



FROM THE RANCH

GARRETT STRIBLING



Technology Provides Operational Benefits

Managing rangelands is not without its challenges. As land stewards, we aim to leave the land better than we found it, enhancing its carrying capacity for both livestock and wildlife. The unique landscape of South Texas presents additional challenges for efficiently managing and gathering cattle. Implementing new virtual fencing technology has allowed us to address both challenges at once.

The idea of better controlling grazing pressure across a landscape is not new. Grazing systems that utilize high stocking densities and a lower frequency of use are becoming more widely used, but these systems can be labor and infrastructure intensive. Building miles of cross fencing is expensive, especially along the Gulf Coast of Texas, where the saline environment significantly impacts the functional lifespan of a fence, and running miles of





polywire electric fence is labor-intensive and does not hold up well against nilgai. Our El Sauz ranch has all of these challenges – large pastures with poor grazing distribution, salt flats and sea breezes, and large herds of nilgai.

Virtual fencing technology has been in development since the early 2000s; however, with the development of new systems it has become commercially available and represents a real opportunity to address these challenges. With virtual fencing collars, we can build miles of fence from our cell phone by simply drawing a grazing enclosure around the cowherd. As cows approach the virtual barrier, they receive an audible tone we have trained them to recognize as a cue to turn back. If they do not turn back and cross the barrier, they receive a small shock, like an electric fence, keeping the cattle where we want them with the added benefit of knowing their location 24/7 via the GPS locator in the collar.

This technology has the potential to benefit our operations in two ways. If we can better control grazing

pressure, we can allow areas of the ranch that receive little rest the ability to recover, and areas that have historically received very little grazing pressure to finally be utilized. In addition, always knowing where the herd is saves us time, labor, and money. Instead of gathering a 20,000-acre pasture, cattle will have been rotated around the ranch in significantly smaller acreages right to where we need them.

We work hard to adjust stocking rates and monitor changes in carrying capacity on a large scale. With the use of virtual fencing, we hope to scale it and efficiently break it down into pieces we can manage for the greater benefit of the resource. We have just started with this technology, but the opportunities for data collection about range utilization, range improvement and response, animal behavior, and other points of interest are just beginning to take shape. This technology provides operational benefits that have already been seen in the field, as well as valuable insight into how we can better utilize our resources and keep them productive in the future. [🔗](#)