

## The Face of the Future

*Employment opportunities in agriculture soar for U.S. college graduates as employers seek global leaders in providing sustainable food systems, adequate water resources and renewable energy in a world of population growth.*

By Joann Pipkin

### National Agriculture Employment Outlook

#### Animal Scientists

5,400 500 or 10% increase

5,900

#### Food Scientists And Technologists

12,000 1,200 or 10% increase

13,200

#### Soil And Plant Scientists

16,000 1,300 or 8% increase

17,300

#### Agricultural And Food Scientists

33,000 3,100 or 9% increase

36,000

Employment, 2006

Projected  
Employment, 2016

Change,  
From 2006-16

NOTE: Data in this table is rounded.  
Source: CareerPlanner.com

Begin with the end in mind. It's a motto of sorts for Ben Rice's family; it's proof the future is bright for the agriculture industry.

It was Rice's father, Dan, who instilled the phrase, which boasts itself on a dry erase board in the office of the family's Prairieland Dairy near Firth, Neb.

"Dad is very futuristic," Rice says. "He recognizes that he's not going to be here forever and he wants to create something to pass on for future generations."

A shining star in the face of the future, Ben Rice recognizes the opportunities in agriculture. In fact, a 2015 report by the USDA's National Institute of Food and Agriculture (NIFA) and Purdue University cites good employment opportunities in the food, agricultural, renewable natural resources and environmental fields through 2020.

The employment outlook report estimates nearly 58,000 highly skilled job openings annually for the next four years. Almost half of those job opportunities will be in management and business while another 27% will be in science, technology, engineering and mathematics. Jobs in food and biomaterials production will make up 15%, and 12% of the openings will be in education, communications and government services.

Add to that the Bureau of Labor Statistics forecast of a 10.8% increase in the U.S. labor force through 2022, with employment opportunities in food, agriculture, renewable natural resources and environmental occupations projected to grow more than 5% through the period for college graduates with a bachelor's or higher degree.

Indeed, agriculture's future is bright.

### OPENING THE DOOR

Diversity creates opportunity for future generations, and Prairieland Dairy brings the concept to fruition through its sister companies Prairieland Foods and Prairieland Gold, a composting venture that completes the farm-to-table circle for the 1,400-cow agribusiness. It's that venture where 20-year-old Ben Rice is hands-on daily as he works to build the dairy's "go green" business.

The will to oversee and grow one of the dairy's entities drove Rice back to the operation. He sees Prairieland Gold as a way to concentrate and isolate the soil's nutrients, using them in more efficient ways to prevent runoff and groundwater contamination, and to reduce odor.

And it's a concept that's already growing by leaps and bounds.



# HONORING THE **REAL FACES OF DAIRY**

**BALCHEM**<sup>™</sup>  
Real People. Real Science. Real Results.

*Ben Rice*

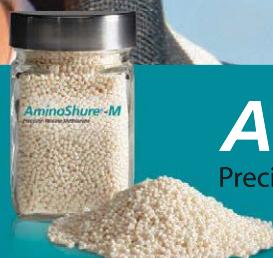
**Ben Rice**  
Prairieland Dairy, Firth, NE

Youth is the life-blood of any industry and there has never been a more exciting and vibrant future in agriculture than today. Young people are seeing these opportunities, as agriculture extends far beyond on-farm production.

At Balchem, we salute those young people that are coming back to agriculture and forging the path to the next level of sustainability, productivity and marketability.

Visit [realfacesofdairy.com](http://realfacesofdairy.com) to learn more about Ben's journey and find other ways to be a part of the Real Faces of Dairy Celebration.

Introducing AminoShure<sup>®</sup>-M Precision Release Methionine, the lowest cost encapsulated methionine on the market. It delivers the methionine needed to optimize milk protein production and supply functional dairy products to the world.

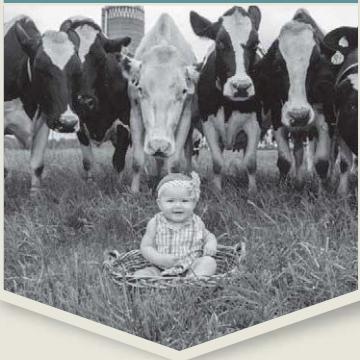


**AminoShure<sup>®</sup>-M**  
Precision Release Methionine

To see how milk protein is made, watch the new CSI-style video at [bit.ly/milkprotein2](http://bit.ly/milkprotein2).



# REAL FACES of DAIRY



## REAL FACES OF DAIRY

*The Real Faces of Dairy campaign is a year-long project designed to honor and celebrate the past, present and future people—well known and lesser known—shaping the American dairy industry through their personal stories. It provides a forum to highlight the many advancements creating an exciting and vibrant industry serving a global market.*



The past two decades have seen rapid advances in the study of genetics, spurred by growth in biotechnology. From plants and crops to animals, increasing productivity is the name of the game. In 2008, CareerPlanner.com reported 33,000 jobs held by agricultural and food scientists alone. A 9% job growth was also expected for those career paths through 2016, spurred by agricultural research and a need for improvement in soil fertility and water quality.

“We are a steward of the land for manufacturing facilities and the agriculture sector,” Rice explains. “We’re a small part of the solution for wanting to be greener and recognizing the problems with the Earth and the environment.”

PrairieLand’s mission is to serve people, cows and the planet, with each of its sister companies working to fulfill that goal. “PrairieLand Gold is the underlying purpose of our mission because we want healthy people,” Rice says. “We want to produce healthy milk. To produce healthy milk, you have to have healthy cows. To have healthy cows, you have to have healthy crops. To have healthy crops, you have to have healthy soil. That’s the full spectrum of what we need to achieve.”

## LEARNING BY DOING

A former Nebraska state FFA vice president, Rice says he really connected not only with the organization’s leadership opportunities, but also with the line in its motto that reads “learning to do.”

Growing up, each of the Rice children was active in FFA. Rice hopes to earn his American FFA degree in 2017. Agricultural education’s three-circle model, which integrates classroom instruction with FFA and work-based learning, has been paramount for the young dairyman.

“I would learn something at school, come home and use it at my dairy or in the compost operation or fields,” Rice explains. “My state officer experience was a huge growing year for me as a person.”



*When his family packed up from its Pennsylvania farm to join a group of dairy farmers in Nebraska who were looking for a young family to join them, Dan Rice already had in mind that he needed an operation to pass on to future generations.*

*Formed in 2000, PrairieLand Dairy is a joint venture of the Rice, Obbink, Eickhoff and Goosen families in southeastern Nebraska, about 30 minutes south of Lincoln.*

*As manager of the dairy, Dan Rice realized diversity would be key to bringing his children back to the farm. Today, PrairieLand Dairy, along with its sister companies PrairieLand Foods and PrairieLand Gold, welcomes three of Rice’s four children back to the operation.*

*Oldest daughter Megan Hickey manages the dairy’s cowherd while her husband Jacob oversees PrairieLand Foods, a division that sells milk, meat*

*and ice cream. Daughter Samantha Henderson works with mom Brenda in the farm office while son Ben manages PrairieLand Gold, the dairy’s compost operation.*

*Dan Rice’s foresight to diversify the dairy in food and sustainable resource entities was spot on. According to the 2015 report by USDA’s NIFA and Purdue University, job opportunities in science, technology, engineering and mathematics (STEM) are expected to grow the next four years. The strongest job markets are expected for plant scientists, food scientists, sustainable biomaterials specialists, water resources scientists and engineers, precision agriculture specialists, and veterinarians.*

*Both PrairieLand Foods and PrairieLand Gold mirror those opportunities.*

*“PrairieLand Gold was my avenue to still be a part of our family’s dairy farm, but still have my own entity to take*

*over,” Ben Rice says.*

*As he helps grow the PrairieLand Gold arm of the dairy, the sustainability buzzword only continues to blossom. Today, more than 4 million pounds of waste comes to the PrairieLand compost facility every month. An indoor facility to house incoming waste, and a nutrient recovery system to develop specialized compost blends for agriculture producers, are both in the works for the operation.*

*It’s a move that Rice says is innovative and cutting-edge, especially for a dairy in the Midwest.*

*While Rice doesn’t want the dairy to be known as just a compost operation, he is interested in PrairieLand Gold being recognized as a business that protects the Earth’s valuable resources.*

*“Our soil and the nutrients in it—that’s what life is built upon,” he says. “That is as precious of a resource, if not more so, than gold.”*



*“I want to be part of figuring out the next step and how to tie all the pieces together to create one effective, efficient, profitable business system. And it’s all tied, right here, with agriculture.”*

— **Ben Rice**, Prairieland Dairy, Firth, Neb.

## SHARE YOUR STORY

Throughout 2016, the Real Faces of Dairy project encourages everyone to share their dairy story and upload pictures of what dairy means to them. The dedicated website features interactive activities, including photo and essay contests. Visit [www.realfacesofdairy.com](http://www.realfacesofdairy.com).



View the interview with Ben Rice at <http://realfacesofdairy.com/>



We value your input; please take our survey at <http://bit.ly/253HCaa>

Agriculture is a diverse industry full of opportunities, and Rice now realizes his FFA experiences helped open his eyes to the future. As a state FFA officer, Rice saw that ag industries offered countless jobs and internships. Opportunities abound for active, young people interested in agricultural careers, he says.

All the while his father’s foresight in diversifying the family business paved the way for Rice and his sisters to find their own niche in the operation.

### FACING THE FUTURE

Agriculture isn’t just grandpa’s farm any more.

Despite the recession of the 1990s, jobs in the U.S. grew by 28 million from 1990 to 2000; the strongest growth was seen in the area of agricultural services, forestry and fishing, with a 20.1% increase, according to a report by the Indiana Business Review.

According to the USDA Economic Research Service, the industry today makes up about 10% of the nation’s workforce, providing 17.3 million jobs.

As sustainability continues to be a driving force in agriculture, young producers like Rice realize its worth. “You can’t deplete your resources,” he says. “Agriculture is our world, built on the soil.”

As international companies knock on Prairieland’s door, Rice looks to the future as a time of great opportunity with advancements unlike anything previous generations have ever seen.

“I don’t think farming is going to look the same at all,” Rice explains. “What excites me most about Prairieland Gold is sustainability. I want to be part of figuring out the next step and how to tie all the pieces together to create one effective, efficient, profitable business system. And, it’s all tied, right here, with agriculture.”



### IN THE NEXT ISSUE:

*Dairy in a Changing World. As consumers become more affluent, dairy products and dairy proteins are making their way to the table. Next month, we will follow a Chinese consumer to show how milk and milk protein help her feed her family.*