

EVOLVE OR DIE: IS ORGANIC CERTIFICATION DUE FOR A TUNE UP?

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Organic certification is quickly becoming a measure of quality and conscience within food and non-food sectors. This distinction of organic as “better” comes saturated with it an anticipated promise of quality, purity and environmental stewardship. With expectations this high, can “organic” labeling alone retain a sustainable level of value, or is a continual evolution of the standards necessary to meet ongoing shifts in consumer concern... or stated plainly, can organics continue live to up to the hype?

I believe that “organic” has a lot of room for growth as a well-defined and inclusive label. I intend to examine whether or not the benefits of specific guidelines for animal derived food products are justified by research focusing on ethics and nutrition. Ultimately I intend to examine the complex relationship between organic standards and the perceived expectations of consumers, and how this connection relates to the future of organics. Many people have professed organics to be superior, but without much discussion of what the certification entails, and why certain values have been adopted or not. Additionally, philosophy about health and nutrition, as well as environmental stewardship could be logically adopted by organics. These additions could strengthen the ethical impact of certification, especially with regards to animal derived food products (like eggs, meat, and milk).

If organics are to endure, they need to be reactive to the concerns of consumers. The standard must continue to evolve in order to be sustainable, and nutrition and ethics are the next logical frontiers.

Introduction

There is unquestionably mounting interest in food and how it is grown. As a student and lover of food, it is an exciting time to be in this area of research. Thanks in part to writers like Michael Pollan¹, and best-selling books like “The 100-Mile Diet”² or “Animal, Vegetable, Miracle,”³ consumer’s interest in food production, responsibly-sourced food, and making healthy, ethically-sound choices has been re-energized. With this in-vogue literature, coupled with heightened consumer consciousness, an excellent opportunity has occurred for the organic movement to gain momentum with new enthusiastic consumers. To capitalize on this enthusiasm the organic food industry must meet head on the explicit and implicit concerns raised by popular food writers, and continue to address the areas where the certification

¹ Michael Pollan, The Omnivore's Dilemma: A Natural History of Four Meals (New York: Penguin Group USA, 2006) 450.; Michael Pollan, In Defense of Food: An Eater's Manifesto (New York: Penguin Press, The, 2008) 244.

² Alisa Smith and J. B. MacKinnon, The 100-mile Diet: A Year of Local Eating (Toronto: Vintage Canada, 2008) 266.

³ B. Kingsolver, et al, Animal, Vegetable, Miracle: Our Year of Seasonal Eating Faber, 2007).

standards may come under scrutiny. Continual evolution is important in order for the label to continue to be distinguishable from conventional practices, and maintain the justification for a price premium.

One area within organics that I believe has much room for meaningful improvement is animal-based agriculture. When animal welfare is examined pertaining to organic production, the conclusions reached are more often than not, positive in nature. Many food writers criticize non-organic agriculture and the living conditions of farm animals, but conclude that the practice is too entrenched to adapt very quickly or in a significant way.⁴ Organic agriculture in contrast is commonly viewed as innovative and positively adaptable, and many proposals for improving animal welfare are suggested as organic projects for this reason.

Animal production within the organic movement has definitely improved upon many of the most criticized aspects of *conventional* or factory-farm agricultural systems, especially at a policy level.^{5,6} This paper is not intended to diminish the accomplishments of farmers who have improved the lives of their animals in this way, nor is it meant to imply that all organic farmers (or conventional farmers) merely do the bare minimum required of them by policy when caring for their herds and flocks. Animal welfare can be as much an individual issue as a national policy issue, since each farmer has the power to adjust his or her operation to reflect whichever ethical philosophy they agree with, so long as it is not in violation of any existing rules. Farmers have the ability to provide humane conditions for their animals beyond what is required strictly by policy, guided by their own philosophy or what their operation can accommodate.

This paper will explore naturalness and how it applies to animals and organic practices, beginning with why early organic pioneers set their methods apart from the conventional way of raising animals, and if their initial rationale provides a framework for further improvements. Building upon this, the natural behaviour and diet of animals will be examined. After establishing the past and present state of naturalness of an animal's life in the agricultural system, a conclusion will be drawn outlining potential changes that can be made on the individual or certification level to better the welfare of food animals in the organic system.

“Natural” Terminology

Since this argument is dependent on the perceived “natural” conditions of organic livestock, I will take the time now to clarify what is meant by the term *natural* in the context of this paper. In order to define *natural*, I studied “The Role of The Concept of the Natural

⁴ Paul R. Greenough says in his guest editorial for *The Veterinary Journal* “...I am hugely impressed that members of organic dairy farming groups are willing to comply with the farming concepts that were evaluated in this study” in reference to suggestions for preventing lameness in dairy cattle. He goes on to remark “It is extremely difficult to convince non-organic farmers to adopt these ideas.” Paul R. Greenough, "Animal Welfare in Dairy Farming: Lameness and the Organic Movement," *The Veterinary Journal* (2008): 2,.

⁵ The shortcomings and appalling conditions of conventional factory farming have been talked about by a variety of Authors, including Peter Singer, Temple Grandin, Michael Pollan, Nina Planck, Andrew Kimbrell and many others.

⁶ Organic Production Systems General Principals and Management Standards, trans. Canadian General Standards Board (Canada:, 2006) s.6

(Naturalness) in Organic Farming” by Henk Verhoog et al.⁷ The paper aimed to further define “naturalness” within the organics movement, amidst speculation that the use of the term *natural* within the movement is merely sentimental, rather than useful as a comparison to industrial/chemical practices.⁸

For the purposes of this paper I am adopting the definition established by Verhoog et al. through their interviews with key position holders in organic farming.⁹ Verhoog et al, propose that “more natural” agriculture is “harmoniously integrated into nature” with emphasized consideration on natural biodiversity within a given ecosystem.¹⁰ Conversely, by this definition if something is “unnatural” it is because it interferes with biology and biodiversity as well as the potential negative effects of a practice on the balance of an ecosystem.¹¹ My interpretation of this is that organic farmers are a contributing component within agricultural-ecosystems (agro-ecosystems), and their practices are based on, respectful of, or akin to unspoiled nature as a framework. Natural or naturalness in this context references unspoiled nature as a blueprint, with harmonious interaction and mutual respect between stakeholders within the ecosystem.

Background

When organic pioneers established the principals of what we have come to understand as the modern *organic movement* complete with rules for certification, animals were a key part of their initial dialogue.¹² These farmers developed a way of farming that was divergent from the increasingly popular industrial farming systems, and in seeking a more environmentally conscientious way of farming they sought a better quality of life for animals as well.¹³ Samuel Fromartz in his book “Organic Inc.” describes these early organic farmers in his opening chapter, discussing what he perceives to be the most influential beginnings of the movement in Britain from 1920 through 1940.¹⁴ Fromartz describes this movement as being exemplified by a healthy functioning complete system, characterized by the use of manure, compost, biological activity and natural processes working “in concert” similarly to that of biological processes on a forest floor.¹⁵ Michael Sligh describes organics as “not a U.S./European creation but rather an ongoing adaptation of indigenous knowledge”¹⁶. He goes on to describe the modern movement as “the marriage of values and standards.”¹⁷

⁷ Henk Verhoog, et al, "The Role of the Concept of the Natural (Naturalness) in Organic Farming," Journal of Agricultural and Environmental Ethics 16.1 (2003): 31

⁸ Verhoog, et al, 31

⁹ Verhoog, et al, 35

¹⁰ Verhoog, et al, 35-36

¹¹ Verhoog, et al, 35

¹² Vonne Lund, "Natural living—a precondition for animal welfare in organic farming," Livestock Production Science 100.2-3 (2006): 71,.

¹³ Lund, 71

¹⁴ S. Fromartz, Organic, Inc: Natural Foods and how They Grew Harcourt, (2007) 7.

¹⁵ Fromartz, 7-11

¹⁶ M. Sligh, "Organics at the Crossroad: The Past and Future of the Organic Movement," (USA: The Foundation for Deep Ecology, 2002) 273.

¹⁷ M. Sligh,, 273.

Organic agriculture has purposely tooled-down to incorporate farming techniques that pre-date chemical/industrial agriculture. Early movements even began as dynamic relationships with nature, before industrialization had taken place. From these, and other early descriptions, it is clear that with the farmer's emphasis on the natural cycle of death and decay, fertilization and regeneration, animals are an implicit and integral component as their waste provides nutrient-rich fertilizer. Nature provides a model that is emulated by these early organic philosophies, and it is perceived by organic farmers to be a good prototype for human activity to be based upon, and to cooperate with.¹⁸ I think it is fair to say, that the current organic movement still respects this ideal and strives for connectivity to nature and natural processes when establishing acceptable farming methods. The current certification standards surrounding animal care and living conditions reflect this. Section 6.8 reads: "The operator of an organic livestock operation shall establish and maintain animal living conditions that accommodate the health and natural behaviour of all animals..." which goes on to stipulate a number of specific conditions with comfort and wellbeing at their forefront.¹⁹

Organic farming is a venture that necessitates respect for ecological processes and environmental balance.²⁰ Naturalness and stewardship are integral components to the history of organic agriculture, and the perceived minimal interference with natural processes is a component of modern organics that consumers identify with.²¹

Animal producers need to consider criticism that many animal production methods currently used by organic farmers may not adhere to the same level of *naturalism* or *biological suitability* that organic plant-based agriculture does. This paper will argue that there is a potential benefit to be gained if this approach is changed, especially from the perspective of animal welfare. Since ecological harmony is a mainstay within the organics movement, practices within organic agriculture should be based on an animal's natural, genetic relationship with its environment, rather than what is most economically efficient.

Rationalization for Moving Forward

There is a suggested link between ethical values and the early organic movement.²² The ethical framework that the philosophy of the organic movement would logically encompass is ecocentricism, which assigns direct moral status to ecosystems and their relevant features.²³ Ecocentric theories focus ethical concern on system integrity, rather than one single part, and in this way, directly correlates with the ideals of organics as ecologically sustainable and harmonious with nature.²⁴ Michael Pollan describes this way of thinking as contrary to reductionist science, which strives to break these systems into parts in order to achieve the desired manipulation.²⁵ Plainly put, organics is *big-picture* agriculture.

¹⁸ Lund, 73

¹⁹ Organic Production Systems General Principals and Management Standards s.6.8

²⁰ Sligh, 277

²¹ Verhoog, et al, 37-38

²² Lund, 75

²³ Lund, 75

²⁴ Lund, 75

²⁵ Pollan, 150

If organic agriculture is seen as the alternative to chemical and industrial agriculture and strives to emulate nature, then good treatment of animals and a respect for their position within the agro-ecosystem is paramount within these ideals. The ecological system is referenced by Nina Planck in her book “Real Food” where she suggests the following rule of thumb for selecting food: “The higher up the food chain, the more important ecological methods are.”²⁶ If this is the rule, organic practices are well positioned to succeed. Animal husbandry is one of the known philosophies associated with organic agriculture, and this correlation between animal care and ecological integrity becomes apparent when examining the link between organic production and ecocentricism. If the healthy and efficient functioning of a system is valuable, then healthy happy animals would be a successful system indicator.

The organic animal welfare concept, as described by Vonne Lund, is most closely related to an approach described as “the natural living approach.”²⁷ Within this approach determining whether or not the animal is living a good life is directly correlated to its ability to express its natural behaviours and desires, determined by its genetics.²⁸ An example of this genetic naturalness would be domestic pigs and their instinct to forage and root, live in a social group, and to realize their desire to build a nest to shelter piglets.²⁹ The other two approaches, described by Lund associated with animal welfare are: “The affected states approach”—which emphasizes animal feelings, such as pain or pleasure; and “The biological functioning approach”—which focuses on the animal’s ability to live and cope in its environment.³⁰ Throughout the remainder of the paper I will return to these concepts, as I believe that through careful management, all three approaches can be satisfied with a strengthened focus on “natural living.”

The Natural Lives for Food Animals

There are two criteria for assessing the naturalness of the lives of animals that are currently being used for food production. The first of these criteria is the animals ability to satisfy their biological needs and instinctual behaviour within their living conditions/environment. The second criterion is the appropriateness of an animal’s diet based on its physiological needs or historical wild foraging. As previously discussed, the organics movement is closely correlated with a respect for natural processes and ecological appropriateness. For this reason, I believe that increased awareness of the natural diet and living conditions of animals will be valuable for anyone trying to adhere to biologically harmonious principles in their agricultural practices, whether all of these issues become part of formal certification or not.

The most basic animal moods are for the most part identifiable. Interpretation is easy for most people as it is relatively simple to determine whether an animal likes or dislikes something, if it is happy or sad, or if it is in pain. Behaviour however is more complex and can be shaped by a variety of criteria. If you raise animals, chances are you know that certain breeds or types of animals have unique traits or qualities that are absent in others of their

²⁶ Nina Planck, Real Food: What To Eat And Why (New York: Bloomsbury USA, 2006), 153.

²⁷ Lund, 73

²⁸ Lund, 73

²⁹ P. Singer and J. Mason, The Ethics of We Eat: Why Our Food Choices Matter Holtzbrinck, 2006) 92-97.

³⁰ Lund, 73

kind.³¹ There are two main factors that will contribute to the behaviour of the animals that livestock producers typically raise; the first is the genetic makeup of that animal, which is determined by its species or variety, and the second is the life experience of the animal itself, especially when it was young.³² The physiology of the animal itself can also give cues as to how it is likely to react.³³ Slender animals, for example, with little body fat are often highly reactive and described as “flighty” whereas stocky, heavy animals that grow to be very large are usually animals less inclined to panic.³⁴

Cows—Environment

Cows are in the heavy-set, stocky class. Peter Singer and Jim Mason, in their book “The Ethics of What We Eat” discuss the emotional lives of cows, and say that it is a misconception that they are placid or that they lack much of an “emotional life.”³⁵ Singer and Mason point out that research into the social lives of cows shows that if permitted, they can form close friendships with up to four other cows, with whom they will spend most of their time.³⁶ As well as friendship, cows can develop a dislike for another cow and hold a grudge against them, sometimes as long as a few years.³⁷ Further exploration into the intellectual and emotional lives of cows has been done, using experiments to prove cognition. Singer and Mason describe this in the following passage:

Most remarkably still, cows can get excited when they solve intellectual challenges. Donald Broom, professor of animal welfare at Cambridge University, sets cows a problem—to work out how to open a door to get some food—while measuring their brainwave patterns. When the cows solved the problem, Broom reported, “their brainwaves showed their excitement; their heartbeat went up and some even jumped into the air. We call it their eureka moment.”³⁸

If taken into consideration that cows are intelligent emotional beings that derive pleasure from exploration and problem solving, as well as social interactions and bonding with other cattle, a natural approach to their rearing should include unconfined access to other cattle, and potentially cognitive stimuli. Organic agriculture, which already has a number of certification criteria surrounding aspects like outdoor access and a discouraging of tie-stalls for cows, would be an ideal context in which to provide for their emotional wellbeing. Allowing cows frequent access to their *friends* or merely just permitting them to mingle in a group enclosure could be beneficial to their emotional welfare, without drastic changes to the operation.

Emotional needs aside, there are other aspects of cow wellbeing that can be easily addressed within organics, without uprooting and changing the dynamics of the system. Dairy cattle for

³¹ Temple Grandin and Mark Deesing, Humane Livestock Handling: Understanding Livestock Behavior and Building Facilities For Healthier Animals (USA: Storey Publishing, 2008) 16.

³² Grandin and Deesing, 16

³³ Grandin and Deesing, 16

³⁴ Grandin and Deesing, 16

³⁵ Singer and Mason, 56

³⁶ Singer and Mason, 56

³⁷ Singer and Mason, 56

³⁸ Singer and Mason, 56

example, are often discussed in animal welfare literature, sometimes referring to their inclination towards lameness, which is a very painful disorder.³⁹ Interestingly, there is research to support that there are fewer incidences of lameness within organic dairy operations.⁴⁰ Investigations into why this may be are inconclusive, but there is evidence to suggest stress may be a factor. Cows can be stressed by a lot of things, including pain, the environment that they live in, and the way that they are cared for.⁴¹ A guest editorial by Paul R. Greenough in The Veterinary Journal states that “Cumulative stress [in cows] causes the release of chemical agents which adversely affect the tissues of the feet. These same chemical agents also affect the reproductive and immune systems.”⁴² Though he makes it clear that these processes of stress and chemical reactions are hardly understood, the point raised is an important one for organic producers wishing to minimize risks of infection in their animals. Minimizing this risk of infection in-turn diminishes the need for antibiotics, which would prevent the products from that animal being sold under the organic label.

With the likelihood that stress has a negative effect on the overall health of the animal and its ability to be free of pain, the issue of emotional stress on dairy cattle is an urgent one. Because cows are mammals, they must first be made pregnant and give birth to a calf before they can give milk.⁴³ The mother cow will have her milk production decline sometime after six-months, and will likely be impregnated again each year.⁴⁴ In conventional agriculture, it is typical for the calf to be taken from its mother within a few hours of birth.⁴⁵ Understanding that cows have a great capacity for emotion and intelligence, it is imaginable then what this action might have on the emotional wellbeing of mother cows. Temple Grandin is an autistic scholar whose work bridges the gap between farmers and farm animals by using her unique sensory experiences to understand the way animals experience certain spaces and events. She is quoted in “The Ethics of What We Eat” describing a mother cow that has been recently deprived of her baby, observing that the cow was in mourning, constantly searching for her baby, bellowing and deeply sad.⁴⁶ The RSPCA in Britain reported cows to be observed as affected by the loss of their calf for a number of weeks:

When the calf was first removed, she was in acute grief... She would only move when forced to do so. Even after six weeks the mother would gaze at the pen where she last saw her calf and sometimes wait momentarily outside the pen.⁴⁷

This is an emotional state that most human mothers could likely relate to, and though the dairy industry is in the business of selling milk, steps could be taken to minimize the stress caused by depriving mother cows of their babies so immediately. In nature calves would suckle and remain with their mothers for about six months.⁴⁸ Clearly this amount of nursing would deprive a farmer of the ability to capitalize on peak milk production time. For this

³⁹ Greenough, 1

⁴⁰ Greenough, 2

⁴¹ Greenough, 2

⁴² Greenough, 1

⁴³ Singer and Mason, 57

⁴⁴ Singer and Mason, 57

⁴⁵ Singer and Mason, 57

⁴⁶ Singer and Mason, 58

⁴⁷ Singer and Mason, 58

⁴⁸ Singer and Mason, 57

reason, it may be worthwhile to explore alternatives for calf weaning in order to minimize stress on mother and baby without costing the producer valuable milk.

One alternative for weaning cows quickly from their mothers without adding stress to either cow or calf is the use of “fence line weaning” which separates mothers from calves outdoors or in the enclosure with a fence that allows the cows to continue to be social without nursing.⁴⁹ Another alternative is plastic clip weaning, which prevents nursing via a plastic clip inserted in the nostrils of the calf; this method allows the calf to remain with its mother for 4-14 days, after which total separation can take place with much less stress.⁵⁰ For cows, the emphasis is on social relationships between mother and calf rather than nursing, so these methods should not disrupt any milking schedules. Employing these techniques for weaning a calf is a favorable compromise for organic operations seeking to gather as much milk as possible, but still respect and accommodate the natural, socially-rewarding weaning process for cows.

Cows—Diet

A natural diet for cattle would logically incorporate fodder and forage into the feed as much as possible, recognizing that cows are ruminants and designed at a genetic level to digest grass.⁵¹ What ruminants can do with a diet of grass is exceptional, as far as their capacity for growth and fat-mass is concerned. The animals take virtually indigestible grasses into their bodies, convert it to hundreds of pounds of lean muscle and then humans may eat that flesh as highly concentrated protein.⁵² This differs from the grain diet in two ways, first being that grass is for the most part free, and second because the meat from cows raised on grass is often alleged to be superior. Grass-fed beef has achieved “fad” status in foodie circles, but there are many sound reasons to not feed cattle solely on grains.

One issue is that cattle can’t adequately digest grains and the added acid in their gut because of the grain diet can increase the risk of *E. coli* making its way into the consumer market.⁵³ The shift in acidity when eating corn and soy may also create gas in some cases, causing a condition called “feedlot bloat” which can result in suffocation.⁵⁴ Grass-fed beef on the contrary has higher concentrations of Omega-3 fats, vitamin E and beta-carotene, and is much leaner.⁵⁵ Michael Pollan describes it as making “superb ecological sense: it is a solar-powered food chain that produces food by transforming sunlight into protein.”⁵⁶ Pollan also comments on the closed loop that exists in the relationship between a balance of cow to pasture—with grass going in one end, manure coming out the other to fertilize and make new grass that becomes food for the cows thereby completing the cycle.⁵⁷ It may not be reasonable for all farmers to raise their cows solely on grass and roughage, but if the cow’s natural diet can be referenced by pasture access or cut fodder as food, there may be benefits

⁴⁹ Grandin and Deesing, 23

⁵⁰ Grandin and Deesing, 24

⁵¹ Singer and Mason, 61

⁵² Planck, 90

⁵³ Planck, 93

⁵⁴ Singer and Mason, 61

⁵⁵ Planck, 92-93

⁵⁶ Pollan, 70

⁵⁷ Pollan, 70-71

to both cows and their meat. Grass as food for a naturally ruminant animal also adheres closely to the guiding philosophies within ecocentricism, which respects the whole system, a concept that is tightly connected to organics.

Pigs

Pigs are another animal commonly used in organic food production. Temple Grandin describes pigs, especially those that are “hybrids” designed through breeding to grow rapidly, as more excitable animals, compared to the heavy-set cow.⁵⁸ The hybrid pigs are more susceptible to weakness in their muscles, due to the inability for the heart to adequately supply their large body with blood as they grow.⁵⁹ The pigs have been selectively bred for these traits. Grandin reminds farmers that since the pigs were selected to be large, rather than fit or hardy, that additional patience may be required when dealing with their need to lie down and rest during physical activities, as a reluctance to let them recover may cause unnecessary stress.⁶⁰

When focusing on naturalness there are several other conditions pigs require for emotional wellbeing besides patience. Michael Pollan calls natural wellbeing an opportunity for pigs to express their “essential pigness.”⁶¹ Pigs are known to be highly intelligent animals. According to Professor Stanley Curtis of the Department of Animal Sciences at the University of Illinois, he suggests that sheep herding tactics exemplified by the movie *Babe* would be a pushover for the pigs he has researched, some of which learned to operate joystick-controlled videogames.⁶² This evidence of cognitive capacity further punctuates the cruelty of sow crates used in some pig production operations, which allow a likely intellectually under-stimulated mother pig only enough room to stand up, or lay down, facing in one direction.⁶³ The rationale behind this restriction of movement is that if the mother sow were unconfined, she may lie down and smother a piglet or two.⁶⁴

The behaviour of pigs and diet are closely related, as much of their natural behaviour and characteristics are derived from their natural inclination to forage for food. Pigs are both grazing animals and rooting animals that in natural/wild conditions will spend most of their time grazing (31 percent), rooting (21 percent), and adjusting or “working over” their living area (23 percent.)⁶⁵ They are naturally very active animals. Pigs with outdoor access to rooting and natural environments will also have less soreness or lameness in their feet from hard floors.⁶⁶ According to Singer and Mason’s research “there are two key elements for sows... the first is to live in a social group, and the second... is to build a nest.”⁶⁷ A sow’s desire to build a nest is a very strong biological urge. Sows nests look like large 5-6 foot bird’s nests on the ground, assembled from sticks, leaves and twigs collected around the

⁵⁸ Grandin and Deesing, 17

⁵⁹ Grandin and Deesing, 17

⁶⁰ Grandin and Deesing, 18

⁶¹ Pollan, 320

⁶² Singer and Mason, 44-45

⁶³ Singer and Mason, 49

⁶⁴ Singer and Mason, 46

⁶⁵ Singer and Mason, 95-96

⁶⁶ Singer and Mason, 96

⁶⁷ Singer and Mason, 96

bush.⁶⁸ Having the space, materials and freedom necessary for sows to build nests is actually a requirement of the Animal Welfare Institute (AWI) standards for pig production, as it is seen as integral to the animals' welfare.⁶⁹

Pigs intended for market that are allowed outside can satisfy their own natural desires and also have a capacity for useful farm work. Their snouts are perfect for rooting, and they can clear bush or when searching for corn, can aerate straw and manure, which aids in the creation of compost.⁷⁰ Michael Pollan describes his own experience with pigs being used as aerators in "An Omnivores Dilemma" as the animals being "buried clear to their butts in composting manure, a bobbing sea of wriggling hams and corkscrew tails, these were the happiest pigs I'd ever seen."⁷¹ The ideal organic movement would be one that strives to incorporate animals into the farm structure not only as sources of revenue, but also as contributing members to the whole system, if the animals themselves are happier for being involved. Rather than putting pigs on concrete, why not put them on land you'd like to have dug up anyways?⁷²

Chickens

The conditions that chickens require are not as complex or as ecocentric as those described for pigs and cows. Though birds do have a genetic inclination to certain behaviours, their needs can be met with relative simplicity. It goes without saying that a bird in a small cage is not a happy bird, which is an issue that organic certification has already addressed.⁷³ Nina Planck who is a longtime chicken owner describes a happy chicken as being:

...Up with the dawn [laying] an egg in the late morning, and when the farmer opens the little chicken house door, she heads outside to hunt for insects in the grass. The occasional dust bath— rolling around in dry soil, fluffing the dust under her feathers—keeps her free of pests. At dusk, the hen goes inside on her own, safe from predators to her dinner of grain and oyster shell.⁷⁴

This description touches on almost all of the natural aspects of raising chickens in accordance with their biological needs and desires. The desire to nest, perch, dust bathe, and access the outdoors, covers most of the basic biological needs of the birds.

Outdoor access for hens is an issue that is marked by controversy, since there is a risk of infection from wild birds or waterfowl.^{75,76} The organic certification standards currently say that birds may be deprived of outdoor access if there is risk of predation, illness or weather.⁷⁷ Though this is a real concern, the Organic Valley co-operative of small egg producers near the Mississippi River put a stipulation in its bird raising policy to include

⁶⁸ Singer and Mason, 92

⁶⁹ Singer and Mason, 93

⁷⁰ Planck, 90

⁷¹ Pollan, 218

⁷² Planck, 118

⁷³ Organic Production Systems General Principals and Management Standards s.6.8.3a.

⁷⁴ Planck, 96

⁷⁵ Singer and Mason, 104-105

⁷⁶ Lund, 78

⁷⁷ Organic Production Systems General Principals and Management Standards s.6.8.3b.

outdoor access, and producers who complied have had nothing but positive reactions.⁷⁸ Many of these producers feel that the outdoor access has enhanced the health of the birds as well as improved their production, without any outbreaks of major disease.⁷⁹ The welfare concerns raised by the risk of infection are great as well, since parasite or viral infection must be viewed as inadequate welfare for animals.⁸⁰ If birds are outside and disease and parasite free, then chances are they have access to the other components of a natural life, such as dust and insects.

The natural diets of chickens are not being completely satisfied by their vegetarian feeding regimens. Though vegetarian feed is an important indicator that the birds have not been fed other birds or animal bi-products, the natural diet of chickens is an omnivore diet that includes bugs, grass and when available, sour milk and grain.⁸¹ The addition of bugs, grubs and worms into the birds diet provides complete proteins, which lessens the need for added protein in feed (such as cattle bone meal, animal fat, or other poultry parts) and diminishes the risk of having to give antibiotics to the birds.⁸²

The final issue I will discuss involving chickens is debeaking. Though it is stated in the organic certification literature that debeaking is to be avoided if possible,⁸³ large, crowded flocks and the aggression level of some breeds, make it less likely that the procedure can be avoided. Ideally steps would be taken by producers to ensure that flock sizes are manageable and that birds are afforded the necessary space to retain their beaks (especially since beaks are vital for natural animal behaviour such as pecking and eating.)⁸⁴ If organic agriculture is philosophically and structurally aligned with whole ecosystems and is concerned with respect for natural order, then perhaps the inability for a large flock of birds to get along with their beaks intact is an indicator that the scale is too large to be considered natural or organic in principal. Rather than physically and painfully modifying the animals to function within a system that accommodates over-crowding or aggressive breeds, perhaps it is the methods that should be changed, rather than the birds. By being put in circumstances outside of their natural comfort level the indication that this is troublesome for the birds is ignored, and their beaks are altered to compensate for the poor environment.

Conclusions

Ecocentricism focuses on value throughout the entire functioning ecosystem and all the components that contribute to healthy functioning. As put forward by the descriptions and suggestions of each class of common farm animal within the agro-ecosystem, there is a degree of naturalness that has yet to be achieved by many farmers, even within the organic system. The organic system as a whole has yet to fully utilize livestock as members of a working ecosystem by using their natural capacity to contribute. Lund suggests this interconnectedness as a type of welfare, one that would benefit both the animal and the

⁷⁸ Singer and Mason, 107-108

⁷⁹ Singer and Mason, 108

⁸⁰ Lund, 78

⁸¹ Planck, 117

⁸² Planck, 96-97

⁸³ Organic Production Systems General Principals and Management Standards s.6.2.2a.

⁸⁴ Singer and Mason, 108

producer.⁸⁵ An example of this interconnectedness is using a pig's desire to root in order to till fields or prepare grounds for forestry.⁸⁶ Chickens as well could be used to consume sour milk, or cows to stimulate the production of pasture with manure and grazing. There appears to be a number of useful applications for animals on farms besides becoming food.

The naturalness (or "The natural living approach"⁸⁷) towards the lives of farm animals has a profound effect on the other considerations associated with animal welfare, as mentioned by Lund and referenced at the beginning of this paper. The other two approaches; "The affected states approach" emphasizing animal feelings, and "The biological functioning approach" focusing on the animal's ability to cope in its environment⁸⁸ are for the most part satisfied if responsible, respectful biologically appropriate living conditions are adapted for animals.

For example, if chickens are allowed to live a natural life, with outdoor access, dust bathing, an omnivore diet, perching and roosting, their entire body intact, and living in a reasonably-sized flock, they will likely not be stressed out, and will possibly derive pleasure from their environment. This would satisfy *the affected states approach*. If the birds are happy and not stressed, and have access to appropriate food and are not crowded, their biological functioning is also likely to be uncompromised, which would satisfy *the biological functioning approach*. Therefore, though at this point it is just an assumption, I would support the idea that improvements made to animal welfare conditions with naturalness (*the natural living approach*) as the focus, can yield associated results that are also favorable to animal comfort and wellbeing.

The specific details presented here pertaining to what is natural within the farm environment for each is not a complete list nor a painstakingly thorough study into what each of these types of animals may consider to be a truly natural life. The natural aspects touched upon here were selected for two reasons; first their feasibility and potential for application within the organic movement, and secondly for their appropriateness within the organic context, since many of the specific conditions are easily adaptable out of existing organic standards. It is my belief that if organic producers adopted some of the elements consistent with the natural lives of food animals not only would the welfare of the animals be increased, but beneficial marketing could result from further association between organic practices and ethical animal treatment. As well, the ability to make these changes highlights a capacity for evolution of standards and care within the organic movement, which could be useful in further differentiating organic practices from conventional/factory farm methods, even on larger-scale organic operations.

Clearly there is much more conclusive research to be done in the future to prove this hypothesis. From the perspective of a literature review however, it certainly provides food for thought. From what I have read to date, it seems that the results of such a study would be favorable—and in the meantime shifts by producers or certification standards within the organic movement could yield significant gains in animal wellbeing, without drastic

⁸⁵ Lund, 79

⁸⁶ Lund, 80

⁸⁷ Lund, 73

⁸⁸ Lund, 73

alteration to the way organic farmers already operate and while respecting the core values of the movement.

Ideally all farmers, regardless of their agricultural classification, will one day take into account issues of welfare, biological harmony and naturalness and shape their operations to reflect those values. Yet until all agriculture is ready to change their practices to be more environmentally and animal-production friendly, there is potential for organic farmers to emerge as leaders, and I urge those of you who are able to seize the opportunity to do so.

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