



2019 ANNUAL REPORT

UNIVERSITY OF MAINE COOPERATIVE EXTENSION
WALDO COUNTY

Information you can use. Research you can trust.

extension.umaine.edu

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OFFICE OF THE DEAN

Welcome to the University of Maine Cooperative Extension! We are located across the state in 16 county offices, research farms, 4-H camps and learning centers, and online. We are the largest outreach component of the University of Maine and reach more Maine people than any other entity within the seven campus University of Maine System. Our work is focused on helping Maine communities thrive and we do so focusing on two areas of excellence--the Maine Food System and 4-H. UMaine Cooperative Extension conducts the state's most successful out-of-school youth education program through 4-H, empowering young people to reach their full potential. Extension also helps support, sustain, and grow the food-based economy across the entire state of Maine. In addition, we partner with other organizations and programs to provide additional educational opportunities to a diversity of audiences across this state.



UMaine Cooperative Extension is determined to make a positive difference in our areas of excellence and beyond for the citizens of Maine. Explore our website, visit a county office, and contact our enthusiastic workforce.

— Hannah Carter, Dean

Waldo County Extension Association

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***Putting university research to work in homes, businesses, farms,
and communities for over 100 years.***

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

STATEWIDE HIGHLIGHTS —MAINE FOOD SYSTEM

Supporting Maine's Wild Blueberries

Relevance – Wild blueberries are a \$250 million industry in Maine. Mummy berry and Botrytis flower blight can be serious diseases in wild blueberries that can greatly decrease yield when they occur. Mummy berry can result in complete crop loss if not effectively controlled. Botrytis can kill off 30% of flowers during bloom, and frost during bloom also can greatly decrease yield. Maine's 510 blueberry growers need accurate weather and disease risk information, and those who use fungicides need timely information on when they should apply fungicides for optimum efficacy. Timely applications of fungicides provide improved control of mummy berry and Botrytis. Avoiding unnecessary fungicide applications also saves growers' money and prevents adding unnecessary pesticides to the environment.

Response – Extension has a network of 15 Internet connected weather stations in low bush blueberry fields. From the weather data and field conditions, we provide growers with biweekly reports on infection risk during mummy berry season and make recommendations on effective times for fungicide applications. In 2019, Extension provided growers with a new weather app developed with AgriNet. This web-based app is available on mobile phones and provides current information for each weather station, and indicates when disease events have occurred. Future additions to the app will include alerts for frost events and inclusion of growing degree day models for important blueberry life stages or pests.

Result – As a result, more growers can quickly obtain information about their fields for weather conditions and disease risks. Growers report substantial savings by avoiding unnecessary applications of fungicides to control mummy berry disease.

Supporting Maine's Potato Industry

Relevance – The \$500 million potato industry is the largest agricultural sector in Maine, encompassing over 500 businesses generating over \$300 million in annual sales, employing over 2,600 people, and providing over \$112 million in income to Maine citizens. The management of insects, diseases, weeds, and other pests is integral in sustaining a healthy Maine potato crop. Potato growers are increasingly relying on a multidisciplinary Integrated Pest Management (IPM) approach to ensure that Maine's potato crop is pest and damage free while attempting to minimize the amount of pesticides that are applied.

Response – UMaine Extension's Potato IPM Program impacts Maine's 300 commercial potato growers and 48,000 acres of potatoes and has become an integral part of the Maine Potato Industry. The program also broadly impacts national and international growers who rely on the state's seed crop. The project maintains nearly 100 specialized insect traps, coordinates a statewide network of electronic weather stations, and surveys 75 potato fields on a weekly basis for weeds, insects and diseases. IPM scientists track potential pest outbreaks to provide growers with current information on treatments to minimize the number of pesticide applications and maximize potato yield.

Result – The economic impact from Extension's pest monitoring and educational programs for the 2019 season is estimated at over \$19 million.

Supporting Food Producers with Food Safety

Relevance – The 2011 Food Safety Modernization Act (FSMA) was a significant change to food safety regulations, introducing a proactive rather than reactive approach to outbreaks. Two major rules impacted farmers and food businesses in Maine, and throughout the U.S. They are the Produce Safety Rule (PSR) and the Preventive Controls for Human Food Rule (PC). The overall goal of these rules is to make our food system safer. For produce farmers, the impact of the changes are the greatest, since this industry has not been regulated before. These farmers remain uncertain of how the regulations affect their work.

Response – In 2019, Extension provided three-day PC trainings to over 30 food producers in Maine and three seafood Hazard Analysis Critical Control Point (HACCP) courses with 60 seafood processors and one Meat and Poultry course with 23 participants. We have scheduled PSR training to over 200 farmers. In addition to these trainings, Extension provided one-on-one consulting and education for over 30 food producers, providing services ranging from facility design, sanitation, thermal process design/validation, and food safety plan guidance.

Result – As a result of participation in these FSMA trainings, over 60 food producers have implemented food safety plans. One company exemplifies the implementation of knowledge gained by participating in all three trainings and receiving one-on-one consulting. In the six years that Extension has been working with this company, they have grown from producing 200 units a week to over 8,000, and grown from 2 employees in 2012 to 12 full-time and 5 part-time employees in 2019. In 2020, they are planning to build a new building capable of producing over 20,000 units a week.

AgrAbility...Supporting Farmers of All Abilities To Remain Active on the Farm

Relevance – The average U.S. farmer is 58 years old, and farming is the sixth most dangerous job in America. An estimated 5,700 farmers, farm family members, or farm workers in Maine have a chronic health condition or disability, such as post-traumatic stress disorder, traumatic brain injury, or aging-related issues, such as arthritis or hearing loss. In addition to farmers, fishermen, forest workers, and migrant workers face similar challenges for remaining successful in production agriculture.

Response – Funded through USDA/NIFA, Maine AgrAbility helps Maine farmers, loggers and fishermen facing physical or cognitive challenges, to enhance their ability to farm and live independently, which improves their quality of life and economic sustainability. AgrAbility specialists assess issues and offer adaptive recommendations. They provide education about safe work methods and connect people with other resources through this nonprofit partnership between Extension and Alpha One. The program supports the capacity of health and agricultural professionals to provide assistance and services for farmers and farm workers with disabilities.

Result – Since the project began in 2010, Maine AgrAbility has provided technical information to over 800 farmers and conducted on-site assessments for over 100 agricultural workers. The diverse agricultural operations include dairy and livestock operations, Christmas tree farms, fruit orchards, agritourism, vegetable and maple syrup production, hay sales, managing woodlots and lobstering. A 2019 program evaluation suggests that participants experienced an increase in economic viability and sustainability, and that AgrAbility suggestions made their farm business more accessible, or using their existing resources differently allowed them to start building up their farm again into a viable and stronger business.

Supporting the “One Health and the Environment” Initiative (OHE)

Relevance – Crossover diseases affect both livestock and wildlife can be a problem in a state like Maine. Likewise, with diseases that affect both animals and humans (zoonoses). These diseases are spread by contact, by shared resources, or by “vectors” such as ticks. Improving detection and prevention of these diseases, such as Lyme Disease, is dependent on education and communication about risk reduction.

Response – To assist in this effort, the UM Veterinary Diagnostic Laboratory (VDL) offers diagnostic assistance for wildlife cases, works with the Extension Insect Control team, and reports on “One Health” topics such as infectious diseases of moose. UM VDL is one of a group of laboratories that “link” regional wildlife agencies with local diagnostic assistance for wild animals, the Northeast Wildlife Disease Cooperative. As well, UM VDL collaborates with the wildlife agencies of Maine, New Hampshire and Vermont in moose health studies.

Result – Participation in the NWDC has been helpful for Maine’s wildlife agencies, and brings expertise both to the region (via NWDC) and to the UM VDL (via collaborations with other labs). UM students benefit from opportunities to work with wildlife disease researchers, and biologists benefit from improved safety in the field due to NWDC workshops. Regionally acquired information provides better disease surveillance, helping wildlife managers. As well, vigilance regarding infectious disease in wildlife helps protect livestock owners. For instance, as the prevalence of *Parelaphostrongylus tenuis* (“brainworm”) increases, sheep producers should change pasture management to avoid snails on pastures, or to reduce white-tailed deer presence in pastures. Similarly, as farmers understand more about Lyme Disease risks, they can reduce their risk of exposure to ticks. The OHE facilitates communication and funding to support surveillance, research and training to reduce these “crossover” and vector-borne diseases.

During 2019, an NSF REU (Research Experience for Undergraduates) 10-week summer program based on One Health projects was held at the University of Maine, and a graduate student began work on a project to reduce the risk of brainworm infections in livestock.

Protecting Maine’s Dairy Industry

Relevance – Maine currently has 8,200 farms, and many have dairy animals. Maine’s dairy industry generates more than \$570 million a year for the state’s economy and contributes more than \$25 million in state and municipal taxes. Dairy farms employ more than 1,300 people statewide, and the industry provides more than 4,000 jobs for Maine people. As well, organic and small ruminant dairies are producing a diverse collection of artisanal cheeses and alternative milk products. For public safety and quality control reasons, all dairy producers must keep pathogenic bacteria out of their dairy animals and their dairy products. It is important for them to identify and cull these chronically infected animals to protect the public, and to avoid spreading this disease on their dairies.

Response – The UMaine Veterinary Diagnostic Laboratory (VDL) offers a local, responsive resource for culturing milk samples (bulk tank or individual animal samples), along with water samples, thus providing a key piece of information for producers, Extension staff, and milk processors. The VDL helps protect Maine’s dairies, both large and small. In 2019 cultured over 1,600 milk samples for mastitis.

Result – Effective responses to animal illnesses are only possible when the disease is identified. Maine’s dairy owners benefit from local, responsive mastitis diagnostic service. At the VDL, Extension staff screen both large and small dairies for mycoplasma, one of the most problematic pathogens for producers of milk or beef. Farmers avoid antibiotic use by culling

animals with incurable infections, such as *Staphylococcus aureus* or *Mycoplasma bovis*. This protects public health, jobs, and this sector of the state's economy.

Recipe to Market Program: Growing Successful Food Entrepreneurs

Relevance – There has been a growing interest in value-added food production in Maine. From farmers looking to add value to their raw products, to Maine families interested in turning their favorite recipes into viable food businesses. In response to this growing demand, the University of Maine Cooperative Extension developed the *Recipe to Market* program in 2007, and has been offering it to statewide audiences annually ever since. The goal of the program is to help potential and existing food entrepreneurs acquire food science and business knowledge and skills to successfully bring a value-added food product to market.

Response – Since its inception, Extension has conducted 28 programs in 9 counties reaching 350 participants across the state. The program is offered in both multiple and single session formats and is designed to help participants understand licensing/regulations, processing/packaging, the specialty food industry and acquire business management knowledge and skills. The program is conducted by a multidisciplinary team of Extension faculty and covers topics such as: Introduction to Specialty Foods; Developing Your Product and Process; Business Realities; Marketing and a resource panel discussion.

Results – As a result of attending these educational programs, more than 90 percent of the participants surveyed indicated they improved their knowledge and skills and plan to adopt business and food processing/safety practices they learned during the program. Long-term survey results indicate that participants used the new knowledge they gained from attending *Recipe to Market* to make more effective business decisions, develop new food products, and write and revise business and marketing plans. The survey results also indicate that 27% of the *Recipe to Market* multi-session participants subsequently started food businesses. We estimate that 60 new value-added food businesses, generating \$2.1 million in direct sales and employing 102 workers were started in Maine by the 221 people attending our *Recipe to Market* multi-session programs since 2007.

Conducting Variety Trials to Support Craft Brewing and Distilling

Relevance – The rapid expansion of the craft brewing and distilling industries in the Northeast has created demand for locally grown and malted barley. In Maine, two craft malthouses opened in 2015 to fill this need. Historically, Maine has grown between three and ten thousand acres of malt barley a year for export to an industrial-scale malthouse in Canada, and the variety of choice has been Newdale. But the craft malting process requires different grain quality characteristics than industrial malting. Craft brewers and distillers seek new and interesting varieties.

Response – In 2015, Extension began conducting annual malt barley variety trials in central and northern Maine, as part of the Eastern Spring Barley Nursery (ESBN) project involving 9 other institutions. The ESBN is coordinated by North Dakota State University and funded in part by the Brewer's Association. Each year 25 varieties are evaluated for agronomic, grain quality, and malting quality characteristics. Using four years of results, Extension worked with Maine's two malthouses and the ESBN coordinator to identify promising varieties for Maine.

Result – As a result of Extension's trials, Maine farmers and maltsters can now use region and state-specific information to select malt barley varieties based on agronomic and malting performance. Extension publishes annual research reports on our Grains and Oilseeds website. Several European varieties have shown greater sprout resistance and equal or better yields and

malting quality as Maine's current standard variety, Newdale. Inspired by these results, Maine Malt House received a Northeast SARE Farmer Grant to conduct at-scale evaluations of two of the new varieties. During the 2019 season, they grew replicated 10-acre blocks of KWS Tinka, LCS Genie, and Newdale. Both new varieties yielded about 10% more than Newdale. Maine Malt House conducted malting evaluations and distributed malted samples to collaborating breweries for their assessment.

STATEWIDE HIGHLIGHTS — 4-H YOUTH DEVELOPMENT

Reducing Summer Learning Loss



Relevance – The U.S. has an identified need to improve student proficiency in STEM disciplines and to better prepare young adults for the workforce. Low-income students are particularly in need, as they tend to lose grade equivalency in summer due to lack of learning opportunities.

Response – To increase science proficiency for Maine youth and to prevent summer learning loss, Extension created and delivered the 4-H Summer of Science (SOS) curricula, exposing youth to informal science, technology, engineering, and math in a fun and meaningful way. The program occurs where youth already are, focuses on reducing barriers to STEM learning, and uses teens and college interns as teachers and mentors. The teen teacher position is often the first paid position for many of the teens.

Result – In 2019, over 3,600 youth and 700 volunteers participated in 50 community sites in 10 Maine counties, and curriculum included ocean literacy and engineering. Eleven undergraduate interns, 41 teens and 12 4-H staff provided program delivery of the weekly activities. 4-H Summer of Science not only helped grade school youth in Maine enjoy STEM learning in the summer, it also fostered career development, leadership, resiliency, and responsibility in the Maine teens who delivered the program in their neighborhoods. The teens and college interns identify many skills they gain in SOS, including responsibility, time management, communication, leadership skills, and career development.

Fostering Positive Science Identities in Youth

Relevance – Educators in the United States, and in Maine, are continuing to work toward fostering interest and positive science identities in youth. They are also searching for ways to engage youth in local, place-based STEM activities, while using best practices for science learning and meeting local state and national standards. Youth enjoy and learn from experiential learning activities, particularly activities that have local and personal relevance and applicability. University researchers continue to explore ways to communicate research to public audiences, including K-12 age youth.

Response – As a way to bring UMaine research to youth audiences, Extension in 2014 developed 4-H Science Toolkits - curricula with associated materials available for loan from Extension offices. These toolkits are available to formal and informal educators at no cost, and the curriculum can be downloaded online. New toolkits have been recently developed or are being developed in mineralogy, meteorites, data science, forestry, solar energy, and aquaculture. Toolkits are standardized so that each serves a classroom group of 25 youth.

Result – The toolkit lending library has nearly 200 individual kits in almost 50 unique STEM subjects. In 2019, over 150 adults borrowed the 4-H Science/STEM toolkits, reaching over 2,000 youth with free hands-on STEM learning. This number is expected to grow with the availability of new toolkits and their use by 4-H STEM Ambassadors, UMaine researchers, and with many faculty adding funding for the creation of 4-H toolkits to their grant proposals. Outside sponsors have also sponsored 4-H toolkits, and the program is also part of a \$20 million National Science Foundation grant to UMaine. By reducing a significant barrier for 4-H volunteers, club leaders, 4-H staff, and other educators, these STEM toolkits are bolstering STEM learning to Maine youth.

4-H Ambassadors Sparking Student Interest in STEM Careers

Relevance – Developing Maine youth’s STEM literacy is vital to ensuring that our state continues to thrive economically and socially. Given the remote and diverse communities where Maine youth live, informal education can help minimize inequities in rural youth STEM education and career pipelines. Future career opportunities in Maine will depend heavily on STEM skills, whether in the growing fields of healthcare and engineering, or in positions requiring technical skills, such as in construction and maintenance of transportation and energy systems.

Response – In 2019, the 4-H STEM Ambassador program staff trained 116 college students to develop and deliver informal STEM-based educational experiences. These volunteers committed 1,740 hours of time including training, preparation and program delivery. Through this program, youth ages 8-14 come to view these Ambassadors as mentors and leaders in their community while also developing skills in STEM through hands-on activities.

Result – The 4-H STEM Ambassador program continues to grow to reach more youth, and engage more UMaine System college students as we engage more partners in our efforts. In 2019, over 850 youth were engaged in at least 6 hours of hands-on science, engineering and mathematics. Youth participants agree they want to learn more about science and feel they are good at science, and feel college could be for them. Our 4-H STEM Ambassadors quickly develop confidence in their abilities as teachers and leaders in STEM education. Over the next twelve months we will extend the program to other higher education institutions in Maine. As part of a successful NSF grant to UMaine, expansion to select Maine Community Colleges will begin in 2020.

Childhood Obesity and EFNEP

Relevance – Nationally, 4.8 million (15.5%) children aged 10 to 17 are obese. Comparatively, Maine’s youth obesity rate is similar to the national rates at 14.9%. Annually, the United States spends \$14 billion to treat childhood obesity, and obese children are almost three times more expensive for the health system than the normal weight child. Rising childhood obesity rates will continue to put a strain on current health promotion programs and continue to raise health care costs for the nation.

Response – In an effort to stop rising childhood obesity rates, UMaine Extension EFNEP implements direct education to Maine’s low-income children to improve their knowledge, behaviors, and attitudes related to improving diet quality, increasing daily physical activity, and using food resources management practices to learn how to plan and shop for healthy meals and snacks. Program outcomes are measured for all youth ages 5-18 using validated pre/post program surveys.

Result – In 2019, 2,056 youth participated in Maine EFNEP. Youth participated in an average of 6 classes over 2 months. Of the 2,056 youth that participated in EFNEP, 1,936 completed a pre and post survey. As a result of participating in EFNEP:

- 77% of youth improved their abilities to choose foods according to current Dietary Guidelines or improved nutrition knowledge.
- 38% of youth improved their daily physical activity practices.
- 53% of youth used safe food handling practices more often.
- 46% of youth improved their ability to prepare simple, nutritious, affordable food.

Early College Helping Rural Youth Transition to College

Relevance – There is compelling research that shows high school students who are exposed to higher education while still in high school, more successfully transition to college, and are more likely to persist to a degree. Furthermore, studies show that rural youth are less likely to aspire to higher education than their peers in more urban or suburban districts.

Response – In 2017, the Maine State Legislature appropriated over \$2 million to support an Early College Initiative through the University of Maine System, from which Extension received a grant to implement an Early College program in rural Oxford County. We began implementing an Early College Outdoor Leadership Pathway in 2018.

Result – In 2019, 24 high school students participated in Early College courses in Outdoor Leadership at UMaine's Bryant Pond site. All participants had a chance to visit the University of Maine, and many report increased aspirations for college and have goals to pursue outdoor leadership as a career path.

4-H Summer Camp-Building Community and Connecting Youth to the Outdoors

Relevance – Research has shown that positive social and emotional learning experiences can significantly impact youth development and connecting youth to a positive adult role model decreases the risk for making unhealthy choices or engaging in risky behaviors. With youth spending more time connected to social media and other digital platforms resulting in isolation and sedentary indoor time, many youth suffer from obesity and/or ADHD, and some lack opportunities to develop positive interpersonal communication skills.

Response – UMaine Extension 4-H Camp and Learning Centers provide programs and opportunities for youth ages 4-17, many from underserved populations, with transformational experiences designed to develop a sense of place and belonging, and confidence in the outdoors. Our programs provide the opportunity to spend each day in a positive learning environment or to live for a week or more alongside trained adult educators, mentors, and caring peers. Our summer camp programs provide youth a wealth of opportunities of programs to choose from, focusing on ecology education, the arts, and outdoor skills, youth can create meaningful experiences that fit their needs.

Result – In 2019, the 4-H summer camps served 2,454 youth from all 16 counties in Maine, 22 states, and 6 countries. Through living and working together, campers and staff became part of an interconnected community committed to a sustainable future. Youth and program alumni report that the 4-H Camp and Learning Center experience has helped them develop greater self-confidence, civic engagement, and personal and academic success.

STATEWIDE HIGHLIGHTS — COMMUNITY AND ECONOMIC DEVELOPMENT

Helping Entrepreneurs in Pricing Skills

Relevance – Small businesses are very important to the economic vitality of Maine’s rural economy. More than 20% of the jobs in rural Maine are created by small-scale entrepreneurs. However, many of these entrepreneurs lack the business skills needed to successfully start-up and grow their businesses. Research shows that helping rural entrepreneurs improve their business skills will improve their chances for success. One of the most important business management skills is pricing. Yet, many small-scale entrepreneurs lack the knowledge and skills necessary to develop a profitable pricing strategy that can help ensure financial success.

Response – During the past year, the UMaine Extension conducted pricing workshops across the state, presented a pricing webinar in collaboration with the Maine Food Strategy, and taught a pricing seminar at a statewide conference for Maine entrepreneurs. The goal of this program was to help existing and aspiring Maine entrepreneurs improve their pricing knowledge and skills so they could develop profitable pricing strategies for their businesses. The program was conducted by Extension faculty and covered topics such as: key elements of pricing, pricing methods and models, pricing strategies, price elasticity of demand, profit margin and cost analysis.

More than 70 rural entrepreneurs from across Maine participated in this highly successful training. They included specialty food producers, farmers, craft artists, food retailers, environmental consultants, bookkeepers and other small rural businesses.

Result – As a result of attending these educational programs, Maine entrepreneurs improved their knowledge and skills of pricing, plan to adopt the pricing techniques they learned, and to set profitable prices for their products and services moving forward. Eighty-seven percent planned to set a new, more profitable, price for their product or service, and 97% planned to adopt the pricing techniques learned during the training. The average participant reported a 157% increase in their knowledge of pricing as a result of attending the workshops. Changes they plan to make within six months of the training included: incorporate the value or their time and profit into their pricing, conduct a thorough cost analysis, research the market before setting prices, and restructure their current pricing structure. Several workshop participants who attended follow-up one-on-one consultations said they subsequently created pricing strategies that led to increased profitability for their businesses.

Master Gardener Volunteers

Relevance – Successful school and community gardens are an important tool for enhancing public health and providing meaningful community engagement opportunities by increasing access to locally grown food, providing a safe space to connect with neighbors, and offering learning opportunities outside the classroom. Extension supports volunteer leaders and provides educational resources, which are key contributors to the success of these projects

Response – The Master Gardener Volunteers (MGV) Program provides participants with a minimum of 40 hours of in-depth training in the art and science of horticulture. Trainees receive current, research-based information from our educators and industry experts and are connected with service projects that match their interests, skill set, and availability. MGV coordinators facilitate relationships between MGV and community partners; assisting with needs assessment, program planning, risk management, and problem solving

Results – The MGV program provides opportunities for gardeners with all levels of experience to connect with meaningful service projects in their community. Of the 937 active MGV, 144 were trained in 2019. In total, they donated 33,500 hours to a variety of educational and food security projects throughout the state including support of: 53 community gardens 50 school gardens 57 demonstration gardens, and 66 youth programs involving 4,129 youth in horticulture activities this year. MGVs reported that they: increased community partnerships, assessed community needs and assets, engaged positively in their community, increased consumption of home-grown food, and developed new or expanded gardens. Many volunteers enter the MGV program with the goal of improving their gardening skills for their own personal benefit and leave surprised by how deeply involved and passionate they become about community projects.

Maine Harvest for Hunger: Mobilizing to Support Food Insecure Citizens

Maine has the highest rate of food insecurity in New England, and ranks 12th in the U.S. The USDA estimates 13.6 percent of Maine households, over 182,000 individuals, are food insecure. Twenty percent of children are food insecure. Twenty-three percent of seniors have marginal, low, or very low food security. Thirty-seven percent of food-insecure people do not qualify for food stamps or other government programs. It is especially challenging for food insecure people to afford high quality, fresh, nutritious food, and donations of fresh produce to Maine's emergency food system has declined significantly in recent years.

Since 2000, UMaine Extension's Maine Harvest for Hunger (MHH) program has mobilized gardeners, farmers, businesses, schools, and civic groups to grow, glean, and donate quality produce to distribution sites (pantries, shelters, community meals) and directly to neighbors in need, to mitigate hunger, improve nutrition and health, and help recipients develop lifelong positive nutritional habits. In addition, educational programs such as Hancock County's Eat Well Volunteers, have focused on engaging food pantry recipients in learning appropriate methods of cooking and using fresh produce, and state-wide Extension programs help teach Mainers to grow more of their own fresh garden produce.

Since 2000, MHH participants have distributed over 3 million lbs. of food to citizens grappling with hunger. In 2019, donations of over 193,000 lbs. of fresh produce from over 120 Maine farms went to 207 hunger alleviation distribution sites. A corps of 365 volunteers and 8 corporate partners from 12 counties logged over 6,000 hours, and the value of the produce is estimated at over \$327,000. Now in its 20th season, MHH has continued to improve the efficiency of supplying fresh produce to food pantries across Maine through building partnerships. For example, through MHH volunteer planning and communications, several food pantries are now sending trucks and vans directly to the farm where gleaning is taking place. Maine has approximately 130 community gardens and many of them are supported by Extension staff and Master Gardener Volunteers. As a result, more than 30 of them now have added an MHH area to their community garden and have contributed almost 20,000 lbs. of our 2019 totals. In Penobscot County, volunteers anonymously sponsor food insecure families by collaborating with the Maine Family Institute to distribute fresh produce to the families, which has resulted in their increased consumption of fresh fruit and vegetables.

Signs of the Seasons: A New England Phenology Program

Relevance – Average New England air temperature increases are among the highest in the continental United States, and sea surface temperatures in the Gulf of Maine have increased faster than 99 percent of the rest of the world's oceans. Little is known about how marine and upland biota respond to these environmental changes. Climate scientists, resource managers, economists, and others need reliable information about the effects of climate change, and the

process of collecting phenology data is a simple, reliable method to ground-truth climate models and understand local-scale biological changes.

Response – Since 2010, UMaine Extension and Maine Sea Grant have worked with state and regional partners to develop and coordinate Signs of the Seasons (SOS), a monitoring program that engages citizens of all ages in observing the timing of seasonal plant and animal life cycle events (phenology). The data are publicly available through the National Phenology Network, and the program offers climate and phenology seminars, webinars, and field-based learning opportunities for participants and the public throughout Maine and New Hampshire. SOS volunteers help scientists document the local effects of global climate change.

Result – In 2019, we trained 78 new adult volunteers, and hundreds of volunteer observers made more than 1,090 site visits and recorded over 43,000 observations of the program's 22 indicator species in Maine and New Hampshire, including rockweed and common loon. Of participants surveyed, 72% reported an increase in their knowledge of climate science, 78% reported taking action regarding climate change and 88% reported a better understanding of phenology as an indicator for climate-related biological change. SOS continues volunteer engagement with increased K-12 programming, and through opportunities for species-specific research seminars

Online Presence

In 2019, UMaine Extension's website at extension.umaine.edu – a composite of 58+ interconnected websites – received over 2.4 million pageviews. Nearly 37,000 followers followed or were subscribed to UMaine Extension's 56 county and program-specific social media accounts on Facebook, Twitter, YouTube, Pinterest, and Instagram. More than 230 educational videos were available to visitors on our YouTube and Kaltura channels or embedded in our web pages. More than 2,700 clients used our online registration system to register for classes, workshops, events, and more.

FINANCIAL

University of Maine Cooperative Extension Support for Waldo County

Without statewide support, UMaine Extension would not be present in your 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.

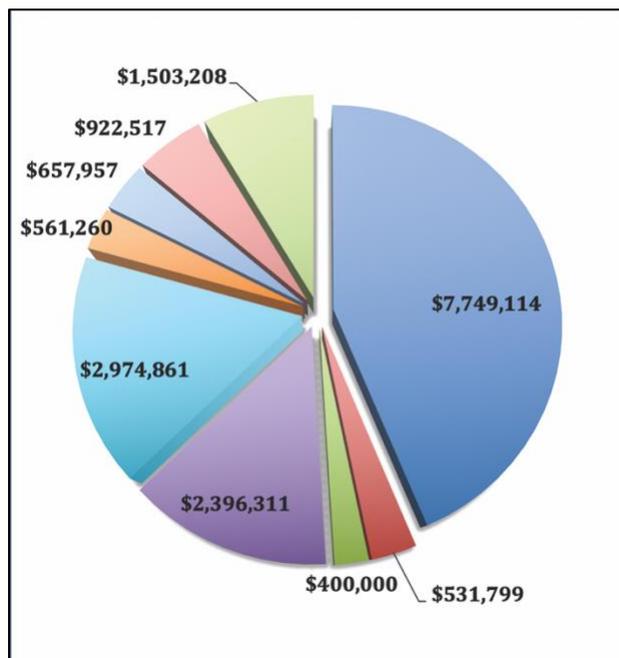
Statewide Extension Funding

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.

This pie graph illustrates the financial resources for programs offered, supported and managed out of the Waldo county office. Each year, Waldo county tax dollars support the UMaine extension with physical office space, support staff salaries, office supplies, equipment and some programming expenses.

Waldo County	CY2019
Local Salaries and Benefits	\$508,933
Prorated Support from UMaine*	\$431,143
Computer Equipment and Networking	\$705
Statewide Animal Diagnostic Lab	\$16,648
Marketing, Publications, Video	\$1,906
Local Programming Supplies & Expenses	\$8,244
Postage	\$997
Telephone	\$432
Travel	\$27,684
TOTAL	\$996,693

* Prorated support from UMaine reflects travel, postage, telephone, computer equipment & networking, salaries & benefits for administrative and state-wide staff.



COUNTY HIGHLIGHTS —MAINE FOOD SYSTEM

[Food Preservation & Food Safety Programing](#)

Waldo County Cooperative Extension offers programming in the area of safe food handling and preservation. One of the trainings we offer, Cooking for Crowds, is geared toward volunteers who serve food to the public. This training meets the requirements for organizations who partner with the Good Shepard Food Bank and serve meals to the public. In 2019, we hosted 2 Cooking for Crowds workshops which were held at the Emergency Management Office and at the County Extension office. Over 20 people were trained in safe food handling best practices. Workshops were also offered on safe food preservation techniques including water bath and pressure canning in the mid coast region in partnership with adult education programs and the YMCA. We also offer free pressure dial gauge testing for clients who want to check the accuracy of their gauge and answer questions from the public throughout the year on food preservation and safety.

[Rural Living Day](#)

Rural Living Day is an exciting annual event, typically the first Saturday in April, hosted by the University of Maine Cooperative Extension and Waldo County Extension Association. A wide variety of workshops are offered each year by Extension staff and community volunteers on topics ranging from gardening, homesteading and alternative energy to food preservation, cooking, livestock and so much more. In its 25th year, this year was a particularly successful event that attracted close to 200 people. The event takes place at Mt. View High School and attracts people from all over the state. The proceeds from the event go toward a scholarship that is awarded annually to a Waldo County youth planning to pursue higher education in a field related to University of Maine, Cooperative Extension's mission.



[Maine State Prison Food Preservation Programming](#)

This year a new food preservation program was offered at the Maine State Prison by University of Maine Cooperative Extension staff members Vina Lindley and Kate McCarty. The program, which included 8 hands-on sessions, covered a full spectrum of food preservation techniques and culminated in a community "feast" at the end of the series where inmates were able to share what they had created with staff and administrators in the prison. The educational series aligns with the robust garden program and will be offered annually to inmates.

[Community Food for Children](#)

In April 2019, the Waldo County Building Communities for Children Coalition organized a community summit focused on food insecurity. Over 100 participants attended and out of the gathering several groups formed to discuss food access issues raised at the forum. One of the groups convened discussed ways to ensure students in Waldo County have access to food during the summer months. Some students do not have access to transportation required to get to summer meals sites, if they are available. Additionally, most summer meals sites only operate 2-3 days a week.

The group, which was initially made up of UMaine Cooperative Extension staff, the Belfast Public Health Nurse, staff from Broadreach and a number of community volunteers began meeting in the spring and decided to organize volunteers to make and pack bagged lunches and give them out in Belfast City park to augment summer meals for kids. The group made lunches on Fridays at the Belfast Soup Kitchen and over the summer the group of volunteers grew to over a dozen.

As the summer progressed, we found that serving lunches in the park was not the most effective strategy. Sometimes there were kids at the pool but then there were weeks when the pool was closed or the weather was cool and rainy. The volunteers shifted focus and began distributing lunches door to door at a few of the subsidized housing communities including Huntress Gardens, Bayview Apartments and Seaside Heights. This turned out to be a much more effective strategy and in total over 449 meals were served to children in need. The Community Food for Children group has continued to meet regularly to plan next steps and find additional partners and opportunities to ensure children in Waldo county have access to food.

[Captain Albert Stevens School](#)

In 2018 The Captain Albert Stevens School in Belfast was selected to participate in The Northeast Farm to School Institute which is a unique year-long professional learning opportunity for twelve school teams from New England and New York. The Institute kicks off with a 3-day Summer Retreat held at Shelburne Farms in Shelburne, VT in late June where teams create an action plan for the year to expand farm to school activities in their school or district. Each team is paired with a coach who helps keep the team on target with meeting their goals once the retreat is over. Participation in the institute is competitive and generally only 1 team is selected to represent Maine per year. The team from CASS was paired with UMaine Cooperative Extension staff member Vina Lindley who over the course of the 2018/19 school year provided support to the team in carrying out the goals they set at the summer retreat. One notable project that the team carried out was a community meal that students helped plan, create and share with their families. The meal took place in March of 2019 and well over 100 people enjoyed a meal together.



Summer School Garden Program

This pilot program was funded by the Maine 4-H Foundation and was offered in 4 counties across the state, including Waldo County. The idea for the program grew out of the need for support to school gardens during the summer months when school is not in session and the idea that enrichment learning opportunities could be offered in the school garden. In Waldo county, the program was offered in partnership with the Searsport 21st Century After School program which also manages the summer school programming. Students attending summer school were able to choose enrichment learning opportunities in the afternoon and UMaine Cooperative Extension staff member Vina Lindley offered gardening twice a week. Gardening and healthy snack making were integrated into 8 lessons. Over the course of the summer, 30 youths participated in the summer school garden program which culminated in a parent luncheon and tours of the garden the kids had helped tend.



COUNTY HIGHLIGHTS — COMMUNITY AND ECONOMIC DEVELOPMENT

[Maine Families Home Visiting Program](#)

Maine Families is a home visiting program for expecting or new parents with a focus on family strengths. The Maine Families Home Visiting Program is part Maine's strategy to ensure healthy futures for our children.



Family Visiting professionals provide individualized parent education and support throughout Waldo County to expectant parents and parents of babies and toddlers to support safe home environments, promote healthy growth and development, and provide key connections for families to available services in their communities. The program is tailored to meet the needs of each family.

Maine Families believes that parents are their children's first and most important teachers. Parent/child interaction and experiences in the early years determine how the baby's brain develops and sets the stage for the child's future.

In 2019 Maine Families in Waldo County also offered twelve playgroups for enrolled families. These groups are offered at the UMaine Cooperative Extension building in Waldo. Children attend with their families and sometimes friends. It is a chance to get out, meet other families with children and learn new games and activities to play at home. Each group includes free play, a healthy snack, information related to nutrition, an opportunity to develop literacy skills, social development, motor skill development, brain development and the value of learning through play.



COUNTY HIGHLIGHTS — 4-H YOUTH DEVELOPMENT

4-H is the positive youth development program of the University of Maine Cooperative Extension. In 4-H, youth partner with caring adults to explore areas of interest where youth acquire knowledge and skills that will build their confidence and give them the tools to be civic leaders. 4-H provides the flexibility for volunteers to plan activities and projects for youth throughout the county.

There are several ways youth ages 5-18 can participate in 4-H: in school, afterschool programs, traditional clubs, and camps. In 2019, Waldo County had 56 youth enrolled in 4-H clubs with 36 volunteers.

[Citizenship Washington Focus](#)

Every summer, high school students from across the country travel to Washington, D.C. to participate in Citizenship Washington Focus (CWF). CWF is an opportunity for 4-H'ers to learn how to be civic leaders and make a difference in their communities. 4-H members learn about the democratic process and their role as citizens from interactive activities and prominent guest speakers. 4-H members also have the chance to interact with Maine representatives and/or senators and their staffers.

In July of 2019, two Waldo County 4-H members, Finnigan T. and Alex T. joined the Maine 4-H delegation at CWF. The 4-H members travelled to Washington D.C. for a five-day trip that included tours of the nation's capital, meetings with congressmen and women, and educational workshops.

The Waldo County 4-H Leaders Association annual fundraiser makes 4-H programs, like CWF, possible for county youth. As a result of this support, 16 county youth have participated in 4-H educational trips from 2012-2019. On behalf of the Waldo County 4-H Leaders' Association and the Waldo County 4-H CWF delegates, we would like to extend a special thank you to the businesses and individuals who donated items and participated in our fundraiser.

[Waldo County 4-H Clubs & Partner Programs](#)

Born to Ride 4-H Club

Born to Ride 4-H Club is a group of equine enthusiasts. The program provides a fun, hands-on learning experience that develops life skills, as well as teaches knowledge of horsemanship and equine care. Youth have the opportunity to participate in various activities and enrichment workshops like judging, exhibits, community service projects, and 4-H horse shows. Youth who participate in these programs develop skills that include leadership, sportsmanship, teamwork, positive attitude, and self-respect.

This is the Born to Ride 4-H Club's third year as a 4-H club. The Club has 18 members ranging in age from 9-18. In January of 2019 the club partnered with the Waldo County Emergency

Management Agency and participated in an Emergency Pet Shelter Preparedness workshop. The club is lucky enough to have their own arena and they use it to host many horse game shows, equitation shows and events for the National Barrel Racing Association and the Maine Barrel Association. In 2019 the Born to Ride 4-H Club participated in an annual service project that took place at the Knox Arena. Forty 4-H family members worked at the arena to rebuild fences, paint buildings, repair the announcer's booth, clean up the land, trim trees, and remove brush. The Born to Ride 4-H Club and their families are happy to have the chance to improve the arena and provide others with a space to use for their equine events.

In 2019, Born to Ride 4-H Club members attended eight horse clinics and sixteen horse shows. 4-H members also recertified their CPR and First Aid Certificates, took a self-defense course, and mentored youth at two horse camps.

For the first time, five 4-H members tried out for the Maine 4-H Eastern States Exposition Horse Team. Born to Ride 4-H Club members made the team and attended Eastern States with the Maine 4-H Horse Team. In addition, a younger 4-H member attended Eastern States as a groomer. The Born to Ride 4-H Horse Club members were proud to represent Waldo County at Eastern States Exposition and hope to have the chance to attend in future years.

During 2019, each 4-H member in the Born to Ride 4-H Club decided to create a scrapbook to demonstrate their 4-H work throughout the year. At the end of the year, the members submitted their scrapbooks to Waldo County 4-H staff for recognition. Born to Ride 4-H Club members received one red ribbon, three blue ribbons, and 3 medals for their 2019 4-H efforts. Two members of the Born to Ride 4-H Club were also recognized for their 2019 4-H achievement with the 2019 Waldo County 4-H Leaders' Association Achievement Award.

Little Beaver's 4-H Club

The Little Beavers 4-H Club is one of Waldo County's oldest 4-H clubs. The Club started in 1974 and has worked hard for years to ensure that the youth of Waldo County have access to positive youth development activities including animal science projects and STEM activities. The Little Beavers 4-H Club had a very busy 2019 4-H year! To start the year, the club held their annual demonstration meeting where club members had the chance to practice their public speaking skills. Club members also practiced their dairy cattle anatomy to prepare for Maine 4-H dairy judging and showmanship competitions. In February, members of the Little Beavers 4-H Club attended the Maine 4-H Dairy Quiz Bowl Tryouts. At this event, 4-H members were quizzed on their knowledge of all things dairy related to qualify for a chance to represent Maine 4-H on the quiz bowl team at Eastern States Exposition in September. In April, members of the Little Beavers 4-H Club participated in the Maine 4-H Dairy Judging Team Tryouts.

The Little Beavers 4-H club held a clinic with 4-H members from other counties to learn how to prepare for upcoming 4-H dairy shows. 4-H members had the chance to practice preparing their animals for shows as well as their showmanship skills. Members of the Little Beavers 4-H Club represented Waldo County 4-H in 4-H dairy shows at Skowhegan Fair, Fryeburg Fair, and Eastern States Exposition. Members of the Little Beavers 4-H Club also competed at Eastern States Exposition on the Maine 4-H Dairy Judging Team, the Maine 4-H Grilled Cheese Team, and the Maine 4-H Dairy Fitting Team and placed first in the competition.

At Eastern States Exposition members of the Little Beavers 4-H Club and their animals won Reserve Junior Champion Jersey and Overall Champion. The younger members enjoyed having the opportunity to learn from older 4-H members and improve their dairy showmanship skills.

As their community service project, the Little Beavers 4-H Club put flags up for veterans at five cemeteries in Waldo County. They also travelled to the Maine State Cemetery to honor veterans with flags for Veteran's Day.

The Little Beavers 4-H Club concluded their 4-H year by attending the annual Waldo County Recognition Night in November. The club members are excited to see what 2020 will hold for them and they are planning to continue serving their community by hosting events for veterans in the upcoming years.

The Game Loft

The Game Loft is a 4-H afterschool program that provides Waldo County youth with a safe environment to develop life skills. Positive youth development is an essential aspect of 4-H and Game Loft 4-H members are provided with numerous opportunities for safe development including serving on a youth board, engaging in leadership activities, planning and organizing events, and fundraising.

In 2019 members of the Game Loft Youth Board participated in a Sidekicks Training that was sponsored by Healthy Waldo County. These young leaders learned how to talk with their peers about difficult subjects like tobacco use and vaping. They learned that certain situations make youth more likely to participate in dangerous situations and how they can speak with at risk youth about developing healthy habits. They also learned how to support their peers who want help correcting unhealthy behaviors and where to find resources to share with their peers. These teen trainers will expand their work to younger peers in the Mount View School system. Self-respect and respect for others are the hallmarks of the work they do in improving healthy lifestyles.

Tech Changemakers

4-H Tech Changemakers is a national 4-H partnership with Microsoft that aims to educate communities about technology and improve technology access in rural areas. Waldo County 4-H is proud to host a 4-H Tech Changemakers team comprised of three Waldo County teen 4-H members and adult volunteers. In 2019 three 4-H members and two volunteers from Waldo County had the opportunity to travel to Washington D.C. for a national 4-H Tech Changemakers training. The group brought back many new ideas and skills that they are excited to share with their community. Since their training, the group has worked to plan how they can help address technology needs in Waldo County.

Independent 4-H Members

Waldo County 4-H independent members had a very successful year in 2019. 4-H members tried horseback riding, bread making, sewing, poultry raising, and many other STEM projects.

Independent members also attended Maine 4-H Days at the Windsor Fairgrounds where they participated in a tea party, poultry workshops, slime making, composting, and crafts.

In 2019 independent 4-H members also participated in emergency preparedness classes and a Safe in the Woods Workshop. The members made their own emergency “go bag” and attended the Emergency Preparedness Day at the Belfast YMCA.

In November, independent 4-H members attended the annual Waldo County 4-H Recognition Night and received blue ribbons for their 2019 4-H projects.

[2019 4-H Recognition](#)

On Saturday, November 16th, over 60 people gathered to celebrate the hard work of Waldo County 4-H members and volunteers. The event included an awards ceremony that recognized 27 4-H members, over 20 volunteers, 2 national trip delegates, three national program participants, and three 4-H clubs.

4-H members were recognized with certificates, gifts, and pins. 4-H families also participated in a potluck dinner and games led by volunteers from The Game Loft.



Waldo County 4-H members of 2019 Waldo County 4-H Recognition Night

AGRICULTURE AND NATURAL RESOURCES - RESEARCH & EDUCATION- 2019

Kersbergen begins Partial Phased Retirement

In July of 2019, Rick Kersbergen enrolled in a partial phased retirement plan offered by the University of Maine. He currently is working at 60% full time equivalent and is focused on dairy and forage education throughout the state. He will fully retire in June of 2022.

Cover crop & no-till corn silage production

Rick Kersbergen continued his research and education efforts working on increasing the acreage of no-till corn and the use of cover crops with dairy farmers throughout the state. Research results (including those from farmers in Waldo County) indicate that adoption of this growing technique saves over \$50/acre in time and money, by reducing costs and improving profitability. Cover crop and no-till adoption is a proven way to reduce environmental impacts from farm operations.

In 2019, additional research began on alternative manure handling on no-till corn farm fields. Some of the research is done with cooperating producers as well as in replicated trials at the University of Maine Experiment Station. It is now a common sight to see green fields in the fall and spring where corn was grown during the summer. Cover crops benefit not only the farmer, but reduces erosion and prevents water quality issues in lakes and streams. This is especially true in the Unity Pond (Lake Winnecook) watershed

Dairy Research

Organic dairy farmers are now challenged with lower milk prices, as are conventional dairy farmers. Extension works to help producers by conducting research on ways to cut expenses and manage high feed bills. The continued depression in milk prices has made it difficult for many dairy farmers to survive. Work also continues through organizations such as the Maine Organic Milk Producers (MOMP) to facilitate educational programs and marketing efforts. Economic data collected by UMaine Extension provides data that calculates the dairy support program (aka the tier program) providing funds to dairy farmers when the cost of production is higher than the milk price they receive.

Corn Silage Variety Trials

Now in the 16th year, the state corn silage variety trials are managed by Rick Kersbergen and Caragh Fitzgerald. This research represents some of the best corn hybrids available to growers in Maine. The data resulting from this project is critical for producers who now spend significant amounts of operating capital each spring on corn seed. Making informed decisions about hybrids that perform well in Maine conditions is crucial to profitability. Differences found through simple hybrid selection can make a huge difference in the amount of purchased grain dairy farmers need to buy and greatly influences milk production on the farm.

In 2018 and 2019, additional plots were planted to evaluate how corn varieties interact with interseeded cover crops. A trial was funded that allowed for experiments in Knox and in Burnham. A video about cover crops and no-till corn was extensively used. Additionally, a training program was developed to teach other agricultural professionals about no-till cropping systems and cover crop establishment (www.extension.umaine.edu/agriculture/soil-health/no-till-and-reduced-tillage).

Tractor and Farm Safety Courses

Since agriculture is one of the most hazardous occupations, UMaine Extension in Waldo County offers a tractor and farm safety class for youth and adults each year in cooperation with Ingraham Equipment in Knox. The class is designed for youth 14-16 to earn certification so as to be able to work on a farm and use tractors as part of their employment. In 2019, twelve students graduated from the class. In addition, safety classes are organized and presented to MOFGA apprentices, employees of Johnny's Selected Seeds and students at Kennebec Valley Community College. Displays and presentations were made at Maine Farm Days and several other events in 2019 including the Agricultural Trades Show in Augusta.

Ag Education Programs and Partnerships

Extension in Waldo County partners with agencies such as the Maine Organic Farmers and Gardeners Association (MOFGA) and producer groups such as the Maine Grass Farmers Network (MGFN) to coordinate educational programs such as pasture walks, and the Farmer-to-Farmer conference. Extension also hosts the website for MGFN, www.umaine.edu/livestock/mgfn, and organizes their Annual Grazing Conference held in Fairfield that draws over 100 participants.

Rick works closely with the Maine Organic Milk Producers (MOMP) and helps provide educational programs and a unique equipment-sharing program. Organic dairy farms now make up over 30% of all dairy farms in Maine.

Small farmers continue to call the office for assistance. Some of these are to explore new opportunities in agriculture and others are to try and solve problems. Extension helps to run the Beginning Farmers Resource Network (BFRN), www.umaine.edu/beginning-farmer-resource-network, that helps new and developing farm operations to find educational resources throughout the state. New livestock as well as vegetable operations are starting up in Waldo County as a result of a renewed interest in local foods and healthy lifestyles.

UMaine Extension in Waldo County hosts the Maine Hay Directory, extension.umaine.edu/livestock/hay, which serves as a resource for farmers marketing hay as well as those animal owners in need of feed.

State and National Representation

Rick Kersbergen serves on several state organizations and holds leadership roles. He has served on the State Nutrient Management Review Board since 2000. Rick is a cooperating member in the Department of Animal & Veterinary Science at UMaine. In addition, he is on the agriculture and forestry technical committee for Maine Technology Institute and serves on the state Technical committee for the Natural Resources Conservation Service (NRCS).

State Specialists working with Waldo County Agriculture

Agricultural programming in Waldo County is assisted by state specialists who provide valuable assistance to farms and natural resource based. One example of this includes Gary Anderson, State Dairy Specialist who has worked with numerous dairy farms solving milk quality issues and helping to do financial planning and farm transitions.

[Dairy Grazing Apprenticeship Program](#)

In 2019, Rick Kersbergen continued his role as the Education Coordinator for the Dairy Grazing Apprenticeship Program, www.dga-national.org, in Maine and Vermont. This is a federally approved Department of Labor (DOL) Apprentice program that pairs “Master” farmers with apprentices for a 24-month apprenticeship. Rick coordinates educational opportunities for apprentices and manages the program for Masters in Maine and in Vermont.

Currently there are 14 Master farmers in Maine, with 5 apprentices. The program has graduated 3 students in 2019 who are now “journeypersons” and work in the dairy industry in Maine. This project is in cooperation with Wolfe’s Neck Center for Agriculture and the Environment in Freeport and Stonyfield Yogurt in New Hampshire.

Dairy Grazing apprentice Haden Gooch who recently graduated from the apprenticeship program at Wolfe’s Neck Farm and is working on an organic dairy farm in Monmouth and starting his own dairy enterprise called “Pasture Pops” (www.pasturepops.com).



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.

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