

# Drought: The worst may be yet to come

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rancher in Burns, Ore., he's rotating pastures twice as fast as usual.

Like many ranchers, Sharp is feeding supplements, including protein tubs and minerals. But that gets expensive. Hay prices are 50% higher than last year, accord-

ing to USDA, and mineral expenses quickly add up.

Sheila Barry, University of California natural resource and livestock adviser, said ranchers who rely on annual grasses rather than irrigated pastures are used to forage drying up each summer. What makes this year worse, she said, is annual

grasses didn't germinate well in many places, were slow to start growing, and in some regions, are still recovering from wildfire.

"The question for cow-calf producers is: Do I have enough forage to keep my cows?" Barry said.

The answer, for many, is no.

Auction staff across the West say they're seeing larger volumes, and in some cases record numbers, of animals being sold.

Faria of the Turlock Livestock Auction Yard said auction season moved up 30 to 45 days. People are culling cows heavier and selling

calves earlier.

Dozens of small-to-mid-sized operations have folded, selling entire herds.

"You have potential flooding of the market with excess inventory," said Sharp of Oregon Cattlemen's Association. "That could really depress live cattle prices at auction."

The worst may be yet to come.

"There are a lot of people who haven't pulled the trigger yet — in other words, they haven't liquidated yet," said Shine, the Lake County rancher. "But a lot of them are sure looking at it, and as the summer gets along, there's going to be a lot more cattle on the market."

## Emu: Most emus in U.S. are remnant of zoo stock from 1930s and '40s

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for nearly three decades.

He thinks the flightless emu could soar again in the marketplace.

### Emus then and now

Native to Australia, emus are ratites, a group of flightless birds that includes ostriches, rheas, cassowaries and kiwis.

Most emus in the U.S. today are remnants of zoo stock from the 1930s and 1940s, Collins said. Emus were so prolific that some zoos sold them into the exotic bird market.

In the early 1990s, emus were touted as an alternative to beef. USDA representatives visited Australia to learn more about the birds, intending to provide emu meat to Third World countries.

"You can produce about 9,000 pounds of red meat on the same space required to produce 500 pounds of beef," Collins said. "Especially living in highly populated smaller countries, that's important."

As interest in emus surged in the 1980s and 1990s, producers ramped up breeding. At the peak, there were 1 million emus in the U.S., Collins said.

"People figured out how to raise the birds before they had a market to sell them," Collins said. "A lot of producers got in because they were supposed to make money hand-over-fist selling breeding stock."

That didn't happen.

Most investors were in their 50s or 60s back then, Collins said.

"A lot of them found out how much work it is," he said. "Maybe they'd never been in agriculture before or been around animals before."

Today, emu ranches remain, but not as many.

According to the 2017 USDA Ag Census, there's at least one emu-growing operation in each of the lower 48 contiguous states.

The census lists 210 emu operations with sales, and more than 1,500 operations with inventory, estimating a total population of 11,535 emus in the U.S. That's the only emu data the USDA tracks, communications director Tara Weaver-Missick said.

The total number of farms or homes with emus is probably more than double that, said Joylene Reavis, secretary of the American Emu Association and a former emu rancher near Madison, Wis.

"These are just the ones who report them to the USDA," Reavis said.

That census includes:

- 12 farms in Idaho with a total of 74 birds.
- 28 farms in Oregon with 186 birds.
- 48 farms in Washington with 266 birds.
- 122 farms in California with 925 birds.
- 17 farms in Montana with 750 birds.

Texas has the most, with 345 farms and 2,249 emus, followed by North Carolina, with 40 farms and 1,793 birds.

The most famous emu is likely the "Limu Emu," which appears in Liberty Mutual Insurance Co. television advertisements, but Collins doesn't care for that characterization.

"It's humanizing something that is intended for food, and that puts a



Matthew Weaver/Capital Press

An emu at Don Collins' emu ranch.

### MONTANA EMU RANCH

Website: <https://montanaemuranch.com/>

### AMERICAN EMU ASSOCIATION

Website: <https://aea-emu.org/>

negative angle on it," he said.

### Life on the emu ranch

In 1992, Collins was working in the wholesale beverage industry. Penni, his wife, worked as a motorcycle shop manager.

They bought their first pair of emus, expecting the birds to produce supplemental income.

"Then we got so involved in it, it became our primary income," Collins said.

Collins had to initially cover the costs of land, equipment and improvements, but has been profitable for at least 15 years, he said.

In 1998, they established a "Laid in Montana" brand, referring to the emu's green eggs. They incorporated as the Montana Emu Ranch Co. in 2004. Now, Collins estimates, they're one of the top 10 emu ranches in the country.

The ranch processes 250 to 300 emus a year at a facility 25 miles away. The birds are processed at 14 to 16 months old.

"It's kind of funny, as far as the government's concerned, they're taxed as livestock, and as far as processing is concerned, they're considered poultry," Collins said.

They also raise 25 acres of hay for sale and keep four horses.

The ranch has 11 full-time employees and three or four part-time workers.

Collins used to offer tours for school and 4-H groups, but didn't want to worry about the extra level of precaution needed when mixing emus with the public.

People still stop to take photos of the birds from the road, he said.

The neighbors think it's neat.

"There was some concern at first, but they're not noisy, they're not stinky," Collins said.

The ranch smells more like the straw, barley and wood shavings used for bedding than anything else.

"If you've been around a hog



Matthew Weaver/Capital Press

Year-old emus cluster near the corner of their pen June 22 on the Montana Emu Ranch.



Matthew Weaver/Capital Press

Rancher Don Collins with some of his emus.

farm, you know what odors are, and these aren't anything like that," Collins said.

### Eggs to emus

An emu hen can produce 30 to 40 chicks a year, compared to llamas or cattle, which usually produce one calf each year.

Emus lay eggs during the winter. Collins starts collecting eggs in November and incubates them in January. Every two weeks, he puts a new batch of 50 to 90 eggs in the incubator. The birds stop laying in April, and hatching is usually finished by June 1. The birds require heat until they are 2 to 4 months old, depending on the weather.

An ostrich rancher might have to create a diversion to safely collect eggs. The emu rancher can simply tip over one male — they're the ones usually sitting on the eggs — and move along to the next.

Emus aren't territorial or aggressive, although they'll fight back if frightened.

"But as far as them tracking you down and pounding you into the dirt, they're not gonna do that," Collins said. "Ostriches actually will."

Emu eggs are edible. Collins makes money boiling and disinfecting the eggs, selling the shells for \$15 to \$20 each to crafters for painting or carving.

"You can't sell them for that price as an eating egg," he said.

### Emus for meat

National emu meat production isn't large enough to attract a big distributor, Collins said.

"Distributors are used to moving truckloads of meat, where we only produce a couple pallets," he said. "The whole industry, you might get a couple big truckloads, but that would be about it."

Collins recoups his processing costs with meat sales as a byproduct. He cited a 2000 University of Wisconsin-Madison study on alternative meats — including ostriches and rheas — declaring emu to be one of the healthiest meats, based on vitamin and iron content, protein and lack of saturated fat.

Collins said his ranch makes most of its money with another product.

### Emus for oil

Those U.S. visitors to Australia in the 1990s learned emu fat was an "ancient Aborigine remedy" to relieve aches and pains, Collins said.

"In fact, they saw an old Aborigine sitting on a log, he ... was putting his hands in the emu fat and rubbing it on his knees," Collins said. "They asked him why he did that and he said, 'It makes the pain go away.' That kind of lit some light bulbs and created a whole different market."

Emus are processed at 80 to 90 pounds, and yield about 27 pounds of boneless meat and 22 to 24 pounds of fat. When it's rendered, 10 pounds of fat makes a gallon of oil. Each bird can produce 2 to 2.5 gallons of oil.

"You can make a lot of skincare products out of a gallon of emu oil," Collins said.

He sells his line of products in nearly 2,000 health food stores nationwide. Other ranches sell them worldwide, he said.

An array of products such as oils, facial and body creams and lotions are made on the ranch in a cosmetics laboratory regulated by the U.S. Food and Drug Administration.

"You need to test and prove everything that you state" on the label, Collins said. "It gets really difficult at times, because you're regulated to the point you can't tell people exactly how to use the product or what it's to be used for. It's a matter of wording and just

being careful."

The emu oil market continues to grow, Collins said. Emu oils can also be used as a complement to cannabidiol, or CBD, the health-related chemical from hemp plants, Collins said.

Some larger oil companies use 1-2% emu oil in their products to stretch it because they can't find an affordable supply, Collins said. He uses between 20% and 100% emu oil in his products.

"You've still got to produce the birds to meet the demand," he said.

### COVID impacts

The COVID-19 pandemic prompted the cancellation of the American Emu Association's annual convention in 2020. A new date hasn't yet been set, said Reavis, of the association.

Many fairs, festivals and farmers markets were also canceled, creating a lack of venues where farmers would normally sell their emu products, she said.

Processing plants were also shut down, creating a backlog. "This has been a problem for both livestock owners and emu growers," Reavis said.

For Collins, in-store sales that were lost during the pandemic are now rebounding, but online sales jumped, he said.

### Raising emus

Collins hopes to retire in the next 10 years. He's looking for someone to take over and continue his established brand.

"We're not going to take over the world, that's not our goal," he said. "If somebody else wants to jump into it and expand it, it's there."

The ideal emu rancher might be someone with an entrepreneurial drive, and experience raising livestock.

Overall, he said, he's happy with the way his emu ranch has progressed over the years.

"I think we've had a very good life," Collins said. "Much better than we would have if we had just continued with our jobs. We did quite well."

## Grasshopper: 'It's too late to do something about it because the damage is already done'

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private landowners in Klamath County and Harney County, advising the community on spraying just as grasshopper eggs hatched. For the most part, it worked in that area.

Agriculture officials have also seen a spread in other areas such as Baker County in Oregon and Walla Walla County in Washington.

This year, the Animal and Plant Health Inspection

Service contracted treatment for 19,000 acres and protected approximately 39,000 acres through cooperative treatment projects, said Clint Burfitt, state plant health director for APHIS in Oregon.

Rogg said the state spends between \$2 and \$4 to spray an acre.

In spring, grasshoppers hatch from their egg and gorge on food until their bodies are big enough to grow genitalia and wings —

cementing their adulthood. That is their current stage in Oregon, meaning Dimilin, an insecticide that interferes with molting in immature stages of insects, is now ineffective.

"At this point, it's too late to do something about it because the damage is already done," said Rogg.

However, land managers can contact local area applications to arrange other treatments independently; APHIS will pro-

vide technical assistance for treatments.

Parts of Oregon and Idaho are also battling a Mormon cricket infestation.

This spring, some Idaho residents experienced an infestation of Mormon crickets and shield-backed katydids as millions made their way through the Owyhee rangeland, according to KIVI-TV.

However, some environmentalists worry about the impacts pesticides meant

to manage the insects will have.

"These are grasslands, sometimes with hundreds of different native pollinator species found in them..."

said Aimee Code, pesticide program director with the Xerces Society for Invertebrate Conservation, a conservation group focused on insects.

Sharalyn Peterson, a healthy wildlife and water program manager at Northwest Center for Alternatives

to Pesticides, suggests insecticides that are less toxic such as BotaniGard ES and Safer BioNeem, which stunt population growth. Organic biocontrols such as *Nosema locustae* offer long-term grasshopper protection, she said.

Rogg said Dimilin is relatively safe to use in pasture settings as it should not harm other insects such as butterflies, which go through a pupa stage before becoming an adult.