

1 8 6 5 THE UNIVERSITY OF
MAINE
Cooperative Extension

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*Above; 4-H Youth Bromlyn Gray, photo by 4-H staff.
All other photos by Tori Lee Jackson, Associate
Extension Professor.*

2013 Androscoggin and Sagadahoc Counties Cooperative Extension Annual Report

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.

Cooperative Extension

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

Partners in Our Communities

Our local partner, the Androscoggin-Sagadahoc Counties' Extension Association (ASCEA), was created by the Maine Legislature in *The County Extension Act*. The Association is the official body in the counties for carrying on Extension work, with funds from the two counties to support the local office, and to provide educational information and programs.

The Association's Executive Committee, whose members volunteer their time and effort, is the vital link among the two counties, our communities and the University of Maine. Major roles of the Executive Committee:

- Advise staff on the educational programs needed in our counties.
- Secure funding from Androscoggin and Sagadahoc Counties to support the local office.
- Manage the office budget and facilities.

*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

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



Photo by Tori Lee Jackson, Associate Extension Professor

Androscoggin and Sagadahoc Counties Highlights

2013 Annual Report
from **Tori Lee Jackson**,
Associate Extension Professor

Increasing Maine's Meat Processing Capacity

Leading a multi-agency team formed in January of 2010, I convened monthly meetings with a potential business owner to assist in moving the project forward. Team members from UMaine Cooperative Extension, Coastal Enterprises, Inc., the Androscoggin Valley Council of Governments, as well as frequent consultations with the Maine Department of Agriculture, assisted in the creation of a business plan for the proposed processing facility. Two new businesses have been opened as a result of these efforts: Northeast Meats, a local meat processing facility in Gardiner, Maine and Dirigo Quality Meats, a food safety consulting business based in Cumberland. I also am part of the Maine Sustainable Agriculture Society-led working group, More Maine Meat. We convene each summer to discuss how we can work together to increase profitability of Maine's livestock producers. With more than three years of research and planning behind us, the local meat processor business owners I have been working have opened a new facility this year, Northeast Meats, creating 7 new jobs in Gardiner. A second company, Dirigo Quality Meats in Cumberland, which focuses on helping other processors get up and running by assisting with the strict food safety laws and regulations, has also begun operating. These two new businesses are well positioned to take advantage of the local food movement in Maine and the needs of the growing livestock industry, particularly beef, lamb and poultry. I have published an article (Appendix 5) in the Journal of the National Association of County Agricultural Educators (NACAA) in May 2013 about the need for increased slaughter & processing capacity in Maine, the opportunities for small producers and how Extension can assist entrepreneurs.



Photo by Tori Lee Jackson, Associate Extension Professor

New Farmer Education

In 2011, I assumed statewide leadership in developing resources and programming for new farmers in Maine. A new farmer website has been launched (<http://extension.umaine.edu/new-farmers/>) that contains a number of videos specific to new farmers. I also help to coordinate a workshop series *So, You Want To Farm in Maine?* that is held each spring at multiple locations around the state. The 2013 class, held in Falmouth, included 31 participants from seven different countries. In addition, I partnered with the local USDA office to offer a New Farmer Series with a slightly different focus in 2012. This seven-session series took a broader approach and included dozens of speakers on topics such as crop management, nutrient management, farm business planning, water and energy management, pest management and farm safety. Individual workshop evaluations were overwhelmingly positive. As we near the one-year mark, we will be doing some longer-term evaluation with the participants.

A participant in the 2013 *So, You Want to Farm in Maine?* series, originally from the Democratic

Republic of the Congo (DRC), asked us to provide new farmer and food safety training to recent immigrants to Maine as well as those currently living in the DRC and Senegal. While our climate, geography and political structures vary greatly, much like Maine, the DRC imports the vast majority of its food. A total of 32 people participated in the two sessions in June and October, which consisted of a mix of in-class training, hands-on demonstration, and farm tours. Participants were eager to take their new business planning and food safety skills back to Central Africa to help build their own local food systems.

I often receive calls from clients interested in exploring farming as a business. Since September 2011, I have conducted nearly 100 new farmer consultations. These consultations helped the potential farmer(s) to best utilize natural resources, use UMaine Cooperative Extension web-based resources, and maintain better records to improve business management decisions.

Following a 2012 *Reading The Farm* training I assisted Sustainable Agriculture Specialist Ellen Mallory develop, it became apparent that there was a need to streamline the various services and agencies available to new farmers. The Beginning Farmer Resource Network (BFRN) of Maine was established in late 2012 as a result of the need for a “one stop shop” for new farmers who do not yet know how to navigate the network of agencies and institutions they may need to work with as they begin farming. The [BFRN website](#), currently hosted by the University of Maine, includes



Photo by Tori Lee Jackson, Associate Extension Professor



Photo by Tori Lee Jackson, Associate Extension Professor

seventeen member agencies and institutions who have put together a large number of resources geared towards helping new and beginning farmers find what they need to be successful. The BFRN sponsored two days of training at the Maine Agricultural Trades Show in January 2013, which were very well received. Following up on this success, an advisory panel made up largely of BFRN members, has worked to create a Maine chapter of the Farmer Veteran Coalition, an agricultural training and support program for returning veterans. We have congressional support, as well as Maine legislative support, as we begin to design this new program.

A two-year post-program survey of the 2010 *So, You Want to Farm in Maine?* participants indicated that at least two farms now have business plans and two also have marketing plans. Participants of the 2011 and 2012 farm business series have written 12 business plans. Since 2008, 401 new farmers have participated in a consultation with me or attended a class I taught. As a result of the consultations, twenty-one new farm businesses have been started where the farm operator has a good understanding of the importance of business planning and how to connect to the educational, financial, and service resources available to them in Maine. This has meant the addition of 57 jobs and about \$1.3 million to Maine’s agricultural economy.

Master Gardener Volunteers

The Master Gardener Volunteers (MGV) program continues to be one of the most recognizable and impactful programs of UMaine

Extension. In 2013, 17 new MGVs were trained in Androscoggin and Sagadahoc Counties. Some of the projects Master Gardener Volunteers supported in 2013 include:

- The Patrick Dempsey Center for Cancer Hope & Healing community garden in Auburn, where cancer patients and their families have the opportunity to garden and use the produce for healthy cooking classes.
- The P.A.L. Youth Gardening project, also in Auburn, where at-risk youth learned to grow vegetables and cook with them.
- The L.O.C.A.L. Garden in Bath where gardening is part of the school's curriculum and produce is used in the food service program.
- And many, many more projects that are both educational and open to the public, with a focus on food production and maintaining Maine's native plant populations.

In total, forty-six Master Gardener Volunteers from Androscoggin and Sagadahoc Counties volunteered 1230 hours (an estimated in-kind value of these volunteers is \$20,7132.00 based on *Independent Sector's* valuation of volunteer hours at \$16.84 per hour). Additionally over 245 lbs. of produce was collected and donated to UMaine Extension initiative, Maine Harvest for Hunger.

4-H Youth Development

4-H supports young people from elementary school through high school with programs designed to shape future leaders and innovators. Fueled by [research-driven programming](#), 4-H'ers engage in hands-on learning activities in the areas of science, citizenship and healthy living. Associate Extension Professor, Kristy Ouellette and Extension Professional, Sarah Sparks work with youth, volunteers, teachers and afterschool providers to strengthen and support the 4-H Youth Development program locally.

The 4-H Youth development program in Androscoggin and Sagadahoc counties currently



Associate Extension Professor Kristy Ouellette presenting the Sportsmanship Award to 4-H youth Courtney Hall.

serves 164 youth in traditional club programs and over 500 youth in school or community based programs. There are currently eleven traditional 4-H clubs. New traditional and afterschool clubs are focused primarily on 4-H Science.

Local Impacts 4-H Youth Development has on youth

- Since 2008, the 4-H youth development program in Androscoggin/Sagadahoc Counties has seen an increase in enrollment of 192% (110).
- 86% (6) of 4-H teens that have graduated from high school have gone on to higher education. Teens reported the information learned through 4-H assisted them in being better prepared for college.
- 52% (85) of 4-H youth have annually participated in 2 hours of community service. This time is equivalent to value of over \$2,800.00 based on *Independent Sector's* valuation of volunteer hours (\$16.84 per hour).
- 81% (132) of 4-H youth participated in programs focused on expanding Science life skills.

Long Term Impacts

- 50% of the clubs that existed prior to 2008 are still engaged in county and community activities.



A 6th grade 4-H member from Hillview who participated in a 4-H event on campus shared, “I plan to attend the University of Maine when I apply to college. Because of 4-H, I was able to visit campus and learn from college students that I have what it takes to apply.” This youth had an increase in confidence and self-esteem as a result of participating in 4-H.

- In reviewing data from 2009-2013, 15% (25) of youth have been enrolled in the 4-H program for 4 or more years. 30% (50) of youth have been enrolled for 2 or more years.
- Nationally, Youth in 4-H Science programming reported having high educational aspirations. When asked how far they want to go in school, half of youth surveyed want to finish college.
- Nationally 4-H youth have higher educational achievement and motivation for future education than non 4-H youth.

Local Impacts of 4-H Volunteers

- In 2013, 45 volunteers collectively provided over 16,500 hours of annual service to this program, an investment of over \$277,000* in high-quality, hands on, positive interactions with young people in Maine (*an estimated in-kind value of these volunteers is \$277,00.00 based on *Independent Sector's* valuation of volunteer hours at \$16.84 per hour).
- 35% (26) volunteers have been engaged in the county 4-H program for over 4 years. These volunteers have provided leadership, educational programs and support to over 400 youth members.

Selected 4-H Program Highlights

Expanding Science Programming

Youth in Androscoggin/Sagadahoc counties are not alone in their science deficiency. Prior to 2008, youth who wanted to enroll in 4-H in Androscoggin/Sagadahoc Counties were limited to animal science projects. In 2013, Science programming including programs in Robotics, Wind Energy and Environmental Science was offered at five local libraries in Androscoggin/Sagadahoc counties, serving over 100 youth.

4-H partnered with local summer feed sites to offer a six-week summer of 4-H science program. This program was replicated in three counties state wide, using universal lesson plans and evaluation. In Androscoggin/Sagadahoc counties 127 youth participated at three locations.

Teen Leaders of Androscoggin-Sagadahoc Counties

In 2013, teen leaders planned, organized and implemented a 4-H science fun day for all youth in Androscoggin/Sagadahoc counties. Over 40 youth participated in this event.

Partnering with Local Housing

4-H has partnered with Lewiston Housing, Auburn Housing and River Valley Village to offer



Master Gardener Volunteer at work. Photo by UMaine Extension staff.

a variety of 4-H Afterschool programs to residents. In 2013, 4-H Science programming was in full swing. Middle and high school youth learned new concepts and ideas. During school vacation week, a time when at risk youth are often at risk for learning loss, these teens planned and implemented a 4-H Science Fair for younger youth. Over 100 youth participated in this event. Monthly science sessions have been offered and well attended.

Trainings for 4-H Volunteers and Educators

4-H Afterschool Academy

This program is a combination of face-to-face and web-based training in which 351 afterschool staff participated. Providers were introduced to 4-H and positive youth development, child development, civic engagement and 4-H Science. Afterschool staff learned how to actively engage students using 4-H Science curriculum and prepare them to engage with other students through a host of science activities, including the

National 4-H Science Day. Training afterschool and out of school time providers proved to be a niche in which Maine 4-H can excel. This program was highlighted in the Spring edition of the Journal of Extension.

<http://www.joe.org/joe/2013june/tt6.php>

In addition to the afterschool academy, 130 volunteers/afterschool providers/teachers have received in depth training in 4-H science in 2013.

Eat Well Nutrition Education Program

The Eat Well Nutrition Education Program helps limited income families with young children and adults improve their skills in nutrition, food purchasing, and food preparation. Two part-time Eat Well Nutrition Associates involve participants in activities such as label reading, cooking, menu planning and food budgeting to help them gain knowledge and skills to improve their self-sufficiency skills and nutritional well-being.

In the past year, Eat Well Nutrition Associates have provided educational programs to a variety of groups including Head Start Parent groups, public schools, Summer Food Service Program Sites, WIC Program, various group home settings, local food pantries as well as collaborated with the Master Gardeners on the community garden projects. A quarterly newsletter, Eat Well, is provided to potential, current and graduated clients featuring low cost recipes and current nutrition and food safety topics.

Evaluations of the program have shown that participants' scores for both dietary adequacy and food and nutrition knowledge increased significantly. Graduates also showed improvements in their knowledge of food handling and storage to reduce their risk of food borne illness.

Behavior Change Highlights:

- 100% of participants showed positive change* in food group consumption at exit (grains, fruits and vegetables, milk, meat and beans).

*Positive change means exit intake was nearer recommended amount for age, gender and level of physical activity

- 92% of participants showed improvement in one or more food resource management practice (i.e. plans meals, compares prices, does not run out of food or uses grocery lists).
- 96% of participants showed improvement in one or more nutrition practices (i.e. plans meals, makes healthy food choices, prepares foods without adding salt, reads nutrition labels or has children eat breakfast).
- 24% of participants demonstrated acceptable food safety practices (i.e. thawing and storing foods properly).

Eat Well Educational Impacts 10/12 - 9/13*

- Number of Program Families: 28
(representing 94 family members)
- Number of Children in Groups: 668
(representing 17 groups)
- Number of Newsletters distributed: 3000

*WEBNEERS FY13 Summary Report



Photo by Tori Lee Jackson, Associate Extension Professor

Maine Families Home Visiting Programs

Issue

According to the US Census' American Community Survey, 14.7% of Mainers of all ages live below the poverty line. One in five Mainers under the age of 18 (20.9 %) live in poverty and one in four children under the age of five (26.9%) live in poverty! "Because family economic distress is associated with negative social, economic and health outcomes for children, these negative outcomes tend to be concentrated in poor and low-income families."¹

What has been done?

Home visiting as described in the Patient Protection and Affordable Care Act of 2010, is defined as an evidence-based program, implemented in response to findings from a needs assessment, that includes home visiting as primary service delivery strategy and is offered on a voluntary basis to mothers, fathers, families, pregnant women, infants, and children birth to five. Home visiting seeks to improve maternal and child health; prevent child injuries, abuse or maltreatment; reduce emergency room visits; improve school readiness; improve family economic self-sufficiency, and improve coordination and referrals for other community resources and supports.

Results

Afforded thru external funding two FTE University of Maine Cooperative Extension Parenting Education Professionals, working in Sagadahoc County, as part of the statewide network of Maine Families Home Visiting programs have enrolled 67 families living in Sagadahoc County. These families received parenting education and support through 445 achieved home visits, numerous phone coaching conversations and referrals to other services and activities for young families in the area. Using the evidence-based home visiting model, Parents as Teachers™, with its numerous studies demonstrating positive outcomes, Parent Education Professionals have partnered with

parents in being their child's first teacher and becoming self-sufficient families. Last year 39 of these families, or more than 58%, identified their household income as unable to meet their basic needs. 28 or 41% rented a home, 14 or 20% lived with others and 2 families were homeless. With more than 50% of enrolled families identified as low-income, the parent educators serving Sagadahoc County have documented the following results:

- 84% of new moms breastfed their babies at birth
- 49% of moms breastfed their children through 6 months of age
- 35% of moms breastfed their children through one year
- 93% of enrolled children were up-to-date with immunizations
- 98% of children had health insurance
- 91% of children were up-to-date with well child check-ups
- 94% of eligible children were screened for developmental delays.
- 63% of children are read to daily

1 Mather, Mark and Adams, Dia. April 2006. "The Risk of Negative Child Outcomes on Low-income Families." A KIDS COUNT/PRB Report on Census 2000. Annie E. Casey Foundation

Statewide Highlights

- **Maine Food System:** Once thought a dying industry, farming is realizing a renaissance. In the past decade, 1,000 farms have been added in Maine, where more than 1.3 million acres are in agricultural use. This success is dependent on a well-functioning food system in which policy, research, production, processing, commerce, nutrition, and food security and safety are integral and interrelated. And that's where University of Maine Cooperative Extension comes in.

UMaine Extension is a significant part of the food system in Maine, which has the largest

and most diverse agricultural economy in New England. Sales from farms were over \$614 million in 2010, led by potatoes, milk, poultry and livestock, eggs, greenhouse and nursery, wild blueberries, and other fruits and vegetables. In each of these commodity areas, UMaine Extension provides research-based information from reliable experts that experienced farmers and new growers alike can trust.

UMaine Extension faculty and staff also provide essential background information to policymakers, legislators and others as they decide issues related to the food system, including the regulation of pesticides, licensing of food producers and processors, and ways to stimulate the Maine economy for the future.

- **Maine Harvest for Hunger:** UMaine Extension is committed to initiatives such as Maine Harvest for Hunger, an effort to grow fresh vegetables and fruits to donate to food pantries and soup kitchens.

Begun in 2000, the University of Maine Cooperative Extension's Maine Harvest for Hunger program is a grassroots effort to encourage gardeners, farmers, businesses, schools, civic groups and others to donate high quality fruits and vegetables to citizens in need.

Through county-based networks, donated produce is delivered to food pantries, soup kitchens, community meals, and individuals across the state.

Horticulture education leads to better gardens and nutrition education provides information on how to prepare healthy meals.

- **Food Safety Education for Families and Commercial Food Producers:** Each year 48 million people in the United States become ill from eating adulterated food. In Maine, food safety risks exist from home food preparation and preservation, people serving crowds, and

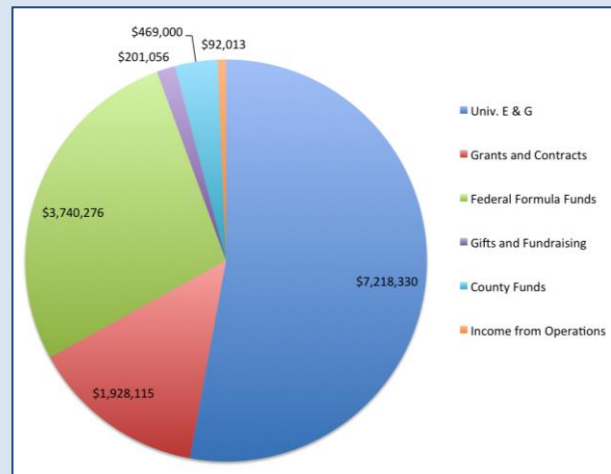
in retail and commercial food sales. UMaine Extension provides food safety training programs that include food preservation, cooking for crowds, general food safety for the home, industry food sanitation, and certification for meat, poultry, and seafood producers. We estimate that more than 50,000 consumers of home prepared and preserved food, and those attending public and community events have a reduced potential to contract foodborne illness due trainings provided by our food safety program. Further, more than 500,000 statewide, national, and international consumers of food produced by New England-based retail and commercial food businesses have a reduced potential to contract foodborne illness as a result of trainings provided by our food safety program. These results are decreasing the occurrences of foodborne illness and increasing overall health in Maine and wherever Maine foods are sold and consumed.

- 4-H Science, Technology, Engineering, and Math (STEM):** 4-H STEM programs in Maine provide youth with hands-on learning experiences to develop passions that will help to prepare the next generation of scientist-leaders. In 2011 Maine 4-H youth completed more than 14,000 projects, many of which were integrated within communities to address local problems.

In one example, during the first year of our Tech Wizards program, teams of students are helping build underwater submersible robotic vessels based on a design by students from the Massachusetts Institute of Technology. The robots seek out invasive aquatic plant species that are threatening Maine's lakes and waterways – especially *Eurasian Milfoil* which has caused millions of dollars in damage and mitigation expense in Maine. Youth then use the DASH (diver assisted suction harvester) boat and remove the invaders.

- The Fundamental Tradition of the Maine Homemakers:** The Maine Extension Homemakers Program is a Maine tradition.

Statewide Extension Funding FY2013



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.

UMaine Cooperative Extension Support for Androscoggin and Sagadahoc Counties

CY2013	
Local Salaries and Benefits	\$350,955
Prorated Support from UMaine*	\$396,398
Computer Equipment & Networking	\$4,925
Statewide Animal Diagnostic Lab	\$3,293
Marketing, Publications, Video	\$1,943
Local Programming Expenses	\$2,770
Postage	\$2,880
Telephone	\$1,277
Travel	\$22,742
Total	\$787,183

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.

For decades Maine Homemakers have been engaged in strengthening communities through support for worthy community causes.

During 2011 more than 700 Maine Extension Homemakers in 10 counties offered community education programs in areas such as food safety, personal safety, nutrition and health, gardening and the environment, financial planning, consumer issues, family relationships, and cultural and creative arts. At the same time they were actively donating their time, money, and materials to improve the lives of community members. Extension Homemakers have improved the quality of life in their communities by volunteering more than 18,900 hours, the estimated dollar value of which was over \$320,000.

- **Signs of the Seasons:** Climate change is affecting the environment around us. In order to fully understand these changes scientists need as much data as possible. Signs of the Seasons is a program of UMaine Extension and Maine Sea Grant, and with other Maine-based partners is part of an international effort to train citizens to observe and record the seasonal timing of life cycle events to build a comprehensive database of information for scientists. We are coordinating a network of Master Gardeners, 4-H youth, coastal groups, and citizens who are adding to the body of scientific knowledge related to phenology, the scientific study of seasonal changes. This knowledge will allow Maine to be better prepared to adapt to environmental changes to keep our agricultural, economic, and cultural prosperous.

Androscoggin-Sagadahoc Counties Cooperative Extension Office



Photo by Tori Lee Jackson, Associate Extension Professor



A Member of the University of Maine System

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