

Satellites and Cows

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Ranchers want to know what their cows are doing in the day. To know what their cows do, they could put GPS collars on the cows and analyze the data. One of the major reasons they may want to do this is to see if there is a difference between large and small frame cows. Large frame cows are preferred aesthetically and economically. There are reasearch papers on dairy cows, but there are not many for range cows. This project uses processes developed by mentors to put collars on range cows. It analyzed cattle behavior such as watering, resting, grazing, and traveling. It took several steps over several months to complete. The first step in this project was to figure out the software and how the GPS devices work. Then the GPS devices were put into collars and the collar onto a cow. After that, the collars were collected and the data was analyzed. From there, the data points were put onto maps, then onto heat maps, charts, and a table. The results of the table showed that large frame cows grazed 6 percent more and rested 5 percent less then small frame cows. The control, large, and small frame cows showed very little difference in watering and traveling. In conclusion, the hypothesis was corrected. There is a difference between large and small frame cows