# 2015 FENCE MATERIAL AND CONSTRUCTION COST SURVEY IN KANSAS

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February 2016 Staff Paper No. 16-02 Contribution No. 16-240-D from the Kansas Agricultural Experiment Station A Fence Construction and Material Cost Survey was conducted by the Agricultural Land Use Survey Center in the Department of Agricultural Economics at Kansas State University in 2015. Respondents were businesses involved in building and/or selling fence supplies. The survey was conducted through phone interviews. Because pasture land is distributed throughout the entire state, the supplier contact list was constructed so that responses should be evenly distributed across Kansas. Twenty-four fence builders/ material suppliers throughout Kansas provided valuable input on fence construction and cost information. Data were collected for costs of barbed wire, different types of posts, and labor for constructing fences. Similar fence cost surveys were conducted in 2010, 2006, 2002, and 1998. All surveys collected data for the calendar year prior to the year in which they were conducted. The data are referred to according to the year of the survey. The data were summarized from the survey results to increase the information available on fence construction costs.

Table 1 summarizes the average fence construction costs for the 2010 and 2015 surveys.

### Hedge/Corner Posts

Hedge/corner posts were specified as 8 inch in diameter by 8 foot in length. The average cost per post for the corner posts increased by 38.46%, from \$25.92 in 2010 to \$35.89 in 2015.

### Steel Post

Steel posts were specified as 5.5 feet tall and either 1.25ft/lb or 1.33 ft/lb in weight. The changes in the cost of a steel post from 2010 were small compared with the changes of other fence costs. A 1.25 lb/ft post cost \$3.92 in 2010 and decreased to \$3.81 in 2015. A 1.33 lb/ft post cost increased slightly from \$4.56 in 2010 to \$4.61 in 2015.

### Treated Wood Posts

Treated posts were specified as 4 inch in diameter by 8 foot in length. The cost for treated wood posts increased significantly from \$9.21 per post in 2010 to \$13.22 per post in 2015.

## Barbed Wire

The cost of one 80-rod roll of two-point barb, 12.5 gauge, barbed wire increased slightly from \$64.23 per roll in 2010 to \$68.26 in 2015.

### Labor: Fence Building per Rod

The cost of fence construction labor per rod increased from \$17.85 in 2010 to \$20.71 in 2015. The latest Bluestem Pasture Survey conducted by the Agricultural Land Use Survey Center in 2015 indicated that the average labor rate charged for building a five-wire, all steel post fence, excluding materials, was \$15.81 per rod, and the rate was \$31.08 when materials were included. The difference may represent differences in the fence specifications, as this survey did not provide fence specifications to respondents. In addition, the regional factors might be another

contributor to the difference in the cost because the Bluestem Pasture Survey results are limited to the 14 bluestem counties.

### Labor: Hedge/Corner Posts

The labor cost for building hedge/corner post increased significantly from 2010. The labor cost for hedge/corner posts was \$123.04 in 2015 versus the cost of \$57.17 in 2010.

### Total Material Costs

The Agricultural Land Use Survey Center divides fencing costs by crop reporting district; the district divisions used are based on the Kansas Office of the National Agricultural Statistic Services' (NASS) regional divisions. The nine NASS districts are: Northwest-10, West Central-20, Southwest-30, North Central-40, Central-50, South Central-60, Northeast-70, East Central-80, and Southeast-90 (Figure 1).

Table 2 shows the total material cost by district for a quarter-section, square pasture with one gate. These costs were calculated using the mode material types for each district as determined from the 2015 Pasture Leasing Survey conducted by the Kansas Department of Agriculture and the Agricultural Land Use Survey Center. Total material cost by district ranges from \$6,473.00 in district 90 to \$8,543.93 in district 50. Total material cost of fence building in 2015 in each crop reporting district was higher than the corresponding number in 2010. The increase in total materials cost can be attributed to the increased use of treated wood posts and the increased material costs for fencing building.

	2010	2015	Percent Change
Hedge/Corner Posts	\$25.92	\$35.89	38.46%
Steel Post (5.5FT, 1.25 LB/FT)	\$3.92	\$3.81	-2.81%
Steel Post (5.5FT, 1.33 LB/FT)	\$4.56	\$4.61	1.07%
Treated Wood Posts (4 IN X 8 FT)	\$9.21	\$13.22	43.54%
Barbed Wire (2 Point Barb, 12.5 Gauge-80 Rods/Roll)	\$64.23	\$68.26	6.27%
Labor Fence Building/Rod	\$17.85	\$20.71	16.01%
Labor Hedge/Corner Posts	\$57.17	\$123.04	115.22%

## **Table 1. Average Fencing Costs**

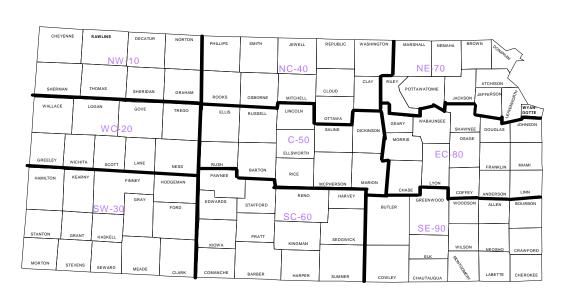


Figure 1. Kansas Crop Reporting Districts

Table 2. Total Material Cost by District, Quarter-section, Square Pasture

<b></b>			Post Spacing	Total Material
District	Fence Type	Post Type	(Feet)	Cost
Northwest-10	4-Wire Barb	2 Steel:1 Wood	16	\$7,616.20
West Central-20	4-Wire Barb	2 Steel:1 Wood	16.5	\$7,466.87
Southwest-30	4-Wire Barb	5 Steel:1 Wood	12	\$7,997.53
North Central-40	5-Wire Barb	3 Steel:1 Wood	15	\$7,986.60
Central-50	5-Wire Barb	5 Steel:1 Wood	12	\$8,543.93
South Central-60	5-Wire Barb	3 Steel:1 Wood	15	\$7,986.60
Northeast-70	5-Wire Barb	All Steel	10	\$8,092.20
East Central-80	5-Wire Barb	All Steel	12	\$7,282.60
Southeast-90	5-Wire Barb	All Steel	15	\$6,473.00