

THE CULTIVATOR

NEWS FROM THE CORNUCOPIA INSTITUTE

FALL 2017

Connecting the Dots

Large Certifiers, the USDA, and Industry Lobbyists Collude

BY MARK A. KASTEL

When I began producing organic food, certification was voluntary. The USDA was years away from being involved.

Farmers formed our own certification groups because we wanted to assure the credibility of organic labeling claims. We wanted to grow the organic farming movement as both an economic justice vehicle for family-scale farmers and as a way to have a positive impact on society, human health, and the environment.

The stakeholders were divided on asking Congress to pass legislation setting minimum standards. Proponents of the standards, including myself, were suffering the consequences of commercial interests undercutting foundational organic standards, primarily in California.

The certification groups formed prior to the USDA's involvement were feuding amongst each other on minor differences in standards, preventing the certification of multi-ingredient products to spur the commercial growth of organics.

As the saying goes, "Be careful what you ask for, because you might actually get it."

Under both Democratic and Republican administrations, the USDA's National Organic Program (NOP), like many other regulatory agencies in Washington, has become an ally of corporate agribusiness.

Choosing authentic organic food protects your family and defends the livelihoods of real organic farmers.



Instead of fulfilling the congressional mandate to protect ethical industry participants from unfair competition, and consumers from fraud, the NOP staff is all too pleased to help the lobbyists funding the federal campaigns of their bosses.

This corporate influence is happening despite the safeguards we convinced Congress to build into the system, including a broad, independent expert body to oversee regulations, the National Organic Standards Board (NOSB).

Numerous violations of the law by the USDA have undercut the intended independence of the National Organic Program.

One of the fundamental responsibilities of the NOP is the accreditation of the 80 certifiers, in the U.S. and internationally, responsible for inspecting and auditing over 37,000 farms and their operations within the \$40 billion industry. This is obviously no small task.

In addition to experts at The Cornucopia Institute, the Office of Inspector General at the USDA has also been critical of how the NOP is doing their job in this regard. And it's important.

Since farmers and corporations pay certifiers, their independence has to be carefully supervised to overcome the inherent economic conflict of interest.

However, NOP Director Miles McEvoy is a former certifier himself

EDITORIAL continued on page 8

INSIDE THIS ISSUE

- Hydroponics 2
- Fraudulent Imports 4
- Replacement Animals 5
- Author Interview 6
- Grassfed Beef 9
- Organic Coffee 10
- Farmer Profile 11

The Significance of Soil

Why Hydroponics Is Not Organic

BY LINLEY DIXON, PHD

Every year, after the first frosty cold rolls over the mountains and puts an end to the outdoor growing season here in Colorado, I dust off the indoor grow lights and boxes of inert grow mats.

Exhausted from months of real organic farming, I look forward to sipping coffee in my jammies while tending to microgreens in the back room of my home. The in-floor hot water heating system is ideal for germinating seeds all winter long under stacks of grow lights.

The hours are flexible; under such controlled conditions, the seedlings don't care if it is morning, noon, or night when I harvest them. Not a speck of dirt gets under my fingernails, nor does a ray of sunshine hit my face; I don't even have to put on boots.

There's nothing wrong with producing a hydroponic crop in the dead of winter to help supplement our diversified small farm's income, but by no means would I consider it organic farming!

In contrast, organic farming creates fertile soils by integrating systems that add organic matter and cycle nutrients on the farm. These practices include rotational grazing, multi-species cover cropping, composting, and mulching.

Most producers within the organic community understand that the most important, and challenging, aspect of organic farming is ensuring that organic matter and fertility in the soil is maintained or increased.

This is accomplished by costly, but environmentally critical, practices that prevent nutrient run-off, capture carbon in the soil, and provide a humane life for

farm animals. These practices are solutions to the biggest environmental issues of our time: climate change, erosion, declining aquifers, and eutrophication of lakes and rivers.

The economic survival of authentic organic farmers depends on enforcement of the laws requiring these practices, without which these farms face the serious risk of being outcompeted by agribusinesses using less expensive and unsustainable production practices under the same organic label.

Rather than cycling nutrients on the farm, hydroponic operations use inert media and apply a continuous supply of liquid nutrients, commonly from hydrolyzed conventionally grown soybeans.

For berry producers (e.g., Driscoll's), the inert growing media is usually peat moss mined from wetland bogs,

Continued on page 3

BOARD OF DIRECTORS

Helen Kees, President

Organic Livestock
Producer
Durand, WI

Kevin Engelbert, Vice President

Organic Dairy Producer
Former NOSB Member
Nichols, NY

Barry Flamm, PhD, Secretary

Conservation Consultant
Former NOSB Member
Polson, MT

William Heart, Treasurer

Wildlife Conservationist
Ashland, WI

Goldie Caughlan

PCC Natural Markets (ret.)
Cooperative Retail Educator
Former NOSB Member
Seattle, WA

Dave Minar

Organic Dairy Producer
New Prague, MN

Cameron Molberg

Organic Livestock Producer
and Feed Mill Manager
Austin, TX

James Crawford

Organic Vegetable Farmer
Hustontown, PA

POLICY ADVISORY PANEL

Michael James

Community Leader
Organic Restaurateur
Chicago, IL

Amanda Love

Natural Foods Chef
Nutrition Educator
Austin, TX

Tom Willey

Organic Vegetable Grower
Madera, CA

Jim Gerritsen

Organic Potato Grower
President, OSGATA
Bridgewater, ME

Steve Sprinkel

Organic Vegetable Producer
Organic Restaurateur
Ojai, CA

Jim Crawford

Organic Vegetable Producer
Wholesale Marketing
Cooperative Founder
Hustontown, PA

John Ikerd, PhD

Agricultural Economist
Professor Emeritus
Fairfield, IA

CONTACT US

P.O. Box 126
Cornucopia, WI 54827
608-625-2000
cultivate@cornucopia.org

STAFF

Mark Kastel, Codirector & Senior Farm Policy Analyst

Will Fantle, Codirector & Director of Research

Linley Dixon, PhD, Farm and Food Policy Analyst

Marie Burcham, JD, Farm and Food Policy Analyst

Anne Ross, JD, Farm and Food Policy Analyst

Gayle Nielsen, Membership Coordinator

Therese Laurdan, Membership Assistant

Jennifer Hayden, PhD, Communications &
Development Director

Rachel Zegerius, Communications & Development Associate

Melody Morrell, Data Analyst and Research Specialist

Jason Cole, Research Associate

Zuri Allen, Social Media Specialist

Celeste Gibson, Accountant, HR Manager

Frank Nilsen, Website Administrator

THE CULTIVATOR Rachel Zegerius, Editor

*Special thanks to Melody Morrell for proofreading.
Unless otherwise noted, photos are AdobeStock.*

robbing carbon from the soil. For tomato, cucumber, and pepper producers (e.g., Wholesum Harvest), the inert media is commonly coco coir from ground up coconut shells.

These mediums are not designed to add any nutrient value, but rather to hold the roots while the plants are fed with a liquid fertilizer solution.

There is nothing required on the label of these “organic” products that helps informed consumers choose.

The controversy over whether or not hydroponics could be considered for USDA organic certification gets at the very heart of the definition of organic agriculture. Currently, the heated debate on the issue continues on the National Organic Standards Board (NOSB).

On August 14, the NOSB held an unprecedented two-hour conference call to discuss whether or not hydroponic systems should be considered under the organic label. The call was scheduled to help the Crops Subcommittee write related proposals for the fall NOSB meeting in Jacksonville, Florida.

NOSB members were strongly divided on the issue—a compromise could not be reached. It seems that pro-hydroponic NOSB members believe the organic label is appropriate for any crop produced without the use of prohibited materials.

In contrast, pro-soil NOSB members maintain that organic production is also defined by what farmers *are doing* (i.e., diversifying fields, rotating animals on pasture, practicing no-till, etc.), rather than simply what they *are not doing* (i.e., using toxic chemicals).

At the upcoming NOSB meeting, if two-thirds of the board cannot be



Fertilizing plants with a liquid solution of predominantly conventional soybeans is not “organic!”

convinced to vote for, or against, the organic certification of hydroponic production, what will remain is a state of confusion, where individual certifiers are allowed to decide for themselves whether or not hydroponic producers meet USDA organic standards.

These decisions will be based on the current regulations, previous NOSB recommendations, and conflicting messages from the National Organic Program.

The NOSB recommended in 2010 to prohibit the organic certification of hydroponics stating, in part, “*Growing media shall contain sufficient organic matter capable of supporting natural and diverse soil ecology. For this reason, hydroponic and aeroponic systems are prohibited.*”

However, they noted that there are some exceptions for the soil requirement, including transplants, mushrooms, honey, aquatic plants, and microgreens.

The 2010 recommendation came after years of public comment and input from the organic community. Since corporate agribusiness didn’t

like the outcome, the corporate-friendly USDA is now forcing us to go through the process all over again.

This time around, large industrial hydroponic growers are organized, forming an “astroturf group,” a lobbying effort masquerading as a grassroots organization: “The Coalition for Sustainable Organics,” otherwise coined “The Coalition for Sustainable Profits” by pioneering organic farmers who are fighting back.

The coalition’s chief lobbyist, Anne McMillan, was deputy chief of staff to former USDA Secretary Tom Vilsack. These ties have enabled her to testify before Congress twice so far to lobby on behalf of hydroponics.

While the NOSB prolongs a decision on standards, the European Parliament tightened its ban on organic hydroponics this past June.

They reached a preliminary agreement to prohibit “demarcated beds,” the container production system where liquid nutrients are routinely applied, under the organic label.

This debate is about ensuring the very survival of the sustainable, diversified farms that built and grew the organic movement—the farms that are currently producing the nutrient-dense, flavorful produce we all have come to love.

It is a sad day when corporate influence over USDA organic has reduced its meaning to simply prohibited inputs, rather than truly integrated production systems.

Fertilizing plants with a liquid solution of predominantly conventional soybeans is not “organic!” Let’s hope a few more NOSB members can be persuaded to agree that there’s simply more to it than that!

Fraudulent Imports, Urgent Action

Will the USDA Heed the Call for More Stringent Regulations?

BY ANNE ROSS, JD

On July 18, Cornucopia submitted a formal request to the National Organic Program, petitioning the USDA to enact, on an expedited basis, critical regulatory changes to halt the entry of fraudulent organic grain into the U.S.

Cornucopia's request calls for amending existing regulations to require new audit-trail protocols, mandating that importers trace grains back to overseas farms.

The petition also requests the USDA, in coordination with other governmental agencies, implement testing of all bulk imports of organic grain.

To ensure integrity throughout the supply chain, the USDA must immediately require certifiers to deploy inspectors to conduct unannounced pesticide residue testing on overseas farms located in known high risk countries.

While the petition awaits USDA review, the staggering losses to domestic organic grain producers continue to mount. Massive quantities of organic grain imports began to increasingly impact the market in 2015 and 2016.

The rise of organic grain imports over the last two years, even by conservative estimates, has resulted in losses exceeding \$250 million for American organic grain farmers who can't compete with the cheap prices of suspect imported grains.

In 2016, imports of organic corn were up over 80% from 2015. Organic soybean imports, already the majority of the market in the U.S., increased almost 20% over the same time period.

The U.S. is only growing a fraction of the organic grain needed by domestic markets. In fact, only about 60% of domestic organic corn



The staggering losses to domestic organic grain producers continue to mount.

and 10-30% of organic soybean demand is being met by U.S. farmers.

American production has been held down by the inability to compete with the imports on price. As questionable imports increase, consumers are left skeptical of organic authenticity amidst documented evidence of fraud.

The USDA has taken some incremental measures to address cases of documented fraud, but a wholesale review of the regulatory framework is necessary to prevent fraudulent imports from crossing U.S. borders.

On June 1, the USDA revoked the organic certification of Beyaz Agro, a Turkish grain handler identified in a *Washington Post* investigative report published in May, which exposed massive shipments of fraudulent organic grain.

According to *The Post* and NOP documents, Beyaz Agro exported conventional, fumigated soybeans from the Ukraine, represented as organic Russian soybeans.

The soybeans may have never entered the U.S. market had each entity in the supply chain been required to conduct the audit-trail protocols that Cornucopia has petitioned the USDA to implement.

While regulatory revisions are critical for change, citizens can exercise their voices politically and in the marketplace.

Organic stakeholders should call legislators and demand that importers, traders, and brokers who handle organic grains be certified under the USDA's organic program.

Additionally, citizens should insist the USDA increase testing of shipments of organic grain presented for entry into the United States.

Much of the grain imported into the U.S. is used for livestock feed.

If the animal feed is not organic, the beef, dairy, or eggs ultimately do not qualify for organic labeling.

Consumer pressure on livestock producers, processors, and retailers to buy domestic certified organic grains simultaneously increases demand for domestic product while decreasing demand for dubious imports.

Cornucopia is preparing scorecards for consumers and wholesale buyers that will highlight exemplary organic brands firmly committed to using domestic grain. Those brands that use imported organic grains will be red-flagged.

Increasing pressure for regulatory change, and demand for domestically grown organic grain through marketplace education, can only help farmers like Bob Joos, whose powerful story, depicting how he was unable to sell his crops after becoming certified organic, was featured in the last issue of the *Cultivator*.

Recently, Mr. Joos let us know that "much more is at stake than simply my ego, my family farm, or a profit or loss statement. Don't forget the health risks and damages to the consumers who have been defrauded. It's time for the USDA to step up and implement real change."

Conventional Calves?

Loophole Exploited by Factory Organic Dairies

BY MARIE BURCHAM, JD

All dairy cows must give birth before they begin lactating. The role played by these calves in a dairy's operation reflects a farm's dedication to organic ideals.

When a dairy cow "ages out," or suffers irreversible health problems and is removed from milk production, she is replaced to maintain the same level of production.

Ethical dairies raise the calves they birth out as replacements for declining milk cows, a "closed-herd" method, keeping the animals within the organic system. Factory dairies will often purchase conventionally raised heifers and transition them to organic production.

Under the existing regulations, dairy farmers converting to organic farming are allowed a one-time transition of their existing herd to organic production. After that one-year process, all animals brought into a herd are supposed to be managed organically before birth, for at least the last third of gestation.

However, some industrial-scale organic dairies, with the approval of their certifiers and the USDA, flout this rule by purchasing replacement heifers that were born and weaned using conventional methods.

Conventional management often includes rearing calves on milk replacer made of cheap ingredients, including soy, dried whey, and animal fat mixed with vegetable oil, wheat gluten, and even animal blood plasma (a BSE or "mad cow" risk factor). Often the calves' diets also contain other synthetic additives and antibiotics—materials banned



Conventional operations often rear calves on milk replacer and antibiotics.

in organic milk production.

Dairy operations are dictated by their cows' biological clocks. Cows first "freshen" around their second year of life, beginning to lactate with the birth of their first calf. These calves are raised on a bottle or bucket until they are weaned.

Some certified dairies game the system by selling their calves and buying older replacements from conventional stock. This allows them to not only avoid feeding these calves valuable organic milk, which can be sold at a premium, but also enables them to buy cheaper non-organic animals that they then transition to organic production.

This system of using conventional calves as replacements often goes hand-in-hand with pushing cows for high-volume milk production and maximization of profits. In turn, pushing cows for high-volume production goes hand-in-hand with animal welfare concerns.

This illegal practice puts ethical organic dairy producers at a competitive disadvantage. Raising calves on organic milk cuts into a farmer's profits.

Current federal rule states both that milk must be from animals that have been organically managed one year prior to milk production and that, once a herd is converted to organic production, all the dairy animals must be under "organic management from the last third of gestation."

Organic regulations are clear that the continuous transitioning in of conventional animals was not intended. While the rule seems straightforward, the USDA has allowed producers to view this rule as optional.

In 2003, the National Organic Standards Board (NOSB) reiterated that animals may not be rotated between organic and non-organic production. Unfortunately, nothing has changed among factory organic dairies, despite these criticisms.

Ultimately, all replacement dairy animals brought onto an established organic farm should be managed organically from the last third of gestation.

Consumers and wholesale buyers can vote in the marketplace by supporting organic dairies that raise their own replacement cattle. These closed-herd dairies raise their replacement heifers from their own farm-born calves that were fed organic milk—the same quality of organic milk that consumers themselves drink.

People interested in this topic will find a more detailed analysis of these issues in The Cornucopia Institute's new dairy report, to be released later this year. Our associated dairy scorecard will include a rubric that takes into account how replacement heifers are managed by different dairies, according to the brand.

Mulch Your Soil, Inside and Out

An Interview with David Montgomery and Anne Biklé

BY JENNIFER HAYDEN

What does soil health have to do with human health? A lot, it turns out. Healthy soil leads to a healthier environment, which improves health for everyone who lives near, or shares water with, farmland. And, healthy soil leads to healthier food, which improves health for those of us eating it!

But there's more. When I recently sat down to talk with David Montgomery and Anne Biklé, authors of *The Hidden Half of Nature: The Microbial Roots of Life and Health*, they described an unseen world thriving in healthy soil that parallels the profusion of life inside our bodies.

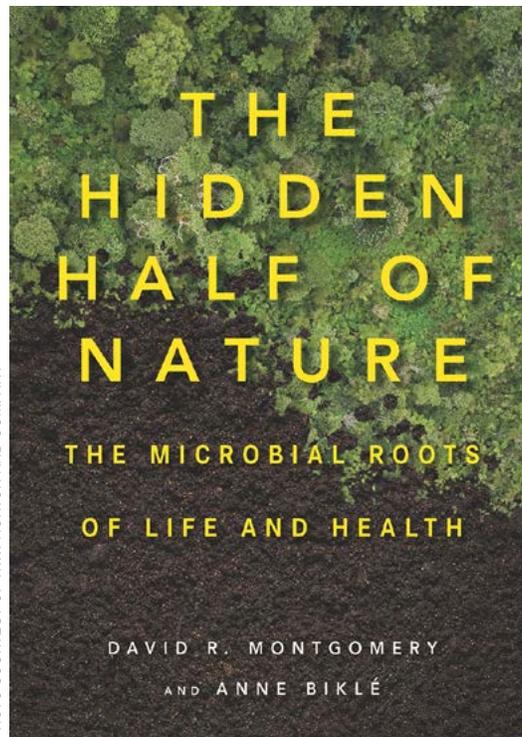
They've carefully studied how biodiversity in the soil and in our guts are related. Their book on the topic is well worth a read by anyone interested in exploring the interconnection between soil health and human health. Here are some excerpts from our wide-ranging conversation.

Hayden: I've just finished reading *The Hidden Half of Nature*, and I was really excited about the parallels you draw between human health and soil health.

The journey you make in your own garden, with the intense composting and mulching, and the story of dealing with a cancer diagnosis and learning about gut health is fascinating.

The book brings together soil health and human health—through a deep dive into microbiota—in a way I've not seen before. So where did the seeds for this book idea germinate?

Biklé: Well, it's interesting. We had always thought that the book would focus on soil and that we'd use our experience building a



garden. We had both noticed, after about five years or so of me doing nonstop mulching of our garden, that it was changing the quality of the soil dramatically, and for the better.

Many soils, especially in the agricultural context, are quite depleted of carbon. We wanted to say, "Look, there's this unappreciated and huge potential to store carbon in the soil through returning organic matter and it can help address climate change too."

And then several things intersected: there was the release of debut papers on the human microbiome in *Science* and *Nature*, along with me dealing with a cancer diagnosis and having a lot of questions about the basis and foundation for health.

Montgomery: The whole direction of the book shifted when we started to realize, "Oh, there's a bigger story here." We started off talking about

restoring soil. We ended up looking at the way beneficial microorganisms in the soil influence plant health, and then we came to see that our gut has a kind of inner soil that promotes our health.

Biklé: And now, after doing a lot of talks, we've got the book summarized in six words: "Mulch your soil, inside and out." It applies equally well to the literal mulching of soil, as well as a metaphor for gut health.

Hayden: I think that a lot of us learned that it takes eons for the earth to generate top soil and that it can be destroyed really quickly. But what you found in your garden, and what modern agricultural research is finding, is that we can build healthy soil rapidly, and that's exciting.

Montgomery: Yeah, it was astoundingly fast. In graduate school, Anne and I were also taught that it takes centuries to build an inch of topsoil. That's a reasonable estimate of how long it takes nature to make it. But we were finding in our yard was that Anne had made a couple of inches of new topsoil in half a decade. So that made us think, "How is it possible for that to happen so fast?"

That led us to the role of microbial life in processing and decomposing and repurposing all the organic matter that we were adding as compost and mulch to the yard. That was our window into thinking about the microbial world.

The Hidden Half of Nature is an exploration of how microbial life can work to restore soil in your garden, on a farm, or inside of us. My new book, *Growing a Revolution*, looks at farmers around the world who have adopted practices that cultivate beneficial microbial life and how

they've been able to restore fertility to their farms in years, not the centuries that you would think it would take.

Hayden: So if microbiota—all of the invisible life in the soil and in our digestive systems—are the key to health, how can we take care of them?

Biklé: What it really comes down to is microbiome-friendly practices for the soil and the body. If you focus on feeding the beneficial microbiota that live in the soil, or in the gut, it will go a long ways towards sustaining soil health or human health.

When farmers are transitioning from conventional to conservation, or organic, agriculture, there's this two to three year period where the soil is getting fed all of this organic matter for the first time.

It's jump-starting all of this microbial life that is kicking back into gear to do what it was always meant to do. After that transition period, soil health is well on its way to restoration.

I think about our bodies that way too. If you shift from a Western diet,

or a heavily processed food diet, to one that feeds the microbiome ample amounts of the kinds of fodder that it needs to make medicinal compounds, your body too will go through a transition process. Getting the microbiome back on its proverbial feet is key to keeping you healthy.

That's where I see the connections between soil health and human health lying, in that if we take care of the processes by adopting the right kinds of practices, we reap health. Health in the soil and health in the body.

PHOTO COURTESY OF ANNE BIKLÉ AND DAVID MONTGOMERY



Anne Biklé is a biologist and environmental planner. Her career spans the fields of environmental stewardship, habitat restoration, and public health. *The Hidden Half of Nature* is her first book.

David R. Montgomery is a professor of geomorphology at the University of Washington, a MacArthur Fellow, and author of several books including the just released *Growing a Revolution: Bringing our Soil Back to Life*.

Cornucopia Board Welcomes Jim Crawford



Jim Crawford, an organic vegetable farmer from south-central Pennsylvania, has joined Cornucopia's board of directors. He and his wife Moie Kimball have farmed organically for over 40 years. All of the produce from their New Morning Farm is direct-marketed in Washington, D.C.

It began for Jim in 1972 with the growing of a wide variety of vegetable crops on a small plot of rented land in West Virginia. Moie joined Jim in 1974, and in 1976 they purchased their farm in Pennsylvania. Through much trial and error, they gradually built their soils organically while collecting appropriate equipment.

From vending veggies out of the back of a pick-up truck, to organizing and supervising three thriving weekly markets (launching a fourth in late 2012), Jim and Moie built a multifaceted, successful direct-marketing system with the help of six to eight year-round helpers and 25 seasonal workers and apprentices.

New Morning Farm produces approximately 60 different crops, including berries and herbs in addition to most standard garden vegetables. And 300 free-range laying hens live in a house accessing a fenced-in yard where

they enjoy pecking in the grass. New Morning Farm is equipped for year-round production with a heated greenhouse, two high-tunnel cold frames, and a packing shed housing several refrigerated coolers.

Jim has also helped spur local economic development. Along with neighboring organic farmers, he helped found a wholesale marketing cooperative called Tuscarora Organic Growers Cooperative (TOG) in the late 1980's. It recently achieved \$3 million in sales. We welcome Jim to the Cornucopia board.

and a big cheerleader for certifiers in general. Even after major scandals have broken, such as those profiled in *The Washington Post*, detailing massive fraudulent imports and illegal “organic” factory dairies, Mr. McEvoy has coached the certifiers on damage control. This is unacceptable from what should be a hard-nosed regulator, scrupulously overseeing the industry.

And how about the certifiers themselves? They should be like the referees in a hockey game, assuring that both teams abide by the rules. Instead, they are cheerleaders for their paying “clients.”

For example, in a recent response to *The Post’s* damaging import fraud investigation, CCOF Certification Services, LLC, the largest accredited certifying agency, stated that they “represented nearly 3,000 certified organic members in 42 states.”

“Represents” is a pretty apt descriptor. After all, CCOF staff show up at NOSB meetings lobbying for synthetic materials, hydroponics, and other issues on behalf of their 3,000 customers. They are also listed as one of the largest donors to the Organic Trade Association (OTA), the powerful industry lobby group.

None of that sounds like an independent arbitrator. Instead, it sounds like a trade organization representing commercial interests. If this seems like a cozy relationship that smells rotten, please allow me to further connect some of the dots.

Hydroponics: Growing Without Soil in Industrial Settings

Even though current organic regulations require careful stewardship of soil as a prerequisite for certification, the USDA/NOP quietly allowed CCOF to certify Driscoll’s, the largest berry producer in the United States, and over 100 other entities, for hydroponics/

container growing. This was in spite of the fact that the NOSB had already clearly stated that hydroponic production does not qualify as organic. However, in a big favor to corporate interests, the NOP has never implemented the tougher NOSB recommendations.

Who did the USDA (illegally) appoint to the NOSB to sit in a seat designated by Congress for someone who “owns or operates an organic farm?” An employee of Driscoll’s (Driscoll’s does not even grow berries; they contract with independent farmers).

This NOSB member did such a nice job carrying the water for the corporate lobbyists that she was named the 2016 OTA member of the year (see the NOSB voting scorecard under the projects tab on Cornucopia’s website).

Organic Livestock Factories

CCOF, Quality Assurance International (QAI), and Oregon Tilth are the largest certifiers and are all happy to jump on the factory farm bandwagon regardless of well-documented violations of organic law. All are cozy members of the OTA industry lobby.

It’s not surprising that a former QAI official, in a book on organics, referred to Cornucopia as “The Organic Taliban.” I don’t think they like us.

What started out as a collaborative effort, with the USDA, certifiers, and farm organizations all working together, has evolved into a rather adversarial relationship.

Unprecedented Betrayal of the NOSB

Recently, the USDA rejected the NOSB’s unanimous vote to remove three non-organic items from the List of Approved Substances (i.e., whey protein concentrate, Turkish bay leaf, and inulin-oligofructose).

After a full year of debate and deliberation, including public testimony, only the OTA

recommended overriding the NOSB vote. And the powerful lobbyists got their *whey*. Organic dairy farmers and processors, who can produce certified organic whey, lose, as do consumers who have their organic products polluted with non-organic ingredients.

There are some wonderful certifiers that are true to the mission. They include the affiliates of the Northeast Organic Farming Association, OneCert, and the Organic Crop Improvement Association. Going forward, we will be comprehensively identifying the best certifiers.

Until We Win the Big Fight at the USDA: Here’s How to Protect Your Family and Organic Farmers

Use the organic brand scorecards (e.g., dairy, eggs, soy foods, pet food, etc.) on Cornucopia’s website to choose the highest-integrity products.

Shop as local as possible at your member-owned cooperative, farmers market, or CSA. Know your farmers. Choose local and organic. Our research shows that there are virtually no integrity problems at that level—it’s voluntary because the farmers involved truly believe. [Use our new DIY Certification Guide to evaluate non-certified options.]

In addition to the brands identified on the Cornucopia scorecards, there are still high integrity, larger companies owned by the visionary founders. These include Eden Foods, Nature’s Path, and Dr. Bronner’s. Many of the other leading brands are now corporately owned.

Choose well, eat well, and sleep well. We all make a difference when investing time in organic brand research and spending our dollars wisely.

Keep an eye out for the upcoming snack bar report and scorecard.



Organic or Grass-fed Beef?

You Don't Have to Choose

BY MARIE BURCHAM, JD

While both USDA certified organic and grass-fed beef offer significant benefits compared to products produced by cows confined to a feedlot, these two labels are different.

USDA certified organic cattle must be fed entirely certified organic feed, which means the pastures must be certified along with any grain and hay the cattle are fed. None of the organic feed, including the pastures on which the cattle graze, can be sprayed with pesticides or herbicides.

In addition, organic beef cattle cannot receive antibiotics, growth-promoting hormones, or other drugs banned in organics. Also, unlike conventional cattle, organic cattle must graze for a certain percentage of their diet.

If beef carries the “100% grass-fed” label, it usually means that the cattle were fed grass, hay, and other forage. Some third-party certifications for “100% grass-fed” allow cattle to consume things like molasses, which adds calories to the livestock diet.

However, beef that carries the grass-fed label, but not the organic label, may receive antibiotics and hormones, and may be fed grass and forage that was sprayed with pesticides. These chemical inputs have negative implications not fully addressed by the grass-fed label.

Consumers seek out both organic and grass-fed products because of their benefits to human health, animal welfare, and the environment.

A high percentage of green forage in a beef animal’s diet imparts much



Rotational grazing can be an essential part of regenerative agriculture.

higher levels of omega-3 fatty acids in the meat, and animals grazed on fresh green forage produce beef with more conjugated linoleic acids (CLA) as compared to beef from animals fed stored hay, and especially grain-fed cows.

These fatty acids have proven health benefits. Eating grass-fed meat and dairy is among the most effective ways for humans to increase the amount of these essential fatty acids in their diets.

As ruminants, cattle evolved to eat mainly grass and other fresh vegetation. The microbiome in the rumen, part of their stomach, excels at breaking down fiber to provide the animal with easily absorbed nutrients.

Despite this, most beef produced in the U.S. is grain-fed. Eating grain disrupts the normal digestive process and, as a result, acid builds up and causes physiological stress.

This “acidosis” from grain-based diets permits the growth of harmful microorganisms, including *E. coli*, and metabolic disease in animals. Conventional cattle are given antibiotics to treat diseases caused by acidosis.

Feeding cattle a diet composed primarily of grass not only prevents acidosis and its associated health problems, but grazing promotes cattle’s overall physical and mental health.

Greenwashing tactics are also common with grass-fed labeling. A simple “grass-fed” label without any other qualifiers can just mean that the product was derived from livestock that received some portion of its diet from grass.

That animal could have still received some grain, and may have been completely “finished” on grain, which negates many of the health

benefits associated with grass feeding. However, a label with “100% grass-fed” language closes this loophole, due to basic laws regarding truthfulness in food labeling.

Looking for the grass-fed label without knowing how and where those cattle were actually grazed can be problematic. Some beef carrying the grass-fed label comes from cattle raised on delicate public lands.

Cattle, which are not a species native to the U.S., can cause serious issues with erosion and the destruction of riparian habitats, and can encourage the spread of invasive species.

In contrast, proper pasturing practices, such as rotational grazing, can be an essential part of regenerative agriculture.

If you are interested in the three-fold benefits to human, environmental, and animal health, look for beef that carries both the USDA organic seal and the 100% grass-fed label. That way, you can ensure the greatest nutrition and shield yourself from exposure to agrichemicals, antibiotics, and growth hormones.

Considering Coffee

Grounds for Labeling

BY LINLEY DIXON, PHD

Straight, with sugar, milk, or honey. Regardless of how you take it, Americans love their coffee. At an average of two cups a day, the U.S. is only 22nd in terms of world consumption, with Scandinavian countries topping the chart at 2-3 times this amount.

As avid coffee consumers, how should we be sourcing our beans to minimize environmental impact and pesticides and support ecologically diverse farms?

Considering coffee is a tropical crop, our usual recommendation to “know your farmer” is largely unworkable. Instead, we must depend on the many certifications that decorate coffee packages, including organic, fair-trade, Rainforest Alliance, shade-grown, and even certified bird friendly! But with so many labels to choose from, how do we know which is best?

Many harmful chemicals that are banned in the U.S. are still widely used in developing countries on coffee plants. In addition to easing consumer concerns over chemical residues, buying USDA certified organic coffee mitigates exposure of farm workers who might not be trained for pesticide applications or have access to protective wear.

Some of the most common pesticides used on coffee include chlorpyrifos, disulfoton, and methyl parathion, all highly toxic organophosphate insecticides used to control cherry borers and leaf miners, among other insects.

Organophosphate insecticides are among the worst chemicals used in conventional farming in terms of impact on human health and the environment. The EPA banned most household uses in 2000 because organophosphates have caused



Many harmful chemicals that are banned in the U.S. are still widely used in developing countries on coffee plants.

human deaths and are linked to birth defects. They are also extremely toxic to birds, aquatic organisms, and bees and are known to bioaccumulate (increase in concentration as they move up the food chain).

The widespread use of organophosphates in conventional coffee production is convincing enough to convert to USDA certified organic, but you can do more.

Research has shown that coffee plants have fewer pests when they are grown in the shade, likely because of the presence of insect-eating birds in the overhead trees. Since organic doesn't always mean shade-grown, what additional labels should we be looking for?

The Rainforest Alliance seal on coffee has become widely respected because, like organic certification, operations are subject to on-farm inspections. Similar to organic, they ban toxic chemical use and assess environmental impacts such as biodiversity.

However, Rainforest Alliance goes beyond organic standards to include shade-grown and climate change adaptations as well as social issues (e.g., working conditions, child labor, community involvement, and fair wages).

While Rainforest Alliance doesn't ban as many chemicals as USDA organic certification, it does

much more when it comes to farmer training and education, enabling farmers to shift to more sustainable production practices.

Similar to USDA certified organic, Rainforest Alliance does NOT offer producers minimum prices, leaving them vulnerable to market price fluctuations. Fair Trade certifications are meant to ensure fair prices.

The Rainforest Alliance label is allowed on products that contain as little as 30% certified beans, but companies that are certified must agree to move towards 100% certified beans over time. Be sure to check the seal for percentage of certified content.

Another option, the Smithsonian Bird Friendly Habitat label, requires farms to be both certified USDA organic and meet very specific shade-grown requirements, including trees of different heights and species.

Labels inevitably carry with them added bureaucracy, require continuous independent monitoring, and lead to questions over who exactly is profiting from the consequent higher retail costs.

Conscientious consumers hope the extra money spent goes toward the farmers who incur additional costs to bring them a product that is better for them and the environment.



Bicentennial Bovine

Over Two Hundred Years of Stewardship

BY RACHEL ZEGERIUS

“It was a very sad day in the late 70s when I watched the cows leave the farm after the bottom went out of milk prices. I never anticipated that they would return,” remembers Jane Bell.

Jane moved to Tide Mill Farm after marrying seventh-generation farmer Robert Bell. Their son, Aaron, was born that same year the milk cows vanished from the barn.

But the Bell’s 200-year relationship to this saltwater farm on Maine’s Cobscook Bay endured. Twenty-three years later, Aaron returned home with his wife Carly, the first of their four children on the way.

A renewed commitment to healthy food for themselves and their family, a modest venture to raise vegetables, hens for eggs, and meat birds, grew into something much more elaborate.

In 2005, Aaron and Carly’s passion and devotion to the land and animals, coupled with courtship by HP Hood, a major milk processor looking to get into organic dairy at the time, led to a revival. Dairy cows returned to the pastures and parlor.

However, the organic dairy market can be a fickle one. Their contract with Hood was dropped, without warning, two years later. What followed was an innovative and cooperative venture to create the farmer-led, organic brand MooMilk.

After years of hard work, filled with many successes and challenges, detailed in the documentary *Betting the Farm*, MooMilk went out of business and, for the second time in five years, they were left without a market for their certified organic milk.

But diversity has helped this family farm prosper. Navigating the complex organic dairy market by balancing value and volume,

they have scaled back their production.

While some of their raw milk is picked up by Horizon, much of their product is purchased by local, value-added processors. One of those dairy operations is led by Aaron and Carly’s cousin, Rachel, and her husband, Nate.

Tide Mill Creamery, just a half mile from the milking barn, produces kefir, yogurt, and cheeses using milk from Tide Mill Organic Farm’s cows.

Tide Mill’s diversity in markets is equaled by their distinction in products. In addition to the dairy (top-rated on Cornucopia’s scorecard), the Bells raise certified organic poultry, pigs, beef, and more.

Weekly, these products ship from Maine’s remote Downeast coast all the way to markets in Portland.

Tide Mill products can be found in restaurants and cafes and on shelves at co-ops, health food stores, and mainstream grocers throughout the state.

Next to dairy, their most important product is organic chicken. Tide Mill Organic Farm currently raises just under 20,000 birds annually.

They have graduated from backyard boiling pots to a permanent, on-site poultry processing facility that includes a heated hoophouse—increasing efficiency and keeping the

birds comfortable, while supplying the market with organic chickens year-round.

Today, three generations help with the abundant chores. “The kids are definitely part of the workforce,” laughs Aaron.

A ninth-generation farmer, fifteen-year-old Paige helps with the milking. Rather than going to the movies, weekly Saturday night activities involve rounding up 450 chickens to be ready for harvest on Sunday morning.

The business of farming has not proven an easy one; as the business has grown, so have the struggles. Slim margins and tight budgets combine with high input and labor costs. Aaron explains, “Trying to get everything done and maintain some sort of peace and harmony with the family is very challenging.”

But, to this farm family, it is all worth it. And they hope they can convey to their customer base why paying more is also worth it. Aaron notes, “If we can just convince people to spend 10% of their food budget on local food; go to the farmers market once a week; buy that local product on the shelf; put that one local item in your grocery cart; lots of people choosing to make those small changes can go a long way.”

PHOTO COURTESY OF COBSCOOK FILM





C O R N U C O P I A
I N S T I T U T E

Lights, Camera, Action

Cornucopia has created two new videos aimed at helping you better understand organic and local food.



Various issues people may encounter at farmers markets and buying directly from farmers are discussed in the first short video with Cornucopia's Mark Kastel explaining the benefits of shopping locally and why seeking out certified organic farmers first makes sense. Cornucopia's new DIY Certification Guide notes the best questions to ask non-certified farmers about their growing methods.

The second new video takes an entertaining look at the health benefits and differences between grass-fed and certified organic grass-fed beef. Both of these videos can be found on Cornucopia's website at cornucopia.org/videos.

P.O. Box 126
Cornucopia, WI 54827

NON-PROFIT
ORGANIZATION
US POSTAGE
PAID
PERMIT NO. 322

Address Return Service Requested

Perdue's USDA Disses NOSB

Leaves Conventional Whey in Organics



The Trump/Purdue administration has rejected a unanimous recommendation from the USDA's National Organic Standards Board (NOSB) that certified organic food products containing whey must use organic whey protein concentrate (WPC).

The NOSB voted 14-0 to remove conventional WPC from the list of approved non-organic ingredients. The board determined there was a sufficient supply of organic whey commercially available.

Following the NOSB's recommendation, developed over the course of a year and during two public hearings, the USDA accepted additional comments before final rulemaking on WPC.

The powerful industry lobby, the Organic Trade Association (OTA), availed themselves of that opportunity to let the USDA know that they had received "new information" indicating that the use of conventional WPC was necessary for organic processors. They provided no evidence supporting this claim.

"This decision by the USDA, to reject the unanimous recommendation from its expert advisory board, is another example of powerful industry insiders shaping public policy separate and apart from the formal process. This is the swamp that Trump had promised to drain," said Mark A. Kastel, Cornucopia's senior farm policy analyst.

The USDA's decision, effective on August 7, continues to allow conventional WPC as a substance used in organics. The synthetic and nonorganic materials on the National List are subject to review by the NOSB every five years.

"It's worth noting, given the anti-regulatory fervor of the Trump administration, that the organic community came to Congress seeking stringent regulation to protect the integrity and ethics of organic agriculture and food," observed Kastel. "It was that desire for national regulation that led to the passage of the Organic Foods Production Act by Congress in 1990. The congressional intent was that the NOSB would buffer organic rulemaking from inappropriate corporate influence."

- WILL FANTLE