

THE CULTIVATOR

NEWS FROM THE CORNUCOPIA INSTITUTE

FALL 2020

High and Dry

Industrial-scale organic exploitation

BY RACHEL ZEGERIUS

Secretary of Agriculture Sonny Perdue’s manifesto, “In America, the big get bigger and the small go out,” lingers like the stench of sour milk.

But the industrialization of organic dairy farming is not inevitable. Rather, the glut of organic milk saturating the market and driving prices down for authentic organic producers is the result of legal opportunism, poorly enforced rules and regulations, and a USDA that appears to lack the will to regulate the sector.

Take the Origin of Livestock (OOL) draft rule, specifying that certified livestock must be managed according to organic regulations for their entire life, even before birth.

As the rule sits stale, in contempt of the congressional deadline, corporate entities manipulate the intent of organic law for economic gain and set dangerous precedent in the marketplace.

The latest development in this ongoing saga is Aurora Organic Dairy’s proposed heifer grow-out feedlot in Holyoke, Colorado. Flouting the intent of organic law, the 1,900-acre industrial heifer factory in the dry High Plains will house 7,000 young “organic” dairy cows when complete.

Drawing from the Northern High Plains Groundwater Basin in Northeastern Colorado, part of the dwindling Ogallala Aquifer,

CORNUCOPIA IMAGE OF AURORA DAIRY IN STRATFORD, TEXAS



Aurora’s pasture irrigation would demand an enormous amount of water in a semiarid region.

The USDA’s Natural Resources Conservation Service reports that the Ogallala, which supports nearly one-fifth of the wheat, corn, cotton, and cattle produced in the US, is being used at an unsustainable rate.

Cornucopia has filed multiple legal complaints about Aurora Dairy over many years. Among other things, Aurora has been accused of continuously cycling conventional livestock into their organic operations—something the languishing OOL rule is intended to prevent.

The new heifer facility appears to circumvent the OOL. But this mechanization runs counter to authentic organic production.

Aurora’s enormous factory farms remain certified, despite successive complaints and evidence of repeated wrongdoing. Authentic organic dairy farmers, whose replacement calves are born and raised on-farm, continue to suffer on an uneven playing field.

Ethical organic brands need consumer support to thrive. Use Cornucopia’s Organic Dairy Scorecard, and see the recent Action Alert on our website that explains how to use milk plant codes to avoid purchasing milk from Aurora.

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Transcending Borders in Organic Agriculture

A talk with soil scientist and professor Dr. Raymond Auerbach

INTERVIEWED BY ANNE ROSS, JD

Sometimes we're fortunate enough to cross paths with people who not only educate us, but inspire us. Professor Raymond Auerbach is one of those people.

I was introduced to Dr. Auerbach through the IFOAM Organic Leadership Course I participated in last year. Wanting to find out more about organic agriculture in Africa, I asked the instructor if he knew anyone who might lend some expertise. His response: "Raymond Auerbach is the guy." It didn't take me long to figure out why.

Not only has Auerbach farmed organically for over 45 years, he also teaches at Nelson Mandela University in George, South Africa. He studied organic agriculture in Australia in the 1970s and then pursued his doctorate in Agricultural and Environmental Sciences in the Netherlands.

Over the years, he has shared his expertise in soil science, and seemingly all things organic, with countless students and farmers. An internationally known research pioneer, Auerbach is the leading authority on soil science and organic agriculture in Africa.

Today, I call Raymond at his home in South Africa, grateful to have more time to learn from him. He greets me enthusiastically, ready to talk organics. We dive in.

Ross: What have we learned from the pandemic about the global food system and where organic production fits in?

Auerbach: We're learning that the industrial food system is broken. We're also learning that people can change food systems at the local



PHOTO BY LENA SCHNIERING

Dr. Auerbach's knowledge is matched only by his passion. Both shine through here in his BIOFACH presentation about his new book, *Organic Food Systems*.

level to support local economies and local farmers. We have an opportunity to establish shorter, more secure supply chains.

In the old days you knew your farmer and you knew how your farmer treated animals and grew crops. In the supermarket, we generally have no idea how our food was grown.

Through cooperatives and CSAs, consumers have access to information about their farmers. It makes a huge difference to support local economies, rather than having food traveling thousands of miles to get to your table.

But when it comes to food miles, it isn't always a simple calculation as to what's a better choice. For example, a Kenyan woman who produced organic coffee and shipped it responsibly to the US has a very small carbon footprint compared to the industrial-style coffee producer using conventional

methods, even if the conventional coffee travels fewer miles.

So it's not just where the food is grown, but how it is grown and how it is shipped; air-freighted grapes will create quite a carbon footprint!

Ross: How are people affected by food production in other countries around the globe?

Auerbach: Climate change is a global problem and much of it is caused by industrial agriculture's destructive practices. As climate change gets worse, more parts of the world become unlivable. That's why we have climate refugees trying to get into the US and Europe. We're going to see more people in concentrated areas, with less viable land.

In simple terms, climate change results from carbon going into the atmosphere instead of the soil. A lot of carbon is released by plowing and destroying forests—practices aggressively used in monoculture.

Our soils are so depleted of natural elements from long-term monocropping and acidification that they can only produce when artificial fertilizers are added.

Organically farmed soils do not need artificial fertilizers because the soil is naturally enriched through crop rotation, compost, and mulch, though soil analysis should check some aspects like available phosphate.

Climate change is a global problem in need of global solutions. Organic, sustainable food systems that promote soil health are part of the solution—promoting resilience, sequestering carbon, and reducing emissions.

Mass food production systems are also a problem in animal agriculture. Cows that are given growth hormones and fed grain in high concentration feedlots emit more methane than cows that graze on natural grasslands. Concentrated feedlots are bad for animals and the environment.

Ross: Speaking of soil health, tell us about your research.

Auerbach: I recently published a book that discusses the science and findings in detail. Basically, conventional management will produce higher yields for some crops the first couple of years of production; but consider the costly inputs, both monetarily and environmentally.

By the third year of organic management, soils are coming alive! Once soil phosphate is balanced, we found organic yields are higher than conventional. Healthy organic soils produce yields just as high as conventional in dry years, and with greater water use efficiency.

Ross: Since organic can produce yields that rival or are better than conventional, what do you tell people who say “Organic can’t feed the world”?

Auerbach: I ask “Can conventional feed the world?” It sure isn’t doing a very good job right now! Conventional production relies on unsustainable, extractive practices, yet we still have hungry people on many levels. Even when people have access to food, it’s often too highly processed—products without nutritional value, born out of industrial agriculture.

I remind them that organic has higher yields of crops with better nutrition, with proper soil management for certain crops.

I also tell them small-scale farming is already feeding half the world. It’s the industrial model that is failing—just look at chronic disease related to diet. Noncommunicable diseases like obesity and diabetes are global problems with astronomical costs.

Ross: What can the US learn from African countries about food and farming?

Auerbach: What a lovely question. A lot of Africans still harvest their food, grind their own corn, and make staple meals. Sometimes when people are poor they are closer to small-scale food production and can’t afford to buy processed food. Even in villages with half an acre of production, the people are healthy if the food system is intact.

It’s very important to discern intact food cultures from those that are not. We import food insecurity when we ignore food culture and shift to unhealthy food outlets. When food culture is disregarded or misunderstood, food sovereignty is lost and people forget how to interact with nature. As a result, people become increasingly food insecure.

Ross: Given your vast knowledge as an organic farmer, researcher, and educator, what other issues affecting organics should our readers know about?

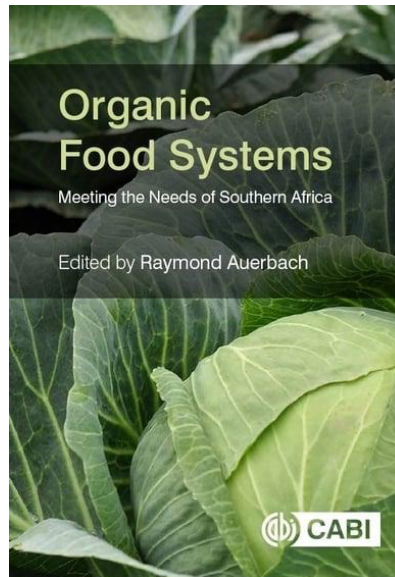
Auerbach: The greatest threats to the organic movement are corruption and misinformation. The food industry and chemical companies are very powerful. While there are food scandals within organics, like in everything else, it’s the agrichemical industry that really plays dirty tricks.

Policies in the US have favored chemical agriculture for many years. In South Africa, the authorities have blocked organic standards because the food industry didn’t want the standards; they didn’t want consumers to have a choice.

The more consumers are informed about the issues, the more they want to know, and the more choices they have. Consumers vote with their food dollars.

Food dollars can either support conventional agriculture and the massive health and environmental costs that it perpetuates—or food dollars can support organic farming that is far better for environmental and human health.

We also need to support organic farmers. I can tell you, it’s a hell of a lot of hard work to farm organically, but it’s rewarding work knowing you’re producing the better product.



Ross recently contributed to Dr. Auerbach's project, commissioned by the African Union, assessing ecological organic agriculture.



Food for Thought

How to ace your back-to-school grocery trips

BY MICHELE MARCHETTI

If you're one of millions of Americans for whom back to school means getting your kid back to Zoom, the cafeteria has moved to your dining room.

Even if your kids or grandkids are headed for the bus stop, your shopping list will need a seasonal overhaul. School kids love their snacks, and the notion of comfort food has never felt more necessary.

The Cornucopia Institute's scorecards can help you make the best food choices for your family. A hallmark of our work, these tools help consumers navigate the cluttered supermarket aisles, while supporting businesses and farmers genuinely committed to the health of their customers and the planet.

As the battle for your food budget is being waged with big bucks and an abundance of certified products that exploit loopholes in the organic regulations, think of our scorecards as your own crash course on the grocery industry.

Our web-based scorecards generate more than 13,000 monthly visits, helping legions of consumers make informed decisions about the food they serve their families.

With feedback from you, Cornucopia has decided to invest the time and resources necessary to make the scorecards even more useful, adding new brands to the ratings for snack bars, cottage cheese, and plant-based beverages.

Updated scoring criteria is based on the latest research



ADOBE STOCK IMAGE

As the battle for your food budget is waged with big bucks, think of our scorecards as a crash course on the grocery industry.

available for the ingredients commonly found in the products rated.

Cornucopia has also revamped the yogurt scorecard to focus exclusively on organic brands, using our Organic Dairy Scorecard as the foundation of our scoring criteria. Organic yogurts that received the highest scores were sourced from milk that received some of the highest ratings on our Organic Dairy Scorecard.

Other factors influencing an organic yogurt product's score include the brand's commitment to organics, as measured by the percentage of offerings a brand sells that are certified organic; the use of coloring agents, flavors, preservatives, synthetic nutrients, and pectin or conventional thickeners; and transparency around the type of sweetener used. (See Cornucopia's website for a detailed summary of the scoring criteria.)

The amount of sugar used is listed for informational purposes only. Just because a yogurt is certified organic does not mean that it can't include an alarmingly high amount of sugar.

You can cut down on sugar—and save money—by buying 32 oz tubs of plain organic yogurt and adding your own fruit and toppings.

The Organic Yogurt Scorecard includes dozens of new organic flavors and styles from brands that appeared on the old scorecard, as well as several from a brand that is new to our scorecard: High marks earned by Alexandre Family Farm in Crescent City, California landed them in the top-rated,

five-spoon category.

Overall, the updated scorecard ranks 225 varieties of organic yogurt from 29 brands. Backed by research-based findings, Cornucopia's scorecards showcase ethical family farms and their brands, while exposing factory farm producers and brands to avoid or scrutinize.

When choosing healthy snacks this fall, invest in organic if you can, and use Cornucopia's Organic Yogurt Scorecard to make the most informed decisions. Also stay tuned for the Organic Beef Scorecard, out later this year.

This school year may feel like no other, but feeding your kids nutritious versions of their favorite meals will feel like a small win.

Thanks to our engaged supporters for sharing their favorite organic brands and varieties. We want to hear from you! Which of your favorite brands are missing from our scorecards? Email us at cultivate@cornucopia.org.

The Quest for Parity

Tales from an Upstate New York produce department

BY MICHELE MARCHETTI

In early December, as snow fell steadily on the Finger Lakes, Andrew Hernandez II (right) huddled with eight New York farmers to map out plans for the abundance that, come summer, turned GreenStar's stores into a backdrop for a photo shoot.

That meeting marked a milestone in GreenStar Food Co-op's longtime commitment to dignity for the people whose labor produces the food on its shelves, a guiding value reflected in its 2013 attainment of the Food Justice Certification label, the high bar of social justice standards.

Now in his second tenure as produce manager, Hernandez is committed to expanding the co-op's definition of "fairness" for farmers. Upon returning, he executed a gathering that, for the first time, would get all the farmers in one place.

"Why don't you have local out there?" one farmer challenged, referring to the co-ops's foyer, which housed 100 cases of strawberries trucked in from California. Hernandez responded with an explanation of the retail realism of beets, a local veggie prolific enough to fill the bins in late fall, but lacking the star power of strawberries.

The tension transformed into a conversation about how GreenStar could utilize those bulk bins for local produce and how committing to that kind of an order would impact farmers and enable them to come down a bit on price.

As a result, the co-op purchased 400 pounds of organic cauliflower and purple, orange, and white cabbage grown less than a mile away, yielding \$1,000 to the farmer in one fell swoop.

Also discussed were trends and transparency in domestic and international markets, and how they could inform pricing of local produce.



PHOTO COURTESY OF ALEXIS SELF

Holding on to summer's abundance.

This spring when a returning local asparagus farmer inquired about his crop, Hernandez checked what was available to him from his distributors.

Informed by a \$5/pound price for asparagus from Mexico, he upped last year's price paid to the farmer by more than \$1/pound. "They have a cider house that's been closed since COVID, so that was super beneficial to them," he says.

Hernandez wishes customers had a greater understanding of all that farming entails. A price increase by a local farmer, he says, often boils down to a human just trying to get by. "This is their job—their livelihood."

His profession affords him an empathy for farmers that can be tough to replicate in a quick trip to the grocery store, when the story of how our food is grown can disappear the moment it hits the shopping cart.

He's proud of his farmer relationships, yet humbled by the prospect of continuing to support them, while also keeping prices affordable and employees fairly paid. In the "weird swirling chaos of COVID," maintaining cohesiveness feels like constant catch-up.

He has an eye on the next gathering, when farmers will join once again and undoubtedly unearth monumental challenges and new opportunities for cooperation.

Fair Food

Organic farming sustains ecological systems—of which humans play an inextricable role. But the USDA organic standards fail to address how farmers are paid or how anyone who plays a role in getting your organic food to the table is treated.

In 1999, the Agricultural Justice Project (AJP) was founded to fill this gap. AJP adapts fair trade models built over previous decades with family farms in the global south to US realities (e.g., refusal of markets to pay premiums).

Since the creation of the standards in 2005, five farms and one co-op (left) have earned its Food Justice Certification.

AJP is modest, yet weighty. The non-profit recently provided technical assistance to 83 Northeast farms that participated in a fairness self-assessment. While the pandemic has paused new certifications, it has also underscored AJP's value.

Now is the moment for influential brands to play a role in creating "market pull" for certification, says AJP co-founder Elizabeth Henderson. Her plea: Increase pay to farmer suppliers so fair working conditions are no longer considered a luxury.

"Social justice is an important value for many organic farmers, and yet the constant downward pressure on pricing makes it difficult for them to live up to their deeply held beliefs."



From Clover to Kool-Aid

Why the finishing period of beef cattle matters

BY MARIE BURCHAM, JD

When scanning your grocer's cooler aisles for beef cuts, commodity agriculture's quantity over quality mentality is palpable. Searching for the highest-quality, most nutritious, and tastiest beef for your family is not a simple task.

One thing to consider is how the beef cattle was "finished." *How* and *what* cattle eat in the last four months of life imparts the quality and nutrition profile of the beef purchased at the store and the quality of care an animal received while it was alive.

For many beef animals, the final stage of their lives means a trip to the feedlot. During this "finishing period," conventional cattle are fed cereal grains and soy that are heavily sprayed and often derived from genetically modified crops.

Unbelievably, they are also fed cast-off candy (sometimes still in the wrapper), Kool-Aid powder, and other cheap industry byproducts, such as blood meal, chicken manure, and hydrolyzed feather meal. Hormones and antibiotics force animals to put on weight; the latter also stave off diseases rampant on feedlots, where cattle crowd together on bare ground.

Organically raised cattle do not receive hormones, antibiotics, or non-organic feed. Many consumers consciously choose organic beef in response to concerns about health, animal welfare, and environmental impact. While Cornucopia absolutely recommends organic beef over conventional factory-farmed beef, not all organic steaks are created equal.

All certified organic cattle require access to pasture during the grazing season. But the finishing period exemption allows cattle to be finished on feedlots for up to one-fifth of the animal's total life, or 120 days, whichever is shorter.



Grass finishing seeks to reproduce cattle's natural diet and results in health benefits for the animals and eventual eaters.

Slaughter stock must be given access to pasture during that finishing period if it falls within the grazing season. But there is no minimum amount of forage or pasture the cattle must eat during finishing; the animal may see green for just a few minutes and spend the rest of their time in the feedlot, receiving most of their calories from concentrated feed.

If a producer in, say, Texas finishes cattle in the high heat of summer, when grazing has wound down, the entire finishing period is spent in the feedlot, without pretense. This is a far cry from what consumers expect from organic beef.

But authentic organic beef farmers who graze their cattle without exception do exist. Many organic producers finish their beef cattle entirely on pasture (aka 100% grass-fed). Never stepping hoof on a feedlot, these grass-finished beef cattle often live longer before slaughter and get unlimited access to pasture during the grazing season, supplemented with forage-based feed such as hay.

Grass finishing takes much longer

than grain finishing, which explains its high cost in the market. This production method seeks to reproduce the cows' natural diet and results in health benefits for the animals and eventual eaters. Grass-finished beef boasts improved fatty acid, antioxidant, and vitamin composition when compared to grain-finished.

Many consumers prefer meat from grain-finished cattle due to its fat marbling, which can be more difficult to achieve with a 100% grass-fed animal. Because ideal cooking times for grass-finished beef can be shorter, many consumers mistakenly overcook the meat. But with a little homework and a willingness to experiment in the kitchen, eaters can factor in ethics without sacrificing flavor.

Look for The Cornucopia Institute's upcoming Organic Beef Report, which will explore how organic beef can be differentiated in the marketplace. An Organic Beef Scorecard will be released in conjunction with the report, scoring domestic beef brands so that eaters can find the most authentic organic beef in their area.

Bearing Fruit

How a noni farmer in Hawaii found abundance in a cup of worm castings

BY MICHELE MARCHETTI

Eighteen years ago, Steve Frailey boarded a Hawaiian Airlines flight with a suitcase brimming with 12 pounds of Indian blue worms.

Those worms play a vital role in Frailey's 70-acre certified organic farm in Kauai, Hawaii that provides rich soil, fertile ground for fruit trees, and habitat for the endangered albatross.

As the co-founder, along with his wife, Richele, of Hawaiian Organic Noni, Frailey produces fruit leather and lotions made from "pure, unadulterated" organic noni.

The lotion is popular with athletes looking for a natural way to manage pain. The fruit leather is appealing to eaters who value the nutritional quality of dehydrated whole noni fruit, not to mention the vegan restaurant that discovered a flavor hack in the addition of diced Hawaiian Organic Noni fruit leather to its salads—raw noni tastes strikingly similar to blue cheese!

Behind those products are farmers passionate about organic production methods. Frailey has learned from experience, and a lot of patience, what works on the farm.

The journey started after a natural food store owner carrying a rotting bin of vegetables turned him onto vermiculture, leading him to the worm farm where he purchased his precious cargo.

After learning about the transformational power of worm castings to rejuvenate land, Frailey started adding one cup of worm castings to each noni tree along with the usual compost and mulch.

In the 15 years since, trees that were previously producing fruit 10

PHOTO COURTESY OF SEA LIGHT PRINT SHOP



months out of the year (two cycles of five months of fruit, followed by a month of rest) transformed into full-time producers. "That's 12 months out of the year just from adding the worm castings!" he says.

That success has inspired Frailey to share his vermiculture story and spend his evenings researching random facts about earthworms. "I was Googling last night. There are 6,000 different species of earthworms worldwide, 130 species in the US."

Hawaiian Organic Noni's earthworms are just one piece of a complex operation. Other vital ingredients include compost and plant matter from the pigeon pea, a plant with superior nitrogen-fixing qualities, grown from heirloom seeds purchased from Peace Seed in Oregon.

Every two days, Frailey turns his piles of compost, injecting oxygen to breed good bacterium. Back and forth the rows go for four weeks, until the plant matter has transformed into superior compost for the farm.

Every six months, he spreads compost and one cup of worm castings around 18 acres of noni trees, protecting the organisms with a heavy layer of mulch made from shredded coconut palm fronds.

The castings also play an important role in his compost tea, made from one gallon of compost and one cup of worm castings.

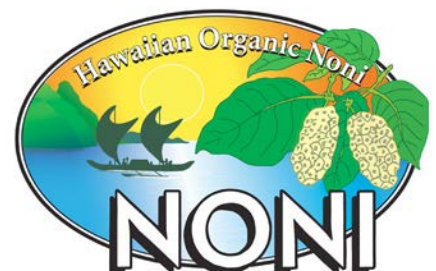
"No," he routinely tells the people who visit his operation, "you don't drink it." But his plants do. He sprays the trees in the afternoon or evening so the leaves can suck up the nutrients all night long.

What Frailey *doesn't* do on his farm is just as crucial to its ability to thrive. He

farms less than half of his total operation, leaving the valley for birds and animals, and a stretch of beach for the Hawaiian monk seal, thought to be the oldest seal in existence, to sun bathe.

"There's a whole balance in our farm," he says. "It's not about denuding everything." Instead of picking his trees bare, he allows some fruit to fall on the ground to be transformed by the burrowing invertebrates whose castings provide nutrients that allow the cycle to continue.

The fruit feeds the worms, who produce more worm castings, and the mulch gives the perfect environment for the worms to thrive, all of which keeps the trees healthy, allowing them to grow more fruit. "All I'm doing is mimicking what nature has done for millennium in the forest floor."





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Stand with Us

The Cornucopia Institute has a 15-year history of boldly standing up for the integrity of ecologically based organic farmers and food.

As we embark on strategic planning, we double down on our role as an organic watchdog, calling out the forces that weaken or water down organic policy.

We will continue to elevate the most ethical organic farmers and foods, providing research-based information to keep consumers informed and engaged.

We look forward to reporting back with a powerful vision and road map for maximizing our impact in this historic moment and beyond.

As we endeavor toward a more just food system that centers the Earth and all living creatures, we invite you to stand with us by renewing or deepening your support.

—Jonathan Rosenthal,
Interim Executive Director

International Investigation Yields Action

USDA proposes long-awaited rule



We are proud to report that The Cornucopia Institute's three-year investigation into organic import fraud has helped compel USDA to propose the Strengthening Organic Enforcement (SOE) draft rule. It was posted for public comment on August 5.

Anne Ross, JD, spearheaded the investigations and networking that led to the most significant piece of rulemaking in organics since the regulations were created. During her tenure as Cornucopia's director of international policy, Ross became a leading authority on the pathways for ongoing organic import fraud, informing heads of agriculture in governments around the globe with Cornucopia's white paper.

Fueled by the hungry US market, fraudulent organic grain flows overseas to the American family's fork. "If the feed isn't authentically organic, neither is the livestock, and neither is the meat on the table," Ross says.

The new rule reduces the types of businesses exempt from organic certification and requires electronic import certificates for all organic products entering the US. Ross is currently examining if and how these changes, and others in the rule, address existing compliance and enforcement issues.

She will share her expertise with stakeholders seeking more clarity on the practical implications of the SOE draft rule. Cornucopia is disseminating information to certified organic farmers, distributors, processors, wholesalers, and retailers about what this seminal rule will mean for organic integrity.

Watch for our exclusive interview with Ross, as she narrates her high-wire journey into the depths of organic import fraud through the twin lenses of international policy and the needs of community-scale farmers.

While the draft rule marks a culmination of Ross' role as international policy director, she continues her relationship with Cornucopia as a trusted consultant.