





Celebrating 100 Years

Making a Difference

For more than 90 years, University of Maine Cooperative Extension has worked with Maine volunteers to offer community-driven, research-based educational programs in every county.

Our annual report features highlights of recent accomplishments and the difference we make in the lives of Maine citizens and their communities.

extension.umaine.edu

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The University of Maine is an equal opportunity/affirmative action institution.

2012-2013

University of Maine Cooperative Extension
Washington County

WASHINGTON COUNTY HIGHLIGHTS

Community Development

- Twelve Washington County residents completed the Strengthening Your Facilitation Skills, Level One training. The 20-hour training is designed to build the working capacity of groups and increase the effectiveness of meetings.
- In cooperation with the University of Maine College of Education and Human Development, a one-day retreat was offered for fourteen teachers and principals from Washington County. Held in partnership with Cobscook Community Learning Center, the day focused on the personal and professional renewal of public school teachers and leaders.
- The goal of the Cooperative's Extension's Small and Home-Based Business Program is to help Washington County people start, improve or expand their business. The business program provides county residents with opportunities to gain or enhance entrepreneurial skills by attending business management workshops and individual business counseling. Approximately 40 existing or aspiring businesses received direct assistance in helping to improve one or more aspects of their business. They include setting a profitable price, exploring financing options and developing more effective advertising and promotion materials.
- Thirty Senior Companions volunteered to help other older adults maintain their independence through companionship, transportation, providing education, and being a friendly visitor. Last year, Senior Companions spent 18,501 hours helping 144 clients. Senior Companions receive a small stipend if they are income eligible which helps supplement their income.

Food Systems

 Thirteen Washington County farmers participated in a Pasture Management workshop where solutions were discussed on how to get weeds under control and

- manage the fields. Both chemical and nonchemical methods of control were discussed.
- Our Animal and Bio-Sciences Specialist has worked with local farms to help them institute standard operating procedures for food production and procedures to monitor product quality through a quality control program. In addition, farmers participated in an 8-hour Dairy Sanitation Course that provides an overview of sanitation topics such as bacterial pathogens related to dairy products and milking/milk room sanitation.
- In 2012, Washington County accounted for 89.3% of Maine's cranberry yield with 31,917 barrels or 3,191,700 pounds valued at \$1.1 million. Extension's Cranberry Professional made 44 visits to cranberry farms in Washington County to assist growers with a variety of production questions ranging from fertilization, pest control, and pollination. In addition, a workshop was conducted for cranberry growers to learn about the latest research and most important issues facing the industry.
- According to a report prepared by the Wild Blueberry Commission of Maine, wild blueberries return \$250 million to Maine in direct and indirect contributions. The most recent census of Agriculture reported that Washington County has 73% of the wild blueberry acres in Maine. University of Maine Cooperative Extension supports the economic viability of the wild blueberry industry through educational programs that provide sound and reliable research-based information that producers use to improve yield and enhance their income. From July 2012 to July 2013, seven meetings were organized for blueberry producers including the annual Field Day at the Blueberry Hill in Jonesboro. In addition, 80 blueberry producers attend the annual Grower's Meeting and learned how to eliminate or reduce the latest threats to the blueberry crop by controlling pests and diseases.
- In 2012, over 600 pounds of produce was donated to local food pantries through the

Maine Harvest for Hunger program sponsored by University of Maine Cooperative Extension. Community members and Master Gardener volunteers are supplied with free seeds and educational gardening advice for enrolling in the program.

- Master Gardener Volunteers spent over 525
 hours volunteering on projects in 2012,
 many of these focusing on food security
 issues. Community and demonstration
 gardens are located in several Washington
 County towns. Other projects include
 school gardens in Eastport and Robbinston,
 historic garden restoration in Machias at the
 Burnham Tavern, Machiasport at the Gates
 House and in Pembroke at the Historical
 Society.
- School Garden 101, a three-part course teaching school staff (teachers, aides, cooks, health coordinators, etc.) how to create a school garden and tie it to classrooms and the cafeteria. The course had 15 participants from eight Washington County schools.
- University of Maine's Marine Extension
 Team has been assisting the Washington
 County towns of Perry and Pembroke with
 the management of river herring stocks for
 commercial and recreational uses. Alewife
 and blue-backed herring (jointly known as
 river herring) migrate from the ocean to
 spawn in Maine's fresh water lakes and
 rivers. In 2011, Pembroke's authority to
 govern the harvest of river herring was
 revoked because of failure to meet State

- requirements. In 2012, Chris Bartlett with Cooperative Extension began coordinating the monitoring of river herring in Pembroke. As a result, recreational harvest was restored in 2013. Chris has also been working closely with fishermen in Perry since 2008 to monitor river herring stocks and maintain their commercial fishery.
- The University of Maine's Marine Extension Team has been collaborating with Cooke Aquaculture USA to raise blue mussels (Mytilus edulis) alongside pens of Atlantic salmon (Salmo salar) in Washington County. This integrated multi-trophic aguaculture (IMTA) approach is an exciting alternative to mono-culture aquaculture because the shellfish remove organic particulate wastes such as uneaten fish food that reduces environmental impacts of commercial salmon farming while increasing sustainability, profitability, and public acceptance. In February 2013, this effort resulted in the harvest of Maine's first IMTAraised mussels and the 2014 harvest is expected to exceed 20,000 pounds. In addition, Cooke Aquaculture USA has identified markets that pay a premium for salmon raised using IMTA principals. Trials will continue in 2013-2014 with efforts to increase mussel production and efficiency on Cooke Aquaculture's farms in Washington County. Project partners include University of Maine Aquaculture Research Institute and Downeast Institute for Applied Marine Research and Education.
- As a result of facilitation, promotion and technical support provided by UMaine

University of Maine Cooperative Extension's successful educational programs result from a federal, state and county government partnership. Since 1919, when the Maine Legislature passed the County Extension Act*, the University of Maine has been in all Maine communities with a county office whose operations are funded by county government. Our educational programs anticipate and respond to local and state needs and issues. We also communicate those issues and opportunities to UMaine faculty to influence their research and development plans.

A sampling of our educational program areas:

- Agriculture Business & Community
- Food & Health
- Gardening & Horticulture
- Home, Family & Youth Natural Resources
- Insect & Plant Disease
- Management Safety & Preparedness

Extension, during the summer of 2013 the USDA Summer Food Service Program provided an estimated \$193,836 to five new sponsoring organizations to serve an estimated total of 66,362 nutritious meals to an average 596 children per day at 11 sites in nine communities. When added to sites that participated in previous years, \$226,249 of USDA funds were spent in Washington County to feed an average 840 children per day in 13 communities, including 90 Native American and 100 migrant participants. This represents 20% of the school age population. UMaine Extension provided fun and engaging nutrition education at some of the sites.

- Despite a significant loss of federal funding that resulted in reduction of Washington County Eat Well Nutrition Program staff from three full-time positions to one parttime position, practical hands-on nutrition education was provided to 556 children in kindergarten through third grade, in six schools, in eight towns. In addition, 50 parents of 88 children, from 22 towns, participated in education to learn about stretching limited family food budgets, nutrition and food safety. A VISTA volunteer was recruited and trained to help offset the loss of staff during the summer of 2013.
- A registered dietitian/nutritionist faculty member provided food and nutrition education to approximately 300 adults and 300 children with an emphasis on reducing risk for chronic disease and food-borne illness.
- Food and nutrition-related training and technical assistance was provided to volunteers and staff of several partner organizations.

Youth and Families

 Nineteen Extension Homemakers meet in Whitneyville on a monthly basis for the purpose of strengthening and extending adult education into the home and community. Maine Extension Homemaker goals are to develop leadership, promote the University of Maine Cooperative Extension educational programs and support worthy community causes. In September, the group hosted the two day

- 2012 State Extension Homemaker meeting in Whitneyville, attended by 85 participants from throughout Maine.
- The 7th annual 4-H Robotics Expo was held with approximately 80 youth in attendance from nine schools. Participants attended workshops on science related topics including mapping for animal science, DNA, and food science.
- 4-H Super Sitter training was held for nine boys and girls age 12 and older.
 Participants learned the basics of childcare featuring safety during the six-hour training.
- Nine 4-H members presented to an audience of 50 people at the Washington County Public Speaking Tournament. Several 4-H members went on to participate in the regional event in Orono.
- Thirteen volunteers participated in a 4-H
 Shooting Sports training. The 16-hour
 training taught both the disciplines of rifle
 and shotgun. Volunteers were trained in the
 4-H Shooting Sports curriculum and learned
 how the program can be shared with youth
 in a club setting. Safety and positive youth
 development were focal points of the event.
- In the 4-H program, 27 volunteers led six clubs, independent members and after school programs in Jonesboro and Steuben.
 4-Hers work on animal science, community service, communication, and gardening projects to name a few. In addition to working on projects, 4-Hers have the opportunity to attend statewide and national events.

Local Partnership

Our County Extension Association is the vital link between the county, our communities and UMaine. The Association's Executive Committee is comprised of local volunteers who represent community interests by advising UMaine Extension staff on educational programs, advocate for and secure funding from county government to support the county office, oversee the office budget and facilities, and guide UMaine Extension staff in identifying their programming goals.

Statewide Extension Funding



As a unique partnership among federal, state and county governments, UMaine Extension uses funding from Maine counties and the University to match and leverage support from the United States Department of Agriculture, other federal grantors, state agencies and private foundations. Each county UMaine Extension office is also part of a statewide organization and the national Extension system.

University of Maine Cooperative Extension Support for Washington County

2012	
Local Salaries and Benefits	\$487,604
Prorated Support from UMaine*	404,428
Computer Equipment & Networking	8,233
Statewide Animal Diagnostic Lab	4,377
Marketing, Publications and Video	1,613
Postage	2,804
Telephone	1,670
Travel	18,767
Total	\$929,496

Prorated Support from UMaine* reflects salaries & benefits for administrative and statewide staff.

Without statewide support, UMaine Extension would not be present in this county. Funds for projects are provided through the University of Maine, Federal Formula Funds, grants, contracts, and fees. Dollars from other sources support salaries and benefits for Extension Specialists, County Educators, Extension administration, computer equipment and networking, publications, postage, telephone, and travel.

2013 Washington County Budget

Equipment	\$ 2,000
Insurance	\$ 430
Rent	\$ 7,200
Utilities	\$1,200
Supplies	\$ 2,000
Postage	\$ 100
Telephone	\$ 2,200
Program Support	\$ 1,370
Secretarial Salary	\$ 23,500
Total Budget	\$ 40,000

Each year, Washington County tax dollars support the UMaine Extension with physical office space, support staff salaries, office supplies, equipment and some programming expenses.

Washington County Photos



A Washington County 4-Her was very successful at the Regional 4-H Public Speaking Tournament. She placed in her division amongst other participants from Hancock, Knox, Lincoln, Somerset, Penobscot, Piscataquis, Waldo and Washington Counties.

Washington County Photos Cont.



Senior Companion volunteers, advisory board and staff pose for a group photo at a monthly training.



Volunteers were trained in the 4-H Shooting Sports curriculum, learning how the program can be shared with youth in a club setting. Safety and positive youth development were focal points of the 16-hour training.



Extension Educator Marjorie Peronto (I) works alongside Master Gardener volunteers at the demonstration gardens located in Machias. All produce grown is donated to the local food pantry.



4-H members participated in 4-H@UMaine, an event that connects youth ages 12 to 17 to all the University has to offer.

The County Extension Act

The County Extension Act explains the role of county government in funding local Extension offices:

Cooperative extension work shall consist of the giving of practical demonstrations in agriculture and natural resources, youth development, and home economics and community life and imparting information on those subjects through field demonstrations, publications and otherwise. For the purpose of carrying out this chapter, there may be created in each county or combination of two counties within the State an organization known as a "county extension association," and its services available to all residents of a county. The county extension is viewed as a unique and important educational program of county government. The executive committee of each county extension association shall prepare an annual budget as requested, showing in detail its estimate of the amount of money to be expended under this chapter within the county of counties for the fiscal year. The executive committee shall submit to the board of county commissioners on a date requested by the county commissioners, and the county commissioners may, if they deem it justifiable, adopt an appropriate budget for the county extension program and levy a tax therefore. The amount thus raised by direct taxation within any county or combination of counties for the purposes of this chapter shall be used for the salaries of clerks, provision of office space, supplies, equipment, postage, telephone, a contribution toward the salaries of county educators and such other expenses as necessary to maintain an effective county extension program.¹

¹Excerpted from Title 7, Chapter 7 of the Maine Revised Statutes, §191−§195.

Statewide Highlights

A sampling of programs that have statewide and local importance:

Spotted Wing Drosophila (SWD): Maine's 60,000 acres of wild blueberries are inextricably tied to the state's identity and economic success. This \$69 million crop, along with all soft fruits, is under immediate threat by the SWD, an invasive fruit fly that has spread quickly throughout the state since first being detected in 2011. The fly lays its eggs in fruit prior to ripening and the larvae hatch and ruin the ripe fruit. UMaine Extension and Experiment Station researchers have engaged in emergency efforts to track and map infiltration of the SWD in Maine. We are using different baits in different crops in an effort to understand the biology, habits, and movement of the fly. Research results and mitigation recommendations are rapidly being communicated to growers.

Short- and Long-term Efforts to Alleviate Hunger: In Maine one in five children under the age of 16 live in homes where they're not sure where their next meal is coming from. Forty three percent of people defined as food insecure do not qualify for food stamps or other government programs, and need help. Our Harvest for Hunger program provides high quality fruits and vegetables to hungry people in Maine. For the past 10 years, hundreds of volunteers in every County in Maine have grown food in community gardens, school gardens, home gardens, and commercial farms to donate to local food pantries, shelters, soup kitchens, and senior programs. Food recipients are encouraged to actively participate by learning from the program—they receive recipes, cooking, and gardening tips and learn about a healthy diet. This year school children, employees of businesses, community members, and Master Gardeners volunteered more than 830 hours to grow, glean and donate more than 209,000 pounds of quality food for those in need, and in an effort to stem the tide of need, helped the recipients learn about gardening, cooking and preserving.



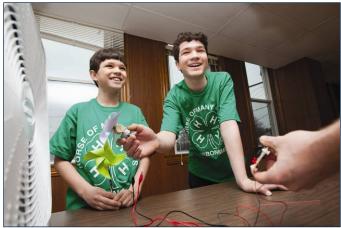
Research Trials To Benefit the Aquaculture Industry:

Working with a Maine-based biotech company, UMaine Extension conducted research trials for a new dietary supplement to determine its effectiveness to even out the timing of the smolting process and increase growth for aquaculture-raised salmon. Using the supplement will allow an increase of production between 5 and 10 percent (\$3 to \$5 million per year in Maine alone) giving aquaculturalists another tool to increase yield and profits. The trials were successful and the product has been introduced to the international market.

eLearning for an Army of 4-H Volunteers: 4-H

programs are of greater significance to children and the community than ever before. In Maine, as in other states, our most important role is to recruit, train, and coordinate the work of high quality youth and adult volunteers - there cannot be effective 4-H programs without well-trained volunteers. In 2010, we implemented a new web-based training program that makes it easier for volunteers to complete their initial training without compromising the quality of their experience. Once complete, volunteers engage in specific face-to-face trainings by our staff. In the past year, 700 volunteers have completed the eLearning series. During 2012 over 29,000 youth were generously supported by more than 1,500 adult and 6,000 youth volunteers in Maine's 4-H Youth Development Program through clubs, camps, schools, nutrition programs, and after school programs.

The Maine Animal Health Lab: Maine has a growing farm population, a commercial poultry industry, and too few livestock veterinarians. UMaine Extension's Maine Animal Health Lab (UMAHL) offers diagnostic services to large- and small-scale producers when there is no local veterinarian or when the local vet does not have relevant expertise. We help poultry producers meet regulatory demands through testing, and diagnose animal health issues that may have profound negative economic consequences for an individual producer or an entire industry. Savings to the poultry industry in Maine is estimated at over \$7 million per year through prevention



of outbreaks as a result of the Lab's salmonella regulatory testing services. Testing for mastitis in cattle has saved the dairy industry an estimated \$10 million per year thanks to early detection and mitigation. Sheep producers have avoided approximately \$400,000 per year in costs associated with infectious preventable diseases such as parasites, footrot, and caseous lymphadenitis. Providing quick diagnostic intervention has helped producers maintain healthy livestock and stay in business.

iOutreach: Our priorities have always focused on meeting the needs of Maine's people on the community level by providing education to a diverse and geographically dispersed clientele. Today, consumers are connected to the world through social media sites and the Internet, and have mobile devices where they can access resources anywhere they happen to be. New technologies have changed the way our programs are delivered and revolutionized our educational outreach. Over the last two vears we have created over 150 short, educational videos in a series called Experts on Demand. Videos are shared across the University of Maine website, embedded in social media platforms, and showcased to important stakeholders. In 2012 we prioritized a new technology-based position to provide organizational leadership and work directly with social media and video production.

Internet-based videos have exponentially increased the capacity for UMaine Extension to reach Maine consumers anywhere, anytime. Analytics show that our videos have been viewed nearly 800,000 times since 2010, with 49 percent of the views from Maine. Data allow us to know the most viewed topics, and consequently becomes an important element in understanding trends and interests over a much greater population, increasing our capacity to meet those trends.

Healthy Moose and the Maine Economy: The iconic Maine moose is an important element to the Maine economy, helping drive the tourism and hunting industries - wildlife watching and hunting in Maine are estimated to generate \$1.8 billion annually. Since 2010, UMaine Extension has worked with the Maine Department of Inland Fish and Wildlife (IFW) to help diagnose the causes of premature death in Maine moose. Saving even 10 percent of the moose population by diagnosing and preventing internal parasites helps maintain the value of the tourism and hunting industry in Maine. Through necropsies our animal health lab discovered large numbers of lungworms, initiating a research project of lungworm morphology and associated DNA. We identified specific

practices to help reduce the risk of lungworms and have worked with both the IFW and the Maine Center for Disease Control to help inform the public about health concerns when in close contact with wildlife.

For More Information about Washington County:

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