UCONN | COLLEGE OF AGRICULTURE, HEALTH AND NATURAL RESOURCES

EXTENSION

UConn Extension Programs in the 1st District

UConn Extension has over 100 educators and specialists working in every town in the state from our 11 locations. Over 170 formal outreach programs address topics from agriculture to youth development.

We have two locations in the 1st Congressional district, our office in West Hartford, and the 4-H Education Center at Auerfarm in Bloomfield.

Climate Adaptation Academy

The Extension system model has historically been to assess the needs and concerns of the citizenry and tailor programs to meet their concerns. What once worked effectively for rural farm families is now being applied to help communities deal with climate-related issues, through the Climate Adaptation Academy (CAA).

Feedback from municipal officials on impacts of climate change in their communities was not just flooding and storm surge, but issues including longer-term budget impacts and the need for planning. It is a new and ever-evolving area that Extension is working to identify and define critical impacts on both coastal and inland communities.

The CAA uses a peer-to-peer system to exchange information and reaches out to municipal officials, non-profits and individuals involved in and concerned about climate change. The Academy has addressed legal issues related to climate adaptation and the impact of climate change on inland flooding, as well as working with living shorelines.

A second program is being developed focusing on Middlesex County, including Cromwell, Middletown, and Portland from the 1st Congressional District.

Healthy Homes

Our Healthy Environments for Children (HEC) program has sent educational materials to every town in the district. 93 youth in Hartford and New Britain completed an 11-week Healthy Homes curriculum.

HEC helps parents and guardians, educators, community leaders, trainers, and other caring adults understand, prevent, and improve environmental conditions that adversely affect the health of children and adults. HEC also helps children understand how to prevent and manage environmental health problems.

Working in partnership with local, state, federal, and tribal agencies and organizations, HEC has focused on environmental health issues such as lead poisoning, radon, asthma, and water conservation.

4-H

UConn Extension has a very strong 4-H presence in the 1st Congressional district, with 4-H members or group programs in all but two towns. 4-H Youth Development is focused on creating safe, healthy, well-educated children and teens through 4-H Clubs, afterschool programs and interactive learning experiences. In addition, our educational efforts focus on incorporating the following three areas of curriculum into youth development programs and activities:

1) Science, Technology, Engineering and Math (STEM)
2) Citizenship & Leadership
3) Healthy Living

From October 2014 to September 2015 approximately 25,000 youth participated in 4-H youth development programs in Connecticut. Of this number, 3,479 were involved in organized club programs, 3,740 participated in camping programs and 14,894 in short-term or special interest programs. Connecticut Operation Military Kids programs reached a total of 1,650 youth and adults.

70,000 hours of community service donated by 1,423 4-H volunteers and 711 4-H youth members with a value of $1.61 million to the communities served.

FoodCorps

FoodCorps service members are located in Hartford and East Hartford. FoodCorps is a service-learning program, placing individuals in 15 high-need communities. FoodCorps CT service members' focus on three reinforcing pillars to improve school food environments: promoting farm-to-school programming, establishing school gardens, and providing nutrition education.

Through the program, 14,670 youth in Connecticut learned about healthy nutritious eating. Our 15 FoodCorps service members also supported 62,332 square feet of community gardens and 17,684 square feet of school garden in 78 gardens total.

A total of 2,620 pounds of vegetables were brought into cafeterias across the state by the FoodCorps program. We had 727 volunteers work with the program, and they spent 1,791 hours for a value of $41,318 to the communities served.

Geospatial Training

Our Geospatial Training program (GTP) has trained people from every town in the district. GTP provides technical education and training outside the traditional academic

environment. The program's goal is to help municipal land use officials, staff and commission members understand and apply geospatial information technologies to help solve local land use problems and to develop environmentally sensitive land use plans.

The program focuses on the use of geographic information systems (GIS), remote sensing (RS) and global positioning system (GPS) technology and online mapping and introduces new users to these technologies through hands-on training courses. Over 350 people in the state have also been trained in smartphone GPS mapping.

People Empowering People (PEP)

We have People Empowering People (PEP) facilitators in: Bristol, Hartford, Middletown and West Hartford. Four organizations in Bristol worked with our PEP program to develop community programs. The PEP Program is a personal and family development program with a strong community focus.

Created by UConn Extension, the PEP program builds upon individual life experiences and strengths to encourage growth in communication and problem solving skills, parent/family relationships and community involvement. The PEP program has graduated over one thousand people in fifteen years.

In 2015, 50 new PEP facilitators were trained in the state. They volunteered over 600 hours, serving 7,000 people in various communities. The PEP program has also expanded to Massachusetts, Vermont and Florida.

Master Gardeners

We have Certified Master Gardeners residing in many towns in the district, and signature projects in Hartford at the Burgdorf/Bank of America Health Center and the Community Court garden.

Burgdorf Community Garden: Master Gardener volunteers helped plant and maintain a garden on the grounds of the Burgdorf/Bank of America Health center, a clinic for the underserved in Hartford's North End. The garden is used to teach nutrition to clients and also provides healthy produce for residents living in a food desert. Along with keeping the garden healthy and productive, Master Gardeners also helped educate area residents about the ability to grow their own healthy food, even with limited space.

Master Gardeners also helped start up the Community Court garden in Hartford. The 100 x 100 foot garden is part of the court diversion program, working with first-time and non-violent offenders to keep them out of the larger court system. As part of their community service, these individuals help maintain the production garden, providing food for area organizations and learning horticultural skills in the process. Master Gardeners assist with crop selection, garden maintenance practices and problem solving.

The Master Gardener Program is an educational outreach program that is part of UConn Extension. The program started in 1978 and consists of horticulture training and an outreach component that focus on the community at large. Master Gardeners are enthusiastic, willing to learn and share their knowledge and training with others. What sets them apart from other home gardeners is their special horticultural training.

In exchange for this training, Master Gardeners commit time as volunteers working through their local UConn Extension Center and the Bartlett Arboretum in Stamford to provide horticultural-related information to the community. In 2015, 34,555 hours of community service donated by our 1,587 Master Gardener volunteers with a value of $797,183 to the communities served.

In 2015, we had graduates from Bloomfield, Bristol, East Windsor, Hartford, Manchester, Newington and West Hartford in the 1st Congressional district. This is in addition to the numerous volunteers already working with our program.

Safe Food Handling From Farm to Table

Ongoing concern for the safety of our food supply has resulted in new regulatory requirements (Food Safety Modernization Act) and both consumer and retailer demand for food that is grown, produced, processed and prepared using safe food handling practices. Farmers are increasingly asked to participate in third party audits; a wider range of processors must develop and implement food safety plans; and consumers, increasingly tuned in to a variety of media, are ever more aware of incidents of foodborne illness.

UConn Extension works in classrooms and on farms to provide local and regional growers and processors with the tools they need to reduce the possibility of contamination; to prepare food safety or HACCP plans; and to prepare for audits that will ensure that locally produced food that ends up on tables in New England is as safe as possible.

Most recently, with the help of over $82,000 in USDA Specialty Crops and USDA Extension Risk Management Education grants, UConn Extension has trained farmers to address the safety of the packing facility environment, to follow Good Agricultural Practices (GAP), and, if processing food in an on-farm home kitchen, to process fruits and vegetables using safe practices. UConn Extension also educates home cooks, consumers and food service personnel through a website, courses, and workshops.

4-H Education Center at Auerfarm

The 120-acre 4-H Education Center at Auerfarm is located in the northwest section of Bloomfield. Hartford entrepreneur and retailer Beatrice Fox Auerbach deeded the farm to the Connecticut 4-H Development Fund in 1976. Today, the Auerbach legacy to the 4-H Education Center is expressed through the variety of 4-H education programs offered in the areas of gardening, agriculture and environmental science.

Over 15,000 students and family members participate in year-round 4-H curriculum based school science programs, animal clubs, and Junior Master Gardening activities.

The Master Gardener/Foodshare garden is a quarter acre vegetable garden used by Master Gardeners and 4-Hers as a demonstration site for learning the basics of environmentally responsible vegetable and flower production. Students study growing conditions through understanding soil, water, insect, and disease management.

The garden offers multiple opportunities helping in the seasonal progression of growing plants as well as observation of wildlife, especially birds. Master Gardeners work with approximately 300 volunteers throughout the gardening season. Each year, the volunteers grow and harvest of over 3,600 pounds of fresh produce for distribution to the community kitchens in and around Hartford. The 4-H Education Center is open to the public daily throughout the calendar year.

Land Use

Our Land Use program has been utilized by every town in the district except: Barkhamsted, East Granby, Granby and Hartland. The Connecticut Land Use Academy conducts regular full-day trainings for land use commissioners across the state, in collaboration with the CT Office of Policy and Management and the CT Bar Association.

Both Basic Training and Advanced Training courses are offered. In addition, the Academy works with CT Sea Grant on programs for coastal towns on Climate Resiliency. Much of this work entails individual town meetings with planners, public works, and land use commissioners; also, one statewide workshop was held.

Finally, the Academy worked with the CT Department of Economic and Community Development and the nonprofit Partnership for Strong Communities on programs related to transit-oriented development and affordable housing.

EFNEP

The EFNEP and SNAP-Ed programs are working in: Bristol, East Hartford, Hartford, Manchester, and West Hartford.

Specially trained EFNEP Nutrition Assistants, who know their communities well, work with program families in their homes or in small community groups to offer knowledge and skills to help people control and manage their food and nutrition practices for better health and quality of life. In combination with food assistance programs such and WIC or the USDA Food Stamp Program, EFNEP can make a difference in improving food choices and health.

Pesticide Safety

We have done pesticide safety training for people in numerous towns in the district, allowing them to operate viable businesses. The Pesticide Safety Education Program (PSEP) primarily targets those who are hired to apply pesticides or those who use restricted-use pesticides in agriculture.

The goals of this training are to ensure that pesticides are used only when necessary and are applied in a manner that protects the applicator, the public, and environment and our food supply. To date, 3,874 people have received pesticide safety training.

Coverts Cooperators

These towns have active Coverts Cooperators: Barkhamsted, Bloomfield, Bristol, Colebrook, East Granby, Glastonbury, Manchester, Middletown, New Hartford, Wethersfield and Windsor.

Coverts cooperators learn certain vegetation management techniques associated with the management plan that was developed under collaboration with town Open Space committees, UConn Extension Forestry, the Coverts Project and service-learning students. This list also encompasses localities where we have impacts from other Forestry Program activities (Emerald Ash Borer Survey, forest stewardship planning, StormWise, local wood to local schools, etc.)

Master Composters

We have Master Composters in: Granby, Middletown and South Windsor. By encouraging Connecticut residents to recycle organic waste materials that would otherwise end up in landfills, Master Composters promote sustainable living and resource conservation at individual and community levels.

NEMO

Our Nonpoint Education for Municipal Officials (NEMO) program is in: Cromwell, East Granby, Hartford, Manchester, Middletown, Southington, West Hartford and Wethersfield. The Nonpoint Education for Municipal Officials (NEMO) Program delivers educational workshops for local officials, by request; conducts Rain Garden training workshops for professional landscapers, municipal workers, and others; conducts applied research on green infrastructure (GI) practices; develops online and smart phone tools.

The rain garden app has been downloaded 5,346 times. Android and iOS version are available. Through this UConn Extension app and the installation of rain gardens across the state, 1.3 million gallons of storm water are annually prevented from being sent untreated into the state's waterways.

Greenhouse IPM

Our Greenhouse IPM program is in the following towns: East Windsor, Manchester, New Hartford, and South Windsor. The UConn Extension Greenhouse IPM Program supports the Connecticut greenhouse industry with information and educational programming on sustainable production methods. In Connecticut, the greenhouse industry is a significant part of agriculture. Greenhouse and nursery products (ornamental shrubs, flowers, young plants) are Connecticut's leading source of agricultural income. Approximately 300 commercial greenhouse businesses have 8 million square feet of production space under cover. In addition, many Connecticut farmers have added greenhouse crops to their businesses to increase income.

Center for Learning in Retirement (CLIR)

Our Center for Learning In Retirement (CLIR) is also very active in the 1st District, with classes held at the Depot Campus in Storrs and participants from many surrounding towns. These include: Manchester, South Windsor, East Hartford, Bloomfield, East Windsor, Newington, and West Hartford.

(CLIR) provides meaningful and serious intellectual activities for retirees and other adults from all walks of life, conducted in an informal and relaxed atmosphere. There are no academic requirements.

CLIR classes are offered in two formats: single classes and courses. A single class consists of one and a half hours. A course consists of two or more classes scheduled in successive weeks.

Vegetable IPM

Our vegetable Integrated Pest Management (IPM) program is works across the state, including with farmers in Granby, South Windsor, and Rocky Hill. UConn Extension's Vegetable IPM Program helps commercial vegetable growers find sustainable solutions to pest problems. The program emphasizes healthy soils, balanced plant nutrition, proper pest and beneficial identification, scouting and monitoring techniques, preventative management strategies, reduced-risk pesticide selection and application, and resistance management.

Fruit IPM

Fruit IPM is in: East Windsor, Glastonbury, Granby, New Hartford, Portland, South Windsor, and Southington. UConn Extension's Fruit IPM Program provides information to commercial growers of tree fruit, small fruit and grapes to help them manage pests through a sustainable, whole plant approach.

Information is disseminated through fact sheets, grower meetings, email alerts, research and demonstrations, and one-on-one grower contacts. The Fruit IPM Program emphasizes

plant nutrition, soil health, identification of beneficials and pests, scouting and monitoring tools, proper plant and site selection, preventative management strategies, pesticide selection and application, and pesticide resistance management.

Other Programs Represented in the 1st District

Dairy, livestock, farm business planning, wetlands work, soil tests, veterinary and plant diagnostics,

**This report is based on the towns reported by UConn Extension programs in 2015.*

UCONN | COLLEGE OF AGRICULTURE, HEALTH AND NATURAL RESOURCES

EXTENSION

UConn Extension Programs in the 2nd District

UConn Extension has over 100 educators and specialists working in every town in the state from our 11 locations. Over 170 formal outreach programs address topics from agriculture to youth development.

We have offices located in Brooklyn, Groton, Haddam, Mansfield, Norwich, and Vernon in the 2nd Congressional District.

Climate Adaptation Academy

The Extension system model has historically been to assess the needs and concerns of the citizenry and tailor programs to meet their concerns. What once worked effectively for rural farm families is now being applied to help communities deal with climate-related issues, through the Climate Adaptation Academy (CAA).

Feedback from municipal officials on impacts of climate change in their communities was not just flooding and storm surge, but issues including longer-term budget impacts and the need for planning. It is a new and ever-evolving area that Extension is working to identify and define critical impacts on both coastal and inland communities.

The CAA uses a peer-to-peer system to exchange information and reaches out to municipal officials, non-profits and individuals involved in and concerned about climate change. The Academy has addressed legal issues related to climate adaptation and the impact of climate change on inland flooding, as well as working with living shorelines.

In the 2nd Congressional District, CAA is working in the following towns: Stonington, East Lyme, Groton, Madison, Norwich, and New London. A second program is being developed focusing on Middlesex County, and works with: Chester, Clinton, Deep River, East Haddam, Killingworth, Old Saybrook, and Westbrook.

Connecticut Shellfish Initiative

Connecticut is a major producer of molluscan shellfish, including oysters, clams, mussels and scallops. The farm-gate value of shellfish products is greater than $30 million, with more than 40 companies and 300 employees. Fourteen coastal towns offer recreational harvest opportunities. Connecticut's natural shellfish resources are of immense ecological value. Oyster reefs and other shellfish populations

provide cleaner and clear water and habitat for marine organisms. Shellfish are also used to remove excess nutrients in bioextraction efforts and in living shorelines projects to protect coastal areas from strong waves and storm surges.

Extension works with the industry and resource managers to conserve these natural resources. UConn's Sea Grant Extension staff, along with NOAA Fisheries is facilitating the development of a vision plan for the state's commercial, recreational and natural resources. As part of the Connecticut Shellfish Initiative, Extension staff gathers key players to identify priorities to grow and protect these valuable economic and ecological resources.

Connecticut Sea Grant also hosts the annual Gathering of Shellfish Commissions, which convenes a statewide gathering of municipal officials to discuss how to improve management of local shellfish resources. Towns working with the shellfish initiative in the 2nd Congressional district include: Stonington, Groton, New London, Waterford, East Lyme, Old Lyme, Lyme, Essex, Old Saybrook, Westbrook, Clinton, and Madison.

4-H

UConn Extension has a very strong 4-H presence in the 2nd Congressional district, with 4-H members or group programs in all but two towns. 4-H Camps are located in Pomfret, Marlborough, and Franklin. 4-H Youth Development is focused on creating safe, healthy, well-educated children and teens through 4-H Clubs, afterschool programs and interactive learning experiences. In addition, our educational efforts focus on incorporating the following three areas of curriculum into youth development programs and activities:

1) Science, Technology, Engineering and Math (STEM)
2) Citizenship & Leadership
3) Healthy Living

From October 2014 to September 2015 approximately 25,000 youth participated in 4-H youth development programs in Connecticut. Of this number, 3,479 were involved in organized club programs, 3,740 participated in camping programs and 14,894 in short-term or special interest programs. Connecticut Operation Military Kids programs reached a total of 1,650 youth and adults.

70,000 hours of community service donated by 1,423 4-H volunteers and 711 4-H youth members with a value of $1.61 million to the communities served.

Healthy Homes

Our Healthy Environments for Children (HEC) program has sent educational materials to every town in the district.

HEC helps parents and guardians, educators, community leaders, trainers, and other caring adults understand, prevent, and improve environmental conditions that adversely affect the health of children and adults. HEC also helps children understand how to prevent and manage environmental health problems.

Working in partnership with local, state, federal, and tribal agencies and organizations, HEC has focused on environmental health issues such as lead poisoning, radon, asthma, and water conservation.

FoodCorps

FoodCorps Service members are located in New London, Norwich, Vernon and Windham. Our AmeriCorps VISTA service program is also working with GROW Windham.

FoodCorps is a service-learning program, placing individuals in 15 high-need communities. FoodCorps CT service members' focus on three reinforcing pillars to improve school food environments: promoting farm-to-school programming, establishing school gardens, and providing nutrition education.

Through the program, 14,670 youth in Connecticut learned about healthy nutritious eating. Our 15 FoodCorps service members also supported 62,332 square feet of community gardens and 17,684 square feet of school garden in 78 gardens total.

A total of 2,620 pounds of vegetables were brought into cafeterias across the state by the FoodCorps program. We had 727 volunteers work with the program, and they spent 1,791 hours for a value of $41,318 to the communities served.

Geospatial Training

Our Geospatial Training program (GTP) has trained people from every town in the district except Ledyard, Union and Voluntown. GTP provides technical education and training outside the traditional academic environment. The program's goal is to help municipal land use officials, staff and commission members understand and apply geospatial information technologies to help solve local land use problems and to develop environmentally sensitive land use plans.

The program focuses on the use of geographic information systems (GIS), remote sensing (RS) and global positioning system (GPS) technology and online mapping and introduces new users to these technologies through hands-on training courses. Over 350 people in the state have also been trained in smartphone GPS mapping.

People Empowering People (PEP)

We have People Empowering People (PEP) facilitators in: Chester, Colchester, Coventry, Enfield, Hampton, Ledyard, Salem and Suffield. The PEP Program is a personal and family development program with a strong community focus.

Created by UConn Extension, the PEP program builds upon individual life experiences and strengths to encourage growth in communication and problem solving skills, parent/family relationships and community involvement. The PEP program has graduated over one thousand people in fifteen years.

In 2015, 50 new PEP facilitators were trained in the state. They volunteered over 600 hours, serving 7,000 people in various communities. The PEP program has also expanded to Massachusetts, Vermont and Florida.

Master Gardeners

We have Certified Master Gardeners residing in many towns in the district, and signature projects located throughout the district, including the Windham Area Interfaith Ministries Community Garden, Wind Hill Community Farm in Glastonbury, and the Our Companions Animal Sanctuary in Ashford.

The Master Gardener Program is an educational outreach program that is part of UConn Extension. The program started in 1978 and consists of horticulture training and an outreach component that focus on the community at large. Master Gardeners are enthusiastic, willing to learn and share their knowledge and training with others. What sets them apart from other home gardeners is their special horticultural training.

In exchange for this training, Master Gardeners commit time as volunteers working through their local UConn Extension Center and the Bartlett Arboretum in Stamford to provide horticultural-related information to the community. In 2015, 34,555 hours of community service donated by our 1,587 Master Gardener volunteers with a value of $797,183 to the communities served.

In 2015, we had graduates from Bozrah, Chester, Clinton, Deep River, Durham, East Haddam, East Lyme, Essex, Haddam, Hebron, Killingworth, Lyme, Madison, Montville, Old Saybrook, Stonington, and Waterford in the 2nd Congressional district. This is in addition to the numerous volunteers already working with our program.

Center for Learning in Retirement (CLIR)

Our Center for Learning In Retirement (CLIR) is also very active in the 2nd District, with classes held at the Depot Campus in Storrs and participants from many surrounding towns. These include: Mansfield, Vernon, Coventry, Willington, Bolton, Ashford, Andover, Stafford, Columbia, Ellington, Glastonbury, Hebron, Lebanon,

Chaplin, Colchester, Eastford, Hampton, Tolland, Windham, Enfield, Sprague, Marlborough, Norwich, Pomfret, Putnam, Scotland, Somers, and Woodstock.

(CLIR) provides meaningful and serious intellectual activities for retirees and other adults from all walks of life, conducted in an informal and relaxed atmosphere. There are no academic requirements.

CLIR classes are offered in two formats: single classes and courses. A single class consists of one and a half hours. A course consists of two or more classes scheduled in successive weeks.

Safe Food Handling From Farm to Table

Ongoing concern for the safety of our food supply has resulted in new regulatory requirements (Food Safety Modernization Act) and both consumer and retailer demand for food that is grown, produced, processed and prepared using safe food handling practices. Farmers are increasingly asked to participate in third party audits; a wider range of processors must develop and implement food safety plans; and consumers, increasingly tuned in to a variety of media, are ever more aware of incidents of foodborne illness.

UConn Extension works in classrooms and on farms to provide local and regional growers and processors with the tools they need to reduce the possibility of contamination; to prepare food safety or HACCP plans; and to prepare for audits that will ensure that locally produced food that ends up on tables in New England is as safe as possible.

Most recently, with the help of over $82,000 in USDA Specialty Crops and USDA Extension Risk Management Education grants, UConn Extension has trained farmers to address the safety of the packing facility environment, to follow Good Agricultural Practices (GAP), and, if processing food in an on-farm home kitchen, to process fruits and vegetables using safe practices. UConn Extension also educates home cooks, consumers and food service personnel through a website, courses, and workshops.

Land Use

Our Land Use program has been utilized by every town in the district except: Ashford, Bozrah, Canterbury, Eastford, Lisbon, Lyme, North Stonington, Pomfret, Scotland, Union, and Voluntown. The Connecticut Land Use Academy conducts regular full-day trainings for land use commissioners across the state, in collaboration with the CT Office of Policy and Management and the CT Bar Association.

Both Basic Training and Advanced Training courses are offered. In addition, the Academy works with CT Sea Grant on programs for coastal towns on Climate

Resiliency. Much of this work entails individual town meetings with planners, public works, and land use commissioners; also, one statewide workshop was held.

Finally, the Academy worked with the CT Department of Economic and Community Development and the nonprofit Partnership for Strong Communities on programs related to transit-oriented development and affordable housing.

EFNEP

The EFNEP and SNAP-Ed programs are based in our Brooklyn and Norwich offices and work with individuals and families throughout the district.

Specially trained EFNEP Nutrition Assistants, who know their communities well, work with program families in their homes or in small community groups to offer knowledge and skills to help people control and manage their food and nutrition practices for better health and quality of life.

Programs are offered in English and Spanish. In combination with food assistance programs such and WIC or the USDA Food Stamp Program, EFNEP can make a difference in improving food choices and health.

Pesticide Safety

We have done pesticide safety training for people in numerous towns in the district, allowing them to operate viable businesses. The Pesticide Safety Education Program (PSEP) primarily targets those who are hired to apply pesticides or those who use restricted-use pesticides in agriculture.

The goals of this training are to ensure that pesticides are used only when necessary and are applied in a manner that protects the applicator, the public, and environment and our food supply. To date, 3,874 people have received pesticide safety training.

Coverts Cooperators

These towns have active Coverts Cooperators: Ashford, Canterbury, Chaplin, Colchester, Coventry, East Hampton, Ellington, Essex, Groton, Haddam, Hampton, Hebron, Killingworth, Lebanon, Lyme, Madison, Mansfield, Mystic, North Stonington, Old Lyme, Old Saybrook, Putnam, Stafford Springs, Stonington, Suffield, Thompson, Tolland, Voluntown, Willington, Windham, Woodstock, Colchester, Franklin, Chester, and Union.

Coverts cooperators learn certain vegetation management techniques associated with the management plan that was developed under collaboration with town Open Space committees, UConn Extension Forestry, the Coverts Project and service-learning students. This list also encompasses localities where we have impacts from

other Forestry Program activities (Emerald Ash Borer Survey, forest stewardship planning, StormWise, local wood to local schools, etc.)

Master Composters

We have Master Composters in: Groton, Haddam, Hampton, Old Saybrook, and Preston. By encouraging Connecticut residents to recycle organic waste materials that would otherwise end up in landfills, Master Composters promote sustainable living and resource conservation at individual and community levels.

NEMO

Our Nonpoint Education for Municipal Officials (NEMO) program is in: Bolton, Brooklyn, Chester, Columbia, East Haddam, East Hampton, East Lyme, Essex, Haddam, Mansfield, New London, Norwich, Old Saybrook, Putnam, Salem, Stafford, Tolland, Vernon, Waterford, Westbrook, and Windham. The Nonpoint Education for Municipal Officials (NEMO) Program delivers educational workshops for local officials, by request; conducts Rain Garden training workshops for professional landscapers, municipal workers, and others; conducts applied research on green infrastructure (GI) practices; develops online and smart phone tools.

The rain garden app has been downloaded 5,346 times. Android and iOS version are available. Through this UConn Extension app and the installation of rain gardens across the state, 1.3 million gallons of storm water are annually prevented from being sent untreated into the state's waterways.

Greenhouse IPM

Our Greenhouse IPM program is in the following towns: Deep River, East Lyme, Ellington, Essex, Haddam, Lebanon, Mansfield, Old Lyme, Preston, Tolland, and Woodstock. The UConn Extension Greenhouse IPM Program supports the Connecticut greenhouse industry with information and educational programming on sustainable production methods. In Connecticut, the greenhouse industry is a significant part of agriculture. Greenhouse and nursery products (ornamental shrubs, flowers, young plants) are Connecticut's leading source of agricultural income. Approximately 300 commercial greenhouse businesses have 8 million square feet of production space under cover. In addition, many Connecticut farmers have added greenhouse crops to their businesses to increase income.

Vegetable IPM

Our vegetable Integrated Pest Management (IPM) program is works across the state, including with farmers in Canterbury, Enfield, Lebanon, Ledyard, Salem, Suffield, Tolland, and Vernon. UConn Extension's Vegetable IPM Program helps commercial vegetable growers find sustainable solutions to pest problems. The program emphasizes healthy soils, balanced plant nutrition, proper pest and beneficial

identification, scouting and monitoring techniques, preventative management strategies, reduced-risk pesticide selection and application, and resistance management.

Fruit IPM

Fruit IPM is in: East Lyme, Eastford, Ellington, Enfield, Glastonbury, Killingly, Ledyard, Preston, Tolland, Windham, and Woodstock. UConn Extension's Fruit IPM Program provides information to commercial growers of tree fruit, small fruit and grapes to help them manage pests through a sustainable, whole plant approach.

Information is disseminated through fact sheets, grower meetings, email alerts, research and demonstrations, and one-on-one grower contacts. The Fruit IPM Program emphasizes plant nutrition, soil health, identification of beneficials and pests, scouting and monitoring tools, proper plant and site selection, preventative management strategies, pesticide selection and application, and pesticide resistance management.

Other Programs Represented in the 2nd District

Community Supported Agriculture, dairy, military families, habitats, livestock, farm business planning, wetlands work, soil tests, veterinary and plant diagnostics,

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Safe Food Handling From Farm to Table

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Connecticut Shellfish Initiative

Connecticut is a major producer of molluscan shellfish, including oysters, clams, mussels and scallops. The farm-gate value of shellfish products is greater than $30 million, with more than 40 companies and 300 employees. Fourteen coastal towns offer recreational harvest opportunities. Connecticut's natural shellfish resources are of immense ecological value. Oyster reefs and other shellfish populations provide cleaner and clear water and habitat for marine organisms. Shellfish are also

used to remove excess nutrients in bioextraction efforts and in living shorelines projects to protect coastal areas from strong waves and storm surges.

Extension works with the industry and resource managers to conserve these natural resources. UConn's Sea Grant Extension staff, along with NOAA Fisheries is facilitating the development of a vision plan for the state's commercial, recreational and natural resources. As part of the Connecticut Shellfish Initiative, Extension staff gathers key players to identify priorities to grow and protect these valuable economic and ecological resources.

Connecticut Sea Grant also hosts the annual Gathering of Shellfish Commissions, which convenes a statewide gathering of municipal officials to discuss how to improve management of local shellfish resources. Towns working with the shellfish initiative in the 3rd Congressional district include: Branford, East Haven, Guilford, Milford, New Haven, Stratford, and West Haven.

Naugatuck River Greenway

The Naugatuck River Greenway (NRG) is a planned 44-mile long regional greenway and trail that will run through eleven communities: Torrington, Harwinton, Litchfield, Thomaston, Watertown, Waterbury, Naugatuck, Beacon Falls, Seymour, Ansonia, and Derby.

While there will be significant costs involved in constructing the NRG, local decision-makers see potential to capitalize on the trail as an economic engine for the region and to improve the quality of life for residents. The business of coordinating stakeholder negotiations and allocating funds for land acquisition requires buy-in on behalf of the communities in the valley.

The Naugatuck River Greenway Steering Committee, with members from each of the eleven NRG communities, and the Naugatuck Valley Council of Governments approached UConn Extension and our partners in the School of Business to better understand potential economic impacts of the proposed trail as well as best practices for helping local communities capitalize on the completed trail. To date, a literature review, a multi-point user intercept survey, and a comprehensive analysis of survey data has been completed. UConn Extension provided 224 hours of training to the communities on the project and worked with local partners to sign up 10 trail volunteers who collected data on trails, for a total of 300 volunteer hours. UConn Extension continues to serve in a coordinating role on providing education for stakeholders, data analysis, and facilitation of focus groups.

Climate Adaptation Academy

The Extension system model has historically been to assess the needs and concerns of the citizenry and tailor programs to meet their concerns. What once worked

effectively for rural farm families is now being applied to help communities deal with climate-related issues, through the Climate Adaptation Academy (CAA).

Feedback from municipal officials on impacts of climate change in their communities was not just flooding and storm surge, but issues including longer-term budget impacts and the need for planning. It is a new and ever-evolving area that Extension is working to identify and define critical impacts on both coastal and inland communities.

The CAA uses a peer-to-peer system to exchange information and reaches out to municipal officials, non-profits and individuals involved in and concerned about climate change. The Academy has addressed legal issues related to climate adaptation and the impact of climate change on inland flooding, as well as working with living shorelines.

In the 3rd Congressional district, we're working with New Haven, Branford, Middlefield, and Middletown.

4-H

UConn Extension has a very strong 4-H presence in the 3rd Congressional district, with 4-H members and group programs in all but two towns. 4-H Youth Development is focused on creating safe, healthy, well-educated children and teens through 4-H Clubs, afterschool programs and interactive learning experiences. In addition, our educational efforts focus on incorporating the following three areas of curriculum into youth development programs and activities:

1) Science, Technology, Engineering and Math (STEM)
2) Citizenship & Leadership
3) Healthy Living

From October 2014 to September 2015 approximately 25,000 youth participated in 4-H youth development programs in Connecticut. Of this number, 3,479 were involved in organized club programs, 3,740 participated in camping programs and 14,894 in short-term or special interest programs. Connecticut Operation Military Kids programs reached a total of 1,650 youth and adults.

70,000 hours of community service donated by 1,423 4-H volunteers and 711 4-H youth members with a value of $1.61 million to the communities served.

Healthy Homes

Our Healthy Environments for Children (HEC) program has sent educational materials to every town in the district.

HEC helps parents and guardians, educators, community leaders, trainers, and other caring adults understand, prevent, and improve environmental conditions that

adversely affect the health of children and adults. HEC also helps children understand how to prevent and manage environmental health problems.

Working in partnership with local, state, federal, and tribal agencies and organizations, HEC has focused on environmental health issues such as lead poisoning, radon, asthma, and water conservation.

FoodCorps

FoodCorps Service members are located in New Haven, Woodbridge, and Waterbury. FoodCorps is a service-learning program, placing individuals in 15 high-need communities. FoodCorps CT service members' focus on three reinforcing pillars to improve school food environments: promoting farm-to-school programming, establishing school gardens, and providing nutrition education.

Through the program, 14,670 youth in Connecticut learned about healthy nutritious eating. Our 15 FoodCorps service members also supported 62,332 square feet of community gardens and 17,684 square feet of school garden in 78 gardens total.

A total of 2,620 pounds of vegetables were brought into cafeterias across the state by the FoodCorps program. We had 727 volunteers work with the program, and they spent 1,791 hours for a value of $41,318 to the communities served.

Geospatial Training

Our Geospatial Training program (GTP) has trained people from every town in the district. GTP provides technical education and training outside the traditional academic environment. The program's goal is to help municipal land use officials, staff and commission members understand and apply geospatial information technologies to help solve local land use problems and to develop environmentally sensitive land use plans.

The program focuses on the use of geographic information systems (GIS), remote sensing (RS) and global positioning system (GPS) technology and online mapping and introduces new users to these technologies through hands-on training courses. Over 350 people in the state have also been trained in smartphone GPS mapping.

People Empowering People (PEP)

We have People Empowering People (PEP) facilitators in: Branford, East Haven, Middletown, New Haven, and Waterbury. The PEP Program is a personal and family development program with a strong community focus.

Created by UConn Extension, the PEP program builds upon individual life experiences and strengths to encourage growth in communication and problem

solving skills, parent/family relationships and community involvement. The PEP program has graduated over one thousand people in fifteen years.

In 2015, 50 new PEP facilitators were trained in the state. They volunteered over 600 hours, serving 7,000 people in various communities. The PEP program has also expanded to Massachusetts, Vermont and Florida.

Master Gardeners

We have Certified Master Gardeners residing in many towns in the district, and signature projects located throughout the district, including the Windham Area Interfaith Ministries Community Garden, Wind Hill Community Farm in Glastonbury, and the Our Companions Animal Sanctuary in Ashford.

The Master Gardener Program is an educational outreach program that is part of UConn Extension. The program started in 1978 and consists of horticulture training and an outreach component that focus on the community at large. Master Gardeners are enthusiastic, willing to learn and share their knowledge and training with others. What sets them apart from other home gardeners is their special horticultural training.

In exchange for this training, Master Gardeners commit time as volunteers working through their local UConn Extension Center and the Bartlett Arboretum in Stamford to provide horticultural-related information to the community. In 2015, 34,555 hours of community service donated by our 1,587 Master Gardener volunteers with a value of $797,183 to the communities served.

In 2015, we had graduates from Durham, Guilford, Hamden, Middlefield, Middletown, Naugatuck, Prospect, and Shelton in the 3rd Congressional district. This is in addition to the numerous volunteers already working with our program.

Land Use

Every town in the district has utilized our Land Use program except East Haven and Shelton. The Connecticut Land Use Academy conducts regular full-day trainings for land use commissioners across the state, in collaboration with the CT Office of Policy and Management and the CT Bar Association.

Both Basic Training and Advanced Training courses are offered. In addition, the Academy works with CT Sea Grant on programs for coastal towns on Climate Resiliency. Much of this work entails individual town meetings with planners, public works, and land use commissioners; also, one statewide workshop was held.

Finally, the Academy worked with the CT Department of Economic and Community Development and the nonprofit Partnership for Strong Communities on programs related to transit-oriented development and affordable housing.

EFNEP

The EFNEP and SNAP-Ed programs are based in our North Haven office and work with individuals and families throughout the district.

Specially trained EFNEP Nutrition Assistants, who know their communities well, work with program families in their homes or in small community groups to offer knowledge and skills to help people control and manage their food and nutrition practices for better health and quality of life.

Programs are offered in English and Spanish. In combination with food assistance programs such and WIC or the USDA Food Stamp Program, EFNEP can make a difference in improving food choices and health.

4-H FANs *In Motion*

Connecticut Fitness and Nutrition Clubs In Motion, is a 4-H Afterschool program designed to reduce obesity rates in children ages 9 to 14, through sustainable interventions surrounding food and fitness. 4-H FANs and fitness and nutrition programs are in: East Haven, Hamden, Middletown, North Haven and Wallingford.

Pesticide Safety

We have done pesticide safety training for people in numerous towns in the district, allowing them to operate viable businesses. The Pesticide Safety Education Program (PSEP) primarily targets those who are hired to apply pesticides or those who use restricted-use pesticides in agriculture.

The goals of this training are to ensure that pesticides are used only when necessary and are applied in a manner that protects the applicator, the public, and environment and our food supply. To date, 3,874 people have received pesticide safety training.

Coverts Cooperators

These towns have active Coverts Cooperators: Guilford, Hamden, Middletown, Milford, New Haven, and Shelton.

Coverts cooperators learn certain vegetation management techniques associated with the management plan that was developed under collaboration with town Open Space committees, UConn Extension Forestry, the Coverts Project and service-learning students. This list also encompasses localities where we have impacts from other Forestry Program activities (Emerald Ash Borer Survey, forest stewardship planning, StormWise, local wood to local schools, etc.)

Master Composters

We have Master Composters in: Hamden, New Haven and Wallingford. By encouraging Connecticut residents to recycle organic waste materials that would otherwise end up in landfills, Master Composters promote sustainable living and resource conservation at individual and community levels.

NEMO

Our Nonpoint Education for Municipal Officials (NEMO) program is in: Beacon Falls, Guilford, Hamden, Middletown, Milford, New Haven and Wallingford. The Nonpoint Education for Municipal Officials (NEMO) Program delivers educational workshops for local officials, by request; conducts Rain Garden training workshops for professional landscapers, municipal workers, and others; conducts applied research on green infrastructure (GI) practices; develops online and smart phone tools.

The rain garden app has been downloaded 5,346 times. Android and iOS version are available. Through this UConn Extension app and the installation of rain gardens across the state, 1.3 million gallons of storm water are annually prevented from being sent untreated into the state's waterways.

Greenhouse IPM

Our Greenhouse IPM program is in the following towns: Bethany, Branford, Hamden, New Haven, Prospect, and Waterbury. The UConn Extension Greenhouse IPM Program supports the Connecticut greenhouse industry with information and educational programming on sustainable production methods. In Connecticut, the greenhouse industry is a significant part of agriculture. Greenhouse and nursery products (ornamental shrubs, flowers, young plants) are Connecticut's leading source of agricultural income. Approximately 300 commercial greenhouse businesses have 8 million square feet of production space under cover. In addition, many Connecticut farmers have added greenhouse crops to their businesses to increase income.

Vegetable IPM

Our vegetable Integrated Pest Management (IPM) program is works across the state, including with farmers in Bethany, New Milford, North Branford, Shelton, and Woodbridge. UConn Extension's Vegetable IPM Program helps commercial vegetable growers find sustainable solutions to pest problems. The program emphasizes healthy soils, balanced plant nutrition, proper pest and beneficial identification, scouting and monitoring techniques, preventative management strategies, reduced-risk pesticide selection and application, and resistance management.

Fruit IPM

Fruit IPM is in: Bethany, Guilford, Middlefield, Shelton, and Woodbridge. UConn Extension's Fruit IPM Program provides information to commercial growers of tree fruit, small fruit and grapes to help them manage pests through a sustainable, whole plant approach.

Information is disseminated through fact sheets, grower meetings, email alerts, research and demonstrations, and one-on-one grower contacts. The Fruit IPM Program emphasizes plant nutrition, soil health, identification of beneficials and pests, scouting and monitoring tools, proper plant and site selection, preventative management strategies, pesticide selection and application, and pesticide resistance management.

Other Programs Represented in the 3rd District

Community Supported Agriculture, dairy, habitats, livestock, farm business planning, community economic development, wetlands work, soil tests, veterinary and plant diagnostics,

**This report is based on the towns reported by UConn Extension programs in 2015.*

UCONN | COLLEGE OF AGRICULTURE, HEALTH AND NATURAL RESOURCES

EXTENSION

UConn Extension Programs in the 4th District

UConn Extension has over 100 educators and specialists working in every town in the state from our 11 locations. Over 170 formal outreach programs address topics from agriculture to youth development. We have a Master Gardener Coordinator located in Stamford at the Bartlett Arboretum in the 4th Congressional District.

Urban Agriculture Training Addresses Food Deserts in Connecticut

UConn Extension implemented an Urban Agriculture and Integrated Pest Management (IPM) training project in Fairfield County, targeting Hispanic adults. This project included three components: training on urban agriculture using lower-risk IPM tactics and organic production methods, vegetable and food production, and entrepreneurship. Candlelight Farms in New Milford allowed students to use an acre of farmland to produce vegetables and Nuestras Raices (Our Roots) from Massachusetts is serving as a mentor.

The project produces fresh food locally to supply food desert areas in Fairfield County. Each year (2014 and 2015) students have distributed more than 4,000 pounds of organic vegetables and served 250 low-income families at Danbury Farmer's Market. This project used contents of the UConn Extension Master Gardeners (MG) curriculum to develop four training modules: Botany, Entomology, Vegetable production, and IPM.

Twenty-one students from Danbury, Bridgeport and Norwalk have completed a year-round program, including 180 hours of classroom instruction. Urban Agriculture students have increased their knowledge on each of the three modules tested (botany, entomology, and vegetable production), and changed their behavior when producing vegetables by applying low-risk IPM tactics. In 2016, the program is being expanded to Stamford, collaborating with East Side Partnership.

Connecticut Shellfish Initiative

Connecticut is a major producer of molluscan shellfish, including oysters, clams, mussels and scallops. The farm-gate value of shellfish products is greater than $30 million, with more than 40 companies and 300 employees. Fourteen coastal towns offer recreational harvest opportunities. Connecticut's natural shellfish resources are of immense ecological value. Oyster reefs and other shellfish populations provide cleaner and clear water and habitat for marine organisms. Shellfish are also

used to remove excess nutrients in bioextraction efforts and in living shorelines projects to protect coastal areas from strong waves and storm surges.

Extension works with the industry and resource managers to conserve these natural resources. UConn's Sea Grant Extension staff, along with NOAA Fisheries is facilitating the development of a vision plan for the state's commercial, recreational and natural resources. As part of the Connecticut Shellfish Initiative, Extension staff gathers key players to identify priorities to grow and protect these valuable economic and ecological resources.

Connecticut Sea Grant also hosts the annual Gathering of Shellfish Commissions, which convenes a statewide gathering of municipal officials to discuss how to improve management of local shellfish resources. Towns working with the shellfish initiative in the 4th Congressional district include: Bridgeport, Darien, Fairfield, Greenwich, Norwalk, Stamford, and Westport.

Climate Adaptation Academy

The Extension system model has historically been to assess the needs and concerns of the citizenry and tailor programs to meet their concerns. What once worked effectively for rural farm families is now being applied to help communities deal with climate-related issues, through the Climate Adaptation Academy (CAA).

Feedback from municipal officials on impacts of climate change in their communities was not just flooding and storm surge, but issues including longer-term budget impacts and the need for planning. It is a new and ever-evolving area that Extension is working to identify and define critical impacts on both coastal and inland communities.

The CAA uses a peer-to-peer system to exchange information and reaches out to municipal officials, non-profits and individuals involved in and concerned about climate change. The Academy has addressed legal issues related to climate adaptation and the impact of climate change on inland flooding, as well as working with living shorelines.

In the 4th Congressional district, we're working with Greenwich.

4-H

UConn Extension has a very strong 4-H presence in the 4th Congressional district, with 4-H members or group programs in all but four towns. 4-H Youth Development is focused on creating safe, healthy, well-educated children and teens through 4-H Clubs, afterschool programs and interactive learning experiences. In addition, our educational efforts focus on incorporating the following three areas of curriculum into youth development programs and activities:

1) Science, Technology, Engineering and Math (STEM)

2) Citizenship & Leadership
3) Healthy Living

From October 2014 to September 2015 approximately 25,000 youth participated in 4-H youth development programs in Connecticut. Of this number, 3,479 were involved in organized club programs, 3,740 participated in camping programs and 14,894 in short-term or special interest programs. Connecticut Operation Military Kids programs reached a total of 1,650 youth and adults.

70,000 hours of community service donated by 1,423 4-H volunteers and 711 4-H youth members with a value of $1.61 million to the communities served.

The Connecticut 4-H Mentoring program works in Waterbury and Bridgeport to provide mentoring to 120 youth. There are three components to the program, mentoring, family night and the 4-H club. There were also 35 volunteers working with the program.

Healthy Homes

Our Healthy Environments for Children (HEC) program has sent educational materials to every town in the district.

HEC helps parents and guardians, educators, community leaders, trainers, and other caring adults understand, prevent, and improve environmental conditions that adversely affect the health of children and adults. HEC also helps children understand how to prevent and manage environmental health problems.

Working in partnership with local, state, federal, and tribal agencies and organizations, HEC has focused on environmental health issues such as lead poisoning, radon, asthma, and water conservation.

FoodCorps

FoodCorps Service members are located in Bridgeport, Norwalk, and Westport. FoodCorps is a service-learning program, placing individuals in 15 high-need communities. FoodCorps CT service members' focus on three reinforcing pillars to improve school food environments: promoting farm-to-school programming, establishing school gardens, and providing nutrition education.

Through the program, 14,670 youth in Connecticut learned about healthy nutritious eating. Our 15 FoodCorps service members also supported 62,332 square feet of community gardens and 17,684 square feet of school garden in 78 gardens total.

A total of 2,620 pounds of vegetables were brought into cafeterias across the state by the FoodCorps program. We had 727 volunteers work with the program, and they spent 1,791 hours for a value of $41,318 to the communities served.

Geospatial Training

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People Empowering People (PEP)

We have People Empowering People (PEP) facilitators in: Bridgeport, Greenwich and Stamford. The PEP Program is a personal and family development program with a strong community focus.

Created by UConn Extension, the PEP program builds upon individual life experiences and strengths to encourage growth in communication and problem solving skills, parent/family relationships and community involvement. The PEP program has graduated over one thousand people in fifteen years.

In 2015, 50 new PEP facilitators were trained in the state. They volunteered over 600 hours, serving 7,000 people in various communities. The PEP program has also expanded to Massachusetts, Vermont and Florida.

Master Gardeners

We have Certified Master Gardeners residing in many towns in the district, and signature projects located throughout the district, including at 19 schools in Stamford through the Gardening Initiative in Vegetable Education (GIVE) and at Ryan Park in Norwalk, in addition to their work at the Bartlett Arboretum and Gardens.

The Master Gardener Program is an educational outreach program that is part of UConn Extension. The program started in 1978 and consists of horticulture training and an outreach component that focus on the community at large. Master Gardeners are enthusiastic, willing to learn and share their knowledge and training with others. What sets them apart from other home gardeners is their special horticultural training.

In exchange for this training, Master Gardeners commit time as volunteers working through their local UConn Extension Center and the Bartlett Arboretum in Stamford to provide horticultural-related information to the community. In 2015, 34,555 hours of community service donated by our 1,587 Master Gardener volunteers with a value of $797,183 to the communities served.

In 2015, we had graduates from Easton, Fairfield, Greenwich, Monroe, New Canaan, Norwalk, Oxford, Redding, Ridgefield, Shelton, Trumbull, Weston, Westport, and Wilton in the 4th Congressional district. This is in addition to the numerous volunteers already working with our program.

Land Use

Every town in the district except Shelton has utilized our Land Use program. The Connecticut Land Use Academy conducts regular full-day trainings for land use commissioners across the state, in collaboration with the CT Office of Policy and Management and the CT Bar Association.

Both Basic Training and Advanced Training courses are offered. In addition, the Academy works with CT Sea Grant on programs for coastal towns on Climate Resiliency. Much of this work entails individual town meetings with planners, public works, and land use commissioners; also, one statewide workshop was held.

Finally, the Academy worked with the CT Department of Economic and Community Development and the nonprofit Partnership for Strong Communities on programs related to transit-oriented development and affordable housing.

EFNEP

The EFNEP and SNAP-Ed programs are based in our North Haven office and work with individuals and families in throughout the district. SNAP-Ed is working in Bridgeport and Norwalk.

Specially trained EFNEP Nutrition Assistants, who know their communities well, work with program families in their homes or in small community groups to offer knowledge and skills to help people control and manage their food and nutrition practices for better health and quality of life.

Programs are offered in English and Spanish. In combination with food assistance programs such and WIC or the USDA Food Stamp Program, EFNEP can make a difference in improving food choices and health.

Pesticide Safety

We have done pesticide safety training for people in numerous towns in the district, allowing them to operate viable businesses. The Pesticide Safety Education Program

(PSEP) primarily targets those who are hired to apply pesticides or those who use restricted-use pesticides in agriculture.

The goals of this training are to ensure that pesticides are used only when necessary and are applied in a manner that protects the applicator, the public, and environment and our food supply. To date, 3,874 people have received pesticide safety training.

4-H FANs *In Motion*

Connecticut Fitness and Nutrition Clubs In Motion, is a 4-H Afterschool program designed to reduce obesity rates in children ages 9 to 14, through sustainable interventions surrounding food and fitness. 4-H FANs and fitness and nutrition programs are in Bridgeport, Danbury, Waterbury, New Haven, and Meriden.

Coverts Cooperators

These towns have active Coverts Cooperators: Darien, Easton, Fairfield, Monroe, New Canaan, Oxford, Shelton, Stamford, Trumbull, and Westport.

Coverts cooperators learn certain vegetation management techniques associated with the management plan that was developed under collaboration with town Open Space committees, UConn Extension Forestry, the Coverts Project and service-learning students. This list also encompasses localities where we have impacts from other Forestry Program activities (Emerald Ash Borer Survey, forest stewardship planning, StormWise, local wood to local schools, etc.)

CYFAR

An urban 4-H garden program for sixth through eighth grade students at Barnum Elementary School in Bridgeport is coordinated with the support of a five-year grant from USDA/NIFA's Children, Family, and Youth at Risk Program (CYFAR). Students attend the program four hours each week during the school year and eight hours a week during the summer. The curriculum focuses on gardening, workforce readiness and technology.

Students learn about nutrition, gardening and healthy meal preparation while working together as a group. They explore agriculture by visiting local farms and participate in community service projects. Students designed, filmed and edited videos to teach healthy eating and used these guides to mentor younger students.

Students also participated in a Christmas program presented in nursing homes. In 2014, the group produced 2,000 pounds of vegetables in 24 raised beds. A portion of the harvested produce is used for cooking classes, while the remainder is sent home with students to supplement family meals. A total of 45 youth in grades 5-8 participated, and there were 21 adult volunteers. Bridgeport students also

participated in an eye-tracking workshop that introduced them to marketing strategies and customers' behavior analysis.

Master Composters

We have Master Composters in: Greenwich, Redding, and Westport. By encouraging Connecticut residents to recycle organic waste materials that would otherwise end up in landfills, Master Composters promote sustainable living and resource conservation at individual and community levels.

NEMO

Our Nonpoint Education for Municipal Officials (NEMO) program is in: Bridgeport, Stamford and Wilton. The Nonpoint Education for Municipal Officials (NEMO) Program delivers educational workshops for local officials, by request; conducts Rain Garden training workshops for professional landscapers, municipal workers, and others; conducts applied research on green infrastructure (GI) practices; develops online and smart phone tools.

The rain garden app has been downloaded 5,346 times. Android and iOS version are available. Through this UConn Extension app and the installation of rain gardens across the state, 1.3 million gallons of storm water are annually prevented from being sent untreated into the state's waterways.

Youth Internet Masters

We have three technology programs in Stamford and Bridgeport. Youth Internet Masters (YIM) is a technology program that teaches webpage design. YIM Level 2 adds a third webpage design language (JavaScript) to the previous two languages studied in YIM Level 1 (HTML and CSS). YIM program utilizes a combination of Self-Directed Learning (SDL) and Project Oriented Learning (POL), which have been defined as a form of study in which learners have the primary responsibility for planning, carrying out, and evaluating their learning experiences.

YIM Level 2 includes 10 projects. They have been designed in an inductive-deductive format or from easy to hard levels of complexity. Each project outlines what students will do and the type of activities they need to complete. However, students will administer their own time and make decisions about what to learn to complete each project.

Greenhouse IPM

Our Greenhouse IPM program is in Easton. The UConn Extension Greenhouse IPM Program supports the Connecticut greenhouse industry with information and educational programming on sustainable production methods. In Connecticut, the greenhouse industry is a significant part of agriculture. Greenhouse and nursery

products (ornamental shrubs, flowers, young plants) are Connecticut's leading source of agricultural income. Approximately 300 commercial greenhouse businesses have 8 million square feet of production space under cover. In addition, many Connecticut farmers have added greenhouse crops to their businesses to increase income.

Vegetable IPM

Our vegetable Integrated Pest Management (IPM) program is works across the state, including with farmers in Shelton. UConn Extension's Vegetable IPM Program helps commercial vegetable growers find sustainable solutions to pest problems. The program emphasizes healthy soils, balanced plant nutrition, proper pest and beneficial identification, scouting and monitoring techniques, preventative management strategies, reduced-risk pesticide selection and application, and resistance management.

Fruit IPM

Fruit IPM is in: Ridgefield and Shelton. UConn Extension's Fruit IPM Program provides information to commercial growers of tree fruit, small fruit and grapes to help them manage pests through a sustainable, whole plant approach.

Information is disseminated through fact sheets, grower meetings, email alerts, research and demonstrations, and one-on-one grower contacts. The Fruit IPM Program emphasizes plant nutrition, soil health, identification of beneficials and pests, scouting and monitoring tools, proper plant and site selection, preventative management strategies, pesticide selection and application, and pesticide resistance management.

Other Programs Represented in the 4th District

Community Supported Agriculture, dairy, habitats, livestock, farm business planning, community economic development, wetlands work, soil tests, veterinary and plant diagnostics,

**This report is based on the towns reported by UConn Extension programs in 2015.*

UCONN | COLLEGE OF AGRICULTURE, HEALTH AND NATURAL RESOURCES

EXTENSION

UConn Extension Programs in the 5th District

UConn Extension has over 100 educators and specialists working in every town in the state from our 11 locations. Over 170 formal outreach programs address topics from agriculture to youth development. We have offices located in Bethel and Torrington in the 5th Congressional District.

Urban Agriculture Training Addresses Food Deserts in Connecticut

UConn Extension implemented an Urban Agriculture and Integrated Pest Management (IPM) training project in Fairfield County, targeting Hispanic adults. This project included three components: training on urban agriculture using lower-risk IPM tactics and organic production methods, vegetable and food production, and entrepreneurship. Candlelight Farms in New Milford allowed students to use an acre of farmland to produce vegetables and Nuestras Raices (Our Roots) from Massachusetts is serving as a mentor.

The project produces fresh food locally to supply food desert areas in Fairfield County. Each year (2014 and 2015) students have distributed more than 4,000 pounds of organic vegetables and served 250 low-income families at Danbury Farmer's Market. This project used contents of the UConn Extension Master Gardeners (MG) curriculum to develop four training modules: Botany, Entomology, Vegetable production, and IPM.

Twenty-one students from Danbury, Bridgeport and Norwalk have completed a year-round program, including 180 hours of classroom instruction. Urban Agriculture students have increased their knowledge on each of the three modules tested (botany, entomology, and vegetable production), and changed their behavior when producing vegetables by applying low-risk IPM tactics. In 2016, the program is being expanded to Stamford, collaborating with East Side Partnership.

Nutrient Management In Agriculture

Farmers are under increasing pressure to protect the environment. Several states have legal actions underway to brand the misuse of nutrients involved in crop production as hazardous waste. If farms cannot learn to manage their agricultural business without polluting the environment they will be forced out of business, and Connecticut consumers will pay more for food to be imported from out of state.

UConn Extension teaches adaptive nutrient management practices using strip trials, aerial imagery, objective tests, and guided stalk sampling to growers of field corn for silage and grain. Farms learn by directly participating in the demonstration project. In 2015, 11 farms participated, with 45 separate fields covering a total of 419.86 acres. Additionally, 55 growers and state agency employees attended an August 2015 Field Day held at Laurelbrook Farm in East Canaan.

A second project focuses on demonstrating manure spreader mounted load cells and GPS technology as a practical method for collecting manure application records. A total of 6 farms to date have used the manure spreader owned by UConn Extension to spread 247 actual and 370 virtual loads of manure. Actual loads are the number of times the spreader was actually filled with manure and taken to a field.

The average load size was 6.81 tons, with a total of 1,677 tons of manure spread on 217.81 acres. Data from the spreader has been collected for the 247 loads. All data is loaded into ESRI ArcGIS software for analysis. Application rates summaries and tons/acre applied are being analyzed for 2015 data.

4-H

UConn Extension has a very strong 4-H presence in the 5th Congressional district, with 4-H members or group programs in all but four towns. 4-H Youth Development is focused on creating safe, healthy, well-educated children and teens through 4-H Clubs, afterschool programs and interactive learning experiences. In addition, our educational efforts focus on incorporating the following three areas of curriculum into youth development programs and activities:

1) Science, Technology, Engineering and Math (STEM)
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From October 2014 to September 2015 approximately 25,000 youth participated in 4-H youth development programs in Connecticut. Of this number, 3,479 were involved in organized club programs, 3,740 participated in camping programs and 14,894 in short-term or special interest programs. Connecticut Operation Military Kids programs reached a total of 1,650 youth and adults.

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The Connecticut 4-H Mentoring program works in Waterbury and Bridgeport to provide mentoring to 120 youth. There are three components to the program, mentoring, family night and the 4-H club. There were also 35 volunteers working with the program.

Healthy Homes

Our Healthy Environments for Children (HEC) program has sent educational materials to every town in the district. 93 youth in Hartford and New Britain completed an 11-week Healthy Homes curriculum.

HEC helps parents and guardians, educators, community leaders, trainers, and other caring adults understand, prevent, and improve environmental conditions that adversely affect the health of children and adults. HEC also helps children understand how to prevent and manage environmental health problems.

Working in partnership with local, state, federal, and tribal agencies and organizations, HEC has focused on environmental health issues such as lead poisoning, radon, asthma, and water conservation.

FoodCorps

FoodCorps Service members are located in Meriden and New Britain. FoodCorps is a service-learning program, placing individuals in 15 high-need communities. FoodCorps CT service members' focus on three reinforcing pillars to improve school food environments: promoting farm-to-school programming, establishing school gardens, and providing nutrition education.

Through the program, 14,670 youth in Connecticut learned about healthy nutritious eating. Our 15 FoodCorps service members also supported 62,332 square feet of community gardens and 17,684 square feet of school garden in 78 gardens total.

A total of 2,620 pounds of vegetables were brought into cafeterias across the state by the FoodCorps program. We had 727 volunteers work with the program, and they spent 1,791 hours for a value of $41,318 to the communities served.

Naugatuck River Greenway

The Naugatuck River Greenway (NRG) is a planned 44-mile long regional greenway and trail that will run through eleven communities: Torrington, Harwinton, Litchfield, Thomaston, Watertown, Waterbury, Naugatuck, Beacon Falls, Seymour, Ansonia, and Derby.

While there will be significant costs involved in constructing the NRG, local decision-makers see potential to capitalize on the trail as an economic engine for the region and to improve the quality of life for residents. The business of coordinating stakeholder negotiations and allocating funds for land acquisition requires buy-in on behalf of the communities in the valley.

The Naugatuck River Greenway Steering Committee, with members from each of the eleven NRG communities, and the Naugatuck Valley Council of Governments

approached UConn Extension and our partners in the School of Business to better understand potential economic impacts of the proposed trail as well as best practices for helping local communities capitalize on the completed trail. To date, a literature review, a multi-point user intercept survey, and a comprehensive analysis of survey data has been completed. UConn Extension provided 224 hours of training to the communities on the project and worked with local partners to sign up 10 trail volunteers who collected data on trails, for a total of 300 volunteer hours. UConn Extension continues to serve in a coordinating role on providing education for stakeholders, data analysis, and facilitation of focus groups.

Greenhouse IPM

The Greenhouse Integrated Pest Management (IPM) program supports over 102,000 square feet in greenhouse production, in addition to outdoor production in Bethlehem, Litchfield, Newtown, Watertown, Kent and Cheshire. Site visits were also conducted in: Morris, Woodbury, Thomaston, Roxbury, Southbury and Brookfield.

The UConn Extension Greenhouse IPM Program supports the Connecticut greenhouse industry with information and educational programming on sustainable production methods. In Connecticut, the greenhouse industry is a significant part of agriculture. Greenhouse and nursery products (ornamental shrubs, flowers, young plants) are Connecticut's leading source of agricultural income. Approximately 300 commercial greenhouse businesses have 8 million square feet of production space under cover. In addition, many Connecticut farmers have added greenhouse crops to their businesses to increase income.

Geospatial Training

Our Geospatial Training program (GTP) has trained people from every town in the district. GTP provides technical education and training outside the traditional academic environment. The program's goal is to help municipal land use officials, staff and commission members understand and apply geospatial information technologies to help solve local land use problems and to develop environmentally sensitive land use plans.

The program focuses on the use of geographic information systems (GIS), remote sensing (RS) and global positioning system (GPS) technology and online mapping and introduces new users to these technologies through hands-on training courses. Over 350 people in the state have also been trained in smartphone GPS mapping.

People Empowering People (PEP)

We have People Empowering People (PEP) facilitators in: Bridgewater, Cheshire, Danbury, Litchfield, Meriden, New Britain, New Milford, Plymouth, Torrington and Waterbury. Four organizations in Bristol worked with our PEP program to develop

community programs. The PEP Program is a personal and family development program with a strong community focus.

Created by UConn Extension, the PEP program builds upon individual life experiences and strengths to encourage growth in communication and problem solving skills, parent/family relationships and community involvement. The PEP program has graduated over one thousand people in fifteen years.

In 2015, 50 new PEP facilitators were trained in the state. They volunteered over 600 hours, serving 7,000 people in various communities. The PEP program has also expanded to Massachusetts, Vermont and Florida.

Master Gardeners

We have Certified Master Gardeners residing in many towns in the district, and signature projects located throughout the district, including the gardens and annual garden fair at the Fairfield County Extension Center in Bethel, the Enchanted Trail at the Bethel YMCA, three locations in Bridgeport, and four locations in Brookfield. Master Gardeners were also part of 11 projects in Danbury, and five projects in Newtown, among others.

The Master Gardener Program is an educational outreach program that is part of UConn Extension. The program started in 1978 and consists of horticulture training and an outreach component that focus on the community at large. Master Gardeners are enthusiastic, willing to learn and share their knowledge and training with others. What sets them apart from other home gardeners is their special horticultural training.

In exchange for this training, Master Gardeners commit time as volunteers working through their local UConn Extension Center and the Bartlett Arboretum in Stamford to provide horticultural-related information to the community. In 2015, 34,555 hours of community service donated by our 1,587 Master Gardener volunteers with a value of $797,183 to the communities served.

In 2015, we had graduates from Bethel, Brookfield, Canton, Cheshire, Danbury, Farmington, Harwinton, Meriden, Middlebury, Newtown, New Britain, New Fairfield, New Milford, Roxbury, Sherman, Southbury, and Woodbury in the 5th Congressional district. This is in addition to the numerous volunteers already working with our program.

Land Use

Every town in the district except Bridgewater, Danbury, and Morris has utilized our Land Use program. The Connecticut Land Use Academy conducts regular full-day trainings for land use commissioners across the state, in collaboration with the CT Office of Policy and Management and the CT Bar Association.

Both Basic Training and Advanced Training courses are offered. In addition, the Academy works with CT Sea Grant on programs for coastal towns on Climate Resiliency. Much of this work entails individual town meetings with planners, public works, and land use commissioners; also, one statewide workshop was held.

Finally, the Academy worked with the CT Department of Economic and Community Development and the nonprofit Partnership for Strong Communities on programs related to transit-oriented development and affordable housing.

EFNEP

The EFNEP and SNAP-Ed programs are based in our Bethel office and work with individuals and families in throughout the district.

Specially trained EFNEP Nutrition Assistants, who know their communities well, work with program families in their homes or in small community groups to offer knowledge and skills to help people control and manage their food and nutrition practices for better health and quality of life.

Programs are offered in English and Spanish. In combination with food assistance programs such and WIC or the USDA Food Stamp Program, EFNEP can make a difference in improving food choices and health.

Pesticide Safety

We have done pesticide safety training for people in numerous towns in the district, allowing them to operate viable businesses. The Pesticide Safety Education Program (PSEP) primarily targets those who are hired to apply pesticides or those who use restricted-use pesticides in agriculture.

The goals of this training are to ensure that pesticides are used only when necessary and are applied in a manner that protects the applicator, the public, and environment and our food supply. To date, 3,874 people have received pesticide safety training.

4-H FANs *In Motion*

Connecticut Fitness and Nutrition Clubs In Motion, is a 4-H Afterschool program designed to reduce obesity rates in children ages 9 to 14, through sustainable interventions surrounding food and fitness. 4-H FANs and fitness and nutrition programs are in Bridgeport, Danbury, Waterbury, New Haven, and Meriden.

Coverts Cooperators

These towns have active Coverts Cooperators: Goshen, Harwinton, Newtown, Norfolk, Bridgewater, Brookfield, Burlington, Canton, Cornwall, Danbury, Kent, Litchfield, New Milford, Plymouth, Salisbury, Simsbury, Warren, Watertown, and Woodbury.

Coverts cooperators learn certain vegetation management techniques associated with the management plan that was developed under collaboration with town Open Space committees, UConn Extension Forestry, the Coverts Project and service-learning students. This list also encompasses localities where we have impacts from other Forestry Program activities (Emerald Ash Borer Survey, forest stewardship planning, StormWise, local wood to local schools, etc.)

CYFAR

An urban 4-H garden program for sixth through eighth grade students at Barnum Elementary School in Bridgeport is coordinated with the support of a five-year grant from USDA/NIFA's Children, Family, and Youth at Risk Program (CYFAR). Students attend the program four hours each week during the school year and eight hours a week during the summer. The curriculum focuses on gardening, workforce readiness and technology.

Students learn about nutrition, gardening and healthy meal preparation while working together as a group. They explore agriculture by visiting local farms and participate in community service projects. Students designed, filmed and edited videos to teach healthy eating and used these guides to mentor younger students.

Students also participated in a Christmas program presented in nursing homes. In 2014, the group produced 2,000 pounds of vegetables in 24 raised beds. A portion of the harvested produce is used for cooking classes, while the remainder is sent home with students to supplement family meals. A total of 45 youth in grades 5-8 participated, and there were 21 adult volunteers. Bridgeport students also participated in an eye-tracking workshop that introduced them to marketing strategies and customers' behavior analysis.

Master Composters

We have Master Composters in: Bethel, Brookfield, Danbury, Newtown, Salisbury, and Simsbury. By encouraging Connecticut residents to recycle organic waste materials that would otherwise end up in landfills, Master Composters promote sustainable living and resource conservation at individual and community levels.

NEMO

Our Nonpoint Education for Municipal Officials (NEMO) program is in: Bethel, Bridgeport, Burlington, Farmington, Kent, Meriden, Middlebury, Newtown, Southbury, and Torrington. The Nonpoint Education for Municipal Officials (NEMO) Program delivers educational workshops for local officials, by request; conducts Rain Garden training workshops for professional landscapers, municipal workers, and others; conducts applied research on green infrastructure (GI) practices; develops online and smart phone tools.

The rain garden app has been downloaded 5,346 times. Android and iOS version are available. Through this UConn Extension app and the installation of rain gardens across the state, 1.3 million gallons of storm water are annually prevented from being sent untreated into the state's waterways.

Youth Internet Masters

We have three technology programs in Stamford and Bridgeport. Youth Internet Masters (YIM) is a technology program that teaches webpage design. YIM Level 2 adds a third webpage design language (JavaScript) to the previous two languages studied in YIM Level 1 (HTML and CSS). YIM program utilizes a combination of Self-Directed Learning (SDL) and Project Oriented Learning (POL), which have been defined as a form of study in which learners have the primary responsibility for planning, carrying out, and evaluating their learning experiences.

YIM Level 2 includes 10 projects. They have been designed in an inductive-deductive format or from easy to hard levels of complexity. Each project outlines what students will do and the type of activities they need to complete. However, students will administer their own time and make decisions about what to learn to complete each project.

Vegetable IPM

Our vegetable Integrated Pest Management (IPM) program is works across the state, including with farmers in Farmington, Litchfield, New Milford, Southbury, and Woodbury. UConn Extension's Vegetable IPM Program helps commercial vegetable growers find sustainable solutions to pest problems. The program emphasizes healthy soils, balanced plant nutrition, proper pest and beneficial identification, scouting and monitoring techniques, preventative management strategies, reduced-risk pesticide selection and application, and resistance management.

Fruit IPM

Fruit IPM is in: Canaan, Cheshire, Goshen, Sharon, and Washington. UConn Extension's Fruit IPM Program provides information to commercial growers of tree

fruit, small fruit and grapes to help them manage pests through a sustainable, whole plant approach.

Information is disseminated through fact sheets, grower meetings, email alerts, research and demonstrations, and one-on-one grower contacts. The Fruit IPM Program emphasizes plant nutrition, soil health, identification of beneficials and pests, scouting and monitoring tools, proper plant and site selection, preventative management strategies, pesticide selection and application, and pesticide resistance management.

Other Programs Represented in the 5th District

Community Supported Agriculture, dairy, habitats, livestock, farm business planning, community economic development, wetlands work, soil tests, veterinary and plant diagnostics,

**This report is based on the towns reported by UConn Extension programs in 2015.*