



CHAPTER 1
MISSOURI ALMANAC

*Rooted in
Agriculture
Farm Life*



HONORABLE MENTION
Jennifer Jones, Belle

Agriculture: It's in Our Roots

by Chris Chinn, Director of the Missouri Department of Agriculture

As the proverb goes, “the more things change, the more they stay the same.” This is certainly true when it comes to agriculture. While agriculture has made leaps forward in technology, the core values of farm families continue to be passed from generation to generation.

Farming has changed considerably from the days of a horse and plow. I remember my grandpa telling stories of his early days as a farmer and recalling the first tractor he bought. It didn't have a cab; none did at the time. The first tractor my husband and I purchased had a cab and a radio, which was a big deal. Now, we talk about downloading field maps and uploading yield data when we are working in the field.

By and large, Missouri's nearly 100,000 farms are using some of the most advanced technology available in today's world, and they're utilizing it every day. In many ways, agriculture has been a front runner in innovation

to make our food safer, more affordable and plentiful. Crop farmers utilize farm machinery equipped with GPS software to implement precision application techniques, leading to higher yields with fewer inputs. Livestock producers use research-based methods to raise animals in a comfortable and environmentally sustainable way, resulting in the highest quality meat products in the world.

*Family is at the
heart of
agriculture...*

What hasn't changed in agriculture are the values we hold near and dear to our hearts: family, faith, farming and community. Family is at the heart of agriculture and it is the ultimate family business. In fact, 97 percent of Missouri farms are family owned. It's not often you see a grandfather working alongside his grandchildren or a mother/son duo partnering in business, but the blending of personal and professional relationships are the norm on family farms.

Nationally, Missouri has the second highest number of farms, and

they come in all sizes and types. Our diversity is one of the things that sets us apart; we have room for all types of agriculture. Missouri grows staple commodities like corn, soybeans, cotton and rice, and a variety of specialty crops like watermelon, peaches, black walnuts and apples. We raise livestock including poultry, pork, sheep, goats, dairy and beef cattle. We are home to a booming forest products industry, and Missouri's more than 130 wineries produce wines that compete with the best in the nation.

The most valuable "crop" raised on our farms, however, is our children. I spent time in the livestock barns during the State Fair watching 4-H and FFA kids care for their animals. Seeing their hard work and commitment, in and out of the show ring, was yet an-

other reminder agriculture is in good hands for years to come. I saw those values on display yet again when more than 300 FFA members gathered on the fairgrounds to pack 52,000 meals for families in need. Our young people in FFA and 4-H set the bar high and model respect, determination, responsibility and service—values we strive to instill along with farming traditions.

Agriculture is rooted in service and every Missourian is touched by the work of farmers every day. Farmers work seven days a week, 365 days a year, to raise row crops, livestock, poultry, wood products, fruits and vegetables. Even household products like toothpaste and soap; school supplies like jeans and crayons; and office materials like pencils and notepads are available because of the hard work of farmers and ranchers.

Behind every farm, there is a story.



Rooted in Agriculture Photo Contest Honorable Mention, Zachariah Billings

But our farms are more than just the food, fuel or fiber they produce. Behind every farm, there is a story. A story of three generations who've worked in a field to harvest a crop, a father who missed his daughter's first three-point shot in a basketball game because he was caring for a sick animal, a family who spent their weekends working cattle instead of at community gatherings, or neighbors helping one another after disaster strikes.

Those stories are what make agriculture what it is. It is special. It is Missouri.



Rooted in Agriculture Photo Contest
Honorable Mention, Annika Miller



Chris Chinn, a fifth generation Missouri farmer from Clarence, was named *Director of the Missouri Department of Agriculture* in January 2017 by Missouri Governor Eric R. Greitens. Director Chinn has held leadership positions in agriculture on the local, state and national level for more than 12 years, working to move the state's agriculture industry forward.

As a trailblazer in ag advocacy, Chinn has established her brand through social media and public speaking. Her blog and Twitter audiences have attracted more than

10,000 faithful followers who have tuned in to hear her farm story. Through her outreach, she stands up for both rural and urban Missouri by bridging the gap between farmers and consumers and contributes to the advancement of the state's No. 1 industry.

Chinn resides on her family's farm in Shelby County with her husband, Kevin and her two children, Rachelle and Conner, where she helps manage their farrow-to-finish hog operation, as well as their family feed mill. Chinn and her husband also have a small cow-calf herd, as well as raise corn, soybean and alfalfa.



Rooted in Agriculture

Photo Contest

Nearly 100,000 farms and more than 28 million acres of rich farmland illustrate our long-standing strength in agriculture. Today, thanks to the hard work of nearly 400,000 people across the state, Missouri's agricultural industry is worth \$88 billion. Eight of our diverse products rank in the top 10 nationwide for production, and even more are exported throughout the county and the world.

To recognize Missouri's vast farmlands and those who work them, we asked Missourians to submit photographs they have captured showing the beauty in the agriculture around us. Photographers—amateurs and professionals alike—submitted photos showing the grit of family farmers, the farm technology and machines in action, and the landscapes and life that make up Missouri's beautiful farmland.

Members from all divisions of the secretary of state's office narrowed the more than 160 submitted photographs down to the top six in each category: Farm Life, Farm Technology and Family Farmers. Representatives from agricultural organizations, as well as Missouri Department of Agriculture Director Chris Chinn, participated in the final round of judging.

Thank you to all Missourians who sent in photographs and helped us celebrate the beauty of our state's agricultural roots, and congratulations to this year's winning photographers.

Sincerely,



John R. Ashcroft
Secretary of State

*Rooted in
Agriculture*
Family Farmers



FIRST PLACE
Kathy Light, Lebanon



SECOND PLACE
Krystal Simpson, Salem



THIRD PLACE
Krystal Simpson, Salem

*Rooted in
Agriculture*

Farm Technology



FIRST PLACE
Steven Strauch, Lebanon



SECOND PLACE
Pamela Gladbach, Marceline



THIRD PLACE
Meleah Francka, Bolivar

*Rooted in
Agriculture*
Farm Life



FIRST PLACE
McKenna Claborn, Silex



SECOND PLACE

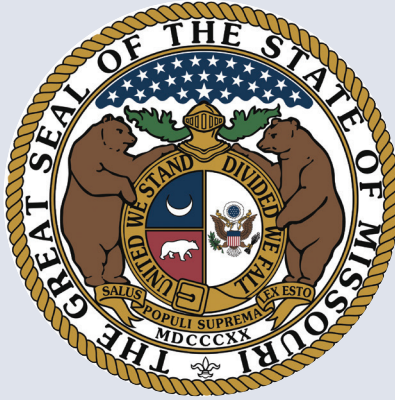
Meleah Francka, Bolivar



THIRD PLACE

Annika Miller, Columbia

State Symbols of Missouri



THE GREAT SEAL OF MISSOURI

The Great Seal was designed by Judge Robert William Wells and adopted by the Missouri General Assembly on January 11, 1822. The center of the state seal is composed of two parts. On the right is the United States coat-of-arms containing the bald eagle. In its claws are arrows and olive branches, signifying that the power of war and peace lies with the U.S. federal government. On the left side of the shield, the state side, are a grizzly bear and a silver crescent moon. The crescent symbolizes Missouri at the time of the state seal's creation, a state of small population and wealth which would increase like the new or crescent moon; it also symbolizes the "second son," meaning Missouri was the second state formed out of the Louisiana Territory.

This shield is encircled by a belt inscribed with the motto, "United we stand, divided we fall," which indicates Missouri's advantage as a member of the United States. The two grizzlies on either side of the shield symbolize the state's strength and its citizens' bravery. The bears stand atop a scroll bearing the state motto, "Salus Populi Suprema Lex Esto," which means, "The welfare of the people shall be the supreme law." Below this scroll are the Roman numerals for 1820, the year Missouri began its functions as a state.

The helmet above the shield represents state sovereignty, and the large star atop the helmet surrounded by 23 smaller stars signifies Missouri's status as the 24th state. The cloud around the large star indicates the problems Missouri had in becoming a state. The whole state seal is enclosed by a scroll bearing the words, "The Great Seal of the State of Missouri." (RSMo 10.060)

MISSOURI DAY

On March 22, 1915, the 48th General Assembly set aside the first Monday in October each year as "Missouri Day," due to the efforts of Mrs. Anna Brosius Korn, a native Missourian. In 1969, the 75th General Assembly changed the date to the third Wednesday in October. Missouri Day is a time for schools to honor the state and for the people of the state to celebrate the achievements of all Missourians. (RSMo 9.040)



THE STATE FLAG

Nearly 100 years after achieving statehood, Missouri adopted an official flag on March 22, 1913. The flag was designed by the late Mrs. Marie Elizabeth Watkins Oliver, wife of former State Senator R.B. Oliver. The flag consists of three horizontal stripes of red, white and blue. These represent valor, purity, vigilance and justice. In the center white stripe is the Missouri coat-of-arms, circled by a blue band containing 24 stars, denoting that Missouri was the 24th state. The Oliver flag embraced national pride, and at the same time expressed characteristics of Missouri and Missourians.

The three large stripes were symbolic of the people of the state—the blue stripe represented vigilance, permanency and justice, the red represented valor, and the white stripe symbolized purity. The Missouri coat-of-arms appeared in the center of the flag, signifying both Missouri's independence as a state, and its place as a part of the whole United States. Having the coat-of-arms in the center of the national colors represents Missouri, as it is—the geographical center of the nation. By mingling the state coat-of-arms with the national colors of red, white and blue, the flag signified the harmony existing between the two. Twenty-four stars surrounded the coat-of-arms, representative of Missouri's position as the 24th state admitted to the Union. (RSMo 10.020)



THE STATE FLORAL EMBLEM

On March 16, 1923, a bill was signed naming the **white hawthorn blossom** the official state floral emblem of Missouri. Known as the "red haw" or "white haw," the hawthorn (*Crataegus*) is a member of the great rose family. The hawthorn blossoms have greenish-yellow centers and form in white clusters. More than 75 species of the hawthorn grow in Missouri, particularly in the Ozarks. (RSMo 10.030)

THE STATE BIRD

On March 30, 1927, the native **bluebird** (*Sialia sialis*) became the official state bird of Missouri. The bluebird, considered a symbol of happiness, is usually 6½ to 7 inches long. While its upper parts are covered with light blue plumage, its breast is cinnamon red, turning rust-colored in the fall. The bluebird is common in Missouri from early spring until late November. (RSMo 10.010)



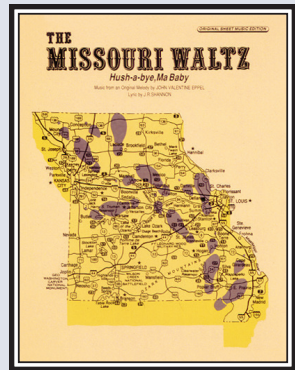
THE STATE TREE

On June 20, 1955, the **flowering dogwood** (*Cornus florida L.*) became Missouri's official tree. The tree is small in size, rarely growing over 40 feet in height or 18 inches in diameter. The dogwood sprouts tiny greenish-yellow flowers in clusters, with each flower surrounded by four white petals. The paired, oval leaves are olive green above and covered with silvery hairs underneath. In the fall, the upper part of the leaves turn scarlet or orange

and bright red fruits grow on the tree. (RSMo 10.040)

THE STATE SONG

The "**Missouri Waltz**" became the state song under an act adopted by the General Assembly on June 30, 1949. The song came from a melody by John V. Eppel and was arranged by Frederic Knight Logan, using lyrics written by J.R. Shannon. First published in 1914, the song did not sell well and was considered a failure. By 1939, the song had gained popularity and six million copies had been sold. Sales increased substantially after Missourian Harry S Truman became president. (RSMo 10.050)



THE STATE MINERAL

On July 21, 1967, the mineral **galena** was adopted as the official mineral of Missouri. Galena is the most important ore of lead and is also a major source of silver. The recognition of this mineral by the state legislature was to emphasize Missouri's status as the nation's top producer of lead. Galena is dark gray in color and breaks into small cubes. Mining of galena has flourished in the Joplin-Granby area of southwest Missouri, and rich deposits have been located

in such places as Crawford, Washington, Iron and Reynolds counties. (RSMo 10.047)

THE STATE ROCK

Mozarkite was adopted as the official state rock on July 21, 1967, by the 74th General Assembly. An attractive rock, mozarkite appears in a variety of colors, most predominantly green, red or purple. The rock's beauty is enhanced by cutting and polishing into ornamental shapes for jewelry. Mozarkite is most commonly found in Benton County. (RSMo 10.045)

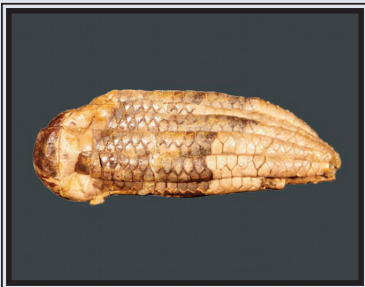


THE STATE INSECT

On July 3, 1985, the **honeybee** was designated as Missouri's state insect. The honeybee, (*Apis mellifera*) yellow or orange and black in color, is a social insect which collects nectar and pollen from flower blossoms in order to produce honey. The honeybee is common to Missouri and is cultivated by beekeepers for honey production. (RSMo 10.070)

THE STATE MUSICAL INSTRUMENT

The **fiddle** became the state's official musical instrument on July 17, 1987. Brought to Missouri in the late 1700s by fur traders and settlers, the fiddle quickly became popular. The instrument was adaptable to many forms of music, could be played without extensive formal training and was light and easy to carry. For generations, the local fiddle player was the sole source of entertainment in many communities and held a position of great respect in the region. (RSMo 10.080)



THE STATE FOSSIL

The **crinoid** became the state's official fossil on June 16, 1989, after a group of Lee's Summit school students worked through the legislative process to promote it as a state symbol. The crinoid (*Delocrinus missouriensis*) is a mineralization of an animal which, because of its plant-like appearance, was called the "sea lily." Related to the starfish, the crinoid lived in the ocean which covered Missouri lived in the ocean more than 250 million years ago. (RSMo 10.090)

THE STATE TREE NUT

The nut produced by the black walnut tree (*Juglans nigra*), known as the **eastern black walnut**, became the state tree nut on July 9, 1990. The nut has a variety of uses. The meat is used in ice cream, baked goods and candies. The shell provides the soft grit abrasive used in metal cleaning and polishing, and oil well drilling. It is also used in paint products and as a filler in dynamite. (RSMo 10.100)



THE STATE ANIMAL

On May 31, 1995, the **Missouri mule** was designated as the official state animal. The mule is a hybrid, the offspring of a mare (female horse) and a jack (male donkey). After its introduction to the state in the 1820s, the mule quickly became popular with farmers and settlers because of its hardy nature. Missouri mules pulled pioneer wagons to the Wild West during the 19th century and played a crucial role in moving troops and supplies in World Wars I and II. For

decades, Missouri was the nation's premier mule producer. (RSMo 10.110)

THE STATE AMERICAN FOLK DANCE

The **square dance** was adopted as Missouri's official American folk dance on May 31, 1995. Square dances are derived from folk and courtship dances brought to the United States by European immigrants. Lively music and callers are hallmarks of square dancing. The caller directs the dancers by singing the names of figures and steps to be performed. (RSMo 10.120)



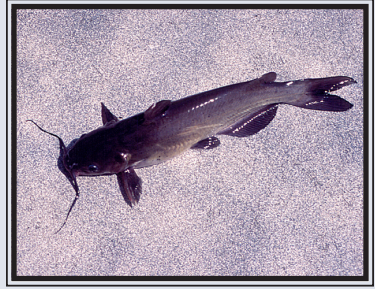
THE STATE AQUATIC ANIMAL

The **paddlefish** (*Polyodon spathula*) became Missouri's official aquatic animal on May 23, 1997. Only three rivers in Missouri support substantial populations of the paddlefish: the Mississippi, Missouri and the Osage. They are also present in some of the state's larger lakes. The paddlefish is primitive, with a cartilage skeleton, rather than bone. They commonly exceed five feet in length and weights of 60 pounds;

20-year olds are common, and some live 30 years or more. (RSMo 10.130)

THE STATE FISH

On May 23, 1997, the **channel catfish** became the official fish of Missouri. The channel catfish (*Ictalurus punctatus*) is slender, with a deeply forked tail. Young have spots that disappear with age. The catfish does not rely on sight to find its food; instead, it uses cat-like whiskers to assist in the hunt. The channel cat is the most abundant large catfish in Missouri streams. Its diet includes animal and plant material. Adults are normally 12 to 32 inches long and weigh from a half-pound to 15 pounds. (RSMo 10.135)



THE STATE HORSE

On June 4, 2002, the **Missouri Fox Trotter** became Missouri's official state horse. Missouri fox trotters were developed in the rugged Ozark hills of Missouri during the early 19th century. Bloodlines can be traced from early settlers to Missouri from the neighboring states of Kentucky, Illinois, Tennessee and Arkansas. The distinguishing characteristic of the fox trotter is its rhythmic gait, in which the horse walks with the front feet and trots with the hind feet. This gait gives the rider

a smooth gentle ride. (RSMo 10.140)

THE STATE GRAPE

On July 11, 2003, the **Norton/Cynthiana grape** (*Vitis aestivalis* 'Norton') was adopted as the official state grape. This adaptable, self-pollinating variety has been cultivated since the 1830s and is likely North America's oldest grape variety still commercially grown. Norton/Cynthiana has long been prized by Missouri vintners for its hardy growth habit and intense flavor characteristics, which produce lush, dry premium red wines of world-class quality and distinction. (RSMo 10.160)



THE STATE DINOSAUR

Hypsibema missouriense is a type of dinosaur called a Hadrosaur or "duck billed" dinosaur. It was an herbivore with jaws that contained more than 1,000 teeth. Hypsibema had evolved specialized teeth to handle the tough, fibrous vegetation of the time. Hypsibema lived in Missouri during the Late Cretaceous Period. Hypsibema was first discovered in 1942 by Dan Stewart, near the town of Glen Allen, Mo.,

and became the state's official dinosaur on July 9, 2004. (RSMo 10.095)

THE STATE AMPHIBIAN

On June 5, 2005, the **American Bullfrog** (*Rana catesbeiana*) became the official state amphibian. The bullfrog is the largest frog native to Missouri and is found in every county. Most Missourians are familiar with the deep, resonant “jug-of-rum” call, which is typically heard on warm, rainy nights between mid-May and early July. The idea for the bullfrog designation came from a fourth grade class at Chinn Elementary School in Kansas City. (RSMo 10.170)



THE STATE GAME BIRD

The **bobwhite quail** (*Colinus virginianus*), also known as the northern bobwhite, became the official state game bird on July 13, 2007. The northern bobwhite is found throughout Missouri in a variety of habitats. In the fall and winter, northern bobwhites form loose social groups better known as a covey. A covey will generally contain 10 to 12 quail, but can have as many as 20 or 30 birds. The familiar two- or three-note “bobwhite” whistle is

made by males in the spring and summer to attract females. (RSMo 10.012).

THE STATE INVERTEBRATE

On June 21, 2007, the **crayfish** (also known as crawfish and crawdad) became the official state invertebrate. Crayfish are an important food source for Missouri fishes. Missouri supports more than 30 species of crayfish (including seven species that occur nowhere else in the world). Crayfish are found in every county of the state and contribute to our unique biodiversity and conservation heritage. The nomination of crayfish for state invertebrate came from Mrs. Janna Elfrink’s elementary school class in Reeds Spring, Missouri. (RSMo 10.125)



THE STATE REPTILE

On June 21, 2007, the **three-toed box turtle** (*Terrapene carolina triunguis*) became the official state reptile. Most Missourians are familiar with this land-dwelling turtle. Three-toed box turtles, as their name implies, typically have three hind toes. The hinged bottom shell allows the turtle to retreat inside as if enclosed in a box. Males have red eyes and females have brown eyes. (RSMo 10.175).

THE STATE GRASS

Big bluestem (*Andropogon gerardii*) was designated as Missouri's stategrass on June 11, 2007, as a result of efforts by the fourth-grade class at Truman Elementary School in Rolla. Big bluestem is native to Missouri and occurs throughout the state, with the exception of a few southeastern-most counties. It is a major component of Missouri's tallgrass prairies where it impressed the first explorers by sometimes growing tall enough to hide a person on horseback. The name bluestem comes from the bluish-green color of the leaves and stems that turn an attractive reddish-copper color in autumn. (RSMo 10.150).



THE STATE DESSERT

The **ice cream cone** became the state of Missouri's official dessert on August 28, 2008. The 1904 World's Fair in St. Louis was the birthplace of the treat and has become a staple at many community events across the state, such as the State Fair. The University of Missouri–Columbia has played a large role in the development of ice cream products for over a century. Missouri presently ranks tenth in ice cream production. (RSMo 10.180).

Louise and Omar Putman Collection, photograph by Louise Putman—Missouri State Archives

THE STATE SYMBOL FOR CHILD ABUSE PREVENTION

The **blue ribbon** became the state of Missouri's official symbol for child abuse prevention on August 28, 2012. It is a symbol of efforts to increase awareness of the prevalence and warning signs of child abuse and the prevention methods and measures available to reduce the incidence of child abuse in Missouri. (RSMo 10.185).



THE STATE EXERCISE

The **jumping jack** exercise was invented by Missouri-born Army General John J. "Black Jack" Pershing as a training drill for cadets when he taught at West Point in the late 1800s. The idea for the jumping jack designation came from students at Pershing Elementary School in St. Joseph. (RSMo 10.115)

THE HISTORICAL DOG OF MISSOURI

On August 28, 2017 **Old Drum** was designated the historical dog of Missouri. Old Drum was a black and tan hunting hound whose shooting death became the subject of an 1870 Missouri Supreme Court case. The closing arguments for the plaintiff, delivered by attorney George Graham Vest, brought tears to the eyes of jurors and became famously-known as the *Eulogy of the Dog*. Although the words of the speech were not written down until sometime after the trial, it became renowned for its appeal to dog lovers in its praise of the dog as a man's "best friend." Both Old Drum and the *Eulogy of the Dog* are memorialized with a statue and plaque at the Johnson County courthouse in Warrensburg, Missouri. (RSMo 10.112)

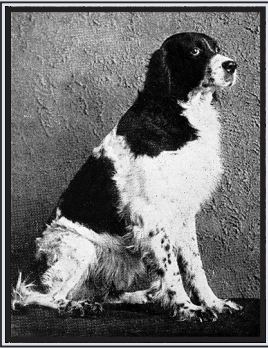


Photo courtesy of Friends of Jim

THE WONDER DOG OF MISSOURI

On August 28, 2017 "Jim the Wonder Dog" was designated as Missouri's wonder dog. A Llewellyn Setter, born in 1925, Jim first gained notoriety for his prowess as a hunting dog. He tracked over 5,000 birds, a total no other dog had ever achieved, earning him the *Outdoor Life Magazine* designation of "The Hunting Dog of the Country." Eventually Jim began to exhibit a wide range of other talents not typically associated with dogs. He could pick a car on the street by license number, recognize unknown people in a crowd and carry out instructions, oral or written, given to him in any foreign language, Morse Code or shorthand. Jim predicted seven Kentucky Derby winners and was known for accurately determining the gender of unborn babies. He performed before the Missouri Legislature and was featured in *Field and Stream*, *The Kansas City Star*, *Missouri Ruralist* and Ripley's Believe it or Not. Jim is buried in Marshall, Missouri's Ridge Park Cemetery. His grave is the most visited spot in the cemetery. (RSMo 10.113)