

Arizona Wildlife News



Spring 2021

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Official Publication of the Arizona Wildlife Federation



What is AWF?

Our Mission Statement

Arizona Wildlife Federation is a non-profit organization dedicated to educating, inspiring, and assisting individuals and organizations to value, conserve, enhance, manage, and protect wildlife and wildlife habitat.

AWF is a statewide association of people interested in the present and future well-being of Arizona's wildlife, wildlife habitat and natural systems. We believe our wildlife heritage should not be jeopardized by any activity that fails to ensure its long-term health and sustainability. From the outset of the organization, AWF's primary goal has been the establishment and maintenance of a Commission/Department form of wildlife administration, free of political influence. We continue to work with the Arizona Game and Fish Department and Commissioners to assure that science-based best practices are used in the management of wildlife and habitat in Arizona.

Our Newsletter

The official publication of the Arizona Wildlife Federation, the State affiliate of the National Wildlife Federation, Arizona Wildlife News (ISSN) is published quarterly as a service to affiliate members and Federation members. The editorials and commentaries in this publication do not necessarily reflect the mission of the Arizona Wildlife Federation. AWF is an equal opportunity provider.

The Arizona Wildlife Federation welcomes stories, art, and photographic contributions! We will consider, but assume no responsibility for unsolicited proposals, manuscripts, art, photographs, and transparencies. Contact the AWF office at (480) 702-1365 for details.

Advertising inquiries should be directed to the Arizona Wildlife Federation at the above address or phone number or by emailing trica@azwildlife.org. AWF does not assume any financial responsibility for errors in advertisements that appear in this publication. If notified promptly of an error, we will reprint the correct ad.

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ARIZONA WILDLIFE NEWS

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ARIZONA WILDLIFE FEDERATION

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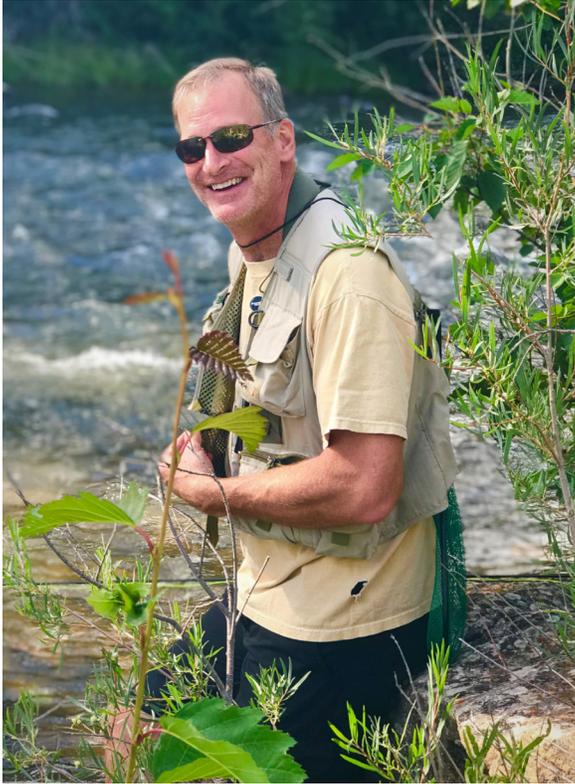
Front Cover Photo Courtesy of Harrison Holub:
"Wild Brown Trout caught on a pheasant tail nymph in n. AZ"
Articles by: Lew Carpenter, Scott Garlid, Glen Dickens, Cheryl Mollohan, Sharma Torrens, Lisa Ristuccia, Val Morrill, Nikki Julien, and Sunny Ray

JOIN THE CONVERSATION



A Message from the Executive Director

By Scott Garlid, AWF Executive Director



Spring has sprung! Springtime always brings renewed life to the outdoors, and having just received my second COVID shot, I find that this year it provides a particularly special sense of renewal for me, too. That same springtime optimism and excitement echoes through this issue of AWF with something of interest for everyone who is a fan of wildlife and the outdoors in Arizona.

As usual, our Regional Reports are loaded with great information on issues, projects, and programs around the state. Read about feral horse and burro management, Mexican wolf reintroduction, Sonoran pronghorn restoration work, water for wildlife projects, and get the facts with a particularly timely update on the Oak Flat mine.

When you read about how the Rio Verde Ranch transfer to the Prescott National Forest created access to thousands of acres of public lands in the upper Verde, recognize that such successes are a direct result of advocacy by AWF... and you! The Rio Verde Ranch project was made possible by LWCF funding, and it would likely have stalled had some bad state public lands legislation been enacted. Many of you have personally signed on to AWF letters or called your elected officials in support of LWCF and in opposition to bad public lands bills over the past several years. Again, thanks to you for making Arizona a great place for wildlife and outdoor recreation.

Our National Wildlife Federation Director of Conservation Partnerships, Lew Carpenter, introduces an excellent new report from NWF titled, "Jobs, Restoration and Resilience for the 21st Century." The report is incredibly well-researched and grounded in practical solutions that benefit wildlife, habitat, and our economy.

AWF's core value has always been, and continues to be, science-based wildlife management and policy decisions. This issue of AWF leans in on the science and history of Arizona's drought cycles and our current drought with a great feature article by our Vice President, Glen Dickens. The importance of science continues in the "Bobcats in Tucson" article where we learn how an important study hopes to reduce potential conflicts with bobcats in the urban/wildland interface on the west side of Tucson.

AWF's educational programs are growing. Learn how the Eco-Schools program, inspired by AWF board member Val Morrill and co-led by AWF staff, is promoting conservation and environmental education across the state.

See, I told you there was something for everyone in this issue! Get your shots, get outside, and enjoy this year's springtime renewal!

Scott Garlid, Executive Director, Arizona Wildlife Federation

A handwritten signature in black ink, appearing to read "Scott Garlid".

All members and affiliates are welcome to join us for our annual meeting. This is the time to get to know the board and staff of AWF.

Email

awf@azwildlife.org
for registration details.



AWF ANNUAL MEETING

VIA ZOOM, SATURDAY, JUNE 26, 2021

AWF Regional Roundup

Arizona Wildlife Federation divides the state into regions in the same manner as the Arizona Game and Fish Department. This map depicts each of those regions and the members of our Board of Directors who serve as directors for each area. Our Regional Directors are busy!



Bob Vahle
Region 1 Director



Open Position
Region 2 Director



Loyd Barnett
Region 3 Director



Pat Headington
Region 4 Director



Duane Aubuchon
Region 5 Director



Amanda Moors
Region 6 Director

Region 1 Director's Report

By Bob Vahle, Regional Director

Travel Management on the ASNF

The AWF is still anxiously awaiting a Final Record of Decision and Environmental Impact Statement (EIS) for the Apache-Sitgreaves National Forest (ASNF) Public Motorized Travel Management Plan. The AWF provided formal comments on the ASNF Revised Draft EIS on 10/28/19.

The Proposed Action (Alternative 2) in the Revised Draft EIS would designate a system of roads, trails, and areas for motorized use as well as limited motorized access for dispersed camping and limited motorized access for big game retrieval. This proposed action would bring the ASNF into compliance with the Travel Management Regulations (36 CFR 212, subpart B) to provide for a system of National Forest System roads, motorized trails, and motorized areas designed for motor vehicle use. The road system would have 15 percent fewer open roads and 68 percent more motorized trails than the current system. That would result in 2,889 miles of NFS roads open to public motorized travel, including 2,144 miles of roads that are open to both highway legal and off highway vehicles (OHVs). Also, this would result in 202 miles of motorized trails, with 20 miles open to all vehicles and 182 miles open to vehicles (OHVs) less than 50 inches wide. The proposed action would designate 300 feet from on one or both sides of around 35 percent of the designated open roads (1,027 miles) for the sole purpose of accessing dispersed camping locations with motor vehicles. Where compliant with the Forest Plan, motorized big game retrieval would be allowed within a 1-mile distance off the designated road and motorized trail system (1.2 million acres) for elk. Motorized big game retrieval would not be allowed in other parts of the Forests because it not consistent with the Forest Plan. Both the camping corridors and motorized big game retrieval corridors are measured from the centerline of the road. No other species could be retrieved using motor vehicles. There would be one motorized use area designated (17 acres). All other motorized cross-country travel would be prohibited.

Feral Horse Population Issues on the ASNF

The AWF along with support from the National Wildlife Federation through formalized policy resolutions continues to be concerned with unmanaged populations of feral horses and burros across the U.S. and in Arizona on Federal public lands (e.g., U.S. Forest Service - National Forests; Bureau of Land Management public lands) and State Land that can adversely impact native wildlife populations and their important habitats including key forage and water resources. Currently AWF is very concerned regarding the ever increasing population of unclaimed and unpermitted feral horses on the ASNF. Individuals and bands of feral horses have predominantly migrated over many years from the White Mountain Apache Indian Reservation (WMAIR) onto the ASNF particularly after the 2002 Rodeo Chediski fire which burned 23 miles of the boundary fence between the WMAIR and the ASNF.

The following discussion is provided as a brief background of how significant feral horse populations have increased on the ASNF. In 1974 the ASNF was required to conduct a forest wide survey to determine the presence of unclaimed and unpermitted horses found within the boundaries of the ASNF in compliance with the "Free - Roaming Horses and Burros Act of 1971 (Public Law 92-195). As a result of the survey, 7 unclaimed and unpermitted horses were found near Heber-Overgaard, Arizona. This required the ASNF to establish a "Heber Wild Horse Territory" designating these animals as "wild free roaming horses." The establishment of the HWHT (19,700 acres) required that a management plan be developed which would include a science based horse population level (i.e., Allowable Management Level -AML) which the HWHT could sustainably support in terms of habitat needs (i.e., forage, water, and cover requirements). Years passed without the development of a HWHT management plan and the horse population began to increase along with horses moving onto the ASNF from the adjacent White Mountain Apache Indian Reservation (WMAIR) through breaks in the common boundary fence between the ASNF and WMAIR. Consequently, the ASNF began gathering and removing unclaimed and unpermitted horses to limit their population expansion. Horse advocates became concerned about the removal of these horses from the ASNF and filed a lawsuit. On March 3, 2007 as a result of the lawsuit filed by horse advocates a Stipulation Agreement between the ASNF and the Plaintiffs was completed which precludes the ASNF from gathering or removing any horses from the Sitgreaves portion of the ASNF (Black Mesa Ranger District) until a HWHT Management Plan and NEPA are completed.

The ASNF initiated a public process in 2017 to begin developing a management plan for the HWHT. As part of this process the AWF participated as a member of a collaborative public stakeholder HWHT Working Group from August 2017 to December 2018 to provide management recommendations to the ASNF for consideration into the development of the HWHT. The AWF also provided comments (3/11/20) on the ASNF 2020 Proposed Action for the HWHT Management Plan and to support the proposed AML of 50-104 horses to meet the goals of the HWHT as "free-roaming wild horses" directly tied to the use of the HWHT. Based on the most recent formal survey (4/17) commissioned by the ASNF on the Sitgreaves portion of the ASNF the survey estimated 51 horses within the HWHT and 420 horses outside of the HWHT. The AWF has observed since this time period that feral horses have significantly expanded their distribution and population numbers across many parts of the ASNF. The AWF considers any horses not dependent on the HWHT and exceeding the AML for the HWHT as feral unpermitted horse populations which need to be gathered and removed to reduce impacts to forest habitats and competition for forage and water resources with native wildlife and



Degrading the roads hurts wildlife habitat and reduces our privilege to go off-road for camping and game retrieval.

Region 1 Director's Report Cont'd.



Feral horses in the Heber area. Photo courtesy of Laura Singleton, White Mountain Independent staff reporter.

permitted livestock. The AWF does not consider these horses as either native to Arizona, as “native wildlife”, or as “free roaming wild horses” under the “Free Roaming Wild Horses and Burros Act of 1971. A final management plan for the HWHT was targeted for completion prior to January 1, 2021. To date, a management plan for the HWHT and NEPA has yet to be completed and implemented.

The lack of a management plan for the HWHT and control and management of feral horse populations outside of the HWHT across the ASNF over so many years has fully frustrated, agitated, and polarized many members of the public including horse advocates, wildlife conservation and sportsman organizations, and livestock operators. Unfortunately, this situation has resulted in an unknown individual(s) taking illegal actions on their own which the AWF does not condone or support in any way. Over a period from October 2018 and the spring of 2020 a total of 24 horses on the ASNF in the Heber area have been documented as shot and killed. On January 7, 2021 another three to four adult horses were found and reported as shot on the Black Mesa Ranger District of the ASNF. The total number of horses that may have been illegally killed is still being investigated. Two groups, the “Friends of the Heber Wild Horses” and the “Heber Wild Horses Freedom Preservation Alliance” along with other members of the public have been putting considerable pressure on the USFS Law Investigative Division to identify and arrest the person or persons responsible for these killings.

Currently there is a \$5000.00 reward being offered for information leading to the arrest and conviction of those responsible for these actions. The public has been also alerted to contact the Tip-line Navajo County Sheriff's Office at 1-800-78CRIME regarding either these incidents or if they encounter an injured / deceased horse on the ASNF.

Four Forests Restoration Initiative (4FRI)

AWF has been engaged as a stakeholder since the inception of the 4FRI project. AWF strongly supports the need to restore forest health including wildlife habitats and to reduce the risk of catastrophic wildfire within the 2.4 million acre project area covering forested acres, predominately Ponderosa pine, within the ASNF, Coconino NF, Kaibab NF, and portions of the Tonto NF. A complete description of the 4FRI project and its restoration objectives can be researched at www.4fri.org. Although many acres have been either mechanically thinned through logging operations or thinned using prescribed fire since the project began, the overall restoration project goal of treating 50,000 acres per year over the 20 year project time period is behind in meeting this treatment acreage objective. One of the key limitations in currently meeting this goal is how logging contractors





Collared MGW courtesy of George Andrejko, AZGFD

can economically operate and treat small non merchantable trees less than 8 inches in diameter that need to be removed to reduce unhealthy tree densities and fire risk and remove the average 50 tons of biomass per acre (e.g., branches, limbs, bark residue) that are created in forest restoration thinning project areas. Logging contractors can currently and economically profit in treating trees between 8 and 16 inches in diameter which are prevalent in excessive densities in many areas within the 4FRI project area. Currently biomass removed from 4FRI thinning treatment areas on the ASNF are being taken to the Novo Power biomass burning plant near Snowflake, AZ which generates electric power from burning forest biomass. The continued operation of this plant is considered critical in treating the biomass created in 4FRI thinning projects. There is concern that if this plant cannot economically continue to operate and is forced to close it will cause a significant bottleneck in completing the 4FRI project in Arizona.

Mexican Wolf Reintroduction Program

The AWF continues to support and track the progress of the Mexican Wolf Reintroduction Program. The Arizona Game and Fish Department (AGFD) is a key agency cooperator in this program. The AGFD provides an excellent quarterly email news update which the public can sign up for by visiting their web site at: www.azgfd.gov. The e-news updates provides information on the current population status, wolf pack updates, mortality information, ongoing research, and other management information related to the reintroduction program in both Arizona and New Mexico.

Currently, the Mexican Wolf Program Interagency Field Team is summarizing and analyzing Mexican wolf population survey data that was collected in December 2020. Results of the 2020 population survey are anticipated to be available in March 2021. The end of year population survey census for 2019 was a minimum of 163 Mexican wolves in the wild (78 in Arizona and 87 in New Mexico). This was a 24% increase in the population from a minimum of 131 Mexican wolves counted at the end of 2018. Annual surveys are conducted in the winter since this is when the population experiences the least amount of natural fluctuation (i.e., during the spring the population can increase dramatically with the birth of new pups and decline throughout the summer and fall as pup mortality generally occurs during this period of time). This allows the Interagency Field Team to summarize the total number of wolves in the winter at a fairly static or consistent time of year. Counting the population at the end of each year allows for the comparable year-to-year trends in population numbers when the Mexican wolf population is most stable.

Region 2 Director's Report



The Arizona Wildlife Federation would like to thank John Hamill for his years of service on our board and serving as the Region 2 Director. John's great guidance, commitment to conservation and strategic thinking will serve AWF for many years into the future. Enjoy your new home in Colorado, John, from all of us at AWF.

Region 3 Director's Report

By Loyd Barnett, Regional Director

Burros

In the fall issue of AWN we reported that the Bureau of Land Management (BLM) had issued a decision record to begin reducing the population of wild burros in the Black Mountain Herd Management Area (BMHMA). The goal is to bring the population down from the estimated population of 2,200 to the appropriate management level (AML) of 468, and then maintain it at that level. The BMHMA extends from the Lake Mead National Recreation Area south to I-40. The Black Mountains contain the largest contiguous area of desert bighorn sheep habitat.

The first gather was planned for 500 burros. In the two month period between late September and late November, BLM employees utilized water and bait traps to remove all 500. Gathered burros were transferred to the Arizona Department of Corrections facility at Florence, the Wild Horse and Burro Training and Off-Range Corral. Periodic adoptions occur at this facility.

Earlier, in July and August of 2020, a nuisance burro removal gather was held on private lands outside the Big Sandy HMA. The Big Sandy has an estimated burro population of approximately 2,000 based on 2012 records and an AML of 111-139 burros. Burros have been causing damage to private land. A private contractor and BLM employees placed traps on private land. A total of 326 burros were removed. In late May and early June of 2020, a similar gather removed 138 burros from private land within the Havasu HMA. Again, burros were sent to the Florence facility. Plans for succeeding gathers in 2021 have not yet been announced.

Verde

The historic Rio Verde Ranch, containing 2/3 mile of the Verde River near the headwaters, was recently acquired and made a part of the Prescott National Forest. There are very few places for public access to the river in the upper 20 plus miles, since most of the river is rugged with deep cliffs. With its easy access to the river, the addition of the 84 acre Rio Verde Ranch to the National Forest will provide the public a third access point on the upper Verde. Through a planning process over the coming year, the Forest Service will determine what recreational uses will be made available on the new property. These will likely include hiking, hunting, birdwatching, and kayaking. Also located on the property is the U.S. Geological Survey's uppermost stream gage on the Verde, identified as Verde River near Paulden. This stream gage, which is used to measure and track river flow, has been in place for 57 years.

The acquisition, spearheaded by the Trust for Public Land, with assistance from the Catena Foundation, was made possible by a grant from the Land and Water Conservation Fund (LWCF). For the last few years, reauthorization and full funding of

the LWCF has been one of AWF's key campaigns. Many conservation organizations participated in the drive which succeeded in fully funding the program as a part of the Great American Outdoors Act, signed into law in 2020. The majority of Arizona's congressional delegation supported passage of this act.

A major challenge for the success of this project was the need to remove several old homes and six other buildings (a requirement for the Forest Service to be able to accept ownership of the land - and return the land to a more natural condition). An Arizona entrepreneur and philanthropist who has a love of the Prescott National Forest and the river, and prefers to remain anonymous, offered to donate his services to demolish and remove those buildings so that the land could be added to the national forest. A stone cabin that was constructed in 1900 by



The Rio Verde Ranch. Photo from: <https://www.signalsaz.com/articles/84-acres-on-verde-river-added-to-the-prescott-national-forest/>

the original homesteader remains on the land and will help tell the story of the land. The Trust for Public Land has contracted with a nonprofit partner and new AWF Affiliate, Friends of Verde River, to complete a restoration plan for reseeded the areas where the buildings were located with native seed.

Drought

Following a near record dry monsoon season, a La Nina winter is being experienced. The usual effect of a La Nina system is a dryer than average winter, and that is the case as we approach spring. Many stock tanks primarily dependent on monsoon rains went into the winter dry. Water hauling for wildlife waters will likely be required again this season.

Region 4 Director's Report

By Pat Headington, Regional Director

Regional Events

Yuma Valley Rod and Gun Club (YVRGC)/Southwest Wildlife Foundation (SWF)

Monthly meeting activities resumed last October and we again are serving dinners and holding monthly raffles working our way to a more normal routine. Fishing tournaments are underway monthly, our Youth Fishing Clinic has been postponed due to the mask mandate on Federal lands. The Yuma County Fair has been postponed until fall 2021 jeopardizing one of our annual fundraising opportunities. We have scheduled a Water for Wildlife Golf Tournament for May 22nd to support water hauling operations. Members attended AWF's annual Camo at the Capitol event, which was held virtually this year due to the ongoing pandemic.

Solar Projects

Two utility-scale solar projects will likely get underway north of Dateland in GMU 41 during 2021; one will be completing phase two of an earlier project and the other beginning phase one of a new project. Total megawatt output for the two sites is estimated at 420,000MW. A third project is in the planning stages located on Arizona State Trust Lands with an estimated start date of 2023. This project has the potential to block the Palomas-Harquahala Road which provides access to the recreational and conservation activities north of the Southern Pacific Railroad in GMU 41. Yuma County and AZGFD Region 4 have relayed the importance of maintaining this access and keeping it open to the public.

Water Projects

YVRGC/SWF volunteers, along with AZGFD Region 4 staff and USFWS staff, constructed a water project for Sonoran pronghorn approximately 23 miles south of Gila Bend in late January. The project will store approximately 17,000 gallons of water for wildlife in the area. Approximately 30 volunteers and staff completed the project in 2 days with the help of some large equipment.

AZGFD Region 4

Water hauling continues at a strong pace in the region, with staff and volunteers preparing for a long and enduring spring and summer ahead. Already, some 10,000 gallons of water have been delivered in the first three days of March. YVRGC volunteers continue working closely with region staff to coordinate efforts and resources.

Sonoran Pronghorn

Fourteen Sonoran pronghorn were moved from the Kofa pen to the holding pen in the Palomas, and released to the wild in January 2021. At least five of them have remained in the area of the holding pen and joined the wild pronghorn herd previously relocated there. Three bucks and three does initially moved about 27 miles north toward Interstate 10. One of the does then moved 42 miles southeast and is currently about 35 miles from the holding pen. Another doe moved back south 40 miles and is in King Valley area on the Kofa. The third doe crossed Interstate 10 and moved about 3 miles north, she was ultimately killed by coyotes. Of the bucks, one was hit crossing Interstate 10, another moved back south and was killed by coyotes approximately 2.5 miles west of the holding pen. One buck remains just south of Interstate 10.

Region 5 Director's Report

By Duane Aubuchon, Regional Director

Habitat Partnership Committee Meeting

The Arizona Game and Fish Department held its annual winter Habitat Partnership Committee (HPC) meeting virtually on January 9, 2021. The meeting goal is to allocate grant funds derived from the raffle/auction of special big game tags to fund on-the-ground projects that benefit wildlife and their habitats. This year there were 57 grant applications submitted. As the Arizona Wildlife Federation representative on, and a voting member of the committee, I reviewed these applications and provided some comments on their selection. Projects included establishing wildlife waters, conducting game surveys, clearing trees and shrubs from wildlife travel corridors, and enhancing pronghorn fawn survival. In all, 36 projects that will benefit Arizona's wildlife and their management received over \$1.5 million in funding.

Habitat Improvements

The Arizona Game and Fish Department (AGFD), with assistance from the Arizona Desert Bighorn Sheep Society and the South Eastern Arizona Sportsmen Club, completed (or has partially completed) the renovation of four wildlife water catchments; two in the Galiuro Mountains (Coati and Two-holer) and two in the Peloncillo Mountains (Tule and Rooster Comb). The AGFD provided funding for these projects through the HPC process listed above. These catchments were originally built nearly 50 years ago to provide water for desert bighorn sheep and other wildlife as part of translocations to re-establish bighorns in these mountain ranges. They were no longer functional and in dire need of repairs. Healthy bighorn populations still occur in both mountain ranges.



Habitat improvements in Region 5.

Meadow Valley Public Access Project

The Sierra Vista Ranger District of the Coronado National Forest is seeking comments on a proposal to build a bypass road around a private property road closure in the San Raphael Valley. The road would be the minimum required to restore public access, approximately 3.74 miles, and would have minimal impacts to soil and water resources. Arizona Wildlife Federation (AWF) staff drafted a letter of support for this project to provide access to public lands and promote recreational activities such as camping, hiking, fishing, and dispersed hunting opportunities.

Safford Field Office Vegetation Management Plan

In December, the Bureau of Land Management (BLM) issued a public review draft of their Vegetation Management Plan Environmental Assessment (EA) for the Safford Field Office. The EA would allow the BLM to treat target species and maintain the vegetation communities within the field office by using strategies to maintain desired shrub and tree threshold objectives. This action would mean the BLM could implement treatments across the Safford Field Office, encompassing approximately 760,000 acres, using the best available science, tools, and methods to manage vegetative communities. Treatments will include manual, chemical, mechanical, and prescribed fire options to target dense stands of salt cedar, juniper, whitethorn acacia, creosote, mesquite, and prickly pear cactus. After reviewing the EA, AWF staff sent a letter of support for the project to the BLM.

House Bill 2702 - Federal Government; Land Acquisition; Consent

This is a proposed bill in the state legislature that would require a landowner to obtain approval from the State Legislature and Governor prior to selling their land to the Federal Government. The proposed bill describes this act as a protection against depriving Arizona of its tax base, but never mentions that all federal lands in Arizona do provide payments in lieu of

taxes (PILT) to local governments. This act could derail certain projects and programs we support to improve access to public lands through land trades and purchases involving the BLM and US Forest Service. The AWF drafted letters to state representatives and submitted editorials outlining the reasons this legislation could impact Arizonans and our access to public lands and enjoyment of the wildlife residing on them.



Sonoran pronghorn mob the waterer. Photo courtesy of Jill Bright, AZGFD .

Rosemont Mine

On February 1, 2021, a panel of three judges with the 9th Circuit Court of Appeals heard arguments in the Rosemont Mine case. The oral arguments were virtual, and based on the appeal of the Judge Soto decision, which concluded the Coronado National Forest erred in approving the mine plan to dump waste rock on unproven mining claims without mineral value. The mine owner, Hudbay, and the Federal government, are the appellants and several NGOs also presented oral arguments in this case. The Court will now weigh the arguments and render a decision, although the Court provided no time frame for that decision.

Border Wall

As of January 15, 2021 contractors had installed 226 miles of bollards on the Arizona border, according to Customs and Border Protection, leaving less than 20 miles still under construction. The list of wall projects where the installation of bollards was not complete includes areas near Sasabe, Nogales, Naco, the southeastern corner of Cochise County and a small area near Yuma. The new administration ordered a halt to continued construction of the border wall and now, a coalition of nearly 70 environmental groups, civil-rights organizations, and tribal entities has sent a report to lawmakers and administration officials requesting that 59 miles of the 30-foot-tall border wall in Arizona be removed to account for important wildlife communities and sensitive habitats such as riparian areas.

Bonita-Allen Flat 1st Annual AAF-AGFD Pronghorn Winter Surveys

(Submitted by Glen Dickens)

Eighteen Arizona Antelope Foundation (AAF) volunteers led by Tucson Regional Game Specialist, Rana Tucker, and AAF SE Arizona Field Manager, John Millican, conducted their first annual “winter pronghorn survey” on February 27 – 28, 2021. The Bonita and Allen Flat pronghorn herd zones are located north and northwest of Wilcox in game management unit 32.

Results had everyone smiling with record population numbers recorded in both herd zones. A total of 219 pronghorn were recorded in the Bonita herd zone of 268,000 acres, where the previous survey high was 162 in 2019. A total of 74 pronghorn were recorded in the Allen Flat herd zone of 68,000 acres, where the previous survey high was 70 in 2019. Both of these herd zones received extensive fence, habitat, and water modifications as well as population supplements by the AAF and AGFD from 2010 to 2019. Those efforts were funded in part by the National Fish and Wildlife Foundation. These population increases are very gratifying to all.

Region 6 Director's Report

By Amanda Moors, Regional Director

Resolution Copper - Proposed Mine at Oak Flat

Many of you are likely aware of the proposed mine at Oak Flat between Superior and Globe. This mine would be a massive copper mine operated by Rio Tinto and BHP, the two largest mining companies in the world. The Resolution Copper project proposes to use block cave mining to access a large vein of copper located 7,000 feet underground. This would be one of the deepest mines in the world and would be the largest mine in North America. That method of mining would eventually cause a 1,000 foot deep, two-mile wide crater to form in Oak Flat. Several members of the San Carlos Apache Tribe have been in strong opposition to the mine due to destruction of ground that is sacred to them. In 1955, President Dwight D. Eisenhower signed Public Land Order 1229 declaring Oak Flat off limits for mining due to cultural and natural

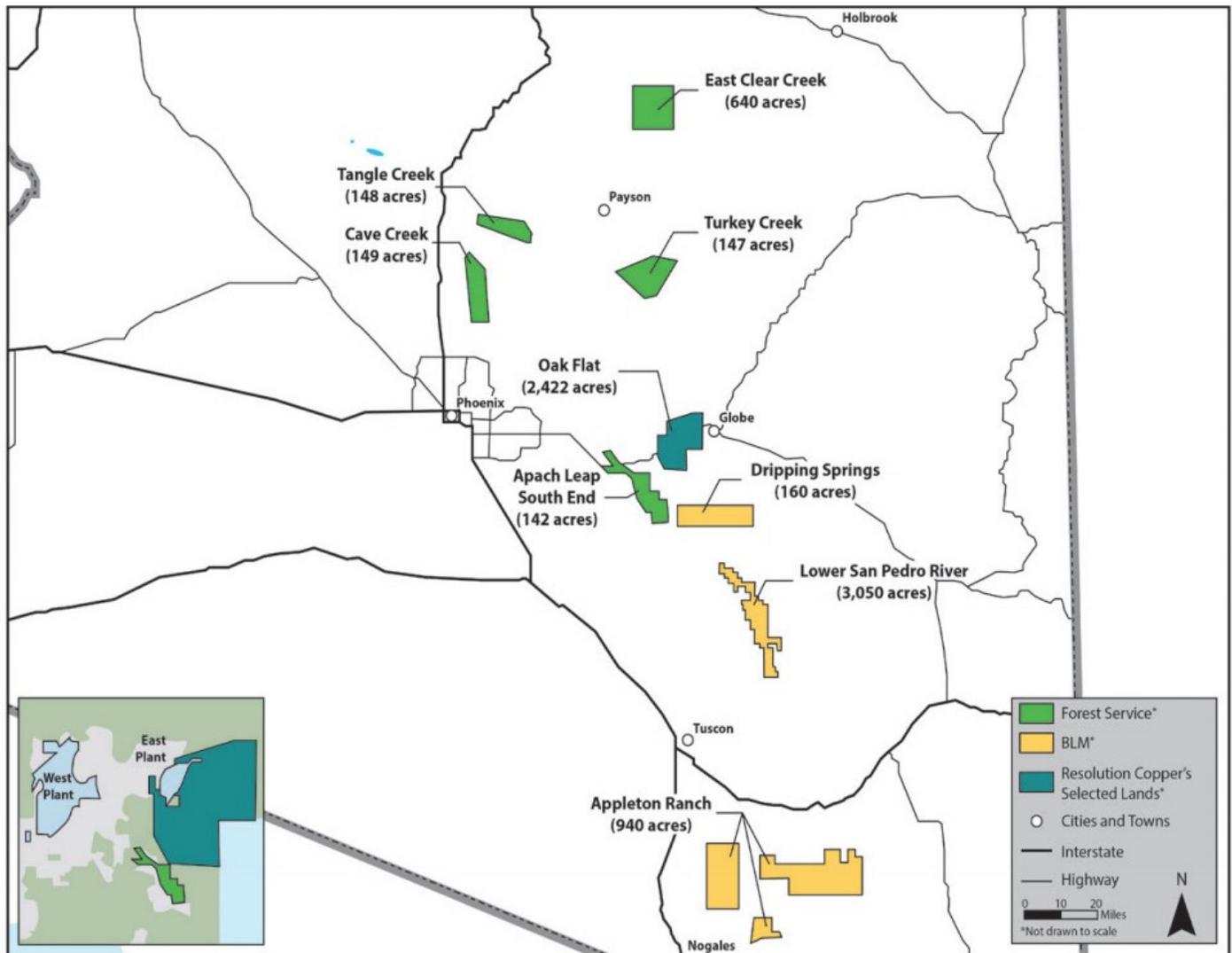


Figure 2.2.2-1. Land exchange parcels overview

value. The Department of the Interior, under President Nixon, renewed the mining ban at Oak Flat, but opened a loophole in the law: the land cannot be mined under federal ownership, but it can be traded to private holders who would not be subject to land use restrictions. In December 2014, Congress passed a last-minute defense spending bill to avoid government shutdown that included federal land exchange legislation, which allowed for the exchange of 2,422 acres of land above the copper deposit for 5,459 acres of Arizona land owned by Resolution Copper that will become public. Here is a map from the Resolution Copper website showing the areas that Resolution Copper would transfer to the federal government in

Region 6 Director's Report Cont'd.

exchange for the Oak Flat acreage.

This land exchange is mandated by law to happen within 60 days of the issuance of the Final Environmental Impact Statement (FEIS). According to critics, the FEIS was rushed through during the last days of the Trump administration and was published on Jan 15, 2021. That started the 60 day clock on the land exchange. However, several actions have taken place that seemingly put a halt to that 60 day time clock.

On February 11, 2021 a federal agency called the Advisory Council on Historic Preservation, notified the USFS of its decision to terminate consultation on the Section 106 process of the National Historic Preservation Act. The Advisory Council on Historic Preservation (ACHP) oversees a key federal environmental review created by the National Historic Preservation Act (NHPA) of 1966. Known as Section 106 review, it ensures federal agencies consider impacts to historic properties during the development of federal or federally-assisted projects. The ACHP feels that USFS is not meeting its obligations under the National Historic Preservation Act.

In a letter to Tom Torres, Acting Supervisor for the Tonto National Forest, the ACHP wrote: "It is clear that the proposed undertaking would destroy significant historic properties, including the highly significant Oak Flat, and the measures in the PA are not sufficient to adequately resolve those adverse effects. The ACHP believes that further consultation in this case would be unproductive and therefore, we are hereby terminating consultation pursuant to 36 CFR § 800.7(a)(4)." After pulling out of the consultation, the ACHP requested more public comments about the project through Feb 26, 2021. Those comments were provided to the Secretary of Agriculture. Shortly thereafter, the Secretary of Agriculture directed the USFS to rescind the Final Environmental Impact Statement and draft Record of Decision.

Below is a project update issued on March 1, 2021 on the government's website regarding this mine (<https://www.resolutionmineeis.us/>)

"On January 15, 2021, the Tonto National Forest released the Resolution Copper Project Final Environmental Impact Statement (FEIS) and draft Record of Decision (ROD) for objection. In the time since these documents were released, the Agency and Department have received significant input from collaborators, partners, and the public through a variety of means. Today, USDA directed the Forest Service to withdraw the Notice of Availability and rescind the Final Environmental Impact Statement and draft Record of Decision. The pre-decisional objection period will be halted as well. The project is proposed on Oak Flat, a site sacred to numerous Federally Recognized Tribes in the Southwest. The Department is taking this step to provide an opportunity for the agency to conduct a thorough review based on significant input received from collaborators, partners, and the public since these documents were released. The recent Presidential Memorandum on tribal consultation and strengthening nation to nation relationships counsels in favor of ensuring the Forest Service has complied with the environmental, cultural, and archaeological analyses required. USDA has concluded that additional time is necessary to fully understand concerns raised by Tribes and the public and the project's impacts to these important resources and ensure the agency's compliance with federal law. USDA and the Forest Service also understand that under federal law that the Forest Service has limited discretion related to protection of Oak Flat. Because the Resolution Copper Mine and Land Exchange Project was directed under the 2015 National Defense Authorization Act, long term protection of the site will likely require an act of Congress. USDA and the Forest Service cannot give a precise length of time for completing the re-initiation of consultation but consultations such as this generally take several months."

Rescinding the FEIS effectively put a halt to the land transfer, if only temporarily. It will likely take an act of Congress to protect Oak Flat permanently and stop the land transfer from taking place. The Arizona Wildlife Federation has not taken a formal position on this mine at this time. We recognize that mines are necessary to support our modern society, so our focus is to make sure that any decisions related to wildlife are based on science and the best mitigation measures are developed to protect land and wildlife resources. Recently, as an AWF Regional Director, I joined the Community Working Group which is a group of leaders from affected towns like Globe and Superior. This working group has been working with the mine for at least the last 7 years to come up with mitigation measures for their communities.

Arizona Wildlife Federation members who feel strongly one way or the other about this mine may want to contact their federal senators and representatives to share your view on this proposed mine.

For those who would like to read the Final Environmental Impact Statement to learn more about the project options and environmental considerations, please visit: <https://www.resolutionmineeis.us/documents/final-eis>

Conservation Corner

With Lew Carpenter

Lew Carpenter is National Wildlife Federation's Director of Conservation Partnerships in the Rocky Mountain region. Lew works directly with NWF affiliates in Colorado, New Mexico, Arizona, and Nebraska.



Jobs, Restoration, and Resilience for the 21st Century: Stewardship of America's Land and Waters

Currently, over ten million Americans are unemployed, scientists warn that we stand to lose 30 percent of our wildlife, and climate change fuels escalating fires in the West and hurricanes in the Gulf and eastern coast. We have an urgent need – and opportunity – to put more than 3.5 million Americans to work in meaningful jobs to tackle these issues head on by investing \$208 billion in the restoration and resilience of our nation's natural infrastructure.

We can increase the capacity of our forests and adjacent communities to be more resilient to fire, restore wildlife habitat, absorb more carbon, expand the ability of our forests to deliver cold, clean water for fish and downstream communities, and restore habitat for wildlife.

We can increase the ability of our floodplains and coasts to weather increasingly dramatic flood and hurricane events and bolster the resilience of communities, while sequestering carbon, improving water quality, and creating recreational opportunities.

We can reclaim degraded lands, including abandoned coal, hard rock, and uranium mines and orphaned oil and gas wells, to remove ongoing threats to public health and revitalize local communities.



We can tackle the growing wildlife crisis and save the nearly 40 percent of species at-risk or vulnerable to potential extinction. Simply implementing state wildlife action plans alone would significantly aid the more than 12,000 species identified as in greatest conservation need.

Investing roughly \$200 billion in restoring our natural systems and bolstering climate resilience over five years would put more than 3.5 million Americans to work. Investments in restoration and resilience create more jobs per dollar because the work is labor intensive.

A robust initiative to restore wildlife habitat, make our air and water cleaner, and our communities safer can serve as a work plan for a new 21st century Civilian Conservation Corps. And land and water

restoration can serve as an important part of a bipartisan blueprint to take on climate change. The National Wildlife Federation (NWF) has a plan for how and why to do this.

The NWF has unveiled an ambitious proposal to put roughly 3.5 million people to work restoring our country's lands and waters in order to safeguard clean air and water; protect communities from wildfires, hurricanes and flooding; and save wildlife. The National Wildlife Federation has urged Congress to swiftly adopt the \$208 billion plan as part of an economic stimulus and recovery program.

“Our nation faces a number of urgent crises: more than 10 million Americans out of work, megafires rage in the West while stronger hurricanes batter our coastlines, abandoned oil wells and coal mines emit methane and threaten clean water sources, and one-third of wildlife species are at heightened risk of extinction. We have the opportunity to tackle these interconnected challenges by investing in our nation's forests, grasslands, wetlands and coastal communities while creating more than 3.5 million good-paying jobs in some of our nation's most economically distressed communities, sequestering hundreds of millions of tons of carbon, and making communities more resilient,” said Collin O’Mara, president and CEO of the National Wildlife Federation. “Not only will this put people to work, it will leave communities safer and our lands and waters better off than we found them.”

The restoration and resilience plan calls for the following:

- Creating a 21st Century Civilian Conservation Corps, which will put Americans to work revitalizing our nations lands and waters
- Restoring National Forests to mitigate wildfires, safeguard clean water, and increase nature's ability to store carbon
- Capping tens of thousands of abandoned oil and gas wells to protect groundwater and reduce methane emissions
- Cleaning up 140,000 abandoned hardrock mines and tens of thousands of abandoned coal mines which threaten human and wildlife health
- Funding for state, private and Tribal forestry programs to reduce the risk and severity of wildfires
- Restoring watersheds to protect coastal and floodplain communities to make them more resilient to extreme weather events and disasters
- Recovering more than 12,000 imperiled wildlife species through habitat restoration, natural infrastructure and research
- Repairing the sagebrush steppe and grasslands to reverse the downward spiral of bird populations, increase water resources, and improve carbon storage
- Investing in partnerships with farmers and ranchers to create habitat for wildlife, improve soil and water quality, and revitalize rural communities

The full NWF plan can be found online at: https://www.nwf.org/-/media/Documents/PDFs/Press-Releases/2021/02-24-21_Jobs-Restoration-and-Resilience-for-the-21st-Century



Improvements in wildlife habitat have many benefits. Photo courtesy of Bob Vahle.

Wildlife, Arizona's Drought, and Science Denial

By Glen Dickens, AWF Vice President of the Board of Directors



Opposing viewpoints agree on at least one thing--we need water.

Let's begin our discussion with the commonly accepted definition of the word science. Science is “the study of the nature and behavior of natural things and the knowledge that we obtain about them.” As a retired Arizona Game and Fish (AGFD) employee and a Certified Wildlife Biologist (CWB), I have been a member of The Wildlife Society (TWS) since 1971. Founded in 1937, TWS’s mission is “to inspire, empower, and enable wildlife professionals to sustain wildlife populations and habitats through science-based management and conservation.”

The mission of the AGFD (which was founded in 1929) is “to conserve Arizona’s diverse wildlife resources and manage for safe, compatible outdoor recreation opportunities for current and future generations.” Founded in 1923, the mission of the Arizona Wildlife Federation (AWF) states that they are “dedicated to educating, inspiring, and assisting individuals and organizations to value, conserve, enhance, manage and protect wildlife and wildlife habitat.” Thus wildlife and the science of wildlife management are at the core of the missions of the AWF, AGFD, TWS, and myself, a practicing CWB.

As I pen this on March 1, 2021, all parts of Arizona are still awaiting significant annual winter storms and moisture. This following what is now referred to as Arizona’s statewide 2020 summer of the “non-soon.” Presently the National Integrated Drought Information System or NIDIS (nidis.org) rates 94.6% of Arizona as in a Severe Drought, which is defined as:

- Water and feed are inadequate for livestock
- Fire danger is high, fire crews are mobilizing
- Little forage remains for wildlife, pine trees are losing needles

The NIDIS further rates 53.4% of Arizona in an Exceptional Drought, which is defined as:

- Fire restrictions increase, large fires occur year-round
- Vegetation green-up is poor, native plants are dying
- Lakes, ponds, and streams are dry

A recent article in AXIOS regarding the southwest stated, “The U.S. Drought Monitor — the nation’s official tally — shows Utah, Arizona, Colorado and New Mexico mired in exceptional drought. This type of drought is only supposed to happen every 50 years, but it’s now a regular occurrence.”

Feature Article: Wildlife, Drought, and Science Denial

Some Arizona water experts are calling the last 25 years Arizona's worst mega-drought in recorded history when compared to Arizona ponderosa pine tree ring data that goes back to the 1300s. Every part of the Southwest experienced higher average annual temperatures between 2000 and 2015 than the long-term average (1895–2015) and some areas were nearly 2°F warmer than average. Phoenix is the 2nd fastest warming city in the U.S. and Arizona is currently the fourth fastest warming state in the country, based on warming rates kept since 1970. When final 2020 data came in, the National Oceanographic and Atmospheric Administration showed that Arizona had endured its second hottest year on record, with an average temperature of 62.6 degrees Fahrenheit. That's 2.9 degrees higher than the average for over more than a century and less than half a degree shy of the record annual average set in 2017. Tucson also had its hottest year, which was nearly 3 degrees higher than the average since 1981 (72.7°F) and Phoenix had its second warmest year (77.3°F) degrees, a full 2.2 degrees higher than the annual average over the past four decades. And finally, since 1955, Arizona's average annual snowpack has decreased 40-80% across the high country rim mountains.

While things are looking grim, the AGFD and its terrestrial wildlife "critter group" partners are not taking this lying down. The AGFD has established an emergency water hauling fund and presently field personnel in all six regions of the state are actively hauling water to over 3,000 wildlife water sources. They are using a variety of plastic water containers, from 150 gallon truck bed units to 500 and 1,000 gallon trailers, and in some cases helicopters, for extremely remote desert bighorn sheep catchments.

Many of these deliveries in the Flagstaff area are being done by volunteers staffed and funded by one of our affiliates, the Arizona Elk Society (AES). In this zone alone, last year they delivered over 800,000 gallons by trailer. To aid in this effort and to help cover the expenses of the AES, the Board of another AWF affiliate, the Arizona Antelope Foundation (AAF), donated a check in the amount of \$10,000 in November, with another \$10,000 approved in January, on behalf of the northern Arizona pronghorn herds.

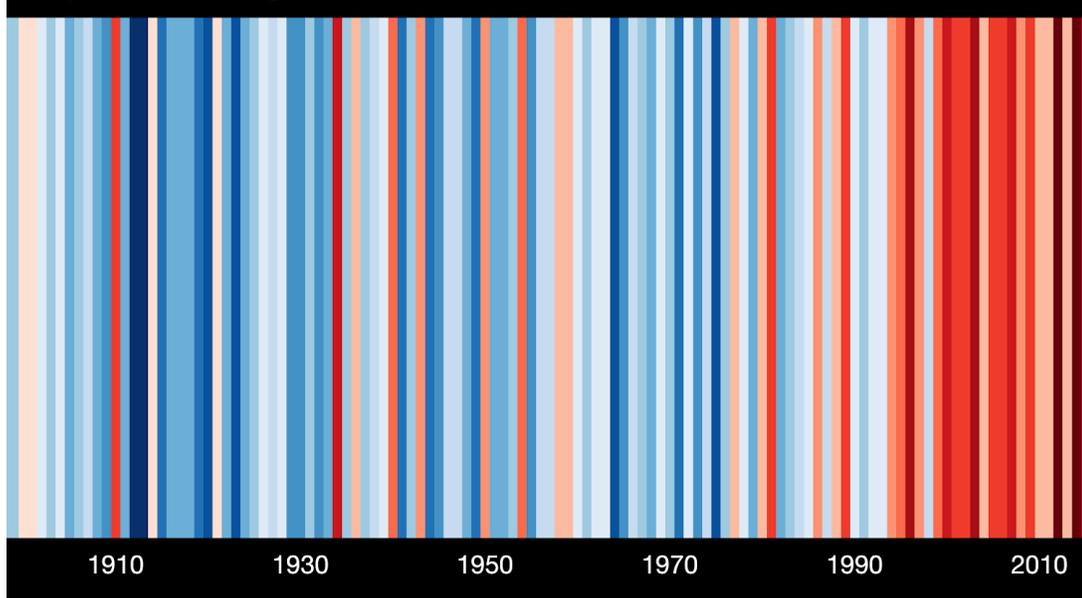
At the January 9, 2021 annual meeting of the Arizona Habitat Partnership Committee (sponsored by the AGFD, along with AES, AAF, Arizona Deer Association, Desert Bighorn Sheep Society, and Wild Turkey Federation), \$270,000 was allocated to statewide water hauling expenses. This, along with another \$996,000, was allocated to 17 statewide water projects to improve water security by the redevelopment of existing catchments to increase storage capacities.



Sow and cub remind us that "clients" to our provided service come in all ages and sizes.

Feature Article: Wildlife, Drought, and Science Denial

Temperature change in Arizona since 1895



The stripes shown represent the change in temperature from 1895-2019, with each stripe representing the average temperature for 1 year. Red is warmer and blue is cooler than the 1901-2000 average. Graphic courtesy of Josh Avey, AZGFD

The principle theme here is that the AGFD and Arizona wildlife conservation non-governmental organizations are doing everything in their power to mitigate the effects of the systemic lack of moisture aggravated by increased evaporation rates due to higher than average temperatures.

The January 2021 “Conservation in the West” poll released by Colorado College’s State of the Rockies Project shows that 74 percent of Westerners, with majorities across all political party lines (and including 400+ Arizonans), agree that climate change is a serious problem. The number of Westerners who think

that climate change is an extremely serious problem in their state has increased by 27 percentage points in the past decade. As a result, majorities of Westerners of all political stripes support bold proposals to confront climate change. This includes efforts such as making public lands a net-zero source of carbon pollution (72% support overall) and protecting 30 percent of America’s lands and waters by 2030 (77% support overall). Additionally, 66 percent of Westerners support requiring their state to gradually transition to 100 percent renewable energy over the next ten to fifteen years, while a whopping 91 percent of Westerners support requiring oil and gas companies to use updated equipment to prevent methane leaks.

Brendan DeMelle, Executive Director of “Desmog” (an organization devoted to clearing up misinformation about climate change), recently opined that climate science denial comes in many forms today. The most common is rejection of the scientific consensus that climate change is real and driven by manmade activities, including the burning of fossil fuels. A second group of deniers includes those who do accept the scientific consensus of manmade global warming, but claim that we can’t do anything, or that taking bold action to mitigate and adapt to climate change would bankrupt our economy. He states that it’s also worth noting that climate deniers speak almost singularly about this issue without regard for the health of our planet’s animal species and ecosystems fixating solely on consequences for financial markets rather than viewing the economy as a wholly-owned subsidiary of our environment.



Waterer critter cam photos and waterers are courtesy of our affiliates: the Arizona Antelope Foundation and the Arizona Elk Society.

Feature Article: Wildlife, Drought, and Science Denial

In his December 2020 Leadership Letter, the outgoing national president of TWS, Gary White, PhD, called upon all the members of the TWS to combat the “denial of science” trend. He said we must redouble our efforts to supply and advance science through our scientific journals, our communication outlets, our policy education work, and our professional networks. He said we must emphasize science above political views. In his closing, Dr. White challenged us with this statement: “Science is the core of our profession and the anchor of our wildlife conservation achievements. We cannot permit it to be undermined. I encourage each of you to find a way this season to help advance the public’s understanding of science and help science rise above the pitfalls of political discourse. Each of us has an opportunity and responsibility to do so.”

As an Arizona CWB and Vice-President of both the AWF and the AAF, I couldn’t concur more; hence this treatise. My intent has been to provide you with some scientific facts about regional climate change and its potential effects on our state’s wildlife resources and their habits. As well I want to recognize the actions that have been taken by the many organizations across the state to provide relief for wildlife during this drought. And finally, I wanted to remind us all that central to the AWF’s mission is and will always be the practice of sound science and best governance!

“Science is the core of our profession and the anchor of our wildlife conservation achievements.

We cannot permit it to be undermined. ...”

-- Dr. Gary White

What can you do to help wildlife?

Donate to AWF’s Water for Wildlife Program

You can help get water to wildlife and support the statewide Water for Wildlife program by donating today. When you donate to AWF and write “Water for Wildlife” in the comment section, we’ll make sure your dollars go directly to projects that get water to wildlife, where and when they need it.

Donate today at:

www.azwildlife.org/donate

Volunteer for Wildlife

Through AWF’s Volunteer for Wildlife program, you can get involved in hands on conservation projects that directly help wildlife and their habitats. Volunteer your time on projects such as improving wildlife watering systems, restoring habitat, or delivering water to wildlife. Find out more and register as a Volunteer for Wildlife:

www.azwildlife.org/volunteer

Follow the Science, Not the Politics

We are all in this effort together – to help wildlife. The science is clear; we are in a severe, long term drought. Supporting healthy wildlife populations is a bipartisan, shared goal that we can all agree upon.

Bobcats in Tucson: A study of bobcats living along the urban/wildlands edge

By Cheryl Mollohan

Ask most Tucson residents who live in suburban areas along the urban/wildland interface if they have ever seen a bobcat, and they will quickly say yes and then give you their favorite bobcat story. Bobcats are a unique urban wildlife species that enrich the lives and living environment of thousands of individuals and families in Tucson.

The *Bobcats in Tucson* project is capturing bobcats at the urban/wildlands interface of west Tucson and fitting them with low impact satellite radio collars for the next several years. We will be filling in some gaps in our science-based understanding of where they hunt, rest, and when and where they give birth and raise kittens. Precise GPS locations provided by the collars 2-6 times per day will allow us to identify habitat features important to urban bobcats, and assess the value of green spaces and travelways. We are collecting diet information to learn how much of an urban bobcat's diet is made up of anthropogenic (human related) foods which in the bobcat's case could include small domestic pets and livestock. We hope to use what we learn to reduce potential conflicts when urban bobcats come in contact with domestic pets and livestock.

The project is an Arizona Game and Fish funded Heritage Urban Fund project, Lottery Dollars Working for Wildlife, being conducted under the umbrella of the Southwest Wildlife Conservation Center. For more project details please go to our website at www.bobcatsintucson.net.

While the Heritage Grant and private donations have covered the cost of the radio collars, \$2300 each, and capture equipment, most of the expertise on the project is donated. The Tucson Team Bobcat Field Team is made up of volunteers that include 4 retired AZGFD wildlife biologists (Al LeCount, Ron Day, Kerry Baldwin, and Cheryl Mollohan) with combined years of professional experience totaling over 150 years, and also includes two volunteer veterinarians from the Arizona Exotic Animal Hospital, Dr. Ericka Johnson and Dr. Erica Giles. They are critical during capture activities in administering the immobilization drugs and monitoring the wellbeing of the bobcats during handling and radio collaring. Our GIS and mapping support is provided by Robert Davis of the Quiet Creek Company, and Gale Sherman is our photographer.

Right now, individuals and groups can help our project in several ways. First, go to the website bobcatsintucson.net and complete a survey. Second, we have a dedicated email address for people to report recent sightings of bobcats in the Tucson Metro area. Please be sure to provide as complete of details as possible, and if available, a photo. Over 250 sightings have been sent in to date. You can also find information on how to donate to the project on the website. All donations go directly to purchasing equip-



Dr. Erica Giles, DVM, and wildlife biologists Cheryl Mollohan, Kerry Baldwin, and Al LeCount with *Bobcats in Tucson* Bobcat #1 "Shannan".



Bobcat #8 "Ben" visits a backyard water. Look carefully for the radio collar. Photo courtesy of Doris Evans.

ment (radio collars) and buying supplies. While on the website, sign up for the Bobcat Blog which provides periodic study updates via email. Be sure to check out the Photo Gallery of Tucson Urban Bobcats. The project currently has

9 bobcats (5 adult females and 4 adult males) collared on the west side of Tucson from north of Sweetwater Preserve to south of Tumamoc Hill. We will begin monitoring the females intensively in mid-March to locate dens where the females have their kittens. One of the more unique aspects of Tucson's bobcat population is that they appear to readily select den sites in close proximity to humans to have and raise their kittens. Some homeowners even have a female return year after year, and get to observe the female and kittens often. With many of the world's spotted cats threatened and endangered, Tucson's thriving urban bobcat population provides a unique opportunity for many residents to observe these beautiful cats up close and personal.

The collars do not stay on the bobcats permanently. We pre-program them before they are put on the bobcat for a specific drop off date. They also have a built-in drop-off function if the battery starts to get critically low. We can also trigger the collar to drop off at any time by sending the collar a simple command. We believe that Tucson's apparently large and thriving bobcat population should be a point of pride for our city, and reflects the longterm commitment of Tucsonans to sharing their desert home with native wildlife, and providing green spaces, wildlands and habitat connectivity as a hallmark of our city.



Bobcat #15 "Sweetwater" prior to release.

Eco-Schools Arizona

By the Eco-School Arizona Team: Sharma Torrens, Lisa Ristuccia, Val Morrill, and Nikki Julien



Students from Fountain Hills Charter School's Eco-Team install a bird feeder as part of the Schoolyard Habitat pathway with National Wildlife Federation's Eco-Schools USA program.



October 2020 kicked-off an exciting project between the Arizona Association of Conservation Districts (AACD), the Arizona and National Wildlife Federations, and the Arizona Association of Environmental Education (AAEE). A two-year, \$100,000 Environmental Education grant from the Environmental Protection Agency awarded to the AACD laid the foundation for this effort to promote conservation and environmental education across the state, cultivating our future stewards of the land. Notable project supporters include the Arizona Department of Agriculture, the Arizona Food Banks Network, General Motors, and Kroger.

The AACD is a 501(c)(3) nonprofit organization that supports and promotes Arizona's 42 Conservation Districts and their statutory responsibilities. Conservation Districts were formed by the state government in the 1940s to protect public lands, conserve natural resources and wildlife, restore and conserve soil resources and prevent soil erosion, and protect and restore the state's rivers and streams. The Districts work across the entire state, all land types (federal, state, private, etc.), and with a diverse group of organizations, agencies, and landowners to successfully see natural resource conservation efforts established across Arizona. Districts are administered by farmers, ranchers, private landowners, and others who volunteer their time to see that our limited natural resources are effectively managed for the benefit of all. Districts and their Education Centers provide conservation education to local schools and communities, agricultural professionals, and others, focusing on topics like soil health, water conservation, sustainable agriculture practices, and more.

Twelve schools (grades K-12) will be enrolled in the project and will be supported by the AACD, AAEE, and AWF in this journey. Working with the AWF, AAEE, and District Conservation Education Centers, schoolteachers will use curricula modeled after the NWF's Eco-School's USA 12 Pathways to Sustainability. Pathways include biodiversity, installing



Another advantage of wearing a mask!

schoolyard habitats, healthy eating, and reducing waste and consumption in energy use and transportation. The students choose their pathway(s) based on their interests and work in a hands-on, project-based approach to make positive impacts at their schools, homes, and local venues such as the Conservation District Education Centers. The students and their teachers create a school Eco-Team and share their projects and successes with the other schools around the state through a blog-style website and four Leadership Summits over the course of the two-year grant cycle. Additionally, 10 Conservation Districts will support adult conservation education efforts for agricultural professionals.

Twelve schools are enrolled around the state, from Kingman to Willcox, from Yuma to St. Johns, from kindergarten to high school seniors and represent a diversity of interests and backgrounds. Each school receives a mini-grant to purchase equipment and supplies. Teachers can also use the funds to cover field trip costs. Participating teachers are given a scholarship to enroll in the Arizona Environmental Education Certification program and other professional development opportunities offered by AAEE to help build the teachers' knowledge and understanding in delivering excellence in environmental education.

Since the project formally began last fall, we are already seeing success at Fountain Hills Charter School. FHCS teacher and AAEE Board Member Lisa Ristuccia has made great strides towards implementing Eco-Schools Pathways and gaining certification. First, students formed a Green Eco-Action team and chose which pathways they wanted to focus on: Biodiversity, Consumption & Waste, Healthy Living, Schoolyard Habitats, Sustainable Food, and Watersheds. Students have engaged in outdoor learning via field trips and activities including

planting an organic garden and orchard, creating a schoolyard wildlife habitat and pollinator garden, implementing a composting program, picking up litter, and conducting water quality tests. And the results are more than just academic--the students are also making strides emotionally. Previously, several of the students were terrified of insects, snakes, spiders, and many things outdoors, but through field trips and nature exploration, they have built their confidence and overcome their fears. FHCS's accomplishments show how well this program can flourish and its positive impacts on students, schools, communities, wildlife, and the environment.

AWF board member, Val Morrill, guides the Eco-Schools Arizona team from her successful experience in supporting Carver Elementary in Yuma to the become the first Green Flag school in Arizona, which is the highest achievement within the Eco-Schools USA program. She saw the program begin with one teacher and expand to include the entire school!

The AACD appreciates this opportunity to work with its key partners to make this project a success.

To learn more about the Eco-Schools USA program, visit: nwf.org/Eco-Schools-USA

To contact the Eco-Schools Arizona team, reach out to AWF Outreach Director, Nikki Julien at nikki@azwildlife.org



AWF board member, Val Morrill, with proud students, staff and volunteers of Carver Elementary, achieved the Eco-Schools USA's Green Flag award.

Javi Hunting Story

By Sunny Ray

As I sat there plucking cactus needles out of my arm, I knew this was something I was interested in... hunting, that is. I wasn't sure if I could handle it, so I signed up for Javi Camp as an observer. I've never viewed a field dressing and was very curious and fascinated by it. Heck, I watch human surgeries on Discovery Health, I could handle harvesting meat, right?

The trip to Javi Camp was uneventful, minus the major potholes in the roads just past Arivaca. I set up my camp and headed over to check in at the main camp headquarters. This program matches experienced hunters to inexperienced ones.

| | |
|-------------------------|----|
| # of hunters | 13 |
| # of mentors | 15 |
| # of helpers | 8 |
| # of shot opportunities | 10 |
| # of javelina harvested | 4 |

The goal of the program is to teach new hunters the laws, hunting methods, glassing methods, and ethics of hunting. Any other questions one might have about hunting are also addressed. I was assigned to a group and camp began.

There were four people in my group: two mentors, one new hunter, and myself (the observer). Before our hunt, our mentors explained where the javelina might be found, what they eat, how mobile are they are, and so much more. I asked question after question and my mentors were always ready with an answer.

On the first day of the hunt, we headed out in our vehicles to where our mentor had spotted a group of javelinas. Right off the bat we spotted a group and just watched their behavior for awhile. We looked at the terrain and considered possible ways of getting down to them without being heard or seen. Ultimately, we had no luck that day, but we'd try again tomorrow!

The next morning, we went to the two hills northwest of where we were the day before. We glassed a big group of javelina that had just bedded down. One of our group members, Shevonne, located the javelinas with her optics and made a mental landmark note of their location. She then headed over to AJ (one of our group's mentors) who was close by and also glassing. AJ had a walkie-talkie and was communicating with our other mentor, Kelly, who also had a walkie-talkie and could see the javelina. Through the radios, Kelly led AJ and Shevonne closer to the squadron. At one point, the javelina heard a noise and stood up. The moms and babies scattered while the others stood still to investigate. Javelina don't see well but their sense of smell is terrific! Our mentors had already explained how to use the wind to our advantage. Shevonne took her shot and got a hit. The injured javelina scrambled down the canyon a bit but eventually couldn't move anymore. It was necessary to make another shot in for the final kill. We had previously discussed with our mentors how to make ethical shots to minimize suffering of hunted animals. There is a moment of sadness and respect that every hunter experiences, but knowing that this animal's death will result in feeding a family puts the circle of life in perspective.

My goal for this program was to experience field dressing. All the horror stories of the smells and blood did not materialize because our mentor, Kelly, had suggested using the "gutless" method described by Randy Newberg. This totally fascinated me and I was so impressed with the lack of stench and blood! I kept relating it back to my "not-so-culi-



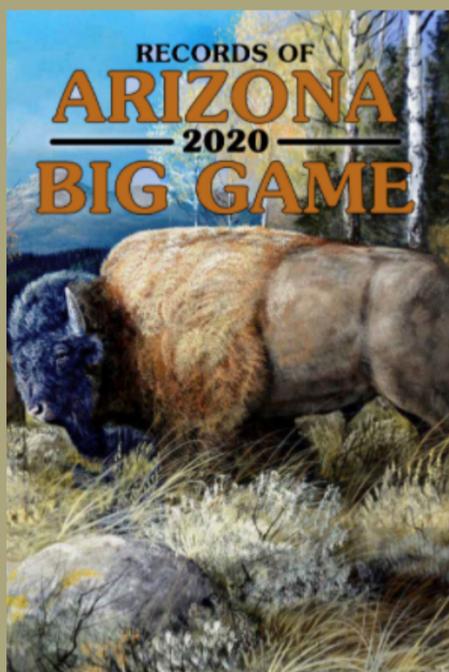
Women's Javelina HAM Hunting Camp typically takes place over President's Day weekend yearly. Women who are interested can find out more at the AZGFD Outdoor Skills Network.



Sunny Ray's hunting party included Kelly Rosas (mentor) and Shevonne LaCroix (successful hunter).

nary” skills of cutting up a whole chicken. I find the joints for making cuts, remove the skin, and work to get specific cuts of meat. For javelina, one harvests the four quarters and the backstrap. For an added bonus, you can try to get the tenderloins, too. We did! I had absolutely no clue that there were so many tools needed for field dressing. Again, it was fascinating! After the field dressing, we bushwacked our way back out of the canyon. The meat was then stored in a cooler with ice until it could be further processed.

I can't say enough good things about this Javi Camp that is sponsored by Arizona Outdoor Women and other partners. It was extremely informative, educational, and hands on!



Records of Arizona Big Game 2020

The Arizona Record Book Committee has been working diligently to make sure this edition lives up to the expectation of the Golden Anniversary edition. The Record Book, which records the scores of game animals taken by hunters throughout Arizona, has been published every five years by AWF since 1970, making the Arizona Records Book the oldest state record book program of any state in our nation. Thank you for your patience as we finish the book. Now is a great time to order your book!

Purchase the book at: azwildlife.org/SHOP

Can we count on your help?

Visit www.azwildlife.org or call 480-702-1365 to give to AWF.



MAKE A DONATION

Choose a recurring donation or a one-time gift. Give to our general fund or a specific program. Give in honor or memory of a friend.



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Join at the individual or distinguished veteran levels. Or choose the family membership to receive an additional magazine. Or become lifetime member.



SHOP WITH US

Purchase the Records of Arizona Big Game 50th anniversary edition or past editions on our website shop.



SMILE.AMAZON

Make AWF your charity every time you shop at www.smile.amazon.com. With no extra work from you, Amazon will give AWF .5% of your eligible purchases.



DONATE STOCKS

Share your investment wealth through the donation of stocks by contacting Board Treasurer Amanda Moors at amoores@cableone.net



LEAVE A LEGACY

By including AWF in your estate planning, you give the gift of long-term conservation.



CERTIFY YOUR GARDEN

Give the gift of habitat to wildlife and when you certify with the National Wildlife Federation, AWF will receive a portion of your certification charge.



GIVE RANGER RICK

For the little ones in your life, give the gift of learning and discovery with Ranger Rick Magazine through our website and AWF receives a portion of your rate.



VOLUNTEER

Join AWF on hands-on conservation projects in the field. We work with our affiliates to offer volunteer opportunities across the state.

Become an AWF Member

Giving to the Arizona Wildlife Federation allows us to further our mission to meet the needs of Arizona wildlife as we seek to protect wildlife species, the habitats in which they live, and the planet we share. As a member of AWF you will receive our quarterly print magazine (Arizona Wildlife News) featuring articles relating to our hunting and fishing traditions along with the latest in conservation efforts around the state. You make a difference to us. Please consider becoming a member today to help wildlife tomorrow! Becoming a member is easy on our website:

<https://azwildlife.org/Join-Us>

AWF Membership Application

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| Name | | | Select Membership Level | |
| Billing Address | | | <input type="checkbox"/> | \$500 Life Member |
| City | State | Zip | <input type="checkbox"/> | \$45 Family - 1 year |
| Phone | Email | | <input type="checkbox"/> | \$30 Individual - 1 year |
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| <input type="checkbox"/> Visa <input type="checkbox"/> Discover <input type="checkbox"/> Mastercard <input type="checkbox"/> American Express | | | | |
| Card Number | | | | |
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