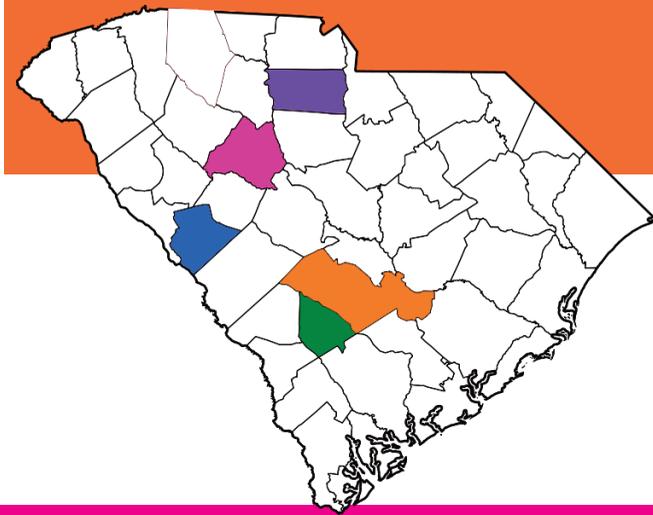




# AGmag

## South Carolina DAIRY



There are about  
**12,000**  
dairy cows in  
South Carolina.

The TOP 5 milk  
producing counties in  
South Carolina are

1. Newberry
2. Orangeburg
3. Bamberg
4. Edgefield
5. Chester



Each dairy cow in South Carolina provides an average of  
**1,996 GALLONS** of milk per year.

### ROBOTIC MILKER: Hi-Tech Helper

If you've ever seen a robotic milking machine, you know they don't look like your usual robot. Sadly, they don't talk either—as fun as that is to imagine. But robotic milkers can help farmers work faster, smarter, and even cheaper. That's why more and more U.S. farmers have installed robots in their cow barns—even if they only have small farms.

Robotic milkers work like this: A cow steps inside a stall. Grain dumps down in front of it. A mechanical arm reaches down to wash its udder. After a laser scans the cow's body, the arm uses a kind of cup to milk the cow. All the while, the robot milker is answering questions: *How much milk does each cow give? What is the cow's body temperature? How much does it weigh? How often does it visit the milking stall?* To get all that info, the farmer doesn't even have to set foot in the barn! He or she just checks it on the computer. Data gathered from the machine helps farmers make decisions about the cows.



South Carolina's total amount of milk produced in  
2019 equaled **24 million gallons.**

# Dairy Wordsearch

Look at the words on the right. Read their definitions and then find them in the puzzle below.

R	M	U	R	A	C	R	U	R	W	T	H	F	E
P	A	S	T	E	U	R	I	Z	E	L	C	R	E
S	O	C	S	R	E	U	A	U	R	A	L	I	E
C	O	W	U	R	C	T	R	E	D	D	U	O	O
P	R	K	L	P	H	S	S	I	E	Z	L	D	T
C	E	L	C	A	O	Y	Z	E	G	O	Z	M	O
I	F	I	A	S	M	E	D	U	A	A	R	U	H
S	I	M	L	T	O	W	N	A	L	E	E	I	M
P	E	I	F	U	G	S	E	I	I	L	P	C	R
G	H	I	L	R	E	B	O	A	S	R	M	L	A
M	L	U	Z	E	N	U	G	H	N	E	Y	A	A
L	L	I	E	O	I	L	T	M	A	E	O	C	E
S	O	M	S	Y	Z	L	E	G	L	P	I	W	I
L	S	I	G	N	E	S	I	L	O	P	P	O	L

**Bull** - male cattle used for breeding

**Calcium** - a mineral found in dairy products that is needed for healthy teeth and bones

**Calf** - cattle less than 3 months of age

**Cow** - female cattle that have given birth to a calf

**Dairy** - food group containing milk and milk products

**Heifer** - female cattle that have not had a calf

**Homogenize** - process where milk fat is broken into tiny particles that are evenly spread throughout the milk

**Milk** - a nutrient rich liquid that comes from female mammals

**Pasteurize** - process of heating and cooling milk to kill bacteria and protect its purity and flavor

**Pasture** - land covered with grass and other low plants suitable for grazing animals

**Silage** - fermented corn, wheat or hay with the stalks and leaves that is chopped and fed to cattle

**Silo** - a structure used in agriculture to store grain or fermented feed known as silage

**Steer** - male cattle not used for breeding

**Udder** - part of a dairy cow that produces, stores and dispenses milk

**Wean** - switching a calf from its mother's milk to eating on its own

Dairy cows produce an average of

**6.5 GALLONS**

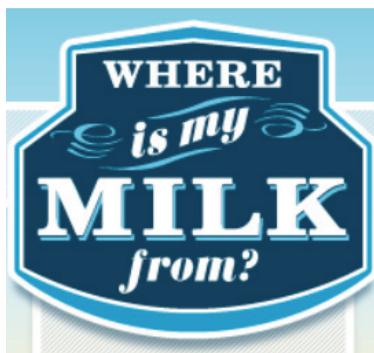
of milk per day.

**99.2%** of all milk produced in 2019 was used and consumed in the form of fluid milk.

In 2019, a dairy cow in South Carolina cost about

**\$1,130.**

**DID YOU KNOW?**



**From the cow to your mouth in five easy steps.**

Udder to tank. Tank to truck. Truck to plant. Plant to grocery store. Grocery store to fridge. Fridge to mouth. So where is your milk from?

First, go to [whereismilkfrom.com](http://whereismilkfrom.com)

Then locate the code on your carton or container, enter it and click Find It. You'll instantly know which dairy your milk came from! The same goes for your yogurt, chocolate milk, coffee creamer, cottage cheese, ice cream, and more!

## Ingredients

½ cup heavy whipping cream  
2 tablespoons granulated sugar

## Equipment

Medium bowl – best if chilled  
Whisk – best if chilled  
Measuring spoons and cups  
Serving spoon  
Small bowls and spoons for tasting

## Directions

### "Food safety starts on the farm and ends in your kitchen"

Thoroughly clean table or preparation area with soap and warm water before starting.

Thoroughly wash your hands with soap and warm water immediately prior to beginning the food preparation.

All ingredients, bowl and whisk should be kept chilled up until the time of preparation.

In a medium bowl, combine the whipping cream and granulated sugar.

Using a whisk or handheld mixer, whip a few minutes or until soft peaks form.

Use whipped cream immediately or cover and store in the fridge for up to 1 week.

Yield: 1 cup

**Make your own Whipped Cream!**

# DAIRY & CLIMATE

**Dairy Farmers practice sustainability every single day and have a goal to be carbon neutral by 2050.**

**Cows Upcycle:** Dairy cows have a unique 4-chambered stomach, so they can unlock nutrition from parts of plants people can't or won't eat. In fact, 80% of what cows eat cannot be eaten by people. Cows take products such as almond hulls, orange peels, corn husks, cottonseed and spent grains and turn them into wholesome milk.

**Nutrient Recycling:** Nutrients from cow manure are applied to plant-based croplands as a natural fertilizer. Some farms are able to turn the stored energy in cow manure into electricity that helps power their communities. The latest research shows that the dairy industry accounts for only 2% of the US greenhouse gas emissions. Dairy farmers are working on ways to reduce that figure even more.

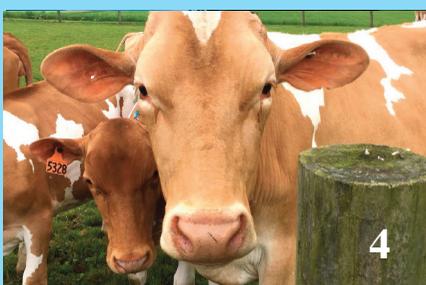
**Water Recycling:** Quality water is essential to a dairy farm. Dairy farmers provide their cows with clean water, which contributes to high quality milk. A gallon of water can be used as many as 4 times by using it for cooling milk, watering fields, and cleaning barns.

Cows upcycle by eating products such as

-  • almond hulls
-  • orange peels
-  • corn husks
-  • cottonseed
-  • spent grains

and turning them into wholesome MILK!

## Water Recycling:



The 5 most common breeds of dairy cows are shown here. Match the number to the breed.

- \_\_\_\_\_ Holstein
- \_\_\_\_\_ Brown Swiss
- \_\_\_\_\_ Jersey
- \_\_\_\_\_ Guernsey
- \_\_\_\_\_ Ayrshire

Answers: 2,1,3,4,5



**DAVIS PEELER** is a dairy farmer in Anderson, SC. His dairy is called Milky Way Farms. His two children, Jasper and Eva, help with the chores every day.

**Q: How did you get started milking cows?**

**A:** I started helping milk cows the day I could stand on a milk crate and reach the cows in the pit. I am the 4th generation to dairy farm. I assume it is in the blood.

**Q: What would a typical day on the job look like for you?**

**A:** The day starts with the alarm going off at 3:45 a.m. to start with the first milking. Then the day is spent taking care of the cows (making sure they are healthy and also tending to baby calves) and bottling milk to prepare for our milk routes since we market our own milk. The day is finished with an afternoon milking.

**Q: What do you love most about your job?**

**A:** Seeing the families enjoy our products is my favorite part and what keeps me going.

**What advice do you have for someone wanting to be a farmer?**

**A:** Be prepared to spend many long hours working as a farmer, but the rewards of raising your family on the farm is worth all the heartaches and headaches.



**THE DAIRY ALLIANCE**  
[thedairyalliance.com](http://thedairyalliance.com)

The Dairy Alliance is a nonprofit funded by dairy farm families of the Southeast. They work diligently with dairy farmers, retailers, schools, sports teams, health professionals, local organizations, state leaders, the media and the public to promote dairy foods and knowledge about the dairy industry.



**TINA HORN** is the State Dairy Program Coordinator for Clemson University's Cooperative Extension Service.

**Q: What do you do in your job?**

**A:** I am responsible for farmer and youth education and serve as a liaison between Clemson and state/regional dairy industry groups. I ensure that our SC dairymen have the latest industry information and research findings. I provide educational resources and opportunities for SC youth as well as coordinate the Clemson Spring Dairy Show, the SC Dairy Heifer Project, and the State 4-H and FFA Dairy Judging Contest. I also work with the SC Farm Bureau Dairy Committee, the state dairy breed associations, and Clemson Livestock and Poultry Health on dairy related issues.

**Q: What do you love most about your job?**

**A:** The friendships I have made with farmers, volunteers and youth.

**Q: How does your job impact agriculture?**

**A:** The direct impact can be seen when dairymen in SC utilize this information and resources to sustain their farms. Educating farmers about opportunities to enhance their profitability and remain in business, not only provides a living for them and their employees but also the employees of many other businesses. My work with youth helps to develop future dairymen, or at least consumers and voters, who have an understanding of agriculture and agricultural practices.

**Q: What does a typical day on the job look like for you?**

**A:** No two days are ever the same. In a day I could meet with a farmer to help provide input on an issue he or she is having on the dairy or help determine the best risk management option for a particular year and later that day be putting together resources for our dairy youth or working with our SC Dairy Heifer Project participants.



**JILL GOBIN** works for The Dairy Alliance as Manager of Youth Wellness.

**Q: What do you do in your job?**

**A:** I work with School Nutrition Directors, Physical Education teachers and nurses to implement programs in schools that increase awareness and availability of nutrition-rich foods, including dairy, and physical activity.

**Q: What do you love most about your job?**

**A:** I love many things about my job. But I would say the most enjoyable part is when I see the school aged children so excited when I come to visit their schools to do a dairy promotion, or Fuel Up To Play 60 pep rally, and hand out lots of fun dairy and FUTP60 swag.

**Q: How does your job impact agriculture?**

**A:** The Dairy Alliance works directly with and for our dairy farm families to own, live, and share the dairy story! Our main focus is to get the dairy farmer's messages out there that dairy is an essential ingredient to life and how important dairy is in a school aged students' diet. We have arrived at a time where curiosity around how the foods we enjoy impact our health, and the health of the planet has come more into focus. That is where it makes sense for us to work together helping youth know, think about, and act on the connection between food that is good for me and good for the planet.



South Carolina's Ag in the Classroom program is a non-profit 501(C)3 education foundation created to promote awareness and recognition of the importance of the sources of our food and fiber.

[www.SCFB.org/aitc](http://www.SCFB.org/aitc)