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ARKANSAS WILDLIFE FEDERATION
PRESIDENT’S MESSAGE

Winter is finally here, I think. 60 degrees one day, 30 the next. The joys of living in The Natural State. Winter is a great time to get out and explore the many local, state and national parks we have. The afternoon weather is usually decent and you can see many different things in the late winter.

Thankfully, the Recovering Americas Wildlife Act passed out of the House Natural Resources committee 26-6. Please thank Congressman Bruce Westerman for his yes vote in committee. Now we can only hope it will get a chance on the House floor for a vote. Thank you all for the support and help over the last year working on this. Don’t stop! We still need to get that full vote and also need support from Senators John Boozman and Tom Cotton.

We are in the middle of duck season as I work on this letter. It has not been bad or good, somewhat in between. Got a chance to hunt with one of my best friends Billy Palmer and his son Gil at their club in Jonesboro. I think I might have harvested one or two ducks. Gil is a shooter in the Arkansas Youth Shooting Sports Program. He is a truly gifted young man. It was a joy to be with them and watch him shoot and watch Billy’s dog Blue retrieve the ducks. If you know me, I was enjoying my time outdoors with good friends with my thermos of coffee and a good cigar.

At our fall board meeting at the Bass Pro Shops, we enjoyed a chance visit from past board member, Gary Bush. In this issue, Gary shares some great tips on creating natural deer habitat that will keep your deer healthy year round. Please check out the article and if you see him, ask him about the fantastic muzzle loaders he is building.

It’s never too early to start working on the Conservation Awards we give out each summer. Start thinking about who you would like to nominate and go to arwild.org to complete a nomination form. The Conservation Awards Banquet will be headed to Heber Springs this year. Details to follow in the next issue.

If you all are not following the AWF on Facebook, please do. Jim Taylor is doing an excellent job of getting articles and pictures up on a weekly and sometimes daily basis.

“Here is your country. Cherish these natural wonders, cherish the natural resources, cherish the history and romance as a sacred heritage, for your children and your children’s children”

- THEODORE ROOSEVELT

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Arkansas Wildlife Federation Mission Statement
To promote conservation, responsible management and sustainable use of Arkansas’ fish, wildlife, habitat, natural resources and outdoor recreational opportunities through education and advocacy.
Whether you have an apartment balcony or a 10-acre farm, a schoolyard or a business park, or anything in between, everyone can create a welcoming haven for local wildlife.

Turning your space into a Certified Wildlife Habitat® is fun, easy and makes a big difference for neighborhood wildlife. Get started today! Become a member of NWF’s certified wildlife habitat community and receive the following benefits:

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When you certify your wildlife garden with National Wildlife Federation, it is also counted towards the Million Pollinator Garden Challenge. Your application processing fee helps NWF increase declining habitat for bees, butterflies, birds and amphibians, and other habitat nationwide!

Certify your wildlife habitat at www.nwf.org/Garden-for-Wildlife/
THIS SEASON, hunters will enter the outdoors in hopes of harvesting deer while also gauging the success of their management efforts. Deer harvest is a critical part of quality deer management but it's the past, as well as the ongoing efforts of well implemented plans that have a long lasting effect on the current hunting season and future success. The amount of information concerning quality deer management is sometimes overwhelming and ever changing. To make things simple I decided to narrow down a simple outline that could be followed and updated periodically that has worked well in the past.

1 Obtain an aerial photo of the property and adjacent lands. Recent photos are available from the Highway Department, assessor’s office, or the FSA (Farm Service Agency). Some aerial photos are available on the internet through various sources. Laminate the photo and put a foam board backing on it. This will serve as a working visual aid from year to year. Crop rotation and timber harvests can be noted using erasable markers. Game will change patterns depending on cover, wind and food locations. Consider the 1,000 acres around you as a management area. Use the aerial photos in conjunction with topographical maps to identify the terrain. In addition, you may want to get a soil survey book (free) from the FSA. These are by county and can give some insight about the terrain and current soil conditions of the areas under management. A soil survey map is very beneficial in swamp or bottomland areas. Also, each type of soil will contain a description of its characteristics. A topographical map in a flat swampy area may not reflect subtle rises in elevation. A soil survey map will reflect different soils that generally are higher in elevation and can be key in the identification of funnels, food or travel areas.
2 Fertilize natural summer time foods (weed patches, honeysuckle, etc.). This will boost deer food production in the area. Also, use the soil survey map and a plant identification guide to locate good natural foods for deer. Contact the county Agriculture Extension Office for information and assistance. The FSA office or a local farmer can lead you to this resource. Make sure to soil test before fertilization.

3 Increase browse availability. Deer feed on acorns or crops but this is a limited food source. Deer are creatures of the edge and tend to feed on what is growing from four feet high to the ground. This can be done by small timber harvests around the edge of the woods, selective timber cutting, mowing existing browse or tilling right-of-ways every few years. The creation of browse will increase the amount of food for game and will also increase the carrying capacity of the land. Periodic tilling (disking) of overgrown or set aside fields throughout the spring and summer months promotes new growth of natural foods. This is often a low cost but promotes high production of food availability. Where possible, controlled burning of certain types of terrain is also beneficial in the creation of浏览 and cover for game.

4 Establish good mineral licks with a least one lick for every 80-100 acres. Using a three pound coffee can as a measure put in the following: one part stock (regular) salt, two parts mineral and vitamin mix and one part di-calcium phosphate which in pure form is 19% Phosphorus and 21% Calcium. This will increase fawn birth weight and boost antler development. The di-calcium phosphate increases lactation and keeps the game healthy. Deer spend the first three years of life growing bone mass. Increasing the birth weight “jump starts” the process. Encourage your neighbors to do the same and everyone will benefit. Add additional salt if use is not noted within a couple of weeks. The di-calcium phosphate is bitter and extra salt will offset the taste. In areas that are already rich in phosphorus such as bottom land soils, calcium carbonate can be used instead of di-calcium phosphate, however, the di-cal is better all around.

5 Establish cool and warm weather food plots. You want to plant food plots that provide high levels of protein in warmer months and high levels of carbohydrates in winter. When summer crops play-out and the acorns are gone deer will need nutritional food. Ladino clover is a favorite and will grow good for several years with proper lime and fertilization. It is higher in protein than other clovers and will grow good in moist conditions. Deer also like turnips, canola, hairy vetch, wheat and oats. Use all available ground that will not be flooded or put in seasonal crops or pasture.
Plots should be large enough to prevent over grazing. Place them where deer feel secure and intruders can’t poach them. Plots serve three purposes: surveying the population, attracting deer for harvest and supplemental food during high stress periods. The majority of people plant food plots to hunt over them but the plots are more important for holding deer on your property and creating a quality herd.

Late winter and before spring green-up is a very stressful time for deer. This is also a critical time for pregnant does especially those carrying buck fawns. Research has indicated that the antler base (pedicle) of a buck develops during the third month of a doe’s pregnancy. If the doe is not well nourished during this time the buck fawn will not have good antlers despite genetics. In some cases under-nourished does abort during this time. This is where the long-term benefits of food plots and minerals are seen.

6 Provide supplemental feed during high stress periods and antler development stages. Make sure that this does not interfere with local game laws during hunting periods, or if it’s prohibited because of high deer density or disease. It is important to remember that this is a way of getting the game a complete diet. This can be accomplished in several ways. Timed feeders provide an easy and low impact way of providing deer with additional food. Pick locations that deer feel safe and away from a bad neighbor. Remember to provide foods that are high in carbohydrates in the winter and high in protein during warmer months. The method of supplemental feeding has the highest potential when placed adjacent to or in established food plot locations. This brings the deer to the plot area for other browsing and helps provide a balanced diet. This is also very beneficial for bucks during the antler development stage. Choose feeds that are low in sodium but rich in minerals and protein. Several people develop their own mix with a variety of food and mineral supplements. Many people feed corn but it does not contain all of the essential amino acids necessary for complete nutrition but can be mixed with a variety of other grains to make supplemental feeding more economical. The following is a list of good nutritional supplements: stabilized rice bran or a pelletized quality feed developed for deer. These are just a few and experimentation may be necessary to get the desired results.

7 Make a sanctuary. Create or designate a place(s) big enough for deer to hide and don’t hunt it. Do not go into these areas throughout the year except to replenish mineral licks established in the sanctuaries. Create cover that protects the deer from hunters and the weather. Mature bucks tend to like cover that hides their bodies from sight but they can see over. This type of cover is referred to as screening cover. The deer can peek over it but you can’t get a clear view through it. Thick brush patches or small stands of evergreens are great for this. This type of cover may be adjacent to your property already. Mature bucks need a safe and secure area to hide during daylight hours that is free from human activity.

This is essential to holding mature deer on your land.

8 Minimize human activity. Limit or restrict scouting activities to off-season only. As early fall approaches, around mid September, bachelor groups of bucks begin to disburse and begin pre-rut activity. Too much human activity such as repeated scouting or the use of ATVs throughout the property may push mature bucks off the land or make them completely nocturnal. Stay away from food plots and stands except to hunt and this will increase the odds of encountering mature deer.

9 Do not hunt if conditions are not favorable for the location(s). Be knowledgeable of the prevailing winds in your area and place stand locations on the downwind sides of travel corridors or food plot locations. Restrict or limit the number of stands on the property and do not hunt them if the wind is not to your advantage. Remember to practice good scent control in addition to playing the wind. This is essential when pursuing mature deer.

10 Survey the herd and control the harvest. Actual sightings are a limited way to adjust the herd and the use of cameras throughout your property can aid in the research. Encourage neighbors to do the same or find out what their objectives are for management. Establish a long-term plan or goals for area management. Set rules for people to follow and keep records of deer sightings and harvest. Mississippi has implemented quality deer management rules to increase age structure. Arkansas and Missouri have antler restrictions but some people are more restrictive. Please remember that the number of antler points is not an accurate indicator of a deer’s age. Take time to learn the physical characteristics of mature animals and use photo data from prior years to identify particular deer as they develop in maturity. If overpopulation is a concern, take more does when necessary. Harvest the oldest and largest does first. They tend to breed earlier and have two female offspring. The objective is to increase the age class of the bucks available for harvest and balance to buck/doe ratio closer to 1:1.

Arkansas Out of Doors - Winter 2020
Arkansas, "the Natural State," is famed for its mountains, caves, and hot springs. Outdoor recreation is a $2 billion industry in the state and nearly two-thirds of Arkansans spend time outdoors annually —paddling our rivers, hiking in the Ozarks, and duck hunting in our wildlife refuges. The Recovering America’s Wildlife Act will provide dedicated funding to implement the Arkansas Game and Fish Commission’s wildlife action plan, which outlines ways to protect species in need.

By the numbers:

<table>
<thead>
<tr>
<th>377 species</th>
<th>The AGFC has identified 377 species that need conservation assistance, including the Eastern collared lizard, monarch butterfly, red-cockaded woodpecker, and lake sturgeon.</th>
</tr>
</thead>
<tbody>
<tr>
<td>$14 Million</td>
<td>The Recovering America’s Wildlife Act would give AGFC $14 million every year to help the 377 species in need by restoring their habitats, removing invasive species, and funding research.</td>
</tr>
<tr>
<td>$600,000</td>
<td>The current source of federal funding in Arkansas for proactive, locally-led wildlife conservation—state and tribal wildlife grants—is inadequate to help these species at risk.</td>
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When you hear the word “minnow,” the first thing that probably comes to mind is “bait.” However, the family Cyprinidae (minnows) is the most comprehensive and diverse family of fishes in Arkansas. Our state is home to more than 60 native species of Cyprinids from 18 different genera, and they come in an amazing variety of shapes, sizes, colors, behaviors and ecological niches. In fact, with around 3,000 living species, Cyprinidae is the largest vertebrate family on Earth.

Cyprinids can be found in nearly every watershed in every corner of the state. Arkansas’s Cyprinids go by several common names – some are referred to as minnows, while others are identified as shiners, chubs, daces, or stonerollers. The family also includes the non-native carps, several of which are now found in Arkansas. The traits that define this family include a single dorsal fin, abdominally placed pelvic fins and bodies covered in a type of scales termed “cycloid scales” which have a smooth, uniform texture and a smooth outer margin. One fascinating trait of Cyprinids is that their teeth are not found in their jaws. Instead, minnows have teeth located on pharyngeal arches inside their throats. These arches make up part of a pharyngeal apparatus that also consists of a pad located on the roof of the pharynx, which allow them to process food.

Minnows can be among the most challenging fish species to identify. While some are distinctive, many others can be frustratingly similar in appearance. Ichthyologists (fish taxonomists) often rely on meristics, a tool that aids in the identification of fish such as minnows. Meristics involves quantifying countable traits such as the number of scales in a row along a fish’s lateral line; the number of fin rays in an anal, pelvic, or pectoral fin; or the number of gill rakers. Another tool that can be used to identify specimens in a lab is the number and arrangement of the aforementioned pharyngeal teeth.

Mouth shape can be a clue in the identification of some Cyprinids. While some species have “terminal” mouths that open at the front of the head and have jaws of equal length, others have “subterminal” mouths that open on the underside of the head. As you can imagine, species with terminal mouths feed in the water column or at the surface of the water, while those with subterminal mouths typically feed on the bottom. The size, shape, and position of the eye is another useful trait, as is the length and depth of the “caudal peduncle,” i.e. the fleshy, tapered end of the fish to which the tail fin is attached. In addition, the pattern or arrangement of breeding tubercles can help distinguish between...
otherwise similar species of Cyprinids. These hard, keratinized bumpy structures are arranged in rows that cover the heads of several breeding males.

During most of the year, minnows are not particularly colorful. Multiple species have a simple silvery coloration, while others might be drab brown, gray, or olive in color. Yet, during the spring spawning season, minnows can attain brilliant color, particularly males in breeding condition. Fish that are dull or drab much of the year may suddenly take on splashes of vivid crimson, yellow, blue, or purple.

One of the most notable species of Cyprinid in the state is the southern redbelly dace (Chrosomus erythrogaster), Arkansas’s only dace. Dace are a type of minnow characterized by extremely small scales, so fine that they almost appear absent, giving the fish a smooth, metallic look. Dace have small rounded fins and two prominent dark lateral stripes separated by a thin yellowish band. Males in breeding color have brilliant red undersides and bright yellow fins.

Southern redbelly dace are found in cold, clear spring-fed headwaters in the Ozark Highlands, frequently in areas with heavy growth of watercress. Because of its association with this habitat, the southern redbelly dace is an important indicator species whose presence is closely tied to the health of the streams it inhabits.

The genus Notropis, commonly called eastern shiners, is the second most numerous genus of fish in North America. Arkansas is home to some 24 species of these minnows. A typical species in this genus is the bigeye shiner (Notropis boops), one of the most widely distributed minnows in Arkansas. Bigeye shiners are found in clear, gravel and rock-bottomed streams and rivers. As its name implies, this species has a substantial eye. Other characteristics include a conspicuous dark band along the side that continues through the eye and around the snout.

Some Cyprinids, called “chubs,” have sensory organs known as barbels at the corners of the mouth. A barbel consists of a fleshy filament containing taste buds and olfactory receptors. Reaching a maximum length of up to 10 inches, the hornyhead chub (Nocomis biguttatus) is one of the more sizable native minnows in Arkansas. It has a small barbel, large scales, and is brownish-olive above with a pale belly and orange fins. Breeding males develop prominent tubercles and a bright red spot behind the eye. These fish are found in clear streams with gravel substrate.
During spawning season, the male hornyhead chub constructs a massive mound by carefully selecting stones that he transports in his mouth. When completed, the spawning mound can be up to 3 ft. in diameter and 1 ft. in height. These mounds are a common sight in clear Ozark streams and attract a host of other fish species, including other cyprinids that also like to spawn in them, as well as darters and sunfish that may feed on eggs.

The genus Cyprinella, or satinfin shiners, consists of six species in Arkansas. They can be recognized by their diamond-shaped scales, which are taller than they are wide. They have a deep, laterally compressed body, and males often develop vivid colors, enlarged fins, and tubercles during the breeding season. The steelcolor shiner (Cyprinella whipplei) is widely distributed in Arkansas in streams with clear water and gravel bottoms, where it often congregates in or below riffles, the fast-flowing, shallow, portions of streams.

Most of the year, satinfin shiners are a metallic silvery blue-gray color, but during the breeding season, males become iridescent steel blue, with red snouts and lemon yellow fins. Arkansas is home to four satinfin shiners in the genus Luxilus, referred to as highscale shiners. These deep-bodied shiners have big scales and big terminal mouths. The bleeding shiner (Luxilus zonatus), one of the most striking highscale shiners in Arkansas, gets its name from the blood-red markings on its head and fins. In Arkansas, this species is confined to the Black River basin, where it is typically one of the dominant upland stream species. It prefers deep riffles or pools, moderate current, and gravel substrate. Males excavate shallow nests, often within the spawning mounds built by hornyhead chubs.

The genus Lythrurus, or finescale shiners, consists of three species in Arkansas. The delicate Ouachita mountain shiner (Lythrurus snelsoni), endemic to the Little River system in the Ouachita Highlands, is often found at the margins of water willow-lined pools in clear, fast-flowing streams.

The genus Pimephales, or bluntnose minnows, consists of four species, all of which can be found in Arkansas. Pimephales minnows exhibit pre-dorsal scale crowding – the scales on the nape (the portion of the fish in front of the dorsal fin) are much smaller than the scales further back on the body. The bluntnose minnow (Pimephales notatus) is abundant in various aquatic habitats, including streams, rivers, and lakes, across much of Arkansas, although it is most common in highland areas such as the Ozarks and Ouachitas. It can typically be found in quiet pools and backwaters away from fast stream currents. It has a slim body, a black spot at the base of the tail fin and frequently another black spot at the base of the dorsal fin (although this trait may vary from one population to another). Breeding males exhibit very prominent tubercles on the head.

Some of the most familiar, yet important Cyprinids in Arkansas are the stonerollers, members of the genus Campostoma. Arkansas is home to three very similar-looking species in this genus, including the central stoneroller (Campostoma anomalum) and largescale stoneroller (C. oligolepis) found in the Ozark Highlands, and the highland stoneroller (C. spadiceum) found in the Ouachita and Boston Mountains, and the Arkansas River Valley. If you’ve ever been walking along a clear mountain stream in Arkansas and noticed a populous school of minnows shimmering as they move back and forth in the water, these are most likely stonerollers. As they shimmy form side-to-side the iridescent scales on their sides catch the sunlight.

Stonerollers feed primarily by scraping algae off rocks, and they have a number of adaptations to this lifestyle, including a subterminal mouth and a hard, chisel-like cartilaginous ridge on the lower jaw used for scraping. In clear, upland streams, Stonerollers are often the single most abundant fish species. Their herbivorous feeding habits and considerable numbers mean that stonerollers play an extremely important role in stream ecosystems, as stoneroller densities are tied to the prevalence of algae in streams.

While fascinating and beautiful in their own right, minnows play an incredibly important role in Arkansas stream ecosystems, frequently serving as an important food source for bigger fish species, including game fish. Whether using a dip-net, seine, or a snorkel and mask, any clear stream in the state can afford fantastic opportunities to see a variety of these amazing little creatures.

Dustin Lynch is the Arkansas Natural Heritage Commission’s (ANHC) aquatic ecologist. The ANHC is a division of Arkansas Heritage.
Bat Superheroes Need Us!
Pass the Recovering America’s Wildlife Act

“Everything’s impossible until somebody does it.” — BATMAN

Swooping and scattering in the darkening sky, bats are the superheroes that protect us while we sleep. With little fanfare, they snap up tons of mosquitoes and crop-damaging insects. Others pollinate night-blooming flowers and spread fruit seeds. Consider this. Without fruit-eating bats dispersing cacao seeds, we would not have chocolate!

But bats are in deep trouble everywhere, including Arkansas with three species already endangered—the Ozark big-eared bat, gray bat, and Indiana bat. Decimated by disease and habitat loss, they need us to come to the rescue.

Fortunately, the Recovering America’s Wildlife Act offers timely solutions for bats and many other wildlife at risk. The bipartisan bill in Congress would fund state wildlife agencies to take proactive measures to prevent wildlife from becoming endangered, and to recover those already imperiled. Arkansas Game and Fish Commission’s share of the $1.3 billion for conservation would be $14.5 million annually.

White-nose Syndrome—stop the spread & find a cure
A deadly disease called white-nose syndrome has killed an estimated 6.7 million hibernating bats in North America—all since 2006. Twelve of North America’s 47 bat species have white-nose syndrome among them, and so far there’s no cure for the deadly fungus. At some caves, all bats have died. The bat catastrophe is the steepest decline of all North American wildlife caused by an infectious disease. Arkansas bats are threatened with the disease, too, that showed up in 2013.

Recovering America’s Wildlife Act will kick in the needed funding for states to accelerate their efforts and carry out action plans that are ready to implement. To date, the disease is confirmed in 28 states and five Canadian provinces (mostly east of the Continental Divide).

With critical and reliable dollars in place, scientists can speed up promising research to keep bats safe from the fungus that causes bats to wake up from hibernation, use up energy, and starve. States can protect more caves where bats hibernate. Disturbing even healthy bats in winter is harmful for their survival. Making sure visitors to caves are not carrying the fungus from another place is imperative.

Ozark Big-eared Bat
Dwelling in caves of the karst region, this imperiled bat is arguably adorable. Take those oversized floppy ears and a lumpy nose. Add in head nuzzling as a form of courtship, and who wouldn’t be smitten? With only a few populations in Arkansas Missouri and Oklahoma, these bats desperately need our help. Funds will help prevent human disturbance of caves, stop the spread of white-nose syndrome, and conserve habitat. The Ozark Big-eared bat flies after moths that live within mature forests of hickory, beech, maple, and hemlock.

Bat Power
Give bats a fighting chance, and these fantastic flying mammals could return to their superhero full capacity. That means helping them on all fronts.

At home, you can build bat boxes, save dead trees that can serve as roosts, and avoid pesticides that kill insects and harm bats. If you’re a caver, you can become a partner for bats and the future of caves in all their bat-filled wonder.

Contact Senators Tom Cotton and John Boozman asking them to go to bat for bats and support the Recovering America’s Wildlife Act!
The Becoming an Outdoors-Woman (BOW) program began in Arkansas in 1994. Each October, 140 women gather at the Arkansas 4-H Center near Little Rock to learn about and practice their outdoor skills. 2019 marked the 25th anniversary of the BOW program in Arkansas. With the breakdown of classes offered being one third hunting, one third fishing and one third non consumptive, there is something for everyone. Hunting classes consist of rifles, shotguns, archery, waterfowl hunting, field to freezer, hunting 101, and deer hunting. Fishing 101, fly tying, fly casting, fly fishing, and boating are among the fishing programs offered. Hummingbirds, SCUBA diving, self-defense, dutch oven cooking, camping, ATV riding, nature crafts, hiking, outdoor survival, herpetology, birding, and backyard habitats round out the non-consumptive classes.

The 2019 BOW had 138 women from eight states in attendance. Eighty six of these were first time participants. Women attend BOW for many reasons. Some of the reasons we hear repeatedly are feeling more secure about being outdoors, conquering fears, fellowship with likeminded women, and learning new skills. We have also seen life-long friendships get their start at BOW. Women may start the weekend as strangers, but walk out with strong bonds. Many women leave BOW Sunday afternoon saying the experience was much more than they expected.

The popularity of the program led to a second event held in November at the Ozark Natural Science Center in Huntsville. This smaller venue was perfect for some more in depth experiences. Thirty eight women took part in some very interesting classes. A guided quail hunt, deer check station, fishing trip, outdoor survival skills, edible plants, out-
door photography, food preservation, hunting observation hike, shotguns, fly tying, squirrel dog training, and dutch oven cooking were all part of the weekend activities.

The weekend long BOW events are a starting point for women to become more familiar with outdoor skills. Smaller BOW programs are offered throughout the year to allow women to build on the foundation they start at BOW. Squirrel Camp, a weekend long squirrel hunt was held last February at the Potlatch Conservation Education Center at Cook’s Lake. A fish camp was also held there in July. Along with boat fishing, bank fishing, and kayak fishing, the participants also learned to clean and cook their catch and back up a boat trailer. Kayaking classes along with trips on the Mulberry and Fourche La Fave Rivers were held in the spring. Other classes held throughout the state included, basic pistols, basic rifles, intermediate pistols, intermediate rifles, archery, crossbows, and fly fishing.

The 2020 Squirrel Camp is set for February 14-16th at the Potlatch Conservation Education Center at Cooks Lake. Fish Camp will be held there July 31-August 2nd. Many other programs are being scheduled for the upcoming year. Information about programs can be found on the Becoming an Outdoors-Woman Arkansas Facebook page or calling 877-676-6963.
Contemporary Rabbit Hunting in Arkansas

Story by Clifton Jackson, Arkansas Game & Fish Commission Biologist

Rabbit hunting has consistently remained as one of the more prevalent pursuits of hunters in Arkansas for several decades. Deer hunting has a stout presence atop surveys that assess hunter preferences, however the numbers of hunters that pursue rabbits, waterfowl, squirrel, or turkey are more evenly distributed than most would think. Small game hunting has remained quite popular, but does not garner as much attention as other pursuits that are comparably preferred by hunters. This is likely due to the economic influence that is tethered to some hunting pursuits. Contemporary rabbit hunting is likely more expensive than it has ever been, however average rabbit hunting expenditures are likely significantly less expensive than contemporary waterfowl expenditures. Although rabbit hunting does not carry the economic clout of other game pursuits, the tradition of rabbit hunting is still alive and evolving as rabbit hunters keep the sport moving forward in an era that is more challenging than it ever has been.

The good old days of rabbit hunting are likely in the rear view mirror of both young and seasoned rabbit hunters. The Settlement Era of Arkansas likely created optimal habitat for cottontails that fueled an unprecedented surge in the population of rabbits. Newly cleared lands, small farms, and the astonishing reproductive capacity of cottontail created a perfect scenario for a bustling population of bunnies. The unrestricted take of raptors and mammals that tend to depredate rabbits likely limited primary rabbit mortality to disease and human consumption. Cottontails thrived at remarkable population rates for many decades post-settlement. However, as farms grew larger and cleaner, rabbit habitat was drastically reduced. Similarly, the means and technology to drain wetlands and eliminate bottomland hardwoods would significantly reduce habitat for swamp rabbits, the cottontail’s larger cousin.

‘Babyboomers’ were the most recent generation to experience a bustling population of rabbits whereby obtaining the eight-rabbit bag limit was so attainable that it was the standard. The abundance of rabbits and the ease of hunting private lands in the 60’s, 70’s, and 80’s is vastly different from today’s times. Hunting agricultural field ‘turn-rows’ and other predictable habitats where rabbits were likely to hold up made for an easy hunt. There was more native warm season grass pastures, more use of fire to reset habitat, and less bush-hogging.

Habitat for both cottontail and swamp rabbits has declined significantly for several decades, but both species can be readily found in their respective suitable habitats across the state. Habitat is the most critical component of a robust population of rabbits. Jackrabbits were also a part of the native fauna in Arkansas, but they were unable to overcome the boom and bust of suitable habitat availability. Consequently, jackrabbits no longer reside in Arkansas. Fortunately, both cottontails and swamp rabbits continue to exist at huntable population levels.

Rabbit hunting in this modern era is certainly more challenging than it has been in several generations. Generation X likely felt a sharp change in rabbit hunting as the proliferation of the no trespassing culture dominated the landscape and severely impacted common access to private land – especially farmland. Subsequent generations see limited access to private land, but the land behind the private gates and signs has likely never been more unfriendly to rabbits than it is now. Farming practices that provided a population stimulus package for cottontails have faded into history. Turn-rows that were used to turn the tractor around and separate fields have largely disappeared and that took away the most critical component of rabbit habitat- escape cover. Herbicide use has also diminished rabbit habitat in and around agricultural fields. The Millennial Generation was left with a fraction of what rabbit hunting used to be in Arkansas. These factors likely had an effect on beagles as well. Whitetail deer were considerably less abundant de-
cades ago. The associated hazards of attempting to rabbit hunt alongside a thriving deer herd was less of a concern to most beagle owners a few of generations ago.

Although rabbit hunting is not likely to return to its former glory, there are some positive realities of contemporary rabbit hunting. Public lands offer some good hunting opportunities for rabbits. Increasingly, rabbit hunters are probably forced to hunt public lands due to poor habitat or lack of access to private lands. Hunting these lands are challenging as rabbits can go anywhere and they tend to have a lot of acreage to run. Swamp rabbits especially run hard and long and don’t hesitate to swim when being pursued. Arkansas is fortunate to have hundreds of thousands of acres of public hunting lands. However the public lands that host all of the essential elements of good habitat for cottontails or swamp rabbits are quite limited. Closed-canopied forest are not optimal for cottontails or swamp rabbits. Cottontails need open fields or young forest with a lot of escape cover that is widely distributed. Swamp rabbits need open forest or young forest with escape cover and tend to relay on the bark of young tress during winter. Both species flourish in environments with a diverse plant community. These habitats exists on public lands, but these habitats are not overly abundant in the public land offerings. Escape cover is the most important element of good rabbit habitat, but it is often an overlooked or underemphasized management practice.

Contemporary rabbit hunting is evolving and more challenging, but it is just as rewarding as it has ever been. Changing and adapting to the modern challenges is worth the effort. One key is to be able to confidently identify suitable habitat. There are many publications online that describe optimal rabbit habitats and best management practices. Rabbits have the reproductive ability to take full advantage of habitat improvements, and implementing rabbit management is relatively easy and inexpensive. Gain- ing permission to hunt rabbits on private land can be done and there are apps that may help. Finding public land opportunities can be aided by aerial photography that is readily found on computers and smartphones. The tracking/ training collars are a welcomed addition to the sport as the attitude of a tenacious beagle has changed little over time. The social media groups that have formed around beagles and rabbit hunting make it easy to get started and to learn techniques and strategies or simply watch rabbit hunting videos. Some public lands that are well known for rabbits have a solid following of seasoned beagle enthusiasts that have hunted or run dogs on the same piece of ground for decades. Seasoned rabbit hunters seem to simply know what to look for as it relates to finding rabbits. That skill comes with experience that is usually readily shared. The joy of watching and listening to a beagle run a rabbit is universal to all generations of hunters. Rabbit hunting in this modern era still never seems to get old! Although many aspects of rabbit hunting have changed, the classic fun is still appealing across the various generations of rabbit hunters.
THE OLD WHITE FARMHOUSE was tucked into a corner with woods on two sides. A gentle ridge dense with post oak lifted north and the woods extended west behind the house for nearly a mile. Granny and Poppy moved there when I was five. The woods held my attention from that first viewing.

Pastures spread out south of the forest with a tree-lined stream bifurcating the expanse of grass. Red cedar, wild cherry, and elm guarded the usually dry branch, and a small stock pond lined with cattails sat out in the wide open. I can still see bronze and gold flecks of sunlight sparkle and blink on the surface of its murky olive waters as a settling summer sun sinks below the horizon. The fields and the pond were my treasures. They were more than that. They were my holy places fenced in barbwire.

Rabbits hid in blackberry bumbles under the red cedars and elms. With a BB gun in hand, the cottontails were in my sights as the pasture turned brown with autumn’s first frosts. As winter rolled into spring, the pond became a daily destination. March was my best chance to hook a big largemouth and the bluegill bite was steady from April through October. Hatchling red-ear sliders caught in the June shallows were pets for a week or so before releasing them back to the warm pond waters. I could roam all over the opened land at will and all by myself. Wildlife abounded, but this was tamed ground, and even way back then I somehow knew that. Regardless, I loved the pasture and pond as much as anyone could love a place; it scratched a lot of itches.

But still the woods beckoned. There was something in there among the shadows, an untamed, secretive presence that whispered to me with every rustle of a rounded oak leaf.

I wasn’t allowed to go into the woods by myself, though, not at that young age. I was given the usual warnings: I could get lost. I could get hurt. I might cross a fence and wander into an irate bull on the neighbor’s property. The grownups’ ace card — they thought — was the threat of stumbling upon a copperhead hidden in the leaves. But that just made the woods more appealing to me. The chance to see a potentially dangerous beast, a creature with latent fierceness that would stand its ground, was the embodiment of a spirit I wanted to experience. I also knew the forest was where the bobcats and coyotes lived. From the front porch I’d heard their nocturnal voices on the ridge. I knew it was where the chuck-wills-widow’s melancholy song floated up through new leaves to a glowing spring moon. I knew it was where the fat,
This exciting visual art contest offers K-12 students in Arkansas the chance to display their creativity. The theme "Wildlife of Arkansas" acknowledges the natural beauty of Arkansas by providing the perfect inspiration for students to explore their natural artistic abilities. The term Wildlife is not limited to animals, but can also include wildflowers, natural landscapes, streams & rivers, etc. A special category will focus on the monarch butterfly and pollinators.

**Guidelines for Art (painting, drawing or collage)**

- Contest is offered to K – 12th grade students.
- Artwork must be student’s original work completed in the 2018-2019 school year.
- Entry must be on canvas, wood, paper or poster board.
- One entry per student accepted.
- Medium can be oil, acrylic, charcoal, pastel, watercolor, graphite, ink, and mixed media.
- Dimensions no larger than 24”x 32”. Please note size limit.

**Judging**

Submitted artwork is judged on creativity, skill and interpretation of the theme. A panel of professional artists will select 4 winners in each grade. Award winners are recognized in early May at an award ceremony with the winning artwork on display at the Witt Stephens, Jr. Central Arkansas Nature Center. The art exhibit will then travel to several AR Game & Fish Nature Centers throughout the summer.

**Awards are as follows:**

1st Place Winner .......... $100.00 award & certificate
2nd Place Winner ............ $50.00 & certificate
3rd Place Winner ............. $25.00 & certificate
Honorable Mention ........... $15.00 & certificate

**The submission deadline is February 15, 2020.**

Shipped art must be post marked by Feb. 15, 2020.

Visit [www.arwild.org](http://www.arwild.org) for application including additional contest rules, submission guidelines and criteria details. If there are questions, contact Sharon Hacker at 501-837-0462 or skhacker@sbcglobal.net.
Recovering America’s Wildlife Act takes major step forward

On December 5th, the Recovering America’s Wildlife Act was passed by a vote of 26-6 by the House Natural Resources Committee, priming it for a vote on the House floor. Thank you to Representative Bruce Westerman for supporting the bill in committee. The bipartisan legislation would make about $1.4 billion ($14 million for AR) available to fund proactive conservation efforts to prevent species from becoming endangered and would provide additional funding for species that are already listed. Recovering America’s Wildlife Act has more than 160 co-sponsors including Representative French Hill. “The Recovering America’s Wildlife Act is the most significant piece of wildlife legislation since the Endangered Species Act passed in 1973,” said Collin O’Mara, president and CEO of the National Wildlife Federation. “This historic bill is making important progress in the House and is showing that even in these divided times, wildlife conservation can bring all Americans together.”

Tom Bly: 2019 Rex Hancock Wildlife Conservationist of the Year

Tom Bly was born a military brat in 1956, in St Johns, Newfoundland. When Tom’s parents moved them back to their home state of Arkansas, he began to develop a love for water and fishing. As a teenager, Tom developed a love for science and chemistry, which lead to receiving a degree in Fisheries and Wildlife management. Upon graduation, he worked a couple of years in Wyoming, married the love of his life and then migrated back to Arkansas, accepting a position with the Federal Fish Hatchery and eventually becoming District Fisheries Biologist for the AGFC. Tom has exemplified himself as a manager, supervisor and trainer of younger members of his team. He has developed and implemented sampling procedures consistent with better management and health of the sport fishing industry. His desire to maintain the environmental integrity of our lakes and streams has been an ongoing effort by Tom and his team through education, surveillance and physical efforts. Tom has worked tirelessly when disasters such as flooding and oil spills occurred. Tom was the project manager to design, develop and build the Collins Creek Trail and youth fishery adjacent to the Little Red River. Through his leadership and recruitment of volunteers, the trail was built with minimal cost. This trail has proven to be one of the favorite go to spots on the Greers Ferry Lake project. Tom’s desire to leave the environment and the sport fishing industry healthier and better than he found it is a testament to his career as a fisheries biologist and to the devotion to duty of the AGFC as a whole.
Five year agreement signed by Arkansas Monarch Conservation Partnership members

On November 20th, the Arkansas Monarch Conservation Partnership outlined a five year working agreement to impact pollinator habitat in The Natural State. The memorandum of cooperation signed by 31 member organizations and agencies reflects the working agreement between the members to meet the goals of the 2018 Arkansas Monarch and Pollinator Conservation Plan. The statewide conservation plan outlines strategic goals including restoring, creating, or enhancing native habitats that support monarchs and pollinators. As an active member of the partnership, AWF has increased monarch and pollinator habitat at the Bearcat Hollow project and encouraged youth to focus art projects on pollinators during the annual Wildlife of Arkansas Youth Art Contest.
Garden for Wildlife

Toddlers through teens can plant seeds, water, weed, and care for a garden!

You can help children create a wildlife habitat garden right outside their door and introduce them to the wonders of the natural world. Gardening for wildlife allows children an immediate way to make a real difference for wildlife and the environment.

MAKE THE GARDEN THEIR OWN

• Ask children what sort of wildlife they want to invite to the garden. This will help children then identify what plants to include in their garden and if the garden should be located in sun or shade. For example:
  • Monarch butterflies require milkweed and nectar plants
  • Birds require plants that provide seed and berries
  • Salamanders require old logs and moist areas
• Identify a designated spot for the garden where children are free to dig, plant and explore with a quiet seat for observing wildlife.
• Start small: Cultivate just a small section of your property at first, or plant flowers in pots or other containers.
• Personalize the garden by building or decorating bird houses, stepping stones or other functional artwork for the garden. Building toad houses and feeders connect children to the space they help create. Children can integrate natural play spaces through the use of natural materials and children’s sculpture.
• Be Inspired: Explore nearby parks and children’s gardens, gardening catalogs, magazines and websites for ideas on design.

CONNECT ACTIONS TO RESULTS

• Help children pick a few budding or blooming native plants from a plant sale or garden center that already contain nectar to quickly attract butterflies, hummingbirds, and other pollinators. This can jump start the garden before seed plantings begin to sprout.
• Become a Butterfly Hero. Help children understand why habitat gardening is important and that they are part of a special group of people nationwide helping to replace “animal homes” (a.k.a. milkweed gardens) that have disappeared. https://www.nwf.org/Butterfly-Heroes/Getting-Started/Learning-to-Garden

ENGAGE THE SENSES

• Plant fragrant, colorful, textured native plants along with herbs. Add grasses for movement and a water feature for light and sound. Kids will love it and wildlife will too, as these elements provide animals with food, cover, and water.
• Provide a magnifying glass.
• Help kids draft notes in journals, draw pictures, or take photos in the garden to reinforce what they have learned and enjoyed.
• Search your neighborhood for backyard animals such as:
  • Daddy Long Legs
  • Robins
  • Bullfrogs
  • Monarch Butterflies

SHARE THE GARDEN

• Support children giving tours to friends, neighbors, and family reinforces a child’s ownership of their garden and helps instill a sense of pride.

Certify the Garden

Wildlife gardens should provide food, places to raise young, water and cover as well as be maintained with sustainable practices. Encourage your child to identify what habitat elements might be missing and how to add them. When all elements are included, it is eligible to Certify as a National Wildlife Federation Certified Wildlife Habitat®. Visit https://www.nwf.org/certifiedwildlifehabitat to certify your backyard wildlife garden.
Arkansas Wildlife Membership Registration Form

**Membership Classification - Please Check One:**

( ) Active AWF - $25  ( ) Supporting AWF - $50  ( ) Conservation Supporter - $100

( ) Conservation Patron - $250  ( ) Conservation Benefactor - $500  ( ) Conservation Sponsor - $1000+

Date ___________________________

Name ___________________________

Address _________________________

City __________________________ State _________ ZipCode ___________

Phone # ______________________ Email ___________________________

Receive your copy of Arkansas Out of Doors (Check One):  ( ) USPS  ( ) E-mail (email address required above)

Visa/MasterCard # ____________ Exp. __________ CVV# __________

Signature __________________________ Date __________________________

Please make check/money order to:

ARKANSAS WILDLIFE FEDERATION
P.O. BOX 56380
LITTLE ROCK, AR 72215

Mail check & form to the address above once complete.  (501) 414-2845

Arkansas Wildlife Federation is a nonprofit 501c(3) organization.  
(tax# 71-6059226) IRS Requirements: You are receiving $10 in goods for your membership, 
through AWF quarterly magazine.

**ARKANSAS WILDLIFE FEDERATION AD RATES & PLANS**

Arkansas Out of Doors readers are active outdoor enthusiast who love hiking, hunting, fishing, camping, biking, canoeing, boating and photography.

Your sponsorship and/or ad purchases puts your company name in front of thousands of Arkansas’ most active outdoor enthusiasts while also supporting Arkansas’ oldest and largest private conservation organization.

For Ad Placement Call 501-414-2845 or email info@arwild.org

AWF is a non-profit 501 (c) 3 Conservation Organization Whose Mission is Advocating For Sustainable Use Of Arkansas’ Wildlife Habitats and Natural Resources For Future Generations. Learn more at www.ArWild.org

**Advertising & Sponsorship Packages**

I. AWF Banquet Sponsor - $750
   1. Banner and Special Recognition at Governors Conservation Awards Banquet.
   2. Tickets and Reserved Table for 8
   3. 12 months of Logo Placement on AWF Web Site.
   4. Eight Prepaid One Year AWF Memberships that Sponsor may give to Banquet attendees, family and associates.

II. Corporate Patron - $2,000  ($500/quarterly)
   Level I plus:
   1. One year of ½ page ads in AOOD

III. Corporate Sponsor - $3,500  ($875/quarterly)
   Level I plus:
   1. One Year of Full page ads in AOOD
   2. Additional five prepaid one year AWF Memberships to give friends and associates.

IV. Corporate Sustainer - $5,000  ($1,250/quarterly)
   Level I plus:
   1. One year of back cover or inside front cover ads in AOOD
   2. Additional Ten Prepaid -One year AWF memberships to give to family & associates.

**PUBLISHING SCHEDULE**

Full Color Ad Rates

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ForBack Cover  $1,135 $1,067 $1,003

Spring: March 1  Autumn: Sept. 1  Summer: June 1  Winter: Dec. 1

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