

Tucson Office 520-326-4300 P.O. Box 40340, Tucson, AZ 85717

Matt Skroch, Executive Director matt@azwild.org

Meghan Mix, Office Manager meghan@azwild.org

Phoenix Office 602-252-5530 P.O. Box 13524, Phoenix, AZ 85002

Kate Mackay, Deputy Director kate@azwild.org

Ian Dowdy, Conservation Outreach Associate ian@azwild.org

> Central Arizona Field Office 928-717-6076 P.O. Box 2741, Prescott, AZ 86302

Sam Frank, Central Arizona Director sfrank@azwild.org

AWC Board of Directors

President: Don Hoffman, Alpine
Vice President: Michael Quinlan, Tempe
Secretary: Joel Barnes, Prescott
Treasurer: Kelly Burke, Flagstaff
Kim Crumbo, Flagstaff
Douglas Hulmes, Prescott
Bart Koehler, Juneau, AK
Nancy Mangone, Phoenix
Trica Oshant Hawkins, Tucson
Mark Trautwein, San Francisco

Mission Statement

The Arizona Wilderness Coalition's mission is to permanently protect and restore Wilderness and other wild lands and waters in Arizona for the enjoyment of all citizens and to ensure that Arizona's native plants and animals have a lasting home in wild nature. We do this by coordinating and conducting inventories, educating citizens about these lands, enlisting community support, and advocating for their lasting protection.

Photo Credits

Cover:

Top and back photos: Taken on the North Rim of the Grand Canyon, this photo illustrates an example of an open, healthy ponderosa pine forest, where fire has rarely been suppressed in the last decade. © Ecological Restoration Institute, Northern Arizona University

Bottom photo: A NASA image shows the Wallow fire burning in eastern Arizona in early summer 2011. © NASA

> Layout and Design: Ian Dowdy, AICP

THROUGH THE DIRECTOR'S LENS



Burned into memory are the fires of 2011. Wallow, Monument, Murphy Complex, Horseshoe II and more – all historic burns in their own right, much less burning at the same time. The million acres that burned represents the largest fire season Arizona has ever seen since we began tracking fires in 1916, by almost double the previous record.

The 2011 fires sparked renewed interest in forest management, begging questions of how we cope with and respond to what will inevitably be a growing trend of big, widespread fires across our state in coming decades. Despite misaligned calls for building more roads, cutting mature forests, and increasing cattle grazing to suppress fires (all of which helped get us into the mess we are now in), the reality is that remote, protected places such as designated wilderness areas have a increasingly beneficial role in managing and controlling fires. We've learned over the years that human caused ignitions in wilderness are far less frequent than in roaded areas, and that fires generally burn less intensively in places where some vestige of a natural fire regime still remains. In fact, some of the most progressive, successful fire programs in the nation occur in the middle of large wilderness areas - programs that have reduced the risk of catastrophic events while restoring ecosystems to their evolu-tionary-adapted relationship with fire. Success in coping with fires in the future will not be spelled out with just fighting them harder. Rather the irony is that more frequent fire, in more places, is necessary to avoid the explosive conditions that fueled 2011.

AWC is helping set the record straight on the relationship between fire and wilderness. During the 2011 season, we issued a policy memo for agencies and communities that clarify the broad latitude that fire fighters have in wilderness areas, while pointing out the benefits these places have in suppression strategies, risks to infrastructure, and conservative talk radio shows, we spoke about the inevitability of fire across our state and the values associated with letting fires burn when we can - often times in wilderness areas where risk is low and ecological benefits are high. And in December, our volunteers tromped through the snow covering the Wallow burn to assess and monitor the area where the fire began, not surprisingly right next to a road.

The winter rains have treated Arizona well and with new growth vigorously sprouting and growing now, we're poised for another potentially intense fire season in 2012. During the shoulder season now—when the rhetoric is diminished and we can thoughtfully probe the issue of fire and wilderness—we've chosen to highlight a number of programs and policy points related to such. I hope you enjoy reading about the worthy efforts currently operating in Arizona now, along with facts and information about how fire and wilderness interact from a policy, safety, and ecological perspective. Fire is inevitable; though how we chose to manage and respond to it will dictate how future burns threaten or enhance our lives and the natural world around us.

As the first century poet Ovid once wrote, "The more the fire is covered up, the more it burns." Judging from Arizona's experience in the last decade, those words are just as true today.

Best regards,

Mille

Matt Skroch Executive Director matt@azwild.org





THE BURNING QUESTION: HOW DO WE RESTORE FIRE IN WILDERNESS?

Prescribed burns, natural fire ignitions, and in rare instances, mechanical treatments are options available to fire managers. by Molly Hunter, Ph.D.

My first job out of college was as a seasonal worker with the Plumas National Forest in the beautiful Sierra Nevada Mountains of California. I spent the summer surveying for rare plants in pro-posed timber sales, but I also got to get my hands "hot", so-to-speak, on the fireline. My image of firefighting at the time included big air tankers dropping red sludge, bulldozers clearing fuel ahead of an advancing fire front, and armies of firefighters digging trenches. I didn't see any of that on my first assignment, a small lightning start in the Bucks Lake Wilderness. Instead, I and six other firefighters hiked five miles deep into the wilderness until we reached the fire, carrying rakes, shovels and axes. For hours we gently raked away litter and duff around the edge of the small fire, to rob it of fuel and prevent it from further spreading. When it looked like the fire might spread to a brush field, a line was cut through the vegetation with a hand saw.

Fire suppression tactics have always been different in wilderness areas, though it's important to note that in cases of protecting homes and public safety, the Wilderness Act gives firefighters full latitude in using all the tools they have at their disposal, including mechanized equipment. Outside of wilderness, the mentality has often been one of fighting a fire at all costs, and at times the costs can be great. On large fires, it is not uncommon to see bulldozers dig firelines several feet wide, clearing everything in their path. The retardant dropped from aircraft to cool fires' flames can have negative impacts on sensitive aquatic species. In emergency situations, where raging wildfires are threatening communities, managers typically don't have the luxury of worrying about how their fire suppression tactics may impact ecosystems. Inside wilderness areas, firefighters follow established agency

policies to use tactics that will produce minimum impacts if possible. Thus, maintaining a light footprint on the land is expected, even when suppressing a fire

"Just as we hope that a burn is varied in its character—burning hot in some places and cooler and slower in others—forest managers have to be equally flexible and adaptable to the ways in which fire can help them accomplish better forest management—both within wilderness and outside of it," says Jason Williams, Wilderness Manager with the Prescott National Forest.

"There are a multitude of factors that go into a land manager's decision to use fire as a landscape restoration tool: atmospheric conditions, previously established goals for the area, endangered species, public tolerance of smoke, fire danger across the region, and above all, safety of the fire fighters and the communities around the forest." Williams adds. "No one-size-fits-all approach can ever be applied to fire. It's possible to reach more natural fire regimes on all types of forest lands, but a varied approach to each area is necessary, using patience and a long-term vision." Several times a year, Williams serves as a Wilderness Resource Adviser during wildland fire incidents around the country; most of the time he is managing trails and wilderness on the Prescott National Forest.

Fire, of course, plays a natural role in most ecosystems and keeping it out can cause serious harm. This is especially true in the dry forests of the Southwest, where fires historically burned lightly through the understory every few years, eliminaing litter, duff, and only the smallest trees. In these same forests, a century of fire suppression has led to a build-up of fuels and more dense forests. As a result, when fires occur now, they tend to be extremely hot and severe, consuming everything in their path. Events like the Wallow and Rodeo-Chediski fires are partly a result of this history.

Soon after the passage of the Wilderness Act, managers began to discuss the role that fire should play in these systems. If fire is in fact a natural process, shouldn't that process be allowed in wilderness areas without humans impeding it? Many land managers came to this conclusion. While fire suppression was the dominant practice throughout the country, in 1968 the National Park Service adopted a policy of allowing naturally ignited fires to spread on their lands, so long as they didn't pose a threat to communities. The U.S. Forest Service soon followed suit, allowing naturally ignited fires to spread on in designated wilderness areas.

Despite these policies, most fires in wilderness areas were still suppressed at the time and that continues to be true today. Often the threat of fire to communities or resources just outside of wilderness is too great to let them spread of their own accord. However, there are examples of places where fire suppression in wilderness has been the exception, not the rule – notably wilderness areas in Yosemite and Grand Canyon National Parks and the Gila and Bitterrot National Forests.

Managers now overwhelmingly recognize that many forests today, particularly in the Southwest, are overgrown due to a century of fire suppression and have the potential to burn with very high severity. Examples abound in the 2011 fire season: Monument, Wallow, and the Horseshoe II fire all scorched forests far beyond historical

Continued on page 4

FIRE IN THE DESERT — A NEW, CHALLENGING THREAT CAUSED BY AN INVASIVE AFRICAN GRASS



Across southern Arizona, an invasive nonnative plant has introduced a new fire risk and
threatens to irrevocably alter our Sonoran Desert,
including dozens of wilderness areas stretching
from Saguaro National Park near Tucson to the
New Water Wilderness in western Arizona.
Buffelgrass (Pennisetum ciliare) is a fire prone
and shrubby grass introduced from the African
savannah in the 1930's for erosion control and
cattle forage. It grows in dense stands that can
crowd out native plants and creates a fire regime
in the desert that never existed before. This potentially leads to devastating fires that can convert
the ecologically rinc Sonoran Desert into a more
monotypic exotic grassland environment. In the
Mexican State of Sonora, large expanses of former
desert now resemble South Africa, with a small
fraction of native plants still residing in areas
where the ubiquitous grass has taken over.

Buffelgrass spreads aggressively by seed and establishes itself readily in areas that have been disturbed. Once established, the invasive grass can then move into native desert habitats on hillsides and along drainages. Buffelgrass stands can burn at over 1,400 degrees and are almost three times hotter than fires generated by flammable native vegetation. Buffelgrass fires are highly detrimental to cacti and native trees and can eliminate them from the landscape. Moreover, fire does not significantly impact buffelgrass stands, which can come back more vigorously than before the fire. After fire, the problem is compounded and the landscape begins to take the form of a single-species grassland.

Over the past five years, the buffelgrass invasion in the Southwest has been the subject of considerable outreach, extensive media coverage, and nearly-unanimous consensus over the need to agnearry-unanimous consensus over the need to ag-gressively control this invader grass in Arizona. Despite the best efforts of a growing group of vol-unteers and a growing public investment, control activities have not kept pace with buffelgrass spread. Because this spread is almost exponential populations of this grass and the costs of controlling it may be doubling every year - time is of the essence and requires working collaboratively and decisively to implement effective control programs. While Arizona has taken steps to control sufflegrass by listing it as a Prohibited Noxious Weed, states like Texas and Sonora, Mexico continue to actively plant the grass, even subsidizing its spread. Ironcially, scientists at Texas A&M University are still working to develop and promote a cold-tolerant species of buffelgrass, dubbed "Frio". Frio was first released in the last decade, and has been actively planted in Cananea, Sonora.

For more information and how you can help beat back buffelgrass, visit the Southern Arizona Buffelgrass Coordination Center at www.buffelgrass.org.

Portions of this story are adapted from Pima County's Natural Resources, Parks, and Recreation Department report "Buffelgrass Control Research Project Backgrouond Information".



Buffelgrass is a now common, and often dominant, plant in places near roads and cities, though it also intrudes natural areas such as the Saguaro National Park Wilderness Area and the Desert Laboratory on Tucson's Tumamoc Hill (shown above). Photos by Travis Rean.

Southwest, this is when lightning strikes are at their peak and natural fire starts are most common. For prescribed fire, managers often prefer the spring or the fall, when weather conditions make fire more controllable. Studies from the Gila National Forest and Yosemite National Park show that wildfires that are allowed to spread tend to have slightly higher intensity than prescribed fires and thus, are slightly more effective at reducing tree density. As a result, stands that burn in these wildfires are more open and less susceptible to highly destructive

In the Southwest, many agencies have paved the way for wilderness fire. The Gila National Forest, Grand Canyon National Park, and Saguaro National Park have been allowing fire to spread in wilderness areas for decades and managers across the country look to these programs as examples. Hiking through these forests is like stepping back in time. In areas where fire has played its natural role, you won't find forests choked with millions of small trees. Instead, you'll find beautiful open forests that look close to what they did 100 or more vears ago.

Advocates of wilderness often like the idea of allowing fire to play its natural role in forests, but there are practical advantages to using limited fire suppression as well. The cost of doing such work is minimal compared to thinning and prescribed fire. Plus, the often exorbitant costs of fire suppression can be avoided. Many managers are starting to reorgize this, which is why the practice of allowing wildfire to spread is becoming more common outside of wilderness areas. Recent shifts in national policy give managers greater flexibility in allowing fire to spread on its own accord and places like the Kaibab and Coconino National Forests have taken advantage of this policy.

Wilderness areas in the Southwest, where wildfire has been allowed to spread for decades, are living laboratories. These unique landscapes have taught us many lessons and managers are beginning to apply those lessons elsewhere. Of course there will always be roles for thinning, prescribed fire, and some fire suppression, but these places show us that much can be accomplished by allowing nature to take its course.

Molly Hunter is Assistant Research Professor in the School of Forestry at Northern Arizona University, where she focuses on continuing education, outreach, and research on fire ecology in the Southwest. She has done extensive research in the Gila National Forest, where fire is often allowed to spread in and outside of wilderness areas. http://nau.edu/CEFNS/Forestry/Faculty-and-Staff/Directory/Hunter/

Molly.Hunter@nau.edu



THE BURNING QUESTION, CONTINUED FROM PAGE 3

averages. Thus, the focus of forest managers today is restoration to forest conditions that are closer to what one would have seen 100 years ago and which provide more resilient, healthier ecosystem. This typically entails mechanically removing small trees - those that have established in the absence of fire-followed by prescribed fire to remove excess litter, duff, and woody fuels. These practices have proven effective in improving wildlife habitat and reducing the threat of severe wildfires, yet they are practices that are typically not available in wilderness areas. Thinning and other mechanical treatments are often prohibited. The only tool managers really have is fire, which begs the question: can restoration be achieved with fire alone? Managers often feel nervous about letting fire spread in longunburned areas that haven't been previously thinned. With all that fuel, there is always a potential for fire to get overly hot and destructive.

Experience suggests that this rarely happens because managers have the discretion of not allowing fire to spread under very hot and dry conditions at least in circumstances of prescribed fires where the managers have more control over the fire's behavior. If anything, fire that is not hot enough may be a concern. When fire is of relatively low intensity, mainly creeping through litter and duff, it typically doesn't produce enough heat to kill small trees, leaving forests still overstocked and susceptible to high intensity fire. Restoration only occurs when fire is just the right intensity, hot enough to kill small trees but cool enough to let the large trees survive. Forests that experience this kind of moderately hot fire tend to resemble historical forests. They are more open and less susceptible to severe

Moderately hot fires often occur in wilderness areas when naturally ignited fires are allowed to spread of their own accord. These fires tend to burn a little hotter because they occur in the middle of the summer, when temperatures are high. In the





WILDLAND FIRE IN THE RINCON WILDERNESS

by Michelle Fidler, NPS Fire Communication and Education Specialist

Wildland fire is an essential, natural process that helps maintain diverse, healthy habitats in the fire-adapted woodlands and forests of Saguaro National Park's Rincon Mountains. Thanks to work by the University of Arizona's Laboratory of Tree Ring Research, we know much about fire history in the Rincons. Fires historically occurred here every 5-15 years, depending on the plant community. However, grazing by livestock, an era of aggressive fire suppression, and the introduction of invasive plant species have modified natural fire cycles throughout the Southwest. Today, the National Park Service manages fire to decrease risks to life and property and to help maintain the natural resource values for which the park was established.

Fire management activities in the Saguaro Wilderness are always conducted with a light handed approach. The primary objective is the safety of firefighters and the public. Other important objectives include preventing damage to wilderness values and historical sites, minimizing erosion and disturbance to sensitive species, and protecting watershed and riparian areas. Fire managers also work with state and local agencies to monitor and manage smoke impacts during wildland fires.

Minimum impact tactics are used whenever possible. This includes using existing trails, streams, and rocky outcroppings as firelines. Confining the fire with natural fuel breaks increases safety and reduces the number of firefighters needed on the ground. Chainsaws and helicopters are only permitted with approval from the park superintendent. Firefighters only remove limbs and standing dead trees that pose a safety hazard to firefighters or future visitors. Stumps are cut flush to the ground, and cut branches and logs are scattered to help make the area look as natural as possible.

Most fires in the park are caused by lightning. They mainly occur in the Mica Mountain area in June, July, and August, during the monsoon. The first storms of the season can bring dry lightning, typically followed by significant precipitation within a few weeks. Most fires remain small due to high humidity and rain. In the past ten years, 36 wildfires have occurred in the park, burning 2,107 acres. Thirty of these fires were lightning-caused.

Most fires burn with low intensity. They reduce dead wood accumulations on the forest floor to ash, release nutrients that stimulate new plant growth, and help regulate insect and disease levels. In some places, fire may be more intense and move into the treetops. This kills the trees, but other plant species that thrive on light will grow in these new openings. A variety of fire behavior creates a mosaic of habital diversity. It also breaks up continuous fuels on the forest floor (such as branches and fallen trees). This can reduce the intensity, slow the spread, and limit the size of wildfires in the future.

Many woodland plants and animals are adapted to fire. Ponderosa pine have thick bark that acts as insulation from fire's heat. They also shed their lower branches as they grow. This reduces ladder fuels that fire could use to climb into the treetops. Fire triggers the seed cones of the Chihuahua pine to open. Other plants, including alligator juniper, Arizona white oak, and Emory oak can resprout after a fire. Fires create standing dead trees that are important habitat for birds like the Mexican spotted owl. Low to moderate intensity fires reduce the risk of large crown fires, which would decrease or eliminate trees where owls nest and roost. Small mammals eat new vegetation that thrive in the sunlight in openings created by high-intensity fires. These small mammals are prey for predators like owls.

Fire managers may manage lightning-ignited fires in fire-adapted plant communities when conditions are favorable, instead of automatically suppressing them. Saguaro National Park was one of the first national parks in the country to manage natural ignitions, beginning in 1971.

One of the more recent lightning-ignited wildfires in the park was the 130-acre Chimenea Wildfire. It was detected on June 26, 2008 in pine-oak woodland in the Rincon Mountains. Fire managers evaluated current and projected weather and environmental conditions, as well as the availability of firefighting resources, before deciding to manage the fire. Fire managers and resource management staff monitored the fire from the ground and by air. They were prepared to use a full range of actions to delay, direct, or minimize the spread of fire in areas to protect sensitive natural or cultural resources if necessary. More than three inches of rain fell on the fire in early July. Pockets of logs in the interior of the burn continued to smolder until the area received additional rainfall. The fire was declared out in late July.

Monitoring this fire and calling in resources only as needed freed up limited firefighting resources to respond to higher priority fires in the region and across the nation. Minimizing the number of firefighters working in remote, rugged terrain during lightning season increased safety. Limiting the need for helicopter support to shuttle crews, equipment, and supplies also helped preserve wilderness character and reduce costs.

Saguaro National Park's fire management plan also identifies the need for low to moderate intensity prescribed fires. Prescribed fires are carefully planned and lit by firefighters to help maintain healthy, fire-adapted forests in the Rincon Mountains and to prevent large, intense wildfires. They are designed to mimic lightning-ignited fires and to help make up for

Continued on page 6

WILDLAND FIRE IN THE RINCON MOUNTAINS, CONTINUED FROM PAGE 5

fires that have been suppressed in the past. Fire managers only conduct prescribed fires when fuel breaks around the area to be burned have been prepared, weather and environmental conditions are favorable, and adequate firefighting personnel and resources are available.

The park's prescribed fire program began in 1984 with the 40-acre Chimenea Prescribed burn. Since then the park has ignited ten more prescribed fires, totaling 4,430 acres. Prescribed burns in the wilderness are complex and require extensive planning and coordination.

The park's most recent planned burn was the Mica Mountain prescribed burn, conducted in late June 2010. More than 50 firefighters from five states hiked more than nine miles into the backcountry. Fire personnel used the established Manning Camp area as their base camp then hiked to the burn unit each day. Pack mules carried in as much food, portable toilets, fire gear and equipment as possible. However, the number of firefighters was more than packers could support, and some helicopter use was necessary.

The planned burn unit was 423 acres. It was about 8,000 feet in elevation and was mainly covered with ponderosa pine. On the first day, 114 acres were burned. However weather conditions changed, and it became too dry to burn the rest of the planned area.

Managing wildland fire requires land and fire managers to balance risks and benefits in an everchanging environment. All fires are different. Fire managers evaluate each one and determine the safest, most effective, and cost-efficient strategies to manage it. Firefighter and public safety is always the top priority. In 2002, the Sky Islands Wildlands Network recognized Saguaro National Park for the ecologically appropriate restoration of fire to fire-prone systems within the park.

Fire management in wilderness presents many challenges. Terrain is rough, trails are few, logistics are challenging, and cost can be high. Endangered species and historic sites require special consideration. Even though much of the park is designated wilderness, its proximity to populated areas means smoke from a fire can impact a large number of people. Park managers balance these considerations and more, as they work to protect public and firefighter safety and restore and maintain the natural processes associated with fire in your national park.

To learn more about Saguaro National Park's fire management program, please visit http://www.nps.gov/sagu/parkmgmt/firemana gement.htm.

Michelle Fidler is a National Park Service Fire Communication and Education Specialist based at Saguaro National Park. She supports parks in Arizona, New Mexico, Oklahoma and Texas. michelle fidler@mps.cov



SHORT TAKES



In March, AWC led a day-into-evening field trip to Saddle Mountain west of Phoenix with award-winning local photographer Colleen Miniuk-Sperry, from whom workshop participants enjoyed top-notch photography instruction on scenic and macro shots during the hike. AWC Deputy Directions of the control of the c

AWC was excited to host a group of children from Boys Hope Girls Hope on an adventurous outing at Saddle Mountain in February. Conservation Outreach Associate Ian Dowdy led the group of a dozen middle-schoolers on a hike, followed by some experiential exercises to help them appreciate the Sonoran Desert. Activities included cognitive mapping, sensing exercises, journaling, and a scavenger hunt! The children (and adults) had a great time and look forward to some other activities together in the future. Boys Hope Girls Hope works to empower young people to a better life, focusing on inner city and underprivileged youth. To learn more visit www.boyshopegirlshope.org.



In late April, the Arthur Carhart National Wilderness Training Center, a U.S. governmental interagency center devoted to training federal and state land personnel who manage wilderness areas, is hosting workshops for agency em-

hosting workshops for agency employees in Tucson and Sedona. AWC has been invited to be a guest presenter at both workshops to discuss the formation and success of our Wilderness Stewards Program. This is a tremendous honor, as AWC is the only non-profit organization to be recognized by federal agencies for our work to engage volunteers in wilderness related issues in Arizona. AWC's Central Arizona Director, Sam Frank, who coordinates the Wilderness Stewards Program, will be giving the presentations. Find out more about our Wilderness Stewardship Program at www.azwild.org/action/wilderness.stewardship.php.

AWC has a new office! Earlier this spring, we moved to another property in the Roosevelt Historic District, not too far from our first office space on 3rd Avenue. We appreciate the eelectic charm of this part of Phoenix, as it offers plenty of open space, walkability, metro rail access, and diverse restaurants.

As with our former space, AWC is subleasing its new home to the Arizona League of Conservation Voters, sharing our kitchen, reception, and meeting room space

as needed. We have plenty of parking at the new location, a cool shady front porch, and a sunny back patio. Stop by and see us at 307 W. Latham Street!



tor Kate Mackay and Friends of Saddle Mountain President Chris Meachum were on hand to discuss the area's significance for wildlife and archaeological values, as well as Saddle Mountain's qualifications for wilderness protection as part of the Sonoran Desert Heritage conservation proposal.

According to one workshop attendee: "Everyone did a great job and was a pleasure to be with. Thanks again for all of your efforts. Although the wildflowers were not out in force this year, it was a good practice session and learning experience." The group was joined by NBC-Channel 12 photographer David Wallace, who captured footage to use in an April broadcast for "Explore Arizona."

A portion of proceeds from the workshop went to support AWC's program work to raise awareness about the Sonoran Desert Heritage proposal, with the goal of securing congressional bill introduction later this year. AWC and Miniuk-Sperry are planning a workshop for later this fall in central Arizona that will focus on autumn foliage in Arizona. Sign up for our e-alerts to get more info: www.azwild.org.





A great macro photo from the photography workshop at Saddle Mountain!

Thanks to: Rebecca Wilks, MD

Skyline Images Fine Art Photography www.skylinemages.net http://skylineimages.tumblr.com/

WILDERNESS TO WATCH



THE WHETSTONES—A WILDERNESS OVERLOOKED

by Dale S. Turner

How do you gauge wilderness qualities? Consider this: deep in the Whetstone Mountains sits a wooden corral with a small metal line shack, remnants of an early cattle ranching operation. Far from any road, its floor has newspapers from 1939 resting where they were dropped when the news was fresh.

The steep, rugged, brush-covered terrain of the Whetstones provides a daunting challenge to all but the hardiest hikers. Only a few old pack trails cross its ridges, additional relics of ranching efforts many decades ago. There are not even foot trails to the highest peaks, providing evidence of the limited visitation this range has received.

Passed over in the 1984 Arizona Wilderness Act, the Whetstone Range is no less deserving of wilderness than its neighbors, such as the Rincon and Santa Rita Mountains, that enjoy the penultimate status of land conservation.

Another Sky Island

The Whetstone Mountains reach their high point of 7711 ft on Apache Peak, rising from approximately 4,800 ft at their edges. Watersheds on the eastern side drain into the San Pedro River, while those on the western side feed Cienega Creek and flow into the Tucson basin.

Botanically, the Whetstone Mountains include and are surrounded by plains grassland and semidesert grassland. Above the grasslands, madrean evergreen woodland covers most of the mountain range, with the highest elevations supporting small stands of ponderosa pine. Several major canyons contain stretches of deciduous riparian forest, with galleries of sycamore and oak.

The spring-fed perennial streams in Wakefield and French Joe Canyons, among others, support rich riparian communities with frogs, turtles, cottonwood and willow trees, along with a great diversity of birds. Black bear and mountain lions

come down to drink, along with the dense population of whitetail deer which attracts hunters, both human and feline.

The U.S. Forest Service manages most of the Whetstone Mountains as a 70.5-mi2 block of land within their Sierra Vista Ranger District. It serves as an eastern boundary for the Sonoita Plains and Las Cienegas National Conservation Area.

Ecological Values

The Whetstone Mountains form a critical linkage in the chain of Arizona's sky islands, connecting the Rincon and Santa Catalina Mountains in the north to the Huachuca Mountains and the Sierra Madre to the south. This may allow large mammals such as jaguar and occlots to move northward unimpeded and provides rest stops for migrating songbirds.

The Whetstones feature limestone outcrops in a band covering approximately 20 square miles. Such limestone often supports a variety of rare plants, either rare species or species far outside their usual distribution, but few botanists have explored this mountain range.

A recent inventory of the Whetstones found five amphibian and 37 reptile species, including at least five species that reach the northern limits of their distribution on the North American continent. This abundance reflects the high diversity found at this overlap between the fauna of the Sierra Madre and the Rocky Mountains, and between those of the Sonoran and Chiuhauhaun Deserts.

The Whetstones form a major part of the watershed for Cienega Creek, the centerpiece of Las Cienegas National Conservation Area and one of the most important streams in southeastern Arizona. With their limestone beds sloping down to the west, they also supply the aquifer beneath Cienega Creek and several important springs.

Recreational Values

Most of the Whetstones' human users are deer hunters, who visit every fall to partake of the robust deer population and the wilderness hunting experience. Bird watchers and campers are familiar with French Joe Canyon, which has easy access to a scenic canyon setting. A short hiking trail loops out of Kartchner Caverns State Park, and rockhounds occasionally visit old mine sites in Mine Canyon. Otherwise there is very little recreational or commercial use of these mountains.

This is a mountain range that rewards the adventurous bush-whacker, those who value the blank place on a map.

Threats

Major residential development is underway to the northeast of the range, large-lot suburban housing is filling land to the north, and second-home development is spreading out of Elgin to the southwest. Sierra Vista is growing rapidly, as are Benson and Vail, thus surrounding the Whetstones with human activity.

The limited set of rough forest roads within the Whetstones has been gradually expanding in some of the canyons, as off-road drivers take signs and barriers at road ends as points of departure, pushing steadily deeper into the unprotected wilderness.

Perhaps the biggest threat comes from high copper prices, and the risk of reactivating old mining claims in the southern portion of the range.

The biodiversity, ruggedness, and allure of the Whetstone Mountains have shaped the storied rhetoric that make up this "land of legends" region. The Arizona Wilderness Coalition and regional partners Sky Island Alliance and The Wilderness Society are moving forward with a vision to designate wilderness in the Whetstones through our Land of Legends Wilderness Campaign.

As part of the campaign, AWC engaged in the Coronado National Forest Planning Process over the last year, successfully expanding the Forest Service's inventory of potential wilderness areas and helping secure a "Wilderness Alternative" in the upcoming draft plan. We also met with the Cochise County Board of Supervisors to discuss the value of wilderness while fending off a proposed anti-wilderness policy that threatened to hamstring the initiative in 2011. As we embark on our 2012 work, we seek to facilitate wilderness legislation for these three mountains in order to permanently protect their incredible natural and cultural history.

TAKE ACTION: Find more information at http://www.azwild.org/regions/skyisland.php.

Dale Turner is a co-founder and former president of the Sky Island Alliance. He works as a conservation planner for The Nature Conservancy in Tucson. You can reach Dale at dturner@tnc.org.





WE NEED WILD & SCENIC RIVERS IN GRAND CANYON

by Joel C. Barnes

 ${
m F}$ or those who experience the Grand Canyon intimately, the river and its tributaries come to represent the heart and soul of the place. These waterways are largely responsible for carving the Canyon's magnificent landscape over millions of years and, like a keystone species, these riparian corridors have evolved into a textbook example of a keystone habitat in that they support an unusually high percentage of the canyon's biological diversity (Stevens et al. 1999). We also know that these waters have had a formative influence on the cultures who have explored the canyon, from prehistoric hunter gatherers to hikers and boaters of the new millennium. With estimates of Arizona's remaining healthy riparian habitat being low (Ohmart and Anderson 1986), Grand Canyon's waterways represent an extensive and relatively intact system of aridland riparian habitat. A living vestige of our Southwest natural and cultural heritage, they are prime candidates for Wild and Scenic River (WSR) designation, which represents the gold standard for river conservation throughout the nation and provides long-term protection for those waterways under its wing.

That the Colorado River and its tributaries in and around the Grand Canyon have yet to be honored with Wild and Scenic River (WSR) designation comes as a surprise to many, even those actively involved in river conservation. One could easily assume that the spectacular Colorado River and it tributaries in Grand Canyon are the southwestern gems of the National Wild and Scenic River System. In fact, WSR designation has eluded a number of our most notable wildland river systems here in the arid Southwest, including the San Pedro, Agua Fria, Hassayampa and yes, the Grand Canyon's share of the Colorado River system.

Studies show that more than 90% of Arizona's riparian areas are in poor and/or degrading condition due to a century of over-grazing, urban development, groundwater withdrawals, and more. In contrast to this bleak piece of news, Grand Canyon's river, streams, seeps, and springs have been largely exempt from these ubjustious impacts. As such, they represent the largest intact system of nearly pristine riparian areas left in the American Southwest -a living vestige of our bioregional heritage. Unfortunately, even Grand Canyon's springs, seeps, and streams are now threatened, and wild and scenic river designation can help saye them.

Managers and conservationists alike cite the fact that the Colorado River and its tributaries, seeps, and springs are already protected by Grand Canyon National Park status as reasonable cause for not pursuing WSR designation. But increasing pressures on our national parks from beyond their political boundaries are very real, as evidenced by the latest resuscitation of a large-scale tourism project in the town of Tusayan (the infamous Canyon Forest Village proposal from the late 1990's). If the water required for this development depends on groundwater (which is likely), it will have to be pumped up from the Redwall Muav aquifer. This aguifer underlies the town of Tusayan and the eastern portion of Grand Canyon National Park. Most importantly, it feeds some of the tributaries, seeps, and springs of eastern Grand Canyon. This is where the importance of WSR designation plays into the equation.

In short, the Wild and Scenic River Act (WSRA) provides the most comprehensive legal protection available for the instream flows of river systems. In other words, WSR designation guarantees that enough water stays in a stream to support the values for which it was designated. The WSRA is potentially as significant to the water resources of parks as the Wilderness Act is to our land resources.

es. Wild and scenic river designation would maintain and enhance long-term protection for the Colorado River in Grand Canyon, including its tributariesceps, and springs—some of which are clearly threatened by activities beyond the park's boundaries.

"In a world of increasing threats—including short-sighted ground pumping of water essential for the park's springs—and especially in light of increasing aridity due to climate disruption, Grand Canyon needs all the tools available to avoid impairment of America's greatest national park," says Kim Crumbo, conservation director with the Grand Canyon Wildlands Council and board member of AWC. "Wild and Scenic River designation for Grand Canyon's Colorado River and its tributaries makes solid ecological sense, and would magnificently complement the Canyon's national park and World Heritage Site status." Crumbo served for almost 20 years at Grand Canyon National Park as wilderness manager and river ranger.

Over the past three decades, southwestern riparian systems have been identified time and again as an endangered ecosystem of North America (Ohmart and Anderson 1986, Noss 1997). These riparian ecosystems have continually suffered as water demands increase. This situation calls for a regional and systems approach to water resource conservation, one that recognizes the interconnections between arid land river systems and their surrounding watersheds. Thus, a successful conservation strategy for the waterways of GCNP should embrace a regional river system and watershed based approach to WSR designation, as opposed to the segment-by-segment approach adopted in most WSR proposals. The segment-by-segment approach has proved to be a painfully slow political process, and overlooks the central ecological function of rivers in aridland ecosystems.

Continued on page 9

WILD & SCENIC BIVERS IN GRAND CANYON, CONTINUED FROM PAGE 8

WSR legislation for the Grand Canyon's river and tributaries would protect a contiguous portion of the Colorado River system, dramatically increase protection of the region's biodiversity, and place these arid-land waters at the heart of a regional conservation strategy. Such WSR omnibus bills have been successfully passed into law in Michigan, Oregon, and Alaska (Raffensperger 1993).

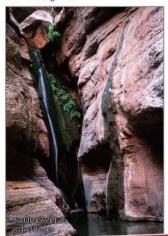
The WSR Study Process

Before Congress legislates a Wild and Scenic River designation, a WSR Study Process is conducted by the federal land management agency that involves three steps - eligibility, classification, and suitability. For a waterway to be eligible for WSR designation it must be free flowing and exhibit one or more "outstandingly remarkable values" as described in the Wild and Scenic River Act of 1968. Once a river or stream segment is determined to be eligible, it is then given a tentative classification of either "wild," "scenic," or "recreational." These categories reflect levels of development and natural conditions along a river segment. Finally, the suitability step evaluates the consequences of designation and the manageability of the river if it is designated, which would consider biological, political and economic factors. After the Study Process is complete and depending on its recommendations, Congress is then prompted to act with legislation, which can take years and even decades to occur.

What Would WSR Designation do for the Ecosystem?

WSR designation in GCNP would mandate protection for the exceptional natural and cultural values of the Colorado River main stem and tributaries, particularly those "outstandingly remarkablevalues" (ORVs) identified in the eligibility and suitability steps of the WSR Study Process. The Act also recognizes preexisting types and levels of river recreation where they do not conflict with the existing goals of river management.

However, the Act does not freeze the status quo in a river corridor when it is designated. Rather, the Act codifies a "mondegradation and enhancement policy" for all designated river areas, regardless of classification. These details are mentioned here to elucidate important differences and similarities between the Colorado River main stem and the tributaries in terms of the biopolitics of WSR designation and management.



For example, by identifying ORVs along the tributaries that are directly dependent upon existing base flows (e.g., riparian vegetation, wildlife and fish), the WSR study process could help set a legal stage for protecting future instream flows of the seeps, springs and tributaries in and around Grand Canyon. Since the Act acknowledges existing river management goals, designation would not impose any significant influence on the scheduled flows (essentially Clen Canyon Dam releases) of the Colorado River.

The existence of Glen Canyon Dam would not violate the "free flowing" criterion of the Act (it isn't all that uncommon, particularly in the east, for dams to be just up or downstream of a WSR segment). More importantly, in regard to the Colorado River main stem, designation would finally put to rest any of the dam proposals that still roam the halls of Congress.

The Act would provide the highest level of legal protection available to ensure that no dam projects from Washington would materialize in the Grand Canyon.

The Act's allowance of preexisting types and levels of river recreation where they do not conflict with the existing goals of the rivers management could be interpreted to support the controversial status quo of commercial use on the river (including large motorized trips). However, popular interpretation of the Act states that WSRs are managed primarily for the values for which they were designated



(IWSRCC 1999). Additionally, the Act codifies a non-degradation and enhancement policy for designated rivers, and directs administering agencies to improve conditions in river corridors where necessary. Therefore, identifying (in the WSR Study Process) the unique wilderness values that enhance river recreation on the Colorado River through Grand Canyon would establish important legislative and management connections between the park's (currently proposed) wilderness and its wild and scenic rivers.

TAKE ACTION: Grand Canyon National Park is in currently in the process of revising their Back-country Management Plan (BCMP), which represents the best opportunity for gaining Wild and Scenic River (WSR) status of the Colorado River and its tributaries. Unfortunately, the Park has stated that the BCMP may not contain a WSR suitability study. We seek to change that, and urge you to contact the Park Superintendent David Uberuaga at david "uberuaga@nps.gov and tell him the BCMP must finalize the suitability status of the Colorado River and its tributaries. For more information, see http://parkplanning.nps.gov/gra.

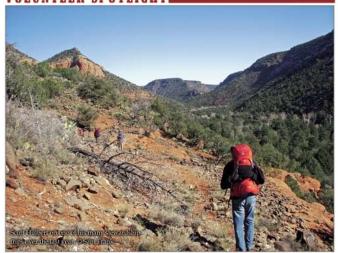
Joel is an AWC board member and a professor at Prescott College; his courses and research are focused on river conservation, water policy, watershed management, and restoration ecology.

jbarnes@prescott.edu





VOLUNTEER SPOTLIGHT



"MY OTHER BRIEFCASE IS A BACKPACK..."

by Sam Frank

10

When you spend your work days arguing with people about million-dollar settlements and whether they're responsible for paying back loans or meeting their contractual obligations, it makes perfect sense to seek out some solitude during your down time. Scott Hulbert does just that—carving out time on the weekends to join the Arizona Wilderness Coalition and its Wilderness Stewardship Program on backcountry trips that give him some peace and quiet—and give back to the wilderness areas he appreciates in Arizona.

"Living and working in a city like Phoenix, you have to force yourself to get back to nature and find that balance," says Hulbert, 38, who has lived and worked in far flung places like Montana, Colorado, Georgia, Vermont, and Australia. Scott is a commercial litigator with Engelman-Berger PC, a full-service Phoenix-based law firm that focuses on the prevention and resolution of legal issues arising in business. One of the aspects of his workplace that he values is the firm's civicmindedness and the fact that its partners encourage employees to volunteer. He was recently named by Southwest Super Lawyers, a national rating service of outstanding lawyers from more than 70 practice areas, as one of the top 2½ percent of the region's attorneys under 40.

"Scott is one of our longtime return volunteers who can enjoy himself on just about any trip, under any conditions," says Sam Frank, AWC's Central Arizona Director who leads the stewardship program. "He gets along with everyone, knows our monitoring and restoration protocols, and is always willing to chip in to help any way he can. He's the type of volunteer outdoor organizations like AWC hope to have on their trips."

AWC's Wilderness Stewardship Program officially launched in 2011 on the Prescott National Forest, although Scott began joining, AWC volunteer field trips in 2008 and has participated in about 4 trips per year ever since. The program's goal is to engage volunteers to work with AWC to restore and maintain Arizona's wilderness areas through overnight and day-long service projects. Often the work is difficult for the agencies to accomplish on their own, with limited budgets and personnel. In 2011 alone, AWC's Wilderness Stewards completed 2,178 volunteer hours, with a monetary equivalent of \$46,522, in eight different wilderness areas around the state.

"My favorite trip so far has been the work we accomplished at Warm Springs Wilderness in 2009, because of its remoteness and the difficult tasks we were asked to do," says Scott. "It was also the first trip I was on that we partnered with Backcountry Horsemen of Central Arizona, and that was a blast"

On that trip, AWC's crew worked with the BLM to repair fencing around the springs that would encourage native wildlife to drink undisturbed while preventing non-native burros from further damaging the springs. Scott has also worked on wilderness monitoring and restoration at Apache Creek, Munds Mountain, Cedar Bench, Castle Creek, and Sycamore Canyon Wilderness areas. In 2009, Scott helped to remove more than 100 pounds of trash out of Fossil Springs Wilderness.

"Sam's trips are well-planned," says Scott. "He prepares to accomplish a lot of work, but also shows us a great time. He's enthusiastic and charismatic and very knowledgeable about all things wilderness. He gives you confidence, being out there, that you're in good hands."

Scott brought along fellow Engelman Berger attorney Scott Cohen and his son, Aaron, 15, on a past trip to Castle Creek Wilderness, where the work focused on recreation impacts and wilderness monitoring. AWC's overall goal with the Wilderness Stewardship Program is to engage people of all ages to reconnect with Arizona's wild places.

"AWC is not only attempting to protect new wilderness and wild and scenic rivers in Arizona, but they're working to inspire the public to be better stewards of the phenomenal areas we already have," says Scott. "You won't hear any objections from me about that."

Sam Frank is located in Prescott and is the Central Arizona Director for AWC, focusing on wilderness stewardship and regional campaigns.





BUSINESS FOR WILDERNESS



WHAT'S BETTER IN A BACKPACK THAN CHOCOLATE?

by Meghan Mix and Will Smallwood

On most evenings, about the time you head home from work for the day, Jennifer Streeter of the White Mountain Candy Company is rolling up her sleeves and getting ready for her second shift. In a secret kitchen somewhere deep in the heart of the sprawling urban jungle of Phoenix, ancient traditions are being resurrected, melted, stirred, and ladled by hand into some very special chocolate magic.

The secret is Belgian chocolate. According to Jennifer, "Tradition combined with new techniques and the finest ingredients, like real butter and fine Belgian and Belgian-style chocolate, go into all of our confections."

Unlike most chocolate made and sold in the U.S. by companies such as Hershey and Nestle, Belgian chocolate contains no paraffin wax. Wax is used to increase the melting temperature in order to give commercial chocolate a longer shelf life, but it also dilutes the high quality flavor of the chocolate. Belgian-style chocolate has a purer flavor, and starts to melt at around 77 degrees F, which gives it an absolutely fantastic, smooth and buttery "mouthfeel."

About Jennifer and White Mountain Candy

Jennifer developed a passion for fine candy when she was still in high school, and has been making heavenly confections as a hobby for many years.

"As a teenager, one of my first jobs was in a candy store where I put boxes of chocolate together. I learned all I could about the candy business," says Jennifer. "Although a successful career in corporate America took me on a different path, my memories of those candy store days fondly remained."

After years of giving her chocolate to friends for holidays and other special occasions, people started asking Jennifer if they could buy the candy on a more regular basis. In August 2010, the White Mountain Candy Company (WMCC) was formed.

Jennifer and husband Rob started their candy business with a website, where customers can order boxes of chocolates for gifts or special occasions. They opened their first retail store, for the holiday season only, last fall, but don't currently have plans to keep a store location open year-round.

Jennifer and Rob used all their own capital to start the business, and plan to keep it that way. They perform every step of the process completely by hand, which is extremely labor-intensive. Although growth may be slow for now, specializing in a small range of chocolate products keeps the quality high, the candy consistent, and sets WMCC apart from larger companies.

WMCC's best-sellers for the holidays were the chocolate covered jalapenos. This concoction is so unique there are no other known makers in the U.S, which puts these spicy, sweet, tangy, crunchy, unusual confections in high demand.

"When I'm in the kitchen mixing and pouring," Jennifer says, "I think back to those teenage days helping people select their favorite candy. It fires my passion for making the best chocolates... after your first taste, you will know why people come back for more."

WMCC and Wilderness

Even though it is a young company, WMCC has made a strong commitment to sponsoring organizations that do good work within their local communities. In the past, they have donated to groups that work with autism and breast cancer. In August of 2011, Jennifer jumped at the chance to be a sponsor of AWC's 4th Annual Wild and Scenie Film Festival in Tempe. She was impressed with AWC's mission to preserve wilderness in Arizona, and its lean use of funds to direct specific projects, such as the Wilderness Stewardship Program. She wanted to get involved, and figured that WMCC could help expand AWC's outreach efforts by donating chocolate bars and offering a 20% discount (for an entire year) to new or renewing members.

Jennifer received lots of positive feedback from people who attended the festival. The educational event not only screened a variety of environmentally and conservation oriented films, but also showcased several businesses and organizations from throughout Arizona that are working to protect our wild lands and waters. She also developed relationships with many new customers who learned about her business while at the event. For Jennifer and WMCC, "the film festival was a good investment. I would be open to sponsoring it again in the future.

Additionally, Jennifer and her husband Rob love the White Mountains of eastern Arizona so much they named their business after the area. For them, teaming up with AWC was a great way to give back to the wilderness they enjoy so much. The White Mountains are home to three important wilderness areas: Mount Baldy, Escudilla, and Bear Wallow.

The Bear Wallow Wilderness Area contains some of the largest acreage of virgin ponderosa pine in the Southwest. Bear Wallow Creek, which flows year-round, provides habitat for the endangered Apache trout, as well as a diverse community of mammals, birds, reptiles, and wildflowers.

To mitigate impacts on the wilderness after the Wallow Fire, AWC's Wilderness Stewardship program led volunteers into the Bear Wallow Wilderness last fall. Volunteers helped record damage to the popular Bear Wallow Trail and removed recreational site impacts since the fire burned through the area. Though the massive wildfire left its mark on the landscape, we now have the opportunity to observe the natural process of fire in one of the most beautiful forests in Arizona.

Jennifer understands how important it is to support the work of organizations like AWC to preserve beautiful places in Arizona. And only with the help of engaged community members like the White Mountain Candy Company can we continue to set aside vital wilderness areas to be enjoyed in their natural splendor for generations to

To learn more about Jennifer and WMCC, including ordering your favorite batch of chocolate, head to www.whitemountaincandy.com.

Meghan is AWC's Office Manager and Will is her partner of 8 years. They both enjoy hiking and eating lots of delicious, local chocolate.

meghan@azwild.org



WHERE THE WILD THINGS ARE (N'T) STAFF EDITORIAL

by Ian Dowdy, AICP

Where the wild things aren't? Nowhere. Let me rephrase that: wild things are everywhere. That's right, I said everywhere. Granted, my slightly messy office space in the historic Roosevelt District contains few, if any, big-game species - unless you count me. My point remains true though: there are wild things of the flora, fauna, fungal, and finite varieties in every corner of the world, if we only take the time and quiet approach to observe them. Just last week, famed ocean explorer and movie producer James Cameron managed to find organisms flourishing at the deepest point in the vast unexplored crevasses of the Mariana Trench - a testament to the resilience and distribution of natural life. If you live in southern Arizona, try going outside at night with a black light to discover what kinds of creepy creatures might be crawling about just beyond your back stoop. Or put out some water and watch your avian friends flutter in to search for a drop of that life-giving liquid during the summer. Our wild friends are everywhere if you will just open your eyes and provide the opportunity to renew their acquain-

In February I was with AWC Deputy Director Kate Mackay, and Arizona staff Mike Quigley and Desmond Johns with The Wilderness Society doing a monitoring visit in the proposed Belmont Mountains wilderness area, a part of the Sonoran Desert Heritage proposal, and we were treated to a pleasant surprise. As we were chatting and stumbling down a rocky road that dipped into a desert wash, we were startled by a dozen or more furry swine friends that were searching around for tasty morsels in the gravel and rocks of the stream bank.

After uttering a few squeals, snorts, and grunts they tore off out of the wash and up the hillside, dodging chola and creosote bushes on their way to a safer and more remote banquet hall. We climbed out of the arroyo and paused to reflect on our good fortune. The encounter was punctuated by a chunky straggler who somehow had not observed the commotion a few minutes earlier, and missing his friends, stumbled out into view right behind us, saw our menacing visages, and tore off after his friends like a bat out of a collapsing mine shaft.

Last week, I had the good fortune of accompanying my brother David and friend Ben Alteneder on a trip kayaking the lower Salt River from Saguaro Dam down to Coon Bluff. Water levels were good, rapids were infrequent (a good thing for someone with no ability to do a kayak roll), and wildlife was abundant, in large part due to the absence of human Sun Devils who swarm the river during warmer months in large rubber inner tubes with lots of beer and scant clothing. On this evening, however, we had the river to ourselves and paddled quietly through the water enjoying a little remote relaxation after a crazy day at work. As we rounded a corner and rode through some mild rapids, we looked to our left and witnessed the majesty of a bald eagle preening on a sand bar. Taking no notice of us, he carried on with his quiet hygienic duties while we marveled at his presence. Distracted as we were by this great encounter, we didn't even notice the dozen wild horses that had come down for evening refreshment at the river. In brown and mottled tones, both colts and adults drank and didn't flinch a muscle when we passed within fifteen feet of them.

These experiences are two of many that occur on a daily basis to humans who quietly and respectfully share the world with wild friends. If we had been tearing around on our quads or motorbikes, we would have never seen the javalinas in that rocky wash in the Belmonts; if we had been cruising the Salt on our jet skis or blaring loud music, we would have never witnessed the majesty of the bald eagle preening not 40 feet from our boats. I'm not saying that our friends with motors don't belong in our public lands. I'm simply saying that loud and obnoxious humans, with few exceptions, restrict their wildlife experiences to scorpions, spiders, and microorganisms. If you want a meaningful and memorable moment in your crazy, hectic life, be quiet and let the opportunities come to you.

lan Dowdy resides in Buckeye and is a Conservation Outreach Associate for AWC, focusing primarily on the Sonoran Desert Heritage project and solar development issues out of the Phoenix office. As a certified urban planner, Ian works toward developing a sustainable community that successfully balances the need for wild places and natural landscapes with the human environment.

ian@azwild.org

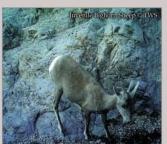


WILD THINGS IN WESTERN MARICOPA COUNTY

Over the past few months, Sonoran Desert Heritage partner groups have been looking more closely at the wildlife that will benefit from the conservation of valuable habitat in Western Maricopa County. The Arizona staff from The Wilderness Society were able to secure funding to place wildlife cameras in strategic locations throughout the proposal area, capturing some great cameos from our wild friends. Here area few images from the area around the Gila Bend Mountains!











PROGRAM HPDATES CONTINUED ON PAGE 14





ARIZONA WILDERNESS COALITION T-SHIRTS ABE NOW AVAILABLE!

AWC members and fans have been grabbing up the new t-shirts like a pack of teens in a candy shop. These fantastic shirts flaunt the adventurous spirit that makes fans of wilderness unique! Make sure you get your order in right away to ensure availability in your size.

Women's shirts are purple with green and white lettering while men's are tan with red and black lettering. Order your shirt right away!

To put in your order online go to www.azwild.org and click on the "Support AWC" link. In the donation page simply put your information, donation amount (\$17 per shirt) and place your size and color selection in the comment box. Make sure your address is correct so we can mail it to you!

\$17 PER SHIRT INCLUDES SUIPPING AND HANDLING AVAILABLE IN MEN'S AND WOMEN'S COTS SIZES: SMALL, MEDIUM, LARGE, AND EXTRA LARGE



UPPER VERDE BIVER

Over the past few months, AWC and partner groups have refined our outreach materials and begun reaching out to as many businesses, groups, municipalities, tribes, and other interested parties. Previous years of hard work are about to start paying off as we gather letters of support from these local supporters, which will pave the way towards getting the Upper Verde proposal introduced as legislation in Congress. Presentations, media coverage, and more are lined up our Verde River Wild & Scenic campaign in 2012. While the public seems fixed on national politics, AWC is staying focused on protecting our last wild waters right here in Artizona. Do you know of a group that would like to find out more about this effort? If so, please contact Sam Frank at AWC's Prescott Wilderness Center: 998-717-6078

WILDERNESS STEWARDSHIP PROGRAM

2011 was a watershed year for the Wilderness Stewardship program and 2012 has gotten off to a busy start for our efforts to protect, monitor, and restore the wilderness character of Arizona's public lands. Our organized trips ranged from the Prescott to the Coconino and the Apache-Sitgreaves national forests. In 2011, the Wilderness Stewardship Program backpacked on remote trails monitoring recreation impacts, hiked boulder strewn drainages looking for non-native plants, and got down in the dirt with picks and shovels to maintain some neglected trails. We also saw some amazing sunsets and sunrises, enjoyed the company of wild critters, made some new friends with fellow outdoor enthusiasts, and had an overall great time. Our efforts amounted to more than just worn out boot soles, as the 'Wild Stew' program contributed 2,178 volunteer hours, which has a monetary equivalent of \$46,522.08.

In 2012, the Wilderness Stewardship Program is stepping to the next level and expanding our efforts more broadly onto other Arizona forests and public lands. Early spring backpack trips into the Mazatzal Mountain range, hiking along the turquoise waters of Fossil Springs Wilderness, and explorations of 'sky islands' like Mt. Wrightson Wilderness are just a few of our upcoming volunteer outings dedicated to stewardship activities within wilderness areas. These trips are open to all AWC members and the general public - come out and join us! Visit our website and go to the Events

This March, we hosted a Wilderness Stewards training session, which trained long-term steward volunteers to "adopt" wilderness areas throughout the state and monitor those areas for impacts while prioritizing restoration activities. Stewards enjoyed training modules of invasive species identification, primitive tool use, backcountry first aid, and other monitoring protocols that help ensure that our wilderness areas stay wild. With an expanding program comes the need for more dedicated Wilderness Stewards—people who love to be out in wilderness and help those areas thrive into the future. Whether you're interested in volunteering for a weekend or interested in becoming a dedicated steward of your favorite wilderness area, contact Sam Frank at AWC's Prescott Wilderness Center '928-717-6076

SOLAR DEVELOPMENT

In the past few months, much has transpired related to solar development on public lands. AWC seeks to ensure that future development of our public lands for the purposes of renewable energy production – an endeavor we support – does not conflict with the conservation of wilderness quality lands and high value wildlife habitat. The Environmental Impact Statements (EIS) for three major projects have come across our desks, including those for the Restoration Design Energy Project, the Programmatic EIS for BLM lands, and the Quartzite solar project on lands identified by AWC as having wilderness character. AWC is also an integral part of the Arizona Solar Working Group which is coalition of solar industry and conservation groups that aims to identify and resolve potential conflicts surrounding siting projects on public lands. AWC continues to be very focused on this initiative and I look forward to helping direct renewable energy toward the right places in Arizona. For more information, contact lan a tam@azwild.org.



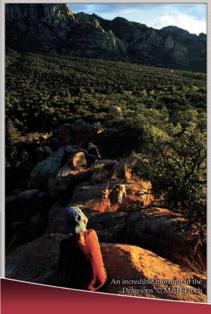
SONOBAN DESERT HERITAGE

The Sonoran Desert Heritage campaign, which seeks to protect the vast desert expanse of western Maricopa County under National Conservation Area and wilderness designations, is at an exciting juncture. In the fall, after years of campaign preparation, AWC hosted five open houses across central Arizona to seek input and support from the public, further refining the initiative and following through on our commitments to make the campaign as inclusive as possible. 200 people attended these meetings, providing a wide variety of comments about specific areas, management concerns, and conservation priorities. We took the results of the open houses to D.C., to encourage lawmakers to offer their express intent to help introduce legislation. The process led us to the negotiating table with several remaining stakeholders key to the campaign's success.

Now, we're working diligently to refine our proposal based on that feedback and will emerge this fall with a final package for legislative consideration. In June, we'll be traveling back to D.C. with the final work to push the initiative towards the goal post. We have high hopes that legislation could be introduced this year if we continue to address questions about the proposal and meet with an ever-growing list of interested land users. To get involved with our campaign in your community, or for more information, visit www.sonoranheritage.org or contact Ian at ian@azwild.org.



LAND OF LEGENDS



In January, a year following the brutal shooting attack in Tucson, Congresswoman Gabrielle Gif-fords announced her intent to vacate her seat in the House of Representatives, where she has served the 8th congressional district and its constituents since 2007. A stalwart defender of conservation in the unique Sky Island region of Arizona, Giffords and her staff have been supportive of the Land of Legends campaign to build local support for wilderness designation in the Whetstone, Dragoon, and Chiricauhua mountains of southeastern Arizona. That goal has not changed because of Giffords' departure; the Legends campaign team will continue to cultivate broad grassroots support for protecting the quality of life, recreational access, and traditional uses of these public land gems, including working with Fort Huachuca to ensure their electronic testing areas are pre-served from disturbance and noncompliant uses. We hope that whoever fills in for Giffords in her new congressional district will be equally open and transparent about the benefits of conservation for these dynamic mountains in southeastern Arizona. For more information about this campaign and AWC's work in the Sky Is lands region, contact Kate at kate@azwild.org.



One of the great photos of a Brown's Canyon hike in January. Ben Alteneder of the Arizona Wildlife Federation, Kate Mackay and Ian Dowdy of AWC, along with Mike Quigley of The Wilderness Society took a jaunt to evaluate wildlife and natural character after some winter rains. Abundant water, feral burro tracks, early wildflowers, and incredibly blue skies were among the findings of this great experience.

YOU HAVE THE POWER TO CHOOSE: BE A REGIONAL STEWARD OF WILDER!



As a Sonoran Desert Guardian you will be with us as we launch one of our largest wilderness programs to date! As Guardians of this desert region, you will have the chance to be face-to-face with some of the most beautiful, geologically- and historically-intriguing terrain in the country.

Opportunities include: restoring portions of the SDNM, hiking into the Western desert on various restoration treks, exploring the subtle differences between wilderness and wildlife refuges, tabling at relevant events, and being a spokesperson for the Sonoran Desert.

Land of Legends Champion



Be a champion for our beautiful sky islands and help us protect the Whetstone, Dragoon and Chiricahua mountain ranges. These sky islands are home to more than 4,000 species of plants, 100 mammal species and more than half the bird species of North America.

Opportunities include: attending public meetings and col-laborative events with AWC and its campaign partners, taking part in voluntary wilderness inventories, restoring portions of damaged areas, and serving as a public ally of the region.

Upper Verde River Defender



Verde River Defenders will help AWC work toward gaining wild and scenic river designation for one of Arizona's few perennial rivers. Fed by the Big Chino aquifer in central Arizona, the Verde nurtures habitat essential to imperiled species like the desert bald eagle, southwestern willow flycatcher, and several native fishes.

Opportunities include: garnering community support to protect the Upper Verde River, networking with your fellow river advocates, and working restore damage to fragile riparian areas (while seeing some of Arizona's greenest areas).

WANT TO BE A RECIONAL STEWARD?

Here's how: To begin, fill out the following form. You may also phone in your support by calling: (602) 252-5530 or make a pledge online: www.azwild.org

Yes! I want to be a:

- Sonoran Desert Guardian
- Land of Legends Champion
- Upper Verde River Defender

Email:

· Here is my gift pledge of \$_ to this campaign made as a monthly contribution. one time or

Check enclosed

Please charge my debit or credit card

Name: Address:

City, State, Zip:_

Tel:

Name on Card:

Expiration Date:_

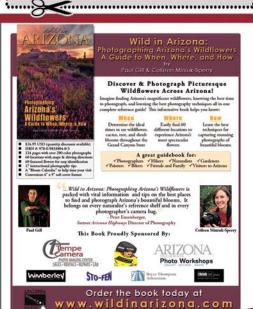
Signature:

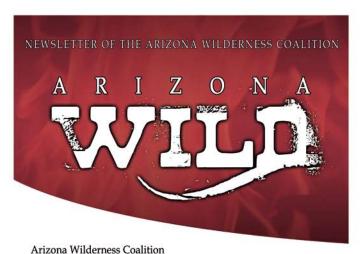
Please clip and mail to: Arizona Wilderness Coalition, PO Box 40340, Tucson, AZ 85717

_Card ID Code:

ON BEHALF OF ARIZONA'S WILDERNESS, THANK YOU!!







NON PROFIT ORG. U.S. POSTAGE PAID TUCSON, AZ PERMIT NO. 541

P.O. Box 40340 Tucson, AZ 85717

What is Wilderness?

What is Wilderness?

Wilderness is an area of undeveloped federal land that appears "to have been affected primarily by the forces of nature, with the imprints of mans' work substantially unnoticeable," as written in the Wilderness Act of 1964. Unlike national parks, wildlife refuges, or monuments, wilderness designation from Congress provides the highest level of natural resource protection available in the world. The Wilderness Act created the National Wilderness Preservation System to preserve the last remaining wild lands in America. Currently, about 4.7 percent of all available land in the United States is protected as wilderness. In Arizona, wilderness designation protects approximately 6.2 percent of our land and wildlife habitat.



What is a Wild and Scenic River?

To be eligible for designation under the Wild and Scenic Rivers Act, a river must be free-flowing and contain at least one "outstandingly remarkable value," i.e., scenic, recreational, geologic, fish and wildlife, historic, cultural, or other similar value. The Act mandates that selected rivers be preserved in a free-flowing condition and be protected for the benefit and enjoyment of present and future generations. Today, approximately 600,000 miles of once free-flowing rivers (approximately 17% of the America's rivers) have been altered by 60,000 dams.



SPRING / SUMMER 2012

The Burning Question: How Do We Restore Fire in Wilderness?	3
Wildland Fire in the Rincon Mountains	5 7
The Whetstones-A Wilderness Overlooked	
We Need Wild & Scenic Rivers in Grand Canyon	8
Volunteer Spotlight	10
Pusiness for Wilderson	11

