

# The Mountain Chickadee

Newsletter of the Sangre de Cristo Audubon Society  
Volume 49 Number 1, March 2020



Photograph by Tom Taylor

## In This Issue

### Upcoming Evening Programs

Wednesdays March 11 and April 8  
6:30 p.m.

**Free! See P. 2 for details**

### Birding Field Trips

March 15, May 17, 24 and 30, and June 6

**Free! See P. 2 for details**

### New Mexico Wildlife Center - Saving Injured Birds

[This Page](#)

### Birds Being Neighborly

[P. 4](#)

### To Protect Birds, Treat Cats Like Dogs

[P. 4](#)

### Timing of Bird Migration Skewed by Climate Change

[P. 5](#)

### Our Chapter in Action

[P. 6](#)

### President's Message

[P. 7](#)

The Sangre de Cristo Audubon chapter represents a landscape that has been occupied for millennia by peoples of diverse cultural backgrounds. We honor that diversity and believe that just as we strive to protect biodiversity, we must include and respect the diversity of the many people and cultures that call northern New Mexico their home.

**Keep Up on Our Latest Events and Field Trips!**  
**Sign up for Eblasts on our [Website](#)**

## Cold Rescue

It's 8:30 a.m., the temperature is below freezing and snow is falling at New Mexico Wildlife Center. But patient #19-684 is hungry. The female Red-tailed Hawk was brought in nearly two months ago from Taos by officers from New Mexico Game and Fish, who noticed the bird wasn't using one of her feet. Initial pain medication followed by weeks of rehabilitation for soft-tissue damage have nearly healed her, but they haven't dimmed her appetite.

In an area away from visitors, Haley Sharpe, a wildlife rehabilitator at the center, tosses a couple of thawed rodent carcasses into the raptor's enclosure. There aren't many more free meals in this bird's future, though – she'll be released back into the wild soon.

Winter at the [New Mexico Wildlife Center](#): the number of avian patients has thinned out. Many of those on hand are Dark-eyed Juncos or other migratory species that have been kept through the winter due to injury. In a separate area, cold-sensitive residents of the center, including a Turkey Vulture and an Osprey, get heaters and plastic sheeting to seal up openings in their enclosures, keeping them warm. And everyone gets dialed-up rations to help fend off the chill.



Haley Sharpe, right, administers fluids to a Western Screech Owl

In its 34th year, the nonprofit center in Espanola has eight staff members, about 30 volunteers and a team of dedicated local veterinarians who donate their time. The wildlife hospital's prime goal is to rehabilitate and release injured wildlife, from desert cottontails and bull snakes to hummingbirds and eagles. Roughly two-thirds of the animals brought into the center are birds, many of them injured by cats, collisions with vehicles, or in senseless pellet-gun attacks.

The center also provides a permanent home for a limited number of animals with issues that prevent them from surviving in the wild. A select few birds in this category are painstakingly trained to work with people and eventually become "ambassadors" for their kind, calmly visiting groups of school children and other people as their handlers explain species traits and conservation.

Even so, the welfare of these animals matters above all else, said Alex Patia, the center's Education and Outreach Manager. Staffers monitor the birds' health and well-being throughout their lives, providing care even as the animals age and are retired from public-education duties.

**Cont. on P. 3**

# Audubon Activities

## Illustrated Evening Programs

Wednesday, March 11, 2020 - 6:30 p.m.

### **River of Birds - Vera Cruz, Mexico, Robert Templeton**

Since 2006 Robert Templeton has worked as a writer and educator at the Veracruz River of Raptors, a coastal count site in central Mexico that records 4.5 million raptors each fall. Through video, photos and maps, he will present timing and population data from the count, and explore questions such as how climate change is affecting the migration.

Wednesday, April 8, 2020 - 6:30 p.m.

### **Birds of the Chiricahua Mountains, Renata Golden**

Renata Golden will talk about the birds of southeastern Arizona's Chiricahua Mountains, and the best places to see them. In addition to Cave Creek Canyon, learn about lesser-known spots such as Horseshoe, Sulphur and Whitetail Canyons. She will also share information on the results of Christmas Bird Counts in the Chiricahuas over the last 20 years.

Evening programs are illustrated talks on bird conservation and other topics concerning the natural world. The programs are held in the new Henderson Pavilion at the Randall Davey Audubon Center and Sanctuary, at the end of Upper Canyon Road in Santa Fe. Abundant parking is available; bring a flashlight. Everyone is welcome, there is no charge and the building is wheelchair accessible. A brief update of environmental issues and chapter activities precedes each program.

## Field Trips

Every Saturday

### **Randall Davey Audubon Center**

Every Saturday a naturalist will lead a walk around the RDAC grounds, an Audubon Important Bird Area, at 8:30 AM. Binoculars can be provided. Dress appropriately. All are welcome. For more info call 983-4609.

Sunday, March 15

### **Diablo Canyon & Rio Grande at Buckman Rd.**

Leader: Alex Patia, 505-753-9505  
alexpatia89@gmail.com

There could be early spring migrants like white-throated swifts, and canyon and rock wrens will be singing. Plus, great duck and sparrow viewing along the river. Max. 10 people. Meet at 7:30 AM at the Starbucks or in the parking lot due south of there at the DeVargas Center in Santa Fe. Contact leader to reserve a place.

Sunday, May 17

### **Spring Migrants at Galisteo**

Leader: René Laubach, 413-358-3363  
renelaubach@gmail.com

We will search for spring migrant songbirds in the cottonwoods and willows that line Galisteo Creek. This migratory pathway is a hot spot for a

wide variety of passerines, especially eastern wood warblers. The terrain is level, but there are some minor stream crossings and the path may be muddy after precipitation. Maximum walking distance is about a mile. Limited to 8 participants. We'll be back by mid morning. Contact the leader to reserve a place, and for meeting time and place.

Sunday, May 24

### **Vertical Mile of Birding, Rio Arriba County**

Leader: Jerry Friedman  
505-753-1946, 505-929-6925  
jerry\_friedman@yahoo.com

The trip will begin in the cottonwood bosque in Espanola and proceed west into the Jemez Mountains. We'll pass through every life zone from lowland riparian to spruce-fir forest; 100 species are possible. Contact trip leader for meeting time and place.

Saturday, May 30

### **Capulin Spring**

Leader: Tom Taylor, 505-660-0860  
tn21tay@comcast.net

This half-day trip will explore the east side of the Sandias at high altitude.

There will be an extended stop at Capulin Spring, where a variety of western birds congregate at an easily seen distance. Western Tanagers, Hermit Thrushes, Cassin's Finches and a variety of warblers are expected. The party will then bird on the way to the Crest House. A National Forest entrance fee or pass will be required for each vehicle. Due to the limited viewing area near the spring, the trip is limited to 8 people. Contact leader to reserve starting on May 16, with no more than 2 attendees per reservation.

Saturday, June 6

### **Orilla Verde**

Leader: Jerry Friedman  
505-753-1946, 505-929-6925  
jerry\_friedman@yahoo.com

On this half-day trip we'll look for raptors and a variety of songbirds. Participants can gather at DeVargas Center (in front of Starbucks) at 6:45 AM to arrange car pools before driving to the Rio Grande Recreation Area Visitor's Center in Pilar for an 8:00 AM departure. Contact leader for trip status.

Sangre de Cristo Audubon Society field trips are designed to promote understanding and appreciation of wildlife and their habitats. Our aim is to cultivate awareness of outdoor ethics in an atmosphere of friendly companionship. Field trips are free and open to the public. Some area entry fees are required and driving costs are shared. Participants are expected to carpool whenever possible. On all field trips, wear walking shoes and clothing appropriate for the weather. Bring water, lunch and binoculars. No pets, please. Always contact the trip leader before the trip. Trips may be cancelled for a variety of reasons.

# Audubon New Mexico

## Randall Davey Audubon Center and Sanctuary

The grounds at the Randall Davey Audubon Center are open Monday to Saturday, 8:00 AM to 4:00 PM, closed Sundays (and in January). Stroll the gardens as birds visit the birdfeeders, or walk the trails and enjoy the natural beauty and serenity of the 135-acre wildlife sanctuary. Additionally, the Davey Center is an environmental education center and offers a variety of educational events. Please check their [website](#) for details. The Center is located at the end of Upper Canyon Road on the far east side of Santa Fe.



### Historic House Tours

Step back in time as you stroll through the old Santa Fe style home (originally a lumber mill built in 1847 by the U.S. Army) of the artist Randall Davey (1887-1964). This docent-led tour will give you an opportunity to view some of Davey's most spectacular works of art, as well as a beautiful collection of Spanish Colonial and European antiques. Tours are held each Friday at 2:00 PM. Reservations are recommended. Cost is \$5 per person. For information call 505-983-4609. Click [here for registration and more details](#).

### eBird Global Big Day

Saturday, May 9

Last May, more than 51,000 [eBird](#) checklists were submitted documenting 727 species in the United States in a single day. On May 9 you can join more than 30,000 others and become part of this year's Global Big Day. You don't have to commit to birding for 24 hours - an hour or even 10 minutes of watching birds makes you part of the team. Visit your favorite spot or search out someplace new; enjoy a solo walk or get some friends to join in the Global Big Day fun.



### Like Birds? Join Audubon!

Sangre de Cristo Chapter: <https://audubonsantafe.org/>  
Audubon New Mexico: <https://nm.audubon.org/>

## Cold Rescue - Cont. from P. 1

As humans and resident birds spend time together at the center, they both begin to learn about each other. For example, Patia can tell that a bird that's panting or turning away is agitated. Tail wiggling and fluffing of feathers indicate a relaxed state of mind. For their part, the birds learn to recognize individual staffers, "and they definitely have preferences," Patia said.

Visitors to the center can view the "ambassador" birds, including a Long-Eared Owl and a Northern Goshawk, in their enclosures. But injured birds destined for rehab and release - like Red Tail #19-684 - are kept strictly separate and are not on display, Sharpe explained. She and other staffers who work with wild patients are also careful to speak softly and limit their time around the animals - and even avoid wearing perfume or using pungent laundry detergent - so the birds won't get used to human ways.



X-ray showing a pin in a Great Horned Owl's broken wing.

Sadly, many of the injured birds brought in to the center can't be saved. But around 60 percent of all wildlife admitted into the hospital that survive the first 24 hours are released back into the wild.

"It is a very difficult job, but every day I can go home and say I did what is best for the animals, even if that means ending suffering," Sharpe said. "And some of the best days are the days that I get to release a bird. There is nothing like getting to watch a little songbird you helped raise and taught to survive on its own flying away!"

### Don't Kidnap That Baby Bird

This spring, many people around the Santa Fe area will see baby birds, rabbits or other wildlife that seem to be orphaned. But resist the urge to "rescue" them and take them to an animal-rehab facility, said Alex Patia, education and outreach manager for the New Mexico Wildlife Center.

For one thing, wild-animal parents don't always spend 24/7 with their offspring. For another, "It's unusual for them to actually abandon their young," he said. That "helpless" baby bird may actually have a parent that is close by or will soon return. Or the youngster may in fact be old enough to survive on its own.

Patia likened even well-intentioned capturing of such animals to "kidnapping," and advised people to call a licensed wildlife rehabilitator before taking any action.



# Environment News

## Birds Being Neighborly

In a clear-walled laboratory compartment, an African Grey Parrot faced a heap of metal washers. A human waited nearby with her hand outstretched, ready with a reward of a delicious walnut if the bird gave her a washer. But the parrot couldn't reach her; there was no opening in the clear plastic between it and the human.



It could reach its neighboring parrot, though, whose compartment had an additional opening to the human. The first parrot started picking up washers in its beak and passing them to its neighbor. At least one of them would get some walnuts today.

"They were quite intrinsically motivated to help one another," said Désirée Brucks, a cognitive biologist at the Max Planck Institute for Ornithology in Germany. She trained the parrots to exchange metal washers for treats, then put the birds into paired compartments with a little opening between them. Only one bird had washers, but only the other bird could reach Dr. Brucks's hand. From the very first trial, described recently in the journal *Current Biology*, the parrots with washers gave them away, even though they got nothing in return. They're the first non-mammals observed helping each other in this way, suggesting other animals have evolved the ability to aid others while receiving no clear benefit to themselves.

Dr. Brucks and her co-author Auguste von Bayern found that parrot pairs with closer relationships before the experiment were more likely to help one another. Humans, too, prefer to help their friends, Dr. Brucks pointed out. But the parrots also helped others they weren't as close with.

"In humans, it's known that we help others because we empathize with them," Dr. Brucks said. But researchers can't tell whether African Grey Parrots feel the same way, or help others simply because they expect favors in return. They also don't know how common it is across the animal kingdom for individuals to help each other out. Dolphins, rats and vampire bats have been observed giving help. Only a few apes, though, have acted like the African Grey Parrots. And when the researchers repeated their experiment with Blue-Headed Macaws, the birds only acted selfishly.

This much is clear, though: Over hundreds of millions of years of evolving separately, humans and African Grey Parrots have both developed the habit of looking out for a neighbor who needs a walnut.

New York Times

## To Save Birds, Treat Cats Like Dogs

Dr. John Read is an Australian ecologist and author of *Among the Pigeons: Why Our Cats Belong Indoors*. Here are excerpts from recent comments he made to an interviewer from the American Bird Conservancy:

Most people interested in wildlife or cat impacts are aware of the phenomenal tallies (billions!) of wildlife that fall victim to either cat predation or death from infection following a cat attack... And there are passionate people who really want to believe that a Trap-Neuter-Release approach is a humane and effective tool for reducing the (numbers and) suffering of outdoor cats. TNR sounds compelling – and if you believe some social media, it is effective – but unfortunately, studies convincingly demonstrate that re-abandoning sterilized cats typically exposes them to ongoing threats and does not lead to substantial, sustained reductions in stray cats unless most cats are adopted and the feeding of unowned cats ceases.



Social animals like wolves, lions, and ants cooperate and benefit from their interactions. They also regulate reproductive output of their colony with strong defense and protection of mates. Domestic cats are essentially solitary animals, not colonial. Feral domestic cats occupy territories with sizes determined by food availability. When food is abundant, like at seabird nest sites or cat feeding stations, these territories collapse, and many cats are happy to coexist. But they still don't cooperatively hunt or strongly defend mates or food. Most cat litters are sired by multiple toms; even queens mated by supposed 'alpha' males typically have more than one male mate. This mutual tolerance is why TNR is ineffective, because neutered cats, like their intact brothers and sisters, don't prevent newcomers from eating their food or mating with others in the group.

Pet cats need to be treated and managed like loved pets. Local, state and federal laws, promoted and endorsed by veterinarians and the animal-welfare lobby, are increasingly requiring these cats to be registered, sterilized and contained within the owner's home or yard, just like dogs. Secondly, cats shouldn't be fed outdoors, and bans on feeding unowned cats should be strongly enforced. Limiting access to food is the very best and simplest way of reducing the number, suffering and impact of unowned cats. Thirdly, we need to brainstorm and test better ways to control feral cats with targeted and humane efforts.

# Climate News

---

## Study Finds Timing of Bird Migration Skewed by Climate Change

A team of researchers has found that the timing of spring bird migration across North America is shifting as a result of climate change. The study, one of the first to examine the subject at a continental scale, was done by scientists at Colorado State University, the Cornell Lab of Ornithology and the University of Massachusetts.

Using 24 years of weather radar data, the study found that spring migrants are likely to pass certain stops earlier now than they would have 20 years ago. Temperature and migration timing were closely aligned, with the greatest changes in timing occurring in regions warming most rapidly. During fall, shifts in migration timing were less apparent.



White-Crowned Sparrow

Lead author Kyle Horton, an assistant professor at Colorado State University, said that the timing shift doesn't necessarily mean that birds are keeping pace with climate change. And there's concern about a mismatch between when birds arrive and when the blooming plants and insects they need for food are at their peak.

Andrew Farnsworth, co-author and researcher at the Cornell Lab of Ornithology, noted that bird migration evolved largely as a response to a changing climate. "It's a global phenomenon involving billions of birds annually. And it's not a surprise that bird movements track changing climates," he said. "But how bird populations respond in an era of such rapid and extreme changes in climate has been a black box. Capturing scales and magnitudes of migration change over time has been impossible until recently."

The study authors found the lack of change in fall migration patterns surprising, but say migration also tends to be a "little bit messier" during those months when there's not the same pressure to reach wintering grounds, and migration tends to move at a slower pace.

Cornell Lab of Ornithology

## State Ups Pressure on Methane Polluters

At a time when several reports indicate methane emissions in the Permian Basin are increasing and could be much higher than previously revealed, state officials are turning up the heat on oil and gas operators within New Mexico.

A new draft report from the Methane Advisory Panel assembled by Gov. Michelle Lujan Grisham suggests the amount of methane released into the atmosphere or burned in the Permian Basin has more than doubled since 2017. Meanwhile, officials from the New Mexico Environmental Department recently used infrared cameras during helicopter flyovers of the Permian Basin to discover potential emissions violations by several oil and gas operators. And the state Oil Conservation Commission took a key step forward in January by adopting new enforcement rules that authorize penalties for oil and gas polluters.

The Methane Advisory Panel's draft technical report lays out comprehensive recommendations meant to help environmental regulators craft a new methane rule involving everything from leaks in oil and gas storage tanks to pneumatic pumps. Tom Singer of the Western Environmental Law Center said the report is the most comprehensive look ever at various sources of methane emissions in New Mexico from the oil and gas industry. Regulators will sift through sometimes conflicting information in the 301-page technical report when deliberating a pending methane-reduction rule.

The helicopter flyovers of the Permian Basin were conducted by the state Environmental Department last fall in conjunction with the Environmental Protection Agency. About 5,340 storage tanks were targeted with infrared cameras, with 111 emitting methane and other pollutants at the time of the flyover. Of the 530 flares observed, 13 were unlit and emitting methane and other pollutants. In response, the department sent written notices to seven oil and gas operators seeking an explanation and requesting that the issues be corrected.

The New Mexico Oil and Gas Association, citing EPA data, insists methane emissions are trending downward. But a recent analysis by the Environmental Defense Fund estimated oil and gas operators in New Mexico emit about five times what the operators are reporting to the EPA – and twice what the environmental group had previously estimated itself.

Meanwhile, Singer said that the action taken by the Oil Conservation Commission, enabling it to penalize "bad actors," is particularly important. "As the state adopts new rules in the coming months to stop methane pollution and waste, most companies won't need the threat of fines to operate responsibly. But for those that do, a hit to their bottom line will be an effective way, along with suspending permits and curtailing production, for the state to let them know that it is serious about climate pollution," he said.

# Political Issues

Let Your Representatives in Washington  
Know How You Feel!  
See contact info on Page 8!

## Our Chapter in Action: Where We Stand

As an advocate for the survival and well-being of New Mexico's diverse bird species, the Sangre de Cristo Audubon Chapter takes every opportunity to make our concerns known to federal, state and local agencies that are contemplating actions that could disrupt bird populations, breeding and behavior. Here are some steps we undertook recently:

### Terrero Mine

We wrote to the U.S. Forest Service to spell out our strong concerns about Comexico's exploratory drilling proposal for a parcel near Terrero. Foremost among our concerns is that drilling activity could disrupt nesting behavior for many birds, including Grace's and Virginia's Warblers, Lewis's Woodpecker and the Mexican Spotted Owl. We urged the Forest Service to prohibit activity that would cut live trees or shrubs, or compact grasslands, between April 15 and August.

We raised concerns about Comexico's plan to use an existing livestock well for water for their operation, which could shift livestock to a nearby perennial stream, creating resource damage there. And we made it clear that we are apprehensive about potential releases of water contaminated by mining operations, and soil compaction at drilling sites that retards the recovery of grasses and shrubs.

### Encino Vista Restoration Project

We also wrote to the Forest Service in regard to the proposed Encino Vista restoration project near Gallina. We noted that the tree-thinning work would be appropriate if managed properly, but urged officials to focus on maintaining the overall ecosystem of the forest while carrying out the project. In particular, we pointed out that the current forest plan calls for thinning trees 9-18 inches in diameter – essentially old, large trees whose loss would inevitably degrade habitat for the threatened Mexican Spotted Owl, among other species.



Spotted Owl

Our letter also urged the Forest Service to avoid cutting live trees or shrubs during nesting season, and to

conserve old snags that are important for many species of birds and other wildlife. And we asked the agency to avoid creating a myriad of "social roads" - tracks created by small pickups that are hard to obliterate and tend to get used over and over even after thinning projects are complete. In addition, we urged the Forest Service to develop plans for managing grazing and recreation, and improving stream function, in the area as part of the restoration project.

### Holloman Airspace Expansion

The Sangre de Cristo Chapter and three other Audubon chapters in New Mexico comprise the New Mexico Audubon Council. Speaking with one voice representing 6,000 Audubon members statewide, the council recently provided the U.S. Air Force with a detailed statement regarding its Holloman Airspace draft environmental impact statement (DEIS), which proposes expanding F-16 training airspace over southern New Mexico.

Acknowledging that the Air Force base plays a crucial role in our national security, the statement expressed strong



Gila National Forest

concern over proposed alternatives that would subject communities, watersheds, wildlife and public lands – including parts of the Gila Wilderness – to extreme noise. The impacts could disrupt breeding behavior in many species of migratory birds, including a number of threatened and endangered species. Potential wildfires and chaff pollution from dropping of flares are also among our chief concerns.

The council urged the Air Force to select Alternative 1 of the DEIS, which would expand and reconfigure the Talon military operation area east of Alamogordo, and would result in the fewest risks and impacts.

### State Environmental Agencies Still Plagued by Funding Cuts

A recent analysis of environmental and public-lands agencies in New Mexico shows deep funding cuts and staff vacancies over the last 10 years that continue to limit protections for the state's air, land and water, and undercut interpretive programs for the public.

The state Environment Department's budget was cut 31.69% during the Martinez administration, and it currently has a vacancy rate of 18.8%. The State Parks Division saw a 13.84% funding cut during those same years, and lost 72 full-time positions. The Department of Game and Fish had a 16% vacancy rate in 2019. Since taking office, Governor Michelle Lujan Grisham's administration has requested increases for these key agencies.

New Mexico Wilderness Alliance





## President's Column

Tom Jervis

For almost 40 years, I have been engaged on behalf of our chapter and the New Mexico Audubon Council with federal agencies that manage land in New Mexico. This has been both rewarding and frustrating. Rewarding because I have developed sufficient credibility with agencies such as the Forest Service and BLM that they seem to pay attention to my comments - even when they do not take my advice. Frustrating because these and other agencies are often still resistant to considering the needs of wildlife and ecosystems.

It has all been a tremendous learning experience and I have learned much from experts. In the 1980s, the Southwest Regional Forester actually declared that he wanted to see old-growth Ponderosa pine in the forests of New Mexico and Arizona gone. As the ecological value of old-growth forests became recognized, though, the Forest Service slowly focused on forest restoration over timber production (aided by the collapse of the timber industry, of course). Much damage was done, but things have improved, gradually.

Progress has not been uniform across the board, however. For example, I can't count the number of allotment management plans I have reviewed that say range conditions are "marginal but improving." Years later the updated plan says range conditions are still "marginal but improving." They are clearly not improving, but the agencies rarely make the significant efforts they need to for real improvement. Even here, though, Congressional action to permanently retire grazing allotments from willing participants is coming, albeit slowly.

On Page 6 of this newsletter are synopses of several of our recent efforts to influence looming decisions by federal land-management agencies, including one regarding a proposed mine near Terrero. Remarkably, the General Mining Act of 1872 still constrains land managers from considering uses other than mining when evaluating mining projects, and forces them to allow - indeed encourage - mining activity to the detriment of wildlife, water quality and scenery.

We will certainly continue to fight for birds and the ecosystems that we all depend on. It is an important undertaking - just as it was 150 years ago, when early conservationists began to object to market hunting of birds and other wildlife, and created what is now the National Audubon Society. We have made much progress, but climate change and other challenges make it all the more urgent that we persevere.

## Climate Change Brings Different Temperatures to The City Different

Santa Fe's average temperature in 2019 was 50.4 degrees F, about half a degree above normal. That's how the city fared during Earth's second-warmest year ever - just shy of the global record set in 2016 - according to government researchers.

The local warming trend compares with last year's average temperatures of 64 degrees F in Los Angeles (1.4 degrees above normal), and 55.7 degrees F in New York (.7 degrees above normal).

Analyses by the National Aeronautics and Space Administration and the National Oceanic and Atmospheric Administration also showed that globally, average surface temperatures last year were nearly 1.8 degrees F higher than the average from the middle of last century, caused in large part by emissions of carbon dioxide and other heat-trapping gases from the burning of fossil fuels. That much warming means the world is far from meeting goals set to combat climate change.

"These trends are the footprints of humans stomping on the atmosphere," said Gavin A. Schmidt, director of the Goddard Institute for Space Studies, which conducted the NASA analysis. "We know that this has been driven by human activities."

Since the 1960s, each decade has been warmer than the previous one, by significant amounts. While the 2010s continued this trend, the second half of the decade was especially warm, with the five hottest years ever occurring during that time span.

New York Times

## The West's Most Vital River in Decline

The Colorado River's average annual flow has declined by nearly 20 percent compared to the last century, and researchers have identified one of the main culprits: climate change is causing the mountain snowpack to disappear, leading to increased evaporation.

Up to half of the drop in the Colorado's average annual flow since 2000 is due to warmer temperatures, recent studies found. Now, two U.S. Geological Survey researchers have concluded that much of this decline - equal to 1.5 billion tons of missing water, or the annual water consumption of more than 10 million Americans - comes from the region's snowpack shrinking and melting earlier. "The Colorado River Basin loses progressively more water to evaporation, as its sunlight-reflecting snow mantle disappears," the USGS researchers wrote.

By law, New Mexico shares the waters of the Colorado River Basin with six other states and Mexico.

Washington Post

Sangre de Cristo Audubon Society  
P. O. Box 22083  
Santa Fé, NM 87502-2083

## Sangre de Cristo Audubon Board of Directors 2020

### Officers:

President:	Tom Jervis	President@AudubonSantaFe.org
Vice President:	VACANT	
Treasurer:	Carlyn Jervis	
Secretary:	Joanna Hatt	

### Committee Chairs:

Conservation:	Joanna Hatt	Conservation@AudubonSantaFe.org
Programs:	VACANT	
Newsletter Editor:	Gordon Smith	
Field trips:	Rick Rockman	
Webmasters:	Tom Jervis/Meg Peterson	
Membership:	VACANT	
Publicity:	VACANT	
ClimateWatch:	Albert Shultz	

### Board Members at Large:

Sheila Gershen  
Tom Taylor  
Mary Ristow

### New Mexico Audubon Council Delegates:

Mary Ristow  
Tom Jervis  
Gordon Smith

## New Mexico Rare Bird Alert is on the Web

### New Mexico Rare Bird Alert

Matt Baumann, Compiler  
mbaumann22@gmail.com

Report sightings to  
505-264-1052 (leave a message) or contact the compiler

## Audubon en Español

Audubon ha lanzado su sitio web en español para conectar con las audiencias hispanas y disfrutar juntos de la naturaleza y la protección de las aves y sus hábitats. Visita Audubon en Español (<http://www.audubon.org/es>).

Es de nuestro reconocimiento que la Sociedad Audubon de Sangre de Cristo es digna representante de un precioso pedazo de tierra que ha sido ocupado durante milenios por personas de raíces culturales diversas. Respetamos profundamente dicha diversidad y creemos que del mismo modo bregamos por la protección de biodiversidad, debemos incluir y honrar la diversidad de los muchos pueblos y culturas que reconocen el norte de Nuevo Mexico como su propio hogar.

Contact your Congressional Representatives -  
Let them know that protecting the environment is important to you!

Senator Martin Heinrich  
U. S. Senate  
303 Hart Senate Office Building  
Washington, DC 20510  
202 224-5521 (office)  
202-224-2841 (fax)  
Toll free 1-800-443-8658  
Santa Fé Office 988-6647  
[www.Heinrich.senate.gov/](http://www.Heinrich.senate.gov/)

Senator Tom Udall  
U. S. Senate  
531 Hart Senate Office Building  
Washington, DC 20510  
202.224.6621 (office)  
202.228.3261 (fax)  
Santa Fe Office 988.6511  
[www.TomUdall.senate.gov/](http://www.TomUdall.senate.gov/)

Congressman Ben Ray Lujan  
U. S. House of Representatives  
2323 Russell HOB  
Washington, D.C. 20515  
202-225-6190 (office)  
202-226-1331 (fax)  
Santa Fe Office 984-8950  
[www.Lujan.house.gov/](http://www.Lujan.house.gov/)