

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 work to conserve grasslands in this area.

Southeastern Arizona's grasslands occupy valley bottoms above about 3500 feet elevation. In addition to being beautiful, these grasslands act as important wildlife habitat, rangeland for livestock, and a system for intercepting and slowing water. Grasslands are fire-adapted, and when they burn during the natural pre-monsoon fire season, invading woody shrubs are knocked back while summer rains quickly bring native bunchgrasses back to life.

Grasslands dominate the Fort Huachuca Sentinel Landscape, though their condition varies across the region. They are havens for pronghorn antelope and grassland birds, particularly sparrows, whose numbers have declined due to habitat loss. Many areas still contain diverse stands of mostly native grasses, other areas have been invaded by non-native grasses and native woody shrubs, and still other areas have been fragmented extensively by development such that their value has declined as rangeland, wildlife habitat, and as a sponge for intercepting floodwaters.

Private landowners, land management agencies, and conservation organizations are hard at work maintaining the Sentinel grasslands.

Protection

Many ranchers have placed conservation easements on their properties that will help grasslands persist into the future. Arizona Game and Fish is protecting land in the Sonoita Creek drainage to maintain grasslands and natural waters as wildlife habitat. Bureau of Land Management at Las Cienegas National Conservation Area (LCNCA) and Arizona State Parks at San Rafael Ranch State Natural Area preserve and monitor native grasslands. Las Cienegas includes the historic Empire Ranch and on-going livestock grazing.

Research

At Audubon's Appleton-Whittell Research Ranch (ARR), scientists monitor grassland wildlife and test ways to eliminate invasive non-native grasses. Since 1969 it has served as an ungrazed reference area that can be compared with grasslands more directly managed by humans. The Santa Rita Experimental Range (SRER) is the oldest, continuously studied rangeland in the world. SRER data sets are key resources for determining effects of changing climate on rangeland resources.

Rehabilitation

Sentinel ranchers use mechanical and chemical means to remove shrubs that invade grasslands. Some ranches conduct burns that regularly renew grassy pastures. ARR works to eliminate non-native grassland invaders to preserve its value as a research site and high quality habitat. Fort Huachuca has regularly introduced needed fire to grassland and savanna areas since the 1980s. Bureau of Land Management removes shrubs and uses fire to preserve the scenic, high-diversity grasslands that form the Cienega Creek headwaters. Since the mid-1990s, Bureau of Land Management, The Nature Conservancy, and Coronado National Forest have used fire to restore tens of thousands of acres of grassland on the Muleshoe Ranch. Borderlands Restoration grows native grass in its Patagonia nursery to provide material for restoration projects.

Though Arizona is known for its deserts, remember that grasslands historically covered about one-quarter of the state. Sentinel partners are doing their best to preserve this high-value ecosystem in our part of the state.



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Grassland rehabilitation via mesquite removal at LCNCA.



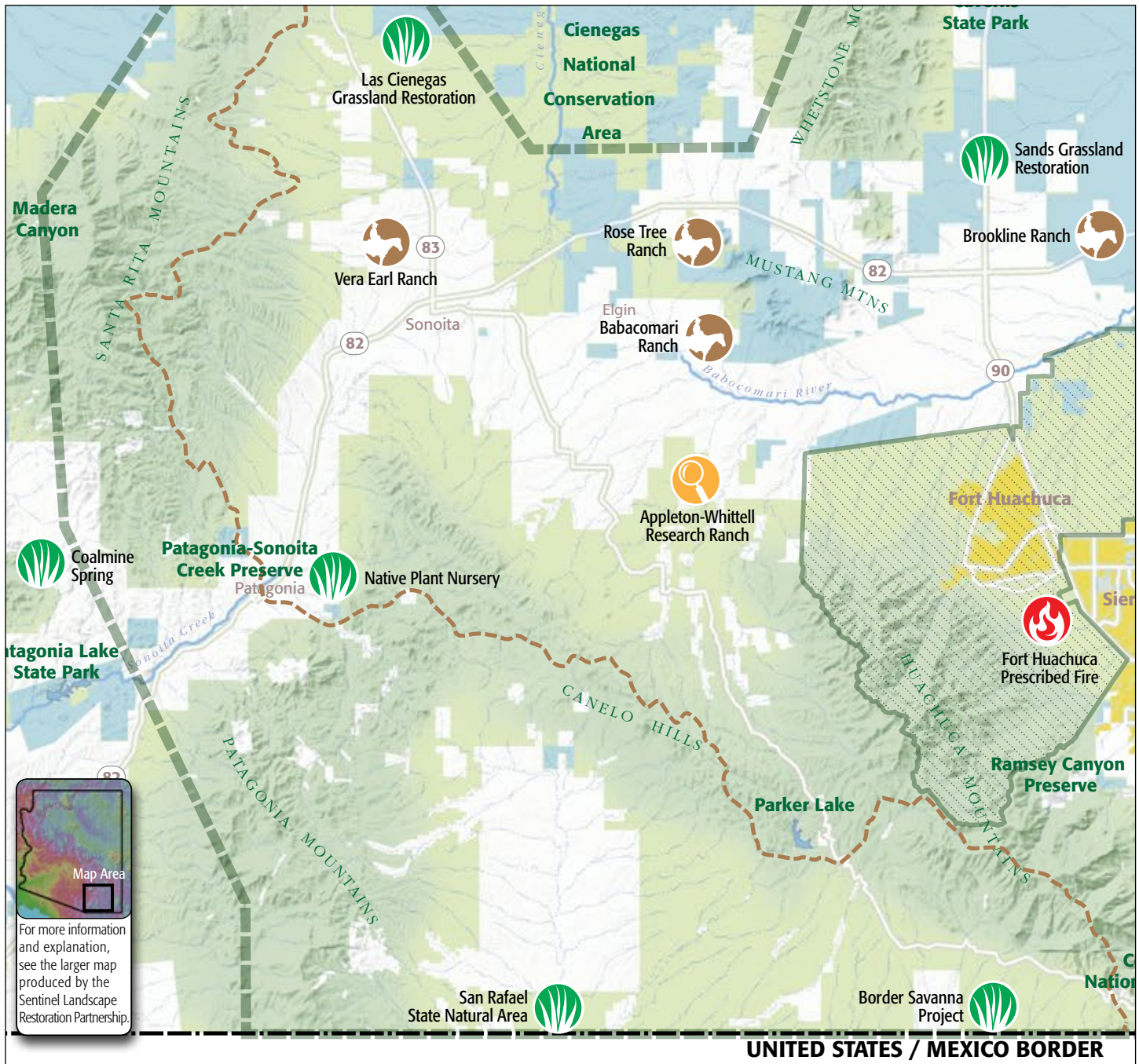
Appleton-Whittell Research Ranch

Grassland monitoring at ARR.

Grasslands

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 some of the work underway to conserve native grasslands in the Sentinel area.



Grassland Restoration Examples

Appleton-Whittell Research Ranch (grassland research, invasive grass removal), Babacomari Ranch (grassland rejuvenation via fire, shrub removal, conservation easements), Border Savanna Project (shrub/tree removal), Brookline Ranch (shrub removal), Coalmine Spring (grassland land protection), Fort Huachuca Prescribed Fire (grassland rejuvenation), Las Cienegas Grassland Restoration (grassland rejuvenation via fire, shrub removal, monitoring), Native Plant Nursery (native grasses for restoration), Rose Tree Ranch (monitoring), Sands Grassland Restoration (shrub removal), San Rafael Ranch State Natural Area (grassland land protection, monitoring).