Wheat and feed grain producers in Alabama include those who grow wheat, corn, grain sorghum and oats.

**W**heat and feed grains are harvested by a machine called a combine. It’s a combination of three separate operations — harvesting, threshing and cleaning. Before the combine was invented, these harvesting operations were done separately and by hand, which was labor intensive and expensive. In the 1920s, farmers would pay between $86 to $116 a day for hired labor to harvest their crop. Each part of the harvesting process required many hours of work, which made it difficult for farmers to make a profit. Today, combines are standard for harvesting wheat, oats, barley, corn, grain sorghum and other feed grains. The combine makes it much simpler for farmers to harvest more crops in less time, about 150 acres a day.

As the combine passes through the field, it is similar to a conveyor belt, taking the crop in and running it through a series of processes. The crop will be harvested from the field, separated from its stalk and then threshed to release the kernel from the rest of the plant. Finally, when the tank containing the finished grain is full, it will be transported to a grain bin for storage.

**DID YOU KNOW?**

One bushel of wheat makes about 45 boxes of wheat-flake cereal.
OATS

Oats can be grown in Alabama as a cover crop. Cover crops are grown to benefit the next crop planted and improve soil quality. Oats are also a great source of food for cattle because of its high nutritional value and easy digestibility.

Around 40,000 acres of oats are planted annually in Alabama. Ten thousand of those acres are harvested and used for livestock feed.

WHEAT PRODUCTION

Most farmers in Alabama grow a variety of wheat called soft red winter wheat. It is planted in late fall with plenty of time to grow several inches before winter arrives. Winter wheat goes dormant for the winter and continues to grow again in the spring. The wheat is finally harvested the summer after planting and is harvested by a combine. The wheat is stored in grain bins or in storage facilities called elevators. From storage, winter wheat is shipped to a mill where it will be ground, sifted and blended to make different products. Soft red winter wheat is used to make all-purpose flour, which is used in an assortment of baked goods.

Top wheat-producing counties in Alabama: Limestone, Baldwin, Madison and Houston

One bushel of wheat makes:

- 42 loaves of white bread
- 90 one-pound loaves of whole wheat bread
- 42 pounds of pasta
- 72 pounds of flour tortillas
- 420 three-ounce cinnamon buns

A family of four could live 10 years from food produced by an acre of wheat.
Corn Facts:

Corn is a **monoecious** plant, meaning it grows male and female reproductive flowers on the same plant.

The **tassel**, or male flower of the corn plant, grows at the very top. Once the tassel matures, it begins to produce pollen, which falls down onto the silk and makes kernels of corn grow.

The corn ear produces the female part of the plant, the **silk**. If fertilized by pollen from the tassels, the ears of corn develop kernels. Each silk produces one kernel on a corn cob.

**Sweet corn** is a popular variety of corn grown in Alabama as a summer vegetable crop. The most popular method of harvesting is by hand, and it can be found at local grocery stores or farmers markets. **Field corn** is also a popular type of corn grown in Alabama. This corn is harvested by a combine and separated from its husk. The kernels are stored in grain bins to be sold or used as livestock feed.

**DID YOU KNOW?**

A typical ear of corn has about 800 kernels.

A corn field the size of a football field makes a year’s supply of oxygen for 131 people.

**State Wheat & Feed Grain Checkoff Fund**

It begins here:

Farmers sell grain.

When Alabama farmers sell their grain, 1 cent per bushel goes into the state wheat and feed grain checkoff fund.

Led by 12 farmers, the Alabama Wheat & Feed Grain Committee assigns this 1 cent per bushel to be used for research, marketing, and education.

**By the Numbers**

- Farmers in Alabama usually harvest **more than half a million acres** of corn per year.
- Over the last decade, around **230,000 acres** of corn have been planted in Alabama for grain production annually.
- **50%** of corn in Alabama is grown in six counties: Lawrence, Madison, Limestone, Jackson, Lauderdale and Colbert.
Family Activity: **Bread in a Bag**
Grab an adult and have fun baking together!

**Ingredients:**
- 1/2 cup all-purpose flour
- 1 package yeast
- 1/2 cup warm water
- 1 tablespoon sugar
- 1 tablespoon sugar
- 2 cups whole wheat flour
- (or 1 cup whole wheat flour and 1 cup bread flour)
- 3/4 cup warm water
- 1 tablespoon vegetable oil
- 2 teaspoons salt

**Directions:**
- **Step 1:**
  - Put these ingredients in bag, seal and smooth until mixed. Let the mixture rest for 15 minutes.
- **Step 2:**
  - Add these ingredients to the bag. Seal and mix well in the bag. Add flour if the mixture is too sticky (not too much or you'll have a tough, flat bread). Turn dough onto a floured surface, knead for 5-6 minutes. Add more flour if it is too sticky. Divide dough in half. Cover with plastic bag and let rest 10 minutes.
- **Step 3:**
  - Press dough out onto floured board. Roll like a sleeping bag and pinch the top together. Place in two small, greased bread pans.
- **Step 4:**
  - Cover again with the bag and let rise 45-60 minutes. Bake for 30-36 minutes in 400°F oven. Cool and enjoy!

**WORD SEARCH**

Find and circle the hidden words listed below. Words may appear up, down, left, right or even diagonal. Good luck!

- NITROGEN
- COMBINE
- GRAIN BIN
- NODES
- BREAD
- WHEAT
- TASSEL
- SORGHUM
- ELEVATOR
- SILK
- FLOUR
- KERNEL
- CORN
- TILLERING
- FEED GRAIN
- WINTER
- OATS
- CEREAL

**SOURCES:**
- http://www.aces.edu
- http://www.extension.oregonstate.edu/home/farmers/farmerscookbook/growing/sorghum
- http://www.alfafarmers.org
- https://www.fao.org/3/a-i4722e.pdf