



Ag Connection

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USDA Releases 2022 Census of Agriculture Data

On February 13, 2024, the USDA began releasing data from the 2022 Census of Agriculture. The Census of Agriculture began in 1840 in 26 states and the District of Columbia. In 1997, the Census of Agriculture was transferred from the Census Bureau to USDA National Ag Statistics Service (NASS). The Census now encompasses all 50 states and U.S. territories. USDA conducts the Census every five years. USDA has been using the following definition of a farm since 1974 “any place from which \$1,000 or more of agricultural products were produced and sold, or normally would have been sold, during the census year.” Based on that definition, Missouri is #2 in number of farms with 87,887 farms. Texas is #1 with 230,662 farms and Iowa is #3 with 86,911 farms. The only state in those top three with an increase was Iowa, which increased 9.4% in total number of farms.

Following are a few data pieces for the state of Missouri from the latest Census. The number of Missouri farms has decreased 7.8%.

Farms size:	2022 # of farms	2017 # of farms	Change
1 to 9 acres	4,259	5,574	down 23%
10 to 49 acres	21,735	22,676	down 4%
50 to 179 acres	30,927	33,356	down 7%
180 to 499 acres	18,336	20,511	down 11%
500 to 999 acres	6,554	7,310	down 10%
1,000 to 1,999 acres	3,623	3,603	up 0.5%
2,000+ acres	<u>2,454</u>	<u>2,290</u>	up 7%.
Total	87,888	95,320	

The number of farms with the following enterprises increased: chicken (broilers), chicken (layers), peanuts, and orchards. The number of farms decreased with beef cattle, dairy cattle, swine, corn for grain, corn for silage, wheat, oats, barley, sunflowers, sorghum, soybeans, forage, cotton, rice sunflower seed, potatoes and sweet potatoes.

Statewide production expenses increased 25%. The average production expenses per farm increased 35% since the last Census. For many years, the average age of farmers increased. Overall, the average age of Missouri farmers increased slightly from 57.4 to 57.9 years of age. Operators under age 25 increased slightly to 2,761 for an increase of 1.7% from the previous Census. The number of new and beginning farmers has increased to 46,312 or 12%.

The data can be organized in many ways including by geographical area (national, state or county), congressional district, watersheds and zip codes. Some of the data continues to be released including American Indian Reservations (08/29/24), watersheds (07/24/24), typology (01/21/26), and specialty crops (10/17/24).

Nationally, a few noticeable items include:

- Farm numbers and land in farms, both continued to decline, 6.9% and 2.2% respectively.
- All sizes of farms declined.
- Fewer farms with CCC (Commodity Credit Corporation) loans and total dollars in CCC loans declined by 44%.
- Total number of farms declined but the market value of ag products sold increased 39%.

- which may be due to prices in 2022 compared to 2017.
- The average age of farmers and ranchers rose slightly.
- Farms with internet access increased to 79%, compared to 75% in 2017. There were large increases in broadband access and cell data plans.

USDA NASS welcomes input for the next Census. Visit their website www.nass.usda.gov/AgCensus, then in the left-hand column click on *Ag Census-Solicitation for Input*.

Much more information can be found on the Ag Census website at <https://www.nass.usda.gov/Publications/AgCensus/2022>

Source: *Mary Sobba, ag business specialist*



Selling at the Farmers' Market

Farmers' Market season is in full swing with more markets in northeast and central Missouri than last year. According to research from USDA, some of the top reasons to shop at local farmers' markets include availability of produce at peak production for highest quality, taste, and freshness; unique offerings; knowing the who and how behind the production; and supporting the local economy.

Sellers and consumers at the market should be aware of the food production and sales regulations that impact local foods. There are different entities that impact direct to consumer sales.

First let's look at Missouri Cottage Law (RSMo. 196.298) and understand specific terminology.

Cottage Food Production Operation-an individual operation out of the individual's home.

Home-a primary residence that contains a kitchen and appliances designed for common residential usage.

Baked Good-includes cakes, cookies, breads, Danish, donuts, pastries, pies and other items that are prepared by baking in an oven. A baked good does not include potentially hazardous food items.

Potentially Hazardous-food that is natural or synthetic and requires temperature control such as animal food that is raw or heat-treated, sprouts, cut melons, cut leafy greens, cut tomatoes or cut tomato mixtures, and garlic-in-oil mixtures.

Cottage food production operations produce a baked good, a canned jam or jelly, or a dried herb or herb mix made in the individual's home. The product must be sold directly to the end user and the seller must be a member of the residence that is knowledgeable about the food product. Products you CAN sell under the Cottage Law are:

- Baked goods
- Jams and jellies

- Dried herbs and dried herb mixes

What you CANNOT sell under the Cottage Law

- Jams and jellies with "No Sugar Added" or "Sugar Free"
- Hot pepper jams and jellies
- Cut produce
- Baked goods garnished with fresh fruit
- Most freeze dried products
- Salsa
- Pickles
- Sauces
- Sprouts
- Wild mushrooms
- Meats
- Products that must be temperature controlled for food safety

There is an exemption in the Missouri Food Code that allows for sales of non-potentially hazardous foods that do not fall under the Cottage Law or other exemptions to be prepared in the home and sold directly to the end consumer. These include freeze dried candy, chocolate covered pretzels, soup mixes, and more.

Many market vendor sell raw agriculture commodities which are allowed and defined as any foods in its raw or natural state, including all fruits that are washed, colored or otherwise treated in their unpeeled natural form prior to marketing.

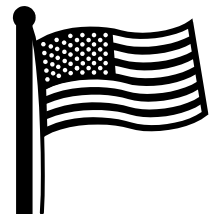
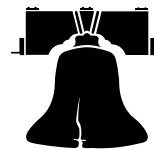
Examples are unprocessed whole produce, fresh herbs, honey, grains, and saps.

While items under the Cottage Law are exempt from inspection, labeling is required. Labels must include:

- Name and address of the cottage food production operation
- Common name of the food
- Name of all ingredients in the food in order of weight
- Net weight of the food
- Statement that the product is prepared in a kitchen that is not subject to inspection by the Missouri Department of Health and Senior Services

Next month this article will continue with items falling under the pervue of the Missouri Department of Agriculture.

Source: *Darla Campbell, business & community specialist*



Gardening in the Heat of Summer

Vegetables

If hot, dry weather is making it difficult to grow vegetables, provide plenty of moisture and use straw mulch around plants. Keep gardens weeded so weeds are not competing with vegetable plants and flowers for moisture. Weeds attract insects, so another good reason to keep the garden weeded. Knowing when to harvest sweet corn and vine crops like watermelon can be tricky. Corn is ready for harvest when silks begin to turn brown and dry. After silks are mostly brown, pick out a thicker ear from a row, then peel back the husk to get a peek at the kernels and see if it is ready to pick. Okra grows quickly, and should be picked daily. Pick okra pods when they are 2-3 inches long. Watermelon should be harvested when the underside of fruit turns from whitish to yellowish. Do not pick winter squash too early. Butternut, spaghetti, acorn and other winter squashes should be picked whenever the fruits have turned a deep, solid color and the rind is hard. Make plantings of vegetables such as green beans, zucchini, lettuce, spinach, radishes, and other crops for a fall garden in late July through the end of August. The best quality and most productive harvests are in the fall due to fewer insects and cooler weather.

Fruit

Many fruits ripen in mid to late summer. Most fruits are 90% or more water. Supplemental moisture and mulch during the hottest, driest months of the year, will help fruits like blackberries, develop a sweet taste. Lack of moisture causes small, tart berries. Tan or white spots on berries is sunburn, or solar injury, which usually occurs under hot, dry conditions. Solar injury is caused from ultraviolet radiation from the sun that appears when there has been an abrupt increase in temperature along with a drop in humidity. Keep plants well-watered and use a shade cloth to provide some protection if necessary. Grapes start to ripen in late July in northern Missouri. As grapes ripen, sugar, color and pH increase. Sugars accumulate more and grapes tend to be sweeter during dry, hot weather. Summer rains can delay sugar accumulation. Water increases berry size and dilutes the juice in the berry reducing the sugar. Cloudy days reduce photosynthesis and the production of sugar. Use netting to protect ripening clusters from birds.

Ornamentals

Butterflies need nectar plants as a food source and host plants to lay eggs. Plant lots of flowers! Old-fashioned varieties are butterfly favorites. Plant flowers with different colors, shapes, sizes and heights. Combine nectar and caterpillar food sources. Plant at least 10 plants of two different species to increase butterfly numbers. Some flowers can be direct seeded with staggered plantings for continuous bloom through the fall. Zinnias are a flower that can be seeded every two weeks through mid-July for fall blooms. They tolerate

heat and dry conditions fairly well, but keep young seedlings watered until mature. Zinnias make excellent cut flowers in addition to being a butterfly favorite. Lantana is an annual flower that blooms profusely from May until the first hard freeze, which is usually late October or early November. Butterflies like the bright yellow and orange blooms of this flower. Cleome, also known as spider flower, petunias, parsley, dill, and fennel are just a few other annual flowers and herbs that attract butterflies and serve as a host plant for their larvae. Columbine, cardinal flower, coreopsis, coneflower, yarrow, goldenrod and aster are a few perennial plants that attract butterflies and hummingbirds to a yard. Butterfly and hummingbird gardens also need rocks so butterflies can rest and soak up the sun, bird feeders (leave out the red food coloring for the hummingbirds) and bird baths as a water source.

Disease, Disorders and Insects

Be on the watch for Japanese beetles which feed on the leaves, flowers or fruit of more than 300 species of plants. They were first found in the United States in 1916 in a nursery in New Jersey. They are native to Japan, where their natural enemies keep their populations in check and they are not a serious plant pest. In the United States, however, the beetle does not have any natural enemies. It found a favorable climate with an abundant food supply. For small infestations, hand pick and place in a bucket of soapy water. For heavy infestations use an insecticide labeled to treat the pest. Cucumber beetles and squash bugs are a pest on cucurbit crops. Companion planting with various herbs and flowers, like marigolds and basil, help repel them to some extent. Their populations tend to decline as fall approaches. Insecticides containing permethrin can also be used for control.

Diseases like Septoria Leaf Spot and Early Blight may be a problem on tomatoes from improper watering practices, or if there has been a lot of rainfall. Wet leaves are more susceptible to fungal disease, so never get the plant wet when watering it. Replenish straw mulch under tomato plants by mid-summer, take off leaves touching the ground, and if necessary spray the plants with a fungicide containing chlorothalonil. Be sure to follow label directions and observe the pre and post-harvest intervals. Blossom end rot is a tomato disorder that may appear in hot, dry weather. A lack of calcium in the soil or more likely inefficient uptake of calcium by the plant is the culprit. Cucumber plants that are stressed from lack of water or heat may produce bitter fruit. Keep all vegetable plants well-watered and mulched to hold in moisture.

When working in the garden this summer, be sure to stay hydrated. Drink plenty of water, and take a break in the shade as needed.

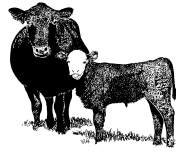
Source: *Jennifer Schutter, horticulture specialist*

2024 Missouri Agricultural Rental Rate Survey

Every three years, the MU Extension Agricultural Business and Policy team conducts the Missouri Rental Rate Survey. The data is summarized and used to publish guides on cash rental rates and share agreements, which are among the most downloaded guides for MU Extension and the starting point for lease agreement discussions between landowners and tenants.

The survey is open through July 15th. The survey is for both landowners and tenants. The survey can be completed: 1) online at bit.ly/MORentalRates or 2) via paper survey available at county extension centers. Paper copies can be requested by calling 573-581-3231 then a paper survey will be mailed to you.

If you participate in a rental arrangement, please consider participating.



Missouri Center for Regenerative Agriculture

Applications are being accepted for the Missouri Climate-Resilient Crop and Livestock (CRCL) Project. The incentive payment programs for farmers to implement climate-smart practices are reopening! These programs are available through the Missouri Climate-Resilient Crop and Livestock (CRCL) Project, funded by a \$25 million USDA Partnerships for Climate-smart Commodities grant. Sign-up periods are:

June 3, 2024

Rye-soy Cover Crops: \$30 per acre
Diverse Covers: \$40 per acre
Late Termination: \$15 per acre
Cover Crop Grazing: \$20 per acre

August 1, 2024

Nutrient Management and 4R Approach: \$20 per acre

November 1, 2024

Regenerative Grazing: \$50 per acre
Climate-Smart Fieldscales: \$10,000 spread across a 3-year contract

To learn more visit <https://cra.missouri.edu/mo-crcl/> or e-mail kellywilson@missouri.edu