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# Arizona Wildlife News

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## ARIZONA WILDLIFE NEWS

EXECUTIVE EDITOR Larry Audsley  
MANAGING EDITOR Ryna Rock  
EDITOR Linda Dightmon  
COPY EDITOR Kim Kreuzer  
DESIGN & LAYOUT Linda Dightmon  
PRINTING Lithotech

### CONTRIBUTORS

Larry Audsley Ryna Rock  
Ben Alteneider Karen Schedler  
John Gale John Underwood  
Kathy Greene Bob Vahle  
Tom Mackin Brian Wakeling

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## In This Issue

Page 3	President's Corner
Page 4	Book Review
Page 5	Historical Tales
Page 6	Desert Heritage
Page 9	Summit of the Horse
Page 10	An Audacious Solution to a Stubborn Problem
Page 12	Solar Energy in Arizona
Page 14	Travel Management
Page 17	BOW Happenings
Page 18	Heritage--What Does it Mean to You?
Page 21	Camp Cook
Page 22	Members Page

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

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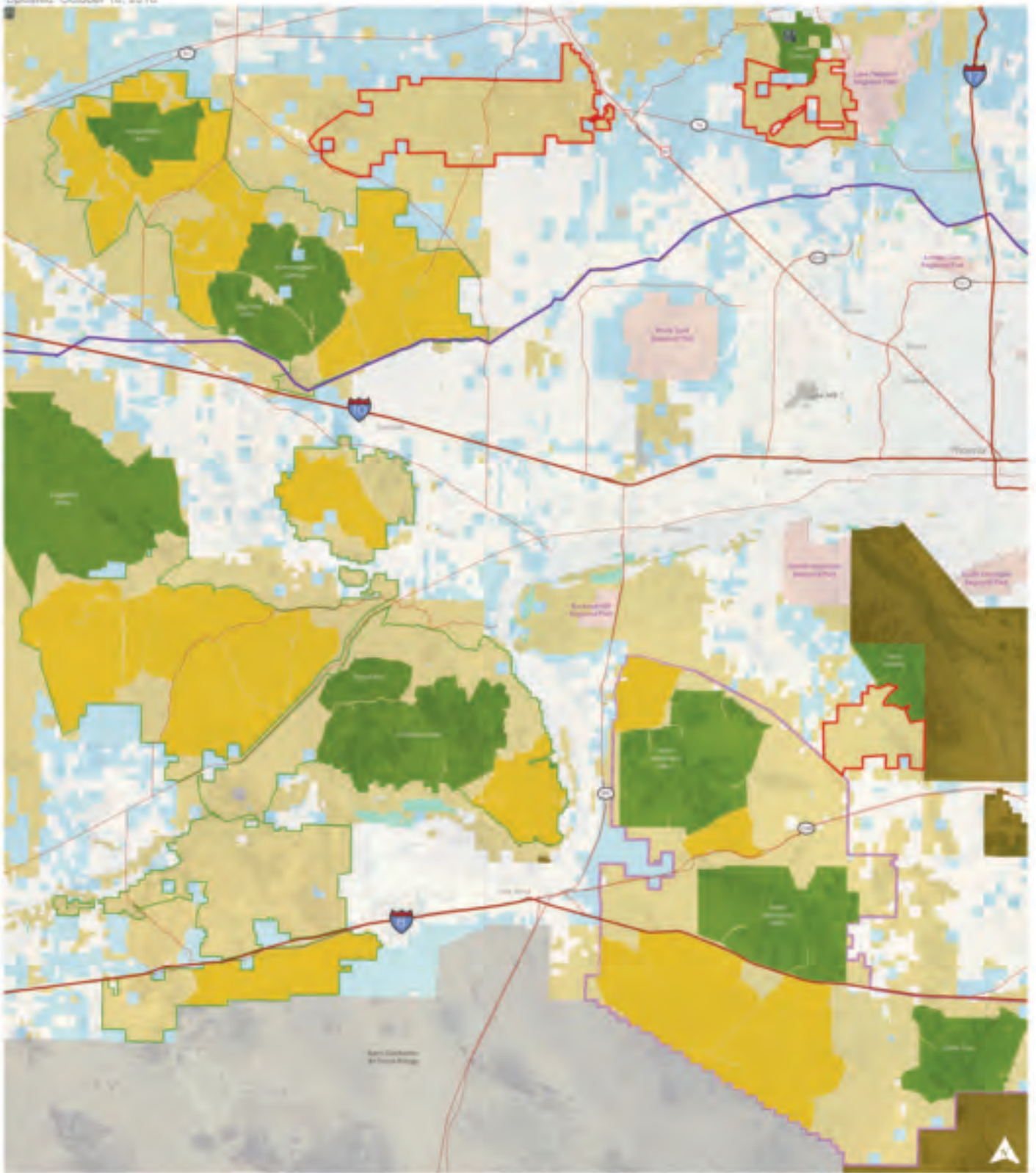
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sportsmen community last fall and continues to work with sportsmen's groups in reviewing this proposal. Significant work on the proposal started 4 years ago with the Sonoran Institute and has grown significantly since that time. Stakeholders include local elected leaders, Chambers of Commerce, the military, non-governmental and faith based organizations, ranchers, farmers, OHV users, businesses and other members of the community.

The proponents of the proposal hope to introduce the legislation sometime in early summer pending the consent of a sponsor and the continued work with stakeholders. The two congressional districts within the boundaries of the proposal are District 2 (Trent Franks) and District 7 (Raul Grijalva).

### **What Sportsmen are Saying**

AWF has contacted Arizona Game and Fish and a variety of sportsmen's organizations including the Yuma Valley Rod & Gun Club and Arizona Desert Bighorn Sheep Society, among others. There has been little to no opposition to designating National Conservation Lands, but there is significant resistance to expanding or creating more Wilderness designations.

Much of this polarization has a historical context. According to sportsmen's groups and Arizona Game and Fish, there have been significant barriers to managing wildlife in designated wilderness areas since the passage of the last Arizona Wilderness bill in 1990. In 2007, commissioners and sportsmen tried, without success, to persuade sponsors of a bill expanding the Pajarito Wilderness to insert language exempting wildlife management activities from restrictions in the Wilderness Act. The commission eventually endorsed the measure anyway, but since then the membership of the commission has changed so that today's commission may be less likely to endorse new wilderness legislation that does not specifically address their concerns.

Consensus among the state's sportsmen and wildlife advocacy organizations is that their concerns will need to be expressed in the language of any legislation enabling new or expanded wilderness. Traditional approaches such as drawing wilderness boundaries around existing roads (cherry-stemming) and adjusting boundaries to provide access and exclude man-made infrastructure have not effectively addressed their concerns, nor have statements and promises from bill sponsors and supporters.

The state's sportsmen did express support for the following:

- Landscape level protections for wildlife connectivity.
- National Conservation Areas if they limit habitat degradation related to the construction and development of solar farms.
- Continued federal recognition of wildlife being held by the State in public trust and belonging to Arizona's citizens, and continued acknowledgment of the trust responsibilities of the Arizona Game and Fish Commission.

However, sportsmen and state wildlife officials also believe that human intervention in a wilderness setting is occasionally necessary to enable resident-native wildlife to survive in desperate circumstances, and that management of wilderness must allow that flexibility when biological data supports such actions. With respect to wilderness designations, including the 87 existing wilderness areas as well as any added in the future, Arizona's sportsmen and wildlife officials are looking to achieve the following:

-Consistent administration of wilderness. The appropriateness of wildlife management projects and techniques in wilderness has been challenged internally within agencies and among land managers, as well as externally by various environmental organizations. This occurs even with policy documents in place that describe the commitment of the federal agencies to coordinate closely with state wildlife agencies on projects within wilderness and wilderness study areas.

-Ability to maintain and retrofit existing wildlife water catchments in wilderness.

-Reasonable access to the edge of wilderness boundaries and in some cases to the interior of wilderness areas for wildlife-dependent recreation, including hunting and wildlife viewing and retrieval of harvested wildlife, and for hauling water and maintaining permitted water catchments and other wildlife management activities.

### **Solutions Going Forward**

Arizona Game and Fish and sportsmen groups believe the need for active management of wildlife will only grow in the future as Arizona's population grows, habitats become more segmented and fragmented, species become extirpated in some locations, isolated species experience a decline of genetic diversity, and invasions of non-native species worsen. Ability to manage wildlife in a wilderness setting is essential. Since it is impossible to predict what actions might be needed to address these concerns in the future, a general and holistic solution for wildlife management in wilderness seems more appropriate than individual exceptions.

Congressional legislative language should state that wildlife management actions taken to protect wildlife are regarded as furthering the purpose of the Wilderness Act.

Legislation enabling grandfathering of water catchments within wilderness areas which allow for the maintenance hauling of water and retrofitting of the aforementioned.

Review of proposed wildernesses to ensure that any roads that lead to the wilderness boundary, or roads leading to interior wilderness cherry-stems, have adequate public access and are not obstructed by private or state trust lands.

Increased look at NCA as a viable alternative to wilderness.

Ensure that adequate interior access is available for the retrieval of harvested wildlife and the ability to maintenance and haul water to permitted wildlife water catchments.

Make sure that proposed wildernesses do in fact possess the characteristics spelled out in the Wilderness Act as criteria for wilderness designation.

While we have a ways to go before many of these concerns are met, AWF believes there is a way to protect wildlife habitat while also addressing the concerns of sportsmen and wildlife professionals. Finding solutions to these concerns will not be easy, but AWF's goal is to get sportsmen, state wildlife officials and conservation groups talking WITH each other, not AT each other. Whatever the outcome, we view this proposal as a way to discuss the historical issues that have plagued sportsmen and have never been adequately addressed.

For more information on this proposal or to make a comment on behalf of your organization please contact: Ben Alteneader, [balteneader@azwildlife.org](mailto:balteneader@azwildlife.org).

# Summit of the Horse

By John W Gale

A broad cross-section of stakeholders gathered at the South Point Hotel in Las Vegas, Nevada, January 3-6, 2011 to kick off efforts toward finding practical solutions to America's wild horse and burro problems. Solutions that were discussed included re-establishing commercial processing of horse products, an industry that ended in the U.S. in 2006.

Wyoming legislator Sue Wallis, one of the co-organizers of the event, described the summit as "a broad based coalition with the capacity and the resources to drive forward the legislative and regulatory changes necessary for a restoration of a viable, sustainable equine industry, an end to the unnecessary suffering of horses, and protections for the ecological balances so necessary on not only federal, but tribal, state, and private lands for free-roaming horses and native wildlife and forage to thrive sustainably."

Featured speakers included former Congressman Charlie Stenholm, Bureau of Land Management Director (BLM), Bob Abbey, renowned animal scientist, Dr. Temple Grandin and National Wildlife Federation (NWF) Regional Executive Director, Steve Torbit.

Participants included animal scientists, wildlife experts, members from more than a dozen Native American tribes, government agencies, business development consultants, equine academics and veterinarians, horse rescue owners, range management professionals, pet animal groups, ranchers and land managers, horse breeders, trainers, and marketers from the U.S., Canada and Mexico.

BLM Director Abbey, whose appearance at the summit was sharply criticized by some wild horse advocacy groups, made clear that he has been willing to meet with diverse stakeholders on wild horse management issues. Recognizing that some organizations take conflicting positions on what is the best way to manage feral horses and burros, Abbey said that is to be expected and welcomed in a nation known for free and open dialogue on controversial issues.

Abbey pointed out that the Department of Interior and the BLM have already removed from the discussion table any consideration of the euthanasia of healthy wild horses and the unlimited sale of older horses, even though these legal authorities exist under the Wild Free-Roaming Horses and Burros Act of 1971 (as amended). Having taken the position that slaughter is not a viable or acceptable management option, Abbey focused his remarks on the present and future course of the BLM's Wild Horse and Burro Program, which the BLM is committed to putting on a sustainable track, as called for by the Government Accountability Office in a report issued in October 2008.

Additionally, Director Abbey noted that two recent reports – one by four independent, credentialed equine professionals and one by the Interior Department's Office of Inspector General – have concluded, without any ideological or political

bias, that the BLM's gathers of wild horses are conducted in a humane manner. The Inspector General determined that the BLM's gathers are "justified" and found that the agency "is doing its best to perform a very difficult job".

NWF's Dr. Steve Torbit spoke to the issue of the ecology of feral horses. His science-based presentation highlighted both the history of feral horses and the ecology behind their increased forage abilities.

"The concerns for the wildlife community as it pertains to feral horses above the current appropriate management level (AML) is great," Torbit said. "Increased forage removal, the fouling of water sources, trampling of vegetative cover and decreased habitat availability all have measurable impacts to mule deer, elk, sage grouse and other wildlife."

Torbit's final points to ponder:

Unite livestock, wildlife and native plant advocates to mandate BLM manage horses within appropriate forage allocations and remove as indicated by management prescriptions.

Horse advocates repeatedly call for "wild" classification and, if they succeed, place horses under the authority of state wildlife agencies, with all appropriate management authorities and tools.

Call for a National Academy of Science determination on the status of feral horses (Feral vs. Wild).

Propose a categorization of feral horses as a "cultural resource", not a natural resource with appropriate management (removal) to ensure no loss of plant, wildlife and livestock resources.

A primary objective of the summit was to create a forum where the voices of the horse world, and those deeply concerned about the health of lands where horses both wild and domestic are managed, could be heard by a misinformed and emotionally manipulated American public. The Summit did catch the attention of media across the country from the *Wall Street Journal* to the *Los Angeles Times*, and became an opportunity for ordinary horse people struggling to make a living and to raise their children in what could be once again a healthy, viable, horseback culture to tell their story.

More than 1,000 people convened, either in person or through on-line live streaming video,

There were more than 209 people on site in Vegas, and another 879 unique viewers on the webcast who collectively put in 909 hours of live viewing from remotes ranches and urban centers all across the nation.

Webcasts of the presentations given at the summit can be viewed here:

<http://www.united-horsemen.org/summit-of-the-horse/remote-registration-online-live-webcasts/>

# An Audacious Solution to a Stubborn Problem


By Larry Audsley

## Commercial Horse Slaughter Could Be the Answer to America's Stubborn Feral Equine Problem

If commercial horse slaughterhouses are re-established in the US, the nation could be on its way toward reforming a wild horse and burro program that has been troubled since its inception 40 years ago. Questions concerning whether and how feral equines should be controlled has put the government between animal lovers and horse romanticists on one side and ecologists, ranchers, sportsmen and taxpayers on the other. To biologists with public trust responsibilities for our public lands, feral horses and burros are destructive non-natives that need to be controlled. On the other side, the wild horse lobby insists the animals have every right to be there and shouldn't be manhandled to appease ranchers, sportsmen and ecologists. For years the horse advocates have pressured Congress to remove limits on how many feral horses and burros can live on our public lands and where they're allowed to roam, and most recently they seemed to be gaining the upper hand in Congress.

In July 2009, Congress acted to appease the horse lovers by passing a bill allowing the animals to populate at will and roam freely across all public lands. Federal land managers and wildlife advocates were terrified at the prospect of exploding horse and burro populations wreaking environmental disaster all across Western National Forest and BLM lands in places the animals haven't been before. To prevent an ecological train wreck, Interior Secretary Ken Salazar and BLM Director Bob Abbey suddenly announced they were pursuing new national solutions to protect both the animals and the habitat, details to follow. That action seems to have bought Interior some time to work the problem, because an identical Senate bill, introduced immediately after the House version passed, has since stalled. But most of what has since come from Salazar and Abbey has only raised more questions, and it could only be a matter of time before Congress picks up its pen again.

Now another set of voices has come forward with a solution that appears reasonable from a practical viewpoint if not a political one. Proponents of re-opening horse slaughterhouses promise to transform what has become an



expensive nuisance into a productive asset. They point out that bringing back the commercial slaughter and processing of horses to produce leather, pet food, meat for export and other products would generate economic benefits while protecting the ecological health of the range. They believe this would be particularly beneficial for rural communities during an economic recession. Seven states have sent resolutions to Congress asking for federal cooperation in getting horse slaughterhouses re-opened. (Arizona isn't one of them.)

This solution will undoubtedly draw fire from at least some of the horse lovers, whose intensity is second to none among lobbying groups, and promises made by Abbey and Salazar have made it even harder for the Obama administration to support it. In his desperation to stop the legislative juggernaut, Abbey assured horse lovers that none of the new solutions would involve killing any healthy animals.

Proponents hope to convince some of the horse advocates that commercial slaughter, given proper planning and monitoring, could prove to be the most humane option in the long run. The Summit featured a presentation from Dr. Temple Grandin, who emphasized the importance of establishing standards for humane handling along with strict protocols for monitoring and measuring performance to those standards at horse-processing facilities. Some of the Summit's attendees were from horse welfare groups and indicated a willingness to hear options involving humane slaughter.

These strikingly divergent solutions – leaving the animals free to roam and reproduce at will, versus killing and selling them for profit – might seem irreconcilable. But almost no aspect of the federal wild horse and burro program has ever earned hearty approval from any stakeholders, and any future course will likely require bitter compromises from purists in all camps.

Since Congress passed the Wild Horse and Burro Act in

1971, government has been unable to keep anyone happy. The Act requires that wild horses and burros be allowed to continue living on public lands wherever they had existed historically. The same law requires the animals to be kept at population levels that are "in ecological balance" with the range, a requirement biologists say can't truly be met since the animals are an invasive species that will invariably inflict unnatural damage anywhere they're living. Without human intervention, their populations will grow about 20 percent each year because they have no natural predators. Birth control, the favored solution for many horse advocates, has not been shown to be practical, effective or economical, and there aren't enough private ranches willing to absorb them. Meanwhile, the animals' frenzied political support base has successfully pressured Congress to block any effective solutions. BLM has not been allowed to euthanize healthy animals, as the 1971 law allows, or to sell off surplus animals for eventual sale to a slaughterhouse. BLM requires no-kill contracts for all horse and burro adoptions. Lately the horse lovers have taken particular aim at the agency's long-standing practice of rounding up surplus animals and stockpiling them in corrals and private pastures. As of 2010, there were 38,000 feral horses and burros on public lands, which is 12,000 more than biologists say should be there, and another 35,000 are living off government funds in holding facilities. BLM now devotes \$38 million of its \$64 million program budget for their feed and veterinary care, often having to borrow from other programs. Congress's General Accounting Office has issued a report critical of BLM's overall handling of the program, and no one is arguing that the present course is sustainable.

So with their legal residencies limited to where they've lived before and their densities limited by range carrying capacity, how does government control a non-native species with a tendency to ignore both? For horse lovers, the answer is to simply stop dictating where the animals can live or how many can be there, and let them do as they please. This is essentially what the bill passed by the House in 2009 would have accomplished. But even if one overlooks the damage that would inflict on habitat, the mathematical realities of horse reproduction dictate that killing surplus animals can't be prevented forever. What happens when they eventually saturate all of our public lands and continue to reproduce?

The last U.S. slaughterhouse that was equipped for horses closed in 2007 after Congress cut off funding for inspections following the circulation of internet videos depicting what some felt was inhumane animal treatment. Because federal law requires the inspections, a judge soon ordered the facility closed. Since then unwanted horses have been sold at auction and shipped either to Mexico or Canada for processing, which hasn't made horse lovers any happier since this requires the animals to endure an even longer journey by truck or box car, and the trip still ends at a slaughterhouse. Animal welfare monitors report that processing practices in Mexico are no more humane than what they replaced in the U.S., leaving activists to question

how much was really gained by closing the last U.S. plant. Activists have since taken to urging Congress to ban exports to countries that allow commercial horse processing but so far haven't succeeded. Even if they do eventually succeed in stopping exports, there's still the question of what happens to horses and burros people no longer want or can't afford to care for. When the US economy went into free fall in 2007, there was a sudden increase in the number of privately owned horses delivered for processing or simply turned loose.

The new proposal for commercial slaughter is essentially the old method spruced up to conform to 21<sup>st</sup> century sensitivities. Prior to the 1971 Act, feral horses and burros had little protection, and their numbers were kept under control through a market for their hides, meat and other parts. The 1971 law made it illegal to capture, kill or harass any wild horse or burro. The Act also required the Bureau of Land Management, which manages most of the lands feral horses and burros occupy, to inventory the numbers and locations of existing herds, designate Herd Management Areas (HMAs), determine appropriate population levels and keep the herds within their HMAs at environmentally sustainable levels. The Act provided for sale and adoption of both horses and burros and specifically authorized euthanasia as a tool to prevent them from over-populating and destroying the range.

The 1971 Act might have worked reasonably well had Congress given the agency enough annual funding to carry out its legislated mandates and then refrained from meddling. Instead Congress routinely caved in to pressures from horse lovers opposed both to round-ups and euthanasia. By the 1980s Congress's annual budget appropriations for BLM began routinely prohibiting the killing of any animals that were not old or lame. To protect the range from growing populations, healthy, unadopted horses and burros had to be rounded up and cared for at private facilities where they received feed and veterinary care paid for by BLM. Horse lovers have always hated the round-ups, which they perceive as brutal and traumatizing to the animals even though reports from public and private entities have concluded that BLM's roundups are conducted in a humane manner. They have asked what kind of a wild horse and burro program has nearly as many animals in confinement as are left roaming free on the range. Both BLM and Congress started turning a blind eye to the Act's requirements to keep populations inside their HMAs and at biologically sustainable levels because it was cheaper to let the herds over-populate and wander than to pay for costly round-ups and long-term boarding. It also kept horse lovers off the backs of BLM and Congress, but that didn't work well for other stakeholders. Private ranchers, public grazing lessees, wildlife groups, state game commissions and land departments, military ranges and other federal agencies including national parks and wildlife refuges were complaining that their lands were being hammered by herds that were above allowable levels and going where they weren't supposed to be. **(To Page 20)**

# Solar Energy in AZ

## *What Price Does Wildlife Pay for Our Energy Demands?*

By Karen Schedler

**A**s an environmental educator, I'm frequently asked why Arizona doesn't derive more of its energy from solar. With plenty of sunshine and long days, why aren't solar panels atop every roof and parking garage?

If it were only that simple. Here are some facts about solar energy that may amaze you.

1. Coal is our primary source of energy nationwide, providing more than 50% of our current energy needs. Using conventional sources such as coal costs the consumer approximately 10 cents per kilowatt hour. Solar energy costs approximately 30 cents per kWh.

2. Though it may seem counterintuitive, the optimal temperature for solar energy to be the most efficient is 80 degrees. It actually loses efficiency once the temperature exceeds that threshold.

3. The most-frequently used solar systems in AZ are photovoltaic (PV), the flat panels you see on rooftops, for example. Unfortunately, PV solar is only about 17% efficient. A new technology has recently emerged that "concentrates" solar by using dish-shaped structures with small mirrors that reflect solar radiation back to a Dish Stirling engine. Relatively new on the scene, this form of solar energy can reach 23-35% efficiency – a quantum leap forward from PV – and can be erected relatively quickly once a suitable location has been prepared. (Note: Efficiency refers to the conversion of sunlight to electricity. The higher the efficiency, the more sunlight is converted into electricity available for us to use.)

Even if we could mitigate cost (which will likely occur sometime in the future) and significantly improve efficiency, solar is still in its infancy. And

there are other challenges – especially for wildlife and habitat.

Solar panels are assembled in close proximity to each other in what is known as an array. Many panels are required to power an entire home, let alone an entire city. Cost efficiencies demand that solar arrays be near transmission lines if they are to serve consumer needs efficiently and reliably. While we all like the idea of using "free" sunshine to provide our energy needs, how many of us want to live next to a giant field of arrays with transmission poles and lines? Wouldn't it be terrific if those arrays would be placed outside populated areas where we could use their services but not have to see them daily?

An Australian company is proposing a new solar technology for La Paz County: solar chimneys. Imagine one huge greenhouse in the middle of the desert with a very large chimney tower rising from its midsection. As sun beats down on the glass, the air heats up (much like a closed car on a hot summer day), and hot air rises. The chimney provides the only outlet for this heated mass of air. The rising air turns a turbine which generates energy. The best part? This system requires NO WATER – and that's a huge advantage for a renewable energy resource in the middle of the American Southwest. (Most require copious amounts of water.) What could possibly be wrong with solar chimneys? They require massive amounts of land – 4 square miles! – to function efficiently

Certainly there are large parcels of land in Arizona with hours of sunshine just going to waste. Would anyone really feel their presence? Ah, but what about those residents who already live in such areas, and who have no one to speak for

them? Actually, those residents – Arizona's wildlife – do have "voices" through advocates including the Arizona Game and Fish Department and the Arizona Wildlife Federation.

What impacts does solar energy have on wildlife and habitat?

Large arrays, transmission lines and immense poles, electrons humming through the transformers and lines. All have some rather stark consequences. Huge amounts of acreage are compacted and pummeled during the construction phase, then covered with large arrays. Fences and other barriers are erected to surround the premises in order to keep the facility secure.

The Arizona Game and Fish Department (AGFD) has identified the following as potential impacts of solar energy generation upon wildlife, habitats and outdoor recreation

- wildlife mortality
- habitat loss and/or fragmentation
- hydrologic impacts
- cumulative effects of other human activities (e.g., compaction of soil during construction and maintenance)

The department serves as the "conscience" for wildlife by reminding the solar power industry and consumers of the numerous laws and regulations that must be considered – e.g., The National Environmental Protection Act (NEPA), the Endangered Species Act (ESA), The Migratory Bird Treaty Act, the Bald and Golden Eagle Protection Act, the Sikes Act, and others. With so much potential for disruption, both wildlife and habitat face stressors that are often hard to mitigate.

For several years, AGFD and other stakeholders have worked as members of the Arizona Wildlife Linkage Workgroup (AWLW) to create "an



# President's Corner

By Tom Mackin



When I look at the numbers, over 150,000 hunting license holders in Arizona, over 300,000 fishing license holders, millions of annual visitors to our National Forests and BLM lands, its staggering to think of the hours spent on these activities by those thousands of individuals. But as Paul Harvey liked to say, "and now for the rest of the story". I look at the number of individuals who are taking an active leadership role in the numerous wildlife and other conservation groups and the number is disproportionately small. Pick a group, any group, and you will see an individual who: a) belongs to several groups, b) has served in a leadership role in each of those groups, c) tries to accomplish an unbelievable amount of tasks necessary to preserve the things they value and tries to do this along with making a living, raising a family and possibly even enjoying those things they actually joined these groups to do, like hiking, hunting, bird watching or fishing. Too many outdoor enthusiasts today reap the benefits that these very few leaders are providing, and they always think someone else will do it so they can go do their own thing. It will always be someone else that goes to the Forest Travel Management Plan meetings, someone else who will comment on the planned solar or wind development, its always someone else that will write the letter to the editor disputing a claim made by an extremist and a hundred other times when it will be someone else. When I started teaching Hunter Ed, 25 years ago, we used to quote figures that stated 10% of the public are hunters, 10% is against hunting and 80% really don't care either way. Those figures have changed, dramatically, with only about 8% hunting, perhaps as many as 15% against hunting and as various recent elections have shown, the remaining 77% can go either way without really understanding the facts or repercussions down the road. This isn't just about hunting though, this is about energy development, planned highways, new public land designations, access to public lands and favoring one species over another with little to no regard for the outcome.

I'd like to ask you to think about your plans and how you can make a difference. The fact that you're reading this

column already says you're doing something. You are taking the time to read an article in a magazine published by a group that has been trying to make a difference for over 80 years, the Arizona Wildlife Federation. But what I'd like to have you think about is joining a group, whether it's a local single species group like the Arizona Antelope Foundation, the Arizona Deer Association, or a national organization like Trout Unlimited, the Rocky Mountain Elk Foundation, or any other group that values wildlife, wildlife habitat and our outdoor traditions. But take it a step further, don't just write that check, kick back and read the glossy magazine. Get actively involved, volunteer to take a leadership role, see how you can help, attend or even organize a worthwhile project, bring your children, young relatives or even neighbor children who don't get outside, and really try to make a difference. We're very fortunate to have a great group of leaders in our Arizona wildlife organizations, but the toll is very high on these dedicated folks and the burn out factor is huge. Do you know who the AZGFD wildlife manager is in the unit where you like to hunt, hike or fish? If not, get to know them, get to know the Forest Service or BLM wildlife manager for the public lands you like to visit. Talk to them, ask them where they need help. Ask them what you can do to help them and then do it. Make it happen, get involved, speak to your friends, get them to help and do your part to keep this great state a haven for the wildlife that we all treasure and respect.

## Letters to the Editor

Keep your communications short and to the point. All must be signed. If you send us questions, we will seek answers and print them here. There may be times mail volume may prevent us from publishing every letter we receive, but we will do our best to print as many as possible.

**Send your 'snail mail' to:** AWF Mail Pouch  
Arizona Wildlife Federation, PO Box 51510, Mesa, AZ 85208  
**Send your email to:** [editor@azwildlife.org](mailto:editor@azwildlife.org)

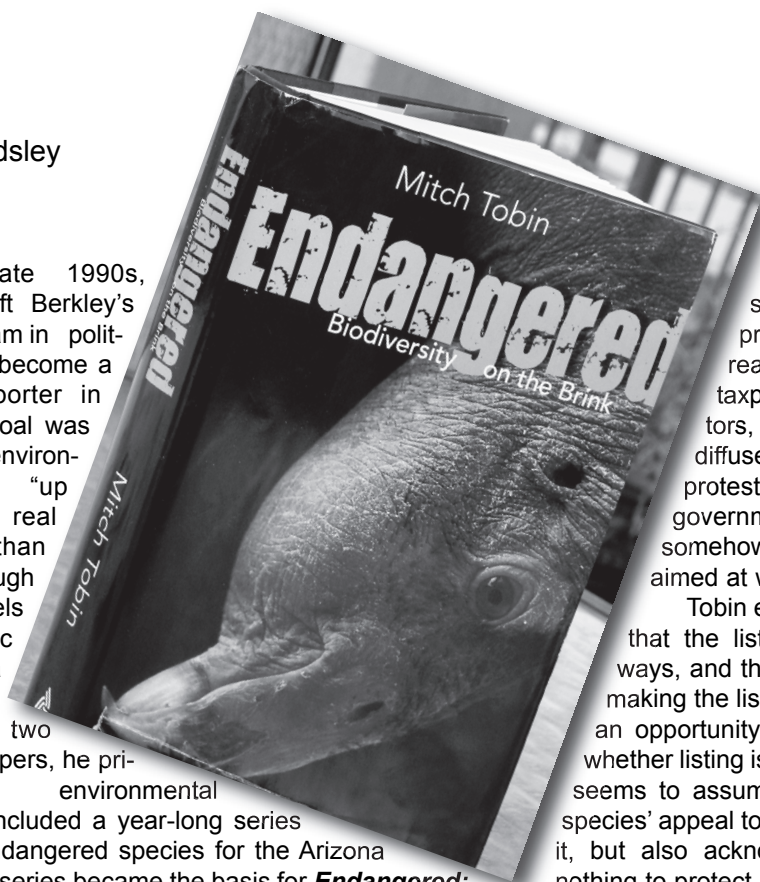
# Book Review

## Endangered: Biodiversity on the Brink

By Larry Audsley

In the late 1990s, Mitch Tobin left Berkeley's graduate program in political science to become a newspaper reporter in Tucson. His goal was to experience environmental policy "up close and in real time" rather than learning it through statistical models and academic tracts. During a seven year stint with two Tucson newspapers, he primarily covered environmental issues, which included a year-long series on Arizona's endangered species for the Arizona Daily Star. That series became the basis for **Endangered: Biodiversity on the Brink**, which takes the reader species-by-species through Arizona's conflicts between man and nature, and between the warring factions within our own species. His somewhat personal account brings us the biology, politics and business of endangered species protection. The book is more than just a compilation of the articles as they appeared in the newspaper. *Endangered* is Tobin's re-telling, on his own terms, of what he found while covering efforts to save Sonoran pronghorn, spotted owls, condors, red squirrels, jaguars, Mexican gray wolves and other species. In addition to providing a paycheck, his career as an environmental reporter allowed him to navigate through mountains, deserts, grasslands, meeting halls and conference rooms on a personal quest to unravel the complexities of endangered species recovery. What Tobin found was messy and cluttered with ironies and incongruities. The endangered willow flycatcher, for example, thrives in the African tamarisk, one of the Southwest's most despised invasive species. Some biologists believe bringing limited cattle grazing back to the Buenos Aires National Wildlife Refuge, where cows were once kicked off to benefit masked bobwhite quail, could actually help these birds by reducing invasive Lehman's lovegrass.

Early in the book Tobin devotes several pages to the Endangered Species Act itself, which he says "for four decades has shaped our nation's entire approach to managing natural resources and has become an arena in which core conflicts play out. How should we balance the needs of humans and nature?" Tobin finds much to admire about the nation's perseverance in pursuing a policy whose success defies all



natural laws as understood by political scientists. As Tobin explains, "The listing and protection of endangered species can impose real, immediate and concentrated costs on taxpayers, industries and campaign contributors, but such actions confer vague, distant and diffuse benefits for creatures that can't vote, lobby, protest or maybe even move." Yet the federal government as whole, including Congress, has somehow managed to hold off periodic uprisings aimed at weakening or eliminating it.

Tobin evaluates the Act from several angles, noting that the listing process itself is problematic in many ways, and that plants seem to have a much harder time making the list than animals. (Here he might have missed an opportunity to explore with biologists the question of whether listing is always in the best interest of a species. He seems to assume it is.) He finds a clear link between a species' appeal to humans and the funding provided to protect it, but also acknowledges that some species cost almost nothing to protect.

He shares many of the questions that perplex today's scientists. Should we consider species transplants or habitat manipulation to save species from extinction caused by climate change, or is that too slippery a slope? Should government tighten controls over a power plant in Florida to save the polar bear without clear evidence linking the plant's emission to dead bears, or does that risk the future of both the ESA and climate change mitigation?

For someone new to Arizona's wildlife and some of its most contentious issues, *Endangered*, is excellent for general orientation and as a reference book. For those who saw the endangered species battles from close range and even lived through some of them, it offers well-told tales about events, places and people many of us personally know, and some new details we perhaps didn't know.

Free at last from the journalist's obligation to report without conveying bias, Tobin is not reluctant to express opinions. He concludes the book with a recommended 12-step program for adapting the nation's biodiversity policy to meet 21st century needs. Most would probably judge his ideas as generally sound, if not especially novel, although a few will spark vehement opposition. His certainty of the need to ban all lead ammunition will certainly outrage some readers, as will his acceptance of delegating more authority to states for environmental regulation. But the value of *Endangered* is not so much in the few answers Tobin offers at the end of the book but rather in his sharing of information and insights that could help guide us toward the right questions.



# Historical Tales

*Reproduced by Ryna Rock from Arizona Wildlife Magazine, October 1967*

## Bighorn – Burros – And Balance

High burro populations in the limited food and water areas of Western Arizona are a detriment to bighorn sheep. There is a strong feeling that wild burros must be controlled and their numbers restricted (if not drastically reduced) if we are to prevent undue conflict with Arizona's native wildlife and destructive overuse of forage plants.

In Arizona, bighorn and feral burros occupy the same habitat. The burros occur mostly in western Arizona, along the Colorado River from Yuma to the Grand Canyon National Park. It is not uncommon for game and fish personnel to observe more burros within an area than any other animal.

It is estimated that there are more than 5,000 feral burros in the State. And, this animal has no predator. So, what keeps him in balance with the habitat? On September 13, the Bureau of Land Management (BLM) issued a news release that outlined its policy on wild horses and burros throughout western rangelands. To an outside observer it would appear, from this release that the primary emphasis of the Federal government will be to preserve the burro. The release did state that BLM recognizes that wild horses and burros may become too plentiful. But, the approved methods for removal of the excess population leave much to be desired.

It appears clear that the voice of the protectionist and not that of the conservationist has been heard. It is, of course, far easier to gain support for the protection of an animal than it is to fully understand or support the wise management or use of that animal. Most of the individuals and organizations promoting the merits of the wild burro appear to know little, if nothing, of its habitat or if its direct and detrimental competition with wildlife. The issue with them is emotional.

In Arizona, emphasis on the preservation of the wild burro appears totally unrealistic. The numbers already are far too high and direct competition with wildlife species prevails throughout its range. There should be grave concern for the habitat and for the necessity to hold animal populations within limits the range will sustain.

Some hope that the recent policy decision of BLM will prompt control of burros and that details will be worked out with local authorities to gather excess animals. In most areas inhabited by burros, bighorn sheep, desert mule deer, and other wildlife,

a reduction of burros is in order.

Work completed by John Russo and Jeff McMichaels of the Arizona Game and Fish Department substantiates the fact that competition is now occurring for both food and water.

So, it appears that the BLM must move to remove excess animals to prevent range deterioration. The Bureau's policy states that roundups must be done in a humane manner. Also, Federal statute prevents the use of motorized vehicles and aircraft.

Unfortunately, the burro is not cooperative. On various occasions individuals, hoping to profit by the capture of wild burros for sale to the pet market, have failed to succeed. Cowboys will attest to the hardness of the burro and of man's frailty in accomplishing burro roundups.

Man and horses both suffer far more than the burro when roundups are attempted. If there is a question of humane treatment, it might better be extended to the cowboy and the horse who make the effort. The burro seems to suffer not.

It appears that current roundup method restrictions are asinine (no pun intended). How then are burro numbers to be controlled? It is no simple matter to determine ownership of these animals much less to define an effective method of removal. The State Livestock Sanitary Board administers those laws that affect the roundup, sale or disposal of livestock in Arizona. By definition and by defined authority this responsibility includes the burro. Ownership of the burro is not so clearly defined.

Undoubtedly these regulations evolved from the early days when burros were used as beasts of burden. It was necessary that animals be branded to identify ownership. Control by the Livestock Sanitary Board was necessary to govern their shipment, sale, branding, and to prevent the transmission of disease. But, was it the intent of the law to govern these animals once they were abandoned on the open range to multiply into an unbranded feral population? By State law, the killing, sale or trade of livestock (including burros) without authority or a bill of sale is a felony.

The large population of burros in Arizona means there is an extensive number of herbivores on lands without permit . . . where no clear responsibility can be placed for management. And, State and Federal laws and regulations require

removal by ineffective roundup methods.

Livestock, where owners can be identified, are permitted on the public range and their numbers held to a level compatible with the forage resources available. These herbivores are controlled and the owner pays a grazing fee to assist in the administration and management of the range.

Who pays the grazing fee for a wild burro? Who can be petitioned to hold burro numbers at a level compatible with the vegetative resources? Who prevents damaging conflict with the wildlife?

It appears the BLM has the responsibility; but this is meaningless unless some more effective and efficient method of burro removal is authorized. Historically, burros have been harvested by firearms. This is not unique. Wildlife, particularly big game populations, have long been managed by this method. It is effective. However, it is a method that is repulsive to some. Those who oppose this method give no thought to the course of events where wild animals compete to the extent that the competition results in a life and death struggle. Such a situation as this cannot be called "humane".

Blind protection with no concern for management or the consequences violates all reasonable judgment and disregards man's own growing knowledge. If those protectionists who complain so bitterly when privately owned horses are rounded up in Montana and Idaho believe they are conservationists . . . they are terribly misled and wrong.

Burro populations must be controlled, not only to protect the welfare of the bighorn and other wildlife, but to protect the welfare of the burro himself. This is nothing but sound management. Any other course limits Arizona's bighorn and jeopardizes the future of other wildlife species as well.

To date, lawmakers and Federal agency heads have heard only the strong voice of protectionists demanding the preservation of the wild burro. Their voice is strong. How strong is yours? If conservationists would make their point equally strong, would not a course of action result that would enable responsible agencies to effectively control the burro?

Regulations and laws can be changed. But, this will not be done unless you make your position known.

# AWF Facilitates Sportsmen-Environmental Dialogue on Sonoran Desert Heritage Conservation Proposal

By Ben Alteneider and Larry Audsley

**F**or the past several months Arizona Wildlife Federation has been involved in discussions concerning a proposal for special use designations on federal lands in Western Arizona. The current players developing this proposal, with input from stakeholders, are the Sonoran Institute, The Arizona Wilderness Coalition and the Wilderness Society. AWF's goal has been to bring sportsmen's issues to the table as the draft proposal moves forward. AWF has also been working with off-highway vehicle groups in reviewing their concerns.

All the lands in the draft proposal are managed by the Bureau of Land Management. This is a landscape level proposal shaped like a crescent. It starts near Lake Pleasant and moves West to the Harquahala Mountains, South to the Gila Mountains and East to the edge of the Sonoran Desert National Monument. The area encompasses approximately 800,000 acres made up of several varying land designations.

## **The Proposal**

As proposed, the Sonoran Desert Conservation Draft Proposal includes three types of federal land designations: wilderness, national conservation areas (NCA) and special management areas (SMA). Laws and administrative regulations governing wilderness restrict a number of human activities such as motorized access, landing or flying aircraft and the use of mechanized tools for any purpose within its boundaries. NCA legislation may be written less restrictively and for a specific purpose, in this case as a conservation tool designed to limit travel to existing roads and permanently designate land for conservation purposes. SMA's would mandate special consideration for wildlife connectivity to adjacent lands when developing in and around the designated SMA. An SMA may be managed cooperatively between BLM and a county, as in the case of a county park.

## **Harquahala Mountains Wilderness Proposed Additions, within the Belmont-Harquahala Mountains Proposed National Conservation Area**

Eighty miles northwest of Phoenix, this wilderness contains a portion of one of western Arizona's largest desert mountain ranges. The 5,700 foot-high Harquahala Peak, the highest point in southwest Arizona, is the anchor point for this proposal. The proposal looks to add additional wilderness to bridge the mountains to the Big Horn/Hummingbird Springs areas to ensure continued wildlife connectivity between the two ranges.

As part of the larger Belmont-Harquahala National Conservation Area (NCA), additions to the existing Harquahala Mountains Wilderness would create a buffer around the proposed wilderness areas and enable the Bureau of Land Management to safeguard and better manage these values on a landscape level.

## **Big Horn Mountains Wilderness Proposed Additions within the Belmont-Harquahala Mountains National Conservation Area**

As part of the larger Belmont-Harquahala National Conservation Area (NCA), there would be additions to Big Horn Mountains Wilderness to the south and north with a purported goal of wildlife connectivity with buffer zones of NCA. The Big Horn Mountains and their neighboring ranges offer various levels of unconfined recreational opportunities within the larger proposed Belmont-Harquahala National Conservation Area (NCA).

## **Bellmonts and Surrounding Areas**

Runoff from the Bellmont range creates dense growth of ironwood, mesquite and palo verde trees, especially along a network of washes that drain northeast to the larger Hassayampa River watershed and aquifer. Wilderness is proposed for this area except for an in-holding of state trust land and access to the trust land.

## **Gila Mountain Complex**

The Gila Mountains as proposed would be slated for wilderness protection. The eastern edge of the Gila Mountain Complex would abut to the "Rainbow Valley SMA" which as proposed would protect the wildlife corridor from the Sierra Estrellas to the Gila Mountains.

## **SMA's**

The stated goal of the SMA's is to provide added protection of wildlife corridors while acknowledging that there may be development. Any development would have to take into consideration wildlife migration patterns and mitigation for wildlife movement. Most, if not all, of the wildlife corridors have been identified as such by the Arizona Game and Fish Department. Additionally, SMA's may be used to provide recreational opportunities in a specific area. For example, an SMA has been identified to allow for off-highway vehicle (OHV) use near Lake Pleasant.

## **Timeline**

AWF began reviewing the proposal and reaching out to the

198-acre Horseshoe Ranch with a 70,000 acre allotment will be acquired with the assistance of the Heritage Fund and pronghorn, mule deer, and turkey special license tag dollars. As in many instances, the benefits to sensitive species are substantial, but so are the benefits to many game species, including pronghorn, mule deer, javelina, and quail. The ability to share costs for habitat conservation among fund sources, especially state funds like Heritage and special big game license tags, allow the Department to acquire matching federal funding and get even more work completed.

Our Heritage Fund was established through initiative in 1990, passing by a 2 to 1 margin. The fund was reauthorized through public vote again in 2002, and voters this time passed it by an almost 3 to 1 margin. Hunters, anglers, and outdoor enthusiasts have supported the Heritage Fund from its inception, but clearly its popularity has emanated beyond the grassroots of its beginnings. This popularity is a result of the benefits to all Arizonans regardless of whether your interests lie in nongame or game wildlife, recreational activities within natural landscapes or in developed facilities, or your personal livelihood depends on development or protection.

As a society, we are fortunate to have an incredible natural environment that adds value to our lives. We

recreate, we rehabilitate, and we enjoy our wildlife in Arizona. We have much more than our fathers had due to the restoration efforts of the past century. We have the ability to pass this heritage along to the next generation amplified and improved. The Heritage Fund continues to play an important role in wildlife conservation for everyone in Arizona and in passing along this heritage to our next generation. As the lottery slogan goes, you win even if you don't play.

(Editor's note: The Arizona Heritage Fund was created by the voters in 1990 to fund conservation and protection of the state's natural and wildlife areas. Up to \$20 million annually in state lottery ticket revenues are divided between Arizona Game & Fish and State Parks. Each year we see a flurry of emails alerting us that Arizona's legislature is again on the prowl sweeping special funds to cover shortfalls in the state's general fund. In most years at least some Heritage revenue does get swept. When funds are swept, the activities they pay for must be scaled down, eliminated or paid for from another source. We asked AWF board member, Brian Wakeling, an employee of Arizona Game & Fish, to tell us what Heritage funding accomplishes with AGFD's share of the funds.)



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Contact a fellow Arizona Wildlife Federation member, Bryant Ridgway at 602-989-1718 or 800-224-1120 x 210 for details.



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**(From Page 11)**

BLM cited a lack of adequate funding. States began taking BLM to court in order to force them to comply with the 1971 law. Arizona's Game and Fish Commission took BLM to federal court on three separate occasions to force removal of excess feral burros in the western part of the state.

All of the "wild" horses and burros on our Western lands are from feral livestock that once belonged to humans but was turned out or escaped. As non-natives, they are not compatible with North American ecosystems and are exceptionally hard on a landscape that did not co-evolve with them. With solid hoofs and meshing incisors, they harm native plants, soils and riparian areas in ways native wildlife do not. Whereas a deer will nibble new growth from a tree, a horse or burro simply eats the tree. In Arizona, the problem has traditionally been with the burros making their homes in the western part of the state (see Historical Tales, page 5), but more recently horses have become a serious threat to forest lands in east-central Arizona. Following a judicial ruling on a lawsuit filed by animal welfare activists, Apache-Sitgreaves National Forest now faces having to host horses that have escaped from the nearby Apache reservation.

It would be naïve to think re-establishing slaughterhouses would by itself end the nation's problems with feral horses and burros. After all, we had slaughterhouses up until 2006

and were anything but happy since the government wasn't allowing itself to use them. It will still be necessary to persuade Congress to allow capture and slaughter of wild horses and burros, something it hasn't wanted to do. Up to now, math, science and economics have been no match for the feral horse and burro liberation movement. Even though it should be obvious that the arithmetic of uncontrolled reproduction pretty well mandates some form of lethal removal, this proposal could very well fail due to an apparent passion gap between those of us who value wildlife and natural eco-systems more than the romantic image of the "wild" horse.

***The Summit of the Horse was attended by National Wildlife Federation Representative John Gale and Arizona Wildlife Federation Directors Chris Fonoti and Bob Vahle. This article was pieced together by Editor Larry Audsley from a combination of their notes and other sources. For more information and background on feral horses and burros, particularly in Arizona, see the issue of Arizona Wildlife News that is available on our web site at***

***<http://www.nwffaffiliates.org/sites/azwildlife.org/ht/a/GetDocumentAction/i/60911>***

## Remember to Enjoy Our Arizona Outdoors

- Observe and Enjoy Wildlife But Do Not Harass or Cause Undo Stress
- Respect All Land Owners - Private, Federal, State and Tribal
- Be Considerate of All Other Outdoors Users
- Travel Responsibly on All Roads, Trails and Lands
- Be Careful At All Times With Fires and Other Combustibles
- Do Not Contribute To The Spread of Invasive Plants or Aquatics
- Properly Dispose of All Litter and Waste
- Know and Uphold All Applicable Laws and Regulations
- Be Prepared For Medical, Weather, Vehicle and Other Emergencies
- Tell Someone Where You're Going and When You'll Return
- Mentor Young People and Others to Respect and Enjoy the Outdoors

### IN MEMORIAM

#### ANTHONY (TONY) BOSSART by John Underwood



On November 17, 2010, Anthony (Tony) Bossart, passed away in Scottsdale after a prolonged illness. Tony, as all his family, friends and Arizona Wildlife Federation members called him, was a long time member of the AWF and served on the Board of Directors. He was always smiling and volunteering for any and all events the Federation was engaged in. Payson Wildlife Fair, cooking and serving Johnsonville Brats at Cabela's, Tres Rios Day, and volunteering at the AZ Game & Fish Expo to name a few. Tony was an asset to the Arizona Wildlife Federation and will be greatly missed. Rest in Peace Tony.

Before retiring and locating to Arizona, Tony was a professional in the health field in the State of Washington. Tony held a Bachelor of Science degree in Microbiology and Public Health. His graduate studies include Public health, law and administration. He had supervised programs dealing with chemical and physical hazards. At one time he was the project manager for Seattle-King County of public health.

Tony is survived by his wife Rebecca and son Mark.

By Ryna Rock



## Potato Chicken Casserole

½ lb bacon, cut into chunks  
1 (10 oz) can cream of chicken soup  
8-10 boneless, skinless chicken breast halves  
1 (10 oz) can cream of celery soup  
2 medium onions, chopped  
1 c sour cream  
1 can mushrooms, drained  
1 ½ tsp seasoning salt  
12-14 medium potatoes, peeled and sliced  
½ tsp garlic salt  
Salt & Pepper to taste  
2 c grated cheddar cheese

Heat a 12 inch Dutch oven until hot. Fry bacon until brown. Cut chicken into bite size pieces. Add chicken, onions, mushrooms and ½ tsp of the seasoning salt. Stir, then cover and cook until onions are translucent and chicken is tender. Add potatoes. Stir in soups, sour cream, and the remaining seasonings. Cover and cook for 45-60 minutes using 8-10 coals bottom and 14-16 coals top heat. Stir every 10-15 minutes. When done, cover top with cheese and replace lid. Let stand until cheese is melted.

## Dutch Oven Beer Bread

3 c self-rising flour                      1 can warm beer  
3 Tbsp sugar

Mix all ingredients and place in a greased Dutch oven. Bake over hot coals about 1 hour. Place a few hot coals on lid so top of bread will brown.

## Apple Crunch

¼ c (1/2 stick) butter  
¼ tsp nutmeg  
½ c brown sugar  
6 cooking apples, peeled, cored, and sliced  
¼ tsp cinnamon  
2 c sugar cookie crumbs

Heat a 12 inch Dutch oven over 12 hot coals; melt butter and stir in sugar, cinnamon, and nutmeg, and cook, stirring frequently, until sugar dissolves and a syrup forms. Cook apples in the syrup for 10 to 20 minutes, or until apples are soft. Top with cookie crumbs and serve hot or cold. Serves 6. (You may want to line the oven with heavy duty foil before cooking for easy clean-up.)

## WHADDA' YA' KNOW?

### Answers

1. Stamps from both the Federal and Arizona Duck Stamp Programs .
2. Climatic factors, which vary throughout the state.
3. Arizona's Sky Island ranges or mountains.
4. Restoring, enhancing, and acquiring wetland habitat in Arizona .
5. Tree squirrels do not hibernate
6. Venomous reptiles.

(From Page 13)

## AWF 88th Annual Meeting Notice



photo: courtesy AZ Game & Fish

The Arizona Wildlife Federation announces its 88th Annual Meeting and Awards Event, June 11-12, 2011. Affiliates it's time think about delegates, getting your membership records updated, and resolutions you'd like to present or candidates for office you'd like to nominate. Information and instructions on requirements and activities will be arriving in your mailboxes soon.

This year we continue our "Back to Nature Camp Meeting" theme in Eastern Arizona's AZG&FD Sipe Wildlife area, approximately 7 miles southeast of the communities of Springerville and Eager. Watch for further communiqués from our office that will include directions and a map, an agenda, and other information relating to our Annual Meeting.

The usual business meeting will be taking place, including AWF elections, resolutions, and a post-Annual Board of Directors meeting. Beyond that we plan to have enjoyable speakers, great camaraderie, and the provision of some "kick-back" time for your enjoyment. We encourage you all to bring your families to enjoy the available camping and beautiful area we will be staying in.

Our Awards Event Saturday evening and Sunday morning Breakfast will be the meals that will be provided for you and your cost will be included in your registration fees. This does mean you will need to bring your own supplies for other meals and your own food preparation equipment. Propane stoves are the best bet for your own cooking requirements.

We encourage you all to join us starting Friday afternoon or evening. Our Annual Meeting will be held on Saturday, as will the Awards Banquet. On Sunday morning, you'll have the pleasure of a delicious cooked breakfast and time to relax afterward with a second cup of coffee.

I hope to see you all there!  
Tom Mackin, President

### NEW MEMBERS FROM OUT OF STATE

Laura Waddle	Las Vegas, NV	Susan A Walker	Sierra Madre, CA
Joe Sorcic	Point of Rocks, MD	Diane Pearce	Las Vegas, NV
Gem Nason	Sykesville, MD	Geri Lundsberg	Denver, CO
Stephanie Lavigne	Las Vegas, NV	Victoria Hayward	Temecula, CA
Ann Clausen	Westchester, PA	Vince Bloom	Citrus Heights, CA
Karen Baumann	Addison, TX	Linda Davies	Las Vegas, NV
Polly Hansen	Rocklin, CA		

### WELCOME NEW MEMBERS

Lisa Anthony	Scottsdale
Ron Beda	San Tan Valley
Travis Bradford	Florence
Thomas Britt	Flagstaff
Chris Buchanan	Surprise
Kris Coates	Sun City West
Joan Cornwell	Payson
Joe Cottrell	Scottsdale
Dave Cummings	Phoenix
Daina Dajevskis	Tucson
Christine Donoghue	Tucson
Deb Drysdale	Yuma
Diana Dunn	Phoenix
Josh Ebert	Cave Creek
Larry Erickson	Apache Junction
Ed Fox	Apache Junction
Diana Fredlund	Sun City West
Sheila Frens	Sun City West
Ruben Fuentes	Gilbert
Linda Halverson	Sun City West
Richard Halverson	Paradise Valley
Alan Handelsman	Scottsdale
Greg Hardy	Phoenix
Jennifer Hayen	Pine
Sheila Hill	Phoenix
Scott Homaday	Apache Junction
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Steve Jansen	Mesa
Elizabeth Johnson	Scottsdale
Alex Johnson	Mesa
Connie L Johnson	Scottsdale
Kirk Jones	Mesa
Kathi Kenneally Figler	Queen Creek
Clint Lindsey	Chandler
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James Martinez	Mesa
Mike Martinez	Gilbert
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Sherri Melson	Queen Creek
Michael Mosier	Chandler
Don Nash	Fountain Hills
Denise Neill	Scottsdale
Bradley Newman	Prescott
Kevin Ouellette	Apache Junction
Rodney Palmer	Gilbert
Jamie Paparelli Rivero	Phoenix
Pat Radtke	Gilbert
Patricia Saunders	Scottsdale
Dusty Sellers	Gilbert
Betty Jo Soehlig	Fountain Hills
Bob Spay Jr	Scottsdale
Mason St Clair	Chandler
Jack Sweeney	Scottsdale
Robyn Tennyson	Peoria
Julie Tennyson	Peoria
Kathleen Tucker	Tempe
Dawn Turk	Mesa
Lisa Wallman	Phoenix
Randy Winsor	Chandler
Steve Wisniewski	Mesa
Sheryl Yee	Chandler

AWF Members wanting a full copy of Board Minutes,  
Contact Kim at: 480-644-0077. A summary is available at [www.azwildlife.org](http://www.azwildlife.org)



assessment of wildlife habitat and linkages critical to sustaining wildlife habitat connectivity with comprehensive recommendations for land use planners and managers.”

Remember that, as our state wildlife agency, AGFD is not a permitting authority for solar energy development. It simply makes recommendations to “avoid, minimize, and/or mitigate impacts to wildlife, and supports/opposes projects based on Wildlife and Habitat Compensation Policy and biological expertise to analyze impacts to wildlife.” This policy manual includes four categories that identify criteria to evaluate when considering impacts to wildlife on solar projects – from the most critical impacts to virtually none. This policy is one worth perusing, especially for sportsmen and other wildlife advocates.

You can visit: <http://www.azgfd.gov/hgis/documents/FinalSolarGuidelines03122010.pdf> <http://www.azgfd.gov/hgis/documents/FinalSolarGuidelines03122010.pdf> to read or download the report in its entirety. (You can also see what the agency has to say about wind projects and others with the potential to disrupt our wildlife heritage. All renewable energy has both intended and unintended consequences.)

What role might AWF play in advocating for wildlife?

While recognizing the need for renewable energy such as solar, the Arizona Wildlife Federation also serves as a “voice” for those who cannot speak. We serve as advocates on numerous levels such as educating the public, contacting elected officials, supporting sage public planning, appearing at public forums and meetings, and working directly with our state wildlife agency to promote the welfare of our state’s diverse wildlife.

Each individual member has a role to play. Your letter to an editor may seem insignificant but every letter written represents similar views of numerous others – so take the time to write! If a potential solar project has been suggested for your area, take time to learn basic details such as the amount of land to be impacted, reports already filed for public review and comment, potential impacts to wildlife, who to contact with your concerns.

No one denies that we need to develop solar energy in order to have a sustainable future. I would also bet that no one wants solar energy to move forward with little-to-no regard for the wildlife and habitat that can be disrupted.

Sources for this article: SRP, the Arizona Republic, Arizona Game and Fish Department.



## Arizona Wildlife Trophies

The 2010  
Arizona Wildlife Trophies  
book is now available.!

You can order it by calling the Arizona Wildlife Federation office at 480-644-0077 or you can download the order form from the website [www.azwildlife.org](http://www.azwildlife.org)

The price is \$45.00 plus a \$4.00 handling/shipping charge.

### WHADDA' YA' KNOW?

1. What two stamps are required to hunt waterfowl in Arizona?
2. What is the single greatest determinant in forecasting long-range small game populations?
3. Arizona was one of the first states to protect which northernmost fragments of the Sierra Madre range in Arizona ?
4. What does the revenue from Arizona 's waterfowl stamps go toward?
5. Is it a truth or a myth that tree squirrels hibernate in winter?
6. What name is given to the sometimes-unpopular reptiles?

(Answers on Page 21)

# Travel Management

## A Personal Perspective

By Bob Vahle

**A**re you one who enjoys visiting our public lands for hunting, fishing, camping, wildlife viewing, and exploring forests and deserts, for example, on primitive roads in 4x4 trucks, ATVs/UTVs or sand rails/buggies? Are you aware of and engaged in the development of the Travel Management Plans (TMPs) that are being crafted by both the US Forest Service (USFS) and Bureau of Land Management (BLM) to address the impacts of off highway vehicles (OHVs) and the excessive road densities and unauthorized “wildcat” roads that have been created on our public lands? Do you understand the critical need for managing the use of motorized vehicles, particularly OHVs, and the impacts of excessive road densities on vegetation, soils, water, wildlife and habitats, and on recreational activities such as hunting, fishing and camping on our public lands?

If you are not aware of this process and not providing your input, you should become involved. Due to the significant increase of road densities, particularly OHV- created, as well as the skyrocketing sales and use of OHVs on public lands, the U.S. Congress, Forest Service and BLM have identified the development of TMPs as a high priority task to address the impacts of excessive road densities and un-regulated OHV use on our natural resources and recreational activities, while still providing sufficient opportunities for the owners of OHVs to enjoy using these vehicles in many types of outdoor activities. The large volume of information regarding these management issues would be difficult to comprehensively cover in this short article, but for more background on the legal mandates, federal agency management issues, public issues, and proposed actions by the USFS, I would recommend reviewing the Federal Register – Publication / Volume 70, Number 216 – November 9, 2005 titled: *Travel Management: Designated Routes and Areas for Motor Vehicle Use – Final Rule* ([www.fs.fed.us/recreation/programs/ohv/final.pdf](http://www.fs.fed.us/recreation/programs/ohv/final.pdf)) and the USFS web site ([www.fs.fed.us/recreation/programs/ohv/](http://www.fs.fed.us/recreation/programs/ohv/)) regarding travel management. The BLM is undergoing a similar process to address the management of motorized vehicle use particularly OHVs on BLM lands as well (See [www.blm.gov/wo/st/en/prog/Recreation/recreation\\_national/travel\\_management](http://www.blm.gov/wo/st/en/prog/Recreation/recreation_national/travel_management)). In addition, there is a large volume of science-based information on the potential adverse impacts of excessive open road densities and unregulated OHV use on natural resources, particularly vegetation, soils, water, wildlife/fish populations and their habitats, along with impacts on recreational activities such as hunting and fishing. Several publications discussing these impacts are included at the end of this article.

Here in Arizona, sales of OHVs have exploded 347 percent in the last 10 years (Source: Arizona Department of Transportation). OHV use has outpaced the state’s population growth. According to the Arizona Game and Fish Department, “OHV use more than doubled while the Arizona population increased by slightly more than 65 percent. A study completed

in 1990 estimated the number of OHVs in Arizona to be over 550,000. In 2001, the number of ATVs alone was over 100,000 and twenty percent of adult Arizonans identify themselves as motorized trail users”. Today in 2011 knowing that the number of OHVs has certainly increased even more since this information was reported, it is very common to see vehicles and trailers loaded with OHVs of all types traveling to our public lands in Arizona. Certainly, the proper use of OHVs is a legitimate and enjoyable source of recreation on public lands, but as with other multiple use activities such as timber harvest and livestock grazing, it is critical to recognize the potential for adverse impacts on natural resources and recreational users that can occur.

As a longtime OHV owner and an avid hunter/fisherman, camper and wildlife-viewing enthusiast, I am very interested in the health and wise management of our federal public lands both in Arizona and other states. Thus, the issues of controlling excessive densities of open roads, particularly those created by unregulated cross country travel, has concerned me both personally and professionally in my previous work. I have been an active participant in all of these outdoor recreational activities for many years. Professionally, I spent 35 years as a wildlife biologist for the USFS and Arizona Game and Fish Department in natural resource management trying to help manage and mitigate these impacts on wildlife and their important habitats. Over the years I often find myself conflicted with trying to balance my own personal desires, opinions, and philosophy regarding these issues with the understanding that there are significant needs to carefully manage open road densities and motorized vehicle use, particularly OHV use, on our public lands. Of first priority, we need to protect and conserve vegetation, soils, water and wildlife habitats while secondarily meeting the desires of the public as best possible so they have reasonable opportunities to use motorized vehicles, including OHVs, to pursue the multitude of outdoor activities the public enjoys.

As a close-to-home example, I have lived and worked in the White Mountains of Arizona within the Apache-Sitgreaves National Forests (ASNF) for over thirty years. I have seen first hand the significant proliferation of roads across this forest and observed the impacts on stream channels, soils, vegetation, and key wildlife/fish habitats. I have witnessed the creation of many miles of unauthorized OHV trails through cross country travel which over time have become “wildcat roads” that are now repeatedly used by OHV users. Many temporary roads classified by the USFS as Level 1 roads in the road management system were developed for strictly forest management purposes such as timber harvest, forest restoration thinning treatments, fuels reduction and fire management. These Level 1 roads were to be closed to public use after the treatment and management activities were completed and were never intended to become part of a





**Suggested Articles:**

**Gucinski, H. et.al. 2000. Forest Roads: A Synthesis of Scientific Information, USDA Forest Service Report.**

**Proesholdt, K. 2007. Collision course? Off-road vehicle impacts on hunting and fishing. Issak Walton League Publication. 18 pp.**

**M.L. Watson and W.M. Gruber. 2006. Wildlife, habitat, and hunting: New Mexico's Roadless Areas. New Mexico Department of Game and Fish Publication. 42 pp.**

public forest transportation system. These temporary roads were purposely closed for a variety of natural resource objectives including the protection of the watershed to limit soil erosion, impacts to water and vegetative resources, and protection of key wildlife habitats. In order to effectively access many areas of the forest for management purposes, the density of these temporary roads has over time become quite high. Unfortunately, many of these temporary Level 1 roads have been re-opened by unregulated OHV use. In addition, OHV users have created many additional miles of undesired and unauthorized OHV wildcat trails and roads through cross country travel. Currently, many areas of the forest have open road densities exceeding more than five miles of open roads per square mile. This greatly exceeds the 1987 ASNF Forest Plan standard of maintaining two miles or less of open roads per square mile. As an example, think about a density of 5 miles of open road per square mile on some areas of the Forest. Do you need an open road approximately every two-tenths of a mile (352 yards) to provide "reasonable" access to the forest? Is that an area you want to recreate in to find solitude or hunt? As mentioned previously, many research studies have been conducted on the adverse effects of fragmenting key wildlife habitats with high open road densities and unregulated OHV use on wildlife species behavior and health. These studies have determined that open road densities of greater than one mile of open road per square mile can reduce habitat effectiveness for species such as elk, and OHV activity and access through key wildlife habitats can displace animals to less preferred marginal habitats and disrupt breeding activities and care and security of their young. This ultimately can affect wildlife population health and numbers. Likewise, excessive open road densities facilitates widespread and increased OHV use that can adversely impact forest recreationists such as hikers and campers who may be seeking solitude away from big cities and motorized vehicles, as well as hunters whose desire of a quality hunting experience involves undisturbed game without disruption by OHV activity. As an avid bow hunter myself, I have had many of my hunts and stalks on game ruined because of uncontrolled OHV activity. Unfortunately, I have seen this problem continue to get worse each year on the ASNF and other forests in Arizona along with public lands in other states where I have recreated through the years.

So, what steps has the Apache-Sitgreaves National Forests taken in its travel management process to address these critical issues? Beginning in 2005 and continuing through 2006, the ASNF hosted and participated in 31 public meetings and workshops related to motorized travel management. The public input from these meetings along with inventory data of the roads existing on the forest were used to propose management alternatives through development of a draft Environment Impact Statement. The ASNF road inventory identified 2,832 miles of open National Forest System roads designated for public motorized vehicle use, 156 miles of motorized trails, and approximately 3,373 miles of predominantly Level 1 primitive forest management roads currently existing on the forest. In October 2010, the ASNF published and disseminated their "Draft - Environmental Impact Statement (EIS) for Public Motorized Travel Management Plan" for public review. This document is available on the ASNF website at <http://www.fs.fed.us/r3/asnf/index.shtml>. During the development period of this document the public has had considerable

opportunity to review and provide input on the issues, alternatives, and proposed actions identified in the plan. In a brief summary, the modified proposed action and preferred alternative identified in the EIS calls for the elimination of motorized cross country travel and designates a system of roads, trails, and areas for motorized vehicle use. The road system would have 5.6 percent fewer open roads (2,673 miles) and 72 percent more motorized OHV trails (268 miles) than the current system. On approximately 25 percent of the designated open roads (658 miles), corridors would be designated 300 feet from either side of the road for the sole purpose of accessing dispersed camping locations with motor vehicles. Motorized big game retrieval would be allowed from a one-mile distance off the designated road and motorized trail system (1.2 million acres) during specific seasons for deer and elk. There would be five motorized OHV use areas designated on two ranger districts (459 acres).

After attending several of the public meetings and participating in the ASNF travel management planning process, I have been astounded by the myths, rumors and outright misinformation I have seen disseminated in various media along with talking with local residents in the White Mountains and elsewhere about what is being proposed in the ASNF Draft Travel Management EIS. The most ridiculous rumors are that all but the main roads in and out of the ASNF will be closed and that 80-90 percent of all existing roads and trails throughout the forest will be closed. Folks, this is simply not true and certainly reflects to me that many of the public spreading these myths have simply not participated in the planning process and are willing to obtain and spread their "factual" information through the rumor mill. Yes, things are going to change from the current situation on this forest in relation to motorized vehicle activity. From my perspective, the most significant positive change as proposed will be to eliminate OHV cross country travel other than that authorized for big game retrieval and fuel wood gathering. Undoubtedly, from my perspective the unregulated cross country travel by OHVs has simply led to the creation of too many wildcat trails and roads and re-opening of Level 1 forest management roads that were never intended for public use, all of which have significantly increased open road densities and impacted soils, vegetation, water, wildlife habitat and recreationists.

Certainly no management plan will meet every desire and expectation given the diverse public that uses this forest. After carefully evaluating the pros and cons of the proposed actions for myself, I feel the proposed actions will provide a significant improvement in reducing the excessive open road densities and unregulated OHV use that I have seen drastically increase over my 30 years of living, recreating and working within the ASNF. I feel the proposed road and trail network will provide me ample opportunities to utilize motorized vehicles, including my OHV, to pursue the outdoor activities I enjoy. Hopefully this plan will be implemented and modified over time through adaptive management to better meet forest users needs as new issues or opportunities are identified. If you are concerned about what travel management actions may occur on your favorite USFS and BLM lands, I highly recommend that you become well informed, participate in, and help craft the travel management plans that will be used to manage motorized vehicle use on our public lands. Actively participating will provide you a much better opportunity to form your opinions based on fact about the proposed plans rather than relying on the rumor mill and disseminated misinformation.

# Beyond BOW is Here!

By Kathy Greene, AOW Coordinator

Are you ready for beyond B.O.W.? If yes, **Arizona Outdoor Women** is ready to take you to the next level.

Arizona Outdoor Women will be having workshops once a month to give you more confidence with those outdoor activities. My name is Kathy Greene and I am the coordinator for these workshops. I have been involved with B.O.W. for 15



yrs. I am an avid outdoorswoman who loves to fish, go camping, 4 wheeling and lives to hunt! I also run the second largest international archery outdoor target tournament in the USA for 6 years. During the 90's I ran all the outdoor archery target tournaments and was the president of A S A A

(Arizona State Archery Association) for 10 years. I have also helped start the PSE youth archery program, and ran my own youth archery program in Tucson for 10 years.

Arizona Outdoor Women's goal is to take one outdoor activity a month and help you become more proficient with it. These one-day workshops are based on small groups of ladies so that you will have a one on one learning experience. The workshops will be no larger than 20 ladies. For a small fee you will get an experienced instructor to work with and some great outdoors cooking.

At B.O.W. Camp you took fly fishing classes. You loved it, and went out and got your own equipment. You are on the water and trying to remember how to do that cast again. The next B.O.W. Camp is not until the fall so what do you do?

Here is where A.O.W. workshops can help you out. You log on to the Arizona Outdoor Women website (ArizonaOutdoorWomen.com) and see that there is a fly fishing workshop in July at Woods Canyon Lake. Great! Now you can get that help you need and enjoy a day on the water fly-fishing. How about that camping class you took and you want to do it again? Say you are out camping with your tent and will be out in that windstorm and rain all night long. At the A.O.W. workshop we will show you how to put up your tent, get it ready for that storm so you won't have to sleep in your car because you got soaked the last time. Plus learn some great outdoor cooking while you're camping.

**Arizona Outdoor Women** will help you become more confident with yourself so you can go out and enjoy these outdoor activities. Hope to see you at one or more of these workshops.

**Arizona Outdoor Women**

**Kathy Greene**

**Coordinator**

[www.arizonaoutdoorwomen.com](http://www.arizonaoutdoorwomen.com)

[info@arizonaoutdoorwomen.com](mailto:info@arizonaoutdoorwomen.com)

Things you can do at a BOW workshop

2011

Make new friends

Learn to Fly

Star in a skit

Jump off a cliff

Find the road less traveled

August 26-28

Discover Arizona



**AZ BOW is now on Facebook!**

[facebook.com/pages/Arizona-Becoming-an-Outdoors-Woman/295848287943](https://facebook.com/pages/Arizona-Becoming-an-Outdoors-Woman/295848287943)

# Heritage – What Does It Mean To You?

By Brian Wakeling



**H**eritage defined: something that is passed down from preceding generations; a tradition. The Heritage Fund, then, is aptly named, for it is a revenue stream

**from the Arizona lottery that in part enables the Arizona Game and Fish Department to manage wildlife in the public trust for today's and future generations.**

It has been 20 years since Arizona voters approved the Heritage Initiative. Since that date, a variety of conservation successes have been achieved with the assistance of the Heritage Fund. The Heritage Fund supports the reintroduction of black-footed ferrets, California condors, and black-tailed prairie dogs in the state. It has provided funding for the bald eagle nestwatch program and restoration of Apache trout. Without these funds, the acquisition of 18,000 acres of public lands for state wildlife areas such as Sipe White Mountain, Grasslands, Upper Verde and Coal Mountain Springs, would have been far more difficult if not impossible.

I am not the first to consider our wildlife and conservation heritage. Over a century ago, those who would later be recognized as our conservation leaders were identifying the key components that would become the North American Model of Wildlife Management. "To waste, to destroy our natural resources, to skin and exhaust the land instead of using it so as to increase its usefulness, will result in undermining in the days of our children the very prosperity which we ought by right to hand down to them amplified and developed" as stated by Theodore Roosevelt during his seventh annual message on the 3rd of December 1907. Even President Roosevelt was a latecomer to the natural heritage concept, as Henry Herbert (under the pen name of Frank Forester) began writing of the need for conservation prior to 1850. Their writings, political activism and conservation activities, along with those of many others, provided us with the heritage we have today.

And that's great if you like that kind of stuff. Most of us do, but it just may not be the most important conservation issue to all of us.

Heritage Fund benefits have been multi-faceted, and they are not only used for threatened or endangered wildlife. Heritage Funds have established or augmented programs that generated \$2.3 billion in total expenditures on wildlife-related recreation, and that means jobs! Human population growth and development has increased challenges for native wildlife, and conservation decisions

have been informed by Heritage-funded programs that reduce risks to their existence and eliminate added federal regulation. The Heritage Fund has increased the Department's ability to gather and apply biological data critical to fighting the misuse of the Endangered Species Act by special interest groups. Wildlife viewing opportunities have been increased and outdoor recreation programs have been established as a direct result of the Heritage Fund.

While Heritage has been a boon to nongame wildlife, the fact remains that the Arizona Game and Fish Department has been involved in nongame and endangered wildlife management for decades before the Heritage Fund was established, and funding had to come from elsewhere. In fact, the Department established the Nongame Branch 10 years before revenues from Heritage arrived. The funding for these activities was derived from other sources, including the Wildlife Check-off on state tax returns, donations, and contracts. Administratively, some activities had to be covered through license and tag revenues to ensure mandated activities could be adequately addressed.

The Department must ensure that conservation activities are in compliance with the Endangered Species Act, the National Environmental Policy Act, and the State Historical Preservation Office. Compliance analysis must be done for all activities, regardless of whether the activities are routine game surveys, research projects, translocations, forage monitoring, or virtually any other activity in which the Department engages. The cost for this analysis is routinely covered through Heritage funding today, but we would need to conduct these activities even without supporting funding. In short, Heritage Funds have allowed the Department to gain knowledge about sensitive species while making the existing funding go even further to benefit traditional research and management activities.

During the first week of February, Department biologists participated in a cooperative effort with volunteers from the National Wild Turkey Federation in the translocation of the 200,000 wild turkey – a restoration that has brought turkeys back from less than 100,000 nationwide in 1900 to about 7 million today. The turkey that hit the 200,000 tally is a Gould's turkey, native to Arizona, but extirpated by 1920. The 1994 translocation and management effort that initiated the push to restore Gould's turkey in Arizona was partially funded by the Heritage Fund.

Also early in 2011, the latest Department habitat acquisition was approved by Governor Brewer; the



# AWF Members

Please take a moment to review the list of Life Members and past Benefactors to make sure we have not missed anyone. If you want to add someone to the list or upgrade your own membership status, please use the membership form provided below.

## AWF Membership Application

Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Phone \_\_\_\_\_ Email \_\_\_\_\_

Check Enclosed!

Please bill my  Mastercard  Visa  Discover

Expiration Date \_\_\_\_/\_\_\_\_/\_\_\_\_

Signature \_\_\_\_\_

\$ 15 Junior (17 & under)

30 Individual

75 Individual - 3 years

45 Family

110 Family - 3 years

100 Patron

500 Life Member

325 Distinguished Life Member (65+ or Disabled Veteran)

500 Benefactor

75 Small Business

500 Corporate

**Mail To:**  
**Arizona Wildlife Federation**  
**PO Box 51510**  
**Mesa, AZ 85208**

**All Membership fees are tax deductible**

## Arizona Wildlife Federation Life Members

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Arizona Wildlife Federation  
PO Box 51510  
Mesa, AZ 85208  
(480) 644-0077  
Fax: (480) 644-0078  
awf@azwildlife.org

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