

# CULTIVATING COLORADO

*Feeding your  
family, growing  
our resources*

## Making History

- First-of-its-kind hemp seed program
- Hi-tech farming
- Bug ranching

*Home on the Range*

COLORADO CATTLE FAMILIES CELEBRATE 150-YEAR HERITAGE



COLORADO'S ELECTRIC COOPERATIVES

# HARVESTING TOMORROW'S ENERGY TODAY

Cooperatives in Colorado are leading the way when it comes to renewable energy. Cooperatives are member-owned and directed. Therefore, their values reflect the values of Coloradans. And Coloradans care about their environment. It's that simple.

**Contact your local cooperative to find out more about the programs and resources in your area.**

**Delta-Montrose Electric Assoc.**  
Montrose

**Empire Electric Assoc.**  
Cortez

**Grand Valley Power**  
Grand Junction

**Gunnison County Electric Assoc.**  
Gunnison

**Highline Electric Assoc.**  
Holyoke

**Holy Cross Energy**  
Glenwood Springs

**Intermountain Rural Electric Assoc.**  
Sedalia

**K.C. Electric Assoc.**  
Hugo

**La Plata Electric Assoc.**  
Durango

**Morgan County Rural Electric Assoc.**  
Fort Morgan

**Mountain Parks Electric**  
Granby

**Mountain View Electric Assoc.**  
Limon

**Poudre Valley Rural Electric Assoc.**  
Fort Collins

**San Isabel Electric Assoc.**  
Pueblo West

**San Luis Valley Rural Electric Co-op**  
Monte Vista

**San Miguel Power Assoc.**  
Nucda/Ridgway

**Sangre de Cristo Electric Assoc.**  
Buena Vista

**Southeast Colorado Power Assoc.**  
La Junta

**United Power**  
Brighton

**White River Electric Assoc.**  
Meeker

**Y-W Electric Assoc.**  
Akron

**Yampa Valley Electric Assoc.**  
Steamboat Springs

**Tri-State Generation & Transmission**  
Westminster

**COLORADO  
COOPERATIVES  
LEADING THE WAY**





# The Colorado Corn Administrative Committee

Utilizing Colorado's corn check-off dollars  
(one penny per bushel of corn produced in the state) for ...

## RESEARCH

Investing hundreds of thousands of dollars annually in projects and collaborating with various partners to help farmers grow more food, fuel and fiber with less resources, and ensure corn producers continue doing so responsibly.

## MARKET DEVELOPMENT

Supporting corn farmers through hundreds of thousands of dollars in ongoing or recently concluded endeavors that promote ethanol, the livestock industry and other vital corn markets.

## COMMUNICATIONS & OUTREACH

- Providing grants and other support for FFA and 4-H youth
- Sponsorship and presence at events all over the state
- Telling ag's positive story through various avenues, and to various audiences

## REGULATORY AFFAIRS

Reaching out to educate lawmakers and officials at the local, state and federal levels to help make sure agricultural rules and regulations are appropriate.



Photo by Ryan Kanode

*Working in coordination with the politically active  
Colorado Corn Growers Association, to improve  
the industry for our state's 4,000 corn producers.*

**colorado**Corn  
Administrative  
Committee

Learn more at [coloradocorn.com](http://coloradocorn.com).



# WHERE FAMILY AND DAIRY GO HAND-IN-HAND

MILK TODAY IS PRODUCED WITH

 **65%**  
LESS WATER

 **90%**  
LESS LAND

 **63%**  
LESS CARBON

Thanks to the hard work and dedication of your local dairy farm families



Compared to 1944



**WDA**<sup>®</sup>

**WESTERN DAIRY  
ASSOCIATION**

*Dairy farmers nourishing people  
and planet with world-class care.*

[WesternDairyAssociation.org](http://WesternDairyAssociation.org)





# CONTENTS



## 44 The Future of Farming

Colorado farmers embrace high-tech agricultural innovations

- 8 COLORADO GROWN**  
Agriculture industry is the backbone of the state
- 14 MAKING HISTORY**  
First-of-its-kind certified hemp seed program boosts state's ag industry
- 18 HOME ON THE RANGE**  
Colorado Cattlemen's Association celebrates 150 years in 2017
- 22 GREEN FIELDS, HIGH YIELDS**  
Colorado cultivates a flourishing field corn sector
- 26 PLENTIFUL POTATOES**  
Colorado, the nation's second-largest shipper of fresh potatoes, grows and harvests dozens of varieties

- 30 A HELPING HAND**  
Colorado AgrAbility helps farmers by providing adaptive equipment and education
- 34 FOOD FROM THE FOREST FLOOR**  
Colorado forests benefit from livestock grazing
- 38 BUILT TO LAST**  
Colorado's Centennial Farms program honors long-lasting family farms
- 42 AGAINST ALL ODDS**  
The Sakata Family Farm continues to flourish

---

### *On the Cover*

Ranchers take part in a cattle drive in Colorado. *Photo by Dina Smith*





# Feeding the world, Cultivating Colorado's economy



*A global food company*



# CULTIVATING COLORADO

2017 EDITION, VOLUME 1

## JOURNAL COMMUNICATIONS INC.

**Project Manager** KIM MADLON

**Agribusiness Content Team** RACHEL BERTONE,

HANNAH PATTERSON, BRITTANY STOVALL

**Agribusiness Marketing Director** M.A. ORR

**Contributing Writers** JESSICA WALKER BOEHM, MAGGIE GINSBERG,

JOHN MCBRYDE, JESSICA MOZO

**Art Director** LAURA GALLAGHER

**Senior Graphic Designers** SAMANTHA FRAZIER, HEATHER HAUSER,

SUSANNA HAYNES, AMY HIEMSTRA, VIKKI WILLIAMS

**Graphic Designer** LINDSEY HIGGINS

**Senior Photographers** JEFF ADKINS, MICHAEL TEDESCO

**Color Imaging Technician** ALISON HUNTER

**Photo Editor** MICHAEL BETTS

**Ad Production/Sales Support Manager** KATIE MIDDENDORF

**Ad Traffic Assistant** PATRICIA MOISAN

**Ad Production/Sales Support Coordinator** COURTNEY COOK

**Web Services** RICHARD STEVENS

**Chairman** GREG THURMAN

**President/Publisher** BOB SCHWARTZMAN

**Executive Vice President** RAY LANGEN

**Senior V.P./Agribusiness Publishing** KIM NEWSOM HOLMBERG

**Senior V.P./Agribusiness Sales** RHONDA GRAHAM

**Senior V.P./Operations** CASEY HESTER

**Controller** CHRIS DUDLEY

**V.P./Agribusiness Content** JESSY YANCEY

**V.P./Content Operations** NATASHA LORENS

**V.P./Creative Services** CHRISTINA CARDEN

**V.P./Digital Operations** ALLISON DAVIS

**Senior Accountant** LISA OWENS

**Accounts Payable Coordinator** MARIA MCFARLAND

**Accounts Receivable Coordinator** DIANA GUZMAN

**Photography Director** JEFFREY S. OTTO

**Executive Secretary** KRISTY GILES

**Human Resources Manager** PEGGY BLAKE

**Integrated Media Manager** JACOB ENGELMAN



*Cultivating Colorado* is published annually by Journal Communications Inc. and is distributed by the Colorado Department of Agriculture. For advertising information or to direct questions or comments about the magazine, contact Journal Communications Inc. at (615) 771-0080 or by email at [info@jnl.com](mailto:info@jnl.com).

## COLORADO DEPARTMENT OF AGRICULTURE:

**Commissioner** DON BROWN

**Director of Communications & Public Awareness** CHRISTI LIGHTCAP

Special thanks to all Department staff for their support.

For more information about the Colorado Department of Agriculture, contact: Christi Lightcap, Director of Communications & Public Awareness, 305 Interlocken Parkway, Broomfield, CO 80021 (303) 869-9005 or by email at [christi.lightcap@state.co.us](mailto:christi.lightcap@state.co.us)

No public funds were used in the publishing of this magazine.

© Copyright 2016 Journal Communications Inc., 725 Cool Springs Blvd., Suite 400, Franklin, TN 37067, (615) 771-0080. All rights reserved. No portion of this magazine may be reproduced in whole or in part without written consent.

Member  The Association of Magazine Media

Member  Custom Content Council



## Welcome to the first edition of “Cultivating Colorado.”

Welcome to the first edition of “Cultivating Colorado.” Within these pages, you’ll find stories of our true American heritage while simultaneously looking into the future of one of Colorado’s strongest industries: agriculture.

Through these articles, you’ll be able to:

- Learn about the importance of agriculture and the role it plays in your life.
- Put yourself in the boots of Colorado farmers and ranchers, whose roots run deep.
- Examine the value of our top commodities and their effect on those around the globe.
- Explore Colorado’s rich diversity in growing conditions and agricultural products.
- Take a glimpse into the future of agriculture through new programs and modern technology.

I have had the pleasure of traveling through this great state and have seen the commitment by our farmers and ranchers to create a safe, affordable, and abundant food supply. Plus, their efforts go beyond the food we produce. Colorado’s farms and ranches add value to our lives in many ways. This industry is made up of strong-willed and passionate men and women who work to preserve our natural resources for their children. You will find their stories among these pages and in upcoming editions.

Whether you’re a Colorado native or moved here from another region, it’s hard to deny the beauty of our state. That splendor reaches from corner to corner and from mountains to prairie. That splendor also includes the people of our agricultural community through their strength, fortitude, and dedication to their life’s work.

I encourage you to read these stories and then set out on your own agricultural adventure. Please travel the state to see the diversity of agriculture for yourself and enjoy the fruits of their labor.

John Hickenlooper  
Governor of Colorado



# NORTHEASTERN JUNIOR COLLEGE



Northeastern Junior College delivers world-class agriculture programs including:

- Agriculture Business
- Agriculture Education
- Production Agriculture
- Animal Science
- Crop & Soil Science
- Equine Science

As Colorado's first iPad college, we bring technology to the field to enhance education and deliver real results to the agriculture industry.

"My educational experience at Northeastern Junior College had a very positive effect on my career. The comprehensive courses, professors, students and events came together to make learning a priority and a pleasure. I will always be thankful for the fond memories and fine education that Northeastern provided."

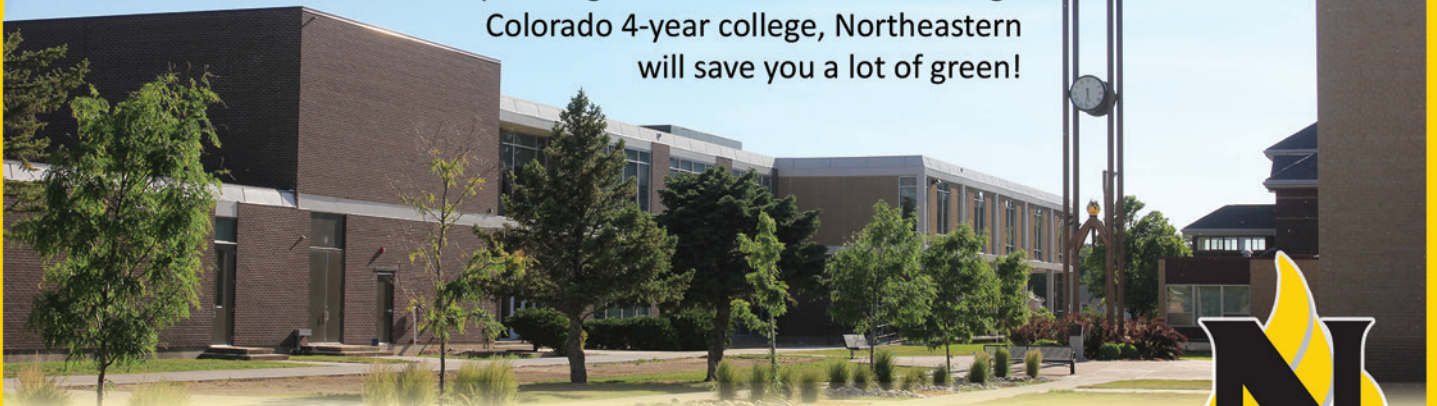
- Don Brown, Colorado Commissioner of Agriculture

Northeastern Junior College Class of 1976



Northeastern has numerous other departments offering degree and certificate programs as well. Check out more than 50 programs and 600 courses across the college.

With a price tag much lower than the average Colorado 4-year college, Northeastern will save you a lot of green!



The student life experience at Northeastern makes for an exciting learning environment with on-campus housing, 10 varsity athletic teams, a rodeo team with multiple national champions, a livestock judging team, and stellar arts and entertainment.

*The Northeastern sense of community can't be beat!*

*Colorado's First iPad College*

[www.njc.edu](http://www.njc.edu)





# READ ON THE GO

**OPTIMIZED  
FOR ONLINE**

Each article can be read online, as a web article or within our digital magazine. Additional photos and statistics are also available on the website.

## SHARE THE CONTENT

Easily share an interesting article, stunning photo or useful advertisement via Facebook, Twitter, Pinterest or email.

## EMBED IN YOUR SITE

Embed our digital magazine in your website to offer compelling information about Colorado agriculture to your site visitors.



Visit us online at  
**COagriculture.com**



*“We hope this magazine expands the understanding of Colorado agriculture.”*

The development of “Cultivating Colorado” has been an exciting, yet difficult process. It has been a real pleasure to explore the numerous agriculture-related stories we have in this state and challenging to narrow them into those you will read among these pages. We plan to make this an annual publication because Colorado is bursting with inspirational and educational stories about agriculture that need to be shared.

As a farmer and rancher, I truly believe that agricultural producers are the backbone of this great state, and this magazine can be a valuable tool to help promote the amazing and dedicated work by our producers while educating the public on the value they add to our lives.

The Merriam-Webster dictionary defines “cultivate” as “to foster the growth of.” This applies to more than plants; you can cultivate the mind and that is the purpose of this magazine. We hope this magazine expands the understanding of Colorado agriculture and those that make it a success.

Consumers are bombarded with information, both truthful and false, about the food system. It is our responsibility to provide an honest and transparent look into the food on their table so they can make informed decisions that best fit their family. There is room in our society for all sectors including conventional agriculture and niche markets, such as natural and organic. The farmer, rancher and consumer must have a symbiotic relationship, based on mutual trust and appreciation. It’s that relationship that feeds our families, neighbors and friends across the globe.

I invite you to discover the amazing people, programs, animals, and equipment within these pages and then share these stories with your friends and family. It is through these stories that we can help achieve a greater understanding of our food system and the many men and women who contribute to it.

Don Brown  
Colorado Commissioner of Agriculture

*“Cultivators are the most valuable citizens... they are tied to their country.”*

**PRESIDENT THOMAS JEFFERSON**



# COLORADO GROWN

Agriculture industry is the backbone of the state

In Colorado, the agriculture industry is as vast as the stunning mountains, stretching as far as the eye can see. Colorado agriculture is extremely important to the Centennial State's economy, generating \$41 billion of economic activity annually and employing nearly 173,000 Coloradans. The state's 34,200 farms produce valuable crops and commodities on 31.7 million acres. The average farm size is 927 acres.

Colorado's hardworking farmers and ranchers produce a wide variety of commodities for the state, country and world. In 2015, the state exported \$1.8 billion in ag products, with top markets including Canada, Mexico, Japan, Korea and China.

Cattle and calves take the top spot for ag commodities, followed by dairy products, corn, hay, wheat, poultry and eggs, hogs, and potatoes. In fact, in 2015, cash receipts to Colorado's ranchers from the sale of cattle and calves alone totaled \$4 billion. But Colorado also ranks among the leading states for the production of fruits and vegetables like cabbage, cantaloupe, carrots,

mushrooms, onions, peaches, potatoes and spinach. Colorado falls among the top 10 states in nearly 20 different agricultural products.

More than just crops and commodities, Colorado agriculture encompasses local food, agricultural education, agribusiness, innovation and technology, forestry, and more.

The Centennial State is an innovative national leader, paving the way as the first in the nation to implement a certified industrial hemp seed program. Farmers are embracing innovation, driving efficiencies and maximizing sustainability with the use of global-positioning technology, drones, solar-powered sensors and more water-efficient irrigation systems.

But the state's industry is rooted in tradition, too, celebrating "Centennial" farms and ranches that have been in the same family for at least a century and recognizing milestones, such as the 150th anniversary of the Colorado Cattlemen's Association.

With a respect for tradition and an equal embrace of change, Colorado agriculture is only poised for more success.

– Rachel Bertone







The Colorado Rockies provide a stunning backdrop as a farmer harvests wheat. Meanwhile, the corn crop growing in the foreground will be harvested and used for feed, fuel and biodegradable products.

Staff Photos by *Jeffrey S. Otto*



## BETTER FOR YOU, BETTER FOR COLORADO

There's no better way to support your state than buying local, and Colorado Proud makes it easy.

Managed by the Colorado Department of Agriculture, the Colorado Proud program identifies Colorado-grown, -raised or -processed products with a distinct logo, allowing consumers to make the easy choice of buying local products.

You make a difference when you buy local. Buying local contributes to the state's economy by helping Colorado farmers, ranchers, growers, manufacturers and processors.

Find a listing of companies that participate in the program, as well as stores that carry local products, at [coloradoproud.org](http://coloradoproud.org).



Colorado's farms cover 31.7 million acres across the state.

**34,202**  
NUMBER OF FARMS  
IN COLORADO



*NEARLY \$2 BILLION IN AG PRODUCTS EXPORTED ANNUALLY  
GIVE PEOPLE AROUND THE WORLD A TASTE OF COLORADO.*

### SUNNY SIDE UP

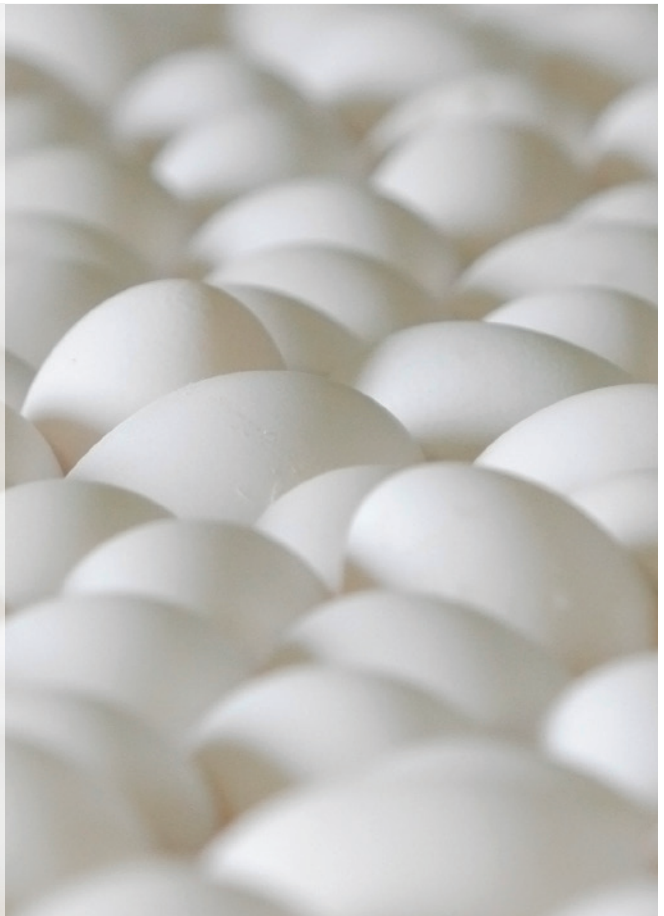
With impressive innovations and technological advancements, Colorado egg producers are breaking through the shell.

There are approximately 4.5 million hens in egg production in Colorado with cash receipts to egg producers topping \$175 million in 2015.

But the most notable aspect of the industry is that Colorado egg production is almost 100 percent automated, ensuring fresh, safe and affordable eggs. Automatic grading machines allow up to 18,000 eggs to be inspected per hour, greatly improving efficiency.

This innovation benefits the hens as well, allowing them to live in a comfortable environment, and therefore, be more productive.

Learn more about Colorado eggs at [coloradoeggproducers.com](http://coloradoeggproducers.com).







Rack of lamb

## FRESH ON THE MENU

The farm-to-table movement is no longer a trend – it's the norm.

Consumers more than ever want to know the exact farm or ranch that their food comes from, and Colorado restaurants are eager to deliver. The farm-to-table premise not only helps them give consumers what they want, but it also helps them form solid relationships with local farmers and ranchers, boosting Colorado's economy and getting the freshest produce and meats available. Sourcing local helps restaurants cut down on travel time, and some chefs and restaurateurs even have their own farms, getting as local as possible.

## WATER WORKS

Though crop circles have been at the center of many alien-focused sci-fi and horror movies, the pretty patterns are actually a result of center-pivot irrigation, developed in Colorado in the late 1940s by Frank Zybach and Ernest Engelbrecht.

After the Ogallala Aquifer was discovered under the Great Plains, farmers were able to begin planting crops in areas that lacked sufficient rainfall necessary to yield bountiful crops. Zybach had a previous knowledge of sprinkler systems and developed the system, which uses equipment that rotates around a single central point, sprinkling water on the crops below.

The Engelbrecht Farm, located in Adams County, still features the original system and is part of the National Register of Historic Places.

Sources: USDA National Agricultural Statistics Service, Census of Agriculture

## Are GMO foods really safe?

### When do farmers use antibiotics, and why?



Hear the facts from a farmer  
and eat fearlessly



*Conversations About Farming and Food*

*Brought to you by Colorado's corn  
farmers and their checkoff.*

Visit [www.FindOurCommonGround.com](http://www.FindOurCommonGround.com)



# YOUR PASSION

---

# OUR PROMISE

Our business is to support yours —  
we'll design a financing plan with terms,  
rates and payment options tailored  
to your unique needs.



AMERICAN AGCREDIT  
MONEY FOR AGRICULTURE

FINANCING • LEASING • CROP INSURANCE

---

**Call 800.799.6545 today or visit [AgLoan.com](http://AgLoan.com)**

A part of the Farm Credit System. Equal Opportunity Lender.



# COLORADO'S PRINCIPAL AGRICULTURAL COMMODITIES

A glimpse at the state's leading ag products

## CATTLE

Cattle and calves represent the largest segment of agriculture in Colorado, contributing \$4 billion in annual cash receipts. With more than 300 days of sunshine, Colorado's mild climate benefits the cattle feeding industry.

## CORN

Colorado has a vibrant history of growing corn for livestock feed and other uses. More than a million acres across the state are dedicated to the corn crop that supplies raw materials for feed, fuel and biodegradable products in the U.S. and internationally.

## DAIRY

Colorado dairy farms produce nearly 3 billion pounds of milk, contributing more than half a billion dollars in annual cash receipts. The state's annual average temperatures are in the 50s and 60s – a perfect environment for raising dairy cows.

## FRUIT & VEGETABLES

From peaches, apples and melons to sweet corn, chilies, potatoes and lettuce, Colorado grows a wide variety of fruit and vegetables. The state produces nearly \$670 million in fruit, vegetables and other specialty crops each year.

## HAY

Hay is an essential agricultural crop, providing feed and seed that sustain overall agriculture in Colorado, across the U.S. and worldwide. Nearly 1.5 million acres across Colorado produce a diverse range of hay, including alfalfa, grass and various mixes.

## NURSERY & GREENHOUSE

Contributing more than \$1.8 billion to the state's economy, Colorado's greenhouses and nurseries provide seeds, plants and other resources to the state's agricultural landscape, primarily growing landscaping products like flowers, bushes, trees, groundcover and more.

## POTATOES

Colorado's San Luis Valley has a rich history of potato farming. The state is the second-largest shipper of fresh potatoes in the U.S., producing more than 2 billion pounds of potatoes annually. Colorado also leads the nation in discovering and growing new varieties of potatoes.

## POULTRY & EGGS

Colorado hens lay more than a billion eggs each year. The state's egg and poultry producers are at the forefront of innovative poultry handling and egg processing, ensuring safely and humanely raised chickens and quality-assured farm-fresh eggs.

## SHEEP & LAMB

Colorado consistently ranks as one of the top five producers of lamb year after year. The state's climate and geography allow Colorado farmers to raise lamb with consistently tender, succulent meat no matter what time of year the lamb is harvested.

## SWINE

Colorado hog farms use new, innovative practices and better feed to raise and process lean, yet tender meat. The result is pork that is 16 percent leaner and contains 27 percent less saturated fat than it did 20 years ago.

## WHEAT

More than 2 million acres of wheat are planted and harvested in Colorado each year, making the crop one of the state's top agricultural commodities. Colorado has consistently ranked high nationally as a wheat-producing state.

## WINE

Colorado wines have won national and international competitions, including the World Riesling Cup and the prestigious Jefferson Cup. The Colorado Wine Industry Development Board funds research through Colorado State University and promotes all wines made in the state.

# 100+

NUMBER OF FARMERS MARKETS IN COLORADO, WHICH IS A HOTBED FOR AGRITOURISM AND LOCALLY PRODUCED FARM PRODUCTS

## COLORADO'S LEADING AG PRODUCTS



**Cattle**  
\$4B



**Dairy**  
\$664M



**Corn**  
\$498M



**Hay**  
\$398M



**Wheat**  
\$359M

Source: Colorado Department of Agriculture



# MAKING HISTORY





# First-of-its-kind certified hemp seed program boosts state's ag industry

**U**sed in products ranging from health food to automobiles, industrial hemp is one of the nation's most underutilized raw materials. During the 1700s and 1800s, hemp played a critical role in rope production. However, the plant fell into disfavor.

Why? Understanding of industrial hemp has

been complicated by its botanical relative, marijuana.

A first-of-its-kind program launched by the Colorado Department of Agriculture (CDA) is focused on changing that false perception and creating opportunities for the state's farmers.

"Colorado already leads the U.S. in industrial hemp production," says Duane Sinning,

assistant director of CDA's Division of Plant Industry. "The CDA Approved Certified Hemp Seed program is the next step in this emerging industry's move toward mainstream agriculture."

## 'ON THE CUTTING EDGE'

Seed produced and conditioned under this program will be issued "CDA Approved Certified Seed" tags through the Colorado Seed



Colorado's certified hemp seed program paves the way for farmers to reap the benefits of growing industrial hemp.



## THE COLORADO DEPARTMENT OF AGRICULTURE'S INDUSTRIAL HEMP CERTIFIED SEED PROGRAM IS THE FIRST OF ITS KIND IN THE NATION.

### WHAT'S THE DIFFERENCE?

Although visually similar, hemp and marijuana are different strains of the cannabis plant. Hemp, or industrial hemp, is grown for industrial uses including paper, textiles and biodegradable plastics, among others. It is thought to have been used to make fiber thousands of years ago. Also, hemp contains insignificant amounts of THC, the psychoactive ingredient found in cannabis.

>5K

Acres of industrial hemp being grown in Colorado

25K

ESTIMATED INDUSTRIAL USES FOR HEMP

*"The CDA Certified Hemp Seed program is the next step in this emerging industry's move toward mainstream agriculture."*

### DUANE SINNING

Assistant Director of CDA's Division of Plant Industry

Sources: Colorado Department of Agriculture, The Denver Post, U.S. Congressional Research Service

Growers Association (CSGA) if the production standards are met, and then will be available for purchase by farmers through a seed distributor.

Seeds need to be certified so farmers and consumers understand that the strain will produce hemp that contains below 0.3 percent Tetrahydrocannabinol (THC), and therefore, is not marijuana. THC is the chemical in marijuana that is responsible for the psychoactive effects.

The "CDA Approved Certified" designation means that farmers can be assured that the seeds purchased and planted have been through a tight production process and thoroughly tested – securing the farmers' investment and abiding by state and federal regulations.

"The biggest reason we want to make sure the CDA Approved Certified Seed program is a viable program is because it mainstreams industrial hemp," Sinning says. "It applies those same principles and practices you apply to wheat and alfalfa, and makes sure the farmer gets what he is paying for."

Adding industrial hemp to the list of crops for which CSGA provides seed certification represents a milestone for the industry, plus assures Colorado's spot as a leader in industrial hemp innovation.

"Industrial hemp becomes just another one of the crops that farmers may choose to plant," Sinning says. "CDA is not encouraging anyone to plant corn or hemp or any other crop. It just means a farmer can make a decision based on his land and his assortment of crops that he wants to focus on."

### GREAT POTENTIAL

The U.S. Congressional Research Service has identified 25,000 uses for industrial hemp, Sinning says. "They talk about uses in foods and beverages, cosmetics, personal

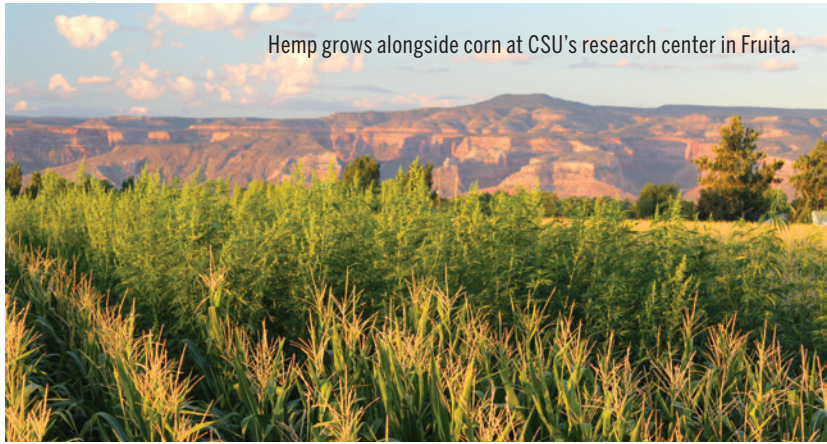


care and personal supplements, as well as fabrics, textiles, papers, construction materials – there are so many,” he says. “It’s hard to say how many of those will come to fruition. It’s still early in an emerging industry.”

Well-known companies including Ford, Patagonia and The Body Shop make products that use hemp seed, oil and fiber – almost all imported from Canada, Europe and China because American farmers have been prohibited from growing the crop due to the perception that it is the same thing as marijuana.

However, federal and state laws are changing regarding industrial hemp, and Colorado is positioning its farmers to reap the benefits.

In June 2016, CDA’s Terry Moran and Colorado State University’s Calvin Pearson worked together to plant industrial hemp seeds on less than half an acre at CSU’s Western Colorado Research



Hemp grows alongside corn at CSU’s research center in Fruita.

Center in Fruita, one of the testing sites for industrial hemp.

“It’s really important that the CDA is taking this on,” Pearson says of the certified hemp seed program. “For the people who are going to buy and plant hemp, we want to make sure that those seed lots are genetically pure and meet certain quality standards, that they’re free of disease, foreign materials like

sticks and weeds, and have good germination. So when somebody plants it, they’re going to get a crop they think they’re going to get.”

– John McBryde



Learn more about Colorado's certified hemp seed program at [COagriculture.com](http://COagriculture.com).



Risk Management ■ Education Programs  
Legislative Advocacy ■ Co-op Development



Rocky Mountain  
Farmers Union

[rmfu.org](http://rmfu.org)

Farm ■ Home ■ Auto ■ Crop  
Insurance



FUSA  
Insurance  
Agency

[fusainsurance.com](http://fusainsurance.com)

**We understand agriculture from the ground up.**



# HOMIE ON





# THE RANGE

Colorado Cattlemen's Association celebrates 150 years in 2017



Stacked Lazy 3 Ranch, located in Deer Trail, is a diversified enterprise with a commercial cow-calf herd as well as dryland crops. The Turecek family has worked diligently to convert hundreds of acres of marginal farm ground back to native grass pasture.





Colorado's ranching heritage runs deep – so deep, in fact, that nine years before Colorado became a state, ranchers formed the Colorado Cattlemen's Association (CCA) in 1867. It was the nation's first cattlemen's association.

"The original purpose was for protection and banding together to prevent theft of livestock, and that's still the case today," says Harold Yoder, who served as president of the Colorado Cattlemen's Association in the 1980s and has been a member since the 1960s. "As time went on, the CCA represented the rural parts of Colorado and assisted with problems for ranchers affected by state and federal legislation. As ranchers, we can't be in Denver or Washington, D.C., debating legislation that is detrimental to us, so the CCA helps take care of its members in that way."

Approximately 12,000 beef producers live and work in Colorado, and the CCA has about

2,500 members. The state has around 2.7 million head of cattle, which generated \$4 billion in 2015.

### BELONGING TO THE CCA

Yoder and his wife, Linda, raise cattle southeast of Limon where his father – also a past president of the CCA – began ranching in 1947. Yoder became a partner in 1969, and today, his sons, Sid and Kenny, are both ranchers as well.

"The CCA allows ranchers to make a big impact, sometimes on a state and national level, even from their local community," Yoder says. "It also allows us to meet people like us who are also making a living in the cattle industry and have the same challenges we have. Being involved in an organization that represents us, we feel obligated to give what we can to it, and the CCA provides an avenue."

Terry Fankhauser is the current executive vice president of the CCA and has been in that role since 2001. He was raised on a ranch

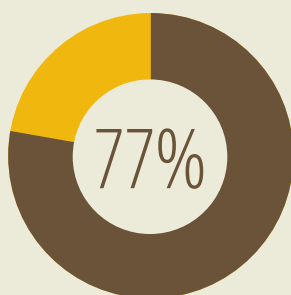
in Kansas, where his parents continue to raise cattle.

"The reason I'm so sincere about this job is because it correlates to experiences my family has had," Fankhauser says. "We want family ranches to be able to stay in the family and thrive from generation to generation. The CCA is looking at helping diversify agriculture production so ranch families can bring in more revenue by producing not only beef, but also habitats for wildlife under concern. We hope that brings back more opportunities for family members to come back to the ranch."

Back when the CCA was founded, ranch families made a living providing beef to miners. "Many of our former members have towns and counties named after them because they helped shape the future of Colorado even before it was a state," Fankhauser says. "The beef industry is an integral part of Colorado's heritage. The CCA's goal is to preserve the ability for

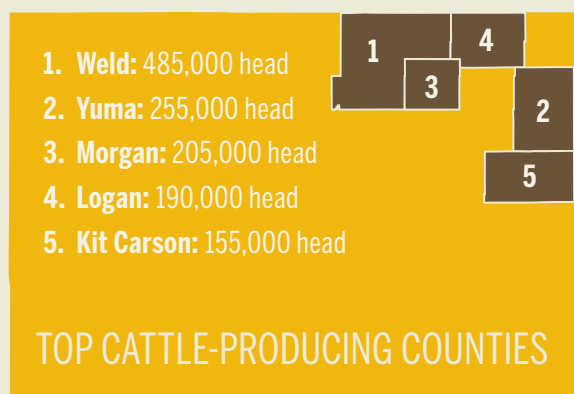
# 2.7M

COLORADO HAS 2.7 MILLION COWS AND CALVES.



Colorado's cattle and calves account for 77 percent of the state's livestock industry.

TO LEARN MORE ABOUT THE COLORADO CATTLEMEN'S ASSOCIATION, VISIT [COLORADOCATTLE.ORG](http://COLORADOCATTLE.ORG).



Sources: USDA National Agricultural Statistics Service, Colorado Department of Agriculture



*“The CCA allows ranchers to make a big impact, sometimes on a state and national level, even from their local community.”*

## HAROLD YODER

Past president of the Colorado Cattlemen's Association

agriculture to continue to be successful and create tools to aid producers. People come to Colorado for its wide open spaces, mountains, clear water and clean air, and without ag producers and their conservation ethics, Colorado wouldn't have that.”

## CONSERVATION MATTERS

Colorado's cattle ranching families have a long tradition of providing a safe, nutritious food supply as well as being good stewards of Colorado's land, water and wildlife resources. Keven and Sandi Turecek of Deer Trail are one example. They were awarded the prestigious Colorado Leopold Conservation Award in 2016 for their conservation efforts on their ranch, where they run a cattle operation and grow 5,000 acres of crops, mostly winter wheat.

The Tureceks have two sons, two daughters and six grandchildren. Their sons, Travis and Tyler, are both partners in the ranch.

“Winning the conservation award was the most humbling experience of my life,” Keven Turecek says. “I have studied the Leopold Conservation Award for years, and I've always thought the recipients were very good stewards of the land. I had no idea the environmental changes and programs Sandi and I have implemented on our land brought us to that level.”

The Tureceks have taken steps to reduce tillage, which helps

eliminate erosion as the soil is not disturbed each year. They've terraced hillsides to stop water and wind erosion. They've also planted farmland with native grasses as well as thousands of trees over the last 30 years.

“In fact, we were planting trees when we got the call that we had been chosen for the award,” Keven says. “We were just blown away when we found out we had won.”

## ADVANCING THE LEGACY

In 2017, the CCA plans to celebrate its 150th anniversary in a memorable way. Its tagline is “Advancing the Legacy,” and Fankhauser says it plans to refresh, renew and become even more relevant for its members. One example is the new smartphone app CCA started to replace its weekly “Bulletin” emails. The app enables the CCA to provide updates to members 24/7.

In June 2017, the CCA Annual Convention in Grand Junction will include a daylong celebration of the 150th anniversary.

“We will emphasize our members because they are the people who make us who we are,” Fankhauser says. “We hope to have a big outdoor barbecue that evening with stories, cool things to commemorate the anniversary and some well-known individuals from our industry. The CCA is full of great stories about great people that deserve to live on and be told.”

— Jessica Mozo



# OTERO JUNIOR COLLEGE

## AGRICULTURE PROGRAMS

*Training the Next Generation  
to Feed the Nation*

### Transfer Degree Options

- Agriculture Business
- Animal Science
- Soil and Crop Science (state-of-the-art greenhouse)

*Guarantee Transfer Agreements  
with Select Universities  
in Colorado, New Mexico,  
Oklahoma and Texas*

### Workforce-Ready Degree Options

- Crop Production
- Livestock Production

*Multiple One-Semester  
Certificate Options Available*

### Make the comparison in costs:

- **OJC (In-state):**  
12 credit hours, living on campus  
= approx. \$5,000 per semester
- **University (In-state):**  
12 credit hours, living on campus  
= approx. \$11,000 per semester

*Scholarships Available*

### For more information contact:

Otero Junior College  
1802 Colorado Ave.  
La Junta, CO 81050  
719-384-6964  
information@ojc.edu

[www.ojc.edu](http://www.ojc.edu)

Scan QR code  
for more program  
information →



FIND US ON  Otero Junior College  
Agriculture Program



# Green Fields,

Colorado cultivates a flourishing field corn sector

**T**hanks to the state's thriving field corn industry, Colorado is home to lush, green fields of swaying stalks. With an average of 1.25 million acres planted each year, it's no surprise that field corn continues to stand as one of the most abundantly produced grains in the state. According to Mark Sponsler, executive director of the Colorado Corn Growers Association (CCGA) and Colorado Corn Administrative Committee (CCAC), corn is the largest grain crop in Colorado, in terms of bushels produced.

Each year, hardworking farmers harvest around 140 to 180 million bushels of corn. The vast majority of Colorado's corn crop is field corn, which is used as livestock feed, as a starch source to make ethanol, and as a minor component in thousands of various products. This differs

from sweet corn, the type you eat straight from the cob with a pat of butter and salt.

"About 99 percent of our nation's corn production is field corn, as opposed to sweet corn," Sponsler says, "and that's roughly the percentage in Colorado, as well."

## MAXIMIZING OPPORTUNITY

In order to maximize efficiency and yields, most Colorado corn producers use irrigation systems and a high level of technology. Due largely to its extensive systems for water storage, diversion and management, Colorado farmers are able to efficiently divert surface water from rainfall and mountain snowmelt for crop production as well as utilize high-efficiency pumping systems to access underground aquifers of various types. The state's corn-growing areas see an average of 12 to 17 inches of rain per year,

but traditionally, the crop can use up to about 22 inches of water over the course of the growing season. The majority of Colorado's corn producers are located in regions of the state where irrigation is possible. "Roughly, corn acres in the state are trending 70 percent irrigated and 30 percent non-irrigated," Sponsler explains.

In eastern Colorado, Rod Hahn tends to his crop in Yuma County – the largest corn-producing county in Colorado – and overall one of the most productive in the nation.

Hahn, former school teacher and fourth-generation farmer, has been growing corn for more than three decades. He grows the crop on both irrigated and dryland, referring to land that is not irrigated.

"They are very different operations," he says. "I have 700 acres of irrigated land and 250 acres of dry land for 2016."



# High Yields

In Yuma County, the majority of water used for irrigation is derived from the underground Ogallala Aquifer, which runs from South Dakota to Texas. However, most of the state's water resources come from snowmelt runoff from the mountains.

Farmers, including Hahn, find using irrigation technology has greatly helped increase their yields through the years while actually using less water than in the past.

"When I started farming in 1980, a 180-bushel (per-acre) yield was exceptional," Hahn says. "Now, around this area, I hear of corn growers getting 280 bushels (yields) over a whole field of corn. I think that big of an increase in that short of time is because we are on the cutting edge of technology."

By far, Colorado's biggest corn customer is its cattle. The state's dry, largely temperate weather and

terrain make it an efficient place to feed cattle. In fact, about 90 percent of Colorado-grown corn is used as livestock feed – higher than the national average.

"Colorado is a very popular and practical state to feed livestock, particularly cattle," Sponsler says. "There are a lot of rangeland, pasture and feedlots. Geographically, Colorado is well-suited to serve other western states."

Close to 10 percent of Colorado field corn is used for ethanol production, with much of the dried distillers grain, a byproduct of ethanol production, used again as feed.

"Even the corn that makes its first stop at an ethanol plant ends up as a high-quality feed for livestock in the form of high-protein distillers grain, meaning it's everything that was in the grain kernel but the starch. The starch is

what is extracted to make ethanol," Sponsler explains.

And while Colorado's livestock keep the demand for in-state corn strong, the export market is also important – and growing.

Overall, exports of Colorado food and agricultural products doubled between 2009 and 2012 to \$2 billion, with beef, dairy, wheat and dry beans as top exports. Corn is having success as well.

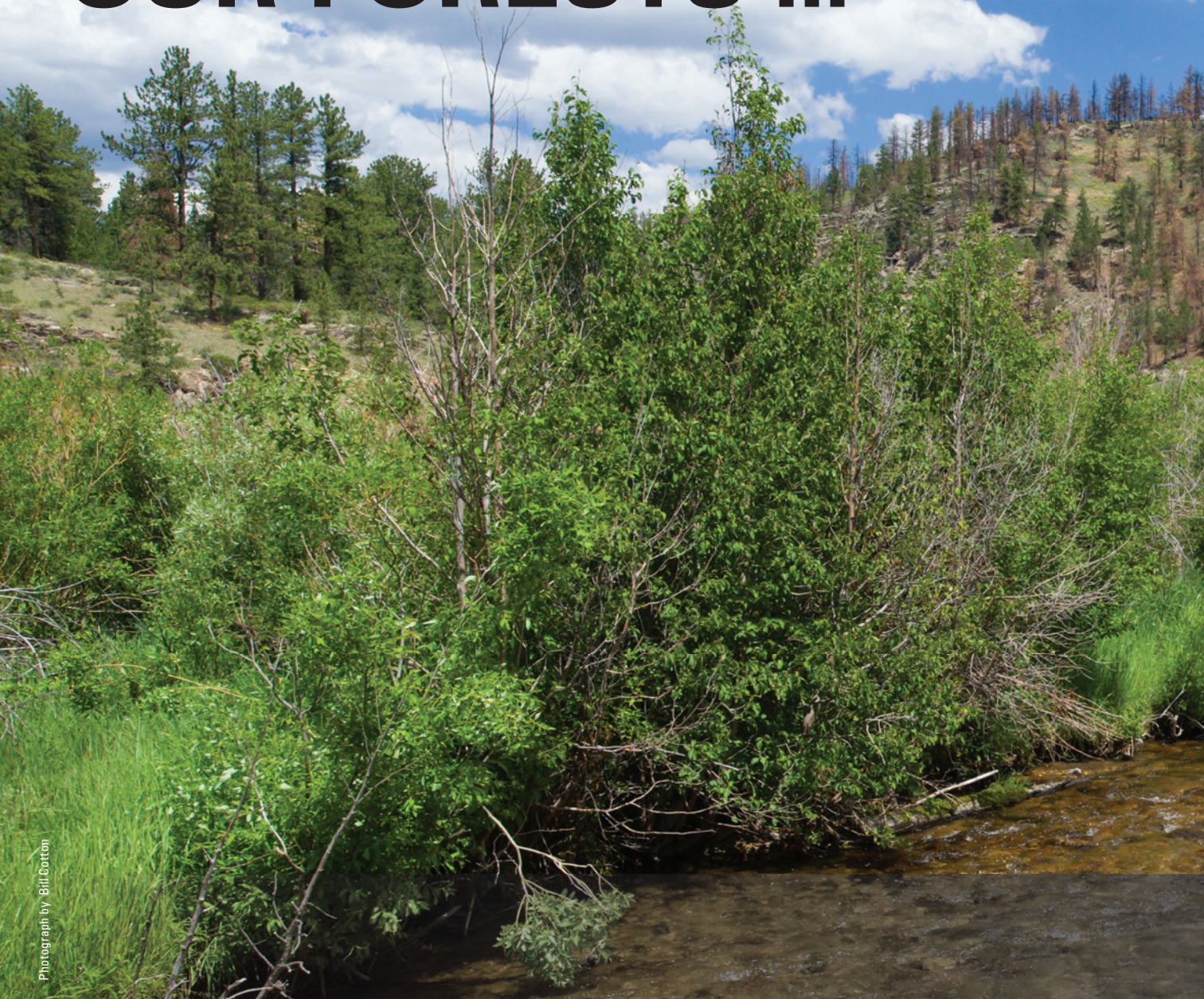
In the most recent production year, Colorado exported a significant amount of corn to Mexico, as well as other states including Iowa, Sponsler says.

– *Brittany Stovall*

*i* Learn more about Colorado's field corn industry at [COagriculture.com](http://COagriculture.com).



# WHAT HAPPENS IN OUR FORESTS ...



Photograph by Bill Cotton



Courtesy of the Colorado Potato Administrative Committee







# ... IMPACTS *everyone*



Forested watersheds often suffer the same fate as the forests themselves. When forest health declines, so does the quality, quantity and seasonal timing of water yields flowing through those forests. Active forest management improves overall watershed health and reduces wildfire intensity.

The CSFS serves Colorado through:

- Forest management to improve forest health
- Outreach and technical assistance for landowners
- Seedling trees and shrubs for conservation purposes
- Forest agriculture and agroforestry

[csfs.colostate.edu](http://csfs.colostate.edu)





# Plentiful POTATOES

Colorado, the nation's second-largest shipper of fresh potatoes, grows and harvests dozens of varieties

**P**lenty of potatoes can be found in Colorado's San Luis Valley, where farmers grow red, yellow and even purple spuds. Each year, potato growers plant and harvest between 50,000 and 60,000 acres of the crop, securing Colorado's spot as one of the nation's leading states in potato production.

"We're actually the second-largest shipper of fresh potatoes in the country," says Jim Ehrlich, executive director of the Colorado Potato Administrative Committee (CPAC), which serves as a marketing board for potatoes in the San Luis Valley. "We raise enough potatoes to feed nearly 17.5 million people each year."

## SAN LUIS VALLEY FARMERS

Though potatoes are grown elsewhere in Colorado, the San Luis Valley is the state's primary region for the crop. This southern

Colorado region is unique, Ehrlich says, with mountain ranges and high elevations up to 7,600 feet, as well as plenty of sunlight throughout the year, moderate temperatures and low humidity. Because the climate is dry, farmers use irrigation for their crops grown in the fertile valley.

"There are about 150 potato growers in this part of the state," Ehrlich says. "For 2016, we are growing about 51,000 acres."

One of those growers is Mark Peterson, whose family-owned farm, Peterson Farms LLC, raises around 450 acres of russet potatoes for fresh-market use. He also chairs CPAC.

"These fresh potatoes are what you see in the grocery stores and eat in restaurants," Peterson explains.

The third-generation farmer runs Peterson Farms with his brother, Greg, growing russets along with rotation









**Colorado**  
SAN LUIS VALLEY  
POTATOES



- NOURISHED BY PURE MOUNTAIN SNOW MELT
- NURTURED BY 350 DAYS OF SUNSHINE A YEAR
- RAISED BY 150 COLORADO FARMING FAMILIES

**Discover the San Luis Valley Difference**

**VISIT US AT [COLORADOPOTATO.ORG](https://coloradopotato.org)**







## FARMERS PLANT MORE THAN 70 VARIETIES OF COLORADO POTATOES, INCLUDING:

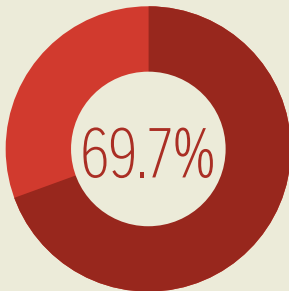
**Russet:** Centennial, Classic, Crestone, Fortress, Mercury

**Yellow:** Alegria, Anuschka, Latona, Molli, Nicola, Satina

**Fingerling:** Austrian, Banana, Crescent, French, Laratte

**Red:** Cherry Red, Chieftain, Colorado Rose, Red LaSoda, Sangre

**Other:** All Blue, Asterix, Cherie, German Butterball, Midnight Moon



In 2015, 69.7 percent of potatoes planted in the San Luis Valley were russet potatoes.



COLORADO IS THE SECOND-LARGEST FRESH POTATO-GROWING REGION IN THE NATION.

**MANY COLORADO POTATOES ARE GROWN IN THE SAN LUIS VALLEY, WHICH IS THE LARGEST ALPINE VALLEY IN THE WORLD, COVERING 8,000 SQUARE MILES.**

Sources: Colorado Potato Administrative Committee, USDA National Agricultural Statistics Service

crops of malting barley, used by Coors Brewing Company to make beer, and other crops such as oats, rye, alfalfa and buckwheat to nourish the soil.

Overall, the farm has 900 acres of irrigated production, according to Peterson.

“We do most of the work ourselves; we only have one full-time employee,” Peterson says. “Every year, we usually harvest between 18 and 20 million pounds of potatoes with around 80 percent of that sent to the warehouse to be packed. We have packing facilities in the San Luis Valley that package potatoes into consumer packs like what you see in grocery stores, or boxes that mainly go to restaurants.”

## DOZENS OF VARIETIES

Ehrlich says more than 70 varieties of potatoes are growing in the San Luis Valley. Colorado State University has an extensive breeding program, with a station located in the San Luis Valley, researching new and improved potato varieties.

And many of those potatoes travel far and wide through international export markets.

“Our primary export market is Mexico,” he says. “We have a really good market there and ship about 10 percent of our crop to Mexico each year.”

Helping to feed not only the nation but also the world, Ehrlich notes the nutritional benefits potatoes have to offer.

“Potatoes are healthy for you,” he says. “For example, they have more potassium than two bananas and provide half your daily requirement of vitamin C.”

– *Brittany Stovall*

**i** Learn more about the thriving potato farms in the San Luis Valley at [COagriculture.com](http://COagriculture.com)



# A HELPING HAND

---

Colorado AgrAbility helps farmers by providing adaptive equipment and education

**B**renna DeGeer's lifelong, profound hearing loss has never held her back from pursuing her dream career as a horse trainer – in one sense, it's even been a gift.

"I feel like it's a contributing factor into the way I'm able to perceive horses, read them and be with them," says the 33-year-old owner of DeGeer Stock Horses in LaPorte, where she also gives riding lessons.

But humans aren't as intuitive as her beloved horses, and so the trickiest challenge for DeGeer is that she needs to be within 20 feet of her students in the arena to hear and instruct them. It's hardly her first hurdle, so she's pressed on with characteristic fortitude.

"You cry, sweat and bleed a lot, and you don't listen to anybody who tells you that you can't do it. You just keep going," DeGeer says.

But this year she learned it doesn't have to be that hard. "I had no idea the number of tools that are available and the help that's out there. I didn't even know AgrAbility existed until just a few months ago, and it's already changed my life."

Jerry Michel, a 55-year-old Atwood farmer, feels the same way about AgrAbility. At age 20, he was in a car accident that left him paralyzed from the waist down. He tried a desk job for 15 years, but ultimately returned to his first love, farming. When a Department of Vocational Rehabilitation (DVR) employee first pulled

---

With the help of AgrAbility, Brenna DeGeer, a horse trainer who is partially deaf, is overcoming communication hurdles.







**The Vision:** AgrAbility's goal is to help those in agriculture stay in agriculture by providing education, assistance and information.

**AgrAbility Can Help By:**

1. Assessing ag work sites and responsibilities
2. Recommending farm equipment modifications and adaptations
3. Referring families to local service providers
4. Educating farmers, ranchers and their families via Colorado State University Extension

IN 2016,  
COLORADO  
AGRABILITY  
WORKED WITH  
MORE THAN  
**600**  
FARMERS.



Each winter, AgrAbility offers eight to nine educational programs throughout Colorado to better help farmers with disabilities remain independent.

Source: Colorado AgrAbility

To inquire about AgrAbility for yourself, a family member or friend, call (970) 491-5627.



up in his driveway in 1998, she saw him struggling to lift himself from his wheelchair into the tractor with a makeshift climbing harness attached to a 2,000-pound winch he and his friends had rigged to the top.

"She about had a fit," he laughs, remembering the experience. The DVR employee connected Michel with the then-fledgling AgrAbility program to install a lift on his truck and adapt some of the irrigation equipment on his 160-acre farm. Now, all these years later, Michel is working with AgrAbility once again to get a lift for his new truck, as both the old one – and his shoulders – are shot.

"The problem with most farmers out here is they think, 'Well, I've been doing it this way, I don't want help,'" says Michel. "But I think it's a wonderful thing. Otherwise I'd have to give up the farming end of it. At least this has the option of giving people a chance to stay involved even if they have limitations."

**ASSISTING FARMERS**

Colorado AgrAbility is part of a nationwide network of U.S. Department of Agriculture projects to empower farmers and ranchers with disabilities. Colorado State University Extension and Goodwill Industries of Colorado work closely with the DVR to test and then recommend adaptive equipment and modifications. In DeGeer's case, AgrAbility connected her with Simultalk for Equestrians, a wireless, two-way communication system that allows for conversation between instructors and students while on horseback.

As of August 2016, Colorado AgrAbility had worked with more than 600 farmers spanning a range of disabilities, including veterans with post-traumatic stress disorder, amputees, and people with multiple sclerosis, macular degeneration, back pain and more.

"We have a young lad who has autism, and we developed a program that's been very beneficial," says Dr. Norm Dalsted, director of Colorado AgrAbility. "His family has chickens, and he raises eggs and delivers them to neighbors. That sounds minor but it has changed his life."

Dalsted's colleagues have started conducting quality-of-life surveys, and the results are unequivocally positive. "There are people who love farming, they love livestock, they love raising things," Dalsted says. "And you want to create an environment where they can continue that endeavor."

The program helps aging farmers as well. Those who are reaching their 70s or 80s and may need a hand, but don't want to quit farming, can reach out to AgrAbility for assistance.

– Maggie Ginsberg

Colorado AgrAbility empowers farmers with disabilities by providing assessments for farm equipment modifications, among other activities.



What's

CO



KING

in Colorado?

## STEAK & POTATOES *Crostini*

### INGREDIENTS:

4-8 medium to large Colorado Yukon gold potatoes, cut into ½-inch thick slices\*

¼ cup extra-virgin olive oil, divided

Salt and pepper, to taste

1 ¼ pounds beef flank steak, trimmed of excess fat

⅔ cup light sour cream

½ cup chives, very finely chopped

*\*Use as many potatoes as necessary to make 20 slices. No need to peel, but trim both ends before starting to slice length-wise.*

### DIRECTIONS:

Heat oven to 425 degrees. Spray a large 18-by-13-inch rimmed baking sheet with cooking spray. Arrange potato slices on sheet. Brush both sides lightly with part of the olive oil and sprinkle with salt and pepper. Roast 10 minutes or until slightly tender and brown. Turn slices over, then roast 8 to 10 minutes more or until thoroughly cooked and browned but still firm and intact. Set aside to cool.

Turn oven to "broil" setting. Lightly rub remaining olive oil on both sides of steak and sprinkle with salt and pepper. Place on a wire rack, then place rack on a large baking sheet. Broil 5 to 6 minutes per side until medium-rare (145 degrees). Remove immediately and let rest for 5 minutes. Cut into slices about ¼-inch thick, then in half if pieces are long.

Arrange one steak slice on each potato slice. Top with a teaspoon of sour cream, then sprinkle with chives. Serve immediately.



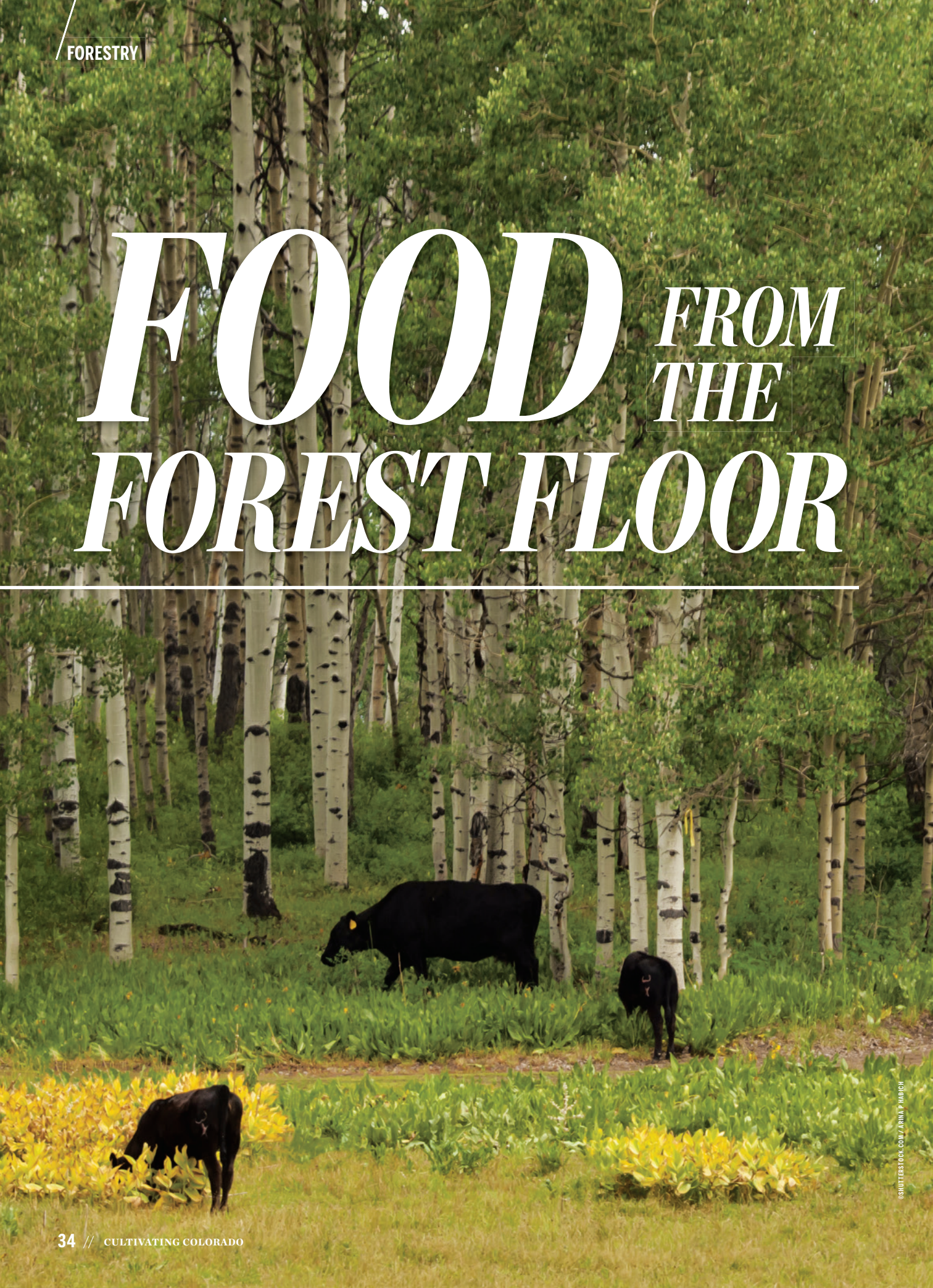
## FARM FLAVOR

Colorado ranks among the top states in the nation for the production of beef and potatoes, both featured in this recipe. Read more about Colorado's top farm products, and find more recipes like this, at [FarmFlavor.com](http://FarmFlavor.com).



# FOOD FROM THE FOREST FLOOR

---



SHUTTERSTOCK.COM / ARINA P. BARICH



A photograph of a forest with a dirt path and two cows grazing in the foreground. The forest is dense with green trees, and the path is a dark brown color. Two cows are visible in the foreground: one is black and the other is black with a white face. They are standing in a grassy area with some yellow flowers.

## Colorado forests benefit from livestock grazing

**C**olorado's beautiful and expansive landscape contains close to 24.5 million acres of forested land – a little more than one-third of the state – and consists of 15 national forests and 222 state wildlife areas. To keep these complex ecosystems healthy, forest managers implement a variety of conservation methods, including allowing Colorado's No. 1 commodity – cattle – as well as other livestock, such as sheep, to actively graze on forestland.

“Forestland is another type of ecosystem, and disturbance is needed to drive the function of the ecosystem,” says Les Owen, director of the Colorado Department of Agriculture's Conservation Services Division. “Grazing is a management tool, and the absence of grazing can cause vegetation to lose its vigor and not grow well.”

### FORESTRY'S IMPORTANCE

Owen says Colorado forests are important for many different reasons. They regulate watersheds for both agricultural and municipal use as well as provide shelter for humans and wildlife, improve air quality by filtering pollutants, and provide recreational activities for consumers along with products and jobs.

Allowing livestock to graze is beneficial for all parties, Owen says, and consumers need to understand that the act of harvesting vegetation is a natural process required for continued healthy growth. Ranchers need to be conscious, though, as overgrazing can be a problem if the timing, intensity and duration of grazing are not managed properly.

---

Cattle graze in a forest in Kebler Pass.





## VITAL INDUSTRIES | STRONG RESULTS

With over \$100 billion in assets, CoBank is a national cooperative bank serving vital industries across rural America, including agribusinesses and rural power, water and communications companies in all 50 states, as well as Farm Credit associations serving over 75,000 farmers and ranchers. We are proud to be a member of the Farm Credit System, celebrating 100 years of serving the nation's rural economy.



800-542-8072  
www.cobank.com

Proud Member of the  
Farm Credit System 



**Premier  
Farm Credit**  
PREMIERACA.com



**Proudly serving  
agriculture for  
100 YEARS**



**Colorado's  
State Fair**  
*In Pueblo*  
*GetchaSome*  
The Summer's Biggest Party  
Year-round facility rentals available!  
coloradostatefair.com

Since 1887  COLORADO  
CATTLEMEN'S  
ASSOCIATION

303-451-6422  
www.coloradocattle.org  
@ColoradoCattle

Join Us!  @ColoradoCattlemensAssociation.org

-  Public Relations
-  Legislative Representation
-  Industry Communications
-  Generational Development
-  Research & Education
-  Issue Management

**CULTIVATING  
COLORADO**

*Tablet  
Edition*

The digital magazine  
is available for tablet  
and phone viewing.







## COLORADO IS COVERED IN 24.5 MILLION ACRES OF FORESTLAND.

Steve Oswald owns Oswald Cattle Company in Cotopaxi. He says grazing forest grasses provides a high-protein source of food for livestock. Forests also greatly benefit from livestock grazing as it works the soil through hoof action and helps cycle minerals back into the soil.

“A grazed plant, when allowed adequate recovery, is a healthy plant with healthy root systems as opposed to a plant which is never grazed and becomes decadent, never allowing those nutrients, minerals and such to be recycled back into the soil,” Oswald says.

As a rancher, he says, the benefit is readily available forage for his livestock.

“As a whole, it provides an opportunity for additional forage for Colorado’s ranching industry,” he says.

Joe Duda, deputy state forester for the Colorado State Forest Service, says livestock grazing also helps reduce fine fuels, which can cause forest fires. Fine fuels include dry grasses, leaves, needles and other small fuels that can spread fires quickly. By reducing the accumulation of dry, mature grasses and then recycling the nutrients, livestock effectively reduce this impact.

Other ways that Colorado forests are managed include mitigating the impacts of forest insects, removing trees (or thinning) to help larger ones grow or start a new succession of forest growth, removing dead trees, and leaving organic matter on the ground to prevent erosion and keep soil moist, among others.

The worst thing for a forest’s health is to do nothing, so harvesting trees and other management techniques are extremely important. Harvesting

trees helps to control the types of trees that grow, provides value-added lumber products, offers recreation for consumers and attracts wildlife. When there are too many trees, they tend to be unhealthy since they’re competing for sunlight and nutrients. One method of harvesting is called thinning.

“When you manage the forests through thinning, you’re allowing more sunlight to reach the forest floor and making water more available for the plants underneath. This also improves range condition, so it’s beneficial to livestock and wildlife,” Duda says.

– Rachel Bertone

**Not just a number**

There are many reasons Aims Community College is Your First Choice for higher education, and one of those reasons is that You are Not a Number! Aims' Agriculture Program offers a variety of hands-on courses, certificates and two-year degrees. And, it's an easy transfer to Colorado State University!

**ASSOCIATE OF SCIENCE DEGREES**  
 Statewide Articulation Agreement  
 Ag Business Statewide  
 Agricultural Education  
 Animal Science  
 Horticulture Business Management  
 Soil & Crop Sciences

**ASSOCIATE OF APPLIED SCIENCE DEGREES**  
 AgriBusiness  
 Animal Science  
 Production Agriculture

**CERTIFICATES**  
 AgriBusiness Management  
 Animal Science  
 Precision Agriculture  
 Production Agriculture and Crops  
 Production Agriculture Mechanics

**Aims**  
 COMMUNITY COLLEGE  
 www.aims.edu

FORT LUPTON | GREELEY | LOVELAND | WINDSOR | ONLINE

For program costs, as well as student debt and success rates, visit <http://www.aims.edu/academics/ge-disclosures/>  
 Aims Community College is an EEO Employer and an equal opportunity educational institution.







# *Built to LAST*

---

Colorado's Centennial Farms program  
honors long-lasting family farms

**C**olorado agriculture is deeply rooted in tradition, and no one better displays that tradition than the families that have been farming the same land for several generations. Created in 1986, the Centennial Farms & Ranches program recognizes these pioneers by acknowledging the significant impact that family farms have on the state's history, economy and culture.

"When you talk to the Centennial Farms program farmers, especially those of the older generation, you hear how proud they are to be formally recognized by the state," says Jonathan Raab, preservation communications manager for History Colorado. "Their story is shared throughout the media, on our website and at local events."

Qualifications for a family to obtain Centennial Farm & Ranch recognition include: a farm or ranch must have remained in the same family continuously for 100 years or more, and the operation must either comprise at least 160 acres or produce a minimum

of \$1,000 in gross yearly sales. If the qualifications are met, History Colorado and the Colorado Department of Agriculture presents the family with an impressive sign and a signed certificate from the governor, commissioner of agriculture and executive director of History Colorado to proudly display on their property. A number of the state's commissioners of agriculture have received Centennial Farm status, including current commissioner Don Brown.

## **CENTER GREENHOUSE**

Best known for its Power Flowers brand, Denver's Center Greenhouse started in 1889 and became a Centennial Farm in 2012. Pietro Yantorno, who traveled to the U.S. from Calabria, Italy, was the original owner. Today, his great-grandson, Frank Yantorno, and Frank's sons, Brian and Ken, have taken over.

Center Greenhouse initially grew crops such as cabbage and celery, but the farm transitioned to a cut carnation operation in 1950, with the flowers grown

---

Brian Yantorno and his father, Frank, own and operate Denver's Center Greenhouse, a Centennial Farm specializing in annuals and perennials.

Staff Photos by *Jeffrey S. Otto*





Workers tend to the plants at the greenhouse operation.



*THE COLORADO  
CENTENNIAL  
FARMS & RANCHES  
PROGRAM BEGAN  
IN 1986.*

**522**

**CENTENNIAL FARMS &  
RANCHES IN COLORADO**

To learn more about the Colorado Centennial Farms & Ranches program, please visit [historycolorado.org/oahp/centennial-farms](http://historycolorado.org/oahp/centennial-farms).

*Sources: History Colorado, Centennial Farms (August 2016)*

in greenhouses. In the 1970s, the focus changed to bedding plants, leading to the creation of Power Flowers, which includes annuals, foliage trailers and fillers, hanging baskets, grasses, and perennials. Garden centers and landscapers in Colorado primarily purchase the brand's products, but Center Greenhouse also has a Power Starts brand, which comprises young plants that are shipped across the U.S.

Jamie Yantorno, Brian's wife, says their 14-year-old daughter is interested in taking over Center Greenhouse one day, continuing the family's long history in agriculture.

"She would be a sixth-generation owner and grower," Jamie Yantorno says. "All our kids know our history and appreciate it, and we're trying to make sure they understand the magnitude – how rare it is for a farm to pass down for so many years and last for so long."

**EDGAR RANCHES**

Located in Rocky Ford, Edgar Ranches Inc. has been in the Edgar family since the early 1900s. Lyman Edgar was the third generation to become principal operator

of the farm, proud to spend his life working the land his father and grandfather worked before him.

Rebecca Goodwin, Lyman's daughter, says the operation began in 1905 as a sugar beet farm, initially owned by John and Mary Edgar. Ownership eventually transitioned to Roy Edgar (John and Mary's son and Lyman's father), and the farm expanded to include crops like hay, corn, wheat, oats and barley, plus a ranch with grazing cattle.

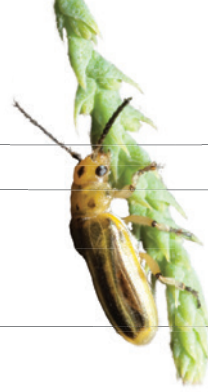
Lyman was recognized as the program's first Centennial Farmer at the 2014 Colorado State Fair, held right before his 100th birthday. He passed away in August of 2016 but his legacy lives on as the land he loved will remain active and in the family.

"We are incredibly fortunate; one of my nephews, his wife and their children recently took over the ranch, representing the fifth and sixth generations of our family to own the land and work it," Goodwin says. "It made my father very happy that the operation would continue for at least another couple of generations – it's what my great-grandparents and grandparents would have wanted too." *– Jessica Walker Boehm*



# BUG RANCHING

Colorado's Palisade Insectary controls invasive pests naturally



A hungry insect is helping protect Colorado's water resources.

The tiny tamarisk beetle eats the leaves of the tamarisk tree, also known as salt cedars tree, and causes the invasive plant to wither and die. The tamarisk, brought to North America in the 1800s from Europe, grows primarily around streams and rivers and has a thirst that threatens the water supply that serves the state's farms and ranches.

To date, the tiny beetle has helped defoliate approximately 40,000 acres of tamarisk along Colorado waterways. This has been vital to protecting the arid state since it's estimated that each plant can absorb 10 to 15 gallons of water every day.

The tamarisk beetle program is just one success of the Colorado Department of Agriculture's Palisade Insectary, the oldest and largest of its kind in the U.S. The Insectary conducts research and helps identify insects and mites to control invasive insects and plants that can harm crops and livestock. The insects are then bred, managed, and raised at the Insectary, similar to livestock on a ranch.

"Invasive pests are typically not native to the U.S. Usually, in a natural setting, every plant and insect has natural enemies, but when they come over from other continents, they're often introduced without those enemies," says Insectary Manager Dan Bean. "When this happens, there's nothing around to control them, so the balance goes haywire, and they become a serious problem."

Fortunately, these problems can be resolved. After at least 10 years of

extensive testing, biological control (biocontrol) agents are distributed to farmers, ranchers, agencies and municipalities to attack targeted invasive pests. There are also steps in place to ensure the agents will not harm non-target plants or insects and cause further problems.

Although Bean says biocontrol agents never completely eliminate pests, they are an alternative to pesticides. "There are multiple benefits to using biocontrol agents. If you're an organic grower, you really don't have pesticide options, but you can use biocontrol because it's natural," Bean says. "It's also

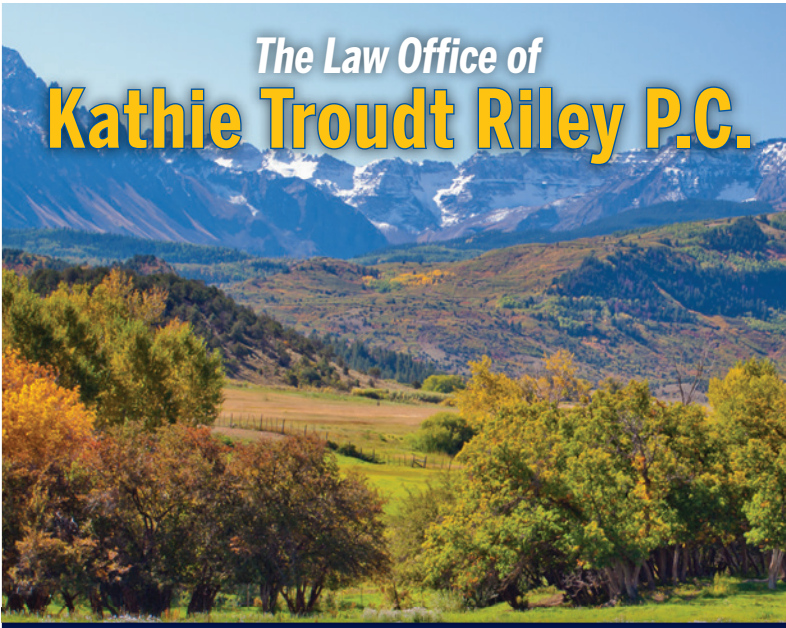
a good option for people who aren't organic but want to reduce pesticide use."

Pest management efforts by the Insectary have proven successful since the 1940s, and today, it releases approximately 20 species of biocontrol agents each year. One of those is a beetle that bicyclists will love, because it targets the puncturevine weed, which sprouts the small thorns that pierce bike tires and feet across Colorado.

"We're essentially reconnecting or reintroducing the invasive pest problem to its natural control," Bean says. — *Jessica Walker Boehm*

The Law Office of

## Kathie Troutd Riley P.C.





**KATHIE TROUDD RILEY, P.C.**

2903 Aspen Drive, Unit D • Loveland, CO 80538

970.663.6316 tel • 970.663.6239 fax

ktr@kathielaw.com • www.kathielaw.com

OVER 25 YEARS OF EXPERIENCE IN AGRICULTURAL AND EQUINE LAW



# AGAINST ALL ODDS

The Sakata Family Farm  
continues to flourish



**F**or the Sakata family, farming is as familiar as a field of sweet corn, as old as the Rockies, and as inspiring as the plum, apricot and cherry trees that once threaded the family farm in Japan. The father of 91-year-old Bob Sakata left his homeland of Japan in 1902 to grow rice on a California tenant farm, and hopefully a better life in America.

As it turns out, that life wasn't always better – California-born Bob was only six when his mother died. Then as a teenager, he, his father and siblings had to leave the California farm and endure

the dark American period of American-Japanese internment camps, in which they and 111,000 other American-Japanese men, women and children were imprisoned on U.S. soil. Through it all, farming and faith kept him afloat, just as it does today.

“I just had faith in America as a free nation,” he says. “I truly believe that if you worked harder, you obeyed the laws and you thought smarter, you could get ahead. And that’s what I did.”

Indeed, Sakata Farms is one of Colorado’s prized agricultural achievements, a 2,400-acre Weld County success story rich with

sweet corn, onions, cabbage, pinto beans, wheat, barley, field corn and more. The farm employs 200 people during peak production times, and around 70 year round.

Bob learned farming from his family, who had generations of experience in Japan. Those skills proved invaluable when Bob’s former FFA teacher moved from California to Colorado and sponsored young Bob’s release from a Topaz, Utah, internment camp. Colorado’s then-Governor Ralph Carr was a well-known supporter of Japanese-American rights.

It was 1942 when Bob moved into the little milk house of Brighton





Bob Sakata stands in a field of sweet corn at Sakata Farms.

dairyman Bill Schluter and worked chores through high school.

When the internment camps closed in 1945, Schluter encouraged Bob to invite his family to Colorado to join him. In turn, Schluter provided him 40 acres with generous terms, and Sakata Farms was born. Bob lost his father and brother early on, but his wife of 60 years, Joanna, raised on a farm near Granby, has helped him create the farming dynasty that his son helms today.

“Sakata Farms could have never reached this success without Joanna and I working as a team,” Bob says.

Bob Sakata still comes to work every day, but his son, Robert – better known as R.T. – is the owner and leader of Sakata Farms and has made a name for himself in his own right. R.T., who received the American Vegetable Grower’s 2014 Grower Achievement Award, is widely known as someone who works hard for the good of the agricultural industry and builds coalitions among producers. He co-founded the Colorado Fruit & Vegetable Growers Association, and as its president, he leads the organization in facing challenges ranging from water resources to food safety.

Sakata Farms sells its sweet corn and onions at retailers such as Safeway and other outlets in the state, and demand continues to grow.

“One of the important things my dad taught me was to focus on the product,” R.T. says. “He definitely got that right. There are a lot of competitors out there, but if you have a good product, it can sell itself.”

– Maggie Ginsberg

**i** Learn more about Colorado’s family farms at [COagriculture.com](http://COagriculture.com).



# *The Future of Farming*





## Colorado farmers embrace the latest and greatest in high-tech ag innovations

**B**y embracing advances in agricultural technology, Centennial State farmers are maximizing production while minimizing their environmental impact – a true win-win situation. These growers and ranchers, many of whom are early tech adopters, are investing in tools that help them increase precision, save time and reduce stress, which often leads to higher-quality crops, more output and happier outlooks.

### CONSERVING WATER, IMPROVING YIELD

Founded in 1995, Marc Arnusch Farms currently comprises just over 2,600 irrigated acres and a small number of dryland acres that produce corn silage and alfalfa for the livestock market, as well as malt barley, wheat seed, grain corn and sugar beets. Although the Prospect Valley farm used to produce a larger variety of crops, owner Marc Arnusch says he and his team began to shift their focus from volume to value in 2003.

“We aim to do things very site-specifically, precisely and sustainably in a way that will keep us profitable for years to come,” Arnusch says.

In order to increase his crops’ value and improve efficiency, Arnusch has implemented advanced farming techniques in recent years. For example, he has installed solar-powered soil moisture probes in his fields to determine how much water his crops require at any given time. The probes send data to Arnusch’s mobile device, and he can easily and quickly see how the crops are making use of the water available in the soil.

“We’re getting inside the soil profile for the very first time,” Arnusch says. “It’s really a cool cross-section into the plant itself and how it’s behaving given the environment around it.”

Arnusch is confident sustainability will grow increasingly important in the agriculture sector – making precision technology a necessity.

---

Marc and Brett Arnusch check a cell phone for data showing how much water a field crop needs. Probes installed in the field determine how much water the crop requires at any time.





**4RIVERS**  
EQUIPMENT



**4R EXCLUSIVE**  
**JOHN DEERE**  
**T-5 SERIES**

**10-YEAR**  
OR  
**1,000-HOUR**  
ENGINE & POWERTRAIN  
**WARRANTY**  
ON COMPACT & 5 SERIES  
TRACTORS

Some restrictions apply.  
See Dealer for Details.  
Offer Expires 7/31/2017.

**FORT COLLINS • GREELEY • HOLLY • LAMAR**  
**ROCKY FORD • PUEBLO WEST • STRASBURG**

[www.4RIVERSEQUIMENT.com](http://www.4RIVERSEQUIMENT.com)

## Visit Our **ADVERTISERS**

### 4-H

[colorado4h.org](http://colorado4h.org)

### 4Rivers Equipment

[4riversequipment.com](http://4riversequipment.com)

### Aims Community College

[aims.edu](http://aims.edu)

### American AgCredit

[agloan.com](http://agloan.com)

### CoBank

[cobank.com](http://cobank.com)

### Colorado Cattlemen's Association

[coloradocattle.org](http://coloradocattle.org)

### Colorado Corn

[coloradocorn.com](http://coloradocorn.com)

### Colorado Farm Bureau

[coloradofarmbureau.com](http://coloradofarmbureau.com)

### Colorado Potato Administrative Committee

[coloradopotato.org](http://coloradopotato.org)

### Colorado Rural Electric Association

[crea.coop](http://crea.coop)

### Colorado State Fair

[coloradostatefair.com](http://coloradostatefair.com)

### Colorado State Forest Service

[cfs.colostate.edu](http://cfs.colostate.edu)

### Colorado State University

[extension.colostate.edu](http://extension.colostate.edu)

### Common Ground

[findourcommonground.com](http://findourcommonground.com)

### JBS

[jbssa.com](http://jbssa.com)

### Law Offices of Kathie Troutd Riley P.C.

[kathielaw.com](http://kathielaw.com)

### Northeastern Junior College

[njc.edu](http://njc.edu)

### Otero Junior College

[ojc.edu](http://ojc.edu)

### Premier Farm Credit

[premieraca.com](http://premieraca.com)

### Rocky Mountain Farmers Union

[rmfu.org](http://rmfu.org)

### Western Dairy Association

[westerndairyassociation.org](http://westerndairyassociation.org)

“Sustainability will drive successful ag operations in the future,” Arnusch says. “Whether it’s managing our water resources, the soil health of our farmland or the economic survivability of our balance sheet, we all need to be working at a very precise and efficient level.”

### ANIMAL CARE IS KEY

For the state’s dairy farmers, animal care is a top priority and that means modern milking equipment, advanced nutrition and expert veterinary care.

“I was raised to take great care of the animals on our farm because it is the right thing to do,” says Michelle Dickinson, a fourth-generation dairy farmer in Loveland. “I watched my dad care deeply for the cows for my whole life so when it became my turn to oversee their care, I knew I had a great responsibility to provide them the best life possible – complete with clean, dry bedding, the most nutritious feed and access to veterinary care regularly.”

Along with her husband and children, Dickinson operates Mountain View Farm with an eye on sustainability.

“Conserving our natural resources is always top of mind for our farm,” she says. “On our farm we re-use water several times so that not a drop goes to waste – first, the cows get access to the freshest, coldest water for drinking since they are our number one priority. Then, we use the water they don’t drink to clean out the barns or to water our crops. That way we are being smart about the limited supply of water we have here in Colorado.”

– Jessica Walker Boehm

**i** Learn more about Colorado's dairy industry at [COagriculture.com](http://COagriculture.com).





**DAIRY IS  
COLORADO'S  
SECOND-LARGEST  
AGRICULTURAL  
SECTOR.**



**148K**

DAIRY COWS IN COLORADO

**#1**

Colorado leads the nation in milk produced per cow with almost 3,000 gallons per year.



**COLORADO PRODUCED  
436 MILLION GALLONS  
OF MILK IN 2015.**

Source: USDA National Agricultural Statistics Service



Colorado State University  
Extension

*From towns and cities  
to farms and suburbs,  
Colorado 4-H  
members and  
volunteers make a  
difference.*

- With over 106,000 members, projects add 45 million dollars to the state's economy in a single year.
- The efforts of more than 11,600 Colorado 4-H volunteers translate to more than 10 dollars returned to the state's economy for every public dollar invested.
- Colorado 4-H alumni say 4-H was the second most influential area of their youth--right behind family.



*4-H is a  
community of  
young people  
across America  
who are learning  
leadership, citizenship  
and life skills.*



[colorado4h.org](http://colorado4h.org)

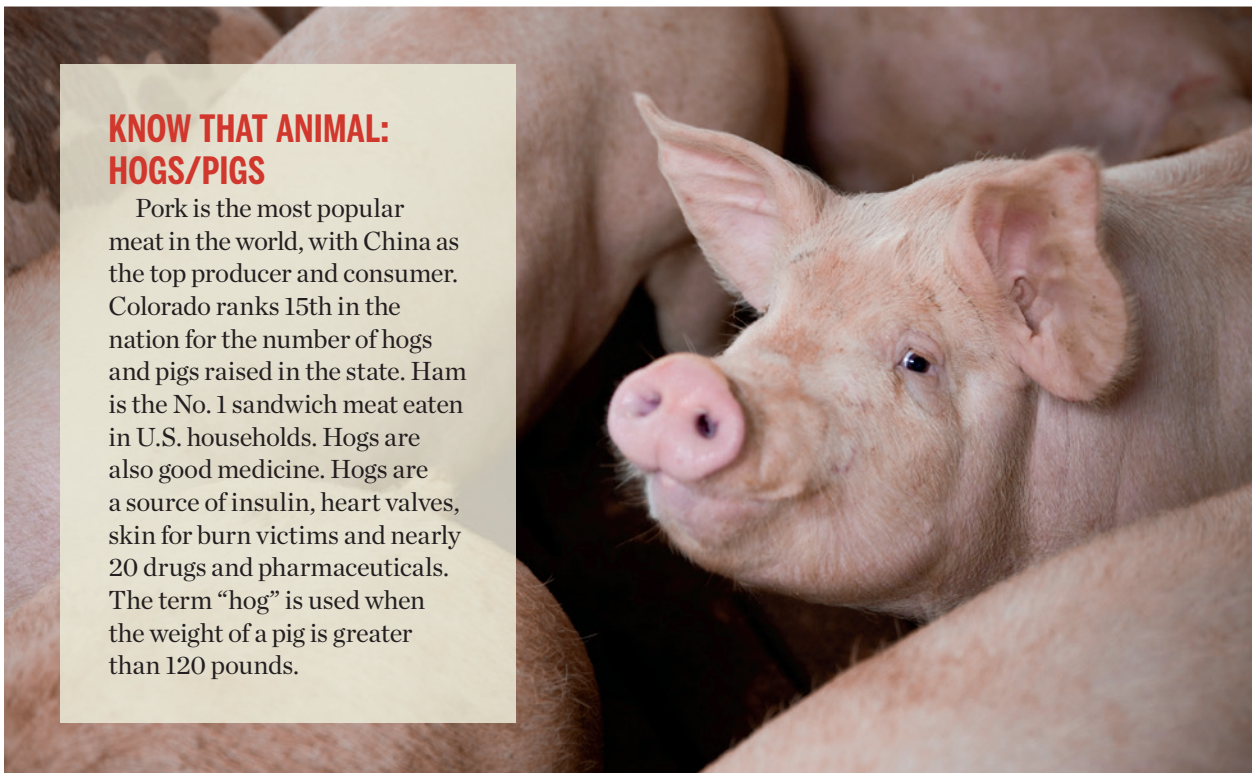


# KNOW YOUR AGRICULTURE



## KNOW THAT CROP: MILLET

Perhaps best known for its use in birdseed and livestock feed, millet is an ancient seed. Primary varieties of millet are pearl, foxtail, proso and finger. Colorado leads the nation in proso millet production. The rise of the health food industry and demands for gluten-free products has put millet back into the American diet. Yellow proso is the kind most often found prepackaged or in bulk bins at health food stores. Colorado grows about half the millet produced in the United States.



## KNOW THAT ANIMAL: HOGS/PIGS

Pork is the most popular meat in the world, with China as the top producer and consumer. Colorado ranks 15th in the nation for the number of hogs and pigs raised in the state. Ham is the No. 1 sandwich meat eaten in U.S. households. Hogs are also good medicine. Hogs are a source of insulin, heart valves, skin for burn victims and nearly 20 drugs and pharmaceuticals. The term “hog” is used when the weight of a pig is greater than 120 pounds.

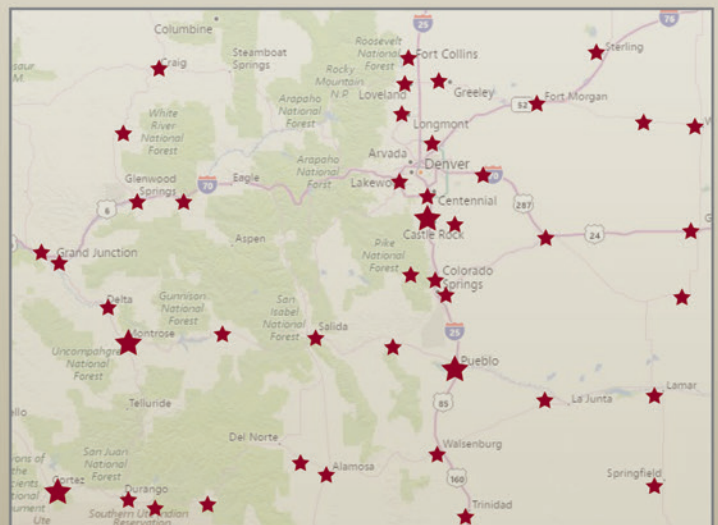




# Protecting the Colorado Way of Life™

Colorado Farm Bureau has been protecting and promoting agriculture and Colorado's rural heritage since 1919. Members receive an array of benefits, including a complete line of insurance products and consumer discounts, as well as representation at the Colorado state and U.S. capitols. Join us and be a part of Colorado's leading voice in agriculture.

## 49 Offices Across Colorado For Your Convenience



Auto • Home • Life







# WE ARE COLORADO AGRICULTURE

COLORADO STATE UNIVERSITY IS A GLOBAL LEADER IN FOOD  
SAFETY, SECURITY, AND SUSTAINABILITY.

[www.colostate.edu](http://www.colostate.edu)



Colorado State University

COLLEGE OF AGRICULTURAL SCIENCES  
CSU EXTENSION | OFFICE OF ENGAGEMENT

