothy Jacquier, Canaan (2005); and Eastern States Exposition (ESE), Board of Directors, and the Connecticut ESE Trustees (2007). The award was not given in 2004 or 2006.

Diversity in Extension

The Provost’s office requested (2006) that each unit in the institution develop a diversity plan with measurable goals. The College goals for 2006–2007 were:

1. Collect benchmark data to be used in increasing the number of underrepresented administrators, faculty, and staff members in all CANR program areas.

2. Create agreements with community colleges to increase the number of underrepresented students from community colleges in CANR.

3. Create a marketing and publications policy for CANR which ensures all College media products support diversity efforts, and demonstrate a welcoming and accepting atmosphere.
4. Create curriculum change processes that encourage faculty members to use pedagogical strategies to engage students in learning and facilitate respect for diverse populations.

5. Conduct a climate assessment to determine needs and opportunities for creating a culturally inclusive climate.

CANR faculty members, including those in Extension, of the American Association of University Professors (AAUP) as self-reported were (2007) 0.6 percent American Indian male, 0.6 percent Black female, 0.6 percent Black male, 1.9 percent Chinese female, 1.9 percent Chinese male, 0.6 percent East Indian female, 1.2 percent East Indian male, 0.6 percent Latino female, 3.7 percent Latino male, 0.6 percent Other Asian female, 1.2 percent Other Asian male, 40 percent White female, 45 percent White male, and 1.2 percent Mexican American female.

The CANR staff members of the University of Connecticut Professional Employees Association (UCPEA) were (2007) 1.4 percent Black female, 1.4 percent Chinese female, 2.9 percent Latino female, 77 percent White female, 16 percent White male, and 1.4 percent not-indicated male.

Department of Allied Health Sciences

The Department of Allied Health Sciences joined (2007) the College and, with this addition, the number of Extension appointments increased. Three faculty members agreed to accept an official Extension appointment. They were Denis Coble, associate professor (1987–); Valerie Duffy, professor (1994–); and Jane Kerstetter, associate professor (1988–). In addition, under Kerr’s leadership, all department heads had a one-third Extension appointment to facilitate the administration of Extension programming across academic departments.

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Michael Hogan becomes the University’s 14th President. Extension hosts first post doctoral scholar.
Mass Media

eXtension

Starting with newspapers, farm publications, and the radio, the transition to early television work, and then computers, Extension continues to reach people via mass media. A *Journal of Extension* article (2000) titled “Extension on the Brink of Extinction or Distinction” launched eXtension as the next generation of media technology. Web seekers of information now find basic information, ask-the-expert advice, frequently asked questions, diagnostics, discussion and chat rooms, decision tools, conferencing, and video, as well as individual or multiple learning modules.

Communities of practice (CoP) representing multiple states develop modules such as Building Local Economics of the Future, Consumer Horticulture, Diversity Across Higher Education, the Extension Disaster Education Network (EDEN), Family Caregiving, and HorseQuest. The formal launch for eXtension occurred on February 21, 2008.

The advantage of eXtension over all other websites is the component of Extension personnel across the nation, in every county, to interpret and back-up the web-based information. eXtension revolutionized the creation and dissemination of information by delivering greater value to global citizens, thus potentially changing the social network structure of communities.

CPTV Vignettes

Carl Salsedo, Hartford County Extension educator (1975–), collaborated (2001) with Connecticut Public Television (CPTV) to address the issue of sustainability within the suburban landscape through a series of educational vignettes for television. The focus was to reduce the use of pesticides, fertilizer, and water, thus reducing inputs from non-point pollution sources, resulting in more...
sustainable gardening and landscaping practices. A residential water quality grant provided $5,000, and CPTV matched this amount in time and services. Five forty-second television vignettes continue to be aired, reaching an estimated audience of 300,000 viewers each day in Connecticut.

**Working the Land Video**

Producer and farmer Ken Simon created the DVD *Working the Land* (2007) to illustrate the past, present, and future for agriculture in Connecticut. With 4,200 farms in the state, agriculture, collectively, is a two billion dollar industry, employing over 50,000 people.

Narrated by actor Sam Waterston, the video featured interviews with members of the UConn community. These included Michael J. Darre, animal science professor and poultry Extension specialist (1981–); Tessa Getchis, associate Extension educator (2000–); Dean Kerr (1993–2008); Kevin McBride, associate professor, anthropology and director of research at Mashantucket Pequot museum; Walter Woodward, assistant professor, history and Connecticut state historian (2004–); Robert Thorson, professor, geology (1987–); Rudy Favretti, professor, landscape architecture (1955–1987); and many alumni of the College of Agriculture and Natural Resources (CANR). Nancy Weiss served as development consultant.

As CES moves toward its 100th anniversary (2014), is there economic justification for its future? Nationally, Extension is a loose confederation of states bound by federal funds appropriated through the Smith-Lever formula. This history is built on the strength of faculty and staff members’ academic competencies, and the anticipation of the needs of the people served—always mindful of working toward the public good.

Consider society in 1914 versus 2008 in terms of the following variables: the number of people living in rural areas, working in agriculture, living on farms, and attending college. From the first day of the Cooperative Extension System,
Extension has possessed the unique ability to sort information by quality and reliability for the intended audience.

UConn celebrated (2006) 125 years as an institution of higher learning. For almost 100 of those years, the Cooperative Extension System (CES) has been a major component of University outreach bringing the resources of the institution to the real world issues of the state for the public good of the people of Connecticut.

This decade saw significant changes and opportunities. The first post doctorate scholar for the Cooperative Extension System, Dorria M. K. El Said, agricultural Extension and rural sociology department, Menoufia University, Egypt, worked and studied at the university for two months (2007).

Extension faculty members still assist individual farm operations as noted (2008) by John and Jennifer Halfinger of Higganum. They credit the success of their operation on their knowledge gained through experience, study, and consultation with agricultural experts through the UConn Cooperative Extension System.

Cooperative Extension’s rich history reflects our efforts to reduce gaps, to consider the environment and the consequence of our actions, and to educate the next generation. President Johnson’s Great Society principles delivered on May 22 1964–also at the University of Michigan in Ann Arbor–continue to drive Extension’s work into the future.

The basic concept of the Extension system (1914) assumed there would be personal contact between the teacher and the learner, and that the learner would be actively engaged in the educational process. That concept lives on today in the work of the Connecticut Cooperative Extension System.
Two youngsters enjoy the outdoors at a 4-H camp (circa 1980).
Appendix A
College of Agriculture and Natural Resources and Cooperative Extension System Administration

College Leadership (1939–2008)
Cooperative Extension Leadership (1913–2008)

In the Memorandum of Understanding between the University of Connecticut and the United States Department of Agriculture on Cooperative Extension Work in Agriculture and Home Economics (1914), the University of Connecticut agreed to organize and maintain a definite and distinctive division known as the Agricultural Extension Service, for the management and conduct of all Cooperative Extension Work. The University also agreed to administer, through Cooperative Extension, all funds for such work received through appropriations made by Congress or the state legislature, by allotment from its Board of Trustees, or from any other sources. The first Memorandum of Understanding was signed by University President Charles L. Beach (1908–1928).

From 1913 to 1937 the title of the administrator of Cooperative Extension was director of Extension work. The title of coordinator of agriculture was added to the director title (1937), and in 1939 the title changed to vice director agriculture Extension. From 1913 to 1939 the director of Extension was a position separate from the office of the dean of the division of agriculture. By action of the Board of Trustees, teaching, research, and Extension programs were coordinated (1940) under one individual, who served as the dean of agriculture and director of the Cooperative Extension Service, and the Storrs Agricultural Experiment Station. The director was and continues to be responsible to USDA for the administration of federal and state-offset funds, the supervision and use of official mail (eliminated in 2004), and the management of employee privileges.

The associate director was designated as the chief operating officer of Cooperative Extension responsible for the general administration and supervision of the Extension program including 4-H at all levels. Both the Extension director and associate director were directly responsible for the conduct of all Extension work in the state. In this capacity, they reported both to the president of the University of Connecticut and to the director of Extension at USDA.
### College Leadership (1939–2008)

Beginning in 1939 the following individuals served as dean and director:

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roger B. Corbett</td>
<td>Dean and Director, College of Agriculture</td>
<td>1939–9/16/1940</td>
</tr>
<tr>
<td>George C. White</td>
<td>Acting Dean and Director, College of Agriculture</td>
<td>9/17/1940–12/1940</td>
</tr>
<tr>
<td>Edwin G. Woodward</td>
<td>Dean and Director, College of Agriculture</td>
<td>12/1940–7/7/1944</td>
</tr>
<tr>
<td>Wilfred B. Young</td>
<td>Acting Dean and Director, College of Agriculture</td>
<td>7/7/1944–10/1/1945</td>
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<tr>
<td>Wilfred B. Young</td>
<td>Dean and Director, College of Agriculture</td>
<td>10/1/1945–10/1/1966</td>
</tr>
<tr>
<td>Edwin J. Kersting</td>
<td>Dean and Director, College of Agriculture</td>
<td>10/1/1966–2/19/1969</td>
</tr>
<tr>
<td>Edwin J. Kersting</td>
<td>Dean and Director, College of Agriculture</td>
<td>2/19/1969–8/31/1983</td>
</tr>
<tr>
<td>Hugo H. John</td>
<td>Dean and Director, College of Agriculture and Natural Resources</td>
<td>9/1/1983–8/31/1987</td>
</tr>
<tr>
<td>Kirvin L. Knox</td>
<td>Acting Dean and Director, College of Agriculture and Natural Resources</td>
<td>9/1/1987–7/1/1988</td>
</tr>
<tr>
<td>Kirvin L. Knox</td>
<td>Dean and Director, College of Agriculture and Natural Resources</td>
<td>7/1/1988–3/1/1992</td>
</tr>
<tr>
<td>John P. H. Brand</td>
<td>Acting Dean and Director, College of Agriculture and Natural Resources</td>
<td>2/17/1992–5/31/1993</td>
</tr>
<tr>
<td>Kirklyn M. Kerr</td>
<td>Dean and Director, College of Agriculture and Natural Resources</td>
<td>6/1/1993 – 7/1/2008</td>
</tr>
<tr>
<td>Gregory J. Weidemann</td>
<td>Dean and Director, College of Agriculture and Natural Resources</td>
<td>7/1/2008–</td>
</tr>
</tbody>
</table>
Cooperative Extension Leadership (1913–2008)

From 1913 to 2008, the following individuals provided the day-to-day leadership to Connecticut Cooperative Extension programs:

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>C.D. Jarvis</td>
<td>Director of Extension Work</td>
<td>1913–1915</td>
</tr>
<tr>
<td>H. J. Baker</td>
<td>Director of Extension Work</td>
<td>1915–1923</td>
</tr>
<tr>
<td>B. N. Ellis</td>
<td>Director of Extension Work</td>
<td>1923–9/1/1937</td>
</tr>
<tr>
<td>Roger B. Corbett</td>
<td>Director of Extension Service and Coordinator of Agriculture</td>
<td>1937–1939</td>
</tr>
<tr>
<td>Raymond K. Clapp</td>
<td>Vice Director Agriculture Extension</td>
<td>1939–7/1/1940</td>
</tr>
<tr>
<td>Robert G. Hepburn</td>
<td>Associate Director, Extension Service</td>
<td>7/1/1940–12/31/1948</td>
</tr>
<tr>
<td>Henry M. Hansen</td>
<td>Associate Director, Extension Service</td>
<td>4/1954–10/31/1973</td>
</tr>
<tr>
<td>George E. Whitham</td>
<td>Associate Director, Extension Service</td>
<td>1/1/1973–3/1/1978</td>
</tr>
<tr>
<td>Ronald F. Aronson</td>
<td>Acting Associate Director, Extension Service</td>
<td>3/1/1978–9/18/1978</td>
</tr>
<tr>
<td>Anne H. Rideout</td>
<td>Associate Director, Extension Service</td>
<td>1978-1989</td>
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<tr>
<td></td>
<td>Associate Director, Extension System</td>
<td>1989-1992</td>
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<tr>
<td></td>
<td>*Extension’s name changed from “service” to “system” in 1989</td>
<td></td>
</tr>
<tr>
<td>Nancy H. Bull</td>
<td>Associate Dean, Outreach and Public Service and Associate Director,</td>
<td>1/1/1995–7/2008</td>
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Appendix B

Cooperative Extension System (CES) Facilities

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In the early years Extension centers were located in county-owned space, often the court house or the local post office. As CES became more integrated into the University, offices were moved into University-owned space.

State Extension Office

The first state 4-H office was housed in the old Whitney Building, the original home of the University of Connecticut, Storrs. In about 1920 the office was moved to the second floor of the farm machinery building (built in 1915 and renamed the Klinck building in 1989) where only beaver board partitions made of compressed wood pulp separated the offices. Tractors and other gasoline-burning machinery occupied the first floor. The main part of the W.B. Young Building was completed (1950) and the office moved again.

Extension specialists in financial management, textiles, food safety, and nutrition were housed (1978) in the Design Resource Management (DRM) Building. By 1994 only the financial management specialist was housed in Storrs Hall as the other positions had been moved to the W.B. Young Building. The human development specialist and the media/communications positions were housed (1978) in the Child Development Laboratory Building. These positions were moved (1994) to Storrs Hall, and then to the W.B. Young Building (1995). The Young Building is the current home of the Cooperative Extension System, Department of Extension, and State 4-H offices.

By 1972 local citizens had raised funds from private sources to build or buy Extension centers with a total value of $850,000. Local citizens had also invested some $900,000 to buy 432 acres of land, and construct seventy-three buildings for Extension’s four 4-H club summer camps (See Appendix C: 4-H Camps and Foundations, 4-H Fairs, and International 4-H Programs for further details).
Fairfield County

The Farm Bureau sponsored Extension work in Fairfield County from 1922 until 1955, when the Fairfield County Agricultural Extension Council, Inc. became the sponsoring agency. During the early years, Cooperative Extension Service offices were on the second floor of the Post Office building in downtown Danbury. In 1950 one dollar purchased the first of two pieces of property that later became the site of the Fairfield County Extension Center, 67 Stony Hill Road, Bethel. By 1965, $30,000 had been donated for the purchase of the land and meeting center. A contribution of $185 for the building fund was given (1970) by the Bethel Patch Pockets 4-H club as a result of their horse show. Both the Bethel (Fairfield County) and the Wallingford (New Haven County) centers were designed as one-stop educational and technical assistance centers for farmers, housing all USDA related agencies. The 1985 mailing address was Rte. 2, P.O. Box 165 A, Stony Hill, Bethel.

As plans were evolving to develop the land in Bethel for an Extension center, a building became available at the Shepaug dam site. That building, now known as the White building, was dismantled by members of the 4-H fair association and other volunteers, and moved to Bethel. Renovations included additional office space, a conference room, an improved meeting room, and accessible access as mandated by the Americans with Disabilities Act. A brick office building was constructed (1970), and Cooperative Extension Service, Agricultural Stabilization and Conservation Service (ASCS), and Soil Conservation Service (SCS) moved into the new building (1971). The property also includes horse show rings, pole barns, and a food booth. ASCS (now Farm Service Agency) and SCS (now Natural Resources Conservation Service) moved (1996) to a regional office model, and Cooperative Extension System programs expanded to fill the vacated space.

From 1969–1992 CES had an office in Bridgeport. The office moved (1982) from Golden Hill Avenue to 1374 Barnum Avenue in Bridgeport, which was rented from a private individual. This office housed the EFNEP and urban gardening programs.
Hartford County

In the early days, the Hartford County office was located in the county court house, 95 Washington Street, Hartford. In the 1950s the Extension Service had to find new office space due to heavy demands on the courthouse space. The local sponsor, Hartford County Farm Bureau, raised funds and purchased a three-story apartment building at 6 Grand Street, behind the Capitol building. The first two floors were renovated for offices and a meeting room. This facility was air-conditioned, a rarity in those days.

After years of negotiating for larger quarters, the Hartford County Extension Center moved (May 1973) from 6 Grand Street and the Capitol area to the old carriage house of the Goodwin estate at 1280 Asylum Avenue, Hartford, a facility owned by the University. This move to University property relieved the state CES budget from maintaining three facilities on the $24,000 per year originally appropriated by Public Act No. 152 (1959) for CES facilities. When the Hartford property was sold, the University agreed to assume responsibility and costs associated with housing the local office.

In late 1984 the office moved to West Hartford into the former University School of Law building on the West Hartford campus. Here staff members faced new questions like: What would be the impact on programming by leaving the city of Hartford? What would this move mean to the public? Would we adapt and survive with professional and program staff members on the third floor, and clerical and reception offices on the first floor? The center remains in 2008 at the 1800 Asylum Avenue location.

From 1976–1977 office space was provided at the Barnes Nature Center, Bristol for a local 4-H program. From 1977 through 1982 the city of Bristol provided free office space at 19 High Street, and a second office was opened at Callan School where gardening tips, soil test kits, parenting classes, nutrition, and energy programs were conducted.
Litchfield County

There are three dates of importance to agriculture in Litchfield County. First was 1914 when the Litchfield County Farm Bureau organized and the Cooperative Extension Service began. In 1934 the Litchfield County Extension office was in the county courthouse in Litchfield. The office location was listed (1945) as the Hunt block. The second date of importance was 1949 when the 4-H Foundation was established. The third date was 1950 when a home was provided for all agricultural organizations in the county. This was precipitated by an April 30, 1950 fire that forced the Extension center to seek temporary quarters.

On September 20, 1950, a contract was signed for the purchase of the agricultural center on the Litchfield town green for $50,000. The first floor housed the Farm Bureau, Cooperative Extension Service, Farm Credit Association, and the Production and Marketing Administration county committee. The second floor consisted of three apartments. The basement was remodeled to accommodate a meeting room. To raise revenue the Litchfield County Agricultural Center, Inc. board of directors sold bonds bearing 4 percent interest, and maturing in thirty years for a total amount of $50,000.

In 1974 the address included Post Office Box 607 with the telephone number of 567-9447. In 1985 the address was Agricultural Center, West St., Litchfield.

The corporation’s board sold (1995) the building for $350,000 and reinvested the funds. During the construction process for the new Extension center (1995–2001), faculty and staff members were located in a leased facility at 1304 Winsted Road, Torrington.

On April 27, 2001, the new Litchfield County Extension Center was dedicated on the University of Connecticut’s Torrington campus. A check for $465,000 was presented by the original ownership group with additional funding provided by the UConn 2000 program, to construct the $1.8 million, 7,400 square foot building, designed as a twenty-first century Extension center.
Middlesex County

Earlier sites for the Middlesex County Extension Center were quite different from the current facility. The Middlesex County office was located (1935) in the Post Office building in Middletown. Next, Extension was quartered on the second floor of a building at the busy intersection of Main and Washington Streets in Middletown. In 1945 the address was listed as 438 Main St. Subsequently, it was located overlooking the well-trafficked corner of Main and Marlborough Streets in Portland above Gahan Motors. This office consisted of one room with dividers.

In May 1957, through the efforts of many friends, the Cooperative Extension Center moved to the reception cottage of the former orphans’ home in Haddam. The site is located on Route 154 (formerly Route 9). The street address is 1066 Saybrook Road, Haddam. Built in 1887, the orphans’ home was bequeathed by J.J. Hendley to the county. Former residents have shared how one side of the building was designated for males and the other side for females, with up to fifty children living at the facility at any one time. Children tended gardens in the back, a tradition revitalized today.

The age of the structure has created a steady stream of repairs and improvements to ensure the building’s utility. In the late 1960s, the need for more meeting room space became apparent, and another rally of community support built the annex. This addition greatly increased the usefulness of the Center for programs and activities to meet the needs of local residents.

This Extension office provides unique surroundings in which to work and conduct educational programs. Each year the county 4-H committee sponsors an auction at the facility to raise funds in support of the countywide 4-H program.
New Haven County

The New Haven County office was (1935) room 301 of the Post Office building in New Haven. The address (1945) was listed as 56 Hillhouse Avenue, New Haven. The office moved (1952) to 335 Prospect Street in New Haven. This location was listed as the Farm Bureau office (1946).

The New Haven County center located at 322 North Main Street in Wallingford (1955–1980s) was owned by a group of local volunteers incorporated under the name of New Haven County Agricultural Center, Inc. The property was purchased (1954) for $1,200 with monthly payments of $25.00. One parcel was purchased from the Masonic Charity Foundation, and the second was purchased from E.S. Merwin. The adjoining carriage house was purchased in 1964.

The building was considered (1978) one of the finest examples of Victorian architecture in town. The purposes of the corporation were to:

Provide and maintain a place in the county where scientific information and knowledge concerning agriculture and home economics may be obtained by residents.

Those who signed the incorporation papers included Harold Dederick, Carl T. Hauser, Charles R. Bishop, Geo. Bronson Farnam, Thomas J. Wall, Jr., Jessie S. Hine, Oliver L. Saranton, Herbert B. Hubbell, Wm. H. Schreiber, Richard Beaumont, Florence S. Juniver, and J. Phillip McCarroll. This building also housed SCS and the Farm Bureau office. The board of directors sold (1995) the property for $210,000, and contributed the proceeds to the University of Connecticut Foundation Inc. to support CES programs.

With the advent of urban programs in the late 1960s, New Haven County had multiple local offices. The New Haven city office was located (1970) at 155 Minor Street, a rented facility. In addition, the main county office was in Waterbury and housed the EFNEP staff, and later (1974) 4-H as well.

Following the close of the Wallingford office, the New Haven County Extension center moved to Hamden into leased space (1982–1988). The addresses were listed (1985) as 17 Willow Street, Waterbury; and 670 Wintergreen Avenue, Hamden.
The two Cooperative Extension Service offices combined and moved (1988) to 43 Marne Street in Hamden, also a leased facility. The final office move was (1996) to 305 Skiff Street in North Haven, a facility owned by the University.

New London County

In 1929 and still in 1935, the New London County office address was room 19 of the Shannon building at 183 Main Street, Courthouse Square in Norwich. In 1945 the address was listed as the Post Office building in Norwich.

A deed was signed (1962) between the New London County Extension Council, Inc. and the State Department of Education for the use of land to construct an agricultural center. Ownership of the land was maintained by the state. The agreement stated that should the New London County Council cease to be the sponsor of the Extension Service, the land and all buildings were to revert to the state. During the spring of 1963, the New London County Center moved from the basement of the downtown Norwich Post Office to the new center location on New London Turnpike, in the East Great Plains section of the city. In addition to the Extension staff and programs, the Center housed offices of ASCS and SCS. The address (1985) was 562 New London Turnpike, Norwich, CT 06360. The Extension Council celebrated its 1986 annual meeting with a mortgage burning.

The marine advisory faculty members were located (1988) in Groton on the Avery Point campus in facilities owned by the University. Marine advisory service evolved into Sea Grant Extension with three department of Extension faculty positions housed (2008) in the Marine Science building on the University’s Avery Point campus.

With changes in the federal law to accommodate the Americans with Disabilities Act, the two sibling federal agencies of Extension, ASCS and SCS, sought new office facilities. The New London Extension Council donated (1998) the building to the University. An $869,740, six-month renovation project (2002) funded by UConn 2000 began. During the renovation process, the Center staff moved to the Avery Point campus of the University in Groton. Staff members moved back into the updated building (2003); a rededication celebration was held on May 23, 2004.
Tolland County

The Tolland County office (1919) was in the Prescott Block building in Rockville and the phone number was 48-4. For many years, the Tolland County office was located in rented space in a Rockville office building known as the Professional Building on Park Street. The building lacked adequate parking. The offices consisted of one large room that had been an auditorium and a three-flight walk-up. A 1959 fire destroyed much of the building, including some Extension records and furnishings. The staff worked in temporary quarters at the old “B” (Northeast) school across the street in Rockville for about two years until the present building on Hyde Avenue was completed (1961).

The Tolland County Agricultural Center (TAC) was the vision of five local residents who believed that the Cooperative Extension Service and two federal agricultural agencies (ASCS and SCS) should have permanent quarters. The land for TAC was purchased (1957) for $10,000 by a group of individuals who signed a banknote in the name of Tolland-area citizens. Rebecca (Niederwerter) Person remembers that:

> With no home for 4-H in Tolland County, my parents and nine other farm families in Tolland County used their farms as collateral to secure a loan so they could purchase the property known today as the Tolland County Agricultural Center. We as a family were involved in many fundraisers which helped to pay off the initial note.

The activities building (now known as the Gold Building) was the first building to be erected (1959). The main office building was next (1960), and was named (1998) for John Elliot, county agricultural agent (1947–1972). When the new building was completed, the kitchen area was not finished so the home economics committee gradually raised the funds to do so. The kitchen was dedicated to Della Gardiner who had been the committee chair and had recently passed away.

Since 1961 the Tolland County Agricultural Center Board of Trustees has directed the building operations. A manager oversees the day-to-day care and maintenance of the grounds, the main facility, and other structures that have been built to accommodate expanded programming needs. The address was listed (1985) as 24 Hyde Ave., Vernon.
Windham County

Eleven men met on January 22, 1915 to discuss the possibilities for rectifying the very unsatisfactory conditions on farms in Windham County. The outcome was the formation of the Windham County Farmers’ Association (W.C.F.A.). Murray G. Lincoln, the first county agent in Connecticut, and assigned to New London County, took part in the meeting. Cooperation with the State College Extension Service and USDA formed the basis for the educational work of the Association. Offices were established in the Union block of Putnam, moving to the Post Office building on June 1, 1933. The mailing address (1919) was simply Putnam, CT with a telephone number of 337-2. By 1943 the phone number had changed to 888. The Windham County Farmers Association joined (1937) the State and American Farm Bureau Federation.

Membership dues for W.C.F.A. were established to meet a requirement of the state law to raise $1,000 in the county before state funds would become available for Extension. The 1922 membership enrollment fee was set at $5.00 each for a total of 275 members. By 1939 the membership had increased to 428 people.

The deed for the current Center transferred from the county of Windham to the University of Connecticut a piece of land on the southerly side of Wolf Den Road in the town of Brooklyn, described by the location of the stone walls. The deed was formally transferred from the county commissioners for the sum of $1.00 on September 23, 1960. The land contained an easement to the Hartford Electric Light Co. that had been granted in 1927. A map attached to the deed indicated approximately thirteen acres of land. The building had originally been a county orphanage. The Windham Agricultural Center was established on September 16, 1957 at a meeting of state representatives and senators of Windham County.

On July 1, 1958, the Windham County Extension Council assumed the role of sponsorship of Extension work in Windham County. A report of the Extension Council indicated that the Council was required to raise $1,000 annually in support of the Extension Service. The 1985 address was listed as Wolf Den Rd., Brooklyn.

The eight Extension Centers, one in each of the original counties of the state, continue to provide a local presence for the University. Faculty and staff members are located close to their program participants for active engagement with their communities.
Appendix C
4-H Camps and Foundations, 4-H Fairs, and International 4-H Programs

4-H Camps in Connecticut: Hartford County 4-H Camp, Litchfield County 4-H Foundation, Middlesex County Camp Foundation, New London County 4-H Foundation, Windham-Tolland 4-H Camp
4-H Fairs: Fairfield County, Hartford County, Litchfield County, New Haven County-Middlesex County, New London County, Tolland County, Windham County
International 4-H programs

4-H Camps in Connecticut

One of the unique characteristics of the Connecticut 4-H camping program is that each camp is owned and operated by a board of directors comprised of dedicated volunteers. Without these loyal volunteers’ commitment, there would not be a 4-H camping program. Connecticut 4-H volunteers have a rich history of participating in national 4-H camping conferences and activities of the American Camping Association (ACA). The New London and Windham-Tolland camps maintain ACA accreditation, an indication of the quality of the camp program and staff.

Initially 4-H camps were open just to 4-H members. However, as camps extended their seasons and for financial reasons, the doors were open to all youth, regardless of 4-H membership. Many 4-H alumni remember 4-H camp as the place they met their future life partner, and as the site of 4-H weddings.

In the late 1980s, a decision was made to transition from local 4-H professional staff members working with each camp to one Extension professional assigned to work statewide. When three additional county Extension 4-H staff members were hired (1997), each county once again had at least one local 4-H staff person working with all 4-H programs in that county. With the additional staff, a local 4-H professional staff member was assigned to work with each of the camps while retaining the state 4-H camp coordinator to focus on American Camping Association (ACA) accreditation and statewide training for 4-H camp staff.
For 3,500 to 4,000 youth a summer, 4-H camps provide an opportunity to be away from home for the first time, to develop a love of the out of doors, and to be involved with the 4-H program.

Over 3,000 campers attended (1975) 4-H camps across Connecticut. In 1994, 3,700 youth ranging in age from six to fifteen explored and discovered life at a 4-H camp. That year, camps employed 125 camp staff members coming from a variety of countries including the Ivory Coast, England, Australia, Russia, Sweden, Spain, and Hungary. More than 250 volunteers served (1994) on committees in support of the camping program.

The second state 4-H camp counselor training meeting was held (1949) in Hartford. Sporadic statewide trainings for camp staff members were held over the years. Yearly 4-H camp staff training resumed (1996), with each camp rotating its turn to host the weekend event. This successful collaboration among the camps continues (2008).

There were four 4-H camps (2002) in Connecticut which included 450 acres of land and 100 buildings. All of this has been accomplished through private donations and incredible amounts of donated labor and time by dedicated volunteers.

Hartford County 4-H Camp

The first Hartford County 4-H camping program was held (1930) for boys and girls who had completed a 4-H project before attending. At the close of the 1934 camping season, there was a balance in the account of $24.82. Most staff members received $5.00 per week in pay. 4-H club members from Hartford County camped (1935) the last weeks of June and the first week of July. The Hartford County Camp was held at Aya-Po in Somers where the camp program consisted of boating, knitting, storytelling, dancing, and poultry. In 1938, 133 campers each paid $6.50 to attend. A senior club weekend was held (1942) with a fee of $2.00 and a cup of sugar. Eggs cost the camp $0.38 a dozen.

No camp was held in 1944 due to World War II. By 1947, the camp fee had increased to $14.00 per week, and camp was held from Monday through Saturday. The camp officially incorporated as the Hartford County 4-H Camp in 1954. After camping at the Litchfield County 4-H Camp facility (1956), the Hartford County Camp then used the New London County 4-H Camp property from 1957 to 1965.
The camp board purchased seventy-two acres known as the Rankl property on South Road in Marlborough (1959). The first building was erected with a $1,200 donation from the Kiwanis Club of Hartford. The long-awaited dedication of the new Hartford County 4-H Outdoor Center, and the first day of camping at the Marlborough facility finally happened (1966). Two years later dedications were held for three new facilities. Baldwin Hall included a dining hall that could seat 266, with a lower recreation and workshop area. Woolam Equestrian Park stabled forty-eight horses with four riding rings. The Grant House served as a house, cook’s quarters, and infirmary. In 1970 the Fritzer Nature Center was added. The two-level Grant House was the construction shanty for the Phoenix Mutual Life Insurance Building in Hartford, and was dismantled, transported, and rebuilt in Marlborough by volunteers. The Hartford Kiwanis donated the building foundation.

On the occasion of the fiftieth anniversary of 4-H camping in Hartford County (1980), the net worth of the camp corporation was estimated to be $500,000. The 1985 annual fund drive titled 4-H Camp Forever initiated an endowment fund. Hurricane Gloria forced the cancellation of the twentieth birthday party for the Marlborough facility. Over the years the Hartford Foundation for Public Giving supported several renovations at the camp. The facility celebrated its thirty-fifth camping season (2001) with 230 alumni, friends and donors present.

The camp today consists of 100 acres adjacent to the Blackledge River and state forest. The facility provides campers with numerous trails for hiking, nature observation, and trail riding; a pond for swimming, canoeing, snorkel and fin instruction; and sixteen cabins for a total of twenty-five buildings on the grounds. An eight station low ropes course was initiated (1998) with four additional stations added later (2001).
Litchfield County 4-H Foundation

The Litchfield County 4-H Foundation was incorporated on March 25, 1949, to:

Provide an education for boys and girls of Litchfield County in cooperation with the 4-H program for youth training carried on by the United States Department of Agriculture, University of Connecticut, and the Litchfield County Extension Service; to purchase and maintain suitable property, real and personal, on which the educational activities of 4-H club work may be carried on.

The Western Connecticut 4-H Camping Association was organized (1946) to include Middlesex, New Haven, Fairfield, and Litchfield Counties to provide a two-week camping experience for 4-H members at the YMCA-owned Camp Mohawk, in Litchfield. Henry Krebser, Litchfield County 4-H agent (1945–1970), learned that a boys' camp in Warren was for sale (1949). The camp consisted of 150 acres including a fifty-acre pond. Out of necessity, the Litchfield County 4-H Foundation was formed to purchase the camp for $30,000. A board of trustees was established to serve as custodians of donated funds and properties. The Litchfield County Farm Bureau advanced a loan of $5,000. The first camping season was held (1949) with four to six weeks of camping held through the 1968 season. At that time, the camp property was sold to the town of Warren, and the Foundation invested the $172,107 in proceeds from the sale to support the 4-H program.

Nancy Neumann-Glasgow, a camper during the 1960s, remembered:

For one week in the summer, away from school and family, telephone and radio, I discovered my inner peace. The unheated cabins with pitched roofs and open windows were crafted of rough wood. Four cots, each with sleeping bag became our bedrooms for a week. We (campers) met as strangers and departed as friends, for we shared moments that no one else would ever experience together in the same way. We realized life, and health, and friendship. In a short six days and five nights, we learned together, swam together, created together, and kept each other's secrets.
Middlesex County Camp Foundation

Prior to 1962, Middlesex County 4-H Camp shared a camp program with Litchfield and Fairfield Counties. The Middlesex County 4-H Committee purchased (1962) the current camp property from the Frankel family for $46,650. The property on Route 149 in Moodus was known as the Hilltop View Resort consisting of eighty acres, eleven cabins, a large field house, swimming pool, and a nine-room house. During the summer of 1962, 450 county residents attended camp at a cost of $27.50 per week.

In the 1970s the house was sold in order to finance two new cabins, an office, a new in-ground swimming pool, and a horse barn. In the late 1980s the camp was closed for one year to conduct a needs assessment. During that one-year hiatus, the camp fought for its future against town residents who wanted to convert the camp property into a school. The camp prevailed and underwent a complete renovation in 1988. This included gutting eight of the original cabins to meet building code. Monroe cabin was torn down and a central bath house was constructed, the nature hut was leveled, and an eighty-by-thirty foot activity center was constructed in its place.

The Middlesex County 4-H Committee sold (1995) the camp to the newly formed Middlesex County Camp Foundation. New additions to the sports complex included a low ropes course, thirty-five foot climbing wall, a bouldering wall, basketball court, soccer field, softball field, beach volleyball court, and archery range. In addition, three used cabins, donated by the Salmon River Club, were moved by flat bed truck to the camp property. The camper cabins were renovated to include built-in wooden bunks. All of this was accomplished through the efforts of dedicated volunteers.

The 1962 camping session consisted of five weeks; but the season was extended (1963) to eight weeks and continues as such (2008). An occasional snowy winter extends the school year into late June and reduces the camping season. The camp sported (2002) 900 campers both in its day and residential program at $275 for a one-week session.
New London County 4-H Foundation

A 1933 New London County 4-H club encampment announcement indicated the fourth annual event was to be held from August 13-18 at Avery Pond, located six miles southeast of Norwich on the main road between Norwich and Westerly. Attendance at camp was considered a valuable vacation for both boys and girls. Pre-payment of $1.00 was expected with the balance of $4.00 due at camp registration. The list of items to bring included a perpetual smile and a desire to cooperate. Campers slept on canvas cots in army tents equipped with wooden platforms.

The New London County Farm and Home Bureau, Inc. purchased (1942) seventeen acres of land in Franklin to be used as a 4-H camp. The site included a two-acre pond. Being viewed as unpatriotic, little work was done on improvements to the Camp from 1942-1947 due to World War II. New London 4-H Camp then moved (1947) from Avery Pond in Preston to the Franklin site. A camp committee comprised of members of the county club committee (presently called the county 4-H advisory committee) was responsible for the program. The first auction to raise funds in support of the camp program was held (1950) for the express purpose of funding the pond and related dam repairs. The auction continues in 2008.

A committee formed (1956) to study who would hold legal title to the camp once Farm Bureau and the Extension Service divided into two separate legal entities. The recommendation was to establish a foundation with a governing board representing Farm Bureau, county club committee, and 4-H Fair Association. The New London 4-H Foundation was incorporated on March 22, 1957, and on June 3rd of that year the deed was conveyed from the Farm Bureau to the Foundation.

In order to maintain a viable camping program and to attract qualified staff members, the camping season was extended (1960s) and more cabins were built. The Connecticut Nurseryman’s Association donated (1960) $100 for foundation plantings and shrubs. The 4-H Foundation donated (1961) $500 to the New London County Extension Center building fund.
An additional 7.5 acres of land were purchased (1965) increasing the camp holdings to 24.5 acres. Buildings constructed on the property included the infirmary, the Staebner Building used for arts and crafts and as a boys' cabin, director's cottage (built with a $10,000 grant from the Kresgee Foundation), bathroom facilities, and eleven cabins. In the late 1980s, the cabin names changed from just numbers such as one, two, three to names that recognized the importance of the Native American population of the county: Mohegan, Narragansett, Pequot, Cherokee, Quinnipiac, Nipmuc, Shetucket, Hammonasset, Poqonnock, Nehantic, and Nameaug. Other facilities include a horse barn converted to a theater/drama building (1978), and extensive expansion and renovation of the Holdridge kitchen (2003). Initially, the camping season was just one week with volunteers serving as staff members. During the 1960s and 1970s the livestock projects for the New London County 4-H Fair were exhibited on the camp property. For a few years there was a small horse program at the camp.

At various times the camp was rented individually to Hartford County and Tolland County (1953) for their 4-H camping program. For several years a Tri-County Camp was held as a cooperative effort between New London, New Haven, and Fairfield Counties. The Tri-County Camp Committee raised funds to send eighty urban youth a year to the New London County Camp. That organizational structure was dissolved in 1977. The camp has been accredited by ACA since 1972.

In 2008 the camp holds 140 campers per session with eight one-week sessions per summer for a total of 806 campers (2002). It includes a very active Teen Leadership training opportunity. Programs include archery, arts and crafts, canoeing, rocketry, Double Dutch, and drama. A new low ropes adventure course was added (2002).

Donald Beebe, a camper from the 1950s, remembered:

There was little for farm youth to do. Probably the biggest event of the whole summer was a week at the New London County 4-H Camp. Part of the summer was spent planning, buying clothes, and preparing for camp.
Chet Perkins, a former volunteer working with the camp, remembered:

Help often comes from unexpected places. After joking to another volunteer about getting shamed into donating his flagpole to the camp, I received a call telling me when to install the flagpole at camp! Collins & Jewell Boiler Company offered to make a base. The pipes were taken to Ernie Staebner to be welded together and I was all set. George Robinson was working for me at the time, and he helped to dig the hole for the base, set the pole, and planned on mixing the concrete the next day to complete the job. At that time they were just beginning the kitchen addition. That evening Tilly Cox, New London County 4-H agent (1932–1966), called to say they were planning to pour the kitchen foundation the next day, and that he would order a half yard extra for the flagpole base. The next day, Tilly, George, and I sat waiting for the concrete truck to arrive. When Tilly was asked who was going to help with the kitchen pour, the response was “I guess we are all here now.” Not only did the camp have a new flagpole, but also a new kitchen foundation.

Windham-Tolland 4-H Camp

Camp Woodstock was (1935) the site for the Windham County 4-H Camp that accommodated sixty campers. The camp was held the last week of June and the first week of July with one highlight being a discussion on vocational decisions. Then Camp Aldersgate in North Scituate, Rhode Island was used.

In spring 1953 Freeman Nelson, driving his mail car down Taft Pond Road in Abington, went past Cudjoe Corner and noticed a piece of property for sale. He attended a meeting that night and notified folks who were looking for a 4-H camp about the site. The idea of a 4-H camp appealed to the owner, Ed Jezielski, who had been involved in 4-H. The property included a six-acre pond, fifteen acres of land, and a waterfront cabin that had once belonged to Congressman Horace Seely-Brown of Pomfret (1947–1949, 1951–1959, 1961–1963).

Through the dedication of volunteers from all fifteen towns in Windham County, the $15,000 asking price was raised by April 1954. The camp was scheduled to open in ninety days. The Windham County 4-H Foundation was incorporated for the purpose of holding the camp in trust to serve all youth and the community. With the support of volunteers, local businesses, Granges, the Lions, and 4-H clubs, a forty-by-sixty foot lodge, a director’s cabin, an infirmary, eleven cabins, and a staff building were completed. A local fire department dumped truckloads of sand into the waterfront area to create a beach. The night
before camp opened, fifty people were constructing benches, tables, and finishing the kitchen. Campers arrived the morning of July 1, 1954.

A capital campaign was initiated to purchase land and develop facilities for a horse camp (1969). Rings, barns, and a dormitory were constructed. The 4-H horse camp opened in July 1970. The camp originally received their American Camping Association Accreditation in the 1970s. Following a lapse in the accreditation, the camp successfully reinstated their accreditation in 1990, which continues (2008).

The camp now has 257 acres, forty-three buildings, three ponds, a forty-five horse stall barn, three practice rings, and a dormitory. The camp is used year round and is the home of the Ragged Hill Woods educational program during the school year. Above the large stone fireplace in the lodge is the inscription: “Dedicated to Youth through the Generosity of Many.” A yearly auction is held to raise funds for capital improvements.

A new flagpole was dedicated (1998) to Merritt Gardner who died in the Korean War. A new pavilion called C.J.’s Place was dedicated to Clarence J. Salmon, a founding member of the corporation on the occasion of his ninety-second birthday (2001). That same year, a new cabin in the horse camp was dedicated to Clarence H. Child. In 2002, 1,350 campers each paid $285 for a one-week session; the camp lasts for seven weeks.

At the 4-H camp in the early 1960s, Carol Hagen worked as a counselor and waterfront director:

The best memory of that summer was having an IFYE (International Farm Youth Exchange) from Rhodesia (now Zimbabwe) come for a week to share his slides and be a part of the camp. He was an African and he was white. It was an interesting and enlightening experience and prodded me to want to be an IFYE—a goal that I achieved!
The 4-H Fair Experience

The primary purpose of the 4-H Fair associations is to sponsor the county 4-H fairs. That simple statement means that youth assume responsibility for the schedule, the financial obligations, and for the marketing of events that attract as many as 10,000 visitors each year. The fair associations are volunteer youth who work with adult advisors over a year to operate a two or three-day event. Alumni 4-H members remember talent shows, auctioning exhibits at the end of the fair, and king and queen contests.

Fairfield County

The 1947 Fairfield County Fair was held on August 23rd at the Danbury fair grounds with 1,000 people in attendance. Exhibits included cows, horses, sheep, swine, rabbits, goats, vegetables, dresses, canned goods, and club booths. Square dances had been held, committees appointed, and new events planned all in preparation of the big day. The calendar for 1948 showed the county fair would be held August 3-4. Victor Durgy, Bethel, exhibited poultry at the 1944 4-H fair. Volunteer adults and youth members work together in support of the fair. The fair provided training to members in how to work together. 4-H member Douglas Watson, Brookfield Center, exhibited his tanned sheep hides at the fair.

Marie Ferris Walker remembered that:

During the 1940s the fair was held in many places. It was rewarding growing vegetables and flowers, knowing that in the end, you would display some of your hard work.

The 4-H Fair was held in the back of Hawley School (Newtown) in a meadow called Taylor Field. It was held at the Extension Center in Bethel once, and it was held at the Danbury fair grounds. It was such a thrill to get a ribbon and a little money as premium.

The Fair Association and thus the fair were disbanded in 1977.

Hartford County

From 1931 through 1933 Hartford County 4-H members exhibited at the Granby Grange Fair. The number of exhibits grew from 150 (1931) to 250 (1933). Formed in 1934 the Hartford County Fair Association held its first event at Charter Oak Park. The fair moved (1936) to Cherry Park in West Avon.
where oxen drawing was an added feature. The 1939 fair was extended to two days. The 1942 fair was canceled due to World War II, and community fairs were held through 1944. With gas rationing over, the 1945 fair was held at Farmington High School. The 1947 fair added balloon races, duck races, cross-cut saw contest, horse draw, freezing demonstrations, a Farm Bureau picnic, and a Saturday night dance. The fair moved (1949) back to Cherry Park and saw a large increase in swine, sheep, and beef projects. This was the first fair to include a 4-H horse show.

For the 1950 fair, associate county club 4-H agent James Wilson (1950–1953) had been called to active military duty and the fair secretary was ill. In his farewell letter to Randolph Whaples, associate professor and state 4-H leader (1948–1959), Wilson expressed concern about the operation of the fair. But all went well with 1,620 exhibits including a greased pole climb and a new tractor driving contest. The fair hosted (1951) the state sheep show and held the first victory ad campaign banquet at Howard Johnson’s restaurant.

The fair then moved (1952) to Bradley Field, Windsor Locks. Over time the fair was held on the east side of Route 75 and then later on the west side. A poultry auction was included with a horse draw and a square dance on Saturday night. The fair shifted to Saturday and Sunday, and church services were held at the field. By 1954 premiums paid to 4-H members for exhibiting increased to a total of $1,000. The fair expanded (1957) to a three-day event, and (1958) the state provided land within the Bradley Field fencing just north of the WAC field. The twenty-fifth anniversary (1961) of the fair included the beginning of the queen contest. The fair operated (1962) on a budget of $12,050. The 1965 Fair Association offered five $100 scholarships to 4-H members entering their first or second year in college. By 1969 a food building, flush toilets, and a second horse ring had been built. When Kevin Woolam became Fair Association president (1974), he ushered in the first second-generation of fair officers as his father, Richard, had also served as president (1943).

The Hartford County 4-H Fair Association suffered a devastating blow (1979) when a tornado swept through the towns of Windsor Locks, Suffield, and Windsor. Right in the middle was the long-time site of Hartford County 4-H Fair. Most of the facilities were lost including show rings and equipment. The Department of Transportation approved the rebuilding of the facility, but would not make a long-term commitment for the use of the land which is now the location of airport parking lots on Route 75. Since only a minor portion of the $75,000 loss was covered by insurance, a major fund drive was initiated.
The first female president of the Fair Association, Aimee Gilbert, was elected (1984). This was also the last year at Bradley Field. The Fair moved (1985) to Fourtown Fairgrounds in Somers. More than $20,000 of advertising was sold for the fair premium book. The search began and still continues (2008) to find a new location for the fair.

Litchfield County

Early 4-H exhibits were held in conjunction with Washington, Goshen, and Riverton fairs. The first 4-H fair was held at the American Legion Hall, West Goshen. The Litchfield County 4-H Fair Association incorporated in 1933. Over the years the fair has been held at several locations including a Grange hall, the Western Connecticut 4-H Camp in Warren, and its current home at the Goshen Fairgrounds. In lieu of a large rental payment, the Goshen Agricultural Society has graciously allowed 4-H members to perform in-kind services such as building show rings, painting fences, and making small donations to the Society for use of the grounds.

A strong following in animal science projects has been evident throughout the years, and is still true (2008). The Home Show has declined over the years after peaking in the 1960s, but has recently started to show an increase in exhibits as club enrollment has risen. The 4-H Fair Association has evolved to a system that invites all 4-H members to be part of the planning process, with two representatives as voting members from each club present at the meetings. The Association is youth run with adult advisors in non-voting roles.

Early in its history the fair gave premiums along with presenting trophies and rosettes as prizes. Sometime around the 1960s premiums were dropped, and today 4-H members compete for the ribbons and trophies as prizes. The fair does not charge parking or admission fees, and does not have a midway or carnival area. Some of the more unique contests at the fair include a premier showmanship contest that involves every animal species shown on the grounds for both junior and senior contestants (beef cattle, dairy cattle, poultry, rabbits, dogs, oxen, horses, sheep, swine, and dairy goats). Included in the event are a herdsmanship contest that involves every club that has barn space, an auction on Saturday night, and lately a legislators’ event that pits area state representatives against each other in goat milking or back seat driving. A new tradition at the fair created on its fiftieth anniversary (1982) has been the Saturday night family dinner. A sit-down dinner of steak, ham, salads, and ice cream sundaes is served to up to 450 people.
Appendix C

The Litchfield County 4-H Fair Association continues to provide youth with meaningful leadership opportunities, and an opportunity to display project work to the public. As projects change, the fair has added classes or events to reflect current interests. The fair celebrated its seventieth anniversary (2002), and looks forward to a strong association for years to come.

Trudie Hill, a current 4-H member, wrote:

The same cookie recipe that my grandmother used over fifty years ago with her 4-H club won for me a trophy for the Outstanding Baker (2000) at the Litchfield County Fair Home Show.

Middlesex and New Haven Counties

In 2001 the Middlesex-New Haven County 4-H Fair celebrated its diamond anniversary as the first 4-H fair in the country. The theme for the 2001 fair was “Building the Future.” That first fair was held August 30, 1924 at Ridgewood Farm, Middletown with 2,000 people attending. So impressed were club officials from other states that the management of Camp Vail at Eastern States Exposition financed a trip for Frank Roberts, Middletown, to explain the plan to the National 4-H Club Congress delegates in Chicago. Camp Vail was the name given to activities conducted during The Big E in support of 4-H. Started (1916) by H. A. Moses of the International 4-H Training School, Camp Vail was named after Theodore Newton Vail, one of the founders of Eastern States Exposition.

Boy Scouts, Y.M.C.A., and other organizations were invited to participate in the first fair. Thirty head of purebred dairy cattle, twenty-four fat steers, fifty sheep, and more than 300 poultry were shown. Twenty ready-for-slaughter steers had been raised and fitted by Baby Beef Club members from New Haven, Middlesex, and Hartford Counties.

Clothing club girls exhibited more than 800 handmade articles of clothing. Middletown merchants and residents voiced their appreciation of the young people in financing and directing the fair. The annual Farm Bureau picnic was combined with the fair. Tickets were sold for $0.25. Food available for sale included cake, sandwiches, ice cream, fruit, drinks, and candy.

The Middlesex County 4-H Fair boasts of being the “First Fair of its Kind in America” not because it was the first 4-H fair, but because it was the first 4-H fair to have its entire voting board comprised of 4-H members. This model of governance is still used (2008) for all 4-H fairs in Connecticut. Eventually, the fair moved to Durham, and the Middlesex and New Haven County 4-H Fair Associations combined (1989).
As part of the seventy-fifth anniversary celebration, the fair sponsored an “Over the Clover” division that was open to all 4-H alumni, volunteers, and parents of a currently enrolled 4-H member. Adult entries were accepted in the Home Arts Division, and adults could participate in the “Over the Clover” livestock, dog, and horse division. The “Almost a Clover” division allowed children seven and under also to participate. Three women who had participated in the 1924 fair were chauffeured to the seventy-fifth celebration. They were Helen Spencer, Evelyn Cornall, and Grace Kelsey.

New London County

The first New London County 4-H Fair was held in Pachaug (1931). From 1932 through 1940, its home was in North Stonington. The 1941 4-H fair took place at the Elks Field in Norwich. No 4-H fair was held until after World War II. From 1947 through 1964, the 4-H fair was held in North Stonington. The 4-H fair then moved (1965) to the New London County 4-H Camp in Franklin. The 4-H fair association contributed funds to build a large exhibit hall at 4-H camp (now known as the Staebner Building) and a refreshment stand.

The New London County 4-H Fair then divided into two parts. The livestock shows were held at the 4-H Camp while the exhibit hall projects were displayed in the center of the enclosed Norwichtown shopping mall. 4-H demonstrations and special activities drew the attention of shoppers who would never travel to a 4-H fair. The New London County 4-H Fair was reunited (1978) as one entity, and returned to the North Stonington Grange Grounds where it continues today (2008).

The name of the event was changed to 4-H Exposition which has evolved over the years in numbers of exhibitors, exhibits, and types of activities. 4-H members from the very early years looked forward to the 4-H fair with great anticipation. It was a week for preparing 4-H exhibits, setting up displays, and a weekend for recognition, recreation, renewal of friendships, and festivity. Over the years 4-H members prepared one-and three-act plays to perform during the fair. There were king and queen contests, greased pole climbs, greased pig contests, square dances, demonstrations, livestock shows, movies and more. The fair is still a highlight of the summer and of the 4-H year.

Today (2008) there are still the exhibits of 4-H members’ projects: photography, baking, educational booth exhibits, horticulture, sewing, arts, crafts, record books and scrapbooks, woodworking, and more in the exhibit hall. The livestock projects include horses, dogs, dairy and beef cattle, poultry, rabbits, goats,
sheep, sometimes swine, alpacas, and working steers. Dairy goats are now a very popular 4-H project.

The New London County 4-H Exposition is a small noncommercial 4-H fair held in late July. There are no amusement rides or commercial food booths. The North Stonington Grange graciously provides the grounds free of charge with the stipulation that the Grange members operate the only food booth during the fair. For many years, the 4-H Fair Association sponsored a chicken (or pork roast) barbecue on Saturday evening, coordinated by 4-H alumni and volunteers.

Features other than the 4-H shows include the ox pull which sometimes attracts up to forty teams of oxen and the horse pull. In 2000 a draft horse demonstration replaced the horse pull. Starting in 2001 a draft horse show became one of Sunday’s features, with driving, riding in harness, and obstacle classes.

Today (2008) the 4-H Fair Association is very concerned about safety and the appearance of events to a non-agricultural public. Gone are the greased pole climb and greased pig contest of yesteryear and even the sheep blocking contest. Discussions concerning livestock and public health issues, including rabies and *E. coli* and necessary precautions dominate 4-H fair meetings. Physical barriers are set around displays of animals for which there is no licensed rabies vaccine (rabbits, swine, goats, young calves, and lambs).

4-H’ers prepare diligently for the livestock fitting and showmanship contests. Poultry showmanship is an intriguing addition in recent years. Poultry and rabbits have been added to the premier showmanship contest in which the top showman of each species shows all the species. Special rosettes and prizes are awarded to the premier showman and runner-up. In some years the contestants show horses, dairy cattle, beef cattle, sheep, goats, swine, dogs, working steers, rabbits, and poultry in this contest. It’s a highlight of the 4-H Expo.

Several 4-H clubs coordinate special activities such as the 4-H Exposition fashion show, the basket raffle, hay maze, hay bale toss, guest demonstrators, and the talent show. 4-H’ers look forward to the 4-H Olympics and the just-for-fun 4-H livestock obstacle course. The celebrity showmanship contest brings community and state dignitaries to the 4-H Expo for a training session conducted by young 4-H’ers and then a contest with the celebrities showing goats.

4-H teens are the officers and committee chairmen of the 4-H Fair Association. The ad campaign pays for the printing of the fair book and helps defray the 4-H Expo expenses. Several 4-H alumni reunions have been held over the years including in 1987 and 1998. Many of the attendees were alumni well into their
seventies and eighties who fondly remembered their early days in 4-H. Blue Slope Country Museum’s Sandy and Ernie Steabner and 4-H fair adviser Patricia Weingart have become the alumni caretakers of the 4-H fair memorabilia, coordinating a 4-H heritage display at the annual New London County 4-H Exposition.

The early reasons for holding 4-H fairs endure. Douglas Hagen, 1964 4-H fair vice president stated:

The 4-H Club Fair is a combination of work and fun through which club members can exhibit their products and experience the satisfying feeling that comes when we help others.

That remains true today.

Tolland County

From 1927 to 1941 the Tolland County 4-H exhibits were organized by the 4-H Extension agents, 4-H leaders, parents, and 4-H members in cooperation with the Tolland County Farm Bureau and the Tolland County Extension Service. The Tolland County 4-H Fair Association was officially organized on July 16, 1941.

From 1942 to 1943 World War II prevented holding county 4-H exhibits. Instead, local community school and town exhibits were held. The county home for orphans and the poor, located in Vernon Center, was used for the 4-H fair from 1942–1948. 4-H exhibits were held at Vernon Center (1948), the Stafford Fair (1950–1951), and the Rockville Fair. As was the usual custom of the day, 4-H exhibits were featured at the Farm Bureau field days as well. From its inception and through the early 1980s, a strong network of town committees comprised of each town’s clubs worked together to promote 4-H.

Throughout the 1940s and 1950s, major interests were in canning, vegetables, frozen foods, clothing, and livestock. The first 4-H horse show was listed in the fair book in the early 1950s. New classes in the 1950s included home nursing and health, frozen foods, childcare, home improvement, farm and home mechanics, entomology, recreation and rural arts, scrapbooks, and photography.

The fair rally of the 1950s was held at Ellington town hall for discussing the annual ad contest similar to the current pizza party or spaghetti dinner. Awards were given to clubs for selling more than $50.00 worth of ads. The fair moved (1958) to the grounds of the new Tolland County Agricultural Center, Vernon.
In the 1960s oxen demonstrations led to the formation of the working steer class. Raymond Ludwig organized (1972) the Tolland County 4-H teamsters as a way to keep alive the art of oxen training. At early fairs, the 4-H advisory committee assumed responsibility for organizing and operating the food booth during the fair. This responsibility was later assumed by the fair associations’ adult advisors. The fair expanded (1967) to three days and celebrated its silver anniversary. Sixty-eight members of the 4-H band played (1968). 1970 was the start of the still popular Saturday evening chicken barbecue with 600 4-H members participating in the fair and 1,300 exhibits judged.

During the 1980s the 4-H clover program received fair premiums, and new activities included computers, bicycle freestyling, and a baseball club. The focus of the fair continued to be a family-friendly event. The 1990s saw an increase in the number of fair directors, the addition of gardens to the grounds, the revitalization of the Frank Niederwerfer Wildlife Sanctuary, and the expansion of small animal projects. The fair kitchen was expanded (2002) and brought up to present day health and safety codes.

Windham County

The first Windham County 4-H Fair was held in 1946. Over the years the fair migrated between the Woodstock and Brooklyn fairgrounds, as both an independent fair and a part of larger fairs.

The county club committee comprised of forty people from all fifteen towns in the county determined the overall county club program in the late 1950s. The fair in those years included a favorite food show, and the 4-H camp had a demonstration day.

Bob Anderson, 4-H agent (1957–1962, 1964–1984) recalled that the fair from the 1960s onward was mainly run by the 4-H’ers themselves, with advising by Extension and 4-H staff. The purpose of this arrangement was to give the members leadership experience and teach them how to handle money. A popular contest was held each year where members competed to design the fairbook cover.

Anderson remembered that the 4-H’ers were assigned to stay at the fairgrounds with their animals overnight. The Danish, or group method of judging, was used to evaluate exhibits, with all participants receiving a prize by groups. This inclusive method of judging echoed the spirit of the fair where everyone was recognized for their contribution.
Horse projects were very successful at the fair, with both Western and English riders competing. A sheep program was introduced and was also very popular, as were competitions for tractor driving and a tractor pull. Sheep showmanship was a featured event and included showing the sheep in costume.

The membership in 4-H in the 1960s and 1970s grew to approximately 1,700 members, due, Anderson thought, to the increased popularity of both the 4-H fair and the Windham-Tolland 4-H camp.

The Windham County 4-H Fair celebrated its fifty-sixth anniversary in 2002 as an independent fair at the Brooklyn fairgrounds. Today in 2008 the fair remains popular and is managed by the 4-H’ers themselves with the help of an adult volunteer board.

All 4-H members in Windham County are members of the fair association and contribute their ideas and time to make the fair a success. Members still sell advertisements to pay for the fairbook and member artwork livens up the book’s cover.

4-H’ers hosted a podcast about the fair in 2007 that was available for download on iTunes, showing how far technology has come since the fair’s early days.

**International 4-H Programs**

International programs allow 4-H youth and young adults to travel and learn abroad. Youth from other nations have the opportunity to live and work in Connecticut, learning about life in an urban state and its strong agricultural economy.

The end of World War II witnessed a growing global perspective for the 4-H program. John Breakell travelled to Switzerland (1950) and Henry Grabber to Finland (1955). The first National Teen Caravan visited (1965) England and the first IFYE World Alumni Conference was held in Switzerland. International Farm Youth Exchange (IFYE) was renamed (1971) to International Four-H Youth Exchange.

Originating as the International Farm Youth Exchange program, IFYE was established (1948) on the principle that understanding between people is the foundation for world peace. As a people-to-people program, IFYE provides opportunities for cross-cultural experiences. Two specific IFYE programs were IFYE Caravan and IFYE Representatives. The IFYE Caravan was a group experience for youth between the ages of sixteen and twenty years of age to
live with host families. 4-H members became acquainted with other languages through a planned program led by a group leader. Initiated in the 1960s by Owen Trask, associate professor of agricultural Extension and 4-H older youth specialist (1956–1971), nineteen Connecticut youth had participated in IFYE Caravan by 1979.

Charles Larson, Hartford County, was the first Connecticut IFYE delegate who went to Denmark (1948). In the same year three IFYEs from France and three from Denmark came to stay with families in Connecticut. From 1948 to 1958 eighteen Connecticut young men and women travelled to sixteen different countries. During the same time period, forty-seven delegates from thirty countries visited Connecticut. Randolph Whaples, associate professor and state 4-H leader (1948–1959), organized the state IFYE committee which then incorporated (1953). By 1959 six of the eight counties had county committees. By 1979 sixty-three Connecticut young adults had participated in the IFYE Representative program in thirty-five countries. Under the leadership of Louis (Lonnie) Malkus, Extension livestock specialist (1964–1992), a two-way exchange was conducted with Belize in the 1980s.

Today participants have an in-depth experience in one country. Most IFYEs live and work with host families, and are nineteen to twenty-five years of age. IFYE participants from other countries also live and work with families in Connecticut. A state committee of IFYE volunteers raises funds and selects participants. Upon their return to this country, IFYEs speak at numerous meetings and schools, and these presentations generate additional resources and program exposure.

Janet Weingart, New London County, remembered her 1986 IFYE experience in Switzerland as being very impressed with how hard people worked. Working on a goat farm, she raked hay in the mountains, and picked grapes by hand. The family chose to live primarily without electricity.

John Garaventa, Hartford County, participated (1978) in the third 4-H Young Agricultural Specialist Exchange program. Selected as one of twelve American delegates, John spent three months in what is now the former Soviet Union, working with farm families on state and collective farms. The main objective of the exchange was to share agricultural technology and increase understanding between the two countries.
The Labo International Exchange Foundation initiated Japanese exchanges in the 1980s for youth ages twelve to eighteen to live and work in the United States. During the 1990s a two-week summer exchange with Chihuahua, Mexico was initiated as well as a year-long high school exchange. The outbound IFYE delegate from Connecticut lived (2002) in Estonia while the two inbound IFYEs were from Greece and Austria. Over the years more than 1,000 families in the state have hosted an IFYE for some part of their stay.

The 4-H youth development program is focused on citizenship and leadership development. Camps, fairs, and international programs provide opportunities for youth and adults to develop and practice these skills. While each is unique, collectively camps, fairs, and international programs have a loyal following of adult volunteers who make these programs such a success. Each has built a rich bank of memories for all who participate.
Appendix D

Extension-Related Professional Organizations

National Association of County Agricultural Agents (NACAA)
National Extension Association of Family and Consumer Sciences (NEAFCS)
formerly known as the National Association of Extension Home Economists (NAEHE)
National Association of Extension 4-H Agents (NAE4-HA)
Association of Natural Resource Extension Professionals (ANREP)
Association for Communication Excellence in Agriculture, Natural Resources, and Life and Human Sciences (ACE)
Epsilon Sigma Phi (ESP)
Galaxy Conference

National Association of County Agricultural Agents (NACAA)

The Connecticut chapter of the National Association of County Agricultural Agents (NACAA) was active through the early 1980s. A highlight of the chapter’s history was hosting the 1976 NACAA national meeting in Hartford, Connecticut. Russell (Russ) Hibbard, New London County agricultural agent and administrator (1960–1980), was instrumental in bringing the meeting to Connecticut. This was a major undertaking for a small state. The Connecticut chapter’s ability to attract the national group was due, in part, to Hibbard’s role as president of the 5,000-member association (1972).

Of particular note was the engagement of retirees in association activities and the sharing of experiences. The general chairman of the meeting was Fred Nelson, Extension administrator and turfgrass specialist, Hartford County (1955–1984). Fifteen hundred Extension agents and their families were educated and entertained for five days through the efforts of over fifteen various committees with membership from throughout New England. The comradeship that developed among the New England agricultural agents persisted and developed into the New England Association of Retired Extension Agents. Annual gatherings were held on a rotational basis among the New England states until 2007.
Due to budget constraints during the 1980s, CES was unable to fill professional positions as they became vacant. This affected chapter membership and led to the voluntary dissolution of the Connecticut chapter in the 1980s.

National Extension Association of Family and Consumer Sciences (NEAFCS), formerly known as the National Association of Extension Home Economists (NAEHE)

The National Association of Extension Home Economists officially became (1996) the National Extension Association of Family and Consumer Sciences (NEAFCS). This was consistent with the terminology used by the overarching professional group formerly known as the American Home Economics Association.

Membership consists of Extension educators and specialists with a wide variety of backgrounds in food and nutrition, food safety, consumer and financial management, housing and energy conservation, child development, and clothing and textiles sciences. In the 1960s the decision was made for the Connecticut chapter to join with the Rhode Island chapter. For a period of time, the organization was known as the Connecticut-Rhode Island Association of Extension Home Economists. A key benefit of the bi-state organization was that the meetings provided members an opportunity to share ideas. The location of meetings rotated between the two states. However, most meetings were held in Connecticut due to travel restrictions in the state at the time. Some years later, the chapter reverted back to a single state chapter.

Membership has declined in the state chapter due to attrition and retirements. The professional association was particularly active in the 1970s and early 1980s when membership was at its peak. The association continues to pursue professional development at the state and national levels.

National Association of Extension 4-H Agents (NAE4-HA)

The National Association of Extension 4-H Agents (NAE4-HA) has been active in Connecticut since the 1940s. Connecticut staff members have held significant national leadership positions. Hank Krebser, Litchfield County 4-H agent (1945–1970), was instrumental in the formation of the national association and served as president from 1949–1950. Arlene Martin (Gray), county Club agent (1946–1962), served as president from 1958–1959. Staff members have
made presentations at national conferences, and served as regional directors and committee chairs. Laura Marek, Litchfield County associate Extension educator, 4-H youth development (1980–), serves as co-chair of the association’s 2009 national conference.

In the early 1980s the Connecticut chapter made the decision to change its name to the Connecticut Association of Extension 4-H and Youth Personnel. This was an attempt to be inclusive of staff members working with youth, other than those in organized 4-H programs.

The Connecticut chapter is still active and meets semi-annually, although reductions in the number of 4-H and youth personnel have impacted membership. Programming is directed toward professional development.

**Association of Natural Resource Extension Professionals (ANREP)**

ANREP is a national association for CES professionals working in environmental education, fisheries, forestry, wood sciences, range, recreation, waste management, water, wildlife, and related disciplines. Members are active and retired CES employees. At the 2002 summer meeting, on receiving the Partner Award, Nancy Bull, associate dean of outreach and public service, associate director of the Cooperative Extension System (1995–2008), complimented ANREP on being a progressive professional association for Extension.

Formed in 1995, ANREP provides its members with current information and news from around the country to assist with programming and to better understand Extension’s natural resources issues and opportunities.

**Association for Communication Excellence in Agriculture, Natural Resources, and Life and Human Sciences (ACE)**

ACE members are writers, editors, photographers, graphic designers, videographers, electronic media producers, marketing and public relations practitioners, researchers, web developers, database programmers, distance education specialists, educators, and managers. They work in universities, government agencies, and research organizations in the public sector, as well as companies and firms in the private sector. ACE develops the professional skills of its members to extend knowledge about agriculture, natural resources, and life and human sciences to people worldwide.
Epsilon Sigma Phi (ESP)

Alpha Chi is the Connecticut chapter of the national Extension honor fraternity known as Epsilon Sigma Phi (ESP). The mission of the fraternity is to foster standards of excellence in the Extension system and to develop the Extension profession and professionals.

The national fraternity was incorporated on May 22, 1930, and the Connecticut chapter was formed (1932) during the Great Depression. Later, bylaws confirmed that both the national and state associations qualified as tax-exempt organizations. This would be important in future years when the fraternity was asked to administer scholarship funds.

The primary foci of the Connecticut chapter have been staff support, development, and recognition. Over the decades Connecticut ESP members have been recognized with regional and national awards such as the Regional Distinguished Service Award, the Regional Mid-Career Award, and the National Distinguished Service Ruby Award.

Anne (Holloway) Rideout, associate director of Extension (1964–1974, 1978–1992), was the recipient of the 1987 national Distinguished Service Ruby Award. This award is given annually to one person in the United States who has contributed to Extension on a multi-state or national basis. The Alpha Chi Chapter sponsors annual Connecticut state awards, including Distinguished Service, Friend of Extension, Outstanding Extension Secretary, Chapter Rookie of the Year, and Meritorious Service, as well as recognition of employee retirements.

The chapter recognizes members through scholarships that the association administers. These include the Doris Lane Scholarship for Academic Work, the Mary “Lib” Jacobson Scholarship for Pursuing Work in Human Nutrition, the Alpha Chi Chapter Scholarship for Participation in Short Courses and Conferences, and the Arland Meade award to an individual, not an Extension educator, who has done the most to improve organizational communications.

In addition to their active participation in the state chapters of their professional associations, five employees have led their respective national associations. They are Russ Hibbard, president of the 5,000-member National Association of County Agricultural Agents (1972); Anne Rideout, president of the 10,000-member Epsilon Sigma Phi honor fraternity (1987); and Carole Fromer, president of the 50,000-member American Home Economics Association (1989). Two members from Connecticut served as NAE4-HA president. They included Krebser from 1949–1950, and Arlene Martin (Gray), Litchfield County assistant 4-H club agent (1946–1962), from 1958–1959.
In 1978 a steering committee of officers of the three Connecticut associations and Epsilon Sigma Phi met with the members of the associations at the time and agreed on the following common concerns: personnel, including how positions were prioritized; programs, including how to share ideas among and between program areas, and new methods to reach clientele; and funding including special funds, speaker fees, rental cost, and local funding. Concerns that arose following the initial meeting were how to assure that Extension had representation on AAUP committees and the University Senate; the promotion, tenure, and reappointment process; and who was responsible for staff development.

During a similar meeting (1988), topics discussed included: issue-based programs called “national initiatives,” volunteer insurance coverage in the state, University budget requests to include all salary increases mandated by the state, the management of state funds allocated to the councils, a toll-free state phone line system, sources of funds for professional development, and clarification of sabbatical leave policies.

On June 9, 1993, bylaws were adopted for the creation of the Connecticut Extension Association that was open to all Connecticut professional and paraprofessional field staff and specialists with Extension responsibilities. The purposes were to improve the professional status of the staff; communicate past, present, and potential contributions of CES; provide support for new CES employees; and promote representation on University and College committees. The three Connecticut associations would remain active as part of their respective national associations. Joyce Meader, Windham County assistant agricultural agent (1985–), was chair (1994). She was succeeded (1995) by Faye Griffiths (Smith), New Haven County assistant Extension home economist (1981–).

**Galaxy Conference**

Galaxy is a joint professional meeting of all the Extension related national associations and Epsilon Sigma Phi that is held periodically. The first was held in Cincinnati, Ohio (1998). The second meeting was (2003) in Salt Lake City, Utah, and Galaxy III was held (2008) in Indianapolis, Indiana.

Extension professional associations promote staff development and recognition while providing members an opportunity to serve in regional and national leadership positions. As staff numbers have decreased and state-based influence has declined, the association continues to play an important role.
Appendix E

Selected College and Extension Organizational Charts

Relationship of USDA to the Connecticut State College of Agriculture (1918)
Connecticut Cooperative Extension Service Committee Structure (1923)
College and Extension Organizational Chart (1931)
Extension Organizational Chart (1947)
4-H Organizational Chart (1968)
Organization Concept (1972)
Extension Organizational Chart (1977)
Cooperative Extension Service Organizational Chart (1989)
Cooperative Extension System Organizational Chart (1990)
Issue based programming (1990)
Cooperative Extension and Volunteer Groups (n.d., probably 1990)
Extension Partners and Cooperative Extension System (2001)
University of Connecticut College of Agriculture and Natural Resources Organizational Chart (2007)

The following charts reflect the changing organizational structure of Extension since 1918.
Relationship of USDA to the Connecticut State College of Agriculture

DEPARTMENT OF AGRICULTURE

SECRETARY AND ASSISTANT SECRETARY

STATE COLLEGE OF AGRICULTURE

TRUSTEES

PRESIDENT

DEAN

WEATHER BUREAU

FOREST SERVICE

BUREAU OF SOILS

OFFICE OF PUBLIC RELATIONS

OFFICE OF AGRICULTURAL INDUSTRY

OFFICE OF EXPERIMENT STATIONS

BUREAU OF AGRICULTURAL STATISTICS

STATES RELATIONS COMMITTEE

RESEARCH

TEACHING

EXTENSION OFFICES

NORTH AND WEST (33 STATES)

SOUTH (16 STATES)

FIELD MEN

FIELD MEN

EXTENSION

DIRECTOR

SPECIALISTS

STATE LEADER

COUNTY AGENTS
Connecticut Cooperative Extension Service Committee Structure 1923

Executive Committee
Officers and chairman of each county committee

Board of Directors
1 agricultural, 1 homemaking, 1 4-H club director from each town

County Agricultural Committee
All Agricultural Directors

County Homemaking Committee
All Homemaking Directors

County 4-H Club Committee
All 4-H Club Directors

Agricultural Commodity Committees
appointed by Agricultural Committee
from its own membership
Poultry Dairy Fruit

Homemaking Project Committees
appointed by Homemaking Committee
from its own membership
Foods Clothing Health

4-H Club Project Committees
appointed by 4-H Club Committee
from its own membership
Boys Girls Fair

Town Committee

Agricultural Director Home Economics Director 4-H Club Director
College and Extension Organizational Chart 1931

U. S. D. A.

Connecticut Agricultural College

Agricultural Department

Extension Service

Home Extension Department

County Farm Bureau

Agricultural Agent

County and Local Committees

Club Agent

Meetings - Demonstrations - Farm and Home Visits - Bulletins - Letters

Boys - Girls

Women
Extension Organizational Chart 1947
Organization Concept 1972

ORGANIZATION CONCEPT

Office of Director

State Management Unit

State Program Unit

Field Units

Subject Matter Unit
Extension Organizational Chart 1977

D I R E C T O R

ASSOCIATE DIRECTOR

ASSISTANT DIRECTORS FOR PROGRAMS

HOME ECONOMICS AND ENEP

4-H & YOUTH DEVELOPMENT

AGRICULTURE AND NATURAL RESOURCES

COMMUNITY ORGANIZATION & STAFF RESOURCE DEVELOPMENT

FIELD COORDINATOR

FIELD UNITS

SPECIAL ASSISTANT

AFFIRMATIVE ACTION-

EQUAL EMPLOYMENT OPPORTUNITY
Connecticut Cooperative Extension Service Organizational Work Flow 1986
Issue based programming 1990

CONNECTICUT COOPERATIVE EXTENSION SYSTEM
PROGRAM DEVELOPMENT PROCESS

<table>
<thead>
<tr>
<th>Step</th>
<th>Target Completion Date</th>
<th>Process</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>I.</td>
<td>Sept. 1</td>
<td>Initiation of Program Development Process</td>
<td>Assoc. and Assist. Dir.</td>
</tr>
<tr>
<td>II.</td>
<td>Oct. 15</td>
<td>Environmental Scan</td>
<td>Asst. Dir.</td>
</tr>
<tr>
<td>III.</td>
<td>Nov. 1</td>
<td>Identification of Issues Priorities</td>
<td>Futures Comm. and Assoc. Dir./Dir.</td>
</tr>
<tr>
<td>IV.</td>
<td>Nov. 15</td>
<td>Formation of Issue Teams</td>
<td>Asst. Dir. Department Head (DH)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>District Administrator (DA)</td>
</tr>
<tr>
<td>V.</td>
<td>Feb. 1</td>
<td>Development Issues</td>
<td>Issue Teams and</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Working (Group) Teams</td>
</tr>
<tr>
<td>VI.</td>
<td>Feb. 15</td>
<td>Recommendation of Issues and Priorities</td>
<td>Asst. Dir., DH/DA</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Dist. Adv.</td>
</tr>
<tr>
<td>VII.</td>
<td>Feb. 28</td>
<td>Approval of Issues</td>
<td>Dir. and Assoc. Dir.</td>
</tr>
<tr>
<td>VIII.</td>
<td>Mar. 31</td>
<td>Development of CES Program Plans</td>
<td>Issue Teams and</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Working Teams</td>
</tr>
<tr>
<td>IX.</td>
<td>May 15</td>
<td>Development of Individual Plans of Work</td>
<td>Individuals, DH/DA, Asst. Dir.</td>
</tr>
<tr>
<td>X.</td>
<td>June 15</td>
<td>Submission of State POW to USDA</td>
<td>Assoc. Dir./Dir.</td>
</tr>
</tbody>
</table>
Cooperative Extension and Volunteer Groups n.d., probably 1990

Relationships between the Cooperative Extension System and Volunteer Support Groups

- State CES Administration
  - CT 4-H Development Fund
  - Extension Futures Committee
- District CES Administration
  - 4-H Farm Resource Center
  - Local Foundations
  - Extension Councils
  - CES Educators
    - Teaching/Project Volunteers
    - CT Extension Homemakers Council
    - SGMAP Advisory Committee
    - Organizational Volunteers
    - CT Master Gardeners Association
    - Advisory Volunteers
    - Event/Activity/Special Program Volunteers
      - Camps, Fairs, Project Activities, Etc.

Legend:
- = CES Faculty/Staff
- = Volunteer Support Groups/Programs
Extension Partners and Cooperative Extension System 2001

Relationships Between Partners and the Cooperative Extension System
Appendix F
Sampling of Collaborative Agreements


June 23, 1955. Memorandum of Understanding between the University of Connecticut and the USDA on Cooperative Extension Work in Agriculture and Home Economics.


1979. Memorandum of Understanding between Cooperative Extension Service and Department of Environmental Protection related to publicizing, distributing, and promoting the use of published soil surveys. The agreement provided for the conduct of in-service training for the use of soil surveys.


January 5, 1990. Memorandum of Understanding Establishing a Curriculum for Training Family Day Care Providers between Cooperative Extension Systems of the University of Massachusetts, University of Connecticut, and University of Rhode Island.


August 1990. Memorandum of Understanding for the Operation and Management of the Ragged Hill Woods 4-H Environmental Program, signed with EASTCONN.


December 10, 1993. Letter of Agreement established between the School of Family Studies and the Cooperative Extension System, within the College of Agriculture and Natural Resources, in regard to the cooperative implementation and management of The Impact of Family Restructuring on Children: A Parent Education Program.


October 2, 2000. Memorandum of Understanding between the University of Connecticut Cooperative Extension System and the Litchfield County 4-H Foundation, Inc.

October 1, 2001. Memorandum of Agreement between the Connecticut Sea Grant College Program and Department of Extension, College of Agriculture and Natural Resources, University of Connecticut.

April 23, 2002. Memorandum of Understanding between Connecticut Department of Environmental Protection (CDEP), Connecticut Department of Agriculture (CDA), Connecticut Department of Public Health (CDPH), University of Connecticut Cooperative Extension System (UCCES), Connecticut Department of Transportation (CDOT), United States Department of Agriculture Animal and Plant Health Inspection Service Wildlife Services (WS) for a cooperative wildlife damage management program in the state of Connecticut.


March 26, 2008. Memorandum of Agreement between the University of Connecticut Cooperative Extension System and the Tolland County 4-H Fair Association, Inc.

Undated. Memorandum of Understanding between Cooperative Extension System and Connecticut Department of Environmental Protection, Division of Forestry regarding the Stewardship Incentive Program.

Appendix G

Definitions and Common Acronyms

4-H
The 4-H youth development program is a partnership of USDA and the Cooperative Extension System, created to assist youth in acquiring knowledge, developing life skills, and forming attitudes which will enable them to become self directing, productive, and contributing members of society. The 4-H program operates through the involvement of volunteers and 4-H program staff who organize and conduct educational and project activities in a community or camp setting. More than 6.5 million young people across America learn leadership, citizenship, and life skills. www.4husa.org

AARP
American Association for Retired Persons is a nonprofit membership organization of persons fifty and older dedicated to addressing their needs and interests. www.aarp.org

ADA
American Disability Association came into force with the Americans With Disabilities Act (1990). It is the short title of United States Public Law 101-336, which was signed on July 26, 1990, by George H. W. Bush. The ADA is a wide-ranging civil rights law body that prohibits discrimination of people suffering from various physical disabilities. The establishment of the ADA was a great achievement; since then it has been serving the community with dedication and dignity. www.ada.gov
ANREP

Association of Natural Resource Extension Professionals is a national association for Cooperative Extension Service professionals who work in environmental education, fisheries, forestry, wood sciences, range, recreation, waste management, water, wildlife, and related disciplines. www.anrep.org

APHIS

Animal Plant Health Inspection Service provides leadership in ensuring the health and care of animals and plants. The agency improves agricultural productivity and competitiveness, and contributes to the national economy and public health. www.aphis.usda.gov

AREERA

Agricultural Research, Extension, and Education Reform Act of 1998 (Farm Bill) redefined the requirement to match federal dollars with state dollars including a new requirement to match retirement and official mail funds. This legislation ensures that federally-funded agricultural research, Extension, and education addresses high-priority concerns with national or multi-state significance. Signed into law on June 23, 1998, it became Public Law 105-185.

Bankhead-Jones Act

The Bankhead-Jones Act provided for further expansion of Cooperative Extension. The formula for the funding distribution changed to be based on farm population rather than rural population (1935).

Bartlett Arboretum

Bartlett Arboretum and Gardens is a ninety-one acre nature preserve located in North Stamford, Connecticut. The Bartlett Arboretum contains thousands of plants, including several “champion” trees that are the largest of their species in the area. It also houses a large permanent collection of plants from around the world in its greenhouse and gardens. The pond, swamp, and stream provide a positive environment for sustaining abundant wildlife. Arboretum programs focus on the interrelationship of people, their gardens and landscapes, and the natural world around them. www.bartlettarboretum.org
CAIC  Connecticut Agricultural Information Council is a non-profit coalition of agricultural groups promoting Connecticut agriculture through displays, informational articles, and other outreach efforts.

CANR  College of Agriculture and Natural Resources, University of Connecticut serves Connecticut through a wide variety of research, outreach education, and undergraduate and graduate degree programs. www.canr.uconn.edu

Capper-Ketchum Act  The Capper-Ketchum Act provided for the expansion of Cooperative Extension with one-third of added funds to be matched within states by local state funds (1928).

CAPS  The Cooperative Agricultural Pest Survey program is involved in the early detection of exotic pests that threaten agriculture and the environment. Activities include annual surveys for targeted pests, outreach, and education.

CCCCS  Connecticut Consumer Credit Counseling Services provides professional financial guidance, credit counseling, community-wide educational programs, debt management assistance, bankruptcy counseling and education services, and housing counseling assistance to consumers. This is done via phone, Internet, and through in-person sessions. www.moneymanagement.org

CES  Cooperative Extension System; also referred to as CCES for Connecticut Cooperative Extension System or UConn CES. A national publicly-funded, non-formal education system that links the educational and research resources and activities of USDA (including the 4-H youth development program); land-grant universities in every state, territory, and the District of Columbia; and approximately 3,150 county administrative units. This unique federal, state, and local partnership focuses on practical solutions to critical issues affecting people’s daily lives. www.extension.uconn.edu

CEU  Cooperative Extension Unit is the administrative name used at UConn from 1995–2007 for the faculty and program staff working in the eight Extension centers.
Clarke-McNary Act  The Clarke-McNary Act allowed for the purchase of land to enlarge the National Forest Service. The act broadened cooperative efforts to include providing forestry assistance to farmers and created state forestry agencies (1924).

CLEAR  Center for Land use Education and Research provides information, education, and assistance to land-use decision-makers, in support of balancing growth and natural resource protection. www.clear.uconn.edu

CHC  Connecticut Horse Council is a nonprofit organization dedicated to serving all aspects of the horse industry in Connecticut. www.cthorsecouncil.org

CSC  Connecticut Seafood Council is a membership organization serving as a collective voice for the commercial harvest and aquaculture industries on issues of concern, and aids in the promotion of Connecticut seafood. www.seagrant.uconn.edu/fish.htm

CMGA  Connecticut Master Gardener Association is the largest horticultural society in Connecticut. CMGA provides an opportunity for certified Master Gardeners to share their knowledge and love of gardening with others. Through sponsorship of events and volunteer projects throughout the state, CMGA members educate and beautify communities. www.ctmga.org

CMTA  Connecticut Marine Trades Association is a not-for-profit trade association that is instrumental to the well being of the marine industry. It promotes the interests of recreational boating, improving industry conditions, monitoring legislative and regulatory issues, and advancing the education of those in the industry in Connecticut. www.ctmarinetrades.org

CoP  Communities of Practice refers to the process of social learning that occurs, and shared socio-cultural practices that emerge and evolve when people with common goals interact as they work towards those goals. www.extension.org
CRD  Community Resource Development seeks to understand community change and identify opportunities to improve social and economic well-being. Programs, projects, and special studies in the areas of economic analysis; business development, retention, and expansion; retail development; facilities and services; strategic planning; tourism; and organization development are the core of CRD activities. The strength of CRD programming is a practical approach of working closely with local leaders to assess public problems and needs, and ultimately, to help them find an effective manner of addressing local issues.

CSBDC  Connecticut Small Business Development Center promotes and encourages the creation and growth of small business. It provides sound business advice through professional no-cost counseling, seminars, technical assistance, and education for business owners and entrepreneurs in one-on-one or group training environments throughout the state of Connecticut. www.ccsu.edu/sbdc

CSREES  Cooperative State Research, Education, and Extension Service unites the research, higher education, and Extension education and outreach resources of USDA. CSREES contributions are strengthened by a broad spectrum of public and private partnerships, including other USDA agencies, federal and state government departments, non-profit organizations, and private sector entities. CSREES is the federal partner of the Cooperative Extension System. www.csrees.usda.gov

DEP  Department of Environmental Protection conserves, improves, and protects the natural resources and environment of the state of Connecticut. This agency encourages the social and economic development of Connecticut while preserving the natural environment and the life forms it supports in a delicate, interrelated, and complex balance. To this end, the state aims to fulfill its responsibility as trustee of the environment for present and future generations. www.ct.gov/dep
DHIA
Dairy Herd Information Association promotes accuracy, credibility, and uniformity of DHI records. It represents the DHIA system on issues involving other national and international organizations, and organizes industry activities that benefit members of national DHIA.
www.dhia.org

DoAg
Department of Agriculture encourages and promotes the development of agriculture within the state. Its staff collects and publishes information and statistics on agricultural and animal industries, and related interests of the state.
www.ct.gov/doag

DPH
Department of Public Health protects and improves the health and safety of the people of Connecticut. This is done by assuring the conditions in which people can be healthy; promoting physical and mental health; and preventing disease, injury, and disability.
www.ct.gov/dph

DSS
Department of Social Services provides a broad range of services to the elderly, disabled, families, and individuals who need assistance in maintaining or achieving their full potential for self-direction, self-reliance, and independent living.
www.ct.gov/dss

DTS
Diagnostic Testing Services laboratory (DTS) is part of the Connecticut State Veterinary Medical Diagnostic Laboratory (now called CVMDL). The staff performs laboratory testing on specimens, such as blood, milk, urine, parasites, swabs, etc., submitted by veterinarians, to determine which infectious agents are present and may be causing disease. The DTS laboratory is separate from the portion of CVMDL that conducts animal autopsy (necropsy), although specimens from necropsy are tested in the DTS laboratory sections.
www.cvmdl.uconn.edu
ECOP

Extension Committee on Organization and Policy (national) was appointed as early as 1905 with the name ECOP emerging in 1915. The committee provides a vehicle for a sense of common mission and purpose at the national level. The current organizational structure is three representatives from each of the five regions for staggered four-year terms (1968).


EDB

Ethylene Dibromide is a soil fumigant used in tobacco farming that may be found in the water supply.

EDEN

Extension Disaster Education Network is a collaborative multi-state effort by Extension Services across the country to improve the delivery of services to citizens affected by disasters. www.eden.lsu.edu

EEO

Equal Employment Opportunity is the right of all persons to work and advance on the basis of merit, ability, and potential. www.eeoc.gov

EFNEP

Expanded Food and Nutrition Education Program is an Extension education program designed to assist limited resource audiences in acquiring the knowledge, skills, attitudes, and changed behavior necessary for nutritionally-sound diets. www.csrees.usda.gov/efnep

Engagement

Defined by the Kellogg Commission, engagement means that the institution of higher education is more productively involved with communities, however community is defined.

Extension agents

Extension agents are now referred to as Extension educators. The agent title was used for Cooperative Extension faculty members housed in the eight Extension Centers who held at least a master’s degree.

FCL

Family Community Leadership is a Kellogg Foundation funded program that partnered actively with volunteers, placing the volunteers in decision-making roles, investing in them by helping them develop leadership skills and the self-confidence to lead.
<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
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<tbody>
<tr>
<td>FCS</td>
<td>Family and Consumer Sciences is the new name for home economics programs.</td>
</tr>
<tr>
<td>FIFRA</td>
<td>Federal Insecticide Fungicide and Rodenticide Act directs the EPA to cooperate with USDA, and use the services of the Cooperative Extension System to inform and educate pesticide users about the accepted uses and other regulations made under the Act.</td>
</tr>
<tr>
<td>FNS</td>
<td>Food and Nutrition Service (formerly known as the Food and Consumer Service) administers the nutrition assistance programs of the USDA. The mission of FNS is to provide children and needy families with better access to food and a more healthful diet through its food assistance programs and comprehensive nutrition education efforts. <a href="http://www.fns.usda.gov/fns">www.fns.usda.gov/fns</a></td>
</tr>
<tr>
<td>FSA</td>
<td>Farm Service Agency (formerly known as ASCS) is the USDA agency whose mission is to help farmers conserve land and water resources, provide credit to new or disadvantaged farmers and ranchers, and help farm operations recover from the effects of a disaster. <a href="http://www.fsa.usda.gov/pas">www.fsa.usda.gov/pas</a></td>
</tr>
<tr>
<td>FSNE</td>
<td>Food Stamp Nutrition Education is a federal and state partnership that supports nutrition education for people eligible for food stamps. It aims to increase the likelihood that people eligible for food stamps will make healthy food choices within a limited budget, and choose physically active lifestyles consistent with the Dietary Guidelines for Americans and Food Guidance System. <a href="http://www.csrees.usda.gov/nea/food/fsne/fsne.html">www.csrees.usda.gov/nea/food/fsne/fsne.html</a></td>
</tr>
<tr>
<td>FSP</td>
<td>Food Stamp Program helps low-income people and families buy the food they need to maintain good health. <a href="http://www.fns.usda.gov/fsp">www.fns.usda.gov/fsp</a></td>
</tr>
<tr>
<td>FTC</td>
<td>Federal Trade Commission pursues vigorous and effective law enforcement, advances consumers’ interests by sharing its expertise with federal and state legislatures, and U.S. and international government agencies. FTC develops policy and research tools through hearings, workshops, and conferences. It also creates practical</td>
</tr>
</tbody>
</table>
and plain-language educational programs for consumers and businesses in a global marketplace with constantly changing technologies. www.ftc.gov

**FTEs**  
Full time equivalents or the number of employees if everyone was appointed to work one hundred percent time.

**GIS**  
Geographic Information System integrates hardware, software, and data for capturing, managing, analyzing, and displaying all forms of geographically referenced information.

**GPS**  
Global Positioning System is a satellite-based navigation system made up of a network of twenty-four satellites placed into orbit by the U.S. Department of Defense. www.clear.uconn.edu/geospatial

**GVI**  
Green Valley Institute is a cooperative effort of CES and the Quinebaug-Shetucket National Heritage Corridor (QSNHC). It was created to help Heritage Corridor communities and citizens sustain their environment and quality of life while growing their economies. www.greenvalleyinstitute.org/index.htm

**HACCP**  
Hazard Analysis and Critical Control Point is a food inspection process that targets pathogens that cause foodborne illness, strengthens industry responsibility to produce safe food, and focuses inspection and plant activities on prevention objectives.

**Hatch Act**  
The Hatch Act (1887) created the agricultural experiment station system through USDA for scientific research.

**HEAP**  
Horse Environmental Awareness Program is a coalition of federal, state, and local agencies, organizations, and individuals interested in educating horse owners on best management practices to protect the environment. www.ct.nrcs.usda.gov/programs/rc&d/km_heap-program.html

**Hippology**  
Hippology is an activity where 4-H members exhibit their knowledge and understanding of equine science and husbandry in a friendly but competitive setting.
HHC

The Hispanic Health Council is a community-based, non-profit organization located in Hartford, Connecticut. HHC’s unique organizational model integrates public advocacy, high-level community-based research, and research-based service to provide outstanding care to the poor and underserved. www.hispanichealth.com

IFYE

International Four-H Youth Exchange (formerly known as the International Farm Youth Exchange) is an in-depth learning experience in which 4-H alumni and other young adults live with host families in other countries. The goals are to increase global awareness, develop independent study interests, and improve language skills. www.ifyeusa.org

IPM

Integrated Pest Management refers to the control of pests or diseases by using an array of crop production strategies, combined with careful monitoring of insect pests or weed populations, and other methods. www.cag.uconn.edu/plsc/plsc/ipm.html

Labo

Labo International Exchange is a non-formal educational organization that provides an integrated program of youth development, language learning, and cultural exploration for Japanese children and their families in the United States. www.labo-exchange.com

1994 Land-grant Institutions

Land-grant status was conferred (1994) on twenty-nine Native American colleges as a provision of the Elementary and Secondary Education Reauthorization Act. A $23 million dollar endowment was authorized to be built over five years with colleges receiving interest payments from the endowment each year. www.csrees.usda.gov/qlinks/partners/state_partners.html

Land Type Associations (LTAs)

Land Type Associations are one level of the National Hierarchical Framework of Ecological Units (NHFEU). The NHFEU is an ecological classification system that divides landscapes into ecologically significant regions at multiple scales. Ecological types are classified and units are mapped based on the associations of biotic and environmental factors which include climate, physiography, water, soils, air, hydrology, and potential
natural communities. Land Type Associations and other levels of the NHFEU are used as large-scale ecological units for resource assessment and planning projects.

LTAs are being mapped and compiled on a state-by-state basis. Once LTAs are mapped, then smaller ecological units that are increasingly more specific may be mapped. http://files.dnr.state.mn.us/natural_resources/ecosystems/nhfeu.pdf

**LIFT**
Learning, Interaction, Friends, and Talents is a 4-H after-school program based at Windham Middle School in Willimantic, Connecticut.

**LISS**
Long Island Sound Study is a six-year federal-state project to research the priority problems of Long Island Sound, and to develop a management plan for addressing the problems. www.longislandsoundstudy.net

**NAEHE**
National Association of Extension Home Economists is now known as the National Association of Extension Family and Consumer Sciences (NAEFCS). The association educates and recognizes Extension professionals who impact the quality of life for individuals, families, and communities. www.neafcs.org

**NASA**
National Aeronautics and Space Administration pioneers the future in space exploration, scientific discovery, and aeronautics research. www.nasa.gov

**NASULGC**
National Association of State Universities and Land-Grant Colleges (as of 2009 called Association of Public and Land-Grant Universities) is the nation’s oldest higher education association whose membership comprises 214 institutions, including state universities, all of the nation’s land-grant colleges and universities, and several public university systems. It is a voluntary non-profit association of major public research universities with campuses located in all fifty states, the U.S. territories, and the District of Columbia. www.aplu.org/NetCommunity/Page.aspx?pid=183&srcid=-2

**NCIMS**
National Conference on Interstate Milk Shipments is a non-profit organization whose goal is to “Assure the Safest Possible Milk Supply for All the People.” www.ncims.org
NEIEE
New England Institute for Extension Education was organized (1984) to train and educate new Extension employees on the work, history, and methodology of Extension education.

NEMO
Nonpoint Education for Municipal Officials is a Connecticut CES program that links land use and water quality, providing towns with cutting edge technology, and resource information for decision-making. www.nemo.uconn.edu

NERL
New England Regional Leadership Program was originally funded by the Kellogg Foundation. NERL was designed to train community members in leadership skills, especially for rural communities.

NEVBGA
New England Vegetable and Berry Growers' Association is the oldest vegetable growers association in America. It was organized to further the vegetable and berry industry within New England. www.epa.gov/pesp/member_pages/nevbga.htm

NNSLE
National Network for Sustainable Living Education brings together natural resource and Extension professionals who investigate, educate, and model sustainable living practices to individuals, families, institutions, businesses, camps, and schools. Successful sustainable living balances economic, social, and environmental needs while meeting the needs of the present generation without compromising the needs of future generations. www.csrees.usda.gov/nea/nre/in_focus/susdev_if_living.html

NOAA
National Oceanic and Atmospheric Administration is a federal agency that uses a comprehensive understanding of the role of the oceans, coasts, and atmosphere in the global ecosystem to make the best social and economic decisions. www.noaa.gov
NRAES

Natural Resource, Agriculture, and Engineering Service is a not-for-profit program dedicated to assisting land-grant university faculty and others in increasing the public availability of research and experience-based knowledge. NRAES is sponsored by eleven land-grant universities in the eastern United States. Cornell University is the host institution.

NRAES publishes practical books of interest to fruit and vegetable growers, landscapers, dairy and livestock producers, natural resource managers, Soil and Water Conservation District (SWCD) staff, consumers, landowners, and professionals interested in agricultural waste management and composting. NRAES books are used in Cooperative Extension programs, in college courses, as management guides, and for self-directed learning. www.nraes.org

NRCS

Natural Resources Conservation Service (formerly known as SCS) is the lead USDA agency for conservation technical assistance to conserve, maintain, and improve natural resources and the environment. www.nrcs.usda.gov

PAT

Pesticide Applicator Training is now known as PSEP or Pesticide Safety Education Program. As a result of amendments to FIFRA, PAT focuses on the safe use and handling of pesticides, and provides information about pesticides and their uses.

OIR

The Office of Institutional Research at UConn provides data and analysis to support the management, planning, evaluation, and assessment functions of the University. The office fulfills this mission in a variety of ways and serves a wide range of consumers of information, both internal and external to the University. www.oir.uconn.edu

OPEC

Organization of the Petroleum Exporting Countries coordinates and unifies the petroleum policies of member countries. It ensures the stabilization of oil markets in order to secure an efficient, economic, and regular supply of petroleum to consumers, a steady income to producers, and a fair return on capital to those investing in the petroleum industry. www.opec.org
### OPMAD
Organized Parents Make a Difference, Inc. is a grassroots, community organization whose mission is to empower parents to design, develop, and deliver quality after-school enrichment programs in their children’s schools.  
[www.opmad.org](http://www.opmad.org)

### Outreach and Public Service
Outreach and Public Service provides leadership to connect, coordinate, facilitate, foster, prepare, and promote outreach programs and engaged scholarship. The aims are to serve the public good, help prepare students to be leaders in their chosen fields, and support faculty and staff in scholarly outreach efforts at the University of Connecticut.  
[www.outreach.uconn.edu](http://www.outreach.uconn.edu)

### Paul and Lisa Program
The Paul and Lisa Program, a non-profit organization, provides prevention, early intervention, and advocacy for children, teens, and adults who have been sexually victimized through commercial exploitation, and to assist them in redirecting their lives in a self-sufficient and meaningful manner.  
[www.paulandlisa.org](http://www.paulandlisa.org)

### PKU
Phenylketonuria is a genetic disorder in which the body cannot process part of a protein called phenylalanine, found in most foods. If the phenylalanine level gets too high, damage to the brain can cause severe mental retardation.

### Ragged Hill Woods
The Ragged Hill Woods Environmental Program was established (1975) to provide education for grades K-6 in northeastern Connecticut. The program is a collaboration among the Connecticut Audubon Society, the University of Connecticut Cooperative Extension System, and the Windham County 4-H Foundation.  
[www.ctaudubon.org/visit/raggedhill.htm](http://www.ctaudubon.org/visit/raggedhill.htm)

### RREA
Renewable Resources Extension Act (Public Law 95-306, June 30, 1978) provides funding for Extension activities related to forestry and other renewable natural resources at land-grant universities.  
RGS  Ruffed Grouse Society was established (1961) as an international wildlife conservation organization dedicated to promoting conditions suitable for ruffed grouse, American woodcock, and other forest wildlife. www.ruffedgrousesociety.org

RMA  Risk Management Agency is the USDA agency with the mission to improve the economic stability of agriculture by offering a system of crop insurance. www.rma.usda.gov

SARE  Sustainable Agriculture Research and Education helps advance farming systems that are profitable, environmentally sound, and good for communities through a nationwide research and education grants program. www.sare.org

Section 319  The federal Clean Water Act (319) establishes a national program to control non-point sources (NPS) of water pollution.

Sibling federal agencies  Sibling federal agencies is the generic term used to mean the other USDA agencies including NRCS and FSA.

TAC  Tolland County Agricultural Center, Inc. is the ownership organization of the Tolland County Agricultural Center located in Vernon where the Tolland County Extension Center is housed. This is a private not-for-profit organization. www.tollandcountyagriculturalcenter.org

UCONN 2000  UCONN 2000 is renewing, rebuilding, and enhancing the University of Connecticut campuses through a $2.03 billion, twenty-year state investment in the University’s infrastructure. The program is also enhancing the academic and research activities on all of the campuses, including the UConn Health Center in Farmington. www.uc2000.uconn.edu

UCPEA  The University of Connecticut Professional Employees Association (UCPEA) is the official bargaining agent for all professional employees at the University of Connecticut, its regional campuses (Avery Point, Hartford, Stamford, Torrington, and Waterbury), and the UConn Law School. www.ucpea.org
**USAID**
United States Agency for International Development is an independent agency that provides economic, development, and humanitarian assistance around the world in support of the foreign policy goals of the United States. www.usaid.gov

**USDA**
United States Department of Agriculture is the third-largest civilian department of the U.S. government, overseeing a variety of agencies, government corporations, and other entities. It employs more than one hundred thousand people at over fifteen thousand locations in all fifty states and eighty countries. www.usda.gov

**U.S. Commission on Civil Rights**
The U.S. Commission on Civil Rights recommends that federal funds be disbursed “only to such publicly controlled institutions of higher education which do not discriminate on grounds of race, color, religion, or national origin.”

**VISTA**
AmeriCorps VISTA is the national service program designed specifically to fight poverty. Founded as Volunteers in Service to America (1965) and incorporated into the AmeriCorps network of programs (1993), VISTA has been on the front lines in the fight against poverty in America for more than forty years. www.americorps.gov/about/programs/vista.asp

**Water Quality 406**
Section 406 of the Agricultural Research, Extension, and Education Reform Act (1998) (AREERA) (Farm Bill) (7 U.S.C. 7626) authorizes the Secretary of Agriculture to establish a competitive grants program for CSREES water quality funding. The program includes four major categories: regional coordination projects, integrated projects, Extension education projects, and national facilitation projects.
The following is a chronological review of the major areas of emphasis for the Connecticut agricultural engineering program. These highlights occurred during the period of 1960-2008, and are not mentioned elsewhere in this history.

Dairy

1960s Conversion of loose housing to free-stall systems
Designs for herringbone milking parlors and new free-stall barns
Designs for horizontal silos for corn silage; more than 100 built
Development of recommendations for liquid manure storage and handling
Research on vacuum-silage processing

1970s Designs for ponds that treat milking parlor waste
Plans for manure push-offs
Plans for anaerobic digesters
Recommendations for silage corn harvesting equipment
Designs for large scale dairy barns

1980s Research on the use of methane and ethanol
Poultry

1960s  Design of the Connecticut insulated panel poultry house
       Conversion of existing poultry coops to a windowless design
       Plans for pullet-rearing houses
       Plans for deep-pit poultry houses with manure storage below
       Ventilation solutions due to increased bird density
       Designs for cage-house egg rooms
       Research on manure odor and disposal

1980s  Fly and odor control recommendations
       Plans for high-density caged layer houses

Greenhouse, Nursery, Vegetables, Fruit

1960s  Introduction of film-plastic coverings
       Development of lath-house plans for winter protection
       Design of the first flat filler for filling plant growing trays
       Start of container production of nursery stock and bedding plants
       Design of rigid-frame wood greenhouses for bedding plants and vegetables
       Conversion from tobacco plant production to hot beds to greenhouses
       Design of controlled-atmosphere apple storage
       Modification of existing potato storage to forced ventilation
       Introduction of air inflated, double coverings for greenhouses

1970s  Rapid expansion of hoop houses for bedding plant production
       Development of automatic watering systems
       Design of materials handling equipment and shipping containers
       Development of over-wintering structures for nursery stock
       Recommendations for energy conservation during the energy crisis
       Development of guidelines for alternate fuel heating systems
Appendix H Agricultural Engineering Highlights

1980s  
Research on the use of hydroponics to increase production  
Design of movable bench systems to increase production area  
Publication of *Greenhouse Engineering* book  
Introduction of horizontal air-flow air-circulation systems  
Development of guidelines for pesticide storage  
Research on mechanization to save labor  
Development of trickle irrigation for field crops  
Recommendations for institutional (school, handicapped, prison) greenhouses

1990s  
Evaluation of natural ventilation systems to save energy  
Introduction of equipment to recycle plastic film from greenhouses  
Publication of *Greenhouses for Homeowners and Gardeners*  
Recommendations on system design and use of root zone heating systems  
Recommendations on electronic environment control systems  
Designs for garden centers

Farm Safety

1960s  
Slow-moving vehicle emblem program promoted

1970s  
Home fire safety emphasis

1980s  
Farm tractor and equipment safety program  
Introduction of sprayer calibration and safe application of pesticides

4-H Program

1960s  
Focus on small gas engines, woodworking, and lighting

Residential

1960s  
Use of new building materials  
Home water treatment
1970s  Guidelines on handling septic tank pumping

1980s  Composting of household waste

**Home Energy Programs**

1960s  Farm refrigeration for egg storage; evolved into fruit and vegetable storage

1970s  Selection, installation, and operation of wood and coal stoves
       Training for fire marshals, building inspectors, stove manufacturers
Appendix I
The Poultry Industry in Connecticut, a Postscript

The University of Connecticut
Arbor Acres
Connecticut Shifts From Broilers to Breeders

This appendix was written by Paul and William Aho and appears here with their permission. Portions of this appendix appeared in Feedstuffs and is used here with the publication’s permission.

During 2001 the chicken breeding company Arbor Acres Farms Inc. (now part of Aviagen) quietly closed farms in Connecticut and decamped to the south. As a result, an entire network of chicken houses became quiet for the first time in fifty years. To mark the passing of broilers and breeders from Connecticut, this article serves as a postscript to the broiler chicken history of a small state that punched above its weight for a while and then disappeared from view (2001).

The story starts with the Yankee Clipper ships of the early nineteenth century. These swift merchant vessels left ports in New England and sailed to the Far East around Cape Horn, returning not only with tea and china, but also with animals of every description, including chickens. Alexander Hamilton had directed American ships to bring back farm animals to improve the genetic stock of the young republic. New England farmers would greet the returning Clipper ships, and buy chickens of all shapes, colors, and sizes. Breeds such as the Rhode Island Red were developed just miles from the Clipper ship docks.

The University of Connecticut

By the late nineteenth century, the poultry industry of New England included a robust combination of chicken breeders, small farms, and feed mills. In Eastern Connecticut (1896) the institution that later became the University of Connecticut (UConn) started research, teaching, and Extension in poultry science at the same time as Cornell, the university usually credited with having the first poultry department. The first instructor of poultry culture at UConn was W. L. Chamberlain (1897–unknown). Although the conditions of his
research and teaching were primitive, it is noteworthy that at a moment when the entire school had eight instructors, one was dedicated to poultry. By 1912 the department had its own building and a full set of research tools, in addition to five faculty members.

The brief history of the UConn Poultry Science Department (1896–1971) included a pioneering discovery that seems elementary today, but was revolutionary at the time. H.M. Scott, professor, poultry husbandry (1941–1947); Lloyd D. Matterson, professor, nutritional sciences (1942–1972); and Edwin Singsen, professor, nutritional sciences (1940–1974), discovered the basic relationship between the concentration of energy in the ration and growth rate. Based on that knowledge, they developed the Connecticut High Energy Ration. That feed ration is still the basic feed formula for broiler chickens around the world.

William (Bill) Junnila, agricultural engineering department, (dates unknown), made two elementary but pioneering observations. First, to grow chickens successfully in crowded conditions, it is important to reduce the number of respiratory organisms with ventilation. Second, to do this in the winter requires heat conservation and proper insulation.

Of equal importance to the feed ration and the chicken house environment were the groundbreaking advances in avian diseases made by Connecticut faculty scientists. A few are particularly worthy of note. L.F. Rettger, Yale, discovered (1900) and described *Salmonella pullorum* in chickens. Later at UConn, Mark Tourtelotte, professor, pathobiology (1953–1992), developed the *Mycoplasma gallisepticum* (MG) vaccine. Charles Helmboldt, professor, pathobiology, and Extension veterinarian (1946–1971), identified the Connecticut strain of Infectious Bronchitis Virus (IBV). Louis Van der Hyde, department head, pathobiology (1986–1994), developed the live Reovirus vaccine for broiler chickens. Roy Luginbuhl, professor, pathobiology (1947–1975), left the College of Agriculture and Natural Resources to form SPAFAS (Specific Pathogen Free Avian Supply) with Ray Davis. SPAFAS (now Charles River SPAFAS) is the largest producer of specific pathogen free eggs for vaccine production and research. The company still maintains production farms in Connecticut.

In the first half of the twentieth century, there was a thriving chicken meat industry in Connecticut. Part of the industry was based on a marketing ploy worthy of the “Nutmeg state.” Connecticut is called the Nutmeg state because early Connecticut traders were known, on occasion, to sell ordinary wood as nutmeg. In modern times, a Connecticut entrepreneur named Jacques Makowsky came up with the idea of selling a “Cornish Game Hen.” The name
was everything because the chicken itself was (and is) just an ordinary, younger than normal, broiler marketed with a fancy name. When the rest of the industry caught on, the “Cornish Game Hens” left Connecticut, but hundreds of millions continue to be sold each year around the world, a linguistic tribute to the Nutmeg state.

Good prices for regular sized broilers, particularly during World War II, provided a false sense of prosperity for Connecticut broiler producers. The high prices for broiler meat during the war encouraged many farmers to construct new two-story broiler houses to take advantage of the bounty. They were soon to be disappointed.

Arbor Acres

At the same time, at the Saglio family fruit and vegetable farm in Glastonbury, Connecticut, Henry Saglio and his adopted brother Mike Saglio were developing an interest in chickens. The farm’s name was Arbor Acres. Henry’s lasting impact on the broiler industry was his success in breeding and selling white broilers. When Henry started breeding chickens, most meat-type chickens were red. Later, almost all broilers around the world were white.

Henry’s white-feathered broilers had something to do with Hartford Poultry Inc. owner Jack Sloat. Brightly colored pinfeathers, inexpertly removed by Jack’s processing plant, drew complaints from consumers. When Jack found that Henry had a white broiler, he immediately contracted with the Saglios for all the chickens they could provide. That contract gave the poultry part of Arbor Acres a leg up and encouraged Henry to continue breeding white chickens. When Henry Saglio entered the Chicken of Tomorrow contest sponsored by A & P supermarket chain (1948), it was with a white chicken. Although he finished second to a brightly colored chicken, he gained enough notoriety to launch his breed. The White Plymouth Rock breed of Arbor Acres, and later hybrid versions of the breed, now constitute a significant portion of the genetic base of the modern broiler chicken worldwide.

While Henry was breeding white broilers, Mike Saglio was conducting pioneering practical research in broiler-breeder husbandry. His contributions to the management of breeders include the use of slats, lighting programs, and beak trimming.
Connecticut Shifts From Broilers to Breeders

In the late 1950s, it became evident that Connecticut did not have a competitive advantage in the production of broilers. With lower land, labor, and feed costs, the southeastern part of the country was a far better place to produce broilers. In addition, the world-beating concept of vertical integration had just been invented in the south. Almost overnight the broiler industry in Connecticut disappeared.

The sting of the loss was softened by the rise of Arbor Acres. Breeder flocks moved into the same chicken houses abandoned by the broiler industry. Arbor Acres was hungry for space as it grew by leaps and bounds, and expanded production not only in Connecticut but also in five southern states and in dozens of locations around the world. At its peak, Arbor Acres provided the genetic stock for two out of every three broilers in the country, and one out of three in the rest of the world. In Connecticut, Arbor Acres employed 400 people. Another 2,000 were employed around the world. It was a global agribusiness company long before the words agribusiness or globalization had ever been coined. Yearly sales reached a peak of $80 million.

As the market share slowly eroded in the 1990s, Arbor Acres saw a steep decline. The genetic lines and the company itself became incorporated into Aviagen, a business headquartered in Huntsville, Alabama. The name Arbor Acres lives on only as a brand name within Aviagen.

The story of broilers and broiler breeders in Connecticut is, for all practical purposes, now over. The poultry houses built with such hope for broilers in the 1940s and later filled with the elite pedigree stock of many of the world’s broilers, sit empty and still. The sense of loss has been compounded (2001) by the passing of three noteworthy Connecticut poultry men. Two of them were known for their work at Arbor Acres: Bob Priddy and Monty Frazier. Bob Priddy helped to plant the Arbor Acres flag in far-flung areas of the world. Monty Frazier, one of the best known globetrotting poultry veterinarians, was the Johnny Appleseed of mycoplasm eradication around the world. The third noteworthy passing (2001) was the long-time manager of the Central Connecticut Feed Coop, Emanuel (Mike) Hirth. The Coop was a competitive feed mill for both broiler chicken producers of the 1950s and for the Arbor Acres breeders.

The last redoubt of Connecticut breeders is a farm called Forest Ridge in Glastonbury. That farm was depopulated on August 14, 2001. The broilers, the breeders, the Cornish Game Hens, and UConn’s Poultry Science Department are gone. The pioneering genetic, nutritional, environmental, and poultry health advances made by the actors who trod this small stage, ever so briefly, live on in the thirty-two billion commercial broilers grown annually around the globe.
Appendix J
End Notes and Citations

So it is, gentle reader, that we leave the book to you. It is as accurate as we have been able to make it, but if you find errors, please remember that no prizes are offered.


Introduction

page


* indicates an item on the timeline. † indicates the reference is from the side panels.


xxv These include the concept: The University of Connecticut Cooperative Extension Service Academic Plan. (1988). Storrs, CT: University of Connecticut, College of Agriculture and Natural Resources.

xxvi As an organization, Extension: R. Roberts (personal communication, eXtension Strategy Retreat, March 25, 2008)
Chapter 1: Prior To 1960—Building the Foundation


1 Changes were on the: Extension staff conference (1963). Storrs, CT: University of Connecticut, Agricultural Extension Service.


2 This was the first: Schwieder, D. (1993). 75 Years of Service: Cooperative Extension in Iowa. Ames, IA: Iowa State University Press.


3 There were a few: USDA. (n.d.). County agricultural agent work under the Smith-Lever Act 1914-1924 (Circular No. 59). Washington, DC: Author.


* indicates an item on the timeline. † indicates the reference is from the side panels.


Appendix J End Notes and Citations

* indicates an item on the timeline. † indicates the reference is from the side panels.


9 Short courses on campus: Baker, H.J. (n.d.). Farmers’ Meeting at the Connecticut Agricultural College. Storrs, CT: Connecticut Agricultural College, Extension Department. The date is assumed to be 1917 based on the calendar and the 1919 program. The Connecticut Pomological Society was founded in 1891.


9 Extension’s three functions are: Unpublished, 3 paged-typed document—exact date unknown but probably 1956. Storrs, CT: University of Connecticut, College of Agriculture.


The amount of woodland: Clark, W.T. (1929). A Soil Improvement Program for New London County. Clark served as Windham County Extension agent from 1917-1918. He then served in World War I and returned as assistant farm manager demonstration from 1920-1923 and as county agent in New London County from 1923-1940.


Women’s suffrage ratified: Retrieved December 23, 2010 from http://en.wikipedia.org/wiki/Nineteenth_Amendment_to_the_United_States_Constitution


In addition to the: University of Connecticut, Agricultural Economics Department Records. Archives and Special Collections at the Thomas J. Dodd Research Center, University of Connecticut Libraries.

From the Agricultural Economics: University of Connecticut, Agricultural Economics Department Records. Archives and Special Collections at the Thomas J. Dodd Research Center, University of Connecticut Libraries.


The poultry barbeque concluded: Barbecues to Feature Farm and Home Week. (1947, July 13). The Hartford Courant.


* indicates an item on the timeline. † indicates the reference is from the side panels.
Clark served as Windham County Extension agent (1917–1918). He then served in World War I, and returned as assistant farm manager demonstration (1920–1923), and as county agent in New London County (1923–1940).


18 In addition, he directed: Gavitt, A.R. (1964, May 22). Frank Atwood, WTIC Farm Director, Receives Service Award from New England County Agents’ Association. Storrs, CT: University of Connecticut, College of Agriculture News Office.


20 The goal of these: A.R.Gavitt (personal comments, May 9, 2008)


21 When the 4-H volunteer: A. Gray (personal comment, n.d.)


Appendix J: End Notes and Citations


22† After World War II: (2007, August 31). The Hartford Courant.


23† Litchfield County 4-H members: D. Gaylord to W. Barber (personal communication, January 7, 1976) Donald and Margaret Gaylord papers. Box 2 Archives and Special Collections at the Thomas J. Dodd Research Center, University of Connecticut Libraries.


25* Ratcliffe Hicks School of: Retrieved December 23, 2010 from http://www.rhsa.uconn.edu/


* indicates an item on the timeline. † indicates the reference is from the side panels.
Chapter 2: The Sixties: Social Unrest—A Time for Redirection


Appendix J End Notes and Citations


The theme of homemaker: C. Webb (personal communication, n.d.)


* indicates an item on the timeline. † indicates the reference is from the side panels.
Gross income from the Olympic Committee of Awards. (n.d.). Chicago, IL Storrs, CT: University of Connecticut, College of Agriculture and Natural Resources. Letter sent from the College in support of Archie Holdridge’s nomination for the Oscar in Agriculture Award. Archie was a retired vocational agriculture teacher after 35 years and then farm editor for the Hartford Courant newspaper for 22 years.


JFK assassinated in Dallas: Retrieved December 29, 2010 from http://www.jfklibrary.org/Historical+Resources/JFK+in+History/Death+of+the+President.htm


Appendix J End Notes and Citations


* indicates an item on the timeline. † indicates the reference is from the side panels.
Chapter 3: The Seventies: Settling In—
A Time of Social Healing


68' The statewide home economics: Your College of Agriculture and Natural Resources. (1972). Storrs, CT: University of Connecticut, College of Agriculture and Natural Resources.

68' 2,700 persons came to: Your College of Agriculture and Natural Resources. (1972). Storrs, CT: University of Connecticut. College of Agriculture and Natural Resources.


Extension agricultural engineering activities: Your College of Agriculture and Natural Resources. (1972). Storrs, CT: University of Connecticut, College of Agriculture and Natural Resources.

Extension fall conference on: V. Zanelli to the Total Extension Staff (personal communication, June 7, 1974)


When the Marine Advisory: 277 Woolley, J.T., & Peters, G. (n.d.). The American Presidency Project. Santa Barbara, CA: University of California. Retrieved from http://www.presidency.ucsb.edu/ws/?pid=3982 By President Richard Nixon. September 28th, 1973. Excerpt: “MARINE ADVISORY SERVICES —To support federal marine programs and to assist in their application for the benefit of the American public, a marine advisory service has been established to serve as a two-way communications link with the public. Field agents of this advisory service—“county agents in hip boots” will help bring to the Nation an awareness of our ocean heritage and its potential for satisfying many of our economic and social needs.”

Due to fuel shortage.: G. Curtis to All organizations using the Middlesex Extension Center (personal communication, January 24, 1974)


The statewide Meskwaka tree: Robert Ricard created the Meskwaka tree project in 1991. The name choice was simple. Bob wanted two things: (1) something to grab people’s attention and (2) a term that combined/integrated people and trees. Bob has several Native American friends with whom he played hockey and lacrosse for two years in Canada. Bob contacted them to see if they could put him in touch with someone who knew Algonquin. They did. These folks didn’t know a word that combined trees and people (actually they were a tad offended by the
idea. They liked the trees part, not the people part) but came back with the term “Meskwaka” as an alternative. The word means “always green” in Algonquin. Bob thought (and did) “spin it” such as “Let’s keep CT communities ‘Always Green’.” The concept for the project is similar to Steve Broderick’s Coverts Project, which he developed based on Dr. Everett Rogers diffusion of innovations model. R. Ricard (personal comments, 1991).


79† This project received a: Major Appliance Consumer Action Program (MACAP). (n.d.). Dispute resolution for the major appliance industry. Retrieved April 14, 2008, from www.consumerservicesguide.org/articles/major_appliance_consumer_action_program.com


80* The cost of a: G. Curtis to Extension staff (personal communication, April 15, 1975)


81 A 1981 Roper Center: Founded in 1947 by Elmer Roper with George Gallup, the Roper Center for Public Opinion Research at UConn is the leading educational facility in the field of public opinion. The Center exists to promote the intelligent, responsible, and imaginative use of public opinion in addressing the problems faced by Americans and citizens of other nations. The public opinion data held by the Roper Center ranges from the 1930s, when survey research was in its infancy, to the present. Most of the data are from the United States, but over 50 nations are represented. Center Purpose. (2008). Retrieved April 18, 2008, from http://www.ropercenter.uconn.edu/center/roper_purpose.html

81† Publication stock in the: Your College of Agriculture and Natural Resources. (1972). Storrs, CT: University of Connecticut, College of Agriculture and Natural Resources.


Auer Farm, located in: Highlights in the Development of the Connecticut 4-H Auerbach Farm Resource Center. (n.d.). Bloomfield, CT: University of Connecticut, College of Agriculture and Natural Resources.

For twenty-four years: Your College of Agriculture and Natural Resources. (1972). Storrs, CT: University of Connecticut, College of Agriculture and Natural Resources.

The 4-H Citation Award: 14th State 4-H Leaders’ Conference. (March 5, 1960). The 1959 4-H Alumni Awards and The 1960 Connecticut 4-H Citation. Storrs, CT: University of Connecticut, College of Agriculture. This source is the earliest record found for the 4-H citation award. The assumption is this was the inaugural year. Recipients included Frank Kearns, Granby; Maude Manning, Franklin; Clarence Salmon, Brooklyn; and G. Emerson Sartain, Windsor.


Arland Meade, department head: A. Meade to R. Prince (personal communication, June 28, 1972)


Extension courses were taught: Your College of Agriculture and Natural Resources. (1972). Storrs, CT: University of Connecticut, College of Agriculture and Natural Resources.


* indicates an item on the timeline. † indicates the reference is from the side panels.
Chapter 4: The Eighties: A Decade of Slow Growth and Reflection


American School for the: located in West Hartford, Connecticut is “the place where deaf education in America began more than 188 years ago! The cradle of American Sign Language and Deaf culture, ASD remains a leader in educating deaf and hard of hearing children and youth and in providing services for deaf and hard of hearing individuals from birth through adulthood.” American School for the Deaf. Retrieved April 1, 2009, from http://www.asd-1817.org/welcome.html


The effectiveness of Extension’s: The first recorded cases of Avian Influenza, also called fowl plague, in the United States were in 1924–1925 in Pennsylvania, Maryland, and Virginia. In 1929 an outbreak occurred in New Jersey. It was not reported again in the U.S. until a 1975 outbreak in Alabama in layers. Following that, a flock of layers was infected in 1978 in Minnesota. The April 1983 Pennsylvania outbreak took two years to control. More than 17 million birds were destroyed at a direct cost of $62 million. Indirect costs were estimated at more than $250 million. Special Report of Extension’s Response to the 1983 Avian Influenza Epidemic. (n.d.). Storrs, CT: University of Connecticut, College of Agriculture and Natural Resources.


104 In early 1983 Stephen: A covert is a thicket that provides cover for wildlife and is a term of which upland game bird hunters are fond. Since the Ruffled Grouse Society was the original sponsor, the project started as “Project Coverts” and evolved to the Coverts Project. Coverts participants become part of an informal network of people who work closely with natural resource professionals and share their knowledge for free with other landowners. Retrieved from http://www.news.uconn.edu/1997/jan1997/rel97005.htmde

105 The Family Community Leadership: Shoup, E. (n.d.). Family Community Leadership. Tolland, CT: University of Connecticut, Cooperative Extension Service. This date was determined based on a February 2, 1990 agreement with the Homemakers Council on handling of the funds.


107 Dale Lick, president, University: The University of Maine, Office of the President, Retrieved from www.umaine.edu/president/presidents.htm


Minutes of the February: Minutes of the University of Connecticut Institutional Policy Committee Meeting. (1989, February 10). Storrs, CT: University of Connecticut, Board of Trustees.


Chapter 5: The Nineties: The Start of a New Era


122 Through a college-wide strategic: 2005-2010 Strategic Plan, College of Agriculture and Natural Resources. (n.d.). Storrs, CT: University of Connecticut, College of Agriculture and Natural Resources.

122 Instead of working primarily: C. Malley (personal comment, 2006)


127 Sustainable agriculture practices address: Retrieved from http://www.um.edu/~nesare/


* indicates an item on the timeline. † indicates the reference is from the side panels.


138 Historically, Extension educators have: While no official documentation was found for this statement, emeriti faculty from 1958 remember having tenure status.


140 The group serves as: 1959 Conn. Public Acts 59-152 §52, related to county Extension services, buildings and appropriations.
Appendix J End Notes and Citations


A statewide 4-H newsletter: Copies of the Connecticut Four-Leaf Clover newsletters have been found as early as 1929.


Chapter 6: 2000 and Beyond: Creating the Future


Invasive non-native plants such: Donna Ellis, Extension educator, IPM (1991–), coordinates the program.

* indicates an item on the timeline. † indicates the reference is from the side panels.
Page


Scholarship is defined as: Weiser, C.J. (1995). The Value System of the University-Rethinking Scholarship. Corvallis, OR: Oregon State University.


* indicates an item on the timeline. † indicates the reference is from the side panels.
The amount of state: Revision of Sec. 52 Public Act No. 152. (1959). Relating to County Extension Services, Buildings and Appropriations.


The advantage of eXtension: R.Roberts (personal communication, eXtension Strategy Retreat, March 25, 2008)


Appendix A: University of Connecticut College of Agriculture and Natural Resources and Cooperative Extension System Administration

186 Beginning in 1939 the: The dates in parenthesis indicate time in position rather than total time of employment.


187 The following individuals provided: USDA Extension Service and University of Connecticut Project Agreement. (1975). Storrs, CT: University of Connecticut, College of Agriculture and Natural Resources.


Appendix B: Cooperative Extension System (CES) Facilities


188 By 1972 local citizens: Your College of Agriculture and Natural Resources. (1972). Storrs, CT: University of Connecticut, College of Agriculture and Natural Resources.


189 A contribution of $185.00: 4-H’ers Give $185 to Ag Building Foundation. (1970, July 1). The Danbury News Times.


190 This move to University: A. Meade (personal communication, March 1, 1974)


* indicates an item on the timeline. † indicates the reference is from the side panels.
Appendix C References: 4-H Camps and Foundations, 4-H Fairs, and International 4-H Programs

The majority of this section was compiled from data from the 4-H Youth Development in Connecticut 1952-2002 by N. Bull.

198  The Hartford County Camp: Retrieved from http://www.ghymca.org/1278


208  Early 4-H exhibits were: D. Gaylord to W. Barber (personal communication, January 7, 1976) Donald and Margaret Gaylord papers. Box 2. Archives and Special Collections at the Thomas J. Dodd Research Center, University of Connecticut Libraries.


Appendix D: Extension-Related Professional Organizations


During a similar meeting: Unknown author to ESP Officers (personal communication, n.d.)

The purposes were to: J. Meader to R. Adams (personal communication, November 12, 1993)

Joyce Meader, Windham County: F. Griffiths to All Cooperative Extension faculty and staff and CANR specialists with Extension education responsibilities covered by the AAUP Collective Bargaining Agreement (personal communication, April 25, 1995)


Appendix E: Selected College and Extension Organizational Charts

There are no end notes or citations for this appendix

Appendix F: Sampling of Collaborative Agreements

There are no end notes or citations for this appendix

Appendix G: Acronyms


Appendix H: Agricultural Engineering Highlights

J. Bartok, personal communication (2007)
Appendix I: The Poultry Industry in Connecticut, a Postscript


Portions of this appendix appeared in Feedstuffs and is used here with the publication's permission.

William Aho Born in Michigan to Finnish immigrants, William Aho was a graduate of Michigan State University (B.A. ‘42, M.S. ‘48), and joined the University of Connecticut as a Professor and Extension Poultryman in 1952. He was hired in part due to the fact that he spoke fluent Finnish, the language of numerous poultry farmers at the time in Eastern Connecticut. William was known for his “Extension touch” and commitment to the poultry industry.

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Back Cover and End Pages


Wyoming provided the first club creed in 1918. Later it was adopted as the National 4-H Club Creed.

Appendix K

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Wyoming provided the first club creed in 1918. Later it was adopted as the National 4-H Club Creed

4-H: An American Idea 1900-1980
By Thomas Wessel and Marilyn Wessel
Copyright, 1982, National 4-H Council
Extension Professional Creed

I believe in people and their hopes, their aspirations, and their faith; in their right to make their own plans and arrive at their own decisions; in their ability and power to enlarge their lives and plan for the happiness of those they love.

I believe that education, of which Extension is an essential part, is basic in stimulating individual initiative, self-determination, and leadership; that these are the keys to democracy and that people, when given facts they understand, will act not only in their self-interest, but also in the interest of society.

4-H Pledge

I pledge
My head to clearer thinking,
My heart to greater loyalty,
My hands to larger service, and
My health to better living,
For my club, my community, my country, and my world.

4-H Club Creed

I believe in 4-H Club work for the opportunity it will give me to become a useful citizen.
I believe in the training of my HEAD for the power it will give me to think, plan, and to reason.
I believe in the training of my HEART for the nobleness it will give me to be kind, sympathetic, and true.
I believe in the training of my HANDS for the ability it will give me to be helpful, useful, and skillful.
I believe in the training of my HEALTH for the strength it will give me to enjoy life, to resist disease, and to work efficiently.
I believe in my county, my state, and my community and in my responsibility for their development.
In all these things I believe, and am willing to dedicate my efforts to their fulfillment.