



UNIVERSITY OF MISSOURI EXTENSION

Howell County

2023 Annual Report

**SERVE
MISSOURI.**

**DELIVER
MIZZOU.**



Extension

University of Missouri

an equal opportunity/ADA institution



Office of Extension
and Engagement
University of Missouri

OFFICE OF THE VICE CHANCELLOR
FOR EXTENSION AND ENGAGEMENT
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December 2023

Dear county commissioners and friends of MU Extension and Engagement,

Thank you for your important partnership with the University of Missouri Extension this past year.

I want to highlight three areas that address needs you helped us identify.

You may recall that the FY 23 state budget provided a one-time \$5 million infusion to MU Extension for growth. Of that, we allocated about \$3 million for field faculty in the areas of agriculture, 4-H, health/human development and business and community development.

Through a dedicated hiring effort, and thanks to that allocation, we have hired 168 new employees since November 2022. That includes 72 academic/faculty members, most of whom are field specialists in a priority area noted above, and 96 staff members (e.g., office administrators, youth and food and nutrition associates, etc.).

We also returned more faculty to local program delivery that best serves your county's needs, while preserving the partnership and relationship building work you value. Our extension and engagement specialists focus full-time on that work as they serve their assigned multi-county groups. Currently, 19 have been hired, with two more in the pipeline.

Finally, we are prioritizing our work with county extension councils. In the new role of partnership and council development director, Lorin Fahrmeier focuses on strengthening council representation and governance. This role will build stronger links with regional, educational and campus leadership to better identify and address local priorities.

At the UM System level, our engagement work across four universities and with leaders across the state makes a difference in areas of greatest need: broadband, workforce development, health access, food security and healthy futures for our youth.

Your county annual report shows what we are accomplishing together as we Serve Missouri and Deliver Mizzou. We look forward to strengthening that partnership with county commissioners and community stakeholders in the coming year.

Sincerely,

Chad Higgins, PhD
Interim Vice Chancellor, MU Extension and Engagement
Chief Engagement Officer, UM System

Who we are

Faculty and staff

Dr. Janice Weddle, Extension Engagement Specialist

Willis Mushrush, Field Specialist in Procurement

Dr. Sarah Kenyon, Field Specialist in Agronomy

Stephanie Johnson, Field Specialist in Nutrition and Health

Elizabeth Picking, Field Specialist in Livestock

Hilliary Shumock, Nutrition Program Associate

Teresa Uminn, Administrative Asst.

Tammy Woodworth, Administrative Asst.

Council members

Jared Barr, Chairman

Raymond Williams, Vice-chairman

Ruth Waggoner, Secretary

Bryan Adcock, Treasurer

David Snodgras

Jerrod Lawrence

Evan Kinder

Christin Byrd

Tyler Osborn

Blake Crow

Jenifer Poor

Daniel McKinney

Billy Sexton – Appointed, Southern Commissioner

John Oravec, Appointed, Farm Bureau

Mike Topliff, Appointed, City Representative

2023 Howell County Extension Council



Members of the Howell County Extension held their annual meeting Thursday morning at the West Plains Extension office, recognizing notable achievements for 2023.

Ralph Riggs, Presiding Commissioner
Billy Sexton, Southern Commissioner
Calvin Wood, Northern Commissioner

2023 Leaders Honor Roll Recipient

Billy Sexton

Consultations: 382
Farm Visits: 76
Hay Tests: 52
Nitrate Tests: 150

Pressure canner tests- 40

Who we are

Faculty and staff

Income

County Appropriations	112,310.00
Total Income	112,310.00

Expenses

Salaries/Benefits	74,200.00
Travel	5,800.00
Telephone	4,200.00
Advertising	1,500.00
Rent	12,360.00
Rent/Lease Equipment	2,200.00
Publishing/Printing	600.00
Reproduction/Copy Service	1,000.00
Office Supplies/Service	5,000.00
Other Contract Services	900.00
Insurance	1,200.00
Council Election	100.00
Professional Dev.	1,200.00
Service Group/Org. Dues	400.00
Publications for Resale	100.00
Repairs/Maintenance	750.00
Furniture & Equipment	750.00
Total Expenses	112,310.00

State Fair Farm Family



The Poor Family
Jason, Jennifer,
Madalyn and Cooper

MU Extension is a unique funding partnership.

Extension funding is a three-way partnership of federal, state and county government. Federal and state money, through the University of Missouri system, pay professional staff salaries, training costs, computers and communication equipment. County funds support the local office, secretarial and youth assistant salaries, staff mileage and council expenses.

The Howell County Extension Council, faculty and staff would like to express our appreciation to the *Howell* County Commissioners for their continued support of extension programs.

Local Support

Did you know you can donate directly to *Howell* County Extension with a gift to be used immediately or as an endowment contribution for long term efforts. Monies put into the endowment are left forever to earn interest with the county office benefiting each year. You can also direct your donation to a specific program such as 4-H or Master Gardeners.



Howell County

UM System Footprint in the county in 2023



FY23 county students

131 students

- 99 Undergraduates
- 32 Graduate and professional students
- 93 Full-time students
- 38 Part-time students
- 38 Pell grant recipients (aid year 2023)



County employees and retirees

24 people employed by UM

- 20 Campuses
- 3 MU Health Care
- 1 UM System

9 UM retirees and beneficiaries
 UM salary and retirement income: \$790,072
 UM state tax revenue: \$20,015
 UM federal tax revenue: \$98,901



County alumni

Selected school alumni

- 17 Medicine
- 32 Nursing
- 28 Health Professions
- 11 Dentistry
- 8 Pharmacy
- 2 Optometry
- 8 Veterinary Medicine
- 92 Agriculture
- 81 Engineering
- 25 Law

Alumni teaching K-12

- 7 teachers
- 1.5% of all district teachers
- 2 principals and administrators
- 6.1% of all district principals and administrators



County breakdown

MU

- 82 students
- 386 alumni
- 17 employees

UMKC

- 18 students
- 57 alumni
- 1 employee

Missouri S&T

- 26 students
- 90 alumni
- 2 employees

UMSL

- 5 students
- 36 alumni
- 0 employees



County population: 39,753



County services provided

Health care (FY23)

- 256 in-state patients seen at MU Health Care, with \$298,025 of uncompensated care
- 5 in-state patients seen at UMKC School of Dentistry with a statewide average of \$43.61 per patient in uncompensated care
- MU Health Care's Missouri Telehealth Network recorded 258 visits to 98 patients having ZIP codes associated with the county

Extension (2022)

- 15,147 Total educational contacts from MU Extension to residents of the county, including:
- 11,489 contacts related to productive farming, better gardening, and managing natural resources
- 3,574 contacts related to healthy eating and aging, strengthening families, personal finance, or youth development
- 62 contacts related to starting businesses, developing community leaders, or renewing the local economy



Construction projects

- \$25,715 remitted to 1 county vendor, for 2 projects



County properties and offices

MU Extension in: Howell County

Howell County



UM System Statewide Footprint

Economic and Community Development Highlights

- In 2022, Business Development Specialists worked with small businesses and entrepreneurs statewide to create or retain 81,645 jobs.



\$3.1
billion

For every dollar invested from 2019 to 2021, the MU Extension Business Development Program has returned \$133 in economic impact for its clients by increasing sales more than \$1.6 billion. For a total impact of \$3.1 billion, the program has generated more than 37,000 jobs and attracted nearly \$451 million in capital investments and \$1.5 billion in government contracts.

- Between FY17 and FY22, UM System brought Missouri more than \$1.46 billion in federal and private research funds, funded primarily from outside the state, but spent within the state.



In FY23, UM System was issued 33 patents and filed 61 new U.S. patent applications.

- In FY23, the UM System awarded 805 design and construction project contracts throughout Missouri, for a total investment of \$279.2 million in the state.



In FY23, to improve access to medical and health related services, MU Health Care's Missouri Telehealth Network's Show-Me ECHO program provided 18,381 hrs of case-based instruction to 2,938 learners located in 112 of 114 Missouri counties and the city of St. Louis.

Education and Training Provided



41,992 police, fire fighters, and medical professionals attending continuing education (2022)



Agriculture and natural resource programs served 174,692 farmers and related businesses (2022)



311,749 youth and stakeholder educational contacts in 4-H clubs, schools, camps and other programs (2022)

Education Highlights

FY23 Financial Aid Awards

In FY23, 67.3% of the UM System's 80,702 students received financial aid totaling \$973.7 million

MU

27,256

students receiving financial aid

\$536.0M

financial aid awarded

UMKC

11,859

students receiving financial aid

\$217.3M

financial aid awarded

Missouri S&T

6,748

students receiving financial aid

\$117.7M

financial aid awarded

UMSL

8,489

students receiving financial aid

\$102.8M

financial aid awarded

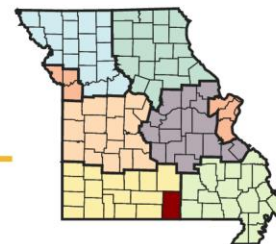


UM System's MOREnet (Missouri Research and Education Network) provides internet connectivity, access, support and training to 58 higher education institutions (230,000 students), 485 K-12 school districts (832,000 students) and 132 public libraries (serving nearly 3 million Missourians) in 2022.

- UM System awarded 50.5% of the 32,098 Bachelor's or higher degrees awarded by Missouri four-year public institutions in 2022-23.
- UM System awarded 36.6% of the 1,935 research doctorates and 26.9% of the 3,593 professional doctorates awarded by Missouri public and not-for-profit private institutions in 2022-23.
- In FY23, UM System's \$37.9 million in National Science Foundation (NSF) grants represented 88.3% of all NSF grants made to Missouri public colleges and universities.
- In 2023, over 10,900 Missourians accessed mobroadband.org, part of the UM System Broadband Initiative which helped the statewide build-out of high-speed internet infrastructure. MU Extension also supported residents in making individual challenges to the FCC that resulted in \$810,000 in additional funding for the state of Missouri.

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

Missouri Grand Challenges: Local Solutions



HOWELL COUNTY

Knowing Missouri's Needs

MU Extension asked Missourians to share the greatest challenges they and their communities face.

We heard that feedback and made big changes in the way we work with council and local partners to improve lives. Locally, a network of county engagement and subject matter specialists now share MU's knowledge, research and engagement, targeting programs, information and assistance in:

- agriculture and environment
- youth and family
- business and community
- health and safety

For each grand challenge, MU Extension and Engagement targets a specific gain by 2023:



Economic opportunity

Increase MU Extension and Engagement's economic impact to the State of Missouri from \$1 billion to \$1.5 billion overall, and from \$88 billion to \$100 billion in agriculture, the top economic sector



Educational access and excellence

Increase participation in postsecondary education from 66% to 70%



Health and well-being

Improve Missouri's health ranking from 40th to 35th in the nation

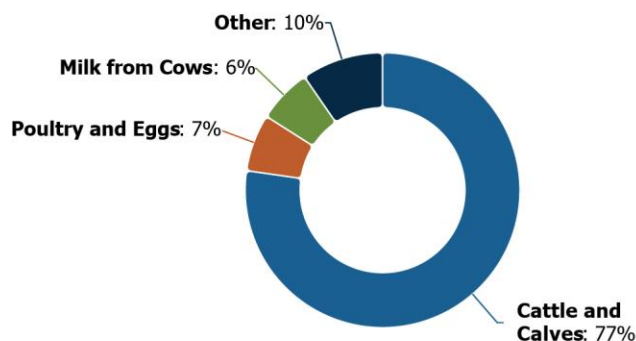
Knowing Local Challenges



CHALLENGE 1: Economic Opportunity: *Agricultural Economics*

Leading Agricultural Products

Total Commodity Sales: \$56,870,000



Data Source: US Department of Agriculture, National Agricultural Statistics Service, [Census of Agriculture](#). 2017.

Net Farm Income

Net farm income (total sales, government payments, and other farm-related income minus total farm expenses) reflects the strength of the local agricultural community and can be an important measure for lenders and policy makers. The report area had a combined net farm income of \$5,964,000 in 2017, an average of \$4,111 per farm. This is below the statewide average farm income of \$29,485.

Report Area	Total Farms	Average Farm Income
Howell	1,451	\$4,111
Missouri	95,320	\$29,485

Data Source: US Department of Agriculture, National Agricultural Statistics Service, [Census of Agriculture](#). 2017.



CHALLENGE 2: Educational Access and Excellence: *Early Childhood Education*

Access to Early Childhood Education

Head Start is an early childhood education program for at-risk children through age 5. Families utilizing Head Start have better success meeting developmental goals and achieving economic stability. In 2018, there were 3 Head Start programs in the report area, or 10.48 per 10,000 population. Access to head start is lower in this area than in the state.

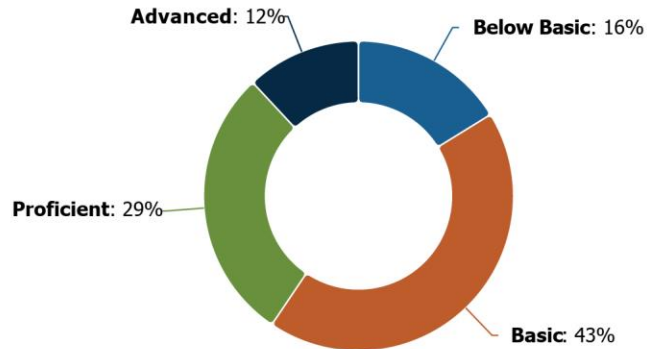
Head Start Programs, Rate (Per 10,000 Children Under Age 5)



Data Source: US Department of Health & Human Services, [HRSA - Administration for Children and Families](#). 2022.

English Language Arts Proficiency

Starting in the 4th grade, public schools emphasize proficiency in reading and reading comprehension. The ability to comprehend becomes the foundation to find and process information in later years and it is important to prevent children from falling behind. Of the 485.00 fourth graders tested in 2018, the known total number of students who had a basic level of English Language Arts was 192.00. The number tested as below basic was 72.00, basic was 192.00, proficient was 127.00, and advanced was 53.00.



Data Source: [Missouri Department of Elementary & Secondary Education](#). 2022.



CHALLENGE 3: Healthy Futures: *Access to Care*

Mental Health Care Providers

Mental health is a critical public health issue worldwide. Access to mental health services is a challenge across Missouri, which ranks 46 out of 51 states in provider access. In the trio there are approximately 47 credentialed professionals providing mental health care to serve the area's 39,750 residents. The patient-provider ratio in the report area is 846 to 1, which means there is 1 provider for every 846 persons. The ratio of persons to providers in the report area is lower than the state average of 855:1, which means there are more providers per person in this area.

Ratio (Population to Providers)

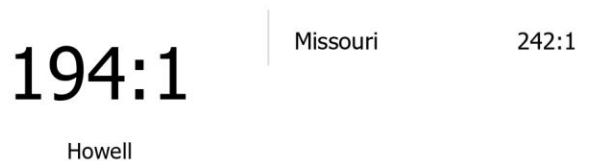


Data Source: Centers for Medicare and Medicaid Services, [CMS - National Plan and Provider Enumeration System \(NPPES\)](#). December 2023.

Primary Care Providers

Older adults make up a historically large percentage of the U.S. population and meeting the healthcare needs of an aging population can be challenging. In the report area, there are approximately 41 primary care physicians (MDs and DOs) to serve the area's 7,952 residents over the age of 65. The patient-provider ratio in the report area is 194:1, which means there is 1 provider for every 194 older adults. The ratio of adults to providers in the report area is lower than the state average of 242:1, which means there are more providers per person in this area.

Ratio (Population to Providers)



Data Source: US Department of Health & Human Services, Health Resources and Services Administration, [HRSA - Area Health Resource File](#). December 2023.



CHALLENGE 4: Agricultural Growth & Stewardship: *Agricultural Economy*

Jobs Derived

Missouri has a diverse agriculture industry, strong in crops and livestock, as well as food and forestry processing industries. These industries remain a significant part of Missouri's economy, supporting more than 1 in every 10 jobs, on average. In 2021, agriculture, forestry, and related industries in Missouri were estimated to contribute: 456,618 jobs, \$93.7 billion in output and \$31.8 billion in household income. [Learn more about Missouri Agriculture's Economic Impact.](#)

Percent of Jobs Derived from Agriculture

28.8%

Howell

Missouri

23.55%

Data Source: Missouri Department of Agriculture, [Missouri Agricultural and Small Business Development Authority](#). 2021.

Value Added

Value-added agriculture refers to production, manufacturing, marketing or other services that increase the value of primary agricultural commodities. In 2021, the total value-added derived from agriculture, forestry and related economic activity was an estimated \$34.9 billion. Meat processing, food processing, animal and pet food manufacturing, and crop production and related industries are Missouri's top value-added products: \$9.5 billion and 155,425 jobs from livestock production and related industries alone. [Learn more about Missouri Agriculture's Economic Impact.](#)

Percent of Total Value Added from Agriculture

23.8%

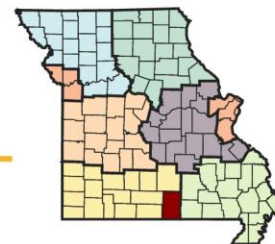
Howell

Missouri

21.98%

Data Source: Missouri Department of Agriculture, [Missouri Agricultural and Small Business Development Authority](#). 2021.

Missouri Grand Challenges: Local Solutions



HOWELL COUNTY

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Knowing Local Challenges



CHALLENGE 1: Economic Opportunity: *Business Dynamics*

Business Growth/Change

The rate of business change reflects the net gain or loss in total establishments. The report area saw a net gain of 50 businesses between 2011 and 2021. There were 1,012 establishment "births" and 962 "deaths" contributing to the change. The rate of change was 5.03% over the ten year period, which is lower than the state average of 8.04%.

Establishment Net Change Rate

5.03%

Howell

Missouri

8.04%

Data Source: US Census Bureau, [Business Dynamics Statistics](#). 2011-2021.

Largest Job Sectors

Understanding the local economy is vital to describing a community. In this region, the largest sector by employment size is Health care and social assistance, which employs 3,644 people. The average wage for the industry is \$56,827. Retail trade and Manufacturing are the next largest sectors, and they employ 2,592 and 2,282 workers, respectively.

Job Sector	Total Employment	Average Wage
Health care and social assistance	3,644	\$56,827
Retail trade	2,592	\$30,371
Manufacturing	2,282	\$57,921

Data Source: US Department of Commerce, [US Bureau of Economic Analysis](#). 2022.

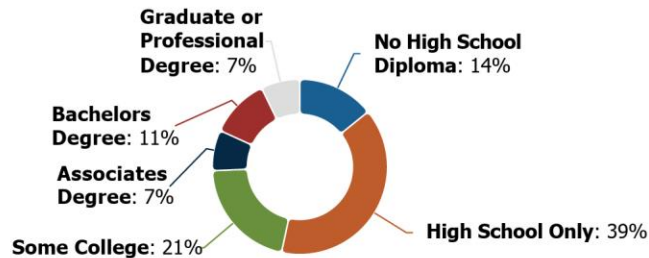


CHALLENGE 2: Educational Access and Excellence: *Educational Attainment*

Adult Educational Attainment

Educational attainment shows the distribution of the highest level of education achieved in the report area, and helps schools and businesses understand the needs of adults, whether it be workforce training or the ability to develop science, technology, engineering, and mathematics opportunities. Educational attainment is calculated for persons over 25 and is an estimated average for the period from 2017 to 2021.

In the report area, 20.9% of adults have at least some college education and 18.5% of adults have an associate's level degree or higher. However, 39.2% stopped their formal educational attainment after completing high school, and 14.2% of adults did not complete high school.



No High School Diploma

14.15%

Missouri 9.02%

Howell

Data Source: US Census Bureau, [American Community Survey](#). 2017-21.

Data Source: US Census Bureau, [American Community Survey](#). 2017-21.



CHALLENGE 3: Healthy Futures: *Mental Health*

Deaths of Despair

Untreated mental health conditions, substance abuse, and stress have caused an epidemic of "deaths of despair" across the United States. Research shows that deaths due to suicide, alcohol-related disease, and drug overdose have caused the first decreases in U.S. life expectancy in the 21st century. Within the report area there were an estimated 154 deaths of despair, or 54.08 deaths per 100,000 population between 2011 and 2017. This rate is higher than the state rate of 52.01 per 100,000, and represents an increase of 4.56% since the 2001-2007 report period.

Poor Mental Health Days

Self-reported mental health status is a widely used measure of health-related quality of life. In 2018, adults in the report area averaged of 5.5 mentally unhealthy days per month, which is higher than the state average of 4.9. This measure of mental health status has worsened since 2014, when adults in the report area averaged 4.7 mentally unhealthy days per month.

Mortality Rate, 2014-2020

54.08

Missouri 52.01 😞

Howell



Data Source: Centers for Disease Control and Prevention, [CDC - National Vital Statistics System](#). Accessed via [CDC WONDER](#). 2014-20.

Average Poor Mental Health Days per Month, 2018

5.5

Missouri 4.9 😞

Howell



Data Source: Centers for Disease Control and Prevention, [Behavioral Risk Factor Surveillance System](#). Accessed via [County Health Rankings](#). 2020.



CHALLENGE 4: Agricultural Growth & Stewardship: *Food Security & Access*

The ability to access healthy and affordable food can be a challenge in Missouri's rural and urban communities alike — with negative impacts on people's health and food security status. Food insecurity is the lack of access, at times, to enough food for an active, healthy life. It is associated with many adverse social and health outcomes. Missouri's overall food insecurity rate is 11.8% — and 12.8% for children under age 18. More than half of Missouri's 114 counties and the City of St. Louis report food insecure populations of 12.6% or higher. Multiple interventions that address the root causes of food insecurity can impact this critical public health issue. Learn more at the [Food Security Story Map](#).

Population Living in a Food Desert

40.80%

Howell

Missouri

17.69%

Data Source: US Department of Agriculture, Economic Research Service, [USDA - Food Access Research Atlas](#). 2019.



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through credible statewide programs

Missouri 4-H for ages 8 – 18



Afterschool clubs

These clubs meet after school for periods ranging from a few weeks to a full 4-H program year. These clubs typically focus on a single project at a time but can rotate through more than 100 different project topic areas. Members can elect officers and plan learning activities with options of public speaking, community service and links to career readiness.



Community clubs

are organized by volunteer club leaders and teams of recognized volunteers. Members attend club meetings, elect officers, enroll in projects and plan learning and community service activities. Some clubs opt to be single-project clubs, where all members focus on the same project.



4-H Natural Resources programs

employ hands-on activities in climate science, environmental sustainability, renewable energy, sportfishing and wildlife conservation. The **Shooting Sports program**, which teaches marksmanship, safe firearm use, hunting and archery principles, is a prime illustration of how 4-H programs promote holistic youth development and responsible citizenship. Supported by caring adult leaders, these programs offer opportunities to cultivate life skills, self-worth and conservation ethics.



Legend



Agricultural Growth & Stewardship



Economic Opportunity



Educational Access & Excellence



Health & Well-Being

Local Impact

- A community of 39 youth building life skills, contributing to their community, and becoming college and career ready.
- 4-H members are supported by 6 youth and adult volunteers

Missouri 4-H Inspires Kids to Do

98% said they are willing to work hard on something difficult.

91% set personal goals.

97% said they try to learn from their mistakes.

98% said they treat others the way they want to be treated.



Local Impact

Heart of the Ozarks Fair Market Animal Show & Sale

- June 4th - Weighed in 134 animals
- June 5th - Live show judged by Jack Green
- June 6th – Awards & Sale
- 15 steers, 28 hogs, 11 lambs, and 29 goats sold
 - Gross = \$139,655
 - Steers - \$57,455
 - Goats - \$39,100
 - Lambs - \$11,500
 - Hogs - \$31,600



Howell County

Missouri 4-H

Local Impact





MU EXTENSION **Serves MISSOURI and Delivers MIZZOU**

through credible statewide programs

Agriculture and Environment

Show Me Quality Assurance Trainings

The Show Me Quality Assurance (SMQA) program is a youth-focused training emphasizing good livestock management practices in the handling and use of animal health products. This program encourages youth involved in livestock projects to take an active role in the health of their livestock. By completing this program, youth demonstrate their commitment to animal production and producing safe and wholesome food. Completion of this program serves to benefit both the livestock and food industries, by reducing the risk of management-based incidents that could destroy consumer confidence in the food supply. Livestock Specialist, Elizabeth Picking, teaches this training to 4Hers through hands-on activities and group learning.

Missouri AgrAbility Project

AgrAbility helps farmers with disabilities and their families succeed. The program links MU and Lincoln University extension services with a nonprofit disability organization to provide practical education and on-the-farm assistance that promotes agricultural and rural independence.

Missouri AgrAbility can...

- help determine if you're eligible for agency services
- perform a customized, on-site assessment of your farm or ranch
- recommend effective and safe solutions to help you overcome limitations
- provide educational resources to support your goals
- connect you with a peer support network

Elizabeth Picking is part of the Missouri AgrAbility Project team and discusses the program with perspective clients, completes on-farm assessments, and helps connect livestock producers to resources.



Legend



Agricultural Growth
& Stewardship



Economic
Opportunity



Educational
Access &
Excellence



Health
& Well-Being



MU EXTENSION **Serves MISSOURI and Delivers MIZZOU**
 through credible statewide programs
Agriculture and Environment

Missouri Grazing Schools

This program teaches management-intensive grazing (MiG), which subdivides large fields into smaller paddocks then rotates livestock across paddocks. The program is delivered in 2- and 3-day schools that are held during the growing season (April to October) throughout Missouri, including at MU outlying centers. School instructors in MU Extension are regional specialists in Agronomy, Livestock, and Ag Business. They pair up with colleagues in NRCS, who teach fencing and watering systems as well as design of grazing systems. In 2018, impact of the grazing school program was \$125 million annual to the state economy.

Regional grazing schools were established in Missouri in 1995 and since then have been taught by MU Extension and NRCS, Missouri Department of Conservation (MDC), Missouri Forage and Grassland Council (MFGC), and Missouri Department of Agriculture. These partners have contributed research, cost-share incentives, and educational outreach to promote the adoption of management-intensive grazing (MiG) in Missouri.

- West Plains - April 26 – 28 (23 Attendees)
- West Plains – October (25 Attendees)



Legend



Agricultural Growth
& Stewardship



Economic
Opportunity



Educational
Access &
Excellence



Health
& Well-Being



MU EXTENSION **Serves MISSOURI and Delivers MIZZOU**
 through credible statewide programs
Agriculture and Environment

Artificial Insemination Schools

Elizabeth Picking Livestock Specialist, Reagan Bluel Dairy Specialist, and Chloe Collins Dairy Specialist taught artificial insemination schools in March and November of 2023 in partnership with Kent Daniels from Select Sires, the MU Southwest Research, Extension, and Education Center, American Foods Group, and Joplin Regional Stockyards.



This multi-day school combined classroom learning about estrous synchronization, reproductive anatomy, and management strategies to increase AI success with hands-on learning. Attendees were able to get hands on practice artificially inseminating cows and handling and thawing semen. These attendees became certified to artificially inseminate cattle.

Legend



Agricultural Growth & Stewardship



Economic Opportunity



Educational Access & Excellence



Health & Well-Being



MU EXTENSION **Serves MISSOURI and Delivers MIZZOU**
 through credible statewide programs
Agriculture and Environment

Spring Forage Conference

The 39th Annual conference is a collaboration between University of Missouri Extension regional ag specialists, Natural Resource Conservation Service employees, and Soil & Water Districts. This conference brought in nationally recognized speakers to create a high-quality conference. This conference had approximately 450 producers and industry stakeholders attend.



Legend



Agricultural Growth & Stewardship



Economic Opportunity



Educational Access & Excellence



Health & Well-Being



MU EXTENSION **Serves MISSOURI and Delivers MIZZOU**
through credible statewide programs
Agriculture and Environment

Show Me Select Heifer Program

This program gives cattle producers an opportunity to market high quality replacement heifers through 12 sales a year. This also offers producers a source of bred replacement heifers which have gone through a reproductive tract score and pelvic measurement as well as being bred to low birth weight bulls to reduce the risk of calving difficulties. MU Extension livestock specialists work with producers enrolling heifers to collect data and run sales. In fall of 2023, 928 Show-Me-Select logo heifers were marketed through six sanctioned sale locations with gross sales of \$2,544,825.



Legend



Agricultural Growth
& Stewardship



Economic
Opportunity



Educational
Access &
Excellence



Health
& Well-Being



MU EXTENSION **Serves MISSOURI and Delivers MIZZOU** through credible statewide programs **Agriculture and Environment**

Missouri Show-Me-Select Replacement Heifers Analysis
Sale Lot Summaries by Head 2023



11/17/2023 Carthage Joplin Regional Stockyards

Tier II AI	Tier II NS	Tier I AI	Tier I NS	All AI	All NS	All Heifers	
Head	0	1	42	42	42	43	85
% Head	0.0%	1.2%	49.4%	49.4%	49.4%	50.6%	100.0%
Sales	\$0	\$2,600	\$125,150	\$119,300	\$125,150	\$121,900	\$247,050
% of Sales	0.0%	1.1%	50.7%	48.3%	50.7%	49.3%	100.0%
\$/Head (max)	\$0	\$2,600	\$3,500	\$3,300	\$3,500	\$3,300	\$3,500
\$/Head (ave)	\$0	\$2,600	\$2,979	\$2,840	\$2,979	\$2,834	\$2,906
\$/Head (min)	\$0	\$2,600	\$2,100	\$2,300	\$2,100	\$2,300	\$2,100

11/18/2023 Kingsville Kingsville Regional Stockyards

Tier II AI	Tier II NS	Tier I AI	Tier I NS	All AI	All NS	All Heifers	
Head	18	5	65	93	83	98	181
% Head	9.9%	2.8%	35.9%	51.4%	45.9%	54.1%	100.0%
Sales	\$55,350	\$14,000	\$190,050	\$262,575	\$245,400	\$276,575	\$521,975
% of Sales	10.6%	2.7%	36.4%	50.3%	47.0%	53.0%	100.0%
\$/Head (max)	\$4,300	\$2,800	\$3,500	\$3,500	\$4,300	\$3,500	\$4,300
\$/Head (ave)	\$3,075	\$2,800	\$2,923	\$2,823	\$2,956	\$2,822	\$2,883
\$/Head (min)	\$2,300	\$2,800	\$2,250	\$2,400	\$2,250	\$2,400	\$2,250

12/1/2023 Fruitland SEMO Livestock Sales, LLC

Tier II AI	Tier II NS	Tier I AI	Tier I NS	All AI	All NS	All Heifers	
Head	3	6	33	21	36	27	63
% Head	4.8%	9.5%	52.4%	33.3%	57.1%	42.9%	100.0%
Sales	\$8,600	\$16,000	\$92,300	\$53,900	\$100,900	\$69,900	\$170,800
% of Sales	5.0%	9.4%	54.0%	31.6%	59.1%	40.9%	100.0%
\$/Head (max)	\$3,000	\$2,800	\$3,900	\$2,900	\$3,900	\$2,900	\$3,900
\$/Head (ave)	\$2,866	\$2,666	\$2,796	\$2,566	\$2,802	\$2,588	\$2,711
\$/Head (min)	\$2,600	\$2,500	\$2,300	\$2,000	\$2,300	\$2,000	\$2,000

12/8/2023 Kirksville Kirksville Livestock, LLC

Tier II AI	Tier II NS	Tier I AI	Tier I NS	All AI	All NS	All Heifers	
Head	2	0	54	70	56	70	126
% Head	1.6%	0.0%	42.9%	55.6%	44.4%	55.6%	100.0%
Sales	\$5,450	\$0	\$147,850	\$186,050	\$153,300	\$186,050	\$339,350
% of Sales	1.6%	0.0%	43.6%	54.8%	45.2%	54.8%	100.0%
\$/Head (max)	\$2,850	\$0	\$3,200	\$3,200	\$3,200	\$3,200	\$3,200
\$/Head (ave)	\$2,725	\$0	\$2,737	\$2,657	\$2,737	\$2,657	\$2,693
\$/Head (min)	\$2,600	\$0	\$2,400	\$2,250	\$2,400	\$2,250	\$2,250

12/8/2023 Farmington Farmington Regional Stockyards

Tier II AI	Tier II NS	Tier I AI	Tier I NS	All AI	All NS	All Heifers	
Head	29	9	45	48	74	57	131
% Head	22.1%	6.9%	34.4%	36.6%	56.5%	43.5%	100.0%
Sales	\$81,300	\$21,300	\$118,150	\$119,800	\$199,450	\$141,100	\$340,550
% of Sales	23.9%	6.3%	34.7%	35.2%	58.6%	41.4%	100.0%
\$/Head (max)	\$3,400	\$2,600	\$3,200	\$3,000	\$3,400	\$3,000	\$3,400
\$/Head (ave)	\$2,803	\$2,366	\$2,625	\$2,495	\$2,695	\$2,475	\$2,599
\$/Head (min)	\$2,400	\$2,100	\$2,100	\$2,200	\$2,100	\$2,100	\$2,100

12/9/2023 Palmyra F&T Livestock Market

Tier II AI	Tier II NS	Tier I AI	Tier I NS	All AI	All NS	All Heifers	
Head	11	4	146	181	157	185	342
% Head	3.2%	1.2%	42.7%	52.9%	45.9%	54.1%	100.0%
Sales	\$29,000	\$10,650	\$406,650	\$478,800	\$435,650	\$489,450	\$925,100
% of Sales	3.1%	1.2%	44.0%	51.8%	47.1%	52.9%	100.0%
\$/Head (max)	\$3,000	\$2,750	\$3,900	\$3,350	\$3,900	\$3,350	\$3,900
\$/Head (ave)	\$2,636	\$2,662	\$2,785	\$2,645	\$2,774	\$2,645	\$2,704
\$/Head (min)	\$2,000	\$2,450	\$2,000	\$1,900	\$2,000	\$1,900	\$1,900

Legend



Agricultural Growth
& Stewardship



Economic
Opportunity



Educational
Access &
Excellence



Health
& Well-Being



MU EXTENSION **Serves MISSOURI and Delivers MIZZOU**
 through credible statewide programs
Agriculture and Environment

Farmfest

Scenes from the University of Missouri Extension booth at the Ozarks Farm Fest in Springfield. An estimated 40,000 people attended this popular event in the Ozarks and field specialists staffed the booth during the three-day event.



Pearls of Production – Women in Ag Conference

The Pearls of Production-Women in Agriculture conference is a program designed to provide a leadership and hands-on training opportunity for women involved in livestock production. Several field and state specialists come together to plan this conference annually. The women producers get hands-on training and a supportive community of women livestock producers.



Legend



Agricultural Growth & Stewardship



Economic Opportunity



Educational Access & Excellence



Health & Well-Being

2023 FARM STRESS ANNUAL REPORT

PROJECT GOALS

- Increase access and utilization of free teletherapy coaching sessions.
- Prioritize providing mental and behavioral support services and training in urban counties.
- Provide training for community members who work with the youth.
- Provide mental health training in 100% of counties.

Missouri's mental health crisis is more challenging for the agricultural community, fueled by growing economic and mental health challenges that are severely affecting the health, safety, and well-being of farm families. These stressors have contributed to substantial and critical mental health issues among rural Missourians, especially farmers and ranchers.

To address Missouri's mental health crisis, the University of Missouri Extension provides free mental health classes, prevention of suicide programs, and stress/depression awareness resources and collaboratively partners with the University of Missouri College of Arts & Sciences Psychological Services Clinic offers free teletherapy counseling services.

In 2022 MU Extension was awarded a gift of \$500,000 from the MFA Foundation which covers the cost of free coaching sessions from a trained therapist. In 2023, 42 clients participated in 203 hours of responsive teletherapy counseling. The services are provided at no cost to farmers, ranchers, and farm families and are valued at \$54,303.



PROTECTING OUR FARMERS

Agriculture remains the backbone of Missouri's strong economy, supporting both rural and urban communities. It is critical to help Missouri farmers, ranchers, and their families remain safe, healthy, and productive.

2023 ANNUAL IMPACTS

1,391

FARMERS AND ALLIES SERVED

100%

COUNTIES SERVED

\$247,413

TOTAL VALUE OF SERVICES

74

Workshops

42

Farmer Clients

Served via Teletherapy Counseling

996

People Completed Mental Health First Aid Training

46

People Completed Question Persuade Refer Training

307

People Completed Weathering the Storm Training

Client Quotes

- "Use 988 for myself when no one is available to talk with [me] about my family member."
- "I'm capable of helping our students. I feel more confident to help our students."
- "I learned that some of the feelings/emotions [that] I've experienced when helping others are valid."
- "I learned 988 isn't just for suicide. Anyone can call."
- "I learned the importance of self-care."
- "I will work with other staff members to review our policies and procedures to see where we need to make updates and then retrain staff on policies."
- "I plan to speak with a family member regarding concerns about feeling sad or anxious. I now have better tools to open the conversation"

ACKNOWLEDGEMENTS

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 USDA NIFA MO FRSAN Grant Award #: 2021-70035-35436



an equal opportunity/ADA institution

Howell County

Agriculture and Environment

Local Impact

Drought Workshop

In 2023, drought was once again a major topic in agronomic programming, marking two years in a row where drought impacted the region. In 2023, drought workshops were held in Howell, Ozark, Texas, and Reynolds Counties, over 80 farmers attended these workshops.

Nitrate spot testing (active ingredients diphenylamine and sulfuric acid) was conducted on forages. Nitrates sometimes accumulate during drought and high levels can result in livestock loss. In 2023, Howell County Extension Center conducted over 150 nitrate spot tests for various forage crops.



Soil Testing

Soil testing assists landowners with understanding the nutrient needs of their soils and helps producers determine the best course of action for fertilizing pasture and crop ground. Soil testing also enables producers to determine the best investment for profitability. The following are the number of farm soil tests conducted in the multi-county area: **Howell** - 530

Winter Workshops

In Howell County, 18 people attended a Beef and Forage workshop on a research update provide by Dr. Stacey Hamilton, and causes for livestock mortality by Dr. Tim Evans.

Howell County

Agriculture and Environment

Local Impact

Private Pesticide Applicator Training

This program educates farmers about the safe and proper use of agricultural pesticides. To purchase and apply restricted-use pesticides, producers in Missouri must attend a training session, view a training video, or attend a Zoom session. A total of 163 private applicators received training in 2023 by either face-to-face meetings or two Zoom trainings.



Howell County

Agriculture and Environment

Local Impact

Strategies for dealing with low forage supply workshop

West Plains – August 8th
35 attendees learned about pasture renovation following drought, feeding during drought, and about financial management of the farm.
Nitrate spot testing was conducted on

Career Exploration Day

1600 area youth came to the SW Research, Education, and Extension Center in Mt. Vernon on September 21st to learn about careers in agriculture. Elizabeth Picking spoke to students about careers in the equine industry and how to determine diets for horses.



Students enjoyed interacting with River the Horse and Winston the Donkey

Howell County

Agriculture and Environment

Local Profiles and Stories



Cattlemen's Association Field Day at Corman Charolais

On June 3rd, Elizabeth Picking spoke about record keeping, pregnancy rates, and keeping 1st calf heifers in the herd. Sarah Kenyon spoke about forage varieties. This field day was a partnership with the Southcentral affiliate of Missouri Cattlemen's Association and had 45 attendees.

Pasture Weeds & Fly Control Workshops

Elizabeth Picking presented on identifying and controlling flies on livestock. Sarah Kenyon presented on pasture weed identification and control. This workshop was offered in 6 locations with a total of 111 attendees.



Howell County

Agriculture and Environment

Local Profiles and Stories

3rd Annual Howell County Equine Conference

Elizabeth Picking Livestock Specialist and Sarah Kenyon, Agronomy Specialist developed and held this conference for horse owners. Charlie Sokolov, Schleese Saddlery Certified ergonomist, spoke about saddle fitting for the horse and rider. Sarah Kenyon spoke about forage variety selection and management and Elizabeth Picking spoke about reducing hay waste. This conference was a partnership with Schleese Saddlery and Saddle fit4life. This conference brought together 25 horse owners from multiple counties in southern Missouri.



Managing Nuisance Wildlife Workshop

Partnership with Missouri Department of Conservation. Scott McWilliams taught attendees how to manage wildlife that were becoming a nuisance.

Howell County

Business and Community

Local Profiles and Stories

MU Extension
Business Development Programs
County Annual Report
Fiscal Year 2023



County Name: Howell

As entrepreneurs and innovators, Missouri's small businesses are becoming a more diverse group that continues to make the state's economy productive. There are approximately 500,000 small businesses in Missouri. Nearly 98 percent of all businesses with employees are categorized as small businesses. In assisting the owners and managers of those businesses, MU Extension contributes to a county's economic development through growth in jobs, sales, innovation, technology development and commercialization.

In Howell County, during 2023, business development program specialists and business counselors with MU Extension, Missouri Small Business Development Centers (MO SBDC), and Missouri Procurement Technical Assistance Centers (MO PTAC) reported 35 individual businesses or clients received counseling sessions for business start-up and management counseling, and government assistance. In addition, entrepreneurs and business owners in Howell County reported the following economic impact and activity as a result of the services provided by the MU Extension Business Development Program:

- Sales Increases: \$\$645,000.00
- Businesses Started: 2
- Jobs Created: 61
- New Investments: \$233,211
- Jobs Created: 14
- Jobs Retained: 66
- Business training attendees and conference participants: 42
- PTAC/APEX Contract Awards: \$67,982
- Number of Awards: 4



Established in 2002, the **Fire Officer Certificate Program** is designed for those who wish to further their professional development without the time and expense of traditional college classes. This program has been developed and evaluated to ensure it provides structured curriculum delivery and academic rigor. The program requires completion of 288 hours of instruction within three years.



The **Aircraft Rescue and Fire Fighting (ARFF)** program provides specialized fire training for Federal Aviation Administration (FAA) certificated airports. The program uses a Mobile Aircraft Fire Training simulator to provide realistic on-site fire and rescue training at airports. The program supports commercial service airports, which are required to provide recurring ARFF training for their airport firefighters.



The **Missouri Extension Disaster Education Network** provides education and technical assistance to individuals and families, local governments, schools and organizations so they can prepare for and respond to natural and man-made disasters. Because of the unique relationship it maintains with each community, MU Extension is a key resource for the public, emergency services and public officials.





The **Fire Service Leadership Enhancement Program** (FSLEP) prepares fire and emergency service leaders for the opportunities and challenges they will face. For 22 years, the MU Fire and Rescue Training Institute has partnered with the Missouri Association of Fire Chiefs and the Missouri Association of Fire Protection Districts on this program.



The programming from the **MU Fire and Rescue Training Institute** (FRTI) is available to all qualified fire and emergency first responders. Seventy percent of courses are held at the local departments or agencies. With most of the state's fire service personnel considered volunteer or part-time, this local access and flexibility assures training opportunities for all firefighters and emergency responders.



The LETI **School Protection Officer Program** provides basic training for school faculty and administrators to become school protection officers. The three-week academy typically runs during June and exceeds the hourly requirements for state recognition and certification.



The Law Enforcement Training Institute (LETI) has provided basic and advanced training for law enforcement since 1948. LETI's **Basic Peace Officer Academy** exceeds the 600 hours of training required for licensure in Missouri. From 2019 through 2023, the basic academy has licensed almost 300 peace officers, more than any other academy in the state. During that time, all but one graduate became employed by a law enforcement agency. LETI graduates come from around the state and return to their communities to serve and protect.



The **Law Enforcement Training Institute** (LETI) offers advanced training on a wide variety of topics, including defensive tactics, firearms, use of force and de-escalation. LETI offers customized programs for all required continuing education areas of concentration.



LETI's **National Animal Cruelty Investigations School** provides training on investigating abuse and neglect of animals. Multi-level courses prepare future animal care workers to handle most types of incidents. Several jurisdictions throughout the country require the National Animal Cruelty Investigations School's training for employment as animal cruelty investigators.

Local Impact

This year I taught two Keep your Keys Classes in West Plains; this class is to help senior drivers ready for driving retirement and help with their driving mobility.

I instructed a healthy food sampling at the West Plains Senior Center.

I also was working on Policy System and Environment changes in the county including implementing a Healthy Rewards program with some of the area teachers. Taking the first steps to set up a seed library in the Howell County office and working with MO Beef Kids to get more healthy protein donated to area schools by local farmers in Willow Springs. I also am working with an area school to get them grants for new playground equipment.

A new program was created for the Behavior Healthcare at Ozark Healthcare to teach nutrition, health and exercise to their group classes of over 25 people.

MOCAN- The Missouri Council for Activity and Nutrition (MOCAN) is a partner-driven council that is housed in Columbia with MU Extension and is composed of professionals across the state from diverse backgrounds (e.g., educators, government officials, healthcare providers, nonprofit representatives, etc.). Through statewide networking, organizations work together to implement and support policy changes that will improve the health and quality of life of Missourians.

Show Me ECHO- Show-Me ECHO (Extension for Community Healthcare Outcomes) uses videoconferencing to connect interdisciplinary teams of experts with primary care providers and other professionals. They collaborate in interactive case-based learning to develop advanced skills and best practices, which improves patient care access, quality and efficiency. Show-Me ECHO learning sessions offer free continuing education and are provided at no cost to participating sites and individuals.

I along with Hilliary Shumock, Alicia Amyx-Winrod and Nick Sanchez participated in the Project Homeless Connect event in West Plains. We reached over one hundred participants and fed them a healthy meal as well.

Howell County

Health and Human Sciences

Local Profiles and Stories



Stay Strong Stay Healthy (SSSH)

Six exercise classes were offered at the Howell County extension office.

This is a 16-session class with classes held twice a week.

The participants all enjoyed the socializing at class along with feeling stronger.

Walk with Ease (WWE)

The Arthritis Foundation's 6-week Walk with Ease program teaches individuals how to safely make physical activity part of your everyday life.

The program is proven to reduce the pain of arthritis and improve your overall health.

The class met at Galloway Park in West Plains with 2 sessions being held, one in the spring and one in the fall.

Howell County

Health and Human Sciences

Local Profiles and Stories



Hilliary Shumock attended two event with Head Start in Howell County. The field day pictured and a cooking class with parents in Mountain View. We had a great turn out for both events



Southwest Research Center had a field day in the fall. Over 1500 area high school students attended. I gave a presentation about Buzz words in nutrition.

Cooking Matters Kids Spin Club

Fifth and sixth grade students from the Boys and Girls Club in West Plains participated in this two session class. Hilliary Shumock, Nutrition Program Associate help with these classes. Participants were taught basic cooking skills, food safety and etiquette. The participants also received memberships into 4H.



Howell County

Food Nutrition Education Program

Local Profiles and Stories

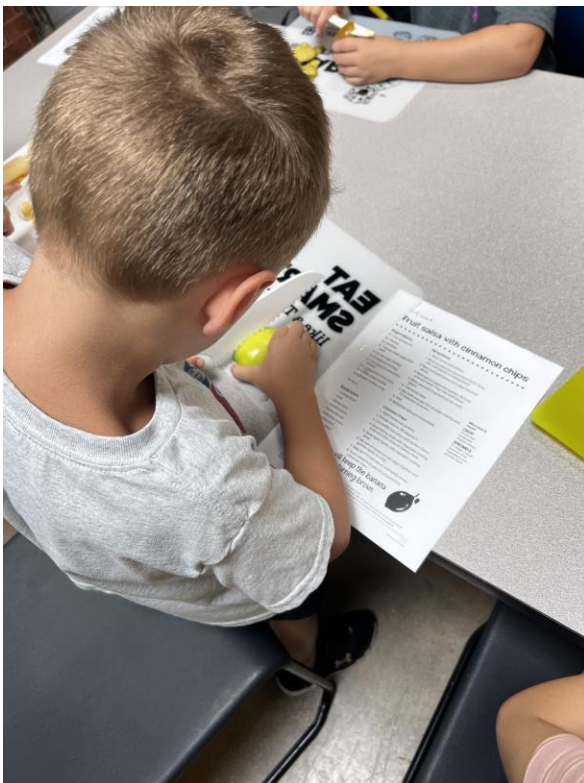
The Supplemental Nutrition Assistance Program Education (SNAP-Education or SNAP-Ed) brought \$10,874,798 in federal funds to Missouri. During FY2023, Missouri's SNAP-Ed program reached over 78,000 Missourians through direct classroom education. Each person participated in an average of 6 hours of education totaling over 15,000 hours. In addition, an additional 760,135 persons participated in indirect education. Direct and indirect education resulted in over 1.8 million total contacts with Missourians.

A total of 5,684 participants were from Howell County.

Participants in SNAP-Ed learn the importance of making healthier meals and snack choices, eating breakfast more often, are more willing to try new foods, increase their physical activity, and make healthier food choices. Those who practice healthy eating and are physically active are more likely to contribute to a healthy labor force and enjoy a high quality of life throughout the lifespan.

This vital programming effort also reduces healthcare costs over the participant's lifetime, saving taxpayer money in reduced public healthcare benefits and insurance premiums.

Making Fruit Salsa



Making and eating fruit pizza



Howell County

Food Nutrition Education Program

Local Profiles and Stories

Schools/Agencies served:

Behavior Healthcare
Boys & Girls Club – West Plains
Fairview Elementary - West Plains
First Baptist Church – West Plains
Holiday Lane Head Start – West Plains Head Start
Howell Co. MU Extension Center
Howell Valley Elementary school
Junction Hill Elementary School
Mountain View Head Start
Munch
Ozark Action Head Start (Ozark Action, Inc.)
Richards Elementary School
West Plains Head Start
West Plains Housing Authority



Young Crunch Off Participant

Hilliary Shumock, Nutrition Program Associate, shared the following success stories from Howell County:

“I recently taught Kids in the Kitchen to middle schoolers at Junction Hill school. Thanksgiving break occurred between lessons. When we resumed lessons, I had 2 students share that they had made the Farmer’s Market Salsa recipe for their family Thanksgiving meal. They discussed with one another the changes they made to their salsa and what their families thought of the recipe. Previous to the class neither student had cooked before so it was nice to see them feel confident and proud in their skills.”