West Virginia Wildlife

Summer 2010

A Publication of the West Virginia Division of Natural Resources

Wild Perspective

Most of you know that West Virginia has an abundance of boating opportunities from whitewater rafting trips to sternwheeler cruises. But you may not know that last year West Virginia had the most boating fatalities per registered boat in the country. So what is wrong?

Perhaps it's the misconception of what boating safety really is. When most people think about boating they envision an open motorboat speeding down the water pulling a water skier or two. But what



about the lone canoeist paddling down a quiet stream, or the whitewater enthusiast kayaking the Gauley River, or even the bass fisherman out early morning on the lake with the fog still rising off the water? These folks are boaters too and also must practice safe boating.

The DNR gets calls every day from individuals wanting to know what type of equipment they need on their boat to be legal. It is not about legalities, it is about saving lives! For example, we all know that life jackets are required for everyone on board. The boat owner purchases these life jackets and places them on the boat safely stored in a bin where they will be safe from damage or wear. Then when disaster strikes, there is no time to get to those jackets.

It's hard to turn your friends away from a boat ride. The next thing you know, you have several guests on your boat, maybe too many. Add loaded coolers, a grill, a full live well and a full tank of gas and your boat is overloaded. The slightest shift of weight can capsize your boat. Those big, ugly capacity plates by the throttle are there for a reason. By the way, were you able to get to your life jacket as you were falling off the boat? Weight shift also applies to small boats — even those little paddle boats.

Whitewater rapids are a rush to shoot, but are no place for a novice without guidance and assistance from an outfitter or seasoned boater. It takes training, skill and a lot of experience to master the rapids in a kayak, yet many a kayaker has been beaten by the river. Know your limits!

Unfortunately it seems that a cooler of beer is required equipment for any boat trip. "We're going up to the beach and drink but we won't be operating a boat." That is a classic statement. How are you going to get back to the marina or ramp? How are you going to get home? On-water stressors such as the motion of the water, sun glare and motor noise also factor into the influence of alcohol. These stressors can actually intensify the alcohol affect.

I encourage everyone to take a Boating Safety Education Course, not because it is a requirement, but because it could save a life — perhaps your child's. Make it a family affair. But just don't memorize the information taught. Ask why the rules are the way they are.

The DNR offers traditional Boating Safety Education classes free of charge, and several on-line courses for a small fee. For information go to www.wvdnr.gov. Have a great boating season, and be careful.

Frank Jezioro

Frank Jezioro, Director, Division of Natural Resources

West Virginia Wildlife



A Northern Cardinal sings one of his many songs.

Summer 2010 Volume 10, No. 1

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West Virginia Wildlife is published quarterly by the West Virginia Division of Natural Resources, 324 Fourth Avenue, South Charleston, WV 25303. Presorted Standard postage paid at Columbia, SC. Subscription is free. To subscribe, send request to: West Virginia Wildlife, PO Box 67, Elkins, WV 26241. Shipped only to 50 states and Washington, DC. The Division of Natural Resources does not discriminate on the basis of sex, race, color, age, religion, national origin, or handicap in employment or provision of services, facilities and programs. West Virginia Wildlife is a copyrighted publication and may not be copied or reproduced in whole or in part without the written consent of the editor. Printed by the R.L. Bryan Company, Columbia, S.C.







Photo by Steve Shaluta



Cave Mountain hosts some of West Virginia's rarest plant communities, including these ancient eastern red cedars. Photo by Jim Vanderhorst

always enjoy walking an Appalachian ridgeline on a summer day, high above the heat, humidity and hubbub of the valley below, feeling on top of the world. Especially if I get a workout from the climb up, and particularly if I'm rewarded with a view. From on top of the mountain I can see the broad expanse of nature before me and contemplate its ecology and our place within it.

It seems like a different state on the ridge top. In spring it's still like winter, and in early summer it feels and looks like spring. A breeze usually blows. On a hot summer day the difference is refreshing, but in winter it can be downright uncomfortable. Trees don't grow so tall here, gnarled from the abuse of winter's ice and wind. The sedge on the ground looks like the one I know from the lower slopes, but on closer examination it turns out to be a different species, one that only grows in higher elevations. Down in the valley, roads and wires connect farms and houses. A few roads climb up the mountain flanks to isolated dwellings, but none reach the ridgeline. The forests in the valley are in small patches, not like the extensive stands here on top. Across the valley is another forested ridge, with a succession of ridges beyond that. Only a few power- and gas-line corridors bisect the high ridgelines, following the shortest routes to out-of-state energy consumers. On one of these ridges I can see the smoke and stack of a coal-fired power plant along with a new feature — just arrived in recent years — lines of windmills.

High ridges are like islands of habitat for many species of wildlife. Endemic (native to a specific area) salamanders confined to a few high ridges evolved under harsh conditions that provide a competitive edge — a niche — for individuals that are adapted to those conditions, and exclude those that are not. The Cheat Mountain salamander is a threatened species confined to a few high ridges in the red spruce zone of the Allegheny Mountains in West Virginia. A related, but different species, the Cow Knob salamander is similarly confined to a few high ridges (Shenandoah, North and Great North mountains) along the West

Virginia/Virginia border. These species do not occur together, and they don't occur anywhere else on earth. Salamanders can be highly competitive and have limited ability to disperse to new locations. This has led to evolution of some species with very limited global ranges. It also makes their habitat particularly vulnerable to fragmentation by roads and gas and electric line rights of way.

The snowshoe hare and the Appalachian cottontail are another pair of animals that characterize our high ridges. The snowshoe hare is a game species that is more common in the boreal north. Its occurrence in West Virginia reflects a common pattern of northern species occurring at high elevations further south. Here

it depends on red spruce saplings for cover when early snowmelts foil its winter white coat survival strategy. The Appalachian cottontail, a rare species tracked by the Wildlife Resources Section Natural Heritage Program, occurs from New York south to Alabama, but is rarely found at low elevations within this range. These rabbits find their home only in the high country.

West Virginia's high elevation ridges remain among the most remote and least disturbed habitats in the state. Their short growing seasons and rocky, infertile soils made them unattractive to pioneer farmers. Commercial timbering was often limited by difficult

High ridges are like islands of habitat for many species of wildlife.



Cheat Mountain salamander.



Snowshoe hare.

access and low value of the misshapen trees that grow in these stressful environments. Coal mining has occurred on a few high ridges, but most ridges lack this economic resource. This lack of disturbance provides habitat for wildlife species that have been eliminated elsewhere. For example, the timber rattlesnake today

> is most plentiful on high remote ridges, but once had a much broader distribution throughout the state.

As our valleys fill up, our ridges are becoming less remote. Ridge tops are increasingly fragmented by development for residences, transportation and energy. By building mountaintop homes and roads to access them, people crowd out the same nature they want to be close to. Species adapted to high elevations are likely to be especially vulnerable to climate change. Ironically, these are the same species that may be most impacted by development of wind farms being built in partial response to climate change concerns.

Considering these increasing pressures, the ecology team of the

Wildlife Resources Section Natural Heritage Program initiated a project to classify and assess the natural communities on high elevation ridges in the state. The scope of this project focused on ridge tops that have high wind energy potential. Although future development will probably be concentrated on private lands, our studies were concentrated on public lands. This sampling bias reflects differences in past land use, ease of access, likelihood of protection, and our responsibility for public interests. Similar patterns are expected on ridges we didn't sample, but no two sites are exactly the same. Our results provide baseline

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information on the natural communities that currently occupy these habitats, a list of what can be protected, and what might be lost.

Our methods and goals are the same as for other ecology projects we conduct throughout the state. We use vegetation, or plant community structure and composition, as the basis for classification. Our sampling unit is an approximately 4,300 squarefoot plot. We collect the exact location of the plot using the global positioning system (GPS). We record environmental data such as which direction the slope faces, along with information on topography, hydrology and disturbance. We identify and estimate the abundance of all plant species occurring in the plot. We collect mosses and lichens for experts to identify. We measure tree heights and diameters, describe soils and collect a soil sample for chemical analysis by a lab.

Plot data from this project are archived in a computer database along with plot data collected from other projects, past and future. We analyze the data using a geographic information system (GIS) and modern multivariate statistical analysis tools. Our classification units, called associations, are designed to fit within the U. S. National Vegetation Classification so they can be analyzed and compared on a regional, national and global level. To date, we have collected data from 442 plots on high windy ridges. We have not yet completed an association-level vegetation classification, but have assigned the plots to more generalized ecological system types. In the rest of this article I'll review a few of these types, but the diversity represented on these ridges is more than I can cover here. We found different patterns of vegetation on different ridges. These patterns reflect environmental conditions related to climate, geology, landforms, soil, natural disturbance and past land use by humans.

In the high Allegheny Mountains province west of the Eastern Continental Divide the climate is cool and moist, and forests on high ridges are dominated by red spruce, eastern hemlock and northern hardwoods (American beech, black cherry, birches and maples) along with some red oak. The ridges here are broad, weathered from nearly horizontal rock layers. Large wetlands can be found very close to some ridge tops. Windswept heath barrens became extensive on Dolly Sods following the destruction of red spruce forests during the logging boom around 1900, and are today only slowly reverting to red spruce. The largest wind farms in the eastern United States have been developed in this province on Backbone Mountain and along the Allegheny Front. Coal is also mined and burned here.

Windy Ridges ☆ Vegetation Plots on Windy Ridges Landscape Integrity

High

Wildlife Resources GIS and Ecology staff developed models of landscape integrity and windy ridges in West Virginia. Landscape integrity is a measure of distance away from disturbance features including mining and other industries, residential and urban development, transportation corridors, and agriculture. Windy ridges are ridge tops that are identified by the U. S. Department of Energy as having high potential for utilityscale wind power generation. Windy ridges are mostly in areas with high landscape integrity. Ridges in this province are home for the Cheat Mountain salamander, snowshoe hare and Appalachian cottontail.

Few windy ridges exist west of the high Alleghenies, but a cluster of sites occurs in western Fayette, Raleigh and adjoining counties. These ridges are in the coal fields, and natural vegetation in some areas has already been eliminated by surface mining. We know little about the private lands in this area but our plots from a few ridges in the New River Gorge National



Lichen-covered boulderfields in the foreground, red spruce in the middle, dwarf pitch pine and more boulderfields in the distance, on Panther Knob in Pendleton County. Photo by Brian Sheets/WV DNR

River give us some idea of the vegetation patterns here. Forests on these ridges are dominated by oaks and vary from rich oak-hickory forests on more fertile soils, to oak-heath forests on more sterile soils.

To the east of the Eastern Continental Divide is the Ridge and Valley province. Dramatic geologic folding and uplift followed by erosion created a landscape of parallel ridges and valleys with alternating exposures of shale, sandstone and limestone, each displaying its own vegetation. This province lies in the rain shadow of the high Alleghenies and the resulting aridity also has a great effect on the natural vegetation.

Ridge-top forests in this province are often dominated by oaks and hickories. On rocky sandstonecapped ridges, old-growth chestnut oaks grow over dense shrub layers of mountain laurel, huckleberries and blueberries. On more fertile soils, hickories (pignuts, mockernuts, shagbarks) grow together with oaks (red, white, black, chestnut). Understories of oakhickory forests can have extremely high herb diversity, but ground disturbance in these communities often promotes invasions of non-native weeds that crowd out the native plant species.

Some of the highest elevations in the Ridge

and Valley province support short-statured forests dominated by red oak. The climate on these ridges is too severe for the other oaks and hickories that prosper on lower ridges. Mature tree canopies may reach only 49 feet tall, compared to twice that or more for red oaks growing at lower elevations. Young oaks quickly grow as tall as the mature trees and then stop growing. Severe winters bring ice and winds which break limbs and bring down entire trees, creating an open canopy and sunny understory full of habitat-enriching woody debris.

Dwarf forests and woodlands dominated by pines grow on the hottest, driest sandstone-capped ridge tops in the Ridge and Valley province. Forests of pitch pine and table mountain pine rarely exceed 16 feet in height. Extensive patches of dwarf pines grow in areas that were burned, but narrow, pine communities on rock outcrops and along cliff tops can persist and reproduce without burning. The southernmost native populations of red pine in the world occur in West Virginia on Pike Knob and South Branch Mountain. They dominate small patches of dry woodland and forest here, 100 miles or more south of the nearest native populations in Pennsylvania.

Cave Mountain is one of a few high ridges in the

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Ecologists sample a lichen-dominated cliff face on North Fork Mountain in Pendleton County. Photo by Jim Vanderhorst

Ridge and Valley province with extensive exposures of limestone. The soils on the mountain top are fertile and these areas were mostly converted from natural vegetation to pastures, as they remain today. But some side ridges and upper ridge flanks were never spoiled. They host some of West Virginia's rarest plant communities. Here exist woodlands of ancient eastern red cedars, some more than 500 years old, and amongst them grow numerous rare herbs including the Smokehole bergamot, blue flax and yellow nailwort. Extensive caves, which give the mountain its name, provide hibernacula for several species of bats, the group of animals that may be most vulnerable to direct mortality from collisions with windmills.

Many cliffs, rock outcrops and boulderfields occur on ridges along the Allegheny Front and in the Ridge and Valley province. These are natural communities dominated not by trees and shrubs, but by lichens, organisms composed of algal and fungal layers that take on many forms and defy the definition of what it means to be a species. In 2005, we collected a "species" of lichen from a boulderfield on Kile Knob that was previously known in North America from just two other sites (in Montana and New York). We know so little about the diversity of these enigmatic organisms! Boulderfields also provide underground refuge for multitudes of millipedes and bats. Sterile sands weathered from cliff-top pavement host rare plants like silvery nailwort and false heather. Cliffs provide important nesting habitat for peregrine falcons and ravens. They also provide recreational opportunities for people — for rock climbing or just taking in a breathtaking view.

Photo by Brian Streets

The author contemplates nature from atop Big Schloss in George Washington National Forest.

Go take a hike on a high, windy ridge. There are many trails to take you there. Try the Appalachian Trail, the Allegheny Trail, North Fork Mountain, or Big Schloss. Or take a drive up to Dolly Sods or along the Scenic Highway in the Yew Mountains. Several state parks such as Lost River and Cacapon and wildlife management areas such as Nathaniel and Short Mountain provide opportunities to explore high ridges. These fascinating natural communities provide a refuge from the rigors of daily life and the summer heat in the valleys. While you're there, consider your place in nature and nature's place in our future.

Jim Vanderhorst is an ecologist with the Wildlife Resources section in Elkins.

Exploring How and Why Birds Sing

Backyard

Naturalist

By George H. Breiding

Beginning in mid-winter and continuing into mid-summer, the West Virginia hills and valleys come alive with a loud *sa-wheet, sweet, sweet, watcheer, wah-cheer, wahcheer, birdee, birdee, birdee.* That's a description of one of the calls of the state bird, the northern cardinal, commonly called the redbird. It's a versatile songster with more than 25 variations in its repertoire.

Once one hears that wonderful oration, one has to wonder, how and why do birds sing? Actually, birds don't sing. They play instruments, a more complicated process than the account that follows. They make musical sounds by means of internal organs called the trachea and the syrinx, commonly known as the windpipe and the voice box.

The muscle-like syrinx or voice box is located between the base of the windpipe and the lungs. The sound is produced by forcing air out of the lungs and vibrating the membranes of the voice box that differs in each species, thus each species renders a different sound.

Light and temperature dominate bird activities. As sunlight increases in spring, the rays strike the birds eyes, triggering a hormonal response that results in the development of the sex glands in both male and females. The intensity and duration of sunlight influence the singing and breeding periods, also daily and seasonal movement. A reverse action takes place as the sun retreats in autumn and winter.



Male Chipping Sparrows sing a long, dry trill of evenly spaced, almost mechanical-sounding chips. Songs are about 3.6 seconds long on average, consisting of around 55 nearly identical chip notes in a row.

The male sings to attract a mate and maintain a territory, an arbitrary area that provides adequate food for him, her and eventually their brood. The song serves as a warning to other males of the same species: "Stay away from the sound of my voice and the lady in my life."

The song also assures the female that all is well on the home area as she incubates the eggs and the hatchlings. Calls or alarm notes are emitted as a danger signal, to communicate and assemble a flock.

Do the females "sing?" Not many do. One that does, the rose-breasted grosbeak, a reliably common species that looks like an over-sized streaked sparrow, occurs in the summer in wooded areas in parts of the state.

Birds are said to sing or "play their instruments" because they're happy. Bachelor birds sing more before they are mated than after they acquire a mate. Both male and female Northern Cardinals sing. Males in particular may sing throughout the year, though the peak of singing is in spring and early summer.

Experienced bird watchers go afield during spring migration and identify dozens of species by their songs or more correctly the tunes they play. Go out in late May or early June away from city noise, listen and try to hear as many different tunes or songs as you can. There's more to a bird's "song" than meets the ear.

The late George H. Breiding was a major ornithologist, naturalist and environmental educator in the state for nearly 40 years.

Tracking the wild turkey A STUDY OF GOBBLER SURVIVAL

by Delbert J. Vandevander

loud boom blasted the early morning stillness. A flurry of feathers, snow and smoke filled the small clearing where, only a moment before, all was silent. My feet and legs, numb and cramped from sitting, would not work properly. I promptly fell over my chair and other gear and fell headlong into the brush behind the small blind I was trying to exit. After finally extricating myself from multiflora rose and electrical cord, I ran out to encounter a wriggling mass of turkeys entangled beneath a net.

Early that morning, I had left my warm bed, grabbed a pack prepared the evening before, and traveled several miles to a turkey trap site. Snow crunched beneath my boots as I trudged the last 50 yards to a blind set up in the brush at the end of a clearing. The temperature that morning at 4 a.m. read 22 degrees. I unzipped the entrance to my small canvas tent and entered. By the light of a small lantern, I arranged items taken from my pack. First of all, I set up a small propane heater and got it going. A coffee thermos, food, radio and reading material were laid out within easy reach. I then dug around and found my ohmmeter, an instrument used to test electrical wiring continuity, and backed out of the blind to check my equipment.

The year was 2008. The West Virginia Division of Natural Resources Wildlife Resources Section was in the fourth and final year of field work for the Mid-Atlantic Gobbler Survival Study. In cooperation with the state of Virginia, and funded in part by The West Virginia Chapter of the National Wild Turkey Federation, the main purpose of the project was to study gobbler mortality and determine causes. As Wildlife Manager at Stonewall Jackson Wildlife Management Area, I was required to trap and track as many gobblers as possible. As the late, great western writer Louis L'Amour would say, one must have "savvy" and "sand" in order to successfully trap the wild turkey. In other words, one must possess knowledge about their habits and abilities, and have patience and willpower to wait them out. Regardless, the wild turkey has a very good sense of sight and sound, which is why it is important to camouflage or cover all trapping equipment with brush, grass or leaves and maintain complete silence.

Up to that date, I had shot my cannon net 14 times and netted 80 birds. Of these, 28 gobblers had been

outfitted with radio transmitters. These small devices were equipped to lie on the back of the bird and were held in place by two small cords around the base of each wing. I assigned each transmitter its own frequency which was then programmed into a receiver. With the aid of a directional antenna, I could determine the bird's location. In addition, if the transmitter emitted a faster signal, the bird was

presumed dead. After locating a dead gobbler, one's investigative skills then came into play to determine the cause of death. "CSI Stonewall Jackson!"

I checked my trapping equipment and electrical connections. All seemed OK. I then looked for the small bait pile in front of the net. As usual, deer had eaten most of it during the night. I hustled back to the blind and found a small bucket of cracked corn I had stashed there earlier. After one more careful study of the area, I reentered the blind and prepared for a long wait. I had been a bit disappointed with this site. Although the birds had "hit" the bait two days in a row, on the third day they had not shown up. With the aid of a game camera and upon inspection of the turkey droppings — "J"-shaped are males, "curled" are females - I had already determined that 10 to 12 gobblers



A gobbler outfitted with a radio transmitter.

had been on site. So, why had they not visited the bait site on the third day? Again, Louis L'Amour would say, "'Mebbie' they're just notional." More than likely, however, they had another food source and, hopefully, would visit my site again as they made their rounds. Wishful thinking, right?

As I sat waiting for daybreak, I sipped my coffee and dozed. This getting out of bed before the turkeys was for the birds! As light finally filtered through the small peephole in the blind, I made sure I could see from all angles and, more importantly, see the spot

> where the bait lay. I then dug into my pack and found my detonator. This is a device used to send an electrical spark to three rockets that are attached to the net. Each rocket contains a small packet of rocket fuel and black powder. When ignited, the rockets shoot the net over the bait site and turkeys. The rockets are set at proper angles to insure that the net travels over the birds quickly without injuring

them. Even though the net measures 40 by 60 feet, turkeys are very capable of escaping capture. With the detonator hooked up and easily accessible, I was ready.

A slow two hours went by. In between frequent inspections of the trap site, I read four chapters of "Under the Sweetwater Rim." It was then I heard a soft "putt." The western novel was quickly forgotten as I scanned the clearing, looking for movement. Out of nowhere appeared a young gobbler being chased by a longbeard. They ran by the bait pile, made a circle, and raced back again. I sat there thinking, "Well, that was different!" During the next five minutes, all was silent, as before. Then I saw birds approaching again. Ten gobblers were cautiously moving toward the bait while two "boss" longbeards stood aloof at the edge of the clearing. The 10 birds began fighting for the

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best positions at the small pile of corn. I waited only a few moments for the two watchful gobblers to join the others. They were acting suspicious and staring at my blind. I knew one sound of warning from them would cause the entire flock to spook. I already had the detonator in my hand. As I held the charge button, I waited until most of the birds were huddled closely over the bait with heads down, and then pushed the fire button.

Not all of the birds were captured. Two gobblers escaped, proof that turkeys can react and move quickly. Only eight lay kicking and squirming, entangled in the net. After making sure all were secure for the moment, I found my radio and called for assistance. Other Wildlife Resources Section personnel were waiting nearby for my call. They soon arrived to assist with outfitting each gobbler with a radio. They recorded measurements of spurs and beards in order to estimate age, weighed each bird, and placed a reward leg band on each turkey. Within three hours, DNR personnel released all gobblers at the very spot where they were

the bird's age.

captured. The location and status of each gobbler was then checked weekly, until either the bird died or the radio battery failed. The life of the batteries varies but is guaranteed for two years. One of my gobblers carried a radio for over four years, only to die at the hands of a poacher. Over a long period of time, one can become somewhat attached to certain birds. I felt a real pang of regret when I finally located him, minus the breast meat and with the radio cords cut cleanly in two.

Wildlife managers and biologists radioed and tracked 272 gobblers statewide during a four-year period. Firearms contributed to the demise of 79 (30 percent) radioed gobblers. Of this number, 23 (8.5 percent) were taken illegally. I remember one particular gobbler that lived only a few days after being released. When the signal indicated he was probably dead, a long search ensued and led into a very brushy area. After much casting about and false leads due to signal bounce, I found the radio. It was hanging in the brush where the poacher had tossed it. No doubt his intent was to make it as hard as possible to find. You have to

give those guys a little credit; they're smart enough to know they shouldn't take a working radio transmitter to their homes!

Preliminary analysis shows between five to 10 percent of radioed birds were taken by mammalian and avian predators. The bobcat and great-horned owl were the predominant killer in their respective groups. The coyote is a minor predator of wild turkeys. One of the radioed birds at Stonewall fell prey to these clever canines. For several weeks, a two year old gobbler at Stonewall had not been difficult to track. I could usually pick up a signal from the highway and then pinpoint his location with a compass and map. On one particular day, however, a fast "beep" from the receiver let me know there had been no movement of the transmitter during the last eight hours. Since the lake lay between me and the bird, I had to drive several miles to access the area where I believed him to be.

I walked about two miles into a hollow only to discover that the signal seemed to be bouncing from several different angles. This required extra trips in and around the area to determine the exact direction of the bird. I knew I was getting closer when I found a few feathers at the top of an abandoned coal strip "high wall." The signal was coming from the very bottom of a sheer drop-off. After much searching, I finally found a safe route to the bottom. Here I located more feathers and eventually found the bird's remains. The radio transmitter was still attached to the skeleton, which was clean of flesh. Bones and feathers had been chewed and broken by strong teeth, proof that the culprit was a large mammal. As I scouted further from the kill site, I came upon coyote scat. This concluded my investigation. The unlucky gobbler had been caught by coyotes near the base of the high wall.

A reward leg band is placed on a turkey's leg.

Hunters legally harvested 45 (16.5 percent) radioed birds during four spring gobbler seasons. Interestingly, 20 percent of radioed birds killed were adults, while 7.5 percent or radioed birds harvested were jakes (yearlings). Past surveys of spring turkey hunters revealed that many hunters pass up jake birds, waiting for adult longbeards. Also, hunters think the two-yearold gobbler is most vulnerable to harvest since their lack of breeding experience causes them to gobble more frequently. This, they believe, makes them easier to locate, and due to less wariness, can be called in easily. However, results from radioed two-year olds reveal they are no more or less susceptible to kill than older radioed toms. It appears it is the quantity of two-year olds that is the factor in their kill rates. It has been proven that higher harvests occur during spring hunts two years after good brood production, while a lower number of birds are harvested two years after poor brood production. Only a small number of radioed gobblers (1.6 percent) were killed during the fall season.

Upon downing a bird, most nimrods were very surprised to find radio transmitters and leg bands attached to them. One day during the gobbler hunting season, I failed to locate one of my birds at Stonewall. As I was driving back to headquarters, I was surprised to hear a signal many miles from where the bird normally ranged. After narrowing the search, I believed





Captured birds are held in boxes for a short time until they can be weighed, banded, fitted with a transmitter and released.

the signal was coming from a residence a few hundred yards off the road. I drove to the house and stepped out with the receiver, which pointed the way to the center of the yard where the radio lay in the grass. I retrieved it and rang the doorbell. The homeowner was very surprised to see me at his door holding the radio. Very hesitantly, the story was revealed. Even though both radio and leg band was marked "reward," he was unsure if the bird was a legal kill. After examining his check tag and hunting license, I assured him he was not in trouble. He then produced both beard and spurs which were measured for comparison with trapping data. His story soon surfaced among the locals who chided him, "You can't hide those things from those guys!"

Although the gobbler survival study data collection was completed by the end of 2008, analysis of the data is not yet complete. Data from this study has proven valuable for other studies as well. Recently, a master's degree thesis was published in regard to home ranges of gobblers. Statewide, the study shows the average home range for gobblers is approximately 2,000 acres. During the spring, adult home ranges are larger than those of yearlings, probably because of breeding behavior. Not surprisingly, home ranges of gobblers are smaller during good mast years and larger during years with poor mast.

The cooperative effort between West Virginia and Virginia is unique in that comparison of survival rates can be made between hunting regimes and seasons. Criteria used in deciding season dates, bag limits, and hours of hunting allowed per day are items of interest of the gobbler hunting community. Information gleaned from this project will be invaluable to biologists when considering

changes in the rules and regulations of turkey hunting. As always, the seasons are set with the wild turkey resource considered first and foremost in importance. Desires of hunters are then taken into account.

All turkey hunting enthusiasts are encouraged to participate in the annual Spring Gobbler Survey. These survey forms can be acquired at any DNR district office or at the Elkins Operation Center (304-637-0245). Cooperators record daily observations during the spring gobbler season. The Gobbler Survey Technical Committee then compiles and analyzes all the information. In exchange for your participation, you will receive a copy of The Spring Gobbler Survey Summary, published by the West Virginia DNR Wildlife Resources Section in cooperation with the West Virginia Chapter of the National Wild Turkey Federation.

The DNR research team is always looking for ways to learn more about wildlife. Look your harvested game over closely. You never know when you might find a radio transmitter attached to a deer, bear, grouse or wild turkey!

Delbert J. Vandevander is the wildlife manager at Stonewall Jackson Lake WMA.

A Sense of Wonder...

Animal Clues Method

Children make up clues for an animal and the other children try to guess what the animal is.

Materials

Paper, pencil, rope or string to mark boundaries

Location

Large grassy area, or large open room, if weather is bad

Number of Participants

You really need 6 as a minimum but would be better with at least 8 or more.

Procedure

Divide children into two equal teams. Have each team choose an animal and then think of six to eight clues for that animal. (Example below.) When both teams have their clues ready, have them form two lines facing each other about two feet apart. Draw a line about 15 feet behind each team, which will be that team's home base.

Team A reads a clue. (You may have one student on each team read the clues or let team members take turns.) Team B tries to guess Team A's identity. If they guess the wrong animal, one student (previously appointed) on Team A will say "No." Team B will read one of thie clues and the game will continue. When a team guesses the right animal, all the members of that team will chase the members of the team which gave the clue back to their home base. Any members tagged before they reach their home base will become a member of the opposing team. Each team will then choose a new animal and make up a new set of clues.

Sample clues – for a bat

- 1. I have two feet, but seldom walk.
- 2. I am nocturnal (or I'm active at night).
- 3. Some of my kind migrate during winter, but others hibernate.
- 4. I can eat 1,500 insects in one night.
- 5. I am the only mammal that can fly.

Nature Note: Lethal Litter

Litter is a familiar eyesore. In addition to being unsightly, litter can injure and kill wild and domestic animals.

Plastic ringed can or bottle holders occasionally get caught around the necks of fish and ducks, geese and other water birds. Once in place, they can impede the fish's or bird's movements, and may result in starvation or strangulation. "A river otter released by the West Virginia DNR in the last 1980s was seen "sporting" one of these unsightly necklaces just minutes after being set free. Some West Virginia Welcome! Fortunately, the otter managed to free itself a few hours later.

Discarded fishing line also causes problems for wildlife. For example, a young osprey introduced to West Virginia lost a leg and ultimately its life after becoming entangled in carelessly abandoned fishing line. Many similar cases have been documented among shorebirds and waterfowl.

Discarded bottles and jars are probably the most ubiquitous hazard. Bottles can be death traps for shrews, mice and other small mammals that squeeze in, but can't crawl out and subsequently starve. The unofficial record for dead shrews in a single bottle is 16.

Glass bottles and jars which litter the countryside are frequently broken. Animals may lick the shards of glass trying to eat the residue and suffer painful cuts. Treading on broken glass is dangerous to animals and humans.

Plastic bags and resin pellets, balloons, Styrofoam pieces and other bits of litter may be mistaken for



food and eaten by wild animals. The trash may get stuck in the esophagus or stomach and eventually kill the animal. Sea turtles occasionally die after eating plastic bags that look like jellyfish, a food source for the turtles.

People can help by disposing of their waste properly, participating in organized clean-ups, and educate others about the problem and what they can do to keep from being a part of the problem and how to be a part of the solution.

The death of an animal due to littering is slow, agonizing and needless. Proper disposal of trash means a safer, more beautiful West Virginia. **Field Trip**



Kanawha State Forest

Description: Located just seven miles south of Charleston, this forest's proximity to the heavily populated Kanawha Valley has made it a recreational haven. The 9,300-acre forest is noted among naturalists for its diversity of wildflowers, reptiles, amphibians and birds. The forest's sole paved road winds through the middle of the property, surrounded on both sides by tall hills. Located in the hills are 25 miles of hiking trails and many more miles of gas and oil well service roads, providing access to much of the forest. Some of the trails and all of the roads are open to mountain biking. Campers will find 46 sites, 25 of which have electrical and water hookups. Small RVs have no difficulty reaching Kanawha State Forest, but large RVs will have trouble negotiating the narrow, winding roads leading to and within the forest.

Viewing Information: Rich cove forest sites, dry piney ridges, and moist bottomlands provide nesting habitat for 19 species of wood warblers, a feature that draws bird watchers from as far away as Canada. The cerulean warbler, a species in rapid decline over much of its former range, is abundant in the high canopy forest of the oldest timber stands within the Forest. Colorful hooded warblers, American redstarts and yellow-throated warblers sing a variety of songs from, respectively, the low understory, the mid understory, and the canopy. Numerous other species of birds also nest here, including turkey vultures on bare ground in the remote rock cliffs, pileated woodpeckers in dens hammered out of ancient beech trees, and yellow-throated vireos in pendulous woven nests attached to small branches.

Because many of the trees are more than 100 years old, there are numerous hollows where barred owls nest. Listen for the haunting hoots of these large, gray nocturnal predators at dusk as they prepare for a night of hunting. Your best chance to catch a glimpse is along the roads and trails in the forested bottomlands. Numerous small clearings in old-growth forest around gas

Barred owl

NOTE: State forests are open to public hunting. Please check with the superintendent for seasons and affected areas.

Directions: From I-64 in Charleston, take Exit 58A, drive south on US. 119. Turn left onto Oakwood Road at the second stop light. Following the brown and white routing signs, turn right onto Bridge Road, and right onto Connell road. At the bottom of Connell, make a sharp left turn onto Kanawha Forest Drive and follow a few miles to the forest entrance.

Closest town: Charleston

Ownership: West Virginia Division of Natural Resources (304-558-3500) and oil wells provide good habitat for another declining species, the whippoorwill. These fascinating songsters provide another reason to stay awake till dark or to get out of your sleeping bag in the predawn hour during late spring. Worm-eating warblers are difficult to see, but the preponderance of dry oak woods on the western slopes of the north-south ridges make your chances to see one fairly high in May and June.

Walk the Shrewsbury Hollow service road and branch off onto Alligator Rock Trail or Teaberry Trail for a good chance to hear and see these small, stripe-headed warblers who sing like buzzing insects. Upper slopes covered with oak and hickory host an abundance of scarlet tanagers. Mossy Rock Trail, Overlook Trail, Pigeonroost Trail, and several others are good spots for viewing bright red males establishing territories in May.

The clean water of Davis Creek and its headwater tributaries in the forest provide good fishing for belted kingfishers and good aquatic insect foraging for Louisiana waterthrushes. While walking Davis Creek Trail or Polly Hollow Trail alongside bubbling riffles, listen for the yellow-throated warblers who like to sing from tall bottomland trees on sunny spring and summer days.

Mammals living in the forest include white-tailed deer; bobcats; red and gray foxes; raccoons; red, gray and fox squirrels; southern flying squirrels; white-footed mice; coyotes and black bears. Several of the forest's trails (Beech Glen, Ballard, and Mary Draper Ingles) pass by massive sandstone overhangs that harbor woodrat middens. These



Pileated woodpecker (male)

interesting rodents can be observed at twilight, but their home turf is usually very rugged.

The Forest provides important habitat to a number of bat species at different seasons. The conversion of much of the forest land to the south and east of the forest to treeless grasslands by mining companies has made the old-growth forest stands and the old coal mine portals critical to bat population survival. The federally-protected, endangered Indiana bat was found to have a maternity colony in the forest in 2009. Big brown bats, little brown bats and pipistrelles hibernate in the old coal mines along Davis Creek. Watch them fly over the impoundment or over the small openings at dusk and dawn during the summer, when insect hatches are commonplace.

The best time to view amphibians is spring. From February to April, with the first warm rains, spotted salamanders migrate to breeding



Spring is the best time to view amphibians, including the spotted salamander, at Kanawha State Forest. Photo by Steve Shaluta sites at night. They are easily identified by their bright yellow spots. Visitors can also look for four-toed and marbled salamanders among others. Spring nights are filled with the sound of spring peepers, green frogs, American and Fowler's toads, and gray tree frogs. Daytime amphibian choristers include the aptly named mountain chorus frog and the "quacking" wood frog.

The Forest is blessed with many vernal pools along the main road through the Forest and along the road to the shooting range. The Spotted Salamander Trail is easily accessible and includes a vernal pool that dries out in mid-summer, and provides good amphibian watching opportunities. Most of the smaller tributaries of Davis Creek are loaded with northern dusky salamanders, two-lined salamanders and spring salamanders. Slimy salamanders are abundant under rotting logs and shaded rocks.

Black rat snakes, ring-necked snakes, northern water snakes and garter snakes are abundant in the forest. Less frequently seen, but likely no less abundant are rough green snakes, eastern hognose snakes, milk snakes and black racers. Both species of poisonous snakes in West Virginia – the copperhead and timber rattlesnake – live here. Skinks and northern fence lizards round out the reptiles that can be seen, especially on warm spring and summer days along the drier trails.

The Kanawha State Forest Foundation organizes guided walks led by experienced naturalists in the spring, fall, and winter. Both the spring and fall events (held on the last Saturday in April and the second Saturday in September) offer as many as twelve different guided walks that focus on a wide variety of nature-related subjects. To learn more about these walks, or other activities and events at KSF, visit the Foundation's website, www.ksff.org.

Wildlife Diversity Notebook: Blue catfish

By Jeff Hansbarger

Common Name: Blue cat, also known as blue channel, humpback blue, highfin blue, great forktail cat, fulton cat, chuckle-headed cat, cold boarder, white fulton, chucklehead, humpback

Scientific name: Ictaluris furcatis which translates to 'fish cat' and 'forked.'

West Virginia status: Blue catfish, along with several other large river species once native to West Virginia (paddlefish, shovelnose sturgeon), were all but eliminated from portions of the Ohio River in West Virginia and the Kanawha River due to poor water guality, habitat degradation, barriers to movement, and other unknown causes within the last 50 years. Over the last five years the West Virginia DNR Wildlife Resources Section has attempted to re-establish blue catfish and other native large river species due to improved water quality and a greater interest in re-establishing native species nationwide. Presently the DNR stocks blue cat fingerlings and advanced fingerlings in the Kanawha and Ohio rivers.

Anglers now catch blue cats in both the Kanawha and Ohio rivers. There is a 24-inch minimum, two fish a day creel limit in effect for all of West Virginia. The current blue cat record in West Virginia weighed 29 pounds, 12 ounces, and was 42.25 inches long. Lynn Lange caught the huge fish from the R.C. Byrd pool on the Ohio River in Mason County. Lange, who is from Springfield, Ohio, was fishing in a Cabela's catfish tournament on September 12, 2009, when she made her record catch. The state blue cat record has been eclipsed by larger fish in each of the last three years.

Description: The blue catfish is the largest North American freshwater catfish, regularly reaching weights in excess of 50 pounds.

Blue catfish and channel catfish are similar in appearance. Blue catfish usually have a bluish tint that fades to silver/white along the sides. Smallersized channel catfish occasionally are peppered with black spots along their sides; blue catfish never have spots. A few more defining characteristics can help determine what species you caught. First, the anal fin is more straight-edged and comb-like on a blue cat and contains 30 or more rays (fin bones), while a channel catfish's anal fin is more rounded and contains 24 to 29 rays. Additionally blue catfish usually have an overbite, and seldom if ever possess an underbite something frequently seen in larger channel catfish. Blue cats reach a larger size than

channel catfish and can appear to have a humped back at larger sizes. The current all-tackle world record for a channel catfish is 58 pounds taken from Lake Moultrie in South Carolina in 1964, while the current all-tackle record blue cat caught in 2005 from the Mississippi River weighed in at a whopping 124 pounds! Finally, a channel catfish has one of the most forked caudal (tail) fins of all the catfish species. A blue cat's caudal fin is less forked in comparison. Sometimes even veteran anglers and fish biologists, however, find it difficult to differentiate between the two species, especially among smaller fish. Tim Pruitt caught the current all-tackle

record blue catfish in the Mississippi River in 2005 — 124 pounds, 54 inches long.

Habitat: Their preferred habitat in large rivers is deeper areas that have a moderate to strong current. Within these areas, blue catfish generally seek out deep holes with abundant cover that provide relief from strong currents, but they will move up to swift water to feed, primarily at night. Outside bends in rivers, tailwaters below dams, creek mouths and discharges are all common blue cat locations.

In large reservoirs, they seek many of the same features as they do in rivers: deep, secluded areas with plenty of









The anal fin is more straight-edged and comb-like on a blue cat, above left, and contains 30 or more rays (fin bones), while a channel catfish's anal fin is more rounded and contains 24 to 29 rays.

brush and other natural or manmade cover. The absence of current in many reservoirs causes blue catfish to cover more water when searching for food, which often brings them to shallow water during peak feeding periods. Therefore, they often seek areas that provide both the security of deep water and the easy access to shallow feeding areas. They will frequently stay suspended over deep water at specific depths in relation to structure (points, humps) or forage such as shad or skipjack herring in both rivers and reservoirs. Their optimal temperature range is between 70 to 82 degrees.

Ryan Bosserman/WV DNR

Range: Blue catfish are native to large rivers and their tributaries (principally the Mississippi, Missouri and Ohio rivers) from Minnesota and Ohio southward into Mexico. They have also been introduced into many large reservoirs and rivers across the United States to establish new sport fisheries.

Diet: Usually a nocturnal predator, blue catfish feed on fish, aquatic insects, crayfish, clams, mussels and miscellaneous animals they encounter. They will consume both live and dead organisms but prefer live prey or very fresh bait. Large blue catfish often feed exclusively on other fish. Many Ohio River anglers prefer to use skipjack herring — either whole, in filet form, or cut-up — when fishing for trophy blue catfish. Anglers sometimes take larger fish on plugs and spinners while fishing for other species during warmer periods when blue catfish are most active and are keying on a specific type of food.

Life History: Blue catfish begin spawning when the water temperature reaches 70-75 degrees in June to early July. Like other catfish they build a nest in a sheltered area under a log or within a rock pile or other cover. Both the male and female assist in making the nest, and guarding and rearing the young until they leave the nest. The male is particularly active in guarding the young. Eggs hatch after about one week. Soon after birth, young blue catfish will go their own way. By the end of their first year, they will reach 2.25 to four inches in length.

Angling Information: It is prized as a sportfish and marketed commercially in some locations due to its excellent tasting flesh. Heavy tackle (stout

rods, strong reels and heavy line) is recommended when fishing for blue catfish. Some anglers even pursue them with saltwater tackle. A combination of size and strength makes the blue catfish a supreme challenge to all anglers. Many river anglers claim blue catfish are triggered into feeding by the passing of large ships and barges.

Kanawha and Ohio rivers.

The current all-tackle world record blue cat weighed 124 pounds, was 54 inches long and 44 inches around its middle. This massive blue cat was caught by Tim Pruitt in the Mississippi River near Alton, Illinois, on May 22, 2005. For more information, check www. timpruitt.net. In 1879, a 150-pound specimen from the Mississippi River was found in a St. Louis market and sent to the United States National Museum. Legends exist about 300- and 350-pound blue catfish, but none have ever been documented.

Conservation and potential threats: No species specific threats in the Mountain State.

Jeff Hansbarger is the Assistant District Fisheries Biologist in Pt. Pleasant.

THE SUNFISH:



Talia Miller proudly holds her first fish — a green sunfish — caught in Dixon Lake in Monongalia County.

By Gerald Lewis

n most cases, it would be a safe assumption that the first fish we can remember catching as a youngster was a sunfish. These feisty relatives of the largemouth bass, smallmouth bass and crappie are usually the most abundant species and easily caught with just a worm as bait. There is nothing more basic than a youngster, fishing pole, bobber, worm and sunfish. While the sunfish may not be the most numerous species present in some of our larger impoundments, almost without exception they are the most common fish available to the angler in the smaller West Virginia lakes, farm ponds and even some streams.

Seven species of sunfish live within the Mountain State. These include redbreast sunfish, green sunfish, pumpkinseed, orange-spotted sunfish, bluegill, longear sunfish and redear sunfish - colorful names for colorful fish! All these fish have the same panfish-like shape and similar life histories. They spawn in the mid-spring through early-summer, and males build and guard nests where females lay eggs. Most sunfish have very small mouths, and therefore can only eat small-sized items including insects, crayfish, worms and very small fish. Males, like most bird species, are more colorful than their female counterparts. Most sunfish do not grow much more than six inches long, and a 10-inch sunfish should be considered a great trophy for West Virginia waters. The best-suited sunfish for our ponds and lakes are bluegill.

Sunfish spawning time is a primetime to catch the large males as they perform nest-guarding duties. Spawning will occur in groups of fish in fairly shallow

OFTEN, A YOUNG ANGLER'S FIRST CATCH

water. This activity can be observed, if the water is clear. In lakes, these spawning areas can be found near shore. Fishing spawning areas thoroughly can yield several large and colorful male sunfish. The largest nesting areas occur in water from two to six feet deep.

Live bait and small artificial lures can be equally effective regardless of the sunfish species. As previously mentioned, fishing a spawning bed full of large males will provide some of the fastest action imaginable. After the spawning season and as summer progresses, fishing near brushy and weedy cover with bait such as earthworms, mealworms, crickets and grasshoppers on a size 6 or smaller hook will prove very effective. Small plastic grubs and crappie tube jigs of 1/32-ounce or 1/16-ounce size and bright in color will be readily grabbed by hungry sunfish. During the hottest summer months, sunfish may feed in shallower water early and late in the day. Fishing deeper, cooler water that contains adequate dissolved oxygen will generally result in better mid- summer catches of good size "sunnies" on hot summer days.

Excellent winter action can also be found if the angler is willing to auger or chop holes through the ice, searching for schools of large sunfish. In winter, live bait, such as mealworms or tiny goldenrod gallworms, will be eagerly taken by the nearly dormant sunfish. A good supply of the gallworms can be obtained by splitting open the swollen nodes of goldenrod stalks during the fall and winter to reveal the small grubs. Use a small hook, about size 10, for these small winter baits.

Most sunfish species readily hybridize, and accurate identification is often tricky and generally unnecessary. The important thing is that they are always eager to devour the angler's offering. This trait has resulted in the sunfish putting more smiles on youngsters' faces than any other fish. For this, I salute the diminutive cousins of the largemouth and smallmouth bass. May they continue to fulfill their important role in the development of our future generation of anglers.



Pumpkinseed sunfish.



Orange-spotted sunfish.



Bluegill.



Redear sunfish.

casy and cften

By Mark T. Scott



A Shredded Wheat biscuit.



Shredded Wheat and strawberry JELL-O[®] dough ball.



Whole kernel corn on a circle hook.

re you having trouble hooking up with that monster fish of your dreams? Do you want to be able to catch big fish easy and often? Of course you do, what angler doesn't! Here in West Virginia, we are blessed with some great rivers to fish and lots of different fish species to pursue. However, even the best anglers have trouble consistently catching those "slungers" throughout the year. Well,

almost everyone! Some of us have a blast catching big fish all year long! The first and most important thing you need to do is drop any purist attitude you may have and learn to just love the pull of a big fish, no matter what it is! Once you have this mastered, the rest is a piece of carp, I mean cake! Looks like I let the secret slip! All you need to do in West Virginia to catch big fish consistently is target carp.

Carp were introduced into U.S. waters in the 19th century and have become common everywhere. They are highly prized in Europe and Asia but many of us have ignored the challenge of fishing for this species. Anyone that has ever caught one, however, will tell you there is nothing lowly about them. They are hardfighting fish that will strip-drag and burn up gears!

The first secret to carp fishing is to find the fish. In West Virginia, they can be found in all the state's large rivers, reservoirs and lakes, and even

The first and most important thing you need to do is drop any purist attitude you may have and learn to just love the pull of a big fish, no matter what it is!

some smaller streams. In short, they are found just about everywhere. But just casting a line in the water won't always do the trick. They tend to congregate in certain areas so you may need to do a lot of moving around initially. Look particularly for shallow areas with aquatic vegetation. Here are a couple of my hot spots to get you started: the tailwaters at the base of Bluestone Dam at Hinton and areas on the New River

> around Sandstone Falls. Both of these spots typically have carp year-round, but you may have to move around a little to zero in on them.

Now that you know where to go, the next step is how to fish for them. Here are a few tips to consider for carp fishing. Let's start out with what gear to use. I know lots of folks who break out their surf rods and big reels to subdue these big carp. But, if you don't have this kind of heavy gear, you can use most of your everyday fishing tackle.

I use my regular bass spinning gear with 12-pound test braided line. Sometimes I will use a 12-pound fluorocarbon leader if the water is really clear. I don't use big sinkers either. My rig consists of a circle hook with the size matched to the bait I'm using and a couple of small split-shot sinkers. That's it. I can't cast halfway across the river, but I don't actually need to cast that far!

The next step is bait selection. I guess every carp angler has a secret bait but I'd like to suggest a

Shaluta/WV Dept. of Comm



Anglers display a carp caught along the New River near Sandstone Falls.

couple that have always worked for me. The first and most common bait is a doughball. I have heard of folks making them from bread, oats or cornflakes and adding in flavors like vanilla extract, peanut butter or jelly. My favorite doughball concoction is made by using Shredded Wheat and strawberry JELL-O[®]. Here's how to make one.

First, buy the large "biscuit" Shredded Wheat, you know the ones that each is the size of your hand. Then break off about half of a "biscuit" and pour some of the dry JELL-O[®] mix on the Shredded Wheat in your hand. Immerse your hand in the water just for a second or two to get it slightly wet. Now comes the tricky part, but a part that is very important. Before you compress this concoction, put your hook in the middle of it! Then begin to squeeze and work it into a doughball with your hook inside. Be careful not to stick yourself! A big help in this instance is a circle hook. It's hard to stick yourself with one when you make a doughball! For doughball fishing, I usually use a decent-sized hook.

I have caught lots of carp on these doughballs, but my all-time favorite bait is whole kernel corn. Start out with a smaller circle hook, one that you would use for bass or trout. I have a specific way of putting the kernels on the hook, though, because those big carp can be spooky sometimes. The first kernel is threaded on from the cut end and pushed up over the eye to hide it. Then I start putting on more kernels until I'm near the barb of the hook. The last kernel I put on is stuck from the top end of the kernel and pushed just past the barb. This hides the barb and tip well.

Now you have your spot picked out, your gear ready, and your hooks baited, what's next? This last step is the most important for consistent success. Before any carp trip, I make a trip to my local grocery store to get bait, Shredded Wheat and corn, but I don't leave without something else. That "something else" is a couple cans of creamed corn! Why you ask? Remember I said that I didn't need to make long casts? Why is that? Because I use the creamed corn to chum the area. You don't need much because it has lots of smell, and it gets any carp in the area in a feeding mood and will attract carp up the river to your spot!

So there you have it. My sure-fire way to catch big fish easy and often. You may not catch carp every time, but you will catch a carp most of the time. Often you will catch several! So get your gear together, visit your local grocer, and hit the water for some of West Virginia's biggest fish.

Mark T. Scott is the District Fisheries Biologist stationed at Beckley.

First Bald Eagle Nest in Southern WV Found

Friday, March 19, was a big day for Jim Phillips, Wendy Perrone and other bird enthusiasts in southern West Virginia. That was the day Perrone, director of the nearby Three Rivers Avian Center, noticed two young bald eagles (eaglets) in a nest that had been discovered by Phillips along the New River in December. A group of 15 volunteers had been monitoring the nest since its discovery. The nest is located on an island within the New River Gorge National River.

Phillips had been coordinating annual bald eagle sighting forays for five years. "Bald eagles have been seen year-round in this part of the state since 2003," he said. Bird lovers believe it is likely another nest or two exist in this area. During the March foray this year, 19 bald eagles were seen.

It remains to be seen whether the eagles remain in the area year-round or whether they migrate south for the winter. Even if they head south, they should return next winter, as bald eagles often use the same nest for many years, sometimes for decades.

Most of the bald eagle nests discovered since the first nest was found in 1981 have been in the Eastern Panhandle along the Potomac River tributaries, and more recently along the Ohio River. Last year, the first nest on the Cheat River was documented. In 2009, 38 young eagles were successfully fledged.



Charles Nichols of the WV Chapter of the National Wild Turkey Federation presents DNR Director Frank Jezioro with a \$20,000 check to purchase acreage for Beury Mountain WMA.

NWTF Donates \$20,000 to DNR

At the Natural Resources Commission meeting earlier this year, the West Virginia Chapter of the National Wild Turkey Federation presented DNR Director Frank Jezioro with a \$20,000 check. The money will be used to buy nearly 1,600 acres on the rim of the New River Gorge near the Rt. 119 bridge to be added to the Beury Mountain Wildlife Management Area. The property had been originally purchased by The Nature Conservancy, which is selling it to the DNR with financial help from organizations such as the Wild Turkey Federation.

Calendar of Events

AUGUST

7 Walk Between the Parks Canaan Valley Resort State Park

Naturalist guided 8-mile hike between Canaan Valley and Blackwater Falls state parks. Call 304-866-4121 ext. 2788 for more information.

Bluestone Turnpike Hike *Pipestem Resort State Park* A 10-mile hike along the Bluestone River. For more information and to register, call 304-466-1800 ext. 344.

SEPTEMBER

11 Margaret Dennison Fall Nature Walk

7

Kanawha State Forest Various guided hikes include fall wildflowers, fungi, pond/ stream life, birds, trees and nature photography. For more information, call Shirley Schweizer at 304-925-2771.

17-19 Becoming an Outdoors Woman Workshop Watoga State Park

A full weekend aimed at introducing women to outdoor activities or improving outdoor skills. Approximately 30 classes from which to choose. Contact Billie Shearer at 304-558-2771, billie.j.shearer@ wv.gov or go online.

25-26 National Hunting and Fishing Day Celebration

Stonewall Resort State Park

Hunting and fishing demonstrations, displays, vendors and hands-on activities for all ages. Contact Jerry Westfall at 304-558-2771, jerry.a.westfall@ wv.gov or check www.wvdnr. gov.

For more events, go online to www.wvdnr.gov

Five Arrested in Poaching Case

Officers Calling Incidents "Thrill Kills" of More Than 30 Deer

Three adults and two juveniles from Braxton County have been arrested and charged with multiple violations of West Virginia wildlife laws in what Division of Natural Resources (DNR) Law Enforcement officers are calling "thrill kill" deer poaching incidents.

In October 2009, DNR conservation officers began finding numbers of dead deer adjacent to several roads in Braxton County. The locations, position of the carcasses and in some cases information supplied by the local citizens led the officers to become suspicious of what might have been written off as deer struck by vehicles. However, upon closer examination of the carcasses, the officers determined that the animals had wounds consistent with being hit by a low velocity projectile that officers later learned were slugs fired from a .410 shotgun.

By late October, the officers got a break in the investigation. Deputy Rob Brady of the Braxton County Sheriff's Department overheard a remark by a juvenile who then showed the deputy a "Anytime wildlife is taken illegally it robs the honest sportsman of the chance to lawfully harvest game and limits the opportunity to introduce a new generation of young people to the outdoor sports."

> Capt. M.A. Waugh DNR District 3 office in Elkins

large set of deer antlers and allegedly initially remarked that the deer was "shot the other night" but later changed his story, stating that another individual killed the deer with a bow on Nicholas Run.

Conservative estimates based on the suspects' statements and the evidence was that more than 30 deer may have been killed by this alleged poaching ring during a two-month period.

The skills and tenacity of Conservation

officers K.W. Bingaman and D. Duffield, along with the cooperation of concerned citizens and an alert Deputy Brady, resulted in the senseless destruction of the citizen's natural resources being stopped," said Capt. M.A. Waugh of the DNR District 3 office in Elkins. "Anytime wildlife is taken illegally it robs the honest sportsman of the chance to lawfully harvest game and limits the opportunity to introduce a new generation of young people to the outdoor sports."

Braxton County

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Plant ID Error

Talented (and sharp-eyed) West Virginia artist Chuck Ripper sent me a note last June saying that the flowering plant on the back cover of the Spring 2009 issue of West Virginia Wildlife was not flame azalea as we noted. Without a close-up image of the flower or a specimen in hand for certain identification, our botanists agree with Chuck that the plant is either the pink azalea or the early (rose) azalea. I apologize for not printing a correction earlier. It's nice to find out for sure that folks are really looking at the magazine.





