



Members

Beyond Pesticides
Center for Food Safety
Consumer Reports
Equal Exchange
Food & Water Watch
Maine Organic Farmers and Gardeners Association
Midwest Organic and Sustainable Education Services
National Co+op Grocers
Northeast Organic Dairy Producers Alliance
Northeast Organic Farming Association - Interstate Council
Ohio Ecological Food and Farm Association
Organic Seed Alliance
PCC Community Markets
Rural Advancement Foundation International -USA

December 2, 2019

Dr. Paul Lewis, Ph.D.
Director Standards Division
National Organic Program
USDA-AMS-NOP
Room 2646 – So., Ag Stop 0268
1400 Independence Avenue SW
Washington, DC 20250-0268

Re: Origin of Livestock Proposed Rule;
Docket Number AMS-NOP-11-0009-1572

Submitted electronically

Dear Dr. Lewis,

NOC strongly supports the proposed rule on Origin of Livestock and urges the USDA National Organic Program to move expeditiously to promulgation of a final rule.

The National Organic Coalition (NOC) is a national alliance of organizations working to provide a "Washington voice" for farmers, ranchers, conservationists, consumers, and industry members involved in organic agriculture. NOC seeks to advance organic food and agriculture and ensure a united voice for organic integrity, which means strong, enforceable, and continuously improved standards to maximize the multiple health, environmental, and economic benefits that organic agriculture provides. The coalition works to assure that policies are fair, equitable, and encourage diversity of participation and access.

The delay in issuing a final rule has resulted in a great deal of economic harm for organic dairy farmers and put at risk the integrity of the organic seal. The organic dairy farmers who have been managing their cows as organic from the last third of gestation suffered more harm than those who took advantage of the loophole in the regulations to continuously convert conventional cows and heifers into their operations to save expense and as a way to ramp up production quickly or those who have been cycling calves in and out of organic management. The oversupply conditions in the organic dairy sector, and therefore the low pay prices to organic dairy farmers, have been greatly exacerbated by the continued existence of this loophole.



Organic Producers Have Been Harmed by Delays in Implementation of Origin of Livestock Rules

An operation that chooses to raise animals conventionally during the first year of life and to make use of loopholes to then transition these animals into organic management for one year before milking them has a significant economic advantage compared to an operation that abides by the organic regulations and raises all animals organically from the last third of gestation.

Several analyses have looked at the difference in the cost of raising dairy replacement heifers under organic management versus conventional management during the first year of life. An analysis that focused on the cost of feed inputs, conducted by Greg Brickner, staff veterinarian for CROPP Cooperative/Organic Valley, determined that organic management costs \$623 more per heifer per year (see Appendix A). NOC member organization, Northeast Organic Farming Association of Vermont (NOFA-VT), spoke to three operations in Vermont and from the information they gleaned from those producers, they have estimated that the cost difference for one year of organic management during the first year of life, compared to conventional management, is somewhere between \$800 to \$1,300 higher (see Appendix B).

A third analysis completed in November of 2019 by Fay Benson, an extension educator for Cornell Cooperative Extension and specialist in organic dairy for the Cornell Organic Dairy program, determined that the cost is up to \$2,577.93 higher per animal for organic management during the first year of life (see Appendix C). The approach taken in the Cornell analysis was more comprehensive, because in addition to the higher feed costs, the analysis considered additional factors such as labor, buildings, machinery, health costs, trucking, manure handling, and culling. While the Cornell analysis noted that feed costs account for more than 50% of the cost of raising a dairy replacement animal, the first year of life is also labor intensive because calves are handled individually. While conventional animals are given growth stimulants and synthetic materials during the first year of life to control health issues, organic dairy animals are fed milk or milk replacer for much longer (an average of 111 days in this analysis, compared to 50 days with conventional management) to give calves better vitality to protect them from calf health issues. The value of the organic milk being fed to calves that are managed organically is more than double the value of conventional milk. All of these factors contribute to the higher cost of organic management during the first year of life, in addition to higher feed costs.

At an operation level, the higher cost to raise animals organically puts operations that are abiding by the last third of gestation regulation at a significant economic disadvantage compared to those operations making use of the continuous transition loophole or those who are cycling animals in and out of organic management.

As the figures described above demonstrate, the cost of raising replacement animals in the first year of life is highly sensitive to changes in feed costs, as well as geographic and operation-level variations in costs of production.



While producers who follow the last third of gestation rule have been harmed economically by the higher costs of raising replacement animals organically, they have also been harmed by low pay prices. Because loopholes have allowed operations to quickly increase supply by continuously transitioning conventional animals into organic operations, the oversupply conditions in the organic dairy sector since 2016 have been exacerbated by the allowance of this loophole. Between June 2016 and October 2018, milk prices decreased by 25 percent, or almost \$8 per hundred pounds of milk. In addition, growth in the organic dairy sector has slowed from a period of high single digit or even low double-digit growth from 2010 to 2016 to growth of less than 1% for the second year in a row. As processors have been faced with an oversupply of milk, they have implemented production quotas, volume restrictions, contract cancelations, and have sold excess milk on the conventional market. For some organic dairy producers, this three-year slump in pay prices has been catastrophic. Jacki Perkins, organic dairy and livestock specialist at the Maine Organic Farmers and Gardeners Association, a NOC member organization, has been working closely with Maine farmers throughout the crisis and says, “Organic dairy farmers are barely breaking even.” As farmers struggle to stay afloat, “there is no room for infrastructure improvements, large herd health emergencies, or feed shortages.” Many farmers have had to make the difficult decision to stop milking. For these reasons, implementing the Origin of Livestock rule now and without further delays is imperative for the future survival of many organic dairies in the United States.

Finally, in a well-managed organic dairy operation, where cows are raised as organic from the last third of gestation, high fertility rates and low cull rates are the norm. As a result, these operations often have excess organic heifers to sell, unless they are expanding their operations. Without enforcement of provisions that require that all replacement animals to be raised organically from the last third of gestation (with the exception of the one-time transition allowance), the market for selling organic replacement animals has not been well developed. This results in a loss of income for producers selling organic replacement animals, since there is currently no market premium and some organic heifers must, as a result, be sold on the conventional market. Closing the loophole would allow organic operations raising replacement animals to recoup their investments through the establishment of a market for the sale of organic replacement animals to other dairy operations seeking to expand their production.

The delay in implementing the origin of livestock rules is unconscionable. In the absence of a final rule, operations following the rules in good faith have been gravely undercut operations that raise animals conventionally up until one-year before milking and are allowed by their certifiers and USDA to transition these conventional animals into organic herds on a continuous basis.

Lack of Enforcement Puts the Integrity of the Organic Seal at Risk

The economic success of the organic dairy industry and of organic more broadly is predicated on consumer trust in the label, which is tied to consistent third-party certification. The lack of



consistency and enforcement for clear rules on how livestock are transitioned into organic production has grave consequences for trust in the organic label. Implementation of this regulation is needed to assure trust in the organic seal going forward.

As NOC member organizations PCC Community Markets and Northeast Organic Dairy Producers Alliance (NODPA) have noted, consumers of organic dairy expect animals to be raised organically without antibiotics or the use of other prohibited substances. As NODPA notes, because the majority of organic dairies rely on selling their organic milk on the wholesale market, pay price is directly tied to consumer trust in organic dairy and in the organic seal overall.

Price Elasticity of Demand for Organic Milk

While the overwhelming majority of the comments to the 2015 proposed rule were strongly supportive, we would like to address an economic analysis offered by one commenter that we believe needs to be challenged.

Specifically, one commenter in 2015 made arguments in opposition to the proposed rule citing a price elasticity of demand figure for organic milk that does not comport with peer-reviewed research on the topic. The arguments made by the commenter suggested that if the proposed rule were adopted:

- retail organic milk prices would increase by 3.7 cents to 6.0 cents per half gallon, and that because demand for organic milk is price elastic, consumer response to price increases would be dramatic (although the commenter declined to specify the decline in demand);¹
- Consumer demand for organic milk would grow faster than the supply; and,
- The availability of organic replacement heifers would be inadequate to meet the demand for such replacements.

In a 2019 unpublished analysis by New York University economist Dimitri and food systems policy analyst Zoebisch, it was determined that the commenter's arguments:

- Are based on assumptions that are not supported by the literature or the experience of the organic sector.
- Used price elasticities greater than those estimated in peer-reviewed literature.²

¹ "Price elasticity of demand indicates how consumer purchases (quantity demanded) will respond to a one percent change in price. If demand is price elastic, then the quantity demanded will decline by more than 1 percent in response to a 1 percent price increase. If demand is price inelastic, then the quantity demanded will decline by less than 1 percent in response to a 1 percent price increase. Economists estimate price elasticities as part of the process of estimating demand, which requires data on consumer purchases (quantities), prices, income, and other variables. Few researchers have estimated the price elasticity of demand for organic milk; one factor that makes the estimation difficult is the need for a comprehensive dataset. Those who do estimate demand or consumer behavior in the organic market use the Nielsen Homescan data or other supermarket scanner data; the advantage of the Homescan data is that consumer purchases (price and quantity) of all foods are included for a period of time. In addition, household demographic information is included in the Homescan dataset." Dimitri and Zoebisch (2019)



- Assumed a continued increase in demand for organic milk, refuted by more recent data that shows a leveling off in sales of organic milk between 2015 and 2016.

The Dimitri-Zoebisch analysis concludes that:

- The best estimates of price elasticity of demand for organic milk are lower than the range used by the commenter;
- The literature indicates price increases are unlikely to be passed on entirely to consumers;
- USDA fluid milk sales data indicates that organic milk demand has leveled off;
- The ARMS data suggests that the need for purchased replacement animals is significantly lower than the commenter predicted, even given the larger herd size in 2016; and,
- The market for organic replacement dairy animals (milk cows and replacement heifers) is not well developed.

² “To date, eight peer-reviewed papers present estimates of organic milk price elasticities of demand, and two doctoral dissertations examine the same issue. Two studies (Glaser and Thompson, 2000 and Dhar and Foltz, 2005) use data that predates the implementation of the National Organic Standards (before 2002). Three papers (Chikasada, 2008; Alviola and Capps, 2010; Choi et al., 2013) use data immediately post the creation of the organic standard, and cover years 2004 and 2005. Li et al. (2012) examine the demand for organic milk during the recession (2008-2010). Chen et al. (2018) use 2013 data. These papers all rely on national-level data; one additional publication examines the Columbus Ohio market (Chang 2011). Two dissertations examine the organic milk markets, using more recent data: Ye (2016) examines 2006 to 2013 and Gao (in progress) examines 2015.

The price elasticities obtained in studies using post-NOP data range from -1 to -2.5; the work of Gao et al. (2019), using 2015 data, is the first study to estimate an inelastic demand for organic milk.

We face multiple challenges when interpreting the price elasticities of demand estimated in the literature. First, the studies using pre-2002 data and those reflecting the earliest years of the organic regulation examine an organic market that is not as mature as today’s market. Next, the recession occurred and this provided a structural change. Note that during times of recession, consumers feel pressured to purchase the lowest priced goods (Andreyava et al, 2010). Growth in the organic sector did significantly slow in response to the recession (McBride and Greene, 2010). Thus, price elasticities estimated from data gathered during a recession (or post-recession) may not represent consumer behavior during normal economic times. We would feel more confident in elasticities that are estimated using data from 2013 or later.

Thus there are few studies using data that might be relevant to today’s market: Chen et al. (2018) and the two bodies of doctoral work (Ye, 2016; Gao, in progress). Of great interest is that the most recent work, using 2015 data, finds that the demand for organic milk is price inelastic (Gao, in progress).” Dimitiri and Zoebisch (2019)

The commenter’s arguments “indicate that the assumed price elasticities are in the range of -2 to -5. Thus, the elasticities used are much larger (in absolute value) than the findings of the peer reviewed literature. Thus, while there is insufficient evidence in the peer reviewed literature regarding the price elasticity of demand for organic milk, we believe the values used by the commenter are too high, and overstate the response of the consumers.” Dimitri and Zoebisch (2019)



CONCLUSION

We are pleased that there is broad consensus in the organic community about the need to close this loophole with regard to the origin of dairy livestock. NOC member organizations Northeast Organic Dairy Producers Alliance (NODPA), Northeast Organic Farming Association of New York (NOFA-NY), Northeast Organic Farming Association of Vermont (NOFA-VT), and PCC Community Markets have also submitted comments in support of the proposed rule and we urge you to consider the points raised in their comments when finalizing the proposed rule.

We believe the 2015 proposed rule represents significant progress toward the goal of creating consistency and a level playing field in organic dairy, and we strongly support the proposed rule as written. In addition, the incorporation of some of the comments from 2015 and this year gives the NOP the opportunity to further strengthen the final rule. We have offered a number of suggestions in that regard as described in detail in the comments we submitted in 2015. However, our top priority is for NOP to move expeditiously to a final rule, and to reject any efforts to dilute or weaken the rule.

Thank you for your consideration of these comments.

On behalf of National Organic Coalition Members:

A handwritten signature in black ink that reads "Abby Youngblood". The signature is written in a cursive, flowing style.

Abby Youngblood, Executive Director
National Organic Coalition

National Organic Coalition Members:

Beyond Pesticides
Center for Food Safety
Consumer Reports
Equal Exchange
Food & Water Watch
Maine Organic Farmers and Gardeners Association
Midwest Organic and Sustainable Education Service
National Co+op Grocers



Northeast Organic Dairy Producers Alliance
Northeast Organic Farming Association
Ohio Ecological Food and Farm Association
Organic Seed Alliance
PCC Community Markets
Rural Advancement Foundation International – USA

Appendix A:

Cost Analysis of Dairy Heifer Replacement: Comparing Continuous Organic Management and Non Organic Management Approaches. Greg Brickner, DVM

Staff veterinarian

CROPP Cooperative | Organic Valley | Organic Prairie

One Organic Way | La Farge, WI 54639

greg.brickner@organicvalley.coop | www.organicvalley.coop

Mobile: 608-632-4056

Analysis of costs for raising dairy replacement heifers for the first 12 months of life was conducted for young stock in two categories: Continuous organic management from date of birth; and non organic management from date of birth. Cost differentials were examined for eight specific feed inputs typical and most impactful in heifer replacement production. **Findings demonstrate an average cost of \$1,070 for continuous organic management and an average cost of \$447 for non organic management resulting in a higher cost for organic of \$623 per heifer raised or \$51.92 per heifer per month.**

Factors such as facilities (depreciation), bedding, labor, equipment, and utilities were assumed as equal between management approach for the analysis. Additionally, farm to farm variation in calf/heifer morbidity and mortality are related more to individual farm management than the differences between organic and non organic management, so there is no value assigned to this feature.



Cost Analysis of Replacement Dairy Heifers from 0 to 12 months of age

Comparing continuous organic management and non-organic approaches.

<u>NON ORGANIC</u>			<u>ORGANIC</u>	
<u>0 to 3 months</u>	<u>3 to 12 months</u>		<u>0 to 3 months</u>	<u>3 to 12 months</u>
\$88 (65 lb x \$1.35/lb) ¹	0	WHOLE MILK AND REPLACER	\$465 (1,550 lb x \$0.30/lb) ²	0
\$84 (350 lb x \$.24/lb) ¹	0	CALF STARTER GRAIN MIX	\$119 (350 lb x \$.34/lb) ²	0
0	\$32 (10 bu x \$3.2/bu) ³	CORN EQUIVALENT	0	\$119 (10 bu x \$9.00/bu) ³
0	\$8 (50 lb x \$.16/lb) ¹	SOYBEAN MEAL EQUIVALENT	0	\$38 roasted organic beans 63lb x \$.60/lb ²

\$3 (50 lb x \$.07/lb) 3	\$210 (3000 lb x \$.07/lb) 3	FORAGE - HIGH QUALITY	\$6 (50 lb x \$.125/lb) 3	\$281 (2,250 lb x \$.125/lb) 3
0	0	PASTURE	0	\$30 (750 lb x \$.04/lb) 4
0	\$10	MINERAL/SALT	0	\$12
\$2	\$10	COCCIDIOSTAT	0	0
	\$4 47	TOTAL FEED COSTS 0 - 12 MONTHS	\$1,0 70	
	Increased cost for organic calf	\$623		

Sources:

1 - Survey of Wisconsin conventional feed mills Nov 2018

2 - Survey of Wisconsin organic feed mills Nov 2018

3 - USDA- Agriculture Marketing Service Nov 2018 <https://www.ams.usda.gov/market-news/organic>

4 - University of Missouri extension publication "Economics of Pasture-based Dairies" <https://extension2.missouri.edu/m192>

**Appendix B:
Northeast Organic Farming Association of Vermont, Letter to Secretary Perdue from
January 11, 2019**



Vermont Organic Farmers, LLC (VOF)

The Accredited Certification Program of the Northeast Organic Farming Association of Vermont (NOFA-VT)

VOF Office: 802-434-3821 vof@nofavt.org www.nofavt.org

January 11, 2019

U.S. Secretary of Agriculture Sonny Perdue
Department of Agriculture
1400 Independence Avenue SW
Washington, D.C. 20250
agsec@usda.gov

RE: National Organic Program: Origin of Livestock Regulation

Dear Secretary Perdue,

The success of the organic label depends on consumer trust as well as uniform interpretation of the organic regulations by USDA accredited certifiers. Currently, there is a difference of interpretation among accredited certifiers in regards to the Origin of Livestock regulations for dairy farms. This difference of interpretation is creating an unfair playing field for organic dairy farmers.

The rule in question, 205.236(a)(2)(iii) states: "Once an entire, distinct herd has been converted to organic production, all animals shall be under organic management from the last third of gestation."

Vermont Organic Farmers LLC (VOF), the USDA accredited certifier owned by the Northeast Organic Farming Association of Vermont (NOFA-VT) interprets this regulation above to mean that the transition of a conventional dairy herd to organic production must be a one-time event, and that afterward, animals brought onto the operation must be organically raised from the last third of their gestation. This is consistent with the preamble of the December 21, 2000 Federal Register National Organic Program Final Rule, which states: "Finally, the conversion provision cannot be used to routinely bring nonorganically raised animals into an organic operation. It is a one-time opportunity for producers working with a certifying agent to implement a conversion strategy for an established, discrete dairy herd in conjunction with the land resources that sustain it.

However, some certifiers allow continuous transition of non-organic animals, stating that the phrase distinct herd is unclear and that 205.236 does not prohibit continuous transition of young stock from conventional to organic management. Producers who are allowed to continually transition dairy calves, raise these animals conventionally for one year and therefore have a significant cost advantage over producers who are required to raise their young stock organically. This is an unfair

competitive advantage, contrary to the intention of the regulation, and out of line with consumer expectations.

We spoke to three certified organic dairy farmers in Vermont and asked them to calculate the cost of raising a calf organically for one year and to estimate the difference if they raised them conventionally during that same period.

The first farm milks 200 Holsteins and uses nurse cows. They estimate it costs them \$2800 to raise a heifer organically to calving. They estimated that it would cost about \$1500 to raise the same heifer conventionally; a difference of \$1300.

The second farm milks 70 Jerseys, they bottle feed the best milk (from cows with highest protein and fat) and they estimate it costs them \$3000 to raise an organic calf to calving. Conventionally, it would have cost them around \$2200; a difference of \$800.

The third farm is a 30 head Jersey cross herd who bottle-feeds and estimates that it costs them around \$2000 to raise a calf to calving. Conventionally, it would have cost them around \$1200; a difference of \$800

This information shows the significant financial impact that the difference of interpretation has on organic dairy farmers in Vermont.

The NOP has declined to take action on this issue, citing a long and complicated history related to the interpretation of 205.236. This history includes several National Organic Standards Board (NOSB) recommendations that eventually led to a proposed Origin of Livestock rule, which was not finalized and was eventually removed from the government's Unified Agenda of Regulatory and Deregulatory Actions

We ask that USDA fix those inequities by finalizing the 2015 Origin of Livestock Rule. We ask the Secretary to work with the National Organic Program to immediately issue guidance outlining a one-time transition provision.

We support a policy that clearly states that the provision for transitioning conventional cows to organic in one year is a one-time allowance and continuous transition of conventional livestock is not permitted. This would stop continual transition of non-organic dairy heifers, would open the market for certified organic replacement animals, and would ensure that all US-based and international-based certifiers are using the same standards. With a historically low organic pay price, opening the market for organic replacements animals would create an important additional revenue opportunity.

If needed we would be happy to discuss this issue in detail with you and your leadership. We urge you to move swiftly as family organic dairy farmers are suffering because of the lack of uniform and strict enforcement. We know you share this priority for strong enforcement and integrity and look forward to hearing from you.

Sincerely,



Nicole Dehne
Certification Director
Vermont Organic Farmers

Appendix C: Raising Dairy Replacements Under Organic Rules Raises Cost

A. Fay Benson – Cornell Organic Dairy Program

In December of 2018 the New York Organic Dairy Task Force met at the Dairy Farmers of America Offices in Syracuse. There was discussion on the negative impact on Northeast organic dairies created by large dairies in western states entering the organic market. These dairies were utilizing a loophole created in the NOP in the “Origin of Livestock” rule to create a lower cost of dairy replacement production than organic dairies certified by certifiers that allow a onetime transition of dairy animals. The loophole was to be repaired by a new rule in 2015ⁱ but it was blocked before it could take effect. The Task Force directed and provided funding for Fay Benson, Extension Educator and project manager for the Cornell Organic Dairy Program to complete a study of what it costs for dairy farmers who raise dairy replacements without biocides, growth stimulants such as Coccidiostats. The organic method focuses on natural methods to prevent health issues rather than treat them with synthetic treatments. The study was done simultaneously on three certified organic dairies in Central New York. Benson used a series of cost analysis created by Jason Karszes, Farm Business Specialist with Cornell’s Pro-Dairy Program. By using the same analysis with the organic dairies as is used for conventional dairies the results would be comparable. Cost and data collected for this analysis included:

<ul style="list-style-type: none"> • Labor • Feed • Buildings • Machinery 	<ul style="list-style-type: none"> • Health Cost • Trucking • Manure Handling • Culling
---	---

Dairy Replacement Cost Differ for the First Year

Western dairies who were being allowed to raise their dairy replacements conventionally for the first year of the animals’ lives and then transition the animals to organic status in the final year prior to the animal first starting to milk. The difference in cost of production created by the NOP “loophole” was happening during the first year of the dairy animal’s life. For this reason, Benson tracked the cost of raising the dairy animal’s first year of life under the natural and more difficult organic regime.

The Results for Organic Farms vs Conventional

The most recent publication by Cornell’s Pro Dairy showed that 18 conventional dairy heifer growers in New York averaged \$1,060.92 during the first year of an animal’s life. Below are the results of all costs of three organic farms who were part of the study.

Conventional Cost	Organic Farm R	Organic Farm A	Organic Farm S
\$1,060.92	\$3,637.99	\$2,312.20	\$3,638.85

Realizing that cost of feed accounts for over 50% of the cost of raising a dairy replacement, any changes to that cost dramatically impacts the total cost of that animal. The first stage of a dairy calf’s life is also the most expensive and labor intensive. This is when calves are fed milk or milk replacer. In the conventional dairy study this period averaged 50 days. On the organic farms milk

was fed for an average of 111 days. The reason milk is fed longer on organic farms is to give the calf better vitality to protect it from calf health issues such as naturally occurring coccidiosis. On conventional farms the synthetic Coccidiostats are used to control this disease and are also a growth stimulant which shortens the period a calf is fed milk. Also during the time calves are fed milk, labor is the most intensive because the calves are handled individually. Below are some breakouts of the costs per animal per day from the conventional study and the three organic farms. The big difference in Milk cost/day/calf between the conventional and the organic is due to the value of the milk being fed to the calf. Organic milk price is more than double of the conventional milk price. Organic Farm A reduced their cost of milk by feeding some waste milk.

Selected Costs	Conventional Cost	Organic Farm R	Organic Farm A	Organic Farm S
Milk /day/calf	\$3.60	\$8.05	\$5.05	\$7.05
Labor/day/calf	\$1.50	\$3.12	\$4.93	\$3.12
Days fed	50	84	70	112
Pre Weaned Cost/calf- Milk&Labor	\$255	\$938	\$698	\$1,139

Here are some breakouts of the costs for feed, Health costs, and Labor associated in the first year of raising an organic dairy replacement calf during its first year.

Organic Farm R					
Pre Weaned	Hours	\$/Hour	#, animals	Totals	
Feed Cost/day				8.05	
Health				0.9	
Labor/day	0.75	25	7	3.125	
Days in Group				84	\$1,014.30
Group 1					
Feed Cost/day				2.659737	
Health				0.12	
Labor/day	3	25	19	3.947368	
Days in Group				154	\$1,035.97
Group 2					
Feed Cost/day				1.45	
Health				0.12	
Labor/day	0.5	25	19	0.657895	
Days in Group				154	\$343.10
				Total for first year	\$2,393.37

Organic Farm A					Cost/Animal	
					per day	
Pre Weaned		Hours	\$/Hour	#, animals		
	Feed Cost/day				5.05235	
	Health				0.15	
	Labor/day	2.17	25	11	4.931818	
	Days in Group				70	\$709.39
Group 1		Hours	\$/Hour	#, animals		
	Feed Cost/day				1.49	
	Health				0.1	
	Labor/day	1	25	20	1.25	
	Days in Group				119	\$337.96
Group 2		Hours	\$/Hour	#, animals		
	Feed Cost/day				2.46	
	Health				0.12	
	Labor/day	2	25	20	2.5	
	Days in Group				119	\$604.52
Group 3		Hours	\$/Hour	#, animals		
	Feed Cost/day				0.84	
	Health				0	
	Labor/day	0.5	25	5	2.5	
	Days in Group				28	\$93.52
Group 4		Hours	\$/Hour	#, animals		
	Feed Cost/day				2.47	
	Health				0	
	Labor/day	0.5	25	5	2.5	
	Days in Group				35	\$173.95
			Total for first year			\$1,919.34

Organic Farm S					Cost/Animal	
					per day	
Pre Weaned		Hours	\$/Hour	#, animals		Total

	Feed Cost/day				7.059	
	Health				0.1	
	Labor/day	0.5	25	4	3.125	
	Days in Group				112	\$1,151.81
Group 1		Hours	\$/Hour	#, animals		
	Feed Cost/day				2	
	Health				0.25	
	Labor/day	0.5	25	4	3.125	
	Days in Group				84	\$451.50
Group 2		Hours	\$/Hour	#, animals		
	Feed Cost/day				1.89	
	Health				0	
	Labor/day	0.25	25	4	1.5625	
	Days in Group				112	\$386.68
				Total for first year		\$1,989.99

ⁱ <https://www.federalregister.gov/documents/2015/04/28/2015-09851/national-organic-program-origin-of-livestock>