

# CowChips: A Comprehensive Bovine Health and Location Information Network

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Since 2002, the total retail price of United States beef has risen to over 25 billion dollars per year. The average feedyard cost to raise beef cattle has also increased to \$494 per head. With the increase in the cost of raising these animals, animal health is a top priority for livestock producers. These points inspired me to develop a new farm technology I call CowChips. CowChips is a small electronic device worn on a cow's ear that will determine the animal's health and position. Heart rate, temperature, and location are all transmitted to livestock producers through radio communication. During calving time producers would be able to use the heart rate and temperature data to predict when cows are about to give birth, improving survival rates during this delicate time in the life of the mother and her calf. When livestock are grazing, according to the season, producers would be able to monitor their animals for health problems, theft, and other situations that may arise. CowChips increases a cattleman's efficiency through animal health awareness and also helps prevent rustling. By using the CowChips system, we could bring the livestock industry into the 21st century through innovative technology.