# THE PINE CONE

Official Newsletter of the Albuquerque Wildlife Federation

Albuquerque WILDLIFE Federation

conservationists since 1914

August 2024


## The Miracle of Comanche Creek Sedges by Bill Zeedyk

*For this month's newsletter, we are reprinting an article that Bill Zeedyk wrote for the August 1994 issue of **New Mexico Fishing Monthly**, published three decades ago this month, which he says is his favorite piece he has ever written:*

Some miracles happen in a moment. Others take longer. The miracle of Comanche Creek has been ongoing since 1982, and it's not over yet.

Sedges are the miracle workers of this creek. Sedges are robust, grass-like plants with stiff, three-cornered leaves that grow in moist soils along the edges of creeks and in wet meadows. Sedges have magical powers because they can heal wounded trout streams.

Comanche Creek is a cutthroat trout stream on the Valle Vidal Unit, Carson National Forest in northern New Mexico. It's a tributary of the Rio Costilla. Today, Comanche Creek teems with scrappy cutthroats, but only a few years ago trout were few and far between. The creek had been severely damaged by a century of overgrazing, subsistence farming, logging and too many roads.

Today it is recovering, thanks to the healing power of sedge and some tender loving care. By implementing a proper grazing system, obliterating roads and controlling off-road vehicles, resource managers have provided

the right conditions for sedges to do their thing. The result is a living miracle.

When the Forest Service acquired the Valle Vidal by donation from the Pennzoil Corporation, the area's streams showed all the marks of long-sustained overgrazing, a pattern of use that began long before Pennzoil itself had acquired the land.

Typically, overgrazed meadow streams are wide, shallow and braided with many riffles and few pools. Stream banks are raw and eroded and lack undercut pockets where trout can hide. In-stream vegetation is scarce or absent. Water temperatures get too warm for trout in summer, too cold in winter. Anchor ice freezes from the bottom up. Gravel bars are clogged with mud.

In contrast, healthy meadow streams are deep and narrow, displaying a typical hour-glass shape, wider at the bottom than at the surface. Stream banks are well vegetated and stable with numerous overhanging reaches. Riffles and pools are roughly equal in number, area, and distribution. Water temperatures stay cool in summer, warm in winter. Winter snows roof and insulate the creek. Anchor ice is rare. Stream gravel is clean, loose and free of mud.

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## The Miracle of Comanche Creek Sedges - continued from page 1

Sedges can mend overgrazed meadow streams, given the chance. They can even do it in the presence of moderate livestock grazing if the grazing use is properly managed and controlled.

The seeds of sedges sprout, take root and grow on sand bars at the water's edge in mountain streams. These plants grow rapidly and their roots spread quickly through the loose, moist sediments of the sand bar. While the sedges are growing, water levels rise and fall with each rainstorm. Particles of silt and sand, bits of grass, leaves and twigs wash downstream to become trapped among the stiff, upright leaves of the sedge plants.

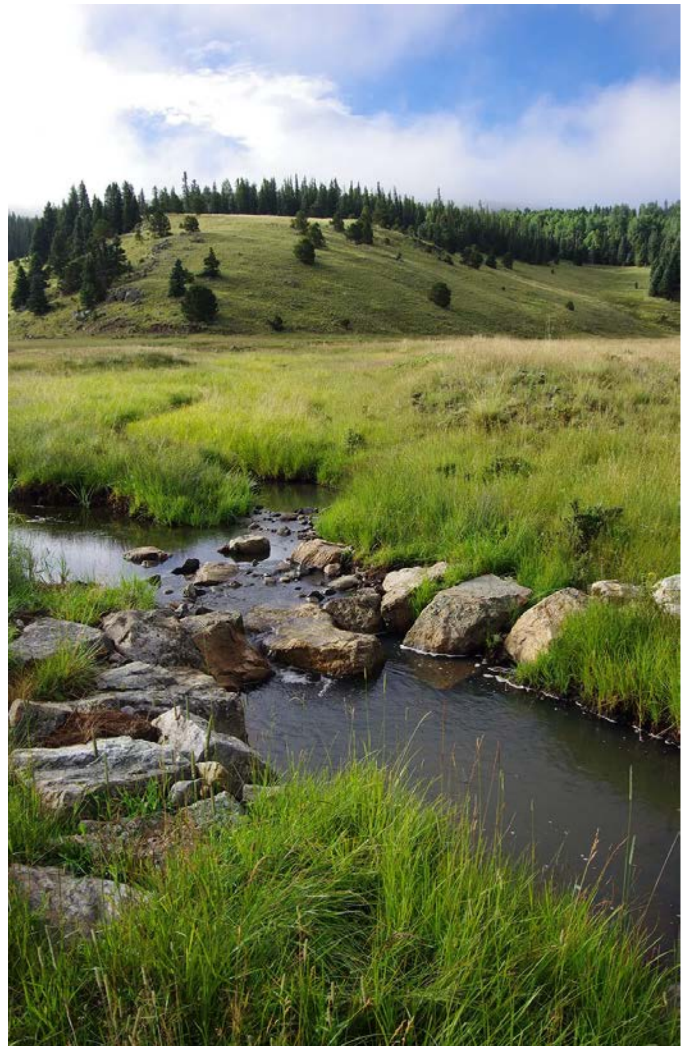
These trapped sediments gradually get deeper, raising the surface of the sand bar higher and higher above the stream itself, and building the stream bank in the process. The stream narrows and deepens. Meander bends develop with a rhythmic pattern curving left to right, right to left, back and forth across the meadow. Braided stream sections disappear altogether.

Unlike upland plants, such as bluegrass, sedges have the power to grow up through accumulating layers of sediment, developing new layers of roots as the soil deepens. These new roots bind the soil particles together, holding the stream banks in place with sufficient strength to resist the erosive gouging of spring runoff.

Finally, as the banks rise higher, the deeper older layers of roots weaken and die. The force of flowing water cuts away at the base of the bank eating out pockets where trout take cover from predators.

The key to successful stream recovery is in growing tall, dense and vigorous stands of sedge plants. If grazed too closely, sedges do not develop sufficient height to trap and hold sediments. Their roots don't develop enough strength to bind the soil together and resist storm flows.

So, the answer is in managing the grazing pressure correctly. The number of cows, when and how long they stay on site, and how much time passes before they return again are the key concerns. The objective is to leave the sedges tall, dense, and vigorous at the end of the summer's growing season.



One solution is to simply remove the cows altogether. Fence out the riparian zone and allow no grazing at all. Let the sedges grow undisturbed. Easy.

But cattle grazing is an important industry in Northern New Mexico. Cattle grazing keeps folks working, pays the bills, sends the kids to school and keeps the land in open space. Systems and methods of grazing are needed that can bring about habitat recovery in the presence of periodic livestock grazing. Under such a system everyone would benefit, including fishermen.

A special grazing management plan was developed for the Valle Vidal with the goal of restoring its meadows and streams to good ecological health and vigor while

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sustaining some livestock use. Basically, where 2,000 head of cattle had grazed before, now just 600 were permitted. The land was fenced and cross-fenced into eight separate pastures, four east of the Rock Wall and four west.

When the cattle arrive each spring, they first graze east of the Wall, staying about 20 days in each of three pastures. Each year a different pasture is totally rested with no grazing at all that year.

In mid-July the cattle are moved to higher elevation lands west of the Rock Wall and the process is repeated. Three of the four pastures are grazed for 20-30 days each and a different one is rested each year. By mid-September the cattle are removed from the area altogether. There are other aspects to the system, but the pattern and frequency of moves is the basic principle permitting recovery of the sedges.

Under the system now used, the sedge plants are not hedged to ground level year after year. They regain much of their height and vigor after the cows are moved along to the next pasture.

The residual stubble of ungrazed grasses and sedges forms a thatch that covers the land through the winter. It slows the spring runoff during snowmelt. This cover mulches the soil, prevents frost heave, traps sediment particles and lets the water seep slowly into the soil where it restores the water table. Overhanging matts of sedge protect the stream banks from the spring torrent and prevent ice flows from gouging the banks.

Encroaching sedge plants sometimes pinch opposite sides of a stream channel through the riffle area. The riffle narrows and gradually becomes a run or a glide, with little turbulence. Eventually, some glides become pools, especially on the outside curve of a stream meander. Cutthroat trout move easily from the cover of such pools to feeding grounds in the runs and riffles.

There are many more trout in Comanche Creek now than there were in 1982. Because the range was recovered, the Forest Service had gradually increased the number of cows permitted to graze there each year. Eventually the upper limit will be reached where further increases would jeopardize the fishery.

Comanche Creek has about 8 miles of fishable trout waters above its confluence with Rio Costilla. Four miles are easily accessible from Forest Road 1950; the rest is walk-in only.

I find it easy to fish a narrow, meadow stream, like Comanche Creek, by casting and moving slowly downstream. I let the current wash my fly under an overhanging bank. I don't need to worry much about natural drift. I just get the fly to the fish with as little commotion as possible. I walk softly and try to stay concealed.

Reading the water helps me catch fish. The pattern of pool, glide, riffle, pool is repetitive in a meadow stream like Comanche Creek. Reading the water is easy to do.

Usually, the biggest trout will be lurking next to the first overhanging sedge clump downstream from the turbulence at the head of the pool. That is about ten to twenty feet down. I cast my fly to the head of the pool and let it drift by that first big clump of sedge. Bang! He's on.

During late evening or early morning hours, cutthroats are quite active. At these times, the runs, glides and riffles may produce good fish if overhanging banks and pools provide nearby cover.

Changing the grazing system on the Valle Vidal has set the stage for the recovery of not only Comanche Creek but also Middle Ponil Creek and Rio Costilla. That's part of the story. Concurrently with changes in land use, the New Mexico Department of Game and Fish changed the fishing regulations. That's the rest of the story. Creel limits went from eight per day to two per day, to catch and release. As a result, there has been an increase in the average size of fish as well as numbers of fish.

Comanche Creek really is a miracle. The miracle is the direct result of professional managers applying the best technology to on-the-ground practice, cooperation of conscientious livestock operators, and the good will of the public.

Yes, the sedge, that tough little plant at the water's edge. Give it a little time. Let it do its thing. It heals wounded trout streams.

Bill Zeedyk
AWF Director Emeritus

## AUGUST 9-11, 2024 SERVICE PROJECT: Midnight Meadows

**LOCATION:** Midnight Meadows in the Carson National Forest

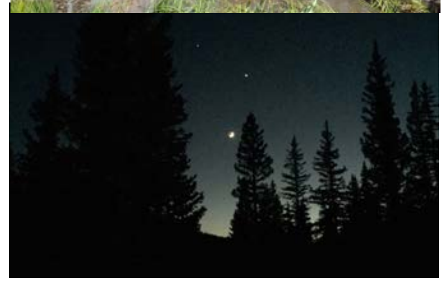
**THE PROJECT:** Midnight Meadows is one of the "wetland jewels" that our partner group Amigos Bravos has identified as needing special protections and restoration priority in the Carson National Forest. During this year's project, we will be building structures to help hold water on the landscape and grow wetland vegetation. We may also work on fencing.

**SCHEDULE:** Friday, August 9 – Sunday, August 11
Volunteers do not need to be present for the entire weekend to participate. You are welcome to join us just for the work day Saturday, or camp for just one of the two nights.

**GEAR:** Bring everything you need for a weekend of camping and restoration work, including work gloves, hat, long sleeves, long pants, sturdy boots, and sunscreen. We will be camping at an altitude of over 10,000 feet, so bring layers and warm clothes. Be prepared for rain showers and wet weather (we recommend bringing a change of shoes, and waterproof boots or boots you don't mind getting wet, as we will be working in creeks and wetlands). Plenty of drinking water is always essential.

**FOOD:** AWF will provide coffee and breakfast burritos on Saturday morning and bison or veggie burgers on Saturday evening. Please bring a dish to share for the Saturday potluck dinner, along with your own lunches, Friday dinner, Sunday breakfast, plate, cup, and eating utensils and lots of water!

**TO SIGN UP: Email Barbara at abqwildlifefederation@gmail.com**
**Directions and further details will be sent to you once you sign up.**

## 2024 SERVICE PROJECTS CALENDAR

March 9......................Valle de Oro Wildlife Refuge
April 12-14.................Wolf Creek, Ft. Union Ranch
May 17-19....................Rio Mora Wildlife Refuge
May 31-June 2.............Rito Peñas Negras
June 21-23....................San Antonio Creek, Jemez Mtns
~~July 19-21.....................Gallinas Post-Fire Restoration~~
August 9-11..................Midnight Meadows near Questa, NM
August 30-Sept 1.........Limestone Canyon, San Mateo Mtns
September 21..............Galisteo Basin
October 4-6..................Cebolla Canyon, El Malpais
October 26..................Cedro Creek, Tijeras

## AUGUST 30-SEPTEMBER 1 SERVICE PROJECT: Limestone Canyon

**LOCATION:** Limestone Canyon, San Mateo Mountains

**THE PROJECT:** Over Labor Day weekend we'll be returning to one of our favorite restoration sites: Limestone Canyon in the San Mateo Mountains. This project will mark AWF's 18th year of working in Limestone Canyon, and it has been gratifying to see how our rock structures have raised the streambed and rewetted the meadows, leading a relict stand of narrowleaf cottonwood trees to send up new shoots that are now growing into strong young trees. This year we're once again pleased to be partnering with New Mexico Volunteers for the Outdoors to continue the work of improving wildlife habitat in this special place.

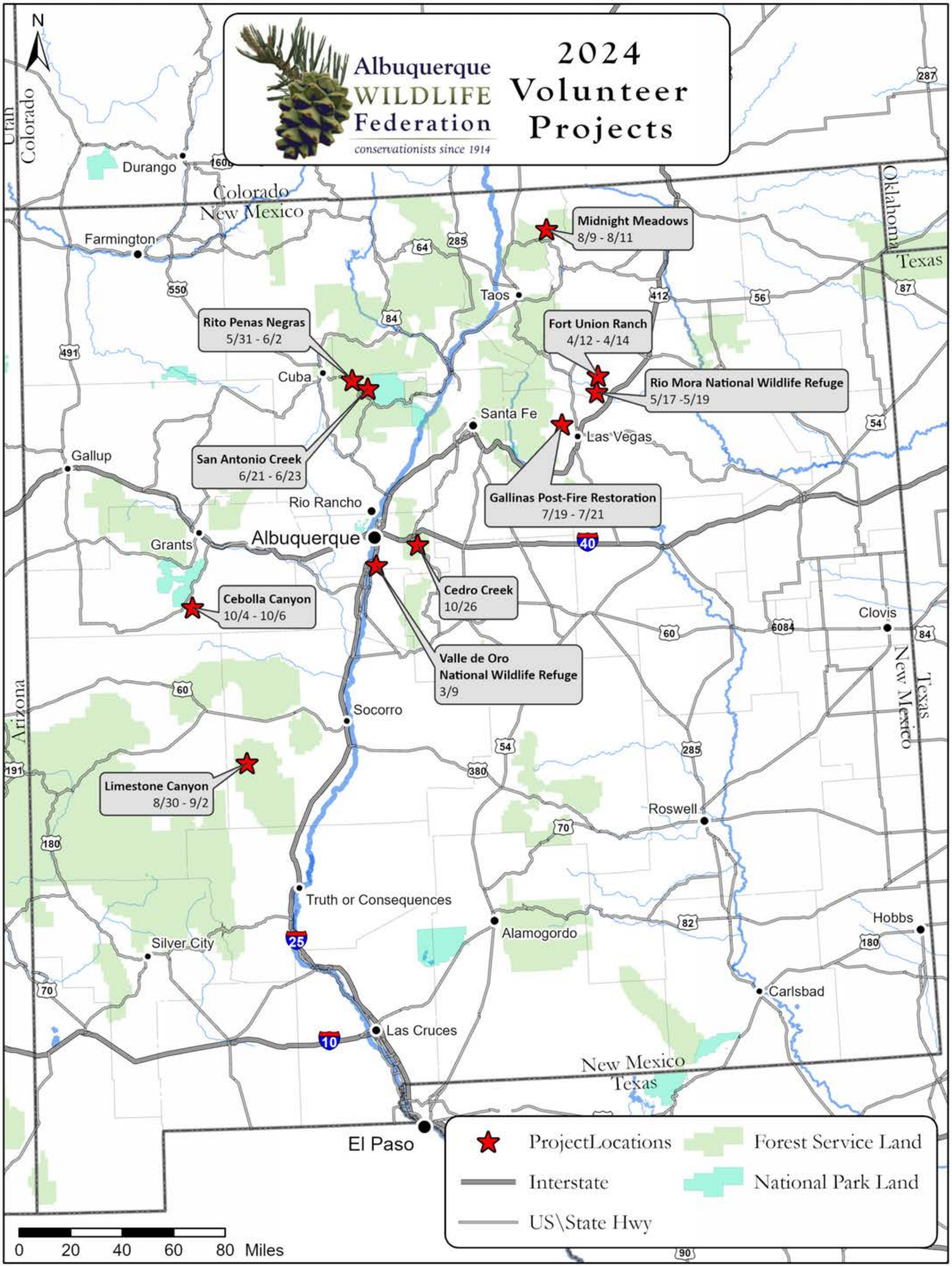
**SCHEDULE:** Friday, August 30 – Sunday, September 1
Volunteers do not need to be present for the entire weekend to participate. You are welcome to join us just for the work day Saturday, or camp for just one of the two nights. You are also welcome to camp an extra night on Sunday and spend more of the long weekend at the site.

**GEAR:** Bring everything you need for a weekend of camping and restoration work, including work gloves, hat, long sleeves, long pants, sturdy boots, and sunscreen. We recommend bringing a change of shoes, and waterproof boots or boots you don't mind getting wet. Rain gear, layers, warm clothes for the evenings and plenty of water are essential.

**FOOD:** AWF will provide coffee and breakfast burritos on Saturday morning and bison or veggie burgers on Saturday evening. Please bring a dish to share for the Saturday potluck dinner, along with your own lunches, Friday dinner, Sunday breakfast, plate, cup, and eating utensils and lots of water!

**TO SIGN UP: Contact Scial at rioscial@gmail.com or 505-480-2906.**
***Directions and further details will be sent to you once you sign up.***

**We are monitoring the Fisher Fire, which has been burning in and around this project site, and we will keep you posted on any impacts it may have on our plans.**


Updated: 3/6/2024

# UPCOMING EVENTS OF INTEREST

## Fence Removal on the Taos Plateau

**AUGUST 23-25, Tres Piedras**

**BACKCOUNTRY HUNTERS & ANGLERS**

Join BHA Habitat Steward Coordinator Bard Edrington on the Taos Plateau for a weekend of fence modification and camping! The Rio Grande Del Norte National Monument is an important wintering area for elk and mule deer and year-round habitat for pronghorn. However, the plateau is also a multi-use area that has miles of fencing separating grazing allotments. Much of this fencing is not wildlife friendly and can cause wildlife mortality or injury. That is where we come in. We will be removing woven wire fencing and prepping the area for future wildlife friendly fencing. Your work will have a direct benefit to wildlife habitat and connectivity. For more info and to RSVP: https://www.backcountryhunters.org/fence_removal_on_the_taos_plateau_and_fly_fishing

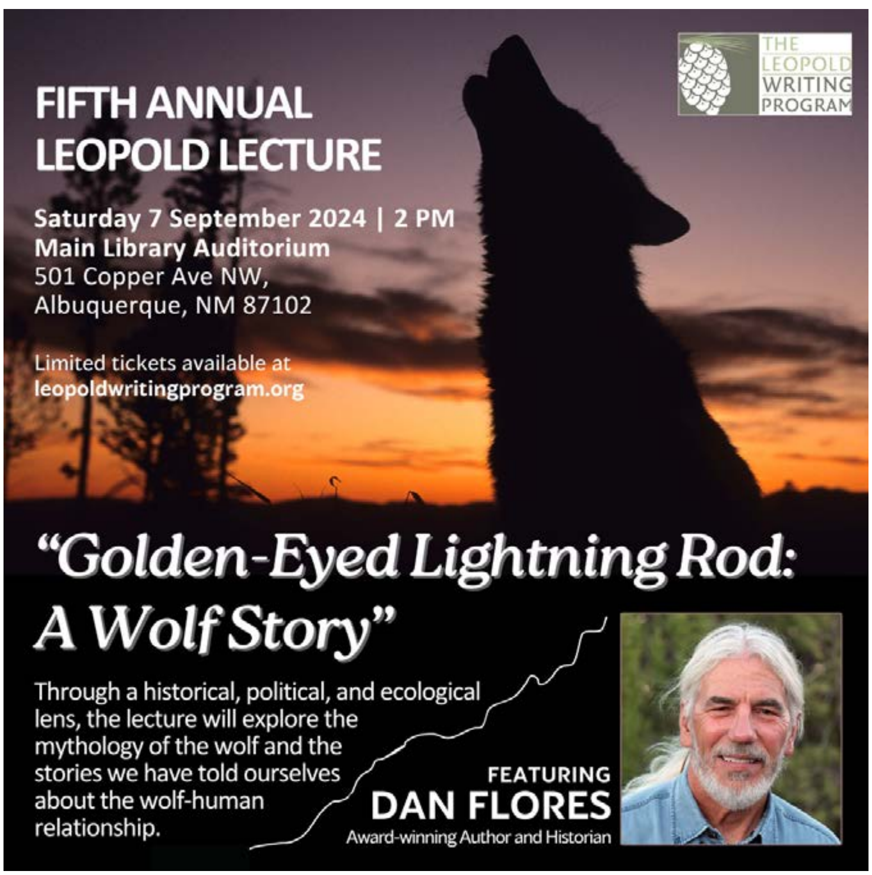
## Fifth Annual Leopold Lecture: Golden-Eyed Lightning Rod: A Wolf Story

**SATURDAY, SEPTEMBER 7, 2:00 p.m.**

**Main Library Auditorium, 501 Copper Ave NW, Albuquerque, NM 87102**

**LEOPOLD WRITING PROJECT**

Through a historical, political & ecological lens, author Dan Flores will explore the mythology of the wolf and the stories we have told ourselves about the wolf-human relationship.
Tickets available at: https://www.leopoldwritingprogram.org/annual-lecture.html




*Send your event information to: abqwildlifefederation@gmail.com!*

# JOIN US!
## Become a Member of the Albuquerque Wildlife Federation

The Albuquerque Wildlife Federation is an all-volunteer organization founded by Aldo Leopold and dedicated to protecting and restoring New Mexico's wildlife and habitat resources.

Our work is only possible thanks to the generous support of our members.

If you like the work we do, we hope you will help keep this legacy going by becoming a member or renewing your membership.


## AWF MEMBERSHIP APPLICATION

Albuquerque Wildlife Federation | P.O. Box 20225 | Albuquerque, NM 87154

❒ Yes, I'd like to join AWF!   ❒ This is a gift membership from: ____________________________________

name(s): ____________________________________________________________

address:____________________________________________________________

city, state, zip: _______________________________________________________

phone: ________________________________ email: ____________________________

❒ Student ___________ $10
❒ Individual __________ $25
❒ Family _____________ $35
❒ Sustaining __________ $50-99
❒ Patron _____________ $100
❒ Lifetime ____________ $500 (*one-time payment*)

Dues: $___________

Extra Contribution: $___________

**TOTAL ENCLOSED: $___________**