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# Cornhusker Economics

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## Program Requirements for Beef Cattle Certified as USDA Organic

### Introduction

Value-added programs offer beef cattle producers an opportunity to receive premiums for more intensively managed cattle operations. While marketing strategies such as grid sales offer premiums for quality and yield grade, lot uniformity, and other carcass attributes that increase the value of the product, there are other ways to add value to beef cattle carcasses. Programs that are tied to specific domestic and export markets potentially allow for premiums to fluctuate given consumer willingness to pay for product attributes.

In most instances value added cattle incur higher producer costs, more labor associated with the cattle, and greater requirements and standards to remain compliant with the program the producer is marketing cattle with. Higher production costs are generally associated with a reduction in the animal's average daily gain and feed conversion resulting in more days on feed, more inputs, and more opportunities for an animal to become sick or die. Producers should evaluate if the premiums associated with these products reasonably cover the efficiency differences and extra inputs of program cattle.

### USDA Certified Organic

This document provides an overview of the use and production of the USDA Certified Organic program for the beef cattle industry. We detail what cattle qualify, feed requirements, medical and health

standards of cattle, and premiums paid by consumers for USDA certified organic products. All information is taken from the Organic Foods Production Act Provisions available in the Federal Register (see <https://www.ecfr.gov/current/title-7/subtitle-B/chapter-I/subchapter-M/part-205?toc=1>). While we provide an overview of the main requirements, a full list can be found at the link above.

### Organic Livestock in the United States

Approximately every five years, the USDA-NASS conducts a nationwide survey on organic production throughout the United States. In 2019, the USDA conducted their 6<sup>th</sup> comprehensive organic survey. Data is available for each state across a variety of products. In the Fall of 2020, USDA released their report on 2019 organic production. Table 1 below summarizes the number of farms, inventory, and sales of livestock and livestock products in Nebraska. As with all USDA reports, this is a representative sample and may be under- or overrepresented within a year conditional on producer survey response rate.

Nebraska has about 3% of all organic beef cattle operations and 6% of all organic beef cattle inventory in the United States. California (11%), New York (13%), and Wisconsin (13%) have the largest number of farms. California (40%), Nebraska (6%), and Oregon (4%) have the largest beef cow inventory. Beef cattle products are the most common form of livestock and livestock

products that are sold as certified organic. All other categories of organic livestock production or livestock products are minimal compared to other states both on an inventory and production level.

Nebraska has seen a continual decline in the number of farms that are able to sell certified organic livestock and livestock products. Beef cattle decreased from 24 farms to 18 farms between 2008 and 2019. Dairies with certified organic milk cows decreased from 4 to 2. Fewer farms may be certifying as organic but total inventory has held steady or been increasing. For example, the total number of certified organic beef cows in 2008 was 2375 and 2474 in 2019. While the number of farms decreased total inventory was relatively stable. This would imply that consolidation amongst producers is also happening in organic production.

#### Cattle Requirements:

Cattle must be under continuous organic management from the last third of gestation to be labeled as organic. Breeding stock may be brought from a nonorganic operation but must be under organic management during the last third of gestation, and during the entire lactation period for the offspring to be labeled organic. Feeding in a continuous confinement barn is prohibited.

#### Feed Requirements:

The ration fed to certified organic cattle must be composed of organically produced feed products that have been certified for organic production. Rations must not include feed supplements in amounts above needed for adequate health maintenance. Plastic pellets, urea or manure, poultry slaughter by-products, feed additives in violation of FDA, and any antibiotic or ionophore added feed are all prohibited in an organic feed ration.

Cattle in the grazing season must be provided with more than 70% of the average dry matter intake when on a dry matter ration. Cattle must be grazed during the entire grazing season, or no less than 120 days per year. Grazing may or may not be continuous. Pasture must be of sufficient quality and quantity to provide no less than 30% of their dry matter intake from grass. During the finishing period, slaughter stock is exempt from the minimum 30% of dry matter intake from grass. The finishing period should not exceed one-fifth of the

animal's life or 120 days whichever is shorter. Breeding bulls are then exempt from being labeled as organic slaughter.

Producers must be able to describe the total feed ration. This information must include all feed produced on farm, all feed purchased, the percentage of each feed type including pasture in the total ration, and a list of all feed additives. Producers must also be able to document the amount of each type of feed fed. Changes in rations throughout the year must be documented in response to changes in seasonal grazing. A calculation method for energy demand and dry matter intake should also be documented.

Synthetic substances allowed for use as feed additives in organic livestock production are:

1. FDA Approved trace minerals
2. FDA Approved vitamins

#### Medical and Health Standards:

Organic cattle operations must not use drugs including hormones to promote growth, administer any drug other than vaccinations in the absence of illness (i.e. metaphylaxis upon arrival), or withhold medical treatment from a sick animal to preserve its organic status.

Synthetic Substances *allowed* for use in organic livestock production are as follows:

#### Certification/Audit information:

Certification requires on-site inspections with complete access to all production and handling areas, submission of an annual organic production plan to an accredited certifying agent, and maintenance of all records applicable to organic production for no less than five years after the organic operations establishment. Each state's organic programs official must have been able to have access to these records.

Producers must report all the producer group members and the location of a producer group that they source cattle feed from to the certifying agent at least once a year. All internal inspections of each organic certified producer group that the operation works with must be reported annually. This includes mass-balance audits

and reconciliation of each producer groups members as well as production yield and group sales. A certifying agent is also permitted to conduct unannounced inspections annually on a percentage of organic operations.

To apply for organic certification the application must include an organic production or handling system plan, the applicants name and information, and the names and history of any previous applications to any certifying agent as well as the outcome of those previous applications. A certification fee is required annually as well as report to a certifying agent including any changes or modifications to the organic production system, any revisions to the previous years organic system production plan, and other information that may be necessary for certification.

Premiums

Publicly available USDA reports are one way to track organic premiums on specific products over time and by product type. The most comprehensive of these is found

[here](#). Comparing these premiums over time shows that organic premiums for chicken products are much more stable over time compared to beef products. For example, organic boneless and skinless chicken breasts were \$7.50 per lb. and \$2.50 per lb. for conventional. These prices have been very consistent since 2018. Contrast this with boneless New York Strip Steak which has varied from \$10-\$20 per lb. since 2018. This price variability implies that organic beef production is much more risky than organic chicken production.

Finding More Information:

Producers interested in more information on the program should first read more about what is required to become USDA Certified Organic (see <https://www.ams.usda.gov/services/organic-certification/becoming-certified>). Producers wishing to proceed and ask further questions or find an agent who can certify their operation should use the certified organic agent locator tool (see <https://www.ams.usda.gov/resources/organic-certifying-agents>).

**Table 1. Number of Farms, Inventory and Sales by Organic Livestock and Livestock Products for Nebraska, 2008-2019.**

Livestock and Livestock Product	Farms				Inventory				Sales (\$)			
	2008	2011	2016	2019	2008	2011	2016	2019	2008	2011	2016	2019
Milk Cows	4	3	-	2	378	(D)	-	(D)	(D)	18,417	-	(D)
Beef Cows	24	12	7	18	2,375	425	1,009	2,474	(D)	361,266	209,575	503,132
Other Cattle	23	16	7	23	3,073	1,388	1,260	4,853	(D)	535,461	656,113	4,575,703

Source: Various USDA-NASS reports

Note: (D) represents non-reporting due to confidentiality and (-) represents no farms, inventory, or sales were present

**Table 2. Synthetic substances allowed for use in organic livestock production**

As disinfectants, sanitizer, and medical treatment: <sup>1</sup>	As topical treatment, external parasiticide or local anesthesia as applicable <sup>1</sup>
<ol style="list-style-type: none"> <li>1. Ethanol (disinfectant and sanitizer), Isopropanol (disinfectant)</li> <li>2. Aspirin</li> <li>3. Atropine (written vet order, 56-day withdrawal)</li> <li>4. Biologics-Vaccines</li> <li>5. Butorphanol (written vet order, 42-day withdrawal)</li> <li>6. Activated charcoal.</li> <li>7. Calcium borogluconate/propionate (milk fever only)</li> <li>8. Chlorhexidine (veterinarian procedures)</li> <li>9. Chlorine materials</li> <li>10. Electrolytes without antibiotics</li> <li>11. Flunixin</li> <li>12. Glucose</li> <li>13. Glycerin</li> <li>14. Hydrogen peroxide</li> <li>15. Iodine</li> <li>16. Kaolin pectin</li> <li>17. Magnesium hydroxide (veterinarian use)</li> <li>18. Magnesium sulfate</li> <li>19. Mineral oil</li> <li>20. Nutritive supplements</li> <li>21. Oxytocin</li> <li>22. Parasiticides (ONLY IN BREEDING STOCK, before last third of gestation, and not used during the lactation period)</li> <li>23. Peroxyacetic/peracetic acid</li> <li>24. Phosphoric acid with no direct contact to livestock</li> <li>25. Poloxalene for emergency bloat treatment</li> <li>26. Propylene glycol only for ketosis treatment</li> <li>27. Sodium chlorite acidified used as a teat dip treatment only</li> <li>28. Tolazoline (written vet order, used only to reverse effects of xylazine, 8-day withdrawal)</li> <li>29. Xylazine (written vet order, 8-day withdrawal)</li> </ol>	<ol style="list-style-type: none"> <li>1. Copper Sulfate</li> <li>2. Elemental sulfur</li> <li>3. Iodine</li> <li>4. Lidocane (8-day withdrawal)</li> <li>5. Lime, external pest control only</li> <li>6. Mineral oil</li> <li>7. Sodium chlorite, teat dip only</li> <li>8. Sucrose octanoate esters</li> <li>9. Zinc sulfate, hoof, and foot treatments only</li> </ol>

Source: USDA-AMS (2023)

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