The phenomenon of migration has been studied for years. As with many other great scientific discoveries, the phenomenon of migration was discovered by chance. Studies have shown the migration and navigational skills of a species, are hard-wired into their brains. Recent studies have identified the earth’s magnetic field as a vital component of a species ability to navigate and migrate. I was intrigued by an accidental discovery Begall et al, published in the Journal of Proceedings of the National Academy of Sciences in 2008, titled Magnetic Alignment in Grazing and Resting Cattle and Deer. They were studying Google Earth satellite images, when they noted the images revealed 60-70% of cows, in all parts of the world and on every continent, were aligned along the earth’s north-south magnetic axis. My hypothesis is; cows have the ability to use the earth’s magnetic field to exhibit magnetic migratory behavior. I hypothesize 75-80% of observed cows in Northern Colorado will be aligned with the earth’s north-south axis. My project was to study herds of cows to see if I could mimic and confirm Begall’s results. My procedure included locating cow herds in Northern Colorado. The herds had to be in open pastures. I would then tally if the cows were aligned along the north-south axis. Of the 371 cows, 261 of them were aligned with the north-south axis. The result is 70%. I then calculated the percentage of cows aligned the north-south axis for each individual herd. The results ranged from 47% to 100%.