



Animal Welfare APPROVED

newsletter

WINTER 2012 • Volume 5 • Issue 4

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Dear Friends,



As another remarkable year comes to a close, the successes of the farmers, ranchers and food businesses that form the heart of the AWA program are just too many to list.

But I hope that you will join me this year in saying a heartfelt thanks to the staff at AWA. One of our key strengths is that we are a voluntary program, funded entirely by donations.

As we don't charge farmers or ranchers to join, we can remain completely impartial in our auditing. In turn, this enables you to offer your customers a level of integrity and assurance that's unrivaled by any other certification service in the U.S. and Canada. Similarly, the range of free services we offer, such as professional product labeling, is second to none, particularly when you'd expect to pay hundreds—if not thousands—of dollars a year if you sought similar services elsewhere.

Given the growing number of farmers, ranchers and food businesses joining the program, and the increasing requests for assistance on the farm or in marketing, the number of enquiries the AWA staff now covers is truly astonishing. To the Audit and Compliance and Farmer and Market Outreach personnel, and to those who toil tirelessly behind the scenes to keep the program running smoothly and to make all our voices heard, I am truly grateful.

Finally, let me take this opportunity to thank you for the vital work that each of you is doing to promote high-welfare, sustainable farming. Together, we are making a difference. On behalf of the program, I wish you all Happy Holidays and good fortune—and better weather—for 2013.

Andrew Gunther
Program Director



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Industrial Organic Comes Under Fire

A California-based large-scale organic egg producer is being sued for allegedly making misleading marketing claims about the welfare of its laying hens.

BY PETER MUNDY, WRITER/EDITOR

The Animal Legal Defense Fund (ALDF), a Sonoma-based animal defense charity, has filed a class-action lawsuit against Judy's Family Farm Organic Eggs and Petaluma Egg Farm for allegedly violating California's consumer protection laws.

The cartons for Judy's Family Farm Organic Eggs feature images of hens roaming on an expansive green field, while the carton wording states that the hens are "raised in wide open spaces in Sonoma Valley, where they are free to 'roam, scratch, and play'."

However, ALDF claims that the organic hens at Judy's Family Farm are actually kept in covered sheds with no outdoor access at all: "Implying their hens are free-range when they are not provides an unfair advantage over actual free-range egg producers, and also cheats consumers," ALDF alleges.

As consumer interest in how their food is produced grows, the public is waking up to the fact that commonly used food claims and terms like "all natural" or "free-range"—and even "organic"—may mean very little, and are often being used to hide intensive farming systems.

According to a recent report by the Cornucopia Institute, for example, some of the largest industrial organic operations can get away with providing no outdoor access at all to their flocks on the basis of a written statement from their veterinarian about a hypothetical disease risk to the birds from outdoor access, and yet still market their eggs as certified organic.

"This recent lawsuit is further evidence of the rising concern about what's really behind many of today's food claims and labels," says Andrew Gunther, AWA Program Director.

"When people buy organic eggs they expect the hens to have plenty of space and free access to pasture, where the birds can exhibit their natural behaviors. Yet once again we find that a tiny minority of these so-called organic operations are

repaying this trust with downright deceit."

"These industrial operations are threatening the livelihoods of countless real organic poultry farmers—many of them AWA-certified—who really are farming to the high standards consumers reasonably expect."

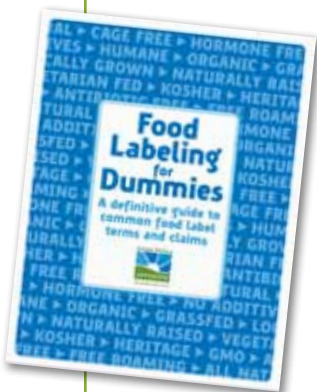
"AWA is proud to represent independent family farms and ranches that raise animals outdoors on pasture, using truly sustainable agriculture methods. No other food label can offer these distinctions." 🐔



Matteo De Stefano/Stock

Would members of the public really regard this kind of industrial-scale operation as "certified organic"?

Want to Know What's Behind the Food Label?



AWA has updated its popular *Food Labeling for Dummies: A definitive guide to common food label terms and claims*.

Recently recommended by the Organic Consumers Association as "a comprehensive labeling guide," *Food Labeling for Dummies* is designed to help decipher the most common terms and claims found on today's food packaging. The 16-page guide offers a simple user-friendly color-coded symbol system, backed

by clear definitions, to explain exactly what all these terms and claims mean—and, most importantly, if they have been independently verified.

From "all natural" and "humane," to "locally grown" and "cage free," *Food Labeling for Dummies* is a vital reference tool for anyone who is interested in learning more about the food that is being sold in the stores—and how it was really produced.

Download a free copy of *Food Labeling for Dummies* at AnimalWelfareApproved.org/consumers/food-labels. Limited printed copies are also available upon request. Please call (800) 373-8806 or email Info@AnimalWelfareApproved.org to order. 🐔

GOOD FOOD FOR ALL

A growing number of AWA-certified food businesses are tackling food poverty head-on by accepting USDA Electronic Benefits Transfer (EBT) cards.

The EBT system is designed to help people at the poverty level under the USDA's Supplemental Nutrition Assistance Program (SNAP, formerly the Food Stamp Program). They can use the EBT card to buy food from participating retailers; the retailer's account is then automatically credited. By accepting EBT cards, AWA-certified businesses can extend the availability of high-welfare, sustainable meat and livestock products to people of all income levels.

Farmer Jay Dixon of Dixon Family Farms, Greene County, NC, recently started accepting EBT cards. "Greene County is a poor county, with probably 90 percent of the population right at the poverty line," says Jay. "Accepting EBT cards is a way for us to make healthful food accessible to everyone. We have to jump through some administrative hoops, but it's really not that difficult."

Rose Konold of Mason Creek Farm, Fayetteville, AR, also takes EBT cards: "Fayetteville Farmers' Market was awarded a grant to start taking EBTs two years ago, so it was easy for us to sign up for the program. We take between \$50 and \$100 in EBTs a week. Payment is easy and quick."

FOOD DAY TWEETING

AWA participated in a special Food Day Twitter Conference on October 24, organized by Sustainable Table.

Five different food and farming organizations were each given one hour to interact with the global Twitter community on a chosen topic.

"AWA's topic was 'The Importance of Supporting Sustainable Farmers' and we were inundated with questions, comments and suggestions from enthusiastic members of the public, farmers and other food and agricultural organizations," explains Katie Baumer, AWA's Communications Associate. "We plan to engage in more Twitter chats in the future to raise awareness of the benefits of the AWA program." Follow [@AWAapproved](#).

GE CROPS INCREASE HERBICIDES

Genetically engineered (GE) crop technology has significantly increased overall pesticide use, according to a new study by Washington State University's Center for Sustaining Agriculture and Natural Resources.

Published in *Environmental Sciences Europe*, the research reveals that the introduction of GE herbicide-resistant crops led to a 527-million-pound increase in herbicide use in the U.S. between 1996 and 2011, with ever-increasing glyphosate application rates and, in recent years, growing use of more toxic herbicides to combat resistant weeds.

"GE crop technology is failing. Contrary to industry claims, the inevitable emergence of glyphosate-resistant weeds has resulted in a dramatic increase in herbicide use," says Anna Bassett, AWA Lead Technical Advisor. "We urgently need to divert research investment to the development of truly sustainable and resilient agricultural technologies and approaches that work with natural systems, not against them."

READ ALL ABOUT IT

AWA's media strategy is achieving significant results at the national, regional and local level.

A recent feature in *TIME* magazine on food labels encouraged readers to "Look for products with an... Animal Welfare Approved stamp, which guarantee the animal was raised on a family-owned pasture or range."

The AWA logo was also highlighted prominently on page 52 of October's *Every Day with Rachael Ray* in a focus on high-welfare food labels as "the only certification that guarantees that animals were raised outdoors on family farms."

"Our approach of targeting local media with press releases written specifically for every farm and ranch that joins the program is proving to be particularly successful," says Emily Lancaster, Lead Farmer and Market Outreach Coordinator. "We know that it is really helping to raise consumer awareness about local AWA farms and food suppliers in their area."



Spraying of soy field in early summer: GE crops have resulted in a dramatic increase in herbicide applications.

AWA AUDITORS EVENT

AWA's Auditing and Compliance team met for their fifth annual training session in San Antonio, TX, in November.

The training included workshop sessions on the Certified Wildlife Friendly program that AWA will begin to audit next year, as well as bison production on the Madroño Ranch, near Medina, TX, and pig and poultry production at Richardson Farms, Rockdale, TX.

"Regular training is a vital part of our audit program," explains Tim Holmes, AWA's Lead Auditor. "This year we introduced a number of our auditors to bison production, as well as focusing on poultry auditing for hens, broilers, and turkeys. We are grateful to both farms for hosting us, particularly as Richardson Farms was in the middle of Thanksgiving preparations."

LINDNER WINS AWARD

Congratulations to Kathy and Ken Lindner of Lindner Bison, CA, for winning second place at the recent Snyder Diamond Farmer of the Year Awards in Santa Monica. The award is given to farmers who exemplify adherence to four principles: high quality, consumer education, sustainable stewardship practices, and social responsibility. Visit [lindnerbison.com](#).

For more local, regional and national news coverage of AWA farmers and ranchers, visit [AnimalWelfareApproved.org](#).

Acre Station Meat Farm: At The Cutting Edge

Small meat processors like Richard and Ronnie Huettmann play a vital role in helping independent farmers address the growing consumer demand for local, high-welfare, and sustainable livestock products.

In 1977, our father established Acre Station Meat Farm as a family-owned meat processing business. He bought livestock from local farmers, selling the meat and other grocery goods through his retail store in Pinetown, NC.

For many years the business was very successful. But during the 1980s and 1990s the larger chain stores became increasingly dominant, and we realized that we would have to refocus the family business. As we already had a slaughter floor, in 2003 we began offering local farmers a custom slaughter and meat processing service to help them respond to the growing consumer demand for local meat products.

Today, Acre Station helps numerous farmers add value to their meat—and remain independent. We process 150–180 hogs a week, as well as cattle, lambs and goats. The carcasses are butchered, as required by the farmer, before we vacuum seal and label each cut. We can also produce sausages, bacon, and hams (including smoked), helping our customers add more value to their meat.

A couple of years ago, we were increasingly approached by farmers in the AWA program. They explained that in order to market their meat as AWA-certified, their processors must also be reviewed. We were pleasantly surprised to find that meeting AWA's slaughter standards would be very straightforward for us. We always treat the animals we receive with the utmost care and respect, and our facilities were already USDA-audited. Given that we already exceed industry norms in terms of animal care, the AWA slaughter specialist advised us that the only significant change we needed to make was to redesign our off-loading ramp area. Even better, we were able to apply for a grant towards our upgrades under AWA's Good Husbandry Grant program.

Our focus is customer service and quality: We know our customers by name and we let them know that their business is important to us. The good thing about having this close relationship with all our customers is that we can



Ronnie (left) and Richard Huettmann of Acre Station Meat Farm, NC.

offer advice. Some farmers mistakenly believe that the bigger their pig is, the more meat they'll get. But after a certain weight, the pig will turn protein into fat, not muscle, which is a waste of feed and money. It's also far more efficient for us to process a 250–300 lb dressed carcass than a 300+ lb animal. It's something we encourage all our customers to think about, especially with today's ever-increasing feed prices.

Similarly, AWA farmers will already know that it's important to transport animals in safety. But we find that some farmers skimp on bedding before transit. Using rubber mats or a good covering of hay or sawdust on the trailer floor before loading will help avoid unnecessary slipping during transit or off-loading, minimizing stress and risk of injury to the animals—and damage to the meat.

We are proud to help our customers showcase the AWA logo on their products, and we know that the logo helps them to add value to their meat and livestock products. By working together, we are all helping to support our local economy. 🐷

For more information about Acre Station Meat Farm, visit acrestationmeatfarm.com.



The new off-loading ramp was updated with the help of an AWA Good Husbandry Grant (left). Acre Station can also process meat to help farmers add further value.



Mike Suarez

GRASSFED AND GREENHOUSE GAS

Pastured cattle are often criticized for producing more methane per pound of meat. But a new AWA report reveals that this is more than offset by the overall environmental benefits of pasture-based systems.

OVER THE LAST YEAR the intensive cattle farming lobby has gone on the offensive in a desperate effort to save its tarnished image. Following criticisms of its environmental record, a coordinated PR campaign is underway to portray intensive cattle systems—including Concentrated Animal Feeding Operations (CAFOs)—as the most environmentally friendly method of producing beef. And it's gaining coverage.

INTENSIFICATION: THE ONLY OPTION?

The story goes something like this: While it may seem counter-intuitive, scientific research clearly shows that feeding cattle in confinement is the most efficient and environmentally friendly way to produce beef, because feedlot cattle emit less methane—an important greenhouse gas (GHG)—per pound of meat than grassfed or pasture-raised cattle. The only way we can possibly feed the growing global appetite for meat and dairy products, and avoid the potentially catastrophic methane emissions associated with pasture-based systems, is to further intensify cattle production.

The problem is that this argument strongly conflicts with the ever-mounting scientific evidence that pasture-based and grassfed cattle systems have a far better environmental

profile than confinement systems. To get to the bottom of the debate, AWA carried out an in-depth review of the science relating to GHG emissions among different cattle production systems. It was a fascinating journey.

What we found is that most of the research used to present industrial farming systems as more environmentally friendly is very limited in its scope and, at best, tells only part of the story. The research frequently ignores two essential facts: First, the significant *non-methane* GHG emissions associated with intensive livestock farming, such as the carbon dioxide and nitrous oxide emissions resulting from grain-based feed production or feedlot manure lagoons (see "What are Greenhouse Gases?" on page 9). Second, the potential role that carbon sequestration could play in offsetting the *overall* GHG emissions associated with pastured beef production.

THE BIGGER PICTURE

Do grassfed cattle release more GHG than grainfed cattle? If you look solely at the direct methane gas emitted by individual cattle during their lifetime, the science shows that pastured cattle produce more of this particular GHG than intensive cattle systems.

Ruminants such as cattle have the unique ability to convert cellulose-rich foods into useable nutrients. Their rumen is like a fermentation vat where fibrous feeds like grass are broken down into compounds that the animals can absorb and utilize, as well as methane gas which is belched into the air. As a general rule, the more fibrous the feed consumed the greater the methane emissions from the ruminant. Research shows that grains, such as corn and soy, are actually much easier for ruminants to digest and that the amount of methane produced by cattle fed a grain-based diet is less than that cattle fed grass-based diets (although it is important to state that high grain diets can also have harmful effects on the health of ruminants). It is therefore possible to argue that, per pound of beef, the faster growing grainfed cattle will produce less methane gas than their slower-growing pasture-fed counterparts. Indeed, it's on this basis that proponents of industrial farming argue that intensively raised livestock are more environmentally friendly and more resource efficient than pasture-based livestock.

But while this focus on methane may appear to support intensive beef production systems, common sense dictates that if we really want to assess the GHG emissions of different methods of livestock production, we must look at more than just the methane emissions of individual cattle. We need to look at the bigger picture.

MORE THAN METHANE

Let's look at methane again: Methane production is not simply a function of how much grass and forage an animal eats. This key GHG is also produced during the bacterial decomposition of livestock manure where there is no free oxygen present (anaerobic conditions). Anaerobic conditions are far more likely to occur when large numbers of animals are managed in a confined area and where their manure is stored in large piles or in open lagoons, such as cattle feedlots or industrial indoor pig and poultry farms. Research reveals that liquid manure management systems—frequently used in intensive livestock systems—

create the ideal anaerobic environment for methane production. It is also worth noting that other research shows that the greater the energy content of the feed, the greater the potential for methane emissions from the manure. The U.S. National Research Council states that “manure from animals fed with grain-based, high energy diets is more degradable and has higher methane production potential than manure from animals fed with a roughage diet.” Such emissions are rarely recognized by proponents of industrial farming.

THE ENVIRONMENTAL COST OF CORN

Proponents of intensive grainfed systems frequently fail to acknowledge the wider GHG emissions associated with producing and transporting the vast quantity of grain-based feed consumed by the millions of feedlot cattle each year.

Nitrous oxide (N_2O) is a very important GHG. One of the biggest sources of N_2O in agriculture is the manufacture and use of nitrogen-based fertilizers. Indeed, the Energy Information Administration (an agency within the U.S. Department of Energy) indicates that more than three-quarters of farming's N_2O emissions actually come from the production and application of artificial fertilizers.

While some pasture-based farmers may use nitrogen fertilizers, others rely on manure from their livestock to build soil fertility. Nevertheless, pasture-based systems which do not rely on significant artificial nitrogen fertilizer applications, and which have well-managed (not waterlogged) pastures, will generally have relatively low N_2O emissions. Indeed, many pastures are managed with little or no artificial nitrogen fertilizers, field cultivations, or applications of pesticides or herbicides, resulting in minimal associated total GHG emissions.

In contrast, the millions of acres of corn and soy grown each year to feed the nation's feedlot cattle must be planted every year; the ground usually requires cultivation before seeding; significant applications of artificial fertilizers, herbicides and pesticides are routinely made throughout the growing season; and, finally, the corn must be harvested and transported to the nation's feedlots. All of this also requires gasoline, diesel and electricity.

Research shows that the combined GHG emissions from every stage of industrial crop production equates to between 226–426 kgs of carbon dioxide (CO_2) equivalent per metric ton of corn. In other words, each pound of corn is responsible for emitting 0.23–0.43 lbs of CO_2 equivalent GHGs. On this basis, David Pimentel, a leading ecologist who specializes in agriculture and energy at Cornell University, estimates that a typical feedlot steer will in effect consume 284 gallons of oil in his lifetime.



A Concentrated Animal Feeding Operation in Kansas. Note the lagoons in the background.



Mike Suarez

CARBON SEQUESTRATION

While some studies suggest that pasture-raised or grassfed cattle produce more methane in their lifetime than grainfed cattle, it is very important to understand that this does not mean that these cattle are responsible for producing more *total* GHGs in their lifetime than grainfed cattle. In fact, it is now widely acknowledged that grassfed livestock systems may have a vital role to play in helping to *cut* global GHG emissions. But how is this possible?

Researchers believe that pasture-based cattle systems can actually help to mitigate (or counter) the higher methane emissions of the individual cattle by helping to capture atmospheric CO₂ through a complex natural process called carbon sequestration. Carbon sequestration is the natural process of transferring CO₂ from the atmosphere into the soil through crop residues and other organic solids, and into a form that is not immediately re-emitted. Cattle and other ruminants graze and naturally fertilize pasture, stimulating the grasses to grow and produce more leaves—and root mass. As the grass grows it absorbs more atmospheric CO₂ and creates a mass of roots under the ground, effectively storing the CO₂ the plant has absorbed in a much more stable form of carbon within the soil, where it can remain for centuries.

Assumptions about the impact of carbon sequestration are absolutely vital when assessing the total GHG emissions for a particular livestock system. When this carbon storage role is incorporated into the calculations of overall GHG emissions by different cattle systems, many researchers now believe that grassfed beef produces no net GHG emissions—and some argue that well-managed grassfed beef systems may even capture *more* total GHGs than they emit. When U.S. researchers applied conservative estimates for the amount of carbon sequestered for improved cow-calf pastures and for previously unmanaged pastures subjected

to management-intensive grazing for pasture finishing, they found that pasture-raised beef cattle have 15 percent *lower* emissions than their feedlot cousins. The same researchers also found that the emissions from cattle raised on pasture for their entire lives were *lower* than for the beef animals that started life on pasture but were finished in feedlots. The researchers went on to say that “beef produced on unmanaged rangeland may, indeed, be considerably less energy intensive than the systems we modeled, although this would also result in tradeoffs in terms of animal performance and associated emissions.”

So why isn't carbon sequestration included in the many papers that examine GHG emissions from beef production? The problem is that accurately quantifying how much soil carbon sequestration contributes is difficult, and it can vary dramatically from place to place. Nevertheless, leading scientists now acknowledge that pasture land—and we're talking about traditional pastures that aren't totally reliant on artificial fertilizers and pesticides—could have a vital role to play in cutting GHG emissions through capturing and storing atmospheric carbon. The Intergovernmental Panel on Climate Change (IPCC)—the world's leading body for the assessment of climate change—suggests that soil carbon sequestration is the mechanism responsible for most of the mitigation potential. Similarly, the U.S. Department of Energy recognizes that enhancing the natural processes that remove CO₂ from the atmosphere may be the most cost-effective means of potentially reducing atmospheric levels of CO₂, while the Food and Agriculture Organization also states that rebuilding soil integrity is an integral part of reducing the livestock industry's carbon footprint.

As reported in the *AWA Newsletter* (Summer 2012), the National Trust's *What's Your Beef* report examined the GHG emissions on their 1,500 farms in the UK. They found that while the GHG emissions (measured in CO₂ equivalents) of grassfed and more intensive farms were largely comparable, the carbon sequestration contribution of well-managed grass pasture on the less intensive, pasture-based systems reduced net GHG emissions by up to 94 percent—and even resulted in a carbon “net gain” on some farms. This research demonstrates once again that, when you look beyond the methane emissions of individual animals, extensive pasture-based systems have lower *overall* GHG emissions than intensive systems.

FEEDING CATTLE OR FEEDING HUMANS?

We know that livestock, particularly ruminants, can eat a wider range of biomass than humans. But in recent years, intensive livestock production systems have moved away from allowing ruminants to graze vegetation on pasture or range, favoring approaches where animals are confined and fed a grain-based diet. But what proponents of industrial farming systems frequently fail to acknowledge is that this puts intensively raised livestock in direct competition with humans for high-energy crops such as cereals.

Researchers in the UK assessed feeds consumed by livestock in terms of the quantities used and the efficiency

of conversion of various feeds into milk, meat and eggs. They split the feeds into grassland, crops that could be eaten by humans, and crop by-products. They found that when you compare how much edible energy or protein you get out of ruminant, pig, and poultry production systems for the amount of human-edible energy or protein you need to put in, ruminants came out on top. They also found that grass-based beef systems performed much better than cattle systems that rely on feeding grain. The same results were found in U.S. systems by U.S.-based researchers.

It is also important to note that millions of tons of grass and forage crops are consumed in the production of milk and meat from ruminants, using pasture land that is otherwise unsuitable for the production of human foods. There are many areas of the world where the climate is conducive to the production of grass and forage crops, but the limitations of topography or soil type preclude growing crops that can be eaten directly by humans. If these grasses and forage crops are grown and grazed as efficiently as possible, or grown, cut, preserved and then fed to ruminants, it enables us to produce food from land that could not be used in any other way for food production.

A BREATH OF FRESH AIR

When it comes to livestock production, we now know that methane is just one part of a much bigger picture. Proponents of industrial livestock farming fail to acknowledge that the vast manure lagoons associated with intensive livestock production are responsible for significant N₂O emissions—the most potent GHG, with the ability to absorb 310 times more heat per molecule than CO₂. Even more importantly, they ignore the GHG emissions associated with the production and application of the vast

quantities of nitrogen-based fertilizers used to grow the grain that's fed to the millions of intensively farmed cattle across the U.S. As *A Breath of Fresh Air* shows, while grassfed cattle might grow more slowly and produce more methane per pound of meat, this is more than offset by the overall benefits of the entire pasture-based production system—including no environmental costs of producing corn and grain, no pollution from manure lagoons, and the positive impact of carbon sequestration on overall GHG emissions.

We cannot ignore the fact that agriculture is a major contributor to global GHG emissions. But when it comes to assessing our best options for livestock production in the future we cannot allow important factors like carbon sequestration to be ignored simply because they are more difficult to measure—or less likely to make the media headlines—than the amount of methane that a ruminant belches. Optimizing our future meat production means making our meat production and consumption truly sustainable, and grassfed systems can undoubtedly help achieve this. 🐄



This article is based on AWA's new report, A Breath of Fresh Air: The truth about pasture-based livestock production and environmental sustainability, which includes more detail and full scientific references. Download a copy at AnimalWelfareApproved.org.



Mike Suarez

WHAT ARE GREENHOUSE GASES?

Greenhouse gases (GHGs) absorb and hold heat in the earth's atmosphere. These gases allow sunlight to reach the earth's surface; however, as the sunlight warms the earth's surface, the GHGs absorb some of the energy (heat) that is radiated back, trapping this heat in the atmosphere.

The main GHGs that are produced by human activity are carbon dioxide, methane and nitrous oxide. These different GHGs vary in their ability to absorb and hold heat in the atmosphere. The more heat that a particular GHG can absorb, the greater the potential damage it may cause. For example, methane absorbs 25 times more heat per molecule than carbon dioxide, while nitrous oxide absorbs 310 times more heat per molecule than carbon dioxide.

A DURABLE AND HUMANE FUTURE FOR ANIMAL HUSBANDRY

This fall, Green Mountain College, Vermont, stepped unwittingly into the media spotlight as the focus of an international protest that arguably concerns all high-welfare livestock farms and ranches.

BY PROFESSOR STEVEN FESMIRE, GREEN MOUNTAIN COLLEGE

Green Mountain College's oxen, Bill and Lou, plowed the fields of the college farm together for a decade, almost as long as I've plowed the college's academic furrows. As shareholders in our farm's CSA, it's hard for my family to envision the place without this Guernsey team.

Sadly, Lou injured a rear leg twice this summer and eventually became unable to support his own weight. With the college's support, our farm decided to slaughter the team, in keeping with an aim of the college's Farm and Food Project to "close the loop" with our dining services. This community-based decision moved the college unwittingly into the media spotlight as the focus of an international animal rights protest. Due to pressure from protestors directed at local slaughterhouses, the college was unable to carry out its decision. Instead, our veterinary service euthanized the injured ox to end his suffering.

Animal rights abolitionists have sought a photogenic target for a campaign against what they describe as "happy meat," procured from small-scale, high-welfare farms. The economic sustainability of small-scale animal husbandry, as with the large-scale animal "factories" that provide most of the nine billion animals slaughtered annually in the U.S., drives a thorny logic of culling. Abolitionists believe any system that

transforms sentient beings into meat for human consumption is wrong. It doesn't matter whether it's a large-scale industrial operation or an AWA-certified farm. Indeed, the latter may be worse, as small-scale farmers frequently name and care for animals that eventually become food. One cannot both care about and use an animal, they assert.

The abolitionists' logic rules out any third way between veganism (no animal products) and large-scale Concentrated Animal Feeding Operations (CAFOs). On the abolitionist view, "humane slaughter" is an oxymoron. They offer no way forward to a more sustainable, durable, and high-welfare future for small farms engaged in animal agriculture.

Our college is home to students, alumni, faculty, staff, and administrators whose value orientations on animal ethics are as different as Wes Jackson's neo-agrarianism is from Peter Singer's animal liberationism. We explore all

of these perspectives in our core curriculum, a twist on traditional liberal arts education that we call the "environmental liberal arts." Imagine that: a college where almost every undergraduate reads animal rights arguments along with biocentrists and ecocentrists who challenge their views. Far from shying away from complex tensions and divergences, we seek them out and welcome them. We strive to be a community that listens to, responds to, and thoughtfully incorporates different voices.

When the issue of the ox's injury arose, and under the consistent guidance of local veterinarians, I argued that a final decision should wait until fall so we could engage in campus-wide dialogue about the ethical issues involved. The decision was far from a no-brainer. In early October, I moderated a packed "open class" formal campus dialogue. A philosophy colleague laid out arguments against slaughter, including arguments focusing on the relationships formed with



The Guernsey oxen team, Bill and Lou, have been central elements of the Green Mountain College farm since their arrival 10 years ago.

The proposal to slaughter the oxen pair and use their meat in the college dining hall was approved by a majority of the college community, and conformed to the college's model of sustainability.



these particular draft animals.

The forum strongly supported the college farm's decision. Abolitionists may object that the forum was ill-informed, or that democracy can lead to tyrannies of the majority. What abolitionists will not, but should, understand is that the decision to slaughter was in part a plausible expression of an ethical worldview that our own vegan students typically regard as "better, but not best" for animals.

There are many ways to pursue more responsible lives in relation to food, and no diet exhaustively deals with all of the often-incompatible factors inherent in agriculture and eating. That is, there's no such thing as the correct, best, or "natural" diet, determined in advance of the situations that require us to make dietary choices. Nor is there any single right way to reason about dietary choices. The problem we all face isn't the lack of a dietary compass; it's that conventional dietary choices and farming methods do nothing to move us toward a more humane, just, and sustainable food system.

If our treatment of those who are vulnerable and dependent may be taken as a test for our values, then our wretched treatment of disadvantaged humans and animals has been among our greatest moral failures. Once we own up to this, there are unavoidable implications for how we farm and what we choose to eat. I've yet to see a compelling ethical defense of our reliance on large-scale CAFOs. But there are many approaches to farming and many diets that can help to move us forward.

My own family's default diet is vegetarian, and the idea of giving the uninjured ox a living retirement

had an intuitive "pull" for me. But this doesn't mean I should set myself up as a moral czar for whom inclusive deliberation inconveniently gets in the way. A keen ear for other voices isn't simply nice; it's the way we make policies and decisions that can be trusted. In this respect, the decision-making process at our college was markedly more democratic than would be expected for a livestock decision usually left to the farm.

Civil society requires public scrutiny of institutional decisions, but the protestors seem to believe they possess a universal moral compass and that my farm colleagues have thrown theirs overboard. On the contrary, unlike calls for a one-diet-fits-all vegan revolution, our farm represents a culturally realistic, workable option for producing eggs, meat, and dairy products from high-welfare sources. Our farm's day-to-day operations represent an ethos of responsibility for the systemic impact of our behaviors, and it's due to our farm that our students can lift the veil that separates consumers from the source of meat and livestock products.

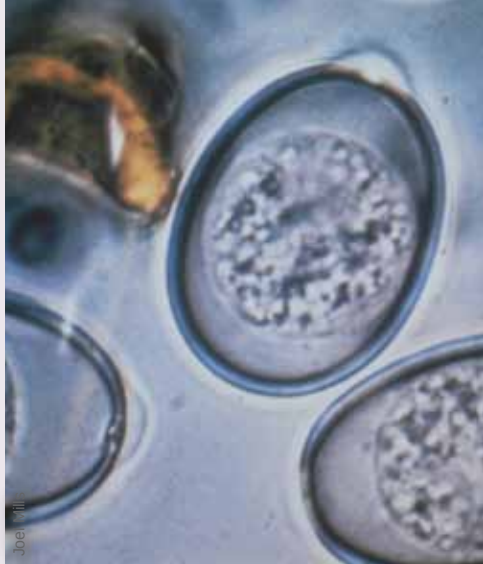
Such a pragmatic move will appear of little worth to dietary purists. Yet Green Mountain College is on its way to becoming the first college or university in the U.S. with a major food service provider to eliminate all animal products that are not humanely raised and slaughtered. To do this

affordably will require reducing overall consumption. We may lack the protestors' sentiment of righteousness, but by welcoming and incorporating diverse ethical perspectives, we're laying tracks for greater human health, environmental sustainability, and dramatically improved lives for other animals. By putting high-welfare farms and ranches on the same level as a typically inhumane CAFO, the protestors are blocking the road to animal welfare reform.

Thoughtful and well-informed people may reasonably disagree on complex ethical matters. On the fate of Bill and Lou, the way forward wasn't crystal clear. Instead of having a "decider" make the call, we opted for an inclusive, democratic process in which members of the college community were invited to take part.

We engaged in reflection on our aims, interests, and background assumptions. We reflected on issues of transparency and accountability in our food system. To paraphrase Churchill, democracy is the worst approach to decision-making, except for all the rest. When abolitionists meet an inclusive and democratic process with heavy-handed tactics, they marginalize themselves and make it difficult to hope realistically for dialogue in the future. 🇺🇸

For more information about Green Mountain College, visit greenmtn.edu.



With its protective wall, coccidia oocysts (left) can survive in the environment under favorable conditions for up to two years. Once ingested by the host animal, the oocyst releases the infective sporozoite stage which invade the intestinal wall and multiply rapidly.

COCCIDIOSIS IN CATTLE, SHEEP AND GOATS

Coccidiosis can cause significant harm to calves, lambs and kids. However, certain management practices will reduce the risk of disease—and help build natural immunity in your flock or herd.

BY ANNA BASSETT, LEAD TECHNICAL ADVISOR

Coccidiosis affects nearly all farmed species and can be particularly devastating in young animals. One of the most common in-feed medications for calves, lambs and kids is for the treatment of coccidiosis. But while treatment may sometimes be necessary, various management options can help to avoid the problem occurring in your herd or flock in the first place.

THE DISEASE

Coccidiosis is caused by a parasitic protozoan that infects and destroys the cells lining the intestines, as well as attacking the liver and other internal organs. Although there are many different types of coccidia, the disease is species-specific and coccidia oocysts that infect cattle will not infect sheep, for example.

Coccidiosis is spread when animals ingest the oocysts that have been passed in the dung of infected animals. Oocysts are protective capsules containing the next life cycle of the parasite and are present in the soil on many farms. Some studies have shown that oocysts can remain infective for up to two years under moderate temperatures and moist conditions.

In many cases the ingestion of oocysts does not cause disease, and if animals are exposed to small numbers of oocysts over a period of weeks they can build up immunity. However, if animals are exposed to large numbers of oocysts before they have immunity—or when they are under stress—they may develop the disease.

SYMPTOMS

Several factors will influence whether an animal is affected by coccidia and how badly they are affected. Typical symptoms include diarrhea, loss of condition, loss of appetite and sometimes death. Death is generally the result of diarrhea, which causes dehydration and loss of electrolytes. Coccidial diarrhea ranges from watery dung to dung containing blood. However, it is worth remembering that even if these more obvious symptoms are not seen, sub-clinical coccidiosis can still cause reduced growth and also reduced immunity, leaving the animal open to secondary infections.

Scouring usually begins 1–2 weeks after infection, so by the time an animal is showing clinical signs of coccidiosis, the damage to the animal's gut has already been done. Some animals that suffer from coccidiosis at a young age may recover, but show stunted growth because the disease has damaged their intestines and reduced their ability to properly digest feed.

DIAGNOSIS

While it is possible to detect oocysts by microscopic examination of feces, it can be misleading to rely solely on an examination of the dung because only certain types of coccidia will cause disease. Additional tests can establish whether pathogenic types of coccidia are present, while post-mortem examinations are often used to diagnose the disease.



Coccidia is one of the most prevalent protozoal infections in North American livestock, including sheep, goats and cattle. Some coccidia may have little or no affect, while other types can cause severe infections, resulting in significant damage to the animal's gut—and sometimes rapid death.

PREVENTION

Coccidiosis is an opportunistic disease that will often develop when other stress factors are present. Preventing coccidiosis is therefore about reducing possible exposure to oocysts and minimizing stress.

Transmission of coccidiosis is fecal-oral and occurs when an animal consumes manure from an infected animal, usually due to contamination of feed or water. Animals can also be exposed to oocysts from soiled pastures, or even by licking a contaminated hair coat. If teats get covered in manure the young animal can easily ingest oocysts when suckling.

Good hygiene is therefore important for any housing or shelter. Making sure that these areas are dry and well-bedded can help reduce risks of exposure in young animals. While coccidia oocysts are extremely resistant to environmental stress—including exposure to disinfectants—they can be killed by heat, direct sunlight and drying. So cleaning housing at high temperature and thorough drying is a recommended strategy, wherever this is practical.

Outdoor areas where animals congregate, such as around feeders or places where animals shelter from bad weather, can also become heavily contaminated with coccidia. Moving the places where feed is offered will therefore help to reduce oocyst build-up.

Animals are far more likely to develop coccidiosis when exposed to oocysts if they are stressed by inadequate nutrition or cold or wet weather, or if they have other infections or parasite problems. Stress from weaning can also make young animals much more susceptible to coccidiosis. Being aware of potential stresses and, wherever possible, taking steps to avoid or minimize them will all help to reduce the risk of the disease.

Natural immunity develops when young animals are

repeatedly exposed to low levels of oocysts, while disease occurs when animals who are not immune are exposed to high numbers of oocysts. Later-born calves, kids and lambs should therefore not be put into pens or pastures previously used by earlier-born animals of the same species. The earlier-born animals may have been exposed to low levels of coccidia and thereby developed immunity, but will still shed oocysts. Putting younger animals in the same areas exposes them to dangerously high levels of oocysts before they have had a chance to develop their own immunity.

Since moisture favors the development of parasites and dryness kills them, practices that reduce the moisture on pasture will decrease parasitic contamination. Try to keep pastures well-drained and ensure that watering troughs are raised well above the ground. Avoid allowing animals to graze on lush grass along the edges of ponds and streams. Overgrazing should also be avoided, otherwise animals may be forced to graze to the roots of plants where they can ingest large numbers of parasites.

TREATMENT

Treatment of the clinical signs of coccidiosis is not very rewarding, as signs of the disease occur during the final stage of parasite cycling in the host, by which time damage has already occurred. The best method of control is therefore prevention.

Nevertheless, coccidiostats may be needed on farms where coccidiosis is known to be a problem and animals are getting sick. Although these drugs inhibit or slow down the development of coccidia, they will not kill it. Talk to your vet about appropriate options for treatment, which could include sulfa drugs or amprolium. Drugs such as these can help reduce the number of oocysts that are shed and therefore the level of contamination in the environment. 🐾

Debris on the Farm

BY TIM HOLMES, LEAD AUDITOR

Most farms have a small collection of equipment, tools, scrap metal and parts. After all, you just never know when you may need a spare part from an old baler or plough. But from an animal welfare standpoint this collection can present a hazard if it's stored in pastures or areas where animals can gain access.

Animals can ingest small pieces of metal such as old barbed wire fencing or roofing nails, which can cause the animals to suffer painful injuries and lead to hardware poisoning—with costly and sometimes fatal results. Sharp points or edges can easily cause bruises or lacerations, while old metal gates or panels that have fallen onto the ground can cause foot and leg injuries. Discarded baler twine can wrap around legs or be ingested, causing blockages. Old boards and building materials often have nails or other fasteners that can cause injury if dumped in pastures. Even old bricks and concrete blocks have the potential to cause injury to animals.

It's for these reasons that the AWA program (standard 5.0.7) requires that "All facilities, equipment, fittings and ranging and foraging areas used by the

animals must be free of debris." If your farm fails this standard you will need to remove the offending materials from your pastures to maintain compliance. We realize that you may be storing these old materials for future recycling or other reasons, so we don't expect you to remove all of this type of material from your farm—just from the areas that animals will access.

Think about creating a single livestock-proof area that is dedicated to storing farm equipment or tools, scrap metal, building waste, and spare or old parts. Not only will this help avoid potential harm to your animals, but it also means you have just one place to look—saving time.

Another added benefit is that the farm will be more aesthetically pleasing to visitors. This is particularly important when you are trying to develop new markets: Consumers and other buyers may have never been to a working farm before, and will often base their opinions of a farm operation on first impressions. A clean, well-ordered farm leaves an impression of confidence in the farmer and their abilities. 🐄



Participating farmers don't have to remove this type of material entirely from their farms—just from areas that animals will have access.



Farm debris can present a potential animal welfare hazard if it is left out in pasture or in areas where your animals will regularly have access.

Advice on Record Keeping

Record Keeping: Worthless or Worthwhile? is one of over 20 Technical Advice Fact Sheets available from AWA.

Record keeping can seem like a daunting task. This technical paper provides farmers and ranchers who are participating in the AWA program with advice on record keeping. It explains how keeping good records can benefit your business, what records are required by the program, what constitutes a "record," and just how easily you can incorporate record keeping into your daily routine.

Download a copy of *Record Keeping: Worthless or Worthwhile?* at AnimalWelfareApproved.org (select "Farmers" tab, then "Technical Support") or call (800) 373-8806.

John Deck of Deck Family Farm, Oregon

Farms across the U.S. and Canada are joining the AWA program. We meet John Deck, who manages the 320-acre Deck Family Farm with his wife, Christine.

WHERE DO YOU FARM?

Deck Family Farm is located 20 miles outside of Eugene, Oregon. We've farmed here for about eight years, moving from California. The farm consists of 320 acres, 250 of which are in pasture. We are AWA-certified for beef cattle (100 head) and are seeking approval for our layers (1,600) and pastured pig operation (200 hogs a year). Our land and cattle are also certified organic, and we use composting, clovers, and management-intensive grazing to build soil fertility.

WHO ARE YOUR CUSTOMERS?

We sell our products mainly through farmers' markets and wholesale to small grocery stores. We enjoy farmers'

markets because it gives us a chance to meet our customers. It really helps us to understand their needs and concerns regarding their food.

HOW DO YOU LIKE BEING PART OF THE AWA PROGRAM?

AWA has been a great resource for us, helping us with marketing, improving our genetics, and directly improving our handling facilities through their Good Husbandry Grant program. We find that customers respond to the AWA logo in much the same way as to the certified organic logo, and it's been invaluable to help distinguish our product and gain credit in the marketplace for our focus on high-welfare handling practices. For more information, visit deckfamilyfarm.com.



John Deck



John Deck

The AWA seal is recognized nationwide and provides visibility and credibility—at no cost to farmers. To learn more about the program, visit AnimalWelfareApproved.org.

The Deck family, shown here on their farm in Eugene (left). The Decks sow drought-resistant Sudan grass to provide good quality forage in the late summer months, when cool season grasses are not producing (right).

Make the Most of Your Farm Profile

Farm Profiles are just one of the many free services offered to farmers and ranchers in the AWA program.

With literally thousands of visitors to our website every year, your Farm Profile is a great way to tell your story to existing and potential customers. A user-friendly regional map on our website helps consumers and local food businesses easily locate their nearest AWA farms or ranches.

We invite every farm or ranch in the AWA program to include a short profile on our website. You are welcome to submit a profile—alternatively, reach out to your AWA Farmer and Market Outreach

Coordinator, who will be happy to help you write one.

If you haven't checked your Profile for a while, and you think it needs updating, please let us know of the changes you would like to make via Info@AnimalWelfareApproved.org

or just call **(800) 373-8806**. You can also include a photograph of your family, or farm and livestock, as well as links to your website or Facebook page, if applicable.

Visit AWA's Farm Profile page at AnimalWelfareApproved.org/farms.



Mike Suarez



Animal Welfare APPROVED newsletter

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“We are proud to offer our customers the opportunity to showcase the AWA logo on their meat and livestock products—and we know the logo helps to add real value.”

—Richard Huettmann, Acre Station
Meat Farm, NC (see page 5).

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Adams Blackland Prairie, TX (Mike Suarez)



AWA certification lets consumers know your animals were sustainably raised on pasture or range with the highest welfare standards. All at no charge for farmers! To learn more visit AnimalWelfareApproved.org or call (800) 373-8806