Hello Friends,

MU Extension is the University of Missouri’s classroom in Adair County. We connect people to research-based education to enrich the quality of life and enhance the economic well-being of our communities.

MU Extension also partners with local organizations to provide education, information and services that meet people’s needs. The elected and appointed members of the Adair County Extension Council provide guidance in identifying those needs to ensure that our educational programs are relevant, reliable and responsive.

Whether it’s resources for yourself or your family, farm, business or community, we invite you to explore our website, call, or email, to learn how we can help you. http://extension.missouri.edu/adair.

Thank you for continuing to make University of Missouri Extension relevant and successful in Adair County. This annual report outlines the success MU Extension has had in Adair County during 2018.

We want to extend a special thank you to the Adair County Commission for their continued support of our MU Extension Center. We would also like to thank all of our volunteers, partners and stakeholders who continue to support our efforts in extension.

When you support University of Missouri Extension, Adair County benefits as well as the state of Missouri.

Sincerely,

Katie Wayman
Extension Council Secretary

Shelley Story
Extension Council Chair

Margo Myers
County Engagement Specialist in Nutrition and Health Education
Dear county commissioners and friends of MU Extension,

The past year has been extremely productive for University of Missouri Extension and Engagement. With the launch of our county engagement specialist model, which is the centerpiece of a long-overdue restructuring, we are better positioned to serve Missourians.

Most county engagement specialists are now in place and the formal training for this new position rolled out this fall. By January 2019, we expect our CESs to be well on their way to success. I see a great future for them and the communities they serve.

At the MU campus, we have been busy putting in place online resources that will benefit Missouri communities. In particular, the All Things Missouri web portal is an exciting tool that can help community leaders search for valuable data. I encourage you to check it out at https://allthingsmissouri.org/.

When 2018 began, we set out to meet with every county’s administrative body. This effort provided valuable insight and helped strengthen relationships; and as a result, we will engage in a similar effort in 2019. Meeting stakeholders and deepening county relationships is something we truly enjoy.

As you read your county’s annual MU Extension report, I am confident that you will be pleased with the results accomplished through county-based University of Missouri faculty. Our faculty take pride in their efforts to respond to local extension council input.

At the state level, we have committed to a goal of doubling the economic impact of MU Extension over the next decade. This goal of $2 billion in public value is ambitious — but, by meeting this challenge, we will help a great many Missourians.

Your support of MU Extension and our efforts in your community are greatly appreciated. As always, I welcome your input on how the University of Missouri can better serve your community and its people.

Sincerely,

[Signature]

Marshall Stewart

University of Missouri, Lincoln University, U.S. Department of Agriculture and Local Extension Councils Cooperating

EQUAL OPPORTUNITY/ADA INSTITUTIONS
### Adair County Extension Council
- Shelley Story, chair
- Andy Jackson, vice chair
- Katie Wayman, secretary
- Martha Hulet, treasurer
- Norm Clark
- Drew Daniels
- Sonja Harden
- Bob Jackson
- Brittany Kelsey
- Kathy Hoppe
- Jim Novinger
- Brad Smith
- Stanley Pickens
- Lois Powell
- Sheila Pruett
- Gale Robertson
- James Snyder
- Melissa Eitel
- Angie Buck

### Adair County faculty and staff

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Margo Myers</td>
<td>County Engagement Specialist in Nutrition and Health Education</td>
</tr>
<tr>
<td>Jennifer Schutter</td>
<td>Field Specialist in Horticulture</td>
</tr>
<tr>
<td>Zac Erwin</td>
<td>Field Specialist in Livestock</td>
</tr>
<tr>
<td>Vanessa Miller</td>
<td>Office Manager</td>
</tr>
<tr>
<td>Christina Morris</td>
<td>Part-Time Secretary</td>
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### Staff serving Adair County, but based in other counties

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
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<tbody>
<tr>
<td>Charles Holland</td>
<td>County Engagement Specialist in Community Economic Development</td>
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<tr>
<td>Valerie Tate</td>
<td>Field Specialist in Agronomy</td>
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<tr>
<td>Jeremiah Terrell</td>
<td>Field Specialist in Human Development</td>
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<tr>
<td>Darla Campbell</td>
<td>County Engagement Specialist in Agriculture and Environment</td>
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<tr>
<td>Kent Shannon</td>
<td>Field Specialist in Agricultural Engineering</td>
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<tr>
<td>Christopher Kempke</td>
<td>County Engagement Specialist in Community Economic Development</td>
</tr>
<tr>
<td>Mary Smyser</td>
<td>Regional Coordinator</td>
</tr>
<tr>
<td>Michael Krauch</td>
<td>Regional Director</td>
</tr>
<tr>
<td>Shari Pretz</td>
<td>Regional Office Support</td>
</tr>
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</table>

### Adair County Commissioners
- Stanley Pickens, Presiding Commissioner
- Bill King, First District Commissioner
- Mark Thompson, Second District Commissioner

### State legislators
- Brian Munzlinger, State Senator, District 18
- Nate Walker, State Representative, District 3
- Craig Redmon, State Representative, District 4

### 2018 Adair County University of Missouri Extension Council operating budget

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<th>Type</th>
<th>Amount</th>
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<tr>
<td>Revenues County Appropriations</td>
<td>$68,300</td>
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<tr>
<td>Expenses Personnel Services</td>
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<td></td>
<td>785</td>
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<td>Payroll Expenses</td>
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<td>Furniture/Equipment</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>$68,300</strong></td>
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### About us
- We’re looking forward to adding a 4-H Youth Program Associate and a Nutrition Program Associate to our office in 2019.

### Our location:
503 E. Northtown Road
Kirksville, MO

### Our office hours:
7:30 a.m. to 4:30 p.m. Monday through Friday

### How to contact us:
Phone: 660-665-9866
Fax: 660-665-9876
Email: adairco@missouri.edu
Webpage: extension.missouri.edu/adair

Find us on @AdairExtension
The 19th educational event and trade show attracted over 1,500 participants to Kirksville on November 30 and December 1. This annual event provides an opportunity for livestock producers to make connections, learn about programs and products, and find answers to their livestock questions. Nationally known educators lead workshops in the areas of horses, beef, sheep, stock dogs, meat goats, forages, small poultry production and farm continuation planning.

**Garden Talk newsletter**
Over 1,000 gardening enthusiasts receive the monthly Garden Talk newsletter. The newsletter provides citizens with timely horticulture information which allows gardeners to make better decisions about plant selection, pest control and production methods.

**Garden n’ Grow**
Participants grew their own garden at the Extension Center this summer. Information learned in the classroom was applied in the garden. Participants learned to cook with the vegetables they grew. Approximately 500 pounds of excess garden produce was donated locally.

**Master Gardeners**
Adair County Master Gardeners completed a total of 1083.5 volunteer hours and 321.75 continuing education hours. They received a $500 grant from Monsanto for the monarch butterfly initiative, worked with the city of Kirksville gardens at Brashear Park and the Veteran’s Memorial, worked on beautification projects at the Extension Center, library and YMCA. Master Gardeners assist with Garden n’ Grow during the summer.

This year-long beef heifer development program focuses on increasing the adoption rate of management practices that offer potential to improve long-term reproductive efficiency of producers herds and resulting profitability. The culmination of this program results in an annual sale, held November 16th at Kirksville Livestock, LLC. The 2018 sale returned $226,650 to participating producers.

**Missouri Fence Laws**
Knowing which of the two fence laws is in effect in your county and following that law helps lower conflicts between landowners and reduces litigation costs. Fourteen Adair County residents learned what each law requires the landowner to do fence-wise; which portion of a boundary fence each landowner must maintain; and where they can find additional resources on the fence law in effect in their county.

**Tomato Fest**
Local citizens learned about the advantages of growing grafted heirloom tomatoes. Fifty-five locally-grown varieties were available for tasting and attendees voted on which one tasted the best.

**Missouri Grown**
Producers who grown and sell locally grown berries, fruits, vegetables, herbs, honey and meat, learned efficient production and management methods, increased customer relations and learned new marketing skills.
**Vegetable Tour**

Forty-four gardeners attended a vegetable tour in rural Adair, Linn and Sullivan counties in August. Participants gained ideas and learned methods of production used by the producers on the tour. They can incorporate these methods and ideas into their own gardens or vegetable operations.

**Mushroom Workshop**

Agro-forestry practices and the process of growing shiitake, oyster and wine cap mushrooms were taught. Participants toured the mushroom yard of a local producer and inoculated 5 logs each with shiitake mushroom spawn to take home.

**On-Farm Research Provides a Tool for Producers to Fine Tune Management**

This will be the second year of an on-farm strip trial focused on evaluating the seed treatment ILeVO to mitigate soybean sudden death syndrome (SDS) and soybean cyst nematode (SCN). Of these trials, a soybean yield advantage of 3.5 bushels per acre of ILeVO treated seed compared to no seed treatment was realized. This in-turn has a positive economic impact to the farmer of $18.00 per acre. The trial addresses the emphasis area of “improving soybean management practices through research and demonstration” through the Missouri Soybean Merchandising Council.

**Private Pesticide Applicator Training**

Thirty-eighty individuals learned how to safely handle and apply pesticides in Adair County. This program provides producers of agricultural commodities with the knowledge and skills necessary to apply pesticides in a way that is safe for them and the environment while remaining competitive by having the option of using EPA restricted crop protection technologies.

**Agricultural Lenders’ Seminar**

On November 30th producers and lenders from across Northeast Missouri attended this program designed to help participants make better financial decisions based on risk management tools, budgets and agricultural economic outlook models. Attending lenders manage 4,285 agricultural loans totaling $972,850,000. Increased understanding of enterprise budgets and cash flow is especially important given the downturn in the agricultural economy, lower net farm income, increasing input prices and Farm Bill uncertainty.

**Farm Income Tax School**

Participants learned about new income tax law changes and how they affect individuals and businesses; provisions related to the drought and how and when you can utilize them; depreciation changes including new class for farm machinery; the qualified business income (QBI) and how it will be calculated.

**Missouri Farm Leases**

Participants gained insight from both the landowner and tenant perspective, cumulating in leases that are fair for both parties. This promotes optimal land use leading to more sustainable profitability. The class encourages better landlord-tenant communication which lowers conflict and avoids costly litigation.

**MU + NRCS Grasslands Project**

This project, formed in 2017, combines experts from two organizations, Natural Resources Conservation Service (NRCS) and University of Missouri Extension. This collaboration impacts forage producers through long-season grazing systems, better nutrient recycling, profitable livestock production and improved soil health. Adair county producers participated in grazing system designs, native warm-season grass demos, soil health monitoring, natural resource inventories and grassland news. [https://extension2.missouri.edu/programs/nrsc-mu-grasslands-project](https://extension2.missouri.edu/programs/nrsc-mu-grasslands-project).
During 2018, Youth and Family programs, meetings and individual consultations were provided to 12,251 participants in Adair County, northeast Missouri and beyond. Below is an overview of a few of those programs.

**4-H**
175 youths in 11 county 4-H clubs, completed 3,306 project meeting hours, 2,100 club meeting hours and 354 community service hours. 4-H clubs offer long-term educational experiences in which members learn life skills such as decision making, public speaking and working with others. Members learn by doing under the guidance of adult volunteers, who teach projects ranging from aerospace and arts to veterinary science and sport fishing. Clubs also involve children and teens in community service, camping and educational trips.

**Family Nutrition Program**
The Family Nutrition Program (FNP) reached 1,557 participants directly and 270 indirectly with nutrition education in Adair County. Youth from Pre-school to 8th grade learned through kid-friendly, hands-on lessons and activities. Activities include opportunities for taste-testing healthy foods and practicing skills that lead to good health. Education for adults also includes nutrition, food safety, and physical activity, as well as food resource management.

**Nutrition Educators Training**
Sixteen participants heard from experts on multiple food topics including good fats-bad fats, research and technology for nutritionists and consumers, the role of expectations and food perception in eating decision making, and how the climate change debate may impact food and nutrition. The knowledge gained is used daily to enhance curriculum delivery in local schools, retirement communities, and income qualifying entities in their respective counties.

**A Matter of Balance**
A Matter of Balance provides participants with the necessary tools to control/manage the frequency of falls and increase levels of physical activity by providing instruction on strength and balance exercises. Further, participants learn to view falls as something that is manageable, not just a natural part of aging. Participants set realistic goals for increasing activity, learned to change their environment to reduce fall risk factors, and promote exercise to increase strength and balance.

**4-H Camp**
Twenty-one campers learned to get along with others, be independent, follow a schedule and be on time, while attending 4-H Camp at Quivre River State Park near Troy, MO. Teen camp counselors receive 25 hours of training in youth development, positive discipline, emergency management and group dynamics each year, even if they have been camp counselors before. Educational content at camp includes science, drama, community service, health and fitness, and teamwork.

**Small Steps to Health and Wealth**
Participants will take the knowledge gained in this course and apply it to the health and financial aspects of their daily lives. By creating health and wealth goals, they are taking the first step in creating healthier habits for themselves and their families. The impact of health on finances and finances on health is also explored.
Clover Kids
Younger children also have opportunities to participate in 4-H through the Clover Kids program. The program is designed specifically for youths 5 to 7. It is developmentally appropriate, non-competitive, focuses on cooperation and introduces youth to a wide variety of 4-H projects that they may learn more about throughout their years in 4-H.

Taking Care of You
Taking Care of You is a multi-session program offering practical strategies and experiences to help individuals deal with the stress in their life. Activities are aimed at increasing mindfulness, positive emotions, optimism, resiliency to stress, coping skills, and self care of one’s mind, body and spirit. This program was delivered in partnership with the Adair County Treatment Court.

Building Strong Families
This program was delivered in partnership with the Adair County Treatment Court. The program helps families find their strengths, build on those strengths, and learn skills to create stronger families, improve relationships, and increase positive communication.

4-H Volunteer Development
106 adult volunteers learned to effectively work with 4-H youths and how to keep themselves and others safe while volunteering. In addition, they learn many of the same project skills as youth. Missouri 4-H volunteers responding to a survey report they contribute on average 100 hours per year. Valuing their time at $21 per hour, based on average Missouri incomes, the contribution of Adair County 4-H volunteers was worth more than $235,000 in 2018! More importantly, these adults serve as mentors for our youth helping them transition into healthy adulthood: priceless.

Hatching Chicks in the Classroom—a 4-H School Enrichment Program
4-H science programs reach more than five million youth with hands-on learning experiences; these experiences will address our nation’s critical challenge of developing a long-term solution for improving science literacy and aptitude. Over 200 youth in Adair County participate in this program yearly.

United Way—United We Can Make a Difference
Through United Way support, 4-H families learn that our community cares about them, and that 4-H is removing barriers to participation by providing dues waivers and reimbursement scholarships for 4-H families who meet the free lunch income guidelines. The 4-H Clover Kids program for youths 5 to 7-years-old is an entry program into 4-H. Through United Way support, the program costs are vastly reduced to encourage families to enroll.

Recognition, in the form of conferences, workshop and camp scholarships, are provided through United Way funding. Members submit a record of their learning experiences in 4-H. Scholarships are awarded to those members whose records merit the award. The scholarships range from $75 to $500. Through writing this record, youth increase their writing skills, reflect on their experiences, and are more motivated to succeed.

Wesley (right), an Adair County 4-H member, meets up with Holly (left), a State 4-H Council officer and Adair County 4-H member, at State 4-H Teen Conference in Columbia. Teen Conference is a fun-filled, two-day event for ages 11-13 and is planned by the State 4-H Council. Wesley received a scholarship to attend Teen Conference from United Way funding, based on a recognition form he completed about his learning experiences in 4-H.
Health and Safety

Missouri University Conference Office
The MU Conference Office provides high-quality, professional, full-service meeting management for a variety of noncredit educational programs. Whether a meeting is hosted on campus, in out-state Missouri or anywhere in the world, the office’s professional staff provides assistance to create the best learning environment for participants. In FY 2018, more than 20,000 Missourians registered to attend conferences, where university knowledge and research across disciplines was shared.

Fire & Rescue Training Institute (MU FRTI)
MU FRTI provides comprehensive continuing professional education and training to Missouri’s fire service and emergency response personnel. The institute has a direct impact on the well-being and protection of Missouri’s 29,000 firefighters and the 6 million citizens they serve. Courses prepare firefighters for medical emergencies, hazardous materials response and disaster preparedness and mitigation, as well as fires. In FY 2018, MU FRTI provided more than 11,000 hours of instruction to 13,494 fire and emergency responders.

Law Enforcement Training Institute (LETI)
LETI brings certified, professional training to law enforcement officers and continuing professional education to other criminal justice and public safety professionals. For more than 60 years, the institute has been the state’s leader in providing vital training and education services to Missouri’s 17,000 in-service personnel and police recruits annually. Working with national, state and local agencies from 31 states, LETI also provides basic and advanced animal cruelty investigations training. LETI presents to civic organizations, churches and businesses throughout the state on a variety of topics, including personal safety and armed intruder response.

Missouri Training Institute
The Missouri Training Institute provides continuing education, custom-designed training programs and consulting services for business and industry, public and non-profit organizations and educational institutions. Training programs include subjects such as human resource management, supervision, management, leadership, team building and other business-related topics. The institute’s consulting services include curriculum design, human resources, strategic planning, board development and facilitating meetings and retreats. In FY 2018, 3,700 people enrolled in the institute’s 180 programs.

MU Nursing Outreach
Keeping Missouri nurses up to date with the knowledge and skills they need to provide effective care and fully participate in the state’s health care efforts is a primary goal for Nursing Outreach. A full 92 percent of Nursing Outreach’s Missouri participants reside outside the metropolitan St. Louis and Kansas City areas. Nursing Outreach brings high-quality, affordable continuing education programs to this audience using face-to-face, web-based and online delivery methods. In FY 2018, the program reached more than 4,300 health care professionals.

Continuing Medical Education and Physician Lifelong Learning (CMD.PLL)
CMD.PLL serves MU Extension and the MU School of Medicine by educating physicians and other health care professionals and enhancing the standard of health care delivery statewide. Through health education, wellness promotion and health care quality performance initiatives, the program improves the health of Missourians. CMD.PLL also facilitates and manages health care quality improvement projects for the University of Missouri Health Care system and the MU School of Medicine Springfield clinical campus. In FY 2018, CMD.PLL offered 1,726 noncredit programs, courses and educational activities to more than 25,700 participants.

Veterinary Medical Extension and Continuing Education (VMECE)
VMECE focuses on issues that impact Missouri veterinarians and livestock owners, such as disease risks, rising input costs and increasing regulations. VMECE provides up-to-date information and consultation to better prepare them to address these challenges. VMECE also provides continuing education for veterinarians renewing their veterinary licenses. Team members also present information about production-related topics and animal disease at meetings across the state.

Labor Education
The MU Extension Labor Education Program works with members and leaders of workplace-based organizations representing the economic interests of more than 20,000 working people in Missouri and surrounding states. Programs help them develop skills to contribute to their organizations, act effectively in the workplace, and be informed and active participants in their communities.
Business and Community

During 2018, Business and Community programs, meetings and individual consultations were provided to 693 participants in Adair County, northeast Missouri and beyond. Below is an overview of a few of those programs.

Adult Community Leadership

Participants took the leadership lessons taught in the course and applied them to their workplaces and projects. As part of the class curriculum, all participants had to take on a leadership project in their communities or in their workplaces. Participants regularly reported on their progress and sought suggestions and feedback from their peers. The participants’ expanded leadership skills will benefit both their work organization as well as other community groups in which they take on leadership roles.

Missouri Training Institute

Each year, our award-winning staff helps thousands of people to improve their job performance and their companies’ bottom lines through quality training programs and consulting services. Whether you’re in business, industry, a public or nonprofit organization, a professional association or education, our training will fit your needs. From the start, we are focused on you and your success!

The MU Extension Center in Adair County also offers educational engagements via our webpage, Facebook and most recently, YouTube. Below are a few statistics from those venues.

extension.missouri.edu/adair
Information on our county webpage was viewed over 236,000 times in 2018. Program flyers, videos and newsletters receive the most views.

missourilivestock.com/
The Missouri Livestock Symposium webpage has an average of 4,068 visitors monthly (per GoDaddy statistics).

@AdairExtension
33,305 people reached

@Adair4H
27,240 people reached

@ShowMeSelect
10,332 people reached

@MissouriLivestock
15,295 people reached

Data from Facebook Insights.

We started actively using YouTube as an educational source in March of this year. Our top five videos are:

⇒ Dwindling Hay Supplies
⇒ Nitrate Testing
⇒ Japanese Beetles
⇒ Extending the Hay Supply
⇒ Hay Shortage Management

We’ve had 588 views and hope to increase that number dramatically in 2019.
Adair County

UM System Footprint in the county in 2018

Fall county students

86 students
- 55 Undergraduates
- 31 Graduate and professional students
- 63 Full-time students
- 23 Part-time students
- 15 Pell grant recipients (aid year 2018)

County employees and retirees

48 people employed by UM
- 26 Campuses
- 22 UM Health Care
- 7 UM retirees and beneficiaries
UM salary and retirement income: $1.7 million
UM state tax revenue: $61,879
UM federal tax revenue: $270,769

County alumni

Selected school alumni
- 11 Medicine
- 37 Nursing
- 23 Health Professions
- 19 Dentistry
- 12 Pharmacy
- 7 Veterinary Medicine
- 52 Agriculture
- 39 Engineering
- 36 Law

Alumni teaching K-12
- 19 teachers
- 7% of all district teachers
- 1 principal or administrator
- 8% of all district principals and administrators

County breakdown

MU
- 51 students
- 395 alumni
- 26 employees

UMKC
- 12 students
- 66 alumni
- 0 employees

Missouri S&T
- 17 students
- 33 alumni
- 0 employees

UMSL
- 6 students
- 38 alumni
- 0 employees

County services provided

Health care
- 2,431 patients seen at UM Health Care, with $704,619 of uncompensated care
- 1 patient seen at UMSL Center for Eye Care with a statewide average of $73.83 per patient in uncompensated care
- 3 patients seen at UMKC School of Dentistry with a statewide average of $53.20 per patient in uncompensated care

Extension
- 24,847 Total educational contacts from MU Extension to residents of district counties, including:
  - 11,903 contacts related to productive farming, better gardening, and managing natural resources
  - 12,251 contacts related to healthy eating and aging, strengthening families, personal finance, or youth development
  - 693 contacts related to starting businesses, developing community leaders, or renewing the local economy

Supporting the University of Missouri is an investment in the future of Missouri.

The university advances Missouri citizens and communities through its mission of teaching, research, public service, and economic development across our four campuses and University of Missouri Extension.

Prepared in December 2018, based on the best available and most recent data. Data Sources Include: Missouri Office of Administration • UM IR • Office of Social and Economic Data Analysis (OSEDA) • Center for Applied Research and Engagement Systems (CARES) • MU • UMKC • Missouri S&T • UMSL • UM System • UM Health Care • MU Extension • US Census Bureau • US Dept. of Health and Human Services • National Science Foundation