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ARIZONA WILDLIFE NEWS

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AWF Mission Statement

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

Front Cover: Photo by Larry Audsley Back Cover: Photo by Larry Audsley

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President's Corner

By Tom Mackin



By the time this issue hits the street, the AWF will have once again held its Annual meeting and Election of Officers, signaling the end of one year and the start of the next. I want to thank those Directors and other officers that have faithfully served this organization for the past year and for those that have agreed to lead us in the new year. While we may be considered a small organization by some, with current membership at about 815 and well over 3000 if you include our affiliates, we simply could not function without the tireless efforts of our single staff member and 18 volunteer Board members. The number of emails, written requests, important issues, telephone messages and numerous other items would be overwhelming if it wasn't for these dedicated individuals. Our mission statement identifies us as an "organization" dedicated to educating, inspiring, and assisting individuals and organizations to value, conserve, enhance, manage, and protect wildlife and wildlife habitat", but in reality its those 19 individuals and all of our members and supporters that undertake this mission every day of the year.

While we are the Arizona Wildlife Federation, we frequently cooperate and collaborate with others from different states when there are mutual issues or objectives that we address. Board members have attended meetings in Nevada that address feral horse and burro issues throughout the Southwest. We've traveled to Washington D.C. in support of Teaming With Wildlife, seeking continuation of funding for many important wildlife and habitat projects. In early April our National Wildlife Federation representatives attended the 75th NWF annual meeting and met with other state affiliates as well as key Federal legislators to discuss these and other related concerns.

Closer to home we had two representatives at a recent meeting regarding wild sheep management where they had the opportunity to see mitigation measures installed on Hwy 93 to aid in sheep movement. Other representatives attended meetings in southeast Arizona to view important grasslands that benefit pronghorns and many other species, hoping to develop a long term plan to insure the viability of this critical habitat. In my home area of Flagstaff, representatives attended numerous meetings regarding uranium mining near the Grand Canyon and the proposal to withdraw almost 1,000,000 acres from further uranium development thereby offering greater protection to wildlife and watershed values. In our Southwest corner, representatives attended meetings on the BLM proposals for identifying lands where energy developments, including solar and other alternatives, would

have the least impact on wildlife. In central Arizona, our Legislative Liaison attended every session of our State legislature, speaking up for sportsmen interests and keeping the rest of us informed of important pending bills and proposals. All of these activities were followed with letters to the editor, new position statements, media releases and numerous other forms of communication that supported our mission statement.

Of course the AWF operation just isn't about meetings. Our Treasurer has to keep our finances in order, pay taxes, process deposits and keep track of the increasingly important grants we're able to secure. Our Secretary has to prepare and distribute our minutes, keep track of meeting dates and numerous other duties. Our Office Manager is probably our busiest person, the one that generally makes the first contact when the phone rings or an email is received. She keeps the rest of us informed about upcoming events, sends out updates to our roster, maintains our website and assists with the publication of this magazine. Other Board members are busy with arrangements for BOW, meeting with local Forest Service and other land management agencies, addressing energy development concerns, assisting the AZG&FD with their needs and many other responsibilities. None of these activities would have occurred if it wasn't for our dedicated volunteers and staff and every day I give thanks to work with these folks.

I spoke earlier about collaboration and I'd like to draw your attention to an excellent article by rancher Dennis Moroney of McNeal, AZ, reprinted here with permission from the Diablo Trust, regarding landscape level collaboration and neighborliness. As we move into our 89th year we've learned that no single organization can possibly resolve the many issues we face regarding wildlife and wildlife habit but by cooperating with other groups, State and Federal agencies, dedicated individuals and many others we certainly can make a difference and that will be one of our main strategies during this next year.

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.

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From the Editor's Desk

What's Wrong with Landowner Tags?



By Larry Audsley

ollowing the closure of Chino Grande Ranch to hunting last March, state officials have been scrambling to prevent further losses of public access to state and federal lands. So far no specific proposals have come forward, but officials say all ideas are on the table, including one that Arizona sportsmen have strongly rejected each time it's been proposed. No matter how many times we kill it, pressure for landowner tags keeps coming back like a slasher in a horror flick seguel.

Here's how a landowner tag program works. The state issues big game tags to private landowners who offer the tags for sale at whatever prices the market will bear. For trophy animals, this can be several thousand dollars. Landowners may contract with commercial guiding services that find the clients and oversee the hunts. Depending on how a particular state designs its program, landowner tags can allow hunting on the private property only or can be cover hunting on leased government lands and even through an entire hunt unit. Profits go to the landowners and guides.

Before going any further, I want to make it clear that I've seen no indication of support for landowner tags by any member of the Game and Fish Commission or the department, nor do I know of any active support in the legislature. All that has been said is that various state officials are looking to other states for ideas, and that landowner tags are among the ideas being evaluated. However, one legislator who has observed the discussions told me he doesn't understand sportsmen's opposition to landowner tags. He's probably not alone.

The short answer is that a landowner tag program would violate the principle of equal hunting opportunity for all, put the health of wildlife at risk, become a costly nightmare to administer and create at least as many new divisions and conflicts as it purports to eliminate.

Far from bringing peace to the valley, landowner tags will only open up new theaters for war. Game & Fish will be asked to satisfy an industry made up of individuals with different situations, needs and temperaments. Just designing the program will be difficult as no set of rules will meet every landowner's needs. Which landowners should be eligible for tags and based on what criteria? And what rights, if any, does a lessee have to wildlife tags for state or federal lands where he holds a lease for grazing privileges? Since these programs are never compulsory for landowners, gates will only open where the landowner is satisfied with the deal he's getting. When Landowner A feels his allocation is unfair relative to what Landowner B received, Landowner A will most likely keep

his gate closed until he gets the deal that satisfies him. Both individually and as a group, landowners will constantly seek improved compensation, terms and conditions, and the state's agricultural associations won't be laying off any lobbyists.

For sportsmen, any proposal for landowner tags will generate outrage and fierce opposition. To begin with, sportsmen find it hard to accept that landowners have any right to sell wildlife in the first place since they do not own it. Arizona's constitution makes no provision for wildlife, but Title 17 of Arizona's Revised Statutes asserts that "wildlife is the property of the state". Arizona has managed its wildlife on that premise since the 1920s if not earlier, the same as most other states. Americans have come to view wildlife as a shared resource held in trust for the people rather than a commodity to be traded or sold. Landowner tags will strike most Arizona hunters as just plain wrong.

Nor will the average hunter quietly accept losing his opportunity for quality big game hunts to the wealthiest hunters who can afford them. Currently an Arizona resident can hunt a trophy bull elk for \$121.50. This is the price paid by everyone, rich or poor, regardless of political, social or business connections. Landowner tags could raise this cost to anywhere from \$5,000 to \$10,000 or more for an unquided hunt. Taking tags out of the pool to be sold on the national market at prices few can afford, or to be handed out as gifts or favors, turns hunting into a rich man's game. One of the foundational principles of North America's wildlife conservation model is equal hunting and fishing opportunity for everyone. That principle is a source of pride among American sportsmen and is partially credited with the model's success. The architects who developed it realized that game laws would never be effective without the broad support of the public. They knew there could never be enough game wardens in the back country to protect wildlife from illegal take. But by making wildlife a shared resource in which everyone has a stake, they created a vast legion of volunteer game wardens in whose presence no one would want to be seen taking a deer out of season or exceeding bag limits since that amounts to stealing from everyone. It's a system that has out-performed all others around the world and deserves both recognition and preservation. But when the average hunter finds himself priced out of the better hunting opportunities in his own state, poachers may be seen more as stealing from the wealthy than from the community at large. Support for our game management system, including habitat work as well as law enforcement, will diminish.

Besides wrecking big game hunting as we know it, landowner tags can threaten the health of our wildlife by creating an incentive to manipulate both the quantity and quality of wildlife species. In states that allow it, landowners and hunt clubs basically farm for deer and other game by altering habitat and providing feed and mineral supplements aimed at enhancing antler growth. Some commercial game ranches in other states attempt to breed selectively for big antlers through such techniques as "pen breeding" even though breeding for a single characteristic might not be in the best long term interest of the species. In short, providing monetary incentive for landowners to produce an abundance of big-antlered wildlife could end up doing for hunting and wildlife what steroids did for baseball.

So why would anyone think we need landowner tags? And since most Western states already have a program for landowner tags, why should Arizona be different?

For starters, wildlife agencies in other states didn't necessarily embrace landowner tags because they wanted to. Agricultural interests have considerable influence in most state legislatures, and some states even designate one or more game commission seats specifically to represent agricultural interests. Thus policy outcomes can reflect a balance of political power more than an intelligent solution. Furthermore, not all policies we see in other states merit emulating. In the name of increased efficiency, some states have recently consolidated multiple state agencies into a single natural resources department where taxpayer-supported agencies are now picking the pockets of the user-funded wildlife agency. Other states are even considering eliminating their independent game commissions altogether. So if other states decide to jump off a cliff, should Arizona follow?

There are two basic justifications offered for landowner tags. One involves compensating farmers and ranchers for damage and inconvenience caused by wildlife and hunters. The other is compensation for access rights onto or across private property.

States like Colorado, New Mexico, Oregon, Utah and Montana have vast tracts of prime elk and deer habitat that are privately owned. This gives the landowners in those states powerful leverage. In exchange for landowner tags, they agree to open their property for hunting. Otherwise the ranch is closed to hunting, which costs the wildlife agency revenue and reduces hunting opportunities for the state's residents. Faced with that choice, several states have agreed to landowner tags.

The situation in Arizona is different. The threat of making private land off limits to hunting doesn't have much leverage in Arizona because there aren't many privately owned ranch properties that are both game-rich and big enough to affect statewide hunting opportunities except perhaps for antelope. Most of Arizona's ranch properties are small parcels adjacent to state trust and federal lands that are leased for grazing. Therefore, unlike other states the issue here is not about hunting on someone else's private land. Instead the issue is about getting across private land to reach the state and federal lands where we already have a right to hunt.

This was the case with Chino Grande, located in the checkerboard of private and state trust lands north of Prescott. Chino Grande's ranching operation covers 50,000 acres, but more than 20,000 acres is state trust land. In the checkerboard areas, it is impossible to drive more than a mile without encountering private land. Landowners have the legal right to lock gates on their own property even if doing so denies the

public access to state or federal lands beyond. That is exactly what Chino Grande did. While a great many private ranches currently allow the public to cross portions of their private land, many others do not. The result is that vast areas of federal and state lands are currently "landlocked" and inaccessible to the public without the express consent of the landowner. This is especially true in southern Arizona where two-thirds of the motorized access routes entering Coronado National Forest cross private lands at some point. Neither the state nor the federal government has been willing to make public access across private property a requirement in grazing leases. So in place of the leverage landowners have used successfully elsewhere - ability to withhold key private lands from hunting access – some are attempting to acquire similar leverage by blocking access to state and federal lands.

Clearly there is an urgent need for new solutions to Arizona's public lands access problems as well as to the legitimate concerns many landowners have regarding wildlife damage and problems associated with allowing the public into areas where people are trying to live and conduct a business. Arizona Game and Fish has grappled with these issues for decades. Some of the measures already in place include "depredation" hunts targeting nuisance wildlife, tailoring hunt structures to minimize visitor impacts, partnering on habitat projects that benefit ranchers as well as wildlife, providing sign-in/sign-out kiosks at entry points and even making annual cash payments in the thousands of dollars to individual landowners in exchange for keeping gates unlocked. Efforts of this kind have succeeded in keeping some important areas open, but the overall trend is more gate closures instead of fewer.

For landowners whose concerns can be satisfied with money, increased emphasis on trespass fees might offer the best solution. Sportsmen as a group tend to be conservative, regard property rights as sacred and do not object to compensating property owners for damages or inconvenience. But it is important to understand that landowner tags still would not open all or even most of the gates that are currently locked. That's because many gate-closers don't even want big game tags, nor would they be swayed by higher trespass fees. Some don't need the money and simply don't want the public coming through. Those who are seeking landowner tags apparently are dreaming of six-figure incomes and playing host to small numbers of high-end clients. To make their case, these people will need to convince officials and the public that they have a legitimate right to sell wildlife they do not own. They will also need to convince us that they should get paid to allow the public to hunt on state and federal lands. Finally, they will also need to convince us that landowner tags will finally bring peace and harmony among ranchers, sportsmen and the government agencies that are caught in the middle, and that public access to public lands will be greatly improved as a result of landowner tags. Proving any of those assertions will be tough.

The complex subject of access to public lands has been addressed in prior issues of AWN. For more background, go to:

Part 1: Whose Public Land Is It? pp.14-15

http://www.nwfaffiliates.org/sites/azwildlife.org/ht/a/G etDocumentAction/i/60915

Part 2: Whose Public Land Is it? pp.14-17

http://www.nwfaffiliates.org/sites/azwildlife.org/ht/a/G etDocumentAction/i/60914



Ithough forests get more attention, ' Arizona's most troubled eco-system is the desert and semi-desert grassland. After more than a century of human activity, most of the grasslands that once covered large sections of Arizona are now severely degraded and in some places are gone entirely. Their disappearance can go almost unnoticed because the loss is not sudden, nor is it caused by headline-grabbing events such as fires. Grasslands don't leave behind fireblackened trees that tell us what was once there. Instead they slowly degrade into the desert scrub that looks normal for Arizona. Often we only recognize the changes when we see an old photograph or read a historical description of how a place used to be, or when we notice that certain wildlife species - pronghorn antelope, for example - don't seem to be around much anymore.

Several decades of efforts by ranchers and federal land agencies to reverse grassland desertification have met with little success. Our last best hope for restoring southeastern Arizona's once-magnificent grasslands could be a grasslands working group initiated by Arizona Game & Fish. The Southeast Arizona Grassland Workgroup (SEA Grass), which is comprised of several governmental and non-governmental organizations, holds unusual promise because of its vast scale – it encompasses most of the grasslands in southeast – and

because it involves unprecedented planning and coordination among several entities. More than just a troop surge, it is a coordinated attack using collaboratively established schedules and prioritized project selection and funding. Principal players include Arizona Game & Fish, Bureau of Land Management, US Forest Service, Arizona State Land Department, US Department of Agriculture, US Fish & Wildlife, University of Arizona, Pima County, Arizona Antelope Foundation, Arizona Wildlife Federation, The Nature Conservancy, Arizona Audubon Society and Fort Huachuca. Financial support comes from a combination of agency budgets, federal grants and Arizona Game & Fish habitat partnership funds. Cooperative efforts from private landowners and volunteer labor by sportsmen also play a critical role.

Restoration work includes the usual prescribed burns and removal of invasive woody plants, but SEA Grass is also tackling special habitat requirements of keystone grassland species that include pronghorn antelope, black-tailed prairie dogs, Baird's sparrow, leopard frogs and burrowing owls. The species receiving first priority is the pronghorn, which historically was present in southeast Arizona in far larger numbers than we see today.

Successful pronghorn restoration requires at least some understanding of pronghorn behavior and specific needs. Like most grassland species, pronghorn are nomadic by nature but also need the ability to travel between key sites for food, water

and fawning. Specific areas where they might spend only five per cent of their time can hold minerals or nutrients they need for survival at certain times of the year. Pronghorn herds have an institutional memory regarding the locations of these places as well as how to get there, which means the introduction of new travel barriers such as fences and woody plant concentrations can threaten their survival. Pronghorn don't like to jump over fences but can slip through where horizontal fence strands are far enough apart. They also avoid thick concentrations of mesquites and junipers due to fear of lurking predators. For these reasons, mesquite thinning and fence modifications are high-priority activities for pronghorn recovery.

Water and vegetative cover are important for fawn survival. In fawning areas, vegetation cover should be 10 to 18 inches high from April through June to reduce predator effectiveness. Water is especially critical in the first two weeks of a fawn's life, and research in central Arizona has shown that most fawning beds are located within .4 of a mile from a water source.

Another species receiving high priority is the black-tailed prairie dog. In addition to the intrinsic value of restoring a native species, black-tailed prairie dogs are believed to discourage mesquite invasions and improve forage for other species by re-cycling nutrients. They are also an important prey species for raptors and other predators.

One of the permanent challenges to desert grasslands is their tendency toward natural fragmentation. The portion of southeast Arizona containing desert grasslands amounts to more than 6,000 square miles but is broken up by several "sky island" mountain ranges, wooded riparian areas, mesquite bosques and oak/juniper forests, resulting in a mosaic of vegetation communities throughout the region. This is typical of desert grasslands. This natural fragmentation increases the importance of maximizing connectivity between grassland zones so as to eliminate "habitat island" effect. The permanent presence of non-grassland vegetation communities poses an ongoing threat of encroachment.

On April 2 and 3 of 2011, members of the Arizona Antelope Foundation toured southeast to take stock of the work ahead. The group visited five of the seven areas that currently hold antelope and are site candidates for future antelope releases. Each stop featured speakers with information specific to the site. In addition to Arizona Game and Fish biologists, there were representatives from federal land agencies, two non-governmental organizations and one private ranch.

Arizona Game & Fish biologists discussed a wide range of issues including pronghorn population dynamics, genetics, forage diversity and travel requirements. Pronghorn were historically present throughout southeast's grasslands but declined sharply in the 20th century and in some places disappeared altogether. Transplants from other regions have shown mixed results with the most successful being those brought from near Marfa, Texas. But despite the proven ability of transplants to survive in southeastern Arizona, pronghorn are certainly not re-bounding toward historic levels. Instead most of the transplanted herds are declining mainly due to low fawn recruitment. Drought, predation, degraded habitat and travel barriers are believed to be the major factors. Specific needs and concerns were addressed at each site..

Las Cienegas National Conservation Area

This 49,000-acre site located near Sonoita in Unit 34B, is a mix of mesquite bosques, cienegas, cottonwood-willow

riparian areas and both sacaton grasslands and semi-desert grasslands. It is especially popular with birders, photographers and predator callers. Formerly a cattle ranch that was headed for ranchette-style subdivision, it was acquired by the federal government in 2000 based on its unique status as a desert grassland and is now administered by BLM. The enabling legislation expressly allows cattle grazing, hunting and other recreational uses deemed compatible with the conservation areas's purpose. Currently there are four grazing allotments. Although restoration work and modern range management stipulations in the grazing leases have helped bring back native grasses, mesquite encroachment remains a severe problem. The NCA's Resource Management Plan calls for removing 20,000 acres of mesquites using both mechanical and chemical treatment followed by prescribed fire. So far 2,100 acres of mesquites have been removed. Federal funding came from the American Recovery and Reinvestment Act.

Texas pronghorn were successfully reintroduced at Las Cienegas in 1986 following a 40-year absence of the species. The current population at Las Cienegas is estimated at 60 to 80 animals. Some are already using the areas where mesquites were removed.

Although the Sonita Valley has experienced significant residential development, generally in the form of five to 20-acre fenced ranchettes, most of the high quality habitat is federally owned. Despite the presence of highways and fencing that have been identified as significant travel barriers, Las Cienegas pronghorn apparently have some reason to continue crossing Highway 83 to the West and Highway 82 to the South. Much of the land on the other side of both highways is private. The Arizona Antelope Foundation plans to modify the 5-strand barb wire fencing that is currently alongside both highways.

Arizona Game and Fish has established three black-tailed prairie dog colonies at Las Cienegas and plans a fourth for this year. The animals were trapped in northwest Mexico, just south of New Mexico's boot heel, and on the Ladder Ranch in New Mexico, and were introduced at Las Cienegas in 2008 and 2009. First-year mortalities were within expected parameters, and so far Game & Fish believes the introduction will be a success. Biologists were pleased to observe both antelope and cattle showing a preference for feeding at the prairie dog sites, thus reinforcing the belief that prairie dogs improve forage quality.



Black-tailed prairie dogs are captured and ID'd for a University of Arizona research project.

Las Cienegas restoration also benefits from synergism with Pima County's Conservation Lands System. Kerry Baldwin of Pima County Parks explained that beginning with a bond issue in 2004, Pima County has been buying up rural ranch properties and managing them for multiple use giving emphasis to cultural and natural resource enhancements and protection. The county now owns the Clyne and Sands ranches totaling nearly 6,000 acres. These ranches are located between the eastern boundary of the conservation area and the national forest boundary along the west side of the Whetstones. Mr. Baldwin stated it is the county's intention to manage these park lands in a way that is consistent with the conservation area's resource management plan, and that the Clyne and Sands properties will be pronghorn-friendly.

Arizona Antelope Foundation has applied for a grant from the National Fish and Wildlife Foundation in the amount of \$775,000. Pima County has committed to provide an in-kind match of \$500,000 specifically for pronghorn-related improvements.

Babocomari/Rose Tree/Audubon Research Ranches

When Frank Brophy Sr. bought the 40,000-acre Babocomari Ranch in 1935, pronghorn were reasonably common. By 1949 there were only four animals remaining along the west boundary of Ft. Huachuca. Arizona Game Fish and Fort Huachchuca began restocking efforts in 1949. Today there are estimated herds of 18 in the Babocomari West Pasture and 36 on the Rose Tree Mustang Plains. Both ranches have taken advantage of habitat partnership funding to reduce shrubs and restore native grasslands. Water sources specifically for pronghorn have been developed on both ranches, and in 2010 the Arizona Antelope Foundation modified two key miles of fencing to ensure an open corridor between the two ranches.

Field trip participants stopped at the Appelton-Whitell Research Ranch Sanctuary for lunch and a presentation on Research Ranch activities. The ranch is a combination of private, state trust and national forest land located three miles south of Elgin. The National Audubon Society purchased the private portion in 1980. Formerly a cattle ranch, the facility functions as a laboratory for developing and demonstrating methods to rehabilitate and safeguard the bioregion through erosion control, eradication of exotic species, re-establishing native grasses and fire control.

San Rafael Valley

Pronghorn habitat in the San Rafael Valley exceeds



Although pleasing to the human eye, most of southeast 's grasslands are generally in poor shape for meeting the needs of wildlife.

44,000 acres of which 60 per cent is US Forest Service and remaining 40 per cent is privately owned and controlled by five ranches. It is considered generally secure from urban encroachment due to open space conservation easements that were acquired some years ago and the high content of public land.

Pronghorn were extirpated in from the San Rafael Valley in 1945. Arizona Game & Fish started reintroductions in 1950 at the request of local rancher Marshall Ashburn. Populations peaked in the mid-1960s when former wildlife manager John Carr reported more than 100 animals distributed from the Vaca Ranch south to the Sharp Ranch, east to the Park Canyon steppes and farther east on Campini Mesa. By 2011 only 12 animals remained, all on the northwestern side of the valley. Since research has shown that antelope seldom survive after herd numbers drop below 17, the possible loss of these pronghorn in the near future is a great concern.

Juniper encroachment is fragmenting the open grassland. Coronado National Forest is crushing Manzanita brush on the eastern and western boundaries of the north end of the valley and plans to burn in treated areas

Border fencing, both old and new, plays a significant role for pronghorn movement in this area. There are still some old sections of six and eight strand barb wire fence that have been

there many years and are impenetrable for pronghorn except where there are breaks. Formerly some of the pronghorn in the San Rafael Valley would use fence breaks to drift into Mexico and back. Today that movement is probably no longer possible. In addition to the old fences that remain, Homeland Security has added Normandy-style vehicle barriers. In some places the vehicle barriers are set in a hundred yards or more from the actual border and are well separated from the barbed wire, but in others the barriers and wire fence are only a few feet apart. Ungulates do not do well when they have to cross multiple barriers in quick succession. Cunning coyotes can exploit these locations to trap pronghorn and deer. Retired Game & Fish biologist John Millican, who spent many years observing pronghorn in this area, believes the current fencing configuration acts as a barrier for pronghorn. However, this might actually be a benefit until such time as there are effective protections for pronghorn south of the border. Beginning in the 1990s, localized declines in pronghorn numbers seemed to correspond with increased Mexican troop patrols across the border, first on Campini Mesa and again west of Parker Canyon Lake, leading some to theorize that some pronghorn were drifting across the border at fence breaks and not coming back. Therefore, the new border fence might actually benefit efforts to re-build a viable population at



Given a choice between the monsoon green-up in a prescribed burn area and some areas that were missed, these pronghorn make their preference clear.

least in the short term.

San Bernadino Valley/Malpai **Borderlands**

The Malpai Borderlands Group is a nonprofit, conservation-oriented ranching group in southeast Arizona and southwest New Mexico. Malpai's goal is to preserve ranching as a tradition and a source of livelihood. They pursue that goal by restoring rangelands to good condition and by working to prevent development of ranch lands into subdivisions, which causes fragmentation and hampers landscape-level management. Malpai partners with governmental and non-governmental entities to improve range conditions, protect endangered species habitat, share cost on range and ranch improvements and protect land from development. The group has worked with NGOs such as The Nature Conservancy to obtain conservation easements protecting 75,000 acres of private land. Malpai has partnered with government agencies and private partners to conduct prescribed fire on more than 69,000 acres. Fire monitoring has shown that prescribed burns have improved ecological conditions for both wildlife and livestock on thousands of acres.

Pronghorn were reintroduced into the San Bernadino Valley in 1986. Today this is the only population in southeast Arizona that is at population management objectives with 250 to 300 pronghorn. Water distribution and accessibility is very good, and fawn survival has exceeded that of other southern Arizona populations. This area is in Unit 30A. Despite limited hunter access in this unit, 30A is the only southern Arizona unit that has actually seen increases in the number of permits during the past 20 years. Permit numbers for all of the other southern Arizona units have been declining.

Corridor improvements are considered the first priority for improving pronghorn habitat in this valley. Old allotment boundary fences between ranches are still a significant factor limiting pronghorn movement. pronghorn were ever released west of Highway 80, and there are no recorded pronghorn observations there. The failure of pronghorn to cross Highway 80 into Unit 29 is attributed to the current fencing configuration on both sides.

Bonita Grasslands

Pronghorn in this area have fared very poorly despite previous habit improvement projects. The population remains significantly below objectives, and predation is thought to be a major factor. Pronghorn were reintroduced here in the late 1940s and early 50s. Since then they have numbered as high as 315 animals (1986, following a transplant) but the 2010 survey found only 93. In the past 20 years, general firearms permits have dropped from 15 in 1991 for Units 31/32 combined to only 10 in 2011.

provides forage for up to 42 pronghorn. fence modification The accomplished a key portion of the overall northern Bonita Plains pronghorn travel corridor improvement. It is meant to ensure that resident pronghorn can travel through the small Bull pasture to nearby open grasslands surrounding the pasture, and that pronghorn can have access to three newly installed water troughs.

Getting to the Finish Line

If the current effort stays at this pace for a few more years, we should



After removal, mesquites are strategically placed to impede runoff.

Today the Bonita Grasslands is the subject of a restoration project to improve up to 10,000 acres in the next five years through grubbing and disposal of invasive mesquite. The entire area encompasses 180,000 acres and in 2010 some 3,000 acres were treated. Partnerships include the Natural Resources Conservation District. Arizona Game & Fish. US Fish and Wildlife Service, local landowners. Arizona Antelope Foundation and Southeast Arizona Sportsman's Club. Recently an HPC project was funded for removal of another 300 acres of mesquites in 2011.

In March 2011, volunteers from Arizona Antelope Foundation and Southeast Arizona Sportsmen completed another in a series of major fence modification projects. In addition to making portions of existing fencing "antelope friendly", this latest project included installing seven "goat bars" surrounding a 640-acre alfalfa field that eventually see thousands of grassland acres restored to conditions more closely approximating what existed prior to the arrival of settlers who brought cattle they had not yet learned how to manage for arid lands. Continued flow of federal funds will be a key factor in determining the rate and extent of progress. While sportsmen's funds including those raised by the big game tag funds and the Antelope Foundation are important, federal grants and land agency budget allocations are needed as well.

Some sportsmen might question whether Arizona Game & Fish should pour resources into privately owned ranches, especially in units where public hunting access is an issue. The simple fact is that at least half of the prime pronghorn habitat in southeast Arizona is privately owned, which means that active collaboration with landowners is vital if we are to have pronghorn in the

Working with Arizona's Natural Resource Conservation Districts to Improve Wildlife Habitat

By Steve Cassady Landowner Relations Program Specialist Region II, Arizona Game and Fish Department

rizona's Natural Resource Conservation Districts (NRCD) have for over fifty years provided a vital role in protecting Arizona's natural resources – soil, water, and wildlife. Arizona's NRCDs provide a link between local landowners and land users and the agencies and groups desiring to work with these landowners and land users towards conserving Arizona's natural resources.

My experience with Arizona's NRCDs over the last 33 years has been mostly as an employee of the Natural Resources Conservation Service (NRCS), formerly the Soil Conservation Service (SCS), and more recently as an employee of the Arizona Game and Fish Department (AGFD). Beginning as a young, energetic Range Conservationist with the SCS, full of ideas, but not sure exactly how best to get these ideas out to the ranchers in the work area I had been assigned, I found the knowledge available through the local NRCD of local conservation issues and the local ranching culture extremely valuable. Then as a new SCS District Conservationist, responsible for identifying and applying the SCS program to conserve natural resources for an entire SCS field office I found the knowledge of and guidance provided by the local NRCDs even more valuable. Now as an employee of the AGFD I am finding again the knowledge of local wildlife issues and local ranching culture to be extremely valuable in performing my duties towards improving wildlife habitat.

So how do Arizona's NRCDs function in their role of protecting Arizona's natural resources? First, some history of the NRCDs and how they came to be is appropriate. Arizona's NRCDs are a result of the Soil Conservation Act (PL 46) passed by Congress in 1935. The act was in response to the national disaster of the early 1930's where drought combined with poor farming practices created conditions that allowed severe soil erosion causing huge dust storms that moved millions of tons of soil across the Great Plains destroying farms, ranches, and people's lives. In addition to the creation of the Soil Conservation Service the act provided for the creation of local conservation districts by the individual states which would be made up of and run by concerned local



stakeholder citizens. It was also apparent that for the movement to be effective, especially on private land, participation in government sponsored programs available through the conservation districts must be voluntary. Although a standard format for establishment was provided, each state was allowed and encouraged to create for its conservation districts a format meeting the local needs of the state within the broad guidelines provided by the federal government. Arizona's conservation districts, the NRCDs, operate on minimal funding with the decision makers, or district supervisors, required to serve on a voluntary basis. Initially the conservation districts were called Soil Conservation Districts (SCD) and covered only farmlands within the state. As the name implied the focus of these districts was to stop soil erosion thereby conserving the state's soil resource. Soon, though, it was apparent there were many more natural resource conservation concerns the SCDs could and should be involved in and both the land types and natural resource conservation issues they dealt with was expanded. In the early 1970's the name of the conservation districts was changed to Natural Resource Conservation Districts to reflect the broader scope of natural resource conservation issues the conservation districts dealt with.

Although they were not required to do so, one of the many benefits the conservations districts brought to the farmers,

ranchers and other land users within the boundaries of the district was the assistance provided by the USDA's Soil Conservation Service. Through the years, especially in the early years, the NRCDs, and their close partner, the SCS, concentrated most of their efforts on controlling soil erosion, conserving water, and improving water quality. Education has always been a high priority of the conservation districts, initially education of land users on how to better manage the natural resources under their control, but later more emphasis was placed on education of the general populace within the district on natural resource conservation issues. Today many NRCDs in Arizona have created and/or sponsor environmental education centers that reach out to a much broader clientele than the conservation districts of old. As a result today, although district boards still are predominantly made up of farmers and ranchers, there is more presence of "non-traditional" stakeholder citizens.

In ARS, Title 37, Chapter 6 - Natural Resource Conservation Districts, it is declared the policy of the legislature to "conserve wildlife, protect and restore the state's rivers and streams and associated riparian habitats, including fish and wildlife resources that are dependent on those habitat". Although much of the efforts of Arizona NRCDs have been directed towards improving conditions surrounding the "traditional" natural resource concerns, as they needed to be, such as soil erosion, conserving water and improving water quality, "non-traditional" natural resource concerns, such as wildlife habitat improvement, have always been part of the NRCDs' overall program. Today, though, as the more traditional concerns have become less of a concern more emphasis can be placed on the non-traditional natural resource concerns, such as wildlife habitat improvement.

Although wildlife habitat generally improved as a result of the work done to address the traditional natural resource concerns (e.g. - improving rangeland condition to reduce soil erosion resulted in more cover for wildlife as well as soil surface protection, or reducing water lost in inefficient irrigation systems could be left in the stream from which it had been diverted or in the ground from which it had been pumped to feed springs or seeps) today more emphasis can be placed on the non-traditional natural resource concerns, such as wildlife habitat management. For example where once it was assumed a water development installed to provide livestock water needed to improve grazing management was assumed beneficial to wildlife, today it is common to consider the impacts the water source will have on the wildlife found in the area and to include modifications to improve accessibility for wildlife and reduce detrimental impact. Another example is although often



brush management activities to reduce soil erosion had some beneficial impact on wildlife, today brush management is commonly implemented and designed to enhance wildlife habitat, such as the grassland restoration for pronghorn antelope habitat improvement work being done cooperatively with NRCD, AGFD and NRCS cooperative assistance to the rancher.

Arizona's NRCDs have a long cooperative relationship with its partner in natural resource conservation, the NRCS (formerly the SCS) and have a long history of providing quidance to the NRCS in what technical assistance is needed within the boundaries of the district. This relationship continues today on an even more formal level through the recommendations provided to NRCS on implementation of Farm Bill programs such as the Environmental Quality Incentive Program (EQIP) and Wildlife Habitat Incentive Program (WHIP). Although the partnership with the NRCS remains the strongest, Arizona's NRCDs have developed strong relationships with many other agencies (AGFD, USDA-BLM, USDA-FS and many more) and many non-governmental organizations (NGO). These relationships further expand the impact Arizona's NRCDs can have on the conservation of Arizona's natural resources.

Wildlife Water Installed by Rancher with Assistance from NRCD and NRCS

Inventory by NRCS, NRCD and AGFD staff of Pronghorn Antelope Habitat Restoration Project

WHADDA' YA' KNOW?

- 1. Name the number one boating violation in Arizona.
- 2. What is the best way to ensure better boating opportunities?
- 3. When hunting from a boat, does the hunter have to wear a PDF?
- 4. How many eggs can a female bluegill produce annually?
- 5. How many eggs can a single female quagga mussel produce annually?
- 6. What is the primary method of overland dispersal of invasive mussell species?

(Answers on Page 19)

Some Thoughts on Collaborative Landscape Scale Conservation

By Dennis Moroney

have been involved in collaborative landscape scale conservation projects for the last twenty years or so. The concept of collaborating, or working together with others who may share some interest in common outcomes, has always made it easier to take on really big challenges. We don't much need to collaborate to shoe a horse or fix a broken float valve. Collaboration is called for when problems involve big jobs, different points of view, institutional barriers, complex systems, or human values.

I live on what we consider to be a family-scale cattle ranch. It's somewhat complex on a day-to-day basis, but we deal with it most of the time through a process of simplification. Almost any tough job is just a series of simple steps, until it really gets complicated. Then it's time for collaboration.

I can go out and gather a good sized bunch of cattle and move them by myself most of the time, especially if I'm riding a good horse, and maybe if my dogs help me. If I also need to brand calves or sort off bulls, it would be easier if I had some help. If we're going to gather all the cows, and try to get everything branded, we put together a crew by inviting our friends and neighbors to help. They will not expect to be paid, but will expect to be fed and exposed to basic hospitality. In return they will be secure in the knowledge that we stand ready to return the favor in the future. We call it neighboring; and through it a sense of community develops that spans

generations, genders, differences in philosophy regarding cow work and horse training, even politics and religion.

We agree to agree on certain things from the start. It's my ranch, my cows, and my works, so it will be done my way. When I go to help the neighbor, I'll do my best to conform to his or her standard. I won't assume that my dogs will be welcome on his works, I won't drive across his hay meadow to turn my pickup and trailer around, and I'll show up on time, and expect to stay until the work is done, no matter how late it gets.

Conservation work on a landscape scale requires even more patience, tolerance, empathy, and persistence. The natural resource management challenges of agency protocols, land tenure, soil differences, vegetation dynamics, fire history, and even terrestrial ecosystem surveys are just the backdrop for the discussions necessary for collaboration on a landscape scale.

Discovery of the nature of the problem unfolds like the petals on a rose; with each participant bringing their own



unique perspective, experience, education, bias, and heartfelt emotional values. It is important for each participant to both listen respectfully to the perspective of others, but also to clearly express their own personal point of view regarding the problem.

This would be easy if the problems out on the land were simple. Unfortunately, all the simple challenges have been solved already. It's up to us to start working on the more difficult issues. We ask if it is caused by lack of fire; overgrazing; overrest; climate change; past history; current management; or just lack of attention? The answers are never simple.

Landscape-scale problems typically overlap legal jurisdictions, agency responsibilities, and multiple ownerships. In addition they often reflect complex ecosystem dynamics, a variety of permitted uses, and multiple expectations as to productivity, protection, short and long term management, and potential for recovery.

Defining the problem is enough to discourage the weak and dampen the enthusiasm of the rest of us; but when we start to identify goals that might help improve the situation on the ground, the real work begins. I find it frustrating in the early stages as some of my values, great ideas, and simple solutions are exposed to the light of day and dismissed as unworkable, idealistic, or too broad.

On the other hand, there is a certain synergy that begins to happen as we focus on our areas of agreement and narrow the scope of our shared common interest. Slowly, something like consensus emerges centered around what is practical, and might result in the most good for the energy and capital expended.

Along the way, many of the participants begin to feel as though they may actually be engaged in something meaningful and tangible. A community of interest, made up of well informed people, representing diverse interests, is working together to produce positive change on the ground. The requirement to think long and hard about the issue is rewarded by the sense that you truly understand the problem, and have come up with a solution that really could do some good.

The goals of course, lead to lining out a course of action; a management plan for implementing the project, and defining measurable outcomes to determine success.

Invariably there are unforeseen impediments which must be overcome, but in the end, something real happens on the ground that makes a difference.

Therein lies the greatest value to collaborative landscapescale conservation projects. The participants invested time, energy, and often significant funds to make a difference on a piece of land. The success will de determined over time, but the participants will be changed forever because of the experience of actively working together to do something real and making a difference for forests, wildlife, watersheds, grasslands, riparian areas, sensitive species, and sometimes feeding the people.

In the big picture, we end up getting some things done on the ground that would not have happened without the process of collaboration, or the cooperation of neighbors. In the long run, we all benefit from preventing erosion, restoring watershed function, improving wildlife habitat, and preserving biodiversity. But something else happens between us as humans that really makes a difference. We begin to understand each other a little better. We may even share a meal with new friends.

Dennis Moroney is the CoOwner, with his wife Deb, and Operator of the 47 Ranch in McNeal, Arizona

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Recreational Access

Wildlife and the Public Trust Doctrine

By Larry Riley, Arizona Game & Fish

recreational access across private lands to publicly owned lands is becoming noticeably more challenging. That challenge applies equally for those that enjoy traversing trails and roads, perhaps with off-highway vehicles, or for those that simply wish to observe wildlife. The bottom line is that much publicly owned land is either located beyond locked gates on private lands or intertwined among alternating sections of state and private checkerboard ownership.

This issue, while always a concern, was thrust into immediacy with the Arizona Game and Fish Commission on March 23, 2011 when the Chino Grande Ranch indicated that they would be denying public recreational access to private lands that had been previously open. This announcement came just days before the scheduled 2011 pronghorn draw and 3 months after the hunting permit levels had been established, which left the Commission with about a week to consider amendments prior to the issuance of permits. The closure eliminated access to about 35% of the open pronghorn habitat and around 50% of the pronghorn population in Unit 19B.

The Commission was left without good options. They could have left permit levels as they were, which would result in 50 general season and 15 archery season hunters competing for available bucks in a hunt that would be vastly different in terms of hunter crowding and pronghorn availability than that for which they had applied. Another option would have been to reduce the number of permits, which still would have differed in opportunity from what hunters had expected when they applied. Finally, the Commission could simply zero out the permits. This latter option is ultimately what they chose to implement.

This was frustrating to those individuals that had applied for pronghorn hunting opportunities in this unit, but actually brought the issue of recreational access front-and-center for a larger number of people. Recreational access is not a new issue. In fact, the Arizona Game and Fish Department works with several programs to foster improved access, including the Landowner Respect Program, Stewardship Program, Natural Resource Conservation Service Farm Bill programs, Habitat Partnership Committees, and Adopt-A-Ranch Program. Despite these efforts that include a substantial number of volunteer hours by sportsmen, there remain large tracts of public lands in southeastern Arizona that are virtually inaccessible because they are surround by private lands across which no access is granted. And in other portions of the state, the checkerboard nature of the state and private lands restricts access to publicly-owned land and restricts legitimate recreational activities.

Since the March Commission meeting, the Commission has held two public workshops to discuss the current access situation in Arizona, and identify what the future of recreational access may look like in Arizona. Additionally, the Commission

directed the Department to follow a process that actively seeks stakeholder and public input; gather information on access programs from other western states; compile the information gathered; develop detailed descriptions of potential alternatives for securing access into the future; complete a risk assessment of these alternatives; and provide this information to the Commission for discussion that will ultimately result in a decision on the direction the Department will follow into the future. Progress on this process is reported each month at the Department's monthly Commission meetings as a standing informational agenda item.

To date we have gathered stakeholder and public input at public hunt guidelines meetings, the Watchable Wildlife Management Plan meetings, the Statewide Habitat Partnership Committee meeting, local Habitat Partnership Committee Meetings, and at the Annual Arizona Cattle Growers Meeting. A set of questions for mail surveys of both sportsmen and landowners has been developed with final approval and mailing of these surveys expected in the next couple of months. This survey can help us evaluate the acceptance, tolerance and relative support of several alternative solution strategies to this recreational access issue from both sportsmen and landowners perspectives. The Department has collected information on 15 westerns states with access programs and is in the process of analyzing the information on hand.

Wildlife is managed in the public trust. This means that wildlife management agencies engage in actions to provide optimal wildlife populations for all citizens and for their recreational enjoyment. And, private landowners have legitimate concerns about public activities on their private land. How can we best provide public access to public wildlife when that access is influenced by private land? Together, we have to keep our eye on the prize—maintaining recreational access to public wildlife. Solutions may be simple or complex, I don't know yet. But I am pretty sure that they will have to be collaborative.

The Arizona Game and Fish Commission is trying to figure out just what possible alternative solutions might look like. If you receive a survey in the near future, we would ask that you please share your feedback with us. In the meantime, we would like to hear of any suggestions on how best to solve the dilemma presented by private lands and public wildlife. We will be providing a link for posting these ideas on our web site in the near future at www.azgfd.gov I hope you'll also feel free to drop any of your valuable ideas in the mail addressed to:

Al Eiden Landowner Relations Program Game and Fish Department 5000 West Carefree Highway, Phoenix, AZ 85086

Larry Riley is Acting Assistant Director, Wildlife Management Division of Arizona Game & Fish

BOW Happenings

2011 BOW Report

By Linda Dightmon AZ BOW Coordinator

ow, it is hard to believe another year is winding down. Mom was right. She always said that the older you get the faster time flies. 2011 marked the 15th year of the Arizona Becoming an Outdoors Woman program and the eleventh year for me. Yep, it is a lot of hard work. Why do I keep doing it? I do it for the grandma who wants to take her grandkids camping. I do it for the single mom with a son showing interest in hunting or shooting. I do it for the woman who always wanted to try fly fishing but had no one to show her how. I also do it to show off the incredible diversity and beauty our state has and hopefully get these ladies to love it as much as I do. You can't conserve or protect stuff you don't even know exists.

I am proud of the accomplishments the program has achieved this year. We organized and executed three successful 3-day workshops. We forged a new partnership with the Arizona Game and Fish Department. We also helped Kathy Greene kick off Arizona Outdoor Woman.

In the winter of 2006 we launched the first ever BOW Deluxe. This is a smaller workshop held in the B&B type venue of Saguaro Lake Ranch. Sessions focus on the living, learning and playing in the Sonoran Desert. Since then, the BOW Deluxe has filled every year but one. At the 2011 workshop we recruited Extreme Huntress Marcy Harris to teach a Javelina Hunting class. This is the first time we tried a hunting class for a single species. Did it work? Several ladies in that class harvested pigs at a spring woman's HAM hunt. Others went and had a great time. How cool is that?

April 1st-3rd we held the traditional spring workshop at Friendly Pines. Each workshop is unique but this one was really different. Women have been requesting for years a hand's on big game field dressing class. BOW programs in deer rich states get a nice fat doe to field dress but that was not going to happen in Arizona. Thus, we have dubbed the Spring 2011 BOW the Year of the Goat. Yep, we purchased a domestic meat goat. On Friday the Field Dressing class, gutted and quartered the goat. They even caped it! Saturday morning we had a Butchering Big Game and a Sausage Making class and because my mother taught me to eat what you kill, guess what the Dutch oven class cooked? God bless Dutch oven gueen, Barb Kennedy, because that goat was delicious! Many thanks to volunteer John Nevins of 4 Peaks Game Processing for the Field Dressing class and long time volunteer, Bill Deshaw for the Butchering Big Game class.

Due to some scheduling conflicts at the camp, the August workshop was moved out two weeks. This meant that we would loose the wonderful services of the Arizona Flycasters. Now, this club does everything for us. They teach three different fly fishing classes and conduct an ongoing fly tying workshop both evenings. I was lamenting what to do when Bill Larson stepped up. He volunteered to teach the three fly fishing classes, his warm water fishing class AND the Saturday



night catfishing event! We had a full compliment of 100 participants and his classes were full. Super instructors Mark Hullinger, and Don Greene were there to help out as well as new comer Jack Campbell from the fly shop at Cablea's. But it wasn't easy. Brian, Connie, Sara, Cathy, Marion, Donna and Elsie of the Arizona Flycasters. We missed you and so did Bill!

With some preplanning by the participants, BOW participants can now get their Hunter Education certificate at the workshop. She completes the online course, in advance, from the Arizona Game and Fish Department's website. The field day requirements and written exam is completed at the BOW workshop. To fulfill the requirements the student takes Basic Firearms Safety at Friendly Pines Camp where the written exam will be given. Then she takes the Beginning Hunting, which includes a Simulated Hunt as well as either Basic Shotgun and clay targets orientation or the Rifle Marksmanship class. We graduated 6 new hunters in 2011. I am excited to be a part of getting women in the field.

Every workshop on the evaluations we get at least 5 or 6 people that want more. They cherish that special camaraderie that comes out of our program but want more detailed instruction. Arizona Outdoor Woman is an attempt to help those ladies that have outgrown BOW but are not quite ready to face the great outdoors on their own. Already, Kathy has organized a Macro photography workshop, an ATV ride and a camping trip is planned for this fall. Contact www.arizonaoutdoorwoman.com for more information.

Eleven years. Why do I do it? There are selfish reasons too. Our instructors are the best. Not just great instructors but great people I have made lifelong friends. I have found like minded people who share a passion for wild lands and the wild things that live there. The real world my mother would call it, the places where the wind will blow the stink of the city from your body. We need to recruit these women, these heads of families, these *voters* before all of the wild places are gone.

Want to help? We are always looking for folks to help bring stuff to camp and drive the shooting class to the range. Contact Kim at the office. 480-644-0077

2012 Dates

January 27-29, April 20-22, September 7-9



Barb Kennedy and the Dutch Oven class prepares the evening meal for the entire workshop (Deluxe)



Judy Miller, Alice Stephenson, Betty Jo Soehlig were at the first BOW in 1996. Kathy Greene mugs with the tee shirt in the background (Deluxe)





Sisters Judy Drayer and Kim Kreuzer (August)



Bill Larson is still all smiles Sunday morning (August)

Lynda Zanolli



Lynda Zanolli, Education Center Director for the Verde Natural Resource Conservation District received the AWF Education Conservationist of the Year award from President Tom Mackin

er eyes sparkle with excitement whenever she talks about the various events, projects, and sessions she "juggles" in her supteaching posed 20 hour work week for the Verde Natural Resource Conservation District. Lynda Zanolli is in her 2nd year of employment with the District and continues to exceed every expectation the supervisors had in mind when they hired her to expand the visibility, educational scope, and viability of the Verde NRCD Ed Center. Word of the quality of her work and her zeal for the subject at hand, conservation of natural resources, has led to a second part-time position with the Western Yavapai Conservation Education Center, meaning she travels to and sets up temporary housekeeping with her 5th wheel trailer in the outlying communities of Yavapai County like Baghdad and Chino Valley in order to accomplish her educational tasks.

Lynda is a retired science teacher, genuinely enjoys children of all varieties, and has a natural affinity for vocalizing her message in ways children of various ages and abilities can comprehend. She is a hands on, don't be afraid to get dirty, learning is fun sort of teacher and the participation level of her classes is exceptional. Beyond having the background as a science teacher, she has become trained in Project Wet, Leave No Trace, and Training the Trainer (Leave No Trace) programs.

Being experienced in working with school curriculums, she has been able to make determinations about which subject matter fits into each school districts' curriculum and the appropriate age and grade for her multiple available presentations/projects.

Lynda's repertoire goes from reading the book "Seed, Soil and Sun" to K-1 students, to reading about the planting/growing processes of seeds through Dr. Seuss' "Oh Say Can You Seed" to 2nd graders, to running a clay pot painting art class that incorporates the middle school students learning about the benefits of "AlterNATIVE" plants versus the down side of invasive plants, to live demonstrations for 6th graders of By Ryna Rock

ground water flows and recharge to aguifers (done in every 6th grade class in the Verde Valley), to teaching Leave No Trace Workshops to Northern Arizona Boys Girls Club and to YouthStEP participants from the Yavapai Court system during summer school break, to showing Verde River canoers how to use a Leave No Trace firepan kit, to interactive game playing (Energy Tic Tac Toe) about renewable energy versus carbon based energy at Boys and Girls Clubs during the summer, and

Recently she accomplished training of 35 high school students, 25 teachers, and 40 other volunteers in order for them to teach 420 4th grade students about watersheds and water conservation at a Project WET Splash Festival. She has also trained two adult volunteers in Groundwater lessons, which has resulted in their presentations taking place at Big Park, West Sedona, Beaver Creek, Oak Creek and Clarkdale/Jerome Schools before the end of the 2011 school

Beyond all this Lynda makes the time to represent the Verde NRCD at meetings and events when the board members are not able to schedule those events for themselves, then brings a detailed report back to the board to enable better decision making and collaborative efforts. She has been instrumental in the success of the Verde NRCD's Wildlife Escape Ramp Project by traveling to various locations to provide a variety of venues with both information on the project and the ramps themselves, since they are being provided to Verde Watershed ranch and livestock operations free of charge for use with watering troughs and sold at a minimal cost to other interested landowners throughout the state. Lynda has been very active with the Verde Birding and Nature Fest and Verde River Day, interacting with the committees that plan and promote these events all through the year, and taking on a variety of responsibilities connected to both events. She tables for the Verde NRCD at both events. acting as the "anchor" person for planning and manning the District's booth, making sure the emphasis is on public conservation education, with an emphasis on water, soils, invasive species and sustainable agriculture.

Lynda is making a difference about knowledge of natural resource conservation in Central Arizona with our children, and by extension, their parents and other adults they interact with. Already she has had the opportunity to reach out to more than two thousand children in successive years, who have demonstrated through their later contact with her that she did make a difference. Her outreach to the public at large at the Verde NRCD's tabling events is just as successful as her inventiveness has extended to improving and expanding the Verde's informational/educational display capability, which has raised the level of enthusiasm of the other volunteers who work with the public on behalf of the Verde NRCD. A person of her caliber deserves the recognition and thanks of the conservation community as a whole for they prove themselves over and over to be an inspiration to all of us.

Oven size **Number of briquettes** Top **Bottom** 10-inch 10 to 12 8 to 10 12-inch 12 to 14 10 to 12 14-inch 14 to 16 12 to 14 16 to 18 14 to 16 16-inch



was asked recently if I could provide some infor-

mation on the basics of Dutch Oven cookery. Since I have proven repeatedly that I am not an expert on this, I am sharing information found in a US Forest Service Heritage Cookbook and from UPublish Info, a free online informational site.

"Dutch ovens are typically made out of cast iron. This gives the oven a lot of durability. If cared for properly, it can last for generations to come. If you buy them brand new, they will come with a thin layer of protective coating. You'll have to wash that off. It's okay to use a piece of steel wool for this job, but for future cleaning, you should only use hot water and a soft sponge. Once everything is removed, you will then have to wipe the inside with a thin layer of grease or oil. It needs to be baked inside a very hot oven for about an hour as this is called seasoning your pot. Let the Dutch oven cool completely, and you will be ready to cook in no time.

When using your Dutch oven, the key is controlling the temperature. Cast iron tends to retain heat for long periods of time. This means that if you get your pot going too hot, you might not be able to control it. While you have the option to cook on an open fire, it's still best to use coal or briquettes. This way, you can discard any extra pieces just in case the pot gets too hot. You're likely to end up burning your food if you let the temperature rise. An open flame is fine for soups and stews, but not for fry-ups and others.

Dutch ovens have the tendency to get hot – too hot. This is why you need a pair of gloves so you can transport it from place to place. You'll need some fire-handling gloves, but working gloves will do the trick as well. These are especially handy when you're working outside in the campfire. Leather is still the best material when it comes to gloves, preferably with a lining of insulation on the inside. This protects your hands fully from the heat and flames. If you're cooking outside, you might also want to bring a shovel with you. This allows you to stir coals or briquettes. You'll also be able to handle the pieces easier, as some cooking methods require you to place them right on top of the pot." (Courtesy of UPublish Info)

Food that requires baking such as biscuits, breads and cakes, need most of the heat on the top. Coals should be placed under the over and on the lid at a 1 to 3 ratio with more on the lid. For roasting, the heat should be equal with the same number of coals on top as underneath. For frying, boiling, simmering and stewing, heat should come from the bottom

Camp Cook



By Ryna Rock

only. To keep biscuits and other baked food from burning on the bottom, remove the bottom heat after two-thirds of the total cooking time.

To share heat and serve dishes that are similar in cooking time, ovens can be stacked. This technique requires careful watching, to ensure that the bottom oven does not overcook.

Depending on the size of the Dutch oven, each briquette adds between 10 to 20 degrees of heat. Placement of briquettes is important, because heat is more evenly distributed if placed in a circular pattern on the bottom and in checkerboard fashion on the lid. Remember that it is much easier to raise the heat in a cast-iron oven than to lower the temperature. Also, temperatures inside the oven will vary according to altitude so the cook may want to use a thermometer to check oven temperatures when using for the first few times. Rotating the oven every ten minutes will also help distribute the heat in a more uniform way. The lid can also be rotated a third of a turn in the opposite direction every ten minutes.

Another thing to remember is that ovens can crack if heated too quickly or if cold liquid is poured into a very hot oven. We are including temperature control guidelines above for your convenience. (Courtesy of Gibbs Smith, Publisher – Camp Cooking 100 Years - by the National Museum of Forest Service History)

WHADDA' YA' KNOW? Answers

- 1. Not enough Personal Flotation Devices for everyone on board
- 2. When boating be safe, be courteous, be responsi ble, and be involved
- 3. Absolutely!
- 4. 20,000 eggs annually
- 5. Up to 1 million (1,000,000!) eggs annually
- 6. Human-related activities on your boat, in bal last water, a bilge, a live-well or other boat com ponent or equipment that holds water

(From Page 12)



Historical Tales

Reproduced by Ryna Rock from Arizona Wildlife Magazine, May 1969

Don't Be Critical of Littl' Old Ladies In Tennis Shoes

By Wendell Bever, NWF Field Representative

A few years ago the new phrase "total environment" was coined by the ecologist. The ecologist is a professional who studies the relationship between living creatures and their environment. He is deeply concerned with man's treatment of planet earth. He knows it's all we have! Perhaps if we knew as much, we would share his concern. Within the past decade, people are becoming more aware of the wild creatures around us and how important the environment is to their continued survival. People are beginning to worry.

This public awareness has created a new generation of conservation-minded citizens. At one time the hunter, fisherman, and a few other users of the resource stood alone, but no longer.

A wide variety of Americans have turned to the wild environment with great enthusiasm that is sometimes misguided but, quite often, gets things done. It's surprising how many battles are won by determined old ladies standing in the path of the bulldozers, or a battery of garden clubbers sending an avalanche of letters to their congressman.

The point is, state members of the National Wildlife Federation affiliates should look, listen, ponder and learn. In many states the affiliates may be exclusive fraternities of die-hard hunters and fishermen. But in a few the affiliates have a rainbow mixture of birders, hunters, scientists, garden clubbers, boaters, fishermen, outdoor writers—a great variety of recreational enthusiasts. Which is the stronger, the single purpose or multi-purpose affiliate?

What does a garden club member have in common with a hunter? Other than how the resource is 'used', the basic objectives are identical. If you

are critical of 'little old ladies in tennis shoes', don't be. In Missouri they helped to save one of the nation's most beautiful rivers for floaters and fishermen and in Oklahoma they made the United States Army back down in a plan to take over the Wichita Mountain National Wildlife Range.

The total environment doesn't discriminate between types of users or lovers of the wild country and neither should we.

We all enjoy the quality environment. The preservationist might say' "I would rather look at wild creatures", and you might respond, "I would rather hunt them".

To each his own, but conservationwise, a quality environment is essential for the continuance of wildlife, whether we hunt or just look. Obviously the users of the wild environment would do well to stop in-family bickering and join forces.

I am basically a hunter, a consumptive user of the resource. However, with the rapidly expanding competition for space and the corresponding industrial and agricultural demand upon our resources, I would be downright stupid to adopt an attitude of 'go it alone'.

This is why I believe nonconsumptive users, if there is such a thing, have a place in the wildlife federation affiliates. No person or group of persons should be denied the opportunity of 'joining' if his interest helps promote our cause. We have no business looking a gift horse in the mouth. Even worse, to start a feud provides mighty good fodder for those economic titans who operate on the principle that resources are made to be exploited or all environment is made to be tidied up in clean fields of grain, domestic grasses, urban sprawl or great industrial complexes.

Deep-thinking people will agree it was the organized sportsman and hunter who saved most wildlife when no other person cared enough to help. Today the vigilance and efforts required to maintain a quality environment is faced with a major confrontation with industrial and agricultural growth.

A controlled exploitation of the natural resources is based against the premise that benefits expansionism is good for us. It is almost considered a sin to oppose the cry of the Chamber of Commerce barker who operates on the thesis of more people, more industry, and so on, ad infinitum.

On the front page of a local newspaper I read about a major development just completed that will eliminate pollution in a certain city. On another page there's a column about a new carburetor gadget that burns twice as much gasoline to eliminate half the smog. When we still face a losing battle with environment pollution—on all fronts—this kind of talk is just lip service or smokescreen.

We aren't winning the pollution battle, we are losing. We need help, anybody from housewife to Boy Scouts. You may not believe it but that housewife and old Joe, the carpenter, and many more serious Americans are looking for a way to help. If you don't believe it, why the sudden proliferation of organizations explicitly interested in the total environment?

There is a need for state wildlife federations to expand their membership to include any group that will work. This means garden clubs, professional science groups, youth organizations, bird clubs, camp organizations, yacht clubs—any user of the natural environment is a potential member.



Streams and Game Trails

By John Underwood



Wind Wind Wind

I can't remember when we have had this much wind during the spring months. March started out fairly calm and then by the second week it began to blow. The fishermen I have talked to indicate the conditions are tough. "Fish are being caught but the wind makes it difficult and just plum wears a body out." I have to agree. Been to Roosevelt five times March through May and probably had only one or two days out of four day trips where the wind was manageable. As one fisherman put it: "Bass are definitely catchable when the wind is blowing hard, but it can be a challenge."

Swim baits, and spinnerbaits, chartreuse or white in color worked well in the wind and in the calmer waters. Senko's rigged wackey style also worked well. Go get'em and good fishing!

Sharpen a Knife with a Cup.

Take any coffee mug and turn over so bottom is up, along the unglazed porcelain side of the bottom edge, run your knife across at a 30 degree angle a couple of times on each side, wipe off and you are ready to use a sharpened knife.

A Little History:

Monofilament line. The electric trolling motor. A spring-loaded bobber. Where would we be without them? The American Sportfishing Association announced the Top Ten list of influential items that have changed the way people

.Think you know what they are?

1. Original Floating Minnow: 1936 — Rapala

Perhaps the most popular and successful lure in history.

2. Spring-loaded Bobber:

1947 — Nibble Nabber

Found in almost every angler's tackle box.

3. Mitchell 300:

1949—Mitchell

Who hasn't fished this spinning reel?

4. Creme Worm:

1949 — Creme Lure Company The plastic lure that started it all.

5. Closed Face Spincast Reel:

1949 — Zero Hour Bomb Company

How every kid learns to cast.

6. Lowrance Fish Lo-K-Tor:

1957 — Lowrance

Known as the "Little Green Box" introduced anglers that sonar...the first ones were actually red.

7. Monofilament Line: 1958 — DuPont Stren

What did they use before mono?

8. Minn Kota Trolling Motor: 1958 — Minn Kota

Lets you crowd that other boat... quietly.

9. Fenwick High Modulus **Graphite Rod:1972 — Fenwick**

Probably started the "hold-the-rodtip-to-your-throat-and-talk" test

10. Shakespeare Ugly Stik:

1976 — Shakespeare

Scents that keep fish away

Yep, sunscreen. More specifically, the Para-Aminobenzoic Acid (PABA) found in many sun-block products is what fish don't like. Instead, use a sunscreen that has titanium dioxide (TiO2) as an active ingredient. It'll protect your skin without chasing fish away.

If you said DEET, the active ingredient in many insect repellents: Congratulations. Turns out fish are turned off by the chemical structure of the molecule in this

City tap water and the water in swimming

pools contain chlorine—a heavy-duty fish repellent.

Surfactants, like sodium lauryl sulfate (SLS) and alpha olefin sulfonate (AOS), help hand soaps and dishwashing liquids dissolve oil and grease. They also repel fish. In fact, the U.S. Navy has experimented with them as shark repellent.

Nicotine from tobacco products. 'Nuff said.

Boat grub like chips, crackers, and snack cakes and cookies may satisfy your appetite, but many of the additives they contain are sure to turn fish away. Wash your hands in lake water after chowing down or a hand cleaner odor eliminator that is biodegradable designed for washing

Kids and Fish

Jimmy Houston said it BEST

Kids like instant gratification, have short attention spans, bad patience, lack focus, and their minds tend to wander. Seriously though, to kids a fish is a fish. They are just as happy catching a bucketful of little ones than a couple of big ones. Start them with methods that don't require much skill and don't make a lesson out of it. make it fun

If the fish aren't biting, who cares? The kids certainly don't. Frogs and dragonflies and crayfish can fascinate them as much as fish. Skipping rocks, digging worms, watching snakes, and saving tadpoles will definitely entertain them

Pick a bouquet of wildflowers to take home to Mom. See how much trash and litter you can pick up and bring home too. That's a great lesson also. When kids are ready to get serious about fishing and really learn how to do it, they will let you know. In the meantime, just have fun and make a memory

Until next time, Be Safe and Enjoy the Great Arizona Outdoors

Membership

Annual Meeting Election of Officers

Due to the Wallow Fire burning in Northern Arizona, the location of the 2011 AWF Annual Meeting was moved from Sipes Wildlife Area to a conference room in Bass Pro Shops. Not quite the atmosphere that the BOD had expected, but the meeting was productive. A big thanks goes out to Bass Pro Shops for making the room available to us.

The Arizona Predator Callers. Verde Natural Resources Conservation District. Arizona Wildlife Education Foundation and Arizona Trout Unlimited had representatives present as delegates.

The following officers of the AWF Board of Directors have been elected to serve another term:

President - Tom Mackin Vice President - Conservation -**Brad Powell**

NWF Representative - Bob Vahle

Alt NWF Repersentative - Brad Powell

Region 1 Director - Bob Vahle Region 3 Director – Loyd Barnett Region 5 Director - Larry Audsley

Directors at Large - Chris Fonoti, Glen Dickens & Jov Hernbrode

The vacant Region 6 Director spot has been filled by Mike Matthiesen by a unanimous decision of all voting delegates present.

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

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 Memb	ership Application				
	Your Persons of the Market State State State		\$ 15	Junior (17 & under)	
Name		9 0	30	Individual	
Address					
City	State Zip		75	Individual - 3 years	
Phone	Email	_	45	Family	
Check Enclosed!			110	Family - 3 years	
Please bill my Mastercard Visa Discover			100	Patron	
			500	Life Member	
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			500	Benefactor	
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