SENTINEL LANDSCAPES

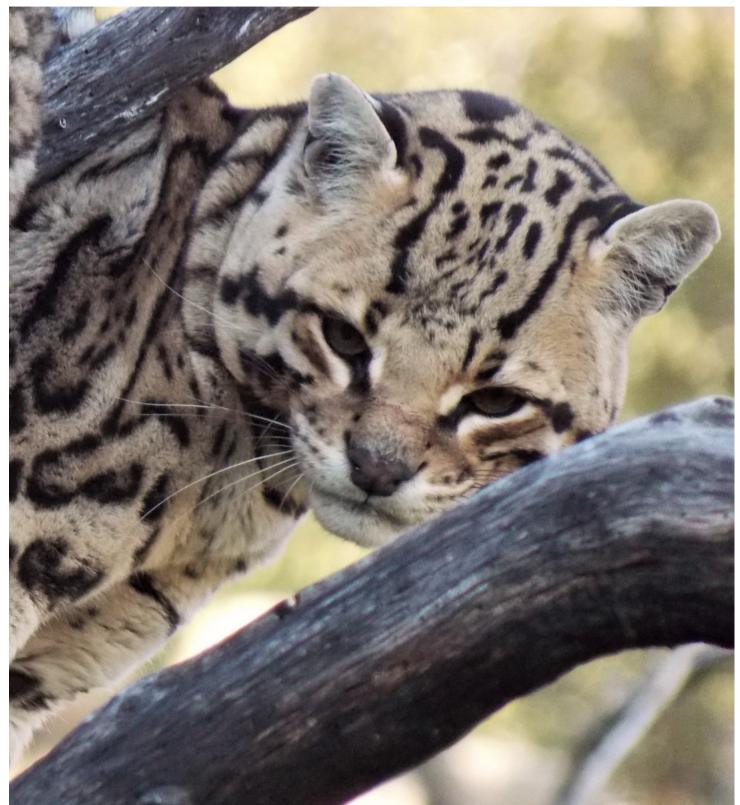
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Fort Huachuca Sentinel Landscape Partnership Newsletter

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~ What is a Sentinel Landscape ~

The U.S. Department of Agriculture (USDA), Department of Defense (DoD), and Department of the Interior (DOI) define sentinel landscapes as areas in which natural and working lands are well suited to protect defense facilities from land use that is incompatible with the military's mission.

Once the Federal Coordinating Committee designates a sentinel landscape, USDA, DoD, and DOI work with local partners to equip private landowners with the resources necessary to carry out sustainable management practices on their properties. Sustainable management practices such as farming, ranching, and forestry offer economic and ecological benefits and protect defense facilities from incompatible development that can constrain the military's ability to carry out training and testing activities.

Located in southern Arizona's Sonoran Desert, Fort Huachuca is home of the U.S Army Intelligence Center of Excellence and the Network Enterprise Technology Command. As a Major Range Test Facility Base, Fort Huachuca is a hub of electromagnetic technology testing and training. The base is also one of the most extensive unmanned aerial vehicle training facilities globally, supporting operations for the U.S. Army, U.S. Air Force, U.S.Marine Corps, and U.S. Customs and Border Protection.

Watch the Below Video to Learn More



~ U.S. Army's 246th Birthday ~



Fort Huachuca Illustrated, Volume 6. 1999

The U.S. Army was founded on 14 June 1775 when the Continental Congress authorized the enlistment of expert riflemen to serve the United Colonies for one year. One hundred two years later, Fort Huachuca began as a temporary camp needed for protection against "That class of lawless characters which finds its greatest safety near a boundary line between two foreign states." Colonel Augustus Kautz*.

Captain Samuel M. Whitside of Camp Lowell and Captain William H. Rafferty of Fort Grant rendezvoused their Cavalry Companies to make permanent Camp Huachuca on 3 March 1877. Whitside concluded that "The site is everything that could be desired for a permanent Military Post and by far in every respect, the most desirable point for one in all Southern Arizona."*

This was due, in part, to the site's ecology: to the cooler temperatures afforded by pine trees, running springs of freshwater, and expansive grasslands for livestock grazing.



Fort Huachuca Illustrated, Volume 6. 1999

The unique ecosystem of southern Arizona, with desert grasslands and towering sky islands, is an incredibly diverse landscape, one that fostered the creation of Fort Huachuca, as well as the settlement of pioneers who mined, raised cattle, and farmed.

On this 246th Birthday of the Army, this same environment continues to foster Fort Huachuca. For the past six years, the Fort Huachuca Sentinel Landscape Partnership has worked to conserve and restore these vital surrounding lands. In partnership with our federal, state, and local partners, we work to preserve our region's unique

history and future interests. The continued collaboration of the military, agriculturalists and natural resource managers is critical to our ecosystem and economy.

--- Fort Huachuca Illustrated, Volume 6. 1999

~ Endangered Neotropical Cats Make Tracks in the Huachuca Mountains ~

In late November 2016, the Arizona Game and Fish Department in Tucson received a grainy, black-and-white trail cam image of an endangered jaguar northbound in the Huachuca Mountains.

It was an exciting development that raised an important question: Was this a new individual, or the jaguar that had persisted in the nearby Whetstone and then Santa Rita mountains since 2011?

Game and Fish did an all-call to other agencies and landowners known to have trail cams in the area. Within days, Fort Huachuca provided a jaguar



Endangered jaguar. Photo courtesy of Fort Huachuca

image that enabled a spot pattern analysis, which determined that it was indeed a new individual.

While that jaguar ultimately returned to Mexico and met a bad end, it is believed not to have been the first to use the Huachucas Mountains as a travel corridor. The Santa Ritas' jaguar, nicknamed El Jefe, is thought to have followed the same route to the Whetstones, where it was first observed.

In addition, the Huachucas jaguar's unfortunate return to Mexico was biologically significant. It was the first confirmation that a jaguar that migrated to the United States returned to Mexico, which scientists had long suspected of happening.



Endangered ocelot. Photo courtesy of the AZGF.

A breeding population of up to 200 jaguars exists in Sonora, and seven solitary males have entered Arizona and New Mexico from there since the 1990s. No females have been documented in the United States since 1963.

Meantime, another endangered neotropical cat species has been using the Huachucas as a corridor of movement. An area landowner in January 2021 directly observed and photographed an ocelot. It was the same individual photographed 163 times in the area on 94 occasions since May 2012.

Two other ocelots have been observed in the Huachucas since 2012, and a fourth seen in the Santa Ritas may have used the Huachucas to get there. Outside of a small population of ocelots in the Pecos River Valley of Texas, no other ocelots are known to exist in the United States.

"We've long thought that in-migration from Mexico is in part why the Huchucas have such a healthy bear population. But the use of the range as a travel corridor for jaguars and ocelots was a new development since 2011," said Regional Supervisor Raul Vega of Game and Fish in Tucson. "Were it not for help from our federal and state agency partners,



Male ocelot in the Huachuca Mountains.

Photo courtesy of the University of Arizona Citizen Science monitoring project, in coordination with U.S. Fish and Wildlife Service.

and local landowners, their presence and movement in Arizona would have been hard to track. We support and enforce the protections afforded to them by the Endangered Species Act."

The Arizona Game and Fish Department has trust responsibility for managing more than 800 native wildlife species – the most of any inland state – for current and future generations of Arizona citizens.

~ Managing Public Land in Drought Conditions ~



Bureau of Land Management

The Bureau of Land Management (BLM) is working with livestock permittees to account for the drought conditions across Southeastern Arizona. The Gila District sent letters to its livestock permittees acknowledging the drought conditions and offering bill adjustments and refunds for permittees that go into voluntary non-use status as a conservation measure. In the past, the district has worked with the Arizona Game and Fish Department (AZGF) to install and maintain wildlife waters in drought-prone areas. In fiscal year (FY) 20, the district assessed approximately 70 wildlife and livestock waters in the Las Cienegas National Conservation Area. In FY 19, the district completed the required NEPA for six wildlife waters constructed in FY 20 to help support AZGF population management goals.

U.S. Forest Service

The drought has significantly impacted the availability of forage available for livestock across the Coronado National Forest. The Range Program has been implementing regional drought guidelines and assessing conditions on each grazing allotment. Many ranchers have voluntarily elected to stock their allotments at 40-50% of their permitted livestock numbers, some choosing not to utilize their allotments at all. These difficult financial decisions will undoubtedly have economic impacts on the ranching families and local communities. The Coronado National Forest is committed to working with producers on a site-specific basis to stock rangelands commensurate with natural resource conditions.

~ Bureau of Land Management & Fort Huachuca ~

Partnership benefits Sentinel Landscape and Provides Fire Crew Accommodations & Training

A longstanding partnership between the BLM's Gila District and U.S. Army Fort Huachuca resulted in a 2017 formal agreement to host and house the BLM Arizona's Aravaipa Veterans Interagency Hotshot Crew at the military installation. In return for the use of Fort facilities, BLM's Hotshot crew and Sierra Vista Engine crew assist the Fort with fire suppression, wildland and prescribed fire training, and various vegetation management treatments.



(Background left to right) Jacob Stueben, Cody Larimer, Armand Moini, Tripp Bartlett (Foreground left to right) Bryan Rankin and Greg Smith relax during their lunch break at the Libby Army Airfield-BLM

"The partnership is a win-win for the BLM and the Army community at Fort Huachuca," said Gila District Manager Scott Feldhausen. "Without the ability to house a crew on the Fort, the BLM would have been unable to stand up this new crew in 2017. Having them there means they are more readily available to respond to fires as well as assist in maintaining a landscape that supports water conservation, wildlife habitat restoration, and the military mission."

Wildfire adversely affects Fort Huachuca's military training, missions, and airspace operations. The vegetation treatments BLM crews assist with during their off-season help reduce this threat and play an important role in providing sustainability and climate resiliency for the installation and the greater Fort Huachuca Sentinel Landscape. The treatments include vegetation thinning, prescribed fires, broadcast burns, and pile burns providing crew members with the opportunity to maintain their saw cutting and hazard tree removal skills.

"Wildfires are the greatest risk to Fort Huachuca and the surrounding community," said Commanding General of U.S. Army Intelligence Center of Excellence and Fort Huachuca, Maj. Gen. Anthony Hale. "Having the BLM's assistance on post provides the extra needed resources to protect our community and our mission."

Partnerships like this are part of the foundation the FHSL uses to build a sustainable landscape that meets the climate challenges of today and tomorrow.



Broadcast burn on Fort Huachuca-Courtesy of Fort Huachuca.

~ Preserving Southern Arizona's Western Landscapes ~

The Arizona Land and Water Trust (Trust) has been working with its landowner partners to preserve Southern Arizona's western landscapes, farms and ranches, wildlife habitat, and the waters that sustain them since 1978. To date, the Trust has protected approximately 65,000 acres across Southern Arizona, including conservation easements on historic cattle ranches in Pima, Santa Cruz, and Cochise Counties. Recently, the Trust announced the protection of the historic Pyeatt Ranch with a permanent conservation easement.

The 800-acre conservation easement is part of the Pyeatt Ranch's more extensive operation, consisting of over 5,050 acres at the base of the Huachuca Mountains near Canelo, Arizona. Family-owned and operated



Pyeatt Ranch
Photo Curtesy of the Arizona Land and Water Trust

since 1919, the Ranch is currently managed by Manuel Murrietta. Manuel has worked diligently to protect and improve the Ranch's grasslands, water resources, and wildlife habitat while increasing agricultural production.

The Ranch is part of a much larger working landscape used to support livestock grazing since the turn of the century. The Pyeatt Ranch borders the Trust's Diamond C Ranch conservation easement to the north and the Coronado National Forest on three sides. It is also home to perennial springs, riparian

floodplains as well as rare sacaton grasslands. It is a welcome addition to the growing conservation landscape in the Elgin – Sonoita grasslands and Upper San Pedro River Watershed.

"Arizona Land and Water Trust is proud to partner with the owners of the Pyeatt Ranch and Fort Huachuca. The project highlights the important heritage of this multi-generational working landscape, the significant wildlife and grassland values found on the property, and conservation partnerships which help to sustain the critical mission of the Fort," said Liz Petterson, Executive Director.

Protection of the property also contributes to a less restrictive military mission environment for Fort Huachuca by reducing land and water development under the R2303 Restricted Military Airspace. Maintaining open space and preserving natural resources improves the Fort's capability to support approximately 160,000 annual air operations and reduce the proliferation of electromagnetic interference within the Buffalo Soldier Electronic Test Range. Protection of Pyeatt Ranch also furthers joint goals of the Trust and the Fort to protect and enhance groundwater availability and the Pyeatt Conservation Easement. This project is supported by the Department



Pyeatt Ranch
Photo Curtesy of the Arizona Land and Water Trust

of Defense's Readiness and Environmental Protection Integration program in partnership with Fort Huachuca.

~ A New Law Gives Arizona's Conservation Districts The Power to Create and Administer a Soil Health Program ~

On April 9, 2021, Governor Ducey signed HB2079, which expands the statutory responsibility of the 42 State Conservation Districts to include creating and administering a soil health program. This new program within the Districts' purview is entirely appropriate since they have been conserving our natural resources since the 1940s when they were formed in Arizona. Districts have always been comprised of farmers, ranchers, and other volunteer private landowners and have been recognized as the experts in "the fields of land, soil, water, and natural resources management within the boundaries of the district." A.R.S. §37-1054(A). Working statewide to conserve our limited natural resources and promote sustainable agriculture across all land types and with a diverse group of entities and private landowners, Conservation Districts are dedicated to improving soil health.

HB2079, which was introduced by Representative Tim Dunn and supported by the Districts, was advanced through the legislative process with the help of the Arizona Farm Bureau. Notably, this bill enables Arizona to be eligible to receive soil health-related funds under the Agriculture Resilience Act, which was introduced by Representative Pingree and is going through Congress now. In addition to giving the Districts the power to create a statewide soil health program, it also gives them the ability to eradicate invasive species and increase public awareness about water conservation.



Healthy Landscape Example
Photo Curtesy of the Arizona Association of Conservation Districts



AACD President Frank Krentz has said when discussing soil health in Arizona, "Districts already support and promote soil health practices and programs across the state. Now that we have the language added in our statutory responsibilities, it gives us the ability to hopefully get even more funding needed to get even more of this type of conservation work on the ground."

For More Information Visit

sentinellandscapes.org