

# Cornhusker Economics

## Premiums Associated with Selected Community Supported Agriculture Attributes

Market Report	Year Ago	4 Wks Ago	9-8-17
<b>Livestock and Products, Weekly Average</b>			
Nebraska Slaughter Steers, 35-65% Choice, Live Weight. . . . .	105.37	*	105.00
Nebraska Feeder Steers, Med. & Large Frame, 550-600 lb. . . . .	145.42	171.63	161.84
Nebraska Feeder Steers, Med. & Large Frame 750-800 lb. . . . .	138.69	142.39	159.89
Choice Boxed Beef, 600-750 lb. Carcass. . . . .	189.47	201.37	192.35
Western Corn Belt Base Hog Price Carcass, Negotiated . . . . .	57.82	77.91	57.25
Pork Carcass Cutout, 185 lb. Carcass 51-52% Lean. . . . .	80.24	94.19	82.72
Slaughter Lambs, woolled and shorn, 135-165 lb. National. . . . .	165.13	174.21	170.98
National Carcass Lamb Cutout FOB. . . . .	361.80	421.40	405.52
<b>Crops, Daily Spot Prices</b>			
Wheat, No. 1, H.W. Imperial, bu. . . . .	2.81	3.32	3.08
Corn, No. 2, Yellow Columbus, bu. . . . .	2.95	3.35	3.15
Soybeans, No. 1, Yellow Columbus, bu. . . . .	9.14	8.48	8.78
Grain Sorghum, No.2, Yellow Dorchester, cwt. . . . .	.54	5.58	5.31
Oats, No. 2, Heavy Minneapolis, Mn, bu. . . . .	12.25	3.07	2.80
<b>Feed</b>			
Alfalfa, Large Square Bales, Good to Premium, RFV 160-185 Northeast Nebraska, ton. . . . .	147.50	*	*
Alfalfa, Large Rounds, Good Platte Valley, ton. . . . .	65.00	82.50	92.50
Grass Hay, Large Rounds, Good Nebraska, ton. . . . .	*	85.00	90.00
Dried Distillers Grains, 10% Moisture Nebraska Average. . . . .	120.50	116.00	116.00
Wet Distillers Grains, 65-70% Moisture Nebraska Average. . . . .	34.25	38.50	40.00
* No Market			

As concerns mount over the health, environmental, and animal welfare consequences of the conventional food system, local food markets are increasingly being seen as one alternative for consumers to procure what they consider as more nutritious, environmentally friendly, and ethically produced food.

Local food sales still remain small relative to overall farm sales. According to a 2015 [U.S. Department of Agriculture \(USDA\) report](#), farmers sold \$6.1 billion of local foods in 2012, representing 1.5 percent of total farm sales. Of the \$6.1 billion, \$1.3 billion were direct-to-consumer (DTC) sales and the rest were through combined DTC and intermediate marketing channels or exclusively through intermediate marketing channels.

However, the prospects for local food markets look promising, particularly because of government policies aimed at creating local food business opportunities and increasing consumer access to healthy food. Between 2009 and 2015, USDA has granted close to \$1 billion to 40,000 local food projects through various programs. USDA has also been sponsoring [National Farmers Market Week](#) during the first week of August for the past 18 years. There are over 30 state laws around the country aimed at promoting local food systems.

For farms to profit more from local food business opportunities, an understanding of the drivers of local food demand is crucial. To that end, there is ongoing research at the University of Nebraska Department of Agricultural Economics that is examining such demand along with

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other local food-related issues. One outcome of that research is a forthcoming article in [Food Studies: An Interdisciplinary Journal](#) that looked at local demand in one segment of the local food market: community supported agriculture (CSA). The specific objective of the article was to conduct a hedonic analysis of CSA share prices, prices paid by members to CSA farms at the beginning of the growing season in return for receiving a share of the farm's vegetable harvest.

The general idea behind hedonic analysis is that, in addition to being determined by supply and demand of the volume of the vegetable harvest, share prices are also determined by supply and demand of the attributes associated with the harvest. Examples of such attributes include sustainable farming practices, integrated pest management, USDA Certified Organic, Certified Naturally Grown, pick up at the farm versus delivery of vegetables, to mention a few. There are also attributes associated with the farm as an entity, such as membership size, distance from the nearest metropolitan area, and if it is a single farm, where all the activities are carried out by a single family with hired labor, or it is part of multiple farms operating under one name.

The interaction between the supply and demand of an attribute determines the premium associated with that attribute. For example, a premium of \$5 associated with integrated pest management (IPM) means that, on average, the share price charged by farms who do IMP is \$5 higher than the price charged by farms who don't. It also means that in deciding whether or not to invest in IPM a CSA farm would have to compare the premium with the cost of implementing IPM.

Data on share prices and attributes of CSA farms were extracted from the [LocalHarvest.org](#) website for seven states in the U.S. Midwest from July to December, 2015. The states are Illinois, Iowa, Kansas, Minnesota, Missouri, Nebraska, and South Dakota. The sample consists of 466 farms.

The information on the website is self-reported by farmers and there is no indication on the website about the breadth and representativeness of the data. What the website indicates is that "Local Harvest has the most comprehensive directory of CSA farms, with over 4,000 listed in our grassroots database nationwide." Google maps was used to approximate distance between each farm and the closest metropolitan area.

Results from the hedonic analysis show that the most important attributes are home delivery, followed by farm size, and more vegetable variety. CSA farms that delivered and had more vegetable variety enjoyed premiums of \$18 and \$0.80, respectively. In addition, share prices of CSAs whose membership size in the fourth quintile (the group with the second largest number of members) were \$15 higher than average.

Contrary to expectations, attributes like USDA Certified Organic, Certified Naturally Grown, and IPM did not turn out to be important; they had zero premium associated with them. One plausible reason is that CSA members are either not willing to pay for organic produce or "sustainable" farm practices and/or are willing to pay but are not informed about such practices<sup>2</sup>. Distance to the nearest metropolitan area was not an important factor either, which is surprising given the stereotypical attributes of locavores.

Obviously, the implications of the findings for CSA private strategy is for farms to pursue a home-delivery marketing strategy, move up the membership scale, and offer more vegetable variety. Such strategies come at a cost, however, and their adoption depends on the costs and benefits (premiums) of investing in those attributes. The sizable premium on home delivery suggests one implication for public policy targeting CSA: subsidizing home delivery to low income families (mostly families without vehicles and with low paid jobs). The subsidy would by far not only improve the bottom line of CSAs but also provide the families access to fresh vegetables.

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<sup>2</sup>We asked Ruth Chantry, farmer and co-owner of [Common Good Farm](#), a CSA farm, for feedback on our research and in her response she disagreed with our explanation why organic did not turn out to be important in our analysis. In her view "CSA was by default done organically if not certified, but that has changed as the model has changed and the term CSA has been co-opted by subscription models that aren't in the more intended form."

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