

COLORADO READER



COLORADO WHEAT IS NEAT!

Did you know??

Wheat is known the world round!

- Wheat has been an important food plant for 10,000 years.
- Early varieties looked very different than the wheat varieties we see today.
- The Mesopotamians were an ancient civilization that is credited with first cultivating wheat.
- Wheat is often measured in bushels. 1 bushel of wheat equals 60 pounds.
- White bread was first thought of as a luxury food.
- Colorado usually ranks 7th in the nation for wheat production.
- Hard Red Winter Wheat and hard White Winter Wheat are the two main types of wheat grown in Colorado.
- Technology has improved and promoted wheat as a viable crop world-wide today.
- Wheat is considered one of the world's most important crops.

This issue of Colorado Reader is sponsored by:

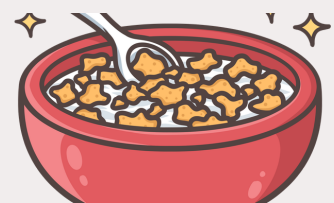


2026
SPRING

World Wide
Wheat Edition!

What is Wheat?

Wheat is a cereal grain from the genus *Triticum*, widely cultivated for its edible seeds and used as a staple food worldwide.



COLORADO WHEAT
ADMINISTRATIVE
COMMITTEE



COLORADO WHEAT
ADMINISTRATIVE
COMMITTEE



COLORADO HAS A LONG AND PROUD HISTORY OF WHEAT PRODUCTION. THREE DIFFERENT ORGANIZATIONS WORK TOGETHER TO SERVE COLORADO WHEAT FARMERS. TOGETHER THESE GROUPS ARE KNOWN AS COLORADO WHEAT.



COLORADO WHEAT
ADMINISTRATIVE COMMITTEE

CWAC HELPS COLORADO WHEAT PRODUCERS DEVELOP, MAINTAIN, AND INCREASE USA AND FOREIGN SALES WHILE SUPPORTING EDUCATION, RESEARCH, AND PROMOTIONAL PROGRAMS DESIGNED TO INCREASE THE CONSUMPTION AND USE OF COLORADO WHEAT.



COLORADO WHEAT
RESEARCH FOUNDATION

THE COLORADO WHEAT RESEARCH FOUNDATION IS A NON-PROFIT ORGANIZATION THAT MARKETS WHEAT VARIETIES AND TRAITS DEVELOPED AT COLORADO STATE UNIVERSITY.



COLORADO ASSOCIATION
OF WHEAT GROWERS

CAWG PROVIDES COLORADO WHEAT PRODUCERS AN ORGANIZATION THAT REPRESENTS THEM AT THE STATE LEGISLATURE AND CONGRESS AT THE NATIONAL LEVEL WHILE KEEPING THE PRODUCER UPDATED ON ISSUES EFFECTING COLORADO WHEAT.

STRETCH YOUR
VOCABULARY!

DEFINE:

1. WHEAT
2. ORGANIZATION
3. PRODUCER
4. WHEAT VARIETY
5. PLANT TRAIT
6. BUSHEL
7. EDIBLE



MEET OUR FACES OF AGRICULTURE

MIDCAP FAMILY-- WIGGINS, COLORADO

Midcap Farms is located in Morgan County, Colorado and has been involved with agriculture for multiple generations. Their farm was purchased in 1945 by Fred Midcap. Mr. Midcap and his son worked very hard to make it successful. Now the sixth generation of their family lives on the same land. In the 1980s, Fred's grandsons started making the farm a dry land, no-till farm. There is not enough water available to irrigate crops. By not turning the soil over, and planting over the field as it lays after harvest, any moisture in the ground is kept in the ground and makes the soil healthy for worms and other good creatures. Every generation of the Midcap family learns to work hard and take care of the land. The children pictured with the tractor are Fred's great, great grandchildren. Sarah Midcap Reed (below lower left) shared her family's story.



Above: Mike, Linda, Nick Midcap and Sarah Midcap Reed. Midcap Farms raise wheat, millet and milo/sorghum. Four Midcap families live and work on the farm with four full time employees and teenage members of the family working during the summer months.

"The rewards of being involved in agriculture include being able to live and work with our family. It feels good to plant a seed and then harvest the food it grows. It also feels good to know the food we grow feeds people. There are challenges too. It costs a lot to run a farm. Drought is also hard. We do not use sprinklers to water our crops, so they only get water when it rains or snows." shares Sarah Midcap Reed, Linda and Mike's daughter.

Fred Midcap's great, great grandchildren



Sarah's advice:
"Make healthy food choices as much as possible. Food is fuel for your body."

MEET OUR FACES OF AGRICULTURE

KALCEVIC FAMILY-- BENNETT, COLORADO

Kalcevic Farms' history spans over 125 years, evolving from the first generation of the Kalcevic family immigrating from Croatia at 16 years old into a 5th generation dryland farming operation family rooted in succession and stewardship. Their farms are located in the Colorado counties of Adams, Arapahoe and Washinton. They raise wheat, corn, milo and millet crops. 11 members of the famly work on the farm with about 20 additional employees.



L-R Kalcevics--Tabor, Bronwyn, Danell, Jeff, Boden, Asia and Kent

HOW MUCH LAND DO YOU FARM?

Kalcevic Farms Incorporated farm enough acres to produce 1 million bushels of wheat, 300,000 bushels of corn, 200,000 bushels of milo and about 5,000 bushels of millet. That amount of wheat is enough to make 43.2 million loaves of bread! Their corn crop feeds about 2,500 head of beef cattle, 11,000 pigs, 1.5 million chickens or several thousand dairy cows for a year

Back row-Kent and Jeff Kalcevic, Front row-Jim and John



WHAT ARE SOME REWARDS AND CHALLENGES OF BEING INVOLVED IN AGRICULTURE?

Rewards: Being good stewards of the land, having awareness of what it takes to grow the food we consume and building and continuing the legacy of our family.

Challenges: Consumers sometimes do not understand agriculture so we try hard to share information, and events in other parts of the world can affect how and what we raise and transport to the markets.

Tabor's husband Jake Erker



FAQ Sheet

Wheat

How is the soil prepared to plant wheat?

A: No-till planting places seeds directly into the previous year's crop wheat stubble disturbing the moisture levels in the soil as little as possible..
Conventional planting tills the soil by using a disc or plow to dig up the soil before planting.

How is wheat planted?

A: Farmers plant wheat seed by using equipment pulled behind their tractors called a grain drill. A grain drill plants the wheat by sowing seeds at the same depth and seed planting rate in each row.

How does the wheat seed get moisture to sprout?

A: Wheat seed is often farmed by dry-land method, where the Farmer relies on stored ground moisture or rain to provide moisture for the seed to germinate and grow into a plant that can be harvested. Irrigated farming provides water to the crops by large pivot sprinklers, or irrigated by water delivery ditches from irrigation wells or delivered from irrigation reservoirs.

How long does it take for a wheat plant to be ready to harvest?

A: The two types of wheat require different lengths of growing seasons. Spring wheat is planted early spring and harvested in late summer. Winter wheat is planted in the fall, then grows and matures the following summer. Usually Winter wheat is grown in Colorado. The plant turns from green to light brown when mature and ready to harvest.

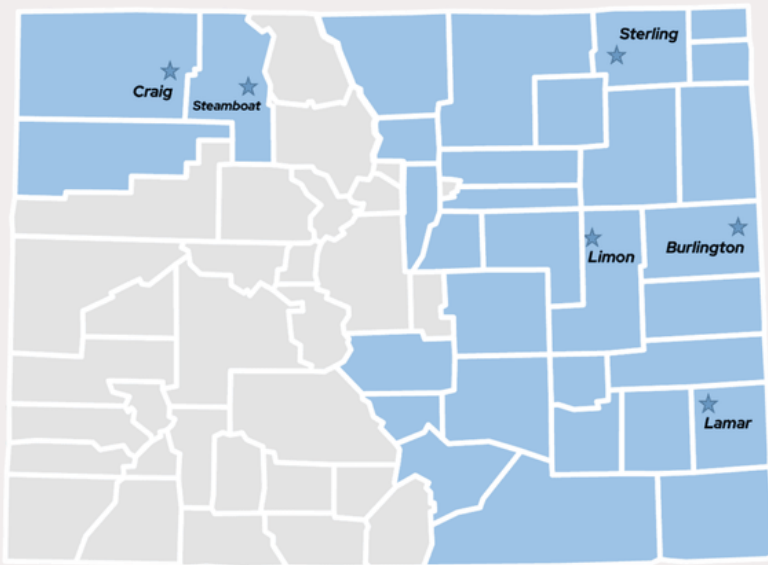
Mike Midcap with his granddaughter

What does a wheat harvest produce?

A: A wheat harvest produces wheat kernels for flour to make bread, noodles, and yummy pastries. It also produces straw used for animal bedding, livestock feed and biofuel production.



Colorado's Wheat Growers Across Our State!



The counties colored blue in this Colorado map shows counties where wheat is grown

DID YOU KNOW??? The top three wheat-producing counties in Colorado (for the last five years) are:

1. Kit Carson
2. Washington
3. Yuma

Which county do you live in? Find it on the map of Colorado coloradowheat.org



Wheat Question time!

Farmer Wade is getting ready to drill his wheat seed. He is choosing to do a no-till soil preparation. He is planting 80 acres of wheat. After the wheat seeds are harvested in the field, Wade will take his wheat to a flour mill where the seeds are ground into flour used for breads, pastries or pasta. That process is called milling. The processed flour contains proteins called gluten that make the dough elastic and stretches easily. Some people are allergic to gluten rich flour and need gluten free flour. Gluten free flour is a mixture of wheat, potato starch, and tapioca or corn.



1. What is a no-till soil preparation?

2. Farmer Wade is planning on not irrigating his wheat field. What kind of farming is it called if the crop is not irrigated? (circle correct answer) a. drought land b. dry land c. flood irrigated

3. Farmer Wade is planting 60 pounds of seed wheat to one acre of land. How many bushels of seed will he need per acre?

4. Extra credit!!! How many bushels of seed will Farmer Wade need if he plants 60 pounds of wheat seed per acre for his 80 acre field?

5. List the three top wheat producing counties in Colorado:

a. _____ b. _____ c. _____

6. What two types of wheat are usually grown in Colorado?

a. _____ c. _____

7. What is another name for a wheat seed? A wheat _____

8. On a separate sheet of paper, draw a wheat seed and label the bran, the endosperm and the germ and turn it into your teacher. Don't forget your name!

9. What are the dry stems of a wheat plant that is left in the field called after the seeds are harvested?

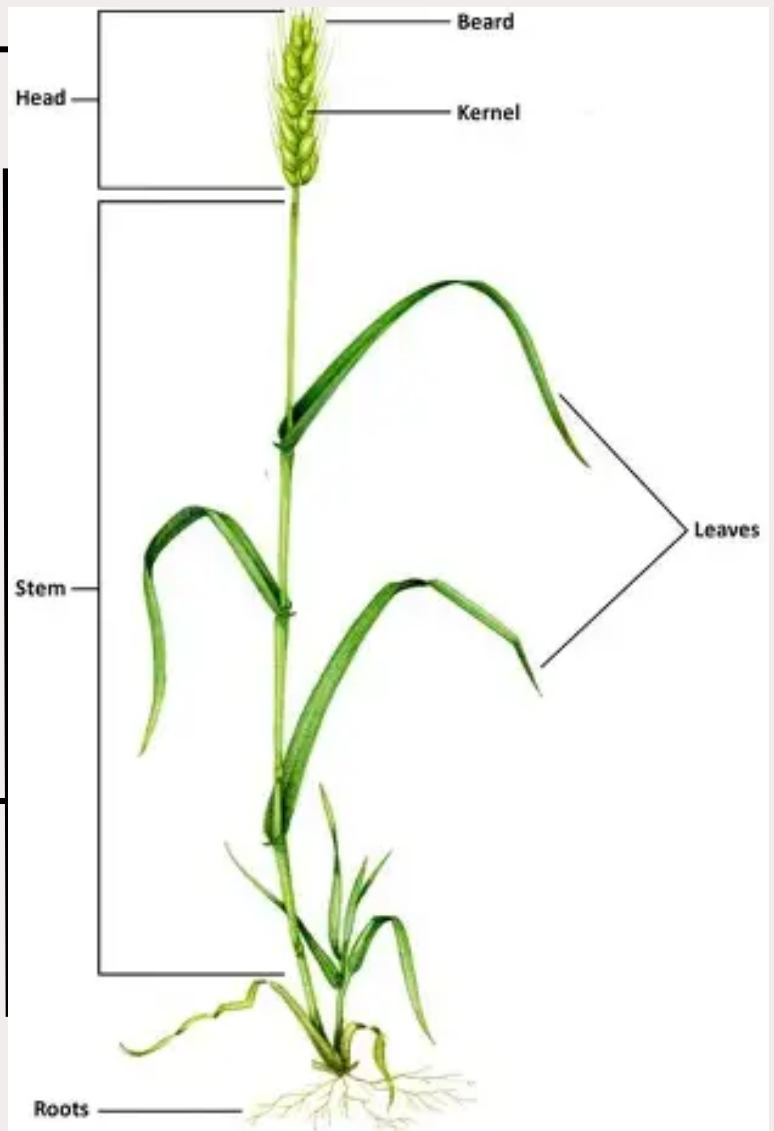
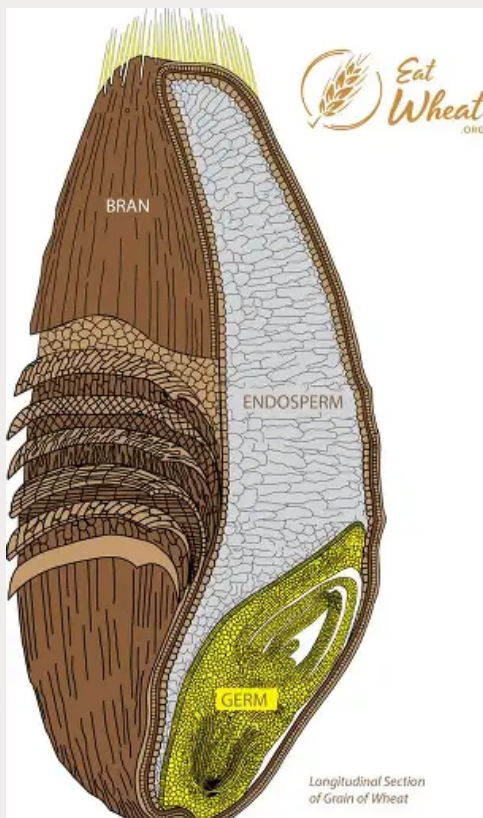
10. What is the difference between gluten rich and gluten free flour?



WHEAT PLANT AND WHEAT SEEDS ANATOMY

A wheat seed can also be called a kernel or a "berry". The parts of a wheat seed are listed below:

- Bran--the multi-layered, hard outer covering of a kernel of cereal grain
- Endosperm--tissue formed within a seed that contains energy (starch) and protein for the germinating seed
- Germ--the embryo of a cereal grain seed
- Grain--the seed or seed-like fruit of grasses that are cereals (such as wheat, corn, and rice)

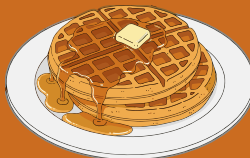


aitcla.org Illustration by Lillie Harper

The wheat stems are cut off just above the ground by farm machines called combines. The seeds are collected in the combine and the chaff (extra parts of the wheat head that are unusable) and stems are left on the ground. The seeds are stored in large metal bins for animal or human food before being taken to be sold whole or milled into flour. The stems can be left to dry in the sun and then be made into rectangular bales that will be used for animal feed or bedding. Those dried stems are called straw.

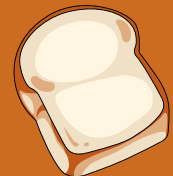
This moist banana bread is a great way to use overripe bananas. It is easy to prepare and tastes just like your grandma made it.

- Prep Time 15minutes minutes
- Cook Time 1hour hour Baking Temp 350°F
- Equipment Two 8x4-inch loaf pans, Nonstick cooking spray, Medium bowl, Large bowl
- Ingredients:
 - 3 cups all-purpose flour
 - 2 teaspoons baking soda
 - 1 teaspoon ground cinnamon
 - 1 teaspoon salt
 - 2 cups mashed bananas (about 6 medium brown bananas)
 - 1 cup canola oil
 - 1.5 cup packed light brown sugar
 - 2 large eggs
 - 2 teaspoon vanilla extract
- Instructions
 - Assembling the Banana Bread
 - Preheat oven to 350 oF. Spray two 8x4-inch loaf pans with nonstick cooking spray.
 - In a medium bowl, whisk together the flour, baking soda, cinnamon, and salt. Set aside.
 - In a large bowl, combine the mashed bananas, oil, sugar, eggs and vanilla extract. Stir until smooth.
 - Stir the dry ingredients into the wet ingredients until combined, but don't overmix.
 - Divide batter evenly between prepared pans. Bake 55-65 minutes, or until a toothpick inserted into the center of the bread comes out clean.
 - Remove pans from the oven and set on a wire cooling rack. Let bread cool in the pans for 15 minutes. Run a knife around the edges of the bread and carefully remove from the pans. Let the bread cool on the wire racks until only slightly warm.
 - Cut into slices and serve.



Wheat Word Scramble

1. EUBLHS _____
2. OAOCDROL _____
3. TAHWE _____
4. RNTWIE TWEHA _____
5. UOLFR _____
6. NABR _____
7. ERSDEMOPN _____
8. OMENMOSAPTISA _____
9. ERMG _____
10. EBSIRRE _____
11. OCNEBMI _____
12. GIANR LILDR _____
13. HVSETRA _____
14. HEATW RWATS _____
15. UGELTACRRUI _____



Wheat Words to Unscramble:
 *Agriculture *Berries *Wheat Straw *Bran
 *Harvest
 *Colorado *Combine *Bushel *Grain Drill
 *Endosperm
 *Germ *Winter Wheat *Flour *Wheat
 *Mesopotamians