

*The Sentinel Landscape Restoration Partnership brings parties together to conserve natural resources, protect working lands, and preserve the mission of Fort Huachuca in Cochise, Santa Cruz, and Pima counties, Arizona. This article introduces common practices of the conservation ranchers in this area.*

Keeping lands productive long-term is the goal of the Sentinel Landscape's "conservation ranchers." Most modern operators recognize that holding soil in place, maintaining grass cover, and retaining water in the system are key ingredients of the livestock-growing recipe. They understand they need to track the condition of important resources and understand their lands are important wildlife habitat.

Exactly what are Sentinel area ranchers doing to sustain productivity long-term? The list of activities is impressive.

### Soil and Water Retention

In times of abundant rainfall, southeast Arizona's grasslands look like the Great Plains. They're not. Drought and overuse can turn pastures into dry, dusty expanses. Where grass cover is depleted, rain becomes a force that washes soil away. Water digs gullies that transport it away from nurturing grasses. Ranchers both directly repair and try to prevent gullying with small (and sometimes large) erosion control structures.

### Livestock Management

Conservation ranchers work with agency and university professionals to develop rotating grazing systems tailored to their ranches. Creating multiple pastures and waters spreads out livestock for more even utilization of grasslands. Selective breeding for high-value qualities allows for smaller herds. Smaller, desert-adapted Criollo cattle require less water and feed and spread themselves out over rough terrain.

### Grassland Rehabilitation

Ranchers are pushing grasslands back into a more natural state by controlling invasions of shrubs. They support efforts to combat non-native grass species and other weeds that provide less nutrition and potentially can poison animals, respectively. Mechanical, chemical, and prescribed fire techniques improve grasslands as range for livestock and habitat for wildlife.

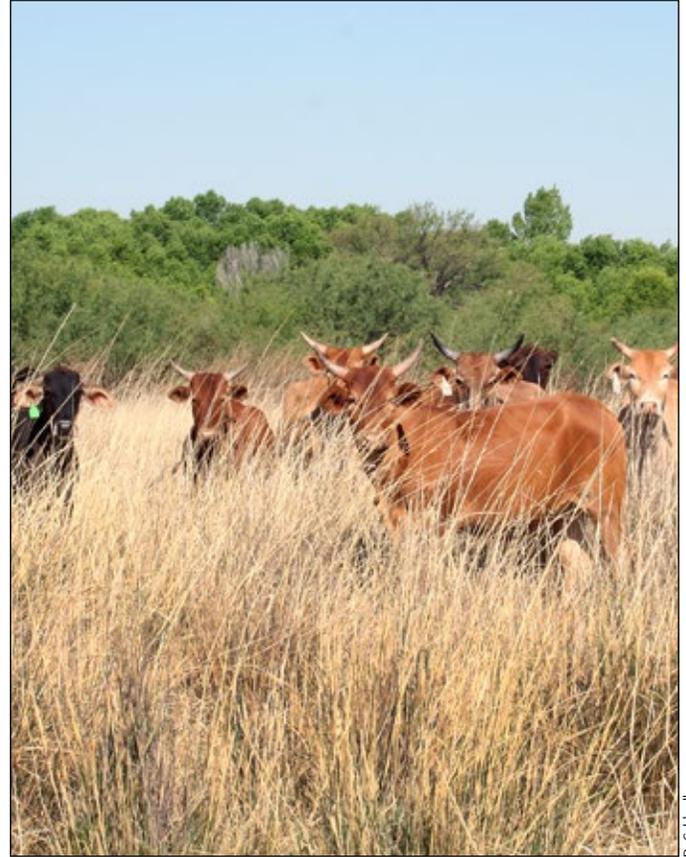
### Wildlife Accommodation

On the Sentinel Landscape ranches provide important habitat for pronghorn antelope, grassland birds, leopard frogs and countless other critters. Conservation ranchers willingly partner with wildlife advocates to accommodate movement, provide water, and prevent habitat impairment. Fence modifications for antelope passage, separate water tanks for wildlife and cattle, and fencing riparian areas to protect these habitat corridors from livestock grazing are common activities that affect the bottom line but are recognized as important for the greater good.

### Conservation Easements

For ranchers intent on a legacy of continued ranching and open space, this legal instrument is a win-win. Parties interested in that future for cultural and conservation reasons have raised funds to provide ranch families with the difference in value of their lands as ranches versus development. On the Sentinel Landscape, conservation easements not only keep ranchers in business but also help preserve the electronic testing and flying missions of Fort Huachuca that thrive where open space is abundant.

In addition to actions described here, conservation ranchers participate in grassland and stream monitoring and invite all manner of curious scientists, land managers, and nature lovers to see their operations. They tolerate scrutiny from many sectors and carry on with their mission of sustaining productive lands on into the future.



D. Caldwell

**Grazing rotation, multiple pastures, and herd selection increase long-term sustainability of cattle operations.**



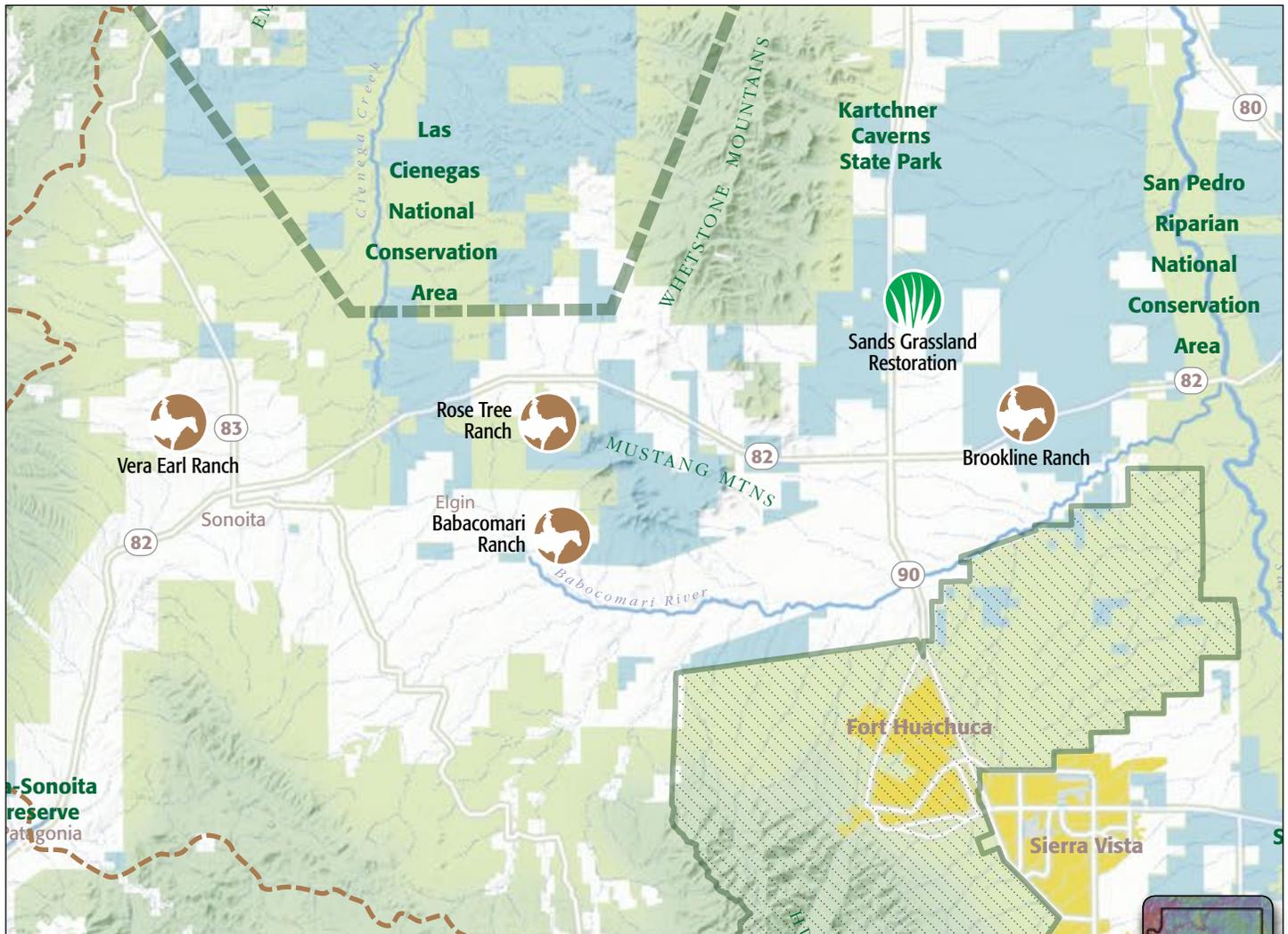
D. Caldwell

**Wildlife-friendly fencing turns cow ponds into valuable habitat while forcing livestock to drink from clean water troughs.**

## Conservation Ranching

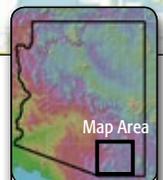
For decades, people have worked together to protect precious natural and cultural features of southeastern Arizona's sky island region. In 2015, the Sentinel Landscape Restoration Partnership came together with an added twist—preserving the electromagnetically quiet area for the U.S. Army's Fort Huachuca Buffalo Soldier Electronic Test Range. The **Fort Huachuca Sentinel Landscape Restoration Partnership** conserves grasslands and forests that provide habitat, water, livelihoods, and recreation in Cochise, Pima, and Santa Cruz counties, Arizona.

This “working landscape” hosts world-class biodiversity and offers recreation opportunities for residents and visitors. The diverse partnerships dedicated to maintaining these riches are made up of landowners, concerned citizens, scientists, and staff of local, state, and federal governments. This piece highlights conservation ranching practices in the Sentinel area.



### Conservation Ranching Examples

Babacomari Ranch (prescribed fire, shrub removal, wildlife accommodations, conservation easements), Brookline Ranch (grazing rotation, shrub removal, river monitoring), Rose Tree Ranch (specialized herd, herd distribution, wildlife accommodation, monitoring), Sands Grassland Restoration (herd distribution, shrub removal), conservation easements, water recharge), Vera Earl Ranch (shrubs removal, wildlife accommodation, conservation easement).



For more information and explanation, see the larger map produced by the Sentinel Landscape Restoration Partnership.