Mapping Beef cows, Milk cows, Value of Cows, and All Cattle and Calves In Missouri Counties By Regions from 1998-2002

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ABSTRACT
Geographic information systems was used to study the difference in Beef and Milk Cow production, Value of Cow, and All Cattle and Calves in Missouri between 1998 and 2002. Results showed that beef cow and the value of all cattle increased, milk cow decreased while all cattle stayed the same from 1998 to 2002. This information can be useful to farmers in monitoring agriculture stock market values and trends.

INTRODUCTION
Missouri is an agricultural state and livestock contributes 59% to its total agricultural production. However, there have reports that farmer numbers are in decline in several Missouri regions as a result of a decline in the prices of agricultural products. Using Geographic Information Systems, this study attempts to assess how the beef industry is affected by this decline by analyzing and visualizing beef cow, value of cows, milk cows, and all cattle and calves production from 1998 to 2002.

MATERIALS AND METHODS
Data was used in this study was downloaded from the Agricultural Electronic Bulletin Board website. After transformation and conversion to an appropriate format, data was transferred to ARCVIEW-GIS where a map of the state Missouri was earlier digitized.

Rates of change between 1998 and 2002 for beef cows, milk cows, value of cows, and all cattle and calves were calculated and maps were produced and imported to CorelDraw via Power point.

RESULTS AND SUMMARY
The data show that beef cow increased in five out of nine regions. Milk cow decreased in all regions while all cattle and calves stayed the same in five out of nine regions. Finally, the value of cattle and cow has increased from 1998 to 2002. This information can be useful to farmers in monitoring agriculture stock market values and trends.