2010 FENCE MATERIAL AND CONSTRUCTION COST SURVEY IN KANSAS

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The Land Use Value Project in the Department of Agricultural Economics at Kansas State University conducted a Fence Construction and Material Cost Survey in 2010. Respondents were businesses involved in building and/or selling fence supplies. The survey was conducted through phone interviews. Forty-seven fence builders/ material suppliers throughout Kansas were contacted. Because pasture land is distributed throughout the entire state, the supplier contact list was constructed so that responses should be evenly distributed across Kansas. Data were collected for costs of barbed wire, different types of posts, and labor for constructing fences. Similar fence cost surveys were conducted in 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 2006 and 2010 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 from \$20.67 in 2006 to \$25.92 in 2010.

Steel Post

Steel posts were specified as 5.5 feet tall and either 1.25ft/lb or 1.33 ft/lb in weight. A 1.25 lb/ft post cost \$3.20 in 2006 and increased to \$3.92 in 2010. A 1.33 lb/ft post cost \$3.73 in 2006 and \$4.56 in 2010.

Treated Wood Posts

Treated posts were specified as 4 inch in diameter by 8 foot in length. The cost for treated wood posts increased from \$8.26 per post in 2006 to \$9.21 per post in 2010.

Barbed Wire

The cost of one 80-rod roll of two-point barb, 12.5 gauge, barbed wire increased from \$47.21 per roll in 2006 to \$64.23 in 2010.

Labor: Fence Building Per Rod

The cost of fence construction labor per rod increased from \$12.70 in 2006 to \$17.85 in 2010. For comparison, we examined the per rod construction labor cost published in the Kansas Agricultural Statistics Service's (KASS's) <u>Kansas Custom Rates.</u> For 2009 KASS construction rates averaged \$11.90 per rod when builders used steel posts and \$20.00 per rod when builders

used a combination of steel and wood posts.

<u>Labor: Hedge/Corner Posts</u>

The labor cost for each hedge/corner post increased from \$30.75 in 2006 to \$57.17 in 2010.

Total Material Costs

The Land Use Value Project divides fencing costs by crop reporting district; the district divisions used are based on Kansas Agricultural Statistic's (KASS) regional divisions. The nine KASS 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 2010 Pasture Leasing Survey conducted by KASS for K-State. Total fence material cost by district ranges from \$6074.60 in district 10 to \$7755.00 in district 70. This range is explained by the addition of another strand of barbed wire and a shorter distance between fence posts resulting in an overall increase in materials used.

Table 1. Average Fencing Costs

			Percent
	2006	2010	Change
Hedge/Corner Posts	\$20.67	\$25.92	25.40%
Steel Post (5.5FT, 1.25 LB/FT)	\$3.20	\$3.92	22.50%
Steel Post (5.5FT, 1.33 LB/FT)	\$3.73	\$4.56	22.25%
Treated Wood Posts (4 IN X 8 FT)	\$8.26	\$9.21	11.50%
Barbed Wire (2 Point Barb, 12.5 Gauge-80 Rods/Roll)	\$47.21	\$64.23	36.05%
Labor Fence Building/Rod	\$12.70	\$17.85	40.55%
Labor Hedge/Corner Posts	\$30.75	\$57.17	85.92%

Figure 1. Kansas Crop Reporting Districts

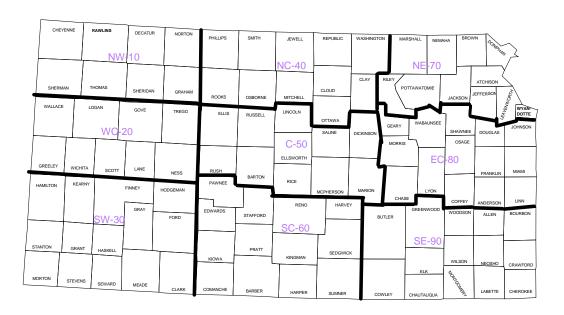


Table 2. Total Material Cost by District, Quarter-section, Square Pasture

			Post Spacing	Total Material
District	Fence Type	Post Type	(Feet)	Cost
Northwest-10	4-Wire Barb	3 Steel:1 Wood	16.5	\$6074.60
West Central-20	4-Wire Barb	3 Steel:1 Wood	15	\$6440.20
Southwest-30	5-Wire Barb	All Steel	10	\$7737.40
North Central-40	5-Wire Barb	4 Steel:1 Wood	15	\$6790.52
Central-50	5-Wire Barb	4 Steel:1 Wood	15	\$6790.52
South Central-60	5-Wire Barb	All Steel	12	\$6936.60
Northeast-70	5-Wire Barb	4 Steel:1 Wood	12	\$7755.00
East Central-80	5-Wire Barb	All Steel	12	\$6936.60
Southeast-90	5-Wire Barb	All Steel	12	\$6936.60