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Factors Affecting Manure Transfers in the Midwest

With livestock operations becoming larger, and a requirement for phosphorus based application, there is a need for farmers to transfer manure off their farm in order for manure to be applied at agronomic rates. A survey of livestock farmers in Iowa and Missouri was conducted in the spring of 2006. It was a random sample stratified by livestock type and farm sales. The major types of livestock were dairy cows, beef cattle on feed, beef cows, swine 55lbs or less, swine more than 55lbs, broilers, and turkeys. This survey examined manure management practices in general and also included questions regarding the sale and transfer of manure. For this analysis, farmers with pasture-only operations were excluded which left 921 observations. Over 81% of turkey farmers and over 57% of broiler operations provide manure to other farmers. Farmers providing turkey manure are also the most likely to receive money for the manure with 83% being paid for the manure versus 82% of the broiler operations. Turkey and broiler litter is also transported the furthest (13.7 and 14.8 miles on average, respectively). Turkey manure also sold for the highest price. Probit regression analysis was conducted to determine the factors that affect whether or not a farmer provides animal manure to others. Other factors held constant, younger farmers, and those from Missouri, were significantly more likely to provide manure. More farmed acres decreased the likelihood of providing manure while more animal units increased it. The percent of land devoted to specific crops had no effect. Broiler and turkey farmers were significantly more likely to provide manure than swine farmers. If farmers used a commercial fertilizer on their manured fields they were less likely to provide manure to others. If farmers said the smell of manure bothered them, they were more likely to provide manure.

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