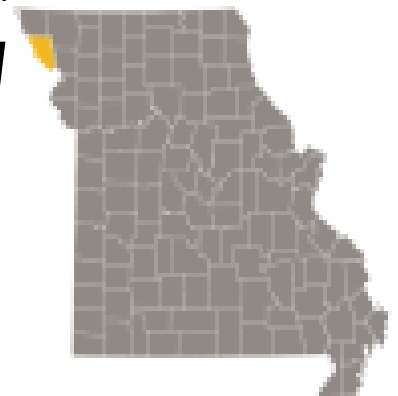




UNIVERSITY OF MISSOURI EXTENSION

Holt County

2023 ANNUAL REPORT





Office of Extension and Engagement

University of Missouri

OFFICE OF THE VICE CHANCELLOR FOR EXTENSION AND ENGAGEMENT

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Columbia, MO 65211

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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



Annette Deering

Field Specialist in 4-H Youth Development

Katie Pemberton

Field Specialist in Human Development

Gina Ripley

Nutrition Program Associate

Kelly Todd

Youth Program Associate

Randa Doty

Extension and Engagement Specialist

Debbie Bennett

Field Specialist in Nutrition and Health

Jim Crawford

Field Specialist in Agricultural Engineering & Director of Graves-Chapple Extension & Education Center

Denice Ferguson

Field Specialist in Agricultural Business

Wayne Flanary

Field Specialist in Agronomy

Gwenlyn Funk

Field Specialist in Horticulture

Amie Schleicher

Field Specialist in Livestock

Jackie Spainhower

Field Specialist in Community Development

Leigh Lade

Holt County Office Manager

Stacey Steffens

Northwest Regional Director

Council Members

Billie Banks, Chairman

Patrick Ezzell, Vice-chairman

Denise Becholdt, Secretary

Cindy Cox, Treasurer

Stacey Counts

Linda Gocken

Dallas Kurtz

Beverly Meyer

Richard Meyer, Appointed Commissioner

Jane Moyers

Barbara Tansey

Beth Varuola

Anne Wales

Contact Us:

University of Missouri Extension in Holt County

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Oregon, MO 64473

660-446-3724

HoltCo@missouri.edu

Office Hours – Monday - Thursday

8:00 a.m. – 4:00 p.m.

Closed for Lunch 12:00-12:30 p.m.

County Commissioners

Presiding Commissioner: *Tom Bullock*

First District Commissioner: *Richard Meyer*

Second District Commissioner: *David Carroll*

Budget and more

2023 Appropriations Budget

County Appropriations	33,053
Total Income	\$33,053

Expenses

Salaries/Benefits	16,974
Travel	2,112
Postage	192
Telephone	1,497
Office Supplies/Service	775
Advertising	560
Reproduction/copy services	1,336
Insurance	1,471
Furniture/Equipment	264
Total Expenses	\$35,843



Two Holt County Council members attended the MU for You conference in Columbia in March. Billie Banks and Linda Gocken joined other council members and county office managers to learn more about MU Extension at the state level and responsibilities of council members. Top picture are all participants from the Northwest Missouri Region. Bottom picture are Randa Doty, Linda Gocken, Billie Banks and Allison Copeland from the UM System.

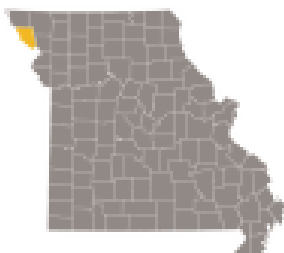


Council members Billie Banks and Linda Gocken checked in youth exhibits at the Holt County Autumn Festival

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



Local Support

Did you know you can donate directly to Holt 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.



Missouri 4-H Positive Youth Development

4-H Participation Report

The following numbers were taken from 4-H Online, for the 4-H year October 1, 2022 - September 30, 2023:

- ✓ Youth members of organized 4-H community clubs: Holt - 26
- ✓ Total number of adult volunteers: Holt - 5
- ✓ Youth members of organized 4-H after school clubs: Holt - 19
- ✓ Youth participating in 4-H special interest (SPIN) short-term programs: Holt - 9

Youth Leadership

One of the goals from the Missouri 4-H 2023 Plan of Work was to grow youth leadership in the counties. To accomplish this goal, Annette, Kelly Todd, and 4-H councils transitioned adult-led 4-H councils to youth-led 4-H councils in Holt county. This transition should offer youth multiple opportunities for leadership roles.

Two Rivers 4-H Day Camp

Participants: 16 youth campers ages 5-12, and 2 teen helpers (2 Andrew, 1 Atchison, 1 Holt, 14 Nodaway.)

Theme: Space. "4-H is Out of this World"

Learning objectives:

- Youth learned about the solar system and planets. They made solar system mobiles, and galaxy jars.
- Youth learned about astronauts. They tasted astronaut ice cream, and learned about foods that astronauts eat while in space.
- Youth learned about rockets. They made and launched rockets, using plastic water bottles, straws, vinegar, and baking soda.



Gary G. Taylor Trust funding was used to build an outdoor classroom in partnership with South-Holt R1 and Holt County 4-H. This is an exciting addition to Holt County.

Holt County 4-H Highlights

- ✓ Sunrise 4-H Club was awarded Feeding Missouri Grant
- ✓ Holt County 4-H Advisory Board was awarded FCS Grant for the Mighty MO Park Project
- ✓ NRA Grant awarded to Atchison-Holt Shooting Sports Club
- ✓ Rocky Mountain Elk Foundation grant was awarded to the Atchison-Holt Shooting Sports Club in the amount of \$1500
- ✓ SNAC Programs held at South-Holt R1 and Nodaway-Holt Elementary
- ✓ Held 4-H enrollment events in Holt County
- ✓ Continued organizing and stocking Holt County Blessing Boxes in Oregon, Maitland and Skidmore
- ✓ Holt County Youth Exhibited 4-H Projects in the 4-H Building at the Missouri State Fair



Agriculture & Environment

Holt County Garden Tour

The Holt County Extension Council saw a need in their community and took the lead on holding a garden tour in their community. Not only did this bring people from eight different counties in Missouri, but it created excitement in their own county. In 2023, the council coordinated with four gardeners in the Oregon area to host guests on July 22. Four educational presentations were presented by MU Extension Field Specialists, including Composting, Stress Management, Food Preservation, and Soil Testing. A fifth program on pollinator gardens was provided by Holt County 4-Hers. The council plans for this to be an annual event to promote the county and to educate citizens about and encourage more gardening.. Local Sponsorships and free will donations funded the event and advertising. Plans are already being made for the 2024 Garden tour.



4-H members present pollinator gardens at the garden tour



Participants and Council Members (wearing yellow vests) at one of the garden tour stops.



Council member, Beverly Meyer, pose for a photo.



Much of the tour advertising was on Social Media. Sharing the posts was important to spreading the word in Holt County.



MU Extension Specialists, assisted by providing educational booths at each stop. Debbie Bennett provided pressure canner lid testing and food preservation materials.

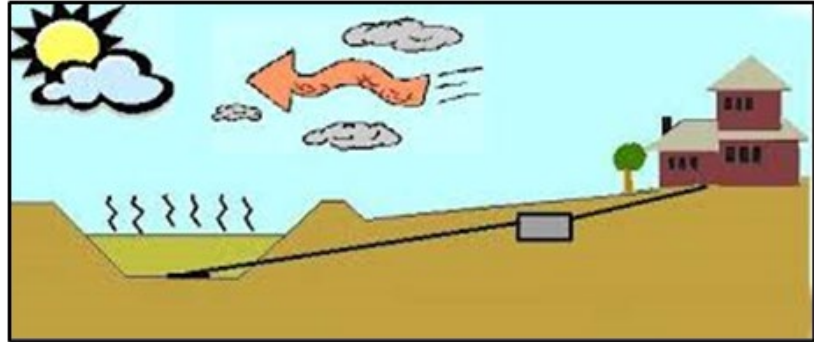




Agriculture & Environment

On Site Septic Systems

- ✓ The most common question this year was septic lagoons going dry from the drought and what should they do. Each is slightly different, but the general recommendation is to add water to maintain its function and to keep the bottom seal from cracking and causing leaks in the future.
- ✓ The average cost to replace a septic system is approx. \$20,000. By taking some simple preventative steps, a current system can be maintained, safely processing wastewater from the home and saving the owner the replacement costs.



A diagram of how an on-site septic system works when incorporating a lagoon in place of a leach field

Tar Spot in Corn

Estimated losses to this corn disease between 2018 and 2022 are approximately 242.6 US million bushels, which is approximately \$900 million. Yield losses are due to reduced grain fill, kernel abortion and reduced test weight. MU requested field specialists in agronomy monitor Tar Spot spread and severity. It is now in my assigned counties and growers should be prepared for a plan of action next year. More than 65 producer phone calls and conversations were had regarding this new corn disease.

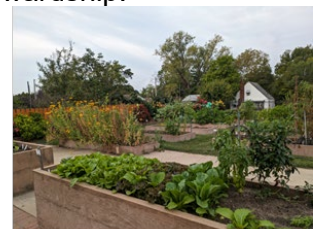


Horticulture Benefits Communities

- Horticulture, the science and art of cultivating fruits, vegetables, flowers, and plants, plays a pivotal role in benefiting communities in multifaceted ways:
- Horticulture contributes to food security by providing communities with a diverse range of fresh and nutritious produce by promoting healthier lifestyles and reducing dependence on external food sources
- Community gardens and shared horticultural spaces foster social cohesion, bringing people together to cultivate a sense of belonging and shared responsibility
- Beyond the social aspect, horticulture enhances:
 - environmental sustainability of communities by promoting green spaces
 - reducing urban heat islands and supporting biodiversity
- Additionally, horticultural activities often provide therapeutic benefits, promoting mental well-being and stress reduction. Overall, horticulture not only addresses practical needs but also enriches the fabric of communities, fostering health, connectivity, and environmental stewardship.



Example of "green mulch"



Example of a well-organized and maintained community garden



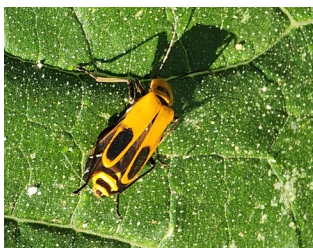
Agriculture & Environment

AG Updates and Private Pesticide Applicator Training

This training educated crop producers for safe handling and application of restricted use pesticides. Participants learned about pest identification, economic thresholds and injury levels, emergency planning procedure and the environmental ramification of improper pesticide application. More than 270 participants initiated or renewed a license, including 34 in Holt County. Ag staff then followed Private Applicator Training with “hot topics” in fields of ag in Horticulture, Ag Engineering, Agronomy, Livestock and Ag Business. Further regional Private pesticide applicator training was held monthly in Buchanan County reaching an additional 33 producers.



Determining if Garden Insects are Pests or Beneficial



Soldier Beetle on garden plant: a **beneficial pollinator**—no need to spray!

Photo courtesy of LG, Holt County

“Thank you so much. I am very relieved by that good news!”

Safety Acres

- ✓ Six hundred ten 3-5 grade students from northwest Missouri area schools attended two 2-day events in Maryville and St. Joseph.
- ✓ There were 8 learning stations with 3 farm safety sessions taught by MU Extension field specialists:
 - PTO Safety
 - ATV Safety
 - Grain Bin Safety
- ✓ Partners included: St. Joseph Safety Council, St. Joseph Fire Department, Missouri Highway Patrol, Associated Electric, Nodaway County Cattleman's Association, Northwest Technical School, Hillyard Technical School, FFA Chapters.
- ✓ PTO safety session taught the youth: tractor safety, how to approach a tractor when someone is operating, the dangers of the power take off on tractors. A demonstration using a tractor and a straw stuffed dummy showed how quickly a person can get tangled up and injured in a PTO
- ✓ ATV safety covered: safety equipment on, and safety equipment to be worn when operating, an ATV; laws regarding ATVs
- ✓ Interactive grain bin safety presentation included discussion on why grain bins are important but dangerous; demonstration of how grain flows out of a grain bin using a cross-section of a small-scale model of a grain bin with grain and a small doll; demonstration with another small version of the top of a grain bin to discuss if we could rescue a person with a rope; students got to try pulling on the rope and see how much weight they could pull



Left: Amie Schleicher teaches Grain Bin Safety

Middle: Wayne Flanary teaches Grain Bin Safety

Right: Jim Crawford teaches students about ATV Safety



Business & Community

Digital Ambassador Program

The inaugural Digital Ambassador program was offered in Nodaway County and trained seven volunteers to assist others in making decisions about broadband internet services, as well as help them set up and maintain home networks and feel confident using the internet. Volunteers will serve the Northwest Region.

The program also provided an opportunity to bring Kathy Kiely, Professor and Lee Hills Chair in Free Press Studies at the MU School of Journalism to the region. Professor Kiely shared tools to help navigate the digital information landscape and differentiate between reliable information and misinformation.



NWMO VITA Tax Preparation

The 2023 NWMO VITA Tax preparation program offered free tax prep to people needing assistance filing their 2022 tax returns. The NWMO VITA program allowed low income, disabled, and older clients to get their returns prepared for free when they didn't feel comfortable using free online resources themselves. They did not have to pay a preparer upfront for the service which may have prevented many of them from getting their taxes prepared. The program provided education on their return and each client was shown where the money was coming from, whether it was a refund of taxes overpaid, or an Earned Income Credit. If a client owed taxes, we helped them understand why they owed additional taxes and advised them to talk to their employer about having additional funds withheld from their paycheck to avoid penalties for underpayment.

Eight volunteers from communities across the region partnered to offer 24 free 2022 income tax preparation sites in 12 different counties in the region. Volunteers spent 377 hours preparing 263 tax returns in Northwest Missouri. Cost savings to taxpayers (\$200 per tax return) is \$52,600. Total federal refunds in northwest Missouri was \$126,116, with \$56,980 being returned from the state. In Holt County, 13 people took advantage of this service.



Free Personal Income Tax Preparation

MU Extension is offering FREE tax return assistance for the 2022 tax year through IRS's Volunteer Income Tax Assistance (VITA) program in northwest Missouri.





Health & Human Sciences

PREVENTING FALLS TO IMPROVE QUALITY OF LIFE AND SUPPORT INDEPENDENT LIVING

There is a clear need for fall prevention programming in Missouri. While one in four adults aged 65 years and older report falling every year in the United States, the fall rate for older adults in Missouri is even higher. In 2020, 31.3% of older Missourians experienced a fall. Falls cause the most injury-related deaths among older adults. The economic cost of older adult falls in the U.S. is \$50 billion a year.

Nutrition and Health Specialists help Missourians prevent falls by teaching **Stay Strong, Stay Healthy (SSSH)**; **Tai Chi for Arthritis and Fall Prevention (TCAFP)** and **A Matter of Balance (MOB)**. **Stay Strong, Stay Healthy** is a strength-training program that focuses on strength, flexibility and balance for older adults. The **Tai Chi for Arthritis and Fall Prevention** program can help participants reduce pain and improve mobility and balance. **A Matter of Balance** is designed to reduce the fear of falling, help older adults increase their physical activity and introduce exercises to increase strength and balance.

In 2023, **SSSH Levels 2 and 3** were completed at the Maryville Community Center with the same 8 participants in both classes. This group was one of the first in the state to pilot the new Level 3 set of exercises. **SSSH Level 1** was taught to a new audience at the Rock Port United Methodist Church as a free SNAP class. There were two, 8-week sessions of the class with 8 participants in both sessions and 7 participants who participated in one of the sessions. **SSSH Level 1** was also taught as a free SNAP class to 6 participants at the Oregon United Methodist Church. **TCAFP** was taught at the Rock Port United Methodist Church to 16 participants. **MOB**, which is a free program, was taught to 16 participants at the Holt County Senior Center and to 9 participants at the Tri-City Friendship Center in Maitland.

Fall prevention programs are proven to decrease participants' fall risks. Data from statewide **SSSH** programs from 2021 and 2022 show that **100% of participants feel that their overall health was improved after the program**. Additionally, 98% of participants reported feeling physically stronger, 85% reported sleeping better and 82% reported that their joints feel better.



Participants perform the Leg Extension exercise with ankle weights during a SSSH Level 1 class in Holt County. Participants work up to doing two sets of 10 repetitions of each of the eight SSSH exercises. In the class taught by Debbie Bennett, they increase the amount of weight they lift with their arms and legs to continue to make the exercises challenging.

Tai Chi participant feedback

One participant learned at a doctor's appointment that her blood pressure was lower and her kidney function was better.

Another participant said she could balance better while she was getting dressed.

"I feel stronger and have more energy. More stamina."



Katie Pemberton talks to A Matter of Balance participants in Mound City.

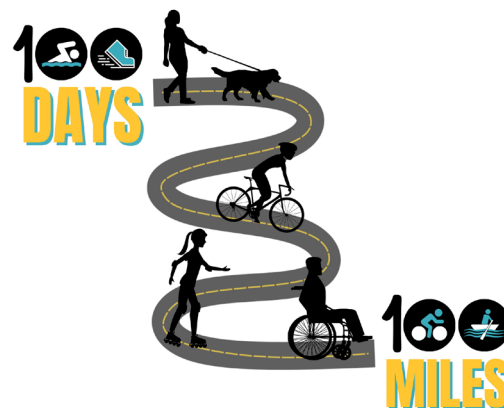


Health & Human Sciences

100 Days, 100 Miles

This year's 100 Miles, 100 Days Extension initiative made a significant impact statewide, attracting over 1,300 participants in Missouri, including 8 from Holt County and more than 240 in our Northwest Region. Throughout the 100 days of summer, participants were urged to discover their own enjoyable ways to cover the equivalent of 100 miles. The diverse activities reported ranged from hikes and bike rides to navigating wheelchairs through MO State Parks. Individuals embraced the initiative by strolling through their neighborhoods, fostering active connections with friends and family, and making the most of local parks and pools.

Our weekly motivational emails provided valuable education and fueled a friendly county competition, adding a bit of excitement into the challenge. Whether participants reached the coveted 100 miles or not, the ultimate goal of our initiative was to instill a lasting enjoyment of movement through a blend of encouragement, accountability, and motivation. Our hope is that the impact of this program will extend far beyond the 100 days, inspiring a continued commitment to a healthy and active lifestyle.

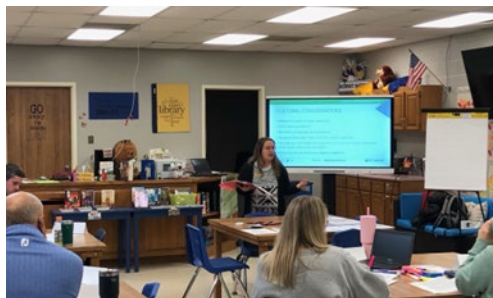


Focus on Kids

Parents who are divorcing or separating face unique challenges in parenting their children while living apart. The purpose of the Focus on Kids (FOK) program is to help parents learn how to nurture and support their children through the divorce/separation process, and to help parents develop ways to effectively work together as co-parents. This class was taught once a month in Buchanan County and in Nodaway County. The classes combined had 66 participants from the counties Buchanan, Gentry, Cass, Nodaway, Holt, Gentry, and Atchison.

“Thank you for opening my eyes on separation in a child’s eyes.”

**Focus on Kids
Participant**



Katie Pemberton, teaching Mental Health First Aid



Health & Human Sciences

SNAP-Education

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 297 participants were from Holt 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.



Gina Ripley teaching Let's Read about Healthy Eating in the Pre-Kindergarten class at Mound City Elementary School.

EFNEP

The Expanded Food and Nutrition Education Program (EFNEP) brought \$1,626,730 federal funds to Missouri. These funds were used to enroll 526 limited-resource families in nutrition education and meal preparation classes, representing 1,926 family members. Additionally, 1,980 youth were enrolled in EFNEP classes.

Thirty-four of these youth participants reside in Holt County.

Participants in EFNEP learn the importance of making healthier meals and snack choices, eating breakfast more often, trying new foods, increasing their physical activity, and making 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.

Participating schools and agencies include:

- ✓ Craig Elementary
- ✓ Mound City Elementary
- ✓ Holt County Head Start
- ✓ Hope House Ministries
- ✓ Community Services, Inc of NWMO - Holt
- ✓ Holt County Health Department
- ✓ Price's Grocery Store

Success Story

Healthy Plants, Healthy Bodies, a prekindergarten gardening curriculum, was recently taught at Holt County Head Start in Mound City for a series of seven weeks. These children range in age from 3-5 years old. Two types of radishes were planted in a mineral tub on the playground. The teacher, Miss Alex, reported that her students checked on the plants each morning and talked about how they were changing and growing. They also asked to water them daily. One boy thought that adding earthworms to the soil might help them grow, so they found one and added it to the pot! The students learned to observe with their eyes and not touch or disturb the plants. On our final lesson each child pulled two radishes and after weighing and cleaning them they were excited to taste them! Several of the students excitedly told me that they were now "vegetable farmers!" What a wonderful example of how our Family Nutrition Education Program is making an impact!!



County highlights

Missouri Century Farm



Century farms and ranches have shaped our nation and state. In every kitchen, behind every barn door and in every soiled and calloused hand lie stories of those who feed our nation. The Missouri Century Farm Program celebrates the lasting contributions farmers and ranchers have made to our country's and state's heritage.

The Virgil Miles family from Mound City, Missouri is this year's recipient. The farm was purchased by William Taylor in 1920 and this was Virgil's great grandfather. It was then owned by Otis and Maude Taylor who were Virgil's grandparents, and his mother Theota grew up on the farm. From the 40's to the 70's the land has been farmed by Virgil's grandfather Otis and Uncle Donald Taylor.

Virgil and Patricia lived in the farmhouse with the 4 children from 1963-1971. Virgil started farming the ground in the 1980's and still farms today with his sons, Kirby and Jamy and grandsons, Kyler, and Corbin. Virgil's son Kirby lived in the farmhouse from 1987 to 1994. Virgil's daughter Teri Beth moved to the farmhouse in 1994 and still resides there today.

The Centennial Farm project was initiated in Missouri in 1976 and awards certificates to persons owning farms that have been in the same family for 100 years or more. The University of Missouri Extension and the MU College of Agriculture Food and Natural Resources created the annual Century Farm program and recognition. The Missouri Farm Bureau joined as a co-sponsor in 2008, Since the program began in 1976 more than 8000 Missouri farms have received the Century Farm designation.

Missouri State Fair Farm Family



Kyle and Wendy Tubbs and family of Craig were among the families honored during the 66th annual Missouri Farm Family Day, Aug. 14 at the Missouri State Fair.

The Tubbs family was selected as the Holt County Missouri Farm Family by University of Missouri Extension in Holt County and the local Farm Bureau. The family includes Lauren and Emily

Each year, the fair sets aside a day to recognize farm families from across the state that are active in their communities, involved in agriculture, and/or participate in local outreach and extension programs such as 4-H or FFA.

The annual event is sponsored by five partner agencies: the Missouri Farm Bureau; the Missouri Department of Agriculture; the Missouri State Fair Commissioners; the MU College of Agriculture, Food and Natural Resources; and MU Extension.

The event showcases the impact that Missouri farm families have on the economy and heritage of the state, said Missouri State Fair Director Mark Wolfe. "These families are involved in agriculture activities in their communities and are active participants in local outreach and extension. As the premier showcase for Missouri agriculture, the Missouri State Fair is most certainly the appropriate place to celebrate these families."