



VIRGINIA WILDLIFE

NOVEMBER/DECEMBER 2018

FOUR DOLLARS

Inside:
Deer & Waterfowl
Forecast

NOVEMBER/DECEMBER

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Cover: A handsome, battle-worn buck watches from a frosty meadow. See page 10. © Ryan Yoder
Left: Waterfowl hunting on the Shore has changed. See page 28. © Ann and Rob Simpson
Back Cover: Inland striper fishing offers great winter sport! See page 14. © Ethan Gordon



BOB DUNCAN
Executive Director

For many of you who share my inclinations, November is the month to seriously pursue wild game. By this time of year, the forest floor is getting covered over with brown, tan, and rust-colored leaves. It is also the time of year when you will encounter turkey scratchings in the leaves and scrapes the size of car hoods made by big bucks. As you no doubt have heard me mention before, it is one of my very favorite times to be outdoors. To say that I love the fall is like saying Vince Lombardi loved football!

I am reminded of a response given by a fellow one time when asked why he hunted. His reply: “To feed my body and my soul!” To be sure, both are important. I think that the uncertain outcome of any hunt is one of the sport’s greatest draws. If you are truly hunting, there are no guarantees and no sure thing. If there is, you’re not really hunting. As sportsmen, we are buoyed to know that 83 percent of Virginians support legal hunting, and by that I mean fair chase. Anything else runs the risk of losing public support for this time-honored tradition.

Another time-honored tradition dear to my heart is the setting aside of a day to pay tribute to our veterans. Veterans Day and D-day are two very special days to me personally. My father parachuted into Normandy on D-day with the 82nd Airborne and fought throughout France and at the Battle of the Bulge. My oldest brother was an army ranger helicopter pilot in Vietnam for two tours in the late ’60s and early ’70s. Let us not forget the men and women who have served and those who are still bravely serving our country.

Perhaps you might find time to visit one and even share a copy of this magazine. There are lots of great features inside: an update from southwest Virginia on the growing elk herd, a land management plan that focuses on creating sanctuaries for trophy bucks, our biologists’ forecasts for upcoming deer and duck seasons, a look back at the changes in waterfowling on the Eastern Shore, and practical tips for catching cold-weather stripers.

Don’t forget about the good works of Hunters for the Hungry (www.hunters4hungry.org), and if you’ve not yet purchased your hunting license, now is the time! I hope to see you out there.



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2017 Deer Season in Review

During the past deer season, 190,623 deer were reported harvested by deer hunters in Virginia (See Fig. 1). This total included 95,563 antlered bucks, 12,967 button bucks, and 82,093 does (43 percent). Archery (including crossbows) accounted for 15 percent of the deer harvest; muzzleloaders, 26 percent; and firearms, 60 percent.

Hunters who would like to know the annual deer kill totals by county dating back to 1947, including the county-specific 2017 totals, will find those numbers on the Department’s website at www.dgif.virginia.gov/wildlife/deer/harvest.

What’s New for Fall 2018?

The city of Newport News, the town of Buchanan, and Stafford and Prince William counties have joined the urban archery deer season.

Hemorrhagic Disease (HD)

Good news: It was a fairly quiet HD year across most of Virginia in the fall of 2017. We received 137 HD calls, and the vast majority of them were from seven far southwest counties. The deer kill numbers were not significantly affected in this area. In southwest Virginia, we were on the eastern edge of a big HD event that spread across the Appalachian Plateau through eastern Tennessee and eastern Kentucky, and north through West Virginia into Ohio and Pennsylvania.

We also got enough HD reports and/or DMAP HD data to be fairly sure that there was some HD activity in the central Piedmont in Buckingham, Charlotte, Cumberland, and Prince Edward counties and at the upper end of the Middle Peninsula (Caroline, Essex, King and Queen, and King William counties).

The best predictor for HD activity is

drought. For more information, go to www.dgif.virginia.gov/wildlife/diseases/hd.

Chronic Wasting Disease (CWD)

Bad news: There is a CWD bomb currently going off across the eastern two-thirds of the United States. Regrettably, this was not unexpected. The primary catalyst behind this unfolding tragedy is the past and current inter- and intra-state movement of live deer, particularly by the captive deer industry (deer farms, deer breeding facilities, and deer shooting preserves). Since Virginia does not have as many CWD risk or amplification factors as other states (e.g., a captive deer industry, feeding, baiting, etcetera), hopefully it will be spared the worst of this calamity. But only time will tell.

Last fall in our four-county CWD Containment Area (CA) in northwestern Virginia, 16 new CWD-positive deer

WHITE-TAILED DEER

were found among the 1,548 deer tested. This brings the CA total up to 38 CWD-positive deer since Virginia's first such deer was found in 2009 in western Frederick County. Infected deer have been identified in western Frederick County (35) and the northern part of Shenandoah County (3). To date, the Department has tested approximately 8,140 deer in the Virginia CA area since 2005 when the first positive CWD deer was identified in Hampshire County, West Virginia.

This fall, the Department will begin a pilot program using cooperating taxidermists to initiate a statewide CWD surveillance program. For more information on CWD, go to www.dgif.virginia.gov/wildlife/diseases/cwd.

Tidewater Forecast

Deer herds and deer kill numbers are down over the past ten years for most of the Tidewater Region. These declines were not unexpected. Approximately a decade ago, the Department implemented liberal either-sex deer hunting regulations over most of the region to address population objectives in the *Deer Management Plan*. These liberal regulations, combined with several HD events (particularly in the fall of 2014), have resulted in significantly reduced deer herds (down >=25 percent) in 17 of 26 (65 percent) Tidewater deer management units.

To address these declines, the Department has been cutting either-sex deer hunting days over most of the region during the past two regulation cycles. It is hoped that these reductions will allow Tidewater deer herds to stabilize or slowly recover. This may take several years.

The Department continues to maintain liberal seasons in most Tidewater counties south of the James River and east of I-95 but will be monitoring them closely in the future and will make adjustments as needed.

Continued high human population growth rates, crop damage, and deer-vehicle collisions remain important deer management issues in Tidewater. HD can play a major role here.

Southern Piedmont Forecast

HD hit the southeastern half of the southern Piedmont like a sledgehammer in the fall of 2014. Hence, deer populations are down over the last decade in the eastern half of the region. To address this big HD event, the Department reduced the number of firearms either-sex deer hunting days in many Southside counties back in the fall, 2015. These changes have been successful in reducing the female deer kill. Deer populations and deer kill numbers have remained stable in the western half of the southern Piedmont over the past decade.

Just like in Tidewater, HD can play a major role in the southern Piedmont. As long as there is not another big HD event

this fall, deer herds over most of the region should be fairly stable or, hopefully, up slightly in the eastern half.

Northern Piedmont Forecast

This is the region where the Department continues to maintain liberal deer seasons. The female deer kill has been fairly high in this region for the past decade or more. Over most of this area, the Department continues to try to reduce the deer population to address population management objectives in the *Deer Management Plan*. The deer kill will hopefully be stable to slightly down in this region over the next several years. The good news is that deer herd reductions have been documented in Loudoun, Prince William, and Stafford counties. Continued very high human population growth rates and deer-vehicle collisions remain important deer management issues in the northern Piedmont. HD can also play a role here.

(cont. page 8)

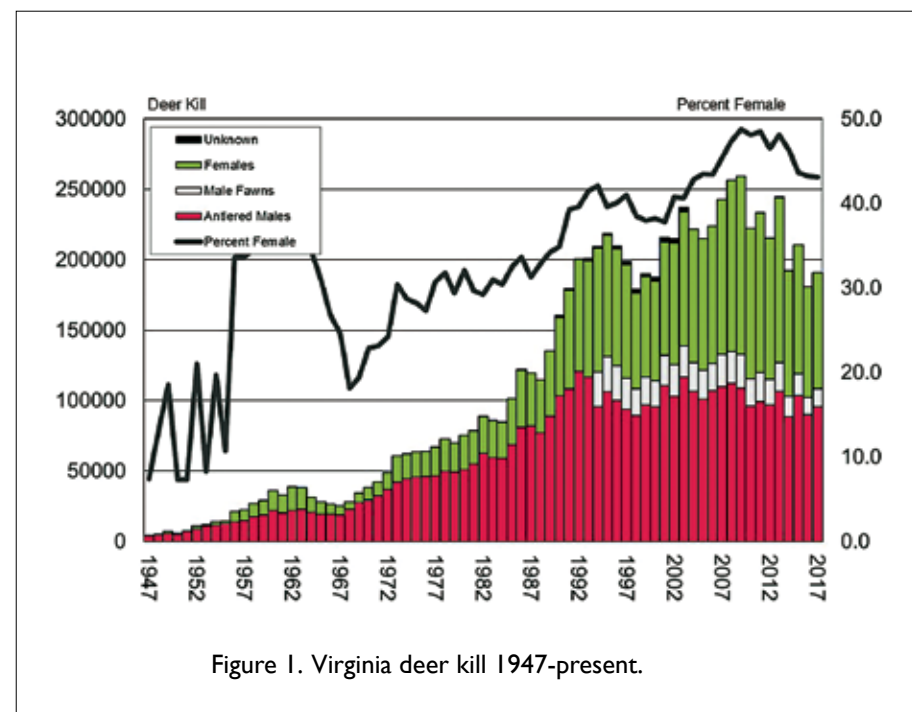


Figure 1. Virginia deer kill 1947-present.

The Case for Copper

There is a high-spirited debate currently going on in the deer hunting community across the country regarding lead versus copper bullets for deer hunting. I am a copper bullet advocate for deer hunting, but I do not support outlawing or prohibiting the manufacture or use of lead ammunition.

I transitioned to all-copper bullets for deer muzzleloading and rifle hunting in the fall of 2015. My copper bullet experiences so far have been very positive. I should also note that most of the Department's deer management staff have already or intends to transition to copper bullets for deer hunting in the future. If you are a Virginia deer hunter, I recommend that you seriously consider using copper bullets for deer hunting.

Why switch? There are two primary downsides to using lead bullets for deer hunting: human health and wildlife health. Lead is a neurotoxin. Copper is nontoxic.

The modern lead rifle bullets used by most deer hunters are made with some sort of lead core surrounded by a thin metal jacket of copper. Lead is relatively soft and when lead bullets enter a deer, they expand and mushroom. Lead bullets also disintegrate upon impact, sending tiny fragments into the surrounding tissue in all directions. It is not unusual for a lead bullet to lose 25 percent or more of its original mass as it disintegrates.

Conversely, copper is much harder and modern copper bullets are designed to expand, or "flower," upon impact. Think of a mechanical broad head that opens upon impact and routinely maintains 95-99 percent of its original mass. Because they do not disintegrate, they also tend to penetrate farther and deeper, very frequently punching completely through a deer. Today, nearly every major manufacturer of rifle ammunition produces non-lead bullets in virtually all of the popular deer hunting calibers.

Depending on the lead bullet design and which study you read, radiographs will typically find 50 to hundreds of lead

fragments up to a foot away from the wound channel for a typical modern lead rifle bullet. In a 2008 study of 72 deer processors in Minnesota, 22 percent of processed and packaged deer meat contained lead fragments, but results varied widely between processors and by type of cut. Lead was found in 26 percent of ground venison compared to two percent in non-ground products.

Needless to say, lead fragments in deer meat represent a human health risk if they are consumed. In my opinion, however, this lead bullet/human health issue is highly related to where the deer was shot (e.g., in a solid muscle mass like the front shoulder versus through the rib cage) and how well the wound channel was trimmed away during processing.

The second major downside to using lead bullets for deer hunting is lead poisoning in raptors (hawks, eagles, owls, vultures, and others) and scavenging birds (crows, jays, ravens, for example). Lead poisoning in birds, attributed to scavenging on deer gut piles, is a serious issue in Virginia and across the United States. In California, lead poisoning was found to be the major cause of mortality in the critically endangered California condor. In response to this finding, Arizona and California have put in place a combination of educational programs and regulation changes to reduce or prohibit the use of lead ammunition for hunting in the condor's range.

Here in Virginia, the risk to raptors has been well stated in a Wildlife Center of Virginia press release from October 27, 2017 (www.wdbj7.com/content/news/Wildlife-center-admits-43rd-bald-eagle-patient-this-year-453699933.html). In that release, the Center reported nearly 70 percent of eagles admitted had measurable amounts of lead in their blood, some levels too high to measure with in-house equipment.

Copper bullets do not poison birds or other mammalian scavengers, but there are also downsides to copper bullets—the primary one being cost. Copper bullets

are more expensive than traditional lead ammunition. In an unofficial survey on MidwayUSA (www.midwayusa.com) conducted in December 2017 using 308 Winchester ammunition as my standard, I found 155 different types of rifle ammunition. Twenty-four (or 15 percent) were lead free. Lead-free bullets ranged in price from \$1.40 to \$2.60 per round and averaged \$1.95. The first 24 lead bullets listed in the same caliber ranged in price from \$0.40 to \$2.38 per round and averaged \$1.24 per round. So shooting copper bullets costs, on average, about \$0.71 (57 percent more per round, or just over \$14 more for a box of 20; \$39 versus \$25).

A second downside to copper bullets is ballistics, or accuracy. Copper is lighter than lead and, therefore, copper bullet weights are generally lower. When I told one of my close friends and mentors, who is also a world-class firearms and ballistics expert, that I was going to copper bullets, he grimaced and shook his head. When I asked him why, he replied, because "You will give up some accuracy." When I asked how much, he answered, "About a half-inch at 100 yards." I was and am fine with that. To my friend, a half-inch at 100 yards is like a mile. To me, a half-inch at 100 yards is no issue at all. I like to shoot deer, not paper.

A final concern about copper bullets is that they penetrate farther. This is a valid point, but to me it is an advantage.

We, as a society, have gotten the lead out of paint, the lead out of plumbing, the lead out of gas, and the lead out of waterfowl ammunition for good reasons. I recommend we voluntarily get the lead out of deer hunting in Virginia because it is the right thing to do.

—Matt Knox



WHITE-TAILED DEER

West of the Blue Ridge Mountains

Deer management in western Virginia remains a tale of two different management situations. Deer herds on private lands over most of western Virginia have been fairly stable over the past two decades (with an exception in the three Alleghany-Highland counties).

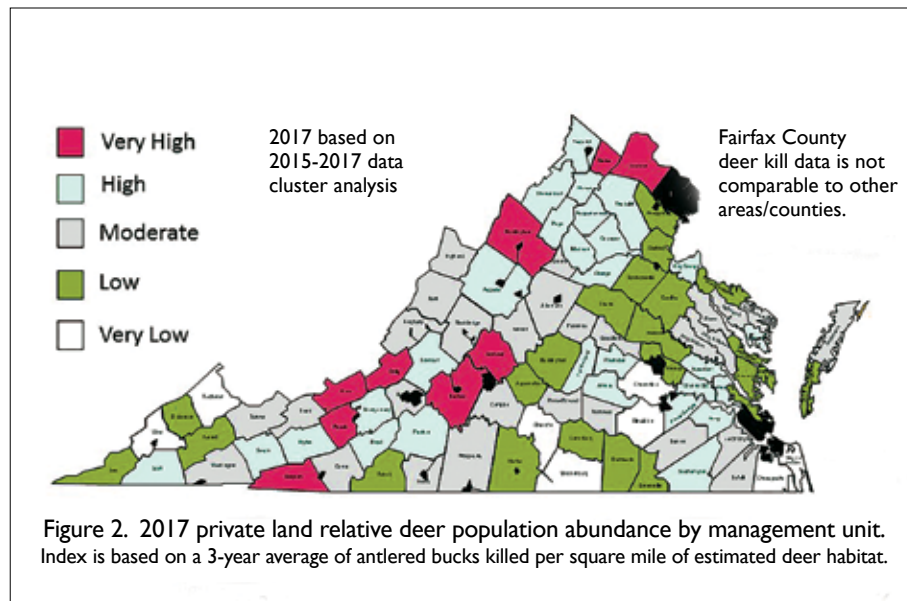
The biggest challenge in deer management in western Virginia over the past 20-plus years has been the decline in public land deer hunters, and thus, the public land deer kill in the mountains. To address this decline, the number of either-sex deer hunting days on western public lands has been reduced significantly over the past decade to very conservative levels. These changes have been successful in reducing the female deer kill, and the western public land deer kill decline appears to have hit its lowest point and is perhaps starting to increase, albeit very slowly.

Relative Deer Abundance Map

The best way to compare deer populations in Virginia is based on the antlered buck deer kill per square mile of estimated deer habitat. Figure 2 shows the relative differences among counties in the harvest of antlered bucks per square mile of habitat on private land averaged over the past three hunting seasons. This map indicates the relative densities of deer on private lands in counties across Virginia. This is the best map of “where” deer are in Virginia. The descriptions for each group (very low, low, moderate, etcetera) are subjective.

Top Issue: Declining Number of Deer Hunters

A major challenge in deer management in Virginia that cannot be overlooked continues to be the steady decline of the number of licensed deer hunters. From just under 300,000 licensed deer hunters



in the early 1990s to an estimated 193,500 in the fall of 2017, the Department has lost more than one-third of its licensed deer hunters over the past 25 years. In the past decade, we have lost ~46,000 (19 percent); in the past five years, ~30,000 (13 percent); and just last fall, ~6,500 (3 percent).

In my opinion, this decline in deer hunters represents the biggest statewide deer management issue. The decline in deer hunter licenses will have a significant, negative impact on the Department's finances and may have a negative impact on the Department's ability to manage deer populations through recreational deer hunting over much of the commonwealth.

Today, there are many deer hunters in Virginia who think the Department has killed all the deer. In their defense, the Department hit the deer herd very hard over the past decade, especially on private land in eastern Virginia. As I have written earlier, in the not too distant future it is possible that the major deer management issue in Virginia will not be “where are the deer?” but “where are the deer hunters?”

Summary

So what is the forecast for the fall 2018 deer season? A major increase or decrease in the statewide deer kill from last fall (190,623) is not expected. We cannot expect to harvest approximately 200,000 or more deer annually with a continuing decline in deer hunters.

Lastly, past experience indicates that the ups and downs in annual deer kill totals are in part attributable to mast conditions and/or HD outbreaks. In years of poor mast crops, the deer kill typically goes up. In years of good mast crops, the deer kill typically goes down.

Persons interested in more information on Virginia's deer management program will find the Department's *Deer Management Plan* at www.dgif.virginia.gov/wildlife/deer/management-plan. Please support the Virginia Hunters for the Hungry program, do not feed the deer and, most importantly, be safe.

This white-tailed deer update was submitted by Matt Knox, who serves as the statewide deer project manager out of the Forest office.

WATERFOWL

Waterfowl Forecast

Waterfowl hunters throughout the Atlantic Flyway will recall the 2017-2018 season as one of the coldest in recent memory. As frigid temperatures pushed ducks down from the north, many Virginia hunters enjoyed favorable gunning conditions. Ultimately, many Virginia waterways ended up freezing as well, pushing ducks farther south in the flyway.

While we cannot predict the weather, reports from the breeding grounds provide an indication of waterfowl populations for the upcoming year. The forecasts below are based on reports of surveys conducted on the primary breeding areas of North America's waterfowl. Official reports and data from both local and primary production area surveys can be found in the “Status of Waterfowl Fact Sheet,” updated annually on the Department's website at: www.dgif.virginia.gov/wildlife/waterfowl.

Duck Production Forecast

The Eastern survey area, which consists of Atlantic Canada, Ontario, and Quebec, is an important breeding area for ducks that winter in Virginia and the Atlantic Flyway. Conditions for waterfowl production in this area generally declined in 2018. The region experienced well below average temperatures in April that continued into May in some areas. This late thaw hindered some waterfowl breeding efforts.

Local Breeding Waterfowl

Although Virginia is primarily a waterfowl wintering area, several species (wood ducks, mallards, and Canada geese) also breed in Virginia. Each year a statewide breeding waterfowl plot survey is conducted by Department staff. This survey contributes to a larger survey throughout the Atlantic Flyway and provides flyway-wide pair and population estimates of waterfowl that

breed in the lower 48 states. These estimates are also used to monitor trends in local populations and to set waterfowl hunting regulations. The survey consists of aerial and ground monitoring of 165 individual, one-square-kilometer plots, which are randomly selected in different physiographic zones of the state. The plots are surveyed during the months of April and May. All waterfowl on these plots are identified and counted, and their breeding status (paired, single, and flocked) is recorded.

YOUTH WATERFOWL HUNTING DAY

FEBRUARY 2, 2019

Habitat conditions in Virginia during the spring of 2018 were generally good. Significant precipitation during the middle and latter portions of the breeding season filled wetlands and created good brood-rearing habitat, although flooding in certain areas may have caused some nest failure. Breeding pair estimates for black ducks and wood ducks were slightly lower in years past, while estimates for Canada geese were higher.

One notable trend from the Atlantic Flyway Breeding Waterfowl Plot Survey is the sustained decline in Eastern population mallards. The 2018 mallard population and breeding pair estimate in the Northeast regions was the second lowest on record after last year's estimate. The continued decline will likely result in a reduced bag limit in the future.

2018 Changes

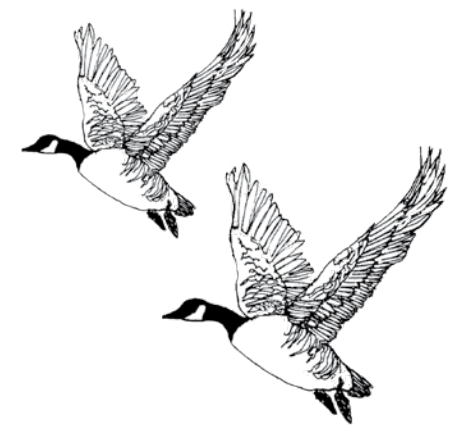
During the 2017-2018 season, Virginia waterfowl hunters saw an increase in the black duck bag limit from one bird to two birds for the first time in 30 years. Several key developments led to this increase—primarily, decreases in hunter numbers in both Canada and the United States, better biological data which showed a stabilized population, and an improved population model that shows that harvest has a limited effect on population size. More information about this increase can be found on our website at www.dgif.virginia.gov/wp-content/uploads/Black-Duck-Hunting-Reg-Update-2017.pdf.

Based on the *Adaptive Harvest Management Strategy for Northern Pintails*, the daily bag limit for pintails has been raised from one to two per day.

◆ ◆ ◆

Despite the unknowns of weather and wildlife populations, the upcoming hunting season will certainly provide opportunities to get out and enjoy the diversity of waterfowl habitat that Virginia has to offer. So enjoy your hunting, be safe, and hopefully we will get to harvest a few birds along the way!

This update was submitted by statewide waterfowl biologist Ben Lewis, who works in the Charles City office.





Sanctuaries for SUCCESS

By Tee Clarkson

Virginia deer hunters have one of the highest success rates in the country. About 60 percent of licensed hunters harvest at least one deer annually. And of the 40 percent who do not harvest a deer during the season, most do so by choice, not because of a lack of opportunity.

The success of Virginia's hunters is no fluke. With one of the most liberal seasons in the country and a herd of over one million deer in the state, equating to 25 animals per square mile, most hunters don't have to venture far to find an opportunity to put a little meat in the freezer.

Finding a trophy whitetail? Now that's a different story. While some real bruisers are taken every year across the state, Virginia isn't exactly known as a trophy whitetail destination.

Of course those who strictly manage for trophy deer have a better chance of racking up the bills with the taxidermist, but a lot of hunters find management intimidating or think they don't have a big enough property to work with.

Delegate James Edmunds, who serves Virginia's 60th District and co-chairs the Legislative Sportsmen's Caucus, has spent a lifetime managing for large whitetails in Halifax County. His theories and tactics can be used throughout the state on properties both large and small to help hunters harvest some serious, trophy bucks.

The Sanctuary

Edmunds's philosophy on trophy white-tail management centers around creating sanctuaries for deer. These sanctuaries are areas that should be left completely undisturbed by human activity 365 days a year. We are talking no vehicles, no walking, no entering at all. It's easier said than done, of course, but no one said raising big bucks was going to be easy. The sanctuaries should include some varied habitat and certainly some bedding area, according to Edmunds.



As for sanctuary size, that depends on the habitat, the geography, and the size of the property. A hunter with access to 50 acres might leave a 25-acre sanctuary. A hunter with access to 500 acres might have four or five or more sanctuaries of varying sizes scattered throughout the property. When possible, Edmunds suggests leaving as much as 50 percent of the land in sanctuary areas, although he recognizes this can be difficult.

"If you are hunting a big cutover area, it's pretty easy to leave a lot as sanctuary, where working farmland is much harder," Edmunds says. "Just the more you can provide, the better your chance of holding an older age buck. You want bucks retreating to your hunting grounds, not from them," he adds.

These sanctuaries provide a place where older, smarter bucks will spend the majority of their time, completely undisturbed by human activity.

Food

One certainly doesn't have to plant food plots to kill big bucks, but Edmunds is



Left: A white-tailed buck scent marks an evergreen branch. Above: Delegate James Edmunds and his son, Paul, with two beautiful bucks taken on his property in Halifax County. Below: Daughter Caroline poses with her big buck, also harvested on their land. Photos above by Peter Sutphin.

a big believer in their effectiveness and annually plants food plots around his sanctuaries. He plants clover in February, then more annual food like sorghum, beans, and sunflowers in April and May. Toward the end of August he plants his fall plots, which are a mix of brassicas (After Frost seed mixes that include foods like radishes and turnips) and cereal grains like barley and wheat.

With food readily available close by throughout the year, the hope is that the larger bucks will stick around. Of course there is no way to ensure this. Edmunds reports that, according to his trail camera photos, he believes larger, mature bucks may travel up to two miles from their home territory during breeding season. Still, he has a barn full of

trophies that suggests the sanctuary concept works more times than not.

Breaking down his schedule

Sure, we all hear stories of the hunter who hasn't been out all year and decides on a whim to go hop in a stand one morning only to find him or herself smiling with the buck of a lifetime an hour later. But consistently harvesting trophy bucks year in and year out takes a lot of thought and even more hard work throughout every season.

Here is his approach

January: puts out trail cameras as soon as the season ends to see which deer made it through the season; also hinge-cuts trees to create more cover and food sources

February: plants clover in food plots, and works on road access and stand access for the next year

March: sprays, limes, fertilizes food plots
April/May: plants annual food plots (sorghum, beans, etcetera)

June: watches everything grow

July: sprays down fall food plots

August: plants fall plots

September: prepares for hunting season

October through End of Season: hunts as much as possible

What is a trophy?

Ask any two hunters this question and you are sure to get two different answers every time. Edmunds classifies a trophy as an old deer with significant body size and

antler mass, but is also quick to note that everyone's idea of a trophy is different.

"If it's a trophy to you, then shoot it," Edmunds says, emphasizing that, "It is not the size of the deer, but the size of the experience that counts."

Edmunds hunts primarily with his son, Paul (19), and daughter Caroline (15), both of whom have become serious hunters. They consistently harvest deer in the 150 to 170 class every year, which is big anywhere you are. His cousin harvested a deer in the 190 class during the 2017-18 season.

"Hunting over food plots is a great way for kids to get excited about hunting," Edmunds believes. "They get to see abundant wildlife up close and personal as

they feed and interact with each other in a natural way. Using shooting houses set up in the middle of a food plot is like having a front row seat in nature's theatre!" he continues.

While Virginia will never be the next trophy deer state like Iowa or Kansas, it is possible to have your own trophy-producing property. It will take some planning and some hard work, but the Edmunds sanctuary method is tried and true.

"I promise you can do it anywhere in Virginia," he maintains.

Tee Clarkson writes the Outdoors Column for the Richmond Times-Dispatch, works in land conservation, and runs a summer camp for kids. Contact him at tsclarkson@virginiaoutside.com.

RESOURCES

- ◆ For more on planting food plots around sanctuaries, visit: www.nontypicaloutdoors.com
- ◆ Plantings to attract deer: www.dgif.virginia.gov/wildlife/deer/plantings

Below: Big bucks enjoy a soybean field. © Tes Jolly



Bundle Up and Enjoy: Winter Striper Fishing

By Gerald Almy

Photos by Ethan Gordon

The weather was bitter cold as we trolled slowly along the lower reaches of Leesville Lake in south-central Virginia. It was November, and a brutal nor'easter gripped the land. But my cold fingers and numb face were the last things on my mind when a rod suddenly bowed deep in its holder.

Snatching the 7-foot graphite rod, I pulled back and was fast to a heavy, lunging fish. Five minutes later my partner deftly scooped the net under 15 pounds of glistening striped bass. Suddenly the cold didn't seem quite so bad.

There's nothing like a feisty fish on the line to take the bite out of a raw winter day. And one of the best quarries to focus on at this time of year in Virginia is the freshwater striper. This inland fishery sometimes gets overshadowed by the terrific angling for saltwater stripers in the Chesapeake Bay and Atlantic Ocean, but great freshwater sport is available on a large number of lakes throughout the Old Dominion. The best known waters include Lake Anna, Smith Mountain, Leesville, Gaston, and Kerr, but many other smaller lakes also have populations of this bass.

Just like in the bay, some of the best sport takes place during the heart of winter. Here's a rundown on four tactics that will score from late fall through early spring on these pin-striped members of the true bass family.

Trolling

This method is a particularly good choice on waters that are new to you. Instead of just riding around looking over a lake, you're fishing while you explore it.

You can investigate likely striper areas such as points, underwater islands, saddles, drop-offs, river channel edges,

flats, and waters near the dam. Trolling also takes lures deep—down in the 15 to 40-foot range where stripers often hang out during winter.

You don't need a lot of equipment to troll. One item that is crucial, though, is a good depth finder. Get the best one you can afford. You'll never regret it.

Stripers are known as open water fish, but they do hang out near certain types of structure much of the time. And when they move, they often follow underwater contour lines such as the edge of a flat, drop-off, or river channel. By pinpointing these types of cover with a depth finder, you can continually pull your offerings through potential pay-dirt zones.

In addition to identifying prime structure, depth finders also help you locate forage fish. When you find a school of shad, herring, or alewives, stripers are usually close by. Depth finders sometimes even allow you to locate the stripers themselves on the display screen as large individual markings.

Rods for trolling need plenty of backbone, to resist the pressure of the moving boat and the big-lipped, diving plugs often used. They should measure 6½ to 8 feet long, to allow you to keep the lines clear of each other. Bait-cast or level wind reels are most practical, spooled with 12-40 pound line.

A topographic map is vital. Buy it ahead of time and try to pinpoint good areas for trolling, such as points, flats, creek and river channel edges, underwater islands, saddles and riprap near dams.

Deep diving plugs are great when stripers are suspended at levels of 12-25 feet. These include offerings such as the Mann's Stretch series, Storm Big Mac,



Rapala X-Rap Deep, Rebel Spoonbill, and Deep Diving Red Fin, among others.

All will catch stripers if the fish are in a feeding mood and the bait they are utilizing is fairly large. If the stripers are proving finicky, however, or if they're feeding on small threadfin shad, a bucktail jig or grub trailed behind these lures will often account for even more fish than the plug.

With this rigging, the larger lure's main purpose is to pull the small jig deep into the striper's feeding territory. Attach a 30- to 48-inch, 14- to 30-pound leader to the center hook of the front treble and tie on a quarter-ounce white bucktail jig or leadhead with white or chartreuse twister tail. Vary the distance you run this tandem-rig behind the boat until you find a range that produces strikes, generally 75 to 150 feet. Expect the majority of hits on the trailing jig.

You can also score on stripers by simply trolling with a single ½- to 3-ounce white or chartreuse jig or Sassy Shad. Some anglers also use umbrella-type rigs with several jig heads, only a few of which have hooks. This favorite saltwater tactic simulates a whole school of baitfish and can be deadly.

Downriggers offer another option for obtaining depth while striper trolling. A heavy lead "cannon ball" on a steel cable takes your lure deep and counters let you set the lure at the level fish show on the depth finder.

White, yellow, or chartreuse bucktails, shad-shaped plastic lures, vibrating rattle baits, spoons, and thin-minnow plugs are all good choices for a downrigger. A final piece of equipment you can use for trolling is a planer board to take lures away from the noise of the boat and cover a larger area.

Optimum speed for striper trolling is usually the slowest you can obtain with your outboard. Work in "lazy-S" patterns or slight curves, to probe more

water and give a different action to the lure during the turns.

Live Bait

Live bait fishing is one of the most consistent tactics of all for catching winter stripers in Virginia. Go with shad if you can get them. Otherwise, opt for 4- to 6-inch shiners. If you manage to catch shad, keep them in a circular, aerated bait container to make sure they stay lively.

Several methods work with live bait. One tactic is similar to fishing a plastic worm for bass. Hook the baitfish through both lips from the bottom up on a size 2-2/0 bait hook. Add several split shot 12-18 inches up the line, or a barrel swivel and a ¼- to ½-ounce sliding egg sinker above it. Vary the weight according to the depth you're fishing.

Fish this rig anywhere you locate baitfish or stripers. Bridge pilings on a lake's creek arms are particularly productive during winter on lakes such as Gaston, Kerr, and Anna. The oxygenated current funneling through these stricture points seems to attract the pin-striped bass. Also focus on points, drop-offs, and thermal discharge areas.

Cast the shad or minnow to your target, let it sink close to the bottom, and then begin a slow retrieve. Raise the rod, then lower it back and reel up slack. When a fish taps, wait just a few seconds and then set the hook with a solid sweep of the rod.

The second technique for minnows and shad involves fishing directly over the known striper hangout or a school of fish located on the depth finder. Either anchor out or use the trolling motor to stay over the structure or the fish. Use the same rigging as when casting, except for a longer leader (24-36 inches) and heavier egg sinker (½ to 1½ ounces).

Lower the bait to the level fish show on the depth finder and set the outfit in a



rod holder. You can fish with several rigs this way. Sometimes it helps to chum while you're waiting for a bite. Cut up a few shad and drop the pieces overboard. Also set baits at different depths to see which level is producing best.

Jump Fishing

This is an exciting, highly visual way to catch cold-weather stripers. Everything takes place on or near the surface. Watch for gulls swooping down or choppy, broken water where fish are feeding explosively on shad near the surface and then get to them fast. Stay a short distance back and ease up slowly under power of a trolling motor.

A variety of lures will work for these surface-crashing fish. Elongated poppers or soft plastic shad lures are two top choices. Many experts simply use a white bucktail jig with a saddle feather tied along the flanks in ¼- to ⅝-ounce sizes. Whatever lure you use, try to match the size of the quarry, which could range anywhere from 3 to 7 inches.

Work topwater plugs with a jerking, twitching retrieve punctuated with occasional pauses. Reel the soft shad and bucktail jig imitations with a smooth, steady retrieve, trying different depths. Start near the surface. If no strikes come, probe levels as deep as 10-15 feet where bigger fish may be lurking.

Vertical Jigging

This is the final tactic you should keep in your arsenal for catching winter stripers. The advantage of this method is that it lets you put your lure right down in front of the fish's face and keep it there, tempting it to strike.

Locate the gamefish themselves, a concentration of bait, or simply prime striper structure from 15-40 feet deep. Lower a slab spoon, blade lure, or lipless crankbait to the level of the quarry or where you've detected baitfish. Then

begin a rhythmic lifting and dropping of the rod, 12-36 inches each time. Vary the distance to see which works best on a given day. Be sure to lower the rod fast enough that the lure falls freely, but also don't allow excessive slack to form in the line.

Stripers may nail the lure at any time during this presentation, but often strikes come on the "drop" as the offering descends. Set the hooks fast if you feel a tap or if the line moves sideways or stops falling.

When a 10-pound striper starts bucking against the rod and tears away on a sizzling run, chances are you won't even notice the ice on your rod guides or your frozen red cheeks and cold stiffened fingers! ❄️

Gerald Almy lives in the Shenandoah Valley but travels widely for his work as an outdoors writer. Among his many accomplishments, he is currently a columnist for Sports Afield and a contributing editor for Field & Stream.

Winter Fishing Tips:

- ❄️ Check the weather.
- ❄️ Let someone know where you are going.
- ❄️ Wear plenty of warm clothes, wool or modern synthetics, and bring quality outer foul-weather gear for rain or snow.
- ❄️ Dress in layers so you can take some off during midday if the weather heats up.
- ❄️ Wear a life jacket at all times when fishing in winter. A spill overboard could be life-threatening at this time of year.
- ❄️ Wear gloves that have a hole in the finger and thumb so you can control your line and tie lures on but keep most of your hands warm.
- ❄️ Wear a face mask when riding in an open boat to the fishing spot.
- ❄️ Take a break during midday and warm up with a cup of coffee or hot soup at a nearby marina or restaurant.
- ❄️ Wear sun screen. Skin can be damaged in winter as well as in summer.

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Making Something Out of Nothing

An artisan transforms others' discards into classic collectibles and folk art.

Story and photos by Ken Perrotte

“Just pull into the driveway and come around to the back of the house. We’ll be in the log cabin,” Hampton Covert told me as I drove through the wooded subdivision where he lives just east of Fredericksburg.

Log cabin? I wondered. But sure enough, walking into the backyard there stood a one-room cabin made of hand-hewn logs with colonial-style chinking. Covert and his son, Hampton Covert II, were tossing a log onto the massive brick fireplace that heats the room. It’s a classic “man cave.” The dusty cabin has wood-working tools in abundance, tattered old duck mounts, vintage books about knife-craft, and more. Pieces of wood, iron, and bone in various stages of redesign fill every cranny. Memorabilia adorn the walls.

Two more outbuildings are a few steps away. One is a blacksmith shop, the other a storage building/workshop. Pieces of old iron, furniture, wood, and discarded hunks of this and that weather nearby in the sun and elements, awaiting Covert’s creative genius.

The 65-year-old was born in Fredericksburg and has lived in the area his entire life. He was named after a best friend fraternity brother of his father, Kenneth. His namesake died during a bombing mission over Germany in World War II. When he was a boy, Hampton’s family owned a 500-acre farm at Mount Moriah in King George. With several duck blinds readily available, young Hamp quickly took to waterfowl hunting, noting, “I shot my first duck at six years old. My father was standing behind me holding the gun, but I pulled the trigger.” After the family sold the Mount Moriah property, they leased White’s Marsh on the Rappahannock.

A lifelong hunter, Covert still counts a good duck shoot among his apex hunting experiences. “But I also like to still-hunt deer with muzzleloaders and other primitive firearms, and get out after turkeys,” he muses. “They’re all important to me. Just being in the woods is all I need. Get me in the woods and I’m good to go.”

Just as his father began teaching him the ways of the Virginia woods as soon as he could walk and somewhat keep up, Covert passed along his outdoors passion to his son. Today, they’re business partners, operating as “Hampton A. Covert & Son Masonry.” Covert began learning the trade as a boy. His older brother was a general contractor and gave him summer work, helping a brick mason. “I was mixing mortar in the summers when I was in high school,” he says.

He calls working with his son, “as good as it gets.” Covert and son specialize in preserving and restoring old properties. They’ve worked on some of the oldest, most important estates in the region, to include Fall Hill, a former plantation on the Rappahannock River; Chatham, now owned by the U.S. Park Service; and Moss Neck Manor, a historic, antebellum plantation house located in Caroline County. Their current, major project is restoring the Confederate Cemetery in Fredericksburg.

Hampton II says his father taught him from a young age to “Work hard and take pride in your work. With so much competition, you must rise to the top...”

If you do good work, there will always be plenty of it.”

Their work is limited to masonry preservation, but they get to see what other restoration contractors are doing. Covert is always on the lookout for any old wood that’s being discarded, especially old hewn beams or floor joists. To the carpenters, the scraps are junk, destined for dumpsters; to Covert, they’re treasures awaiting transformation.

“That’s my thing, creating something out of an old piece of iron, scrap wood, driftwood—making something out of nothing,” he says. He draws his inspiration from nature, especially saltwater fish and the birds he sees along the shoreline. He’s carved big representations of tuna and herons, and smaller works such as unique fishing lures.

Covert collected a bounty of old wood when the Army’s Corps of Engineers demolished the 22-foot-tall Embrey Dam on the Rappahannock River in 2004



Top left: Hampton Covert forges found steel into a knife. Right: The results are beautiful knives with deer antler handles and repurposed leather crafted into sheaths.



Old wood is transformed into turkey calls under Covert's touch.

to improve conditions for migrating fish. A wooden crib dam, built in 1855, was adjacent to the newer dam. After the explosion, water rushed downstream, carrying crib dam debris for miles.

"There was wood from Fredericksburg to God knows how far," Covert recalls. He loaded his skiff, stockpiling wood for folk art projects.

Much of the wood was in bad shape, rotted on the outside, but Covert scraped and cut away the eroded pieces until he found quality wood near the center of the boards and timbers. He said he notices the same things with beams and boards salvaged from old properties. "Eighty percent of it might be junk, but then you'll find good sections here and there or around the ends," he notes.

Many smaller pieces became turkey calls, often crafted in an old "scratchbox" design. Other pieces became parts of knife handles, or signs, or carved fish and birds.

"None of this wood is friendly to a carving knife," says Covert. "Most wood carvers wouldn't touch it. A lot of the yellow pine is almost like a hardwood, it's so old and hard." It's precisely those difficulties and the character that old wood brings to his creations that has Covert hooked. "The knots, the cracks, remnants

of an old handmade nail, and those hew marks where that ax hit it, those help tell the story of that piece of wood. I try to leave every bit of that I can," he explains.

Covert said he took on a keen interest in old-world style blacksmithing while working on the restoration at Fall Hill. "An old, mangled gate was there. I think somebody had run over it and it got hauled away with a tractor. The lady there gave it to me. I straightened it up and that got the ball rolling."

Today, in his small backyard blacksmith shop, Covert tries to create just about anything that strikes his fancy, with a primary interest in making hunting knives with old-world styling.

The blades can be forged from just about any good, hard iron he can find. Covert said some of the best pieces of metal he's used for knives came from the springs of a Model-T Ford. High-quality farrier rasps and files often find their way into the forge before he pounds them into blades as they glow red hot on his anvil. Knife handles can be anything from the wood from old beams to deer antlers.

In creating a knife, Covert often borrows from classic looks of yesteryear, looking at reference images in old books and other source materials before deciding, "I'm going after that one."

"Most [of the books] are long out of print, but I've got one about frontier Bowie knives and another about Sheffield knives," he says. Famous Sheffield patterns (of England) include the Barlow knives, Bowie knives, pen-knives, sportsman's knives, and more.

His restless creativity sees him getting bored when he is making a lot of similar things. "I'll make a couple knives and then switch to something made from old wood or other materials," he says. He has even made replica punt guns—those massive bore muzzleloading shotguns used in waterfowl market hunting before being outlawed. He finds old blocks of wood for the stock, large-diameter pipes and old iron for the barrel and receiver, and leaves them out in the rain, giving them an aura of pitted, rusted authenticity.

Covert has had commercial fishing hook and line licenses in both Virginia and Maryland for many years. He and his son keep multiple boats on the Potomac and Rappahannock rivers, fishing as often as they can when the rockfish are running.

Hampton II says, "We've learned there's no precise formula when you're



Covert carefully crafts old fish sculptures, finishing them with his own detailed paint scheme.



Any old block of nondescript wood can be repurposed, in this case into a fine, small pig.

dealing with wildlife. One day you may not catch enough fish to pay for the gas and the next day you might sink the boat."

Crabbing is another passion, one that Covert's wife Bunny really enjoys. "Fishing in the cold or rough weather isn't her thing, but in the summers in the evening, after I've finished the day's work, she loves to go out with me and run those crab pots."

"She's my high school sweetheart. I was 16 and she was 15 when we started dating, and we got married when I was 25."

Besides being a business partner, Covert's son remains his main hunting buddy. Hampton II recalls, "From a young age he taught me about the skills of reading the signs and patterns of wildlife. He took me with him every chance he could get."

With a business emphasizing preservation, it's not surprising the duo share a strong conservation ethic. "Preservation

of the land is key. Most tracts of land we used to hunt and love are now subdivisions. The places of the world that were once wild are now fading year by year. It's very important to keep the hunting tradition alive," Hampton II believes.

One of Covert's newest projects is Madeleine, a year-old golden retriever. "She's doing great, a lot of fun. She's smarter than I am—takes advantage of me," he says.

Covert has leased a stall in Caroline Square in downtown Fredericksburg for several years and usually keeps a variety of his pieces there for purchase. He said money can be good for his unique style of folk art, which can be highly collectible. "Christmas sales have been very good to me," he admits, "but of course it all goes according to the economy and how much money people have to spend."

He sometimes creates custom works

for people, including three knives he made "on demand" last year. But, fulfilling orders comes with a certain pressure to make something within a given deadline, compromising his prized flexibility. "It takes the fun out of it," he says.

Covert said his lifestyle offered him a chance to live out his dreams. "I always look forward to going to work. And being on the water is about as free as it gets sometimes," he says, adding, "I couldn't sit in an office."

"My wife tells me, 'You've never been on a schedule; you come and go as you want.' We get a lot done, but we've got a lot of freedom." ❖

Ken Perrotte is a King George County resident and the outdoors columnist for Fredericksburg's Free Lance-Star newspaper. Contact him at Kmunicate@gmail.com.

THE REIGNING KING OF THE SOUTHWEST

By David Kalb

More than any other species that has inhabited Virginia, elk tend to inspire an awe that leaves us breathless. The crowning antlers of a mature bull moving through a harem of cows creates little doubt about who is in charge. You can feel the sound of his bugle echoing through the valley. Guests that I take to tour the original elk release site in southwest Virginia always have their phones at hand, rapidly capturing the moments, forgetting about time and work.

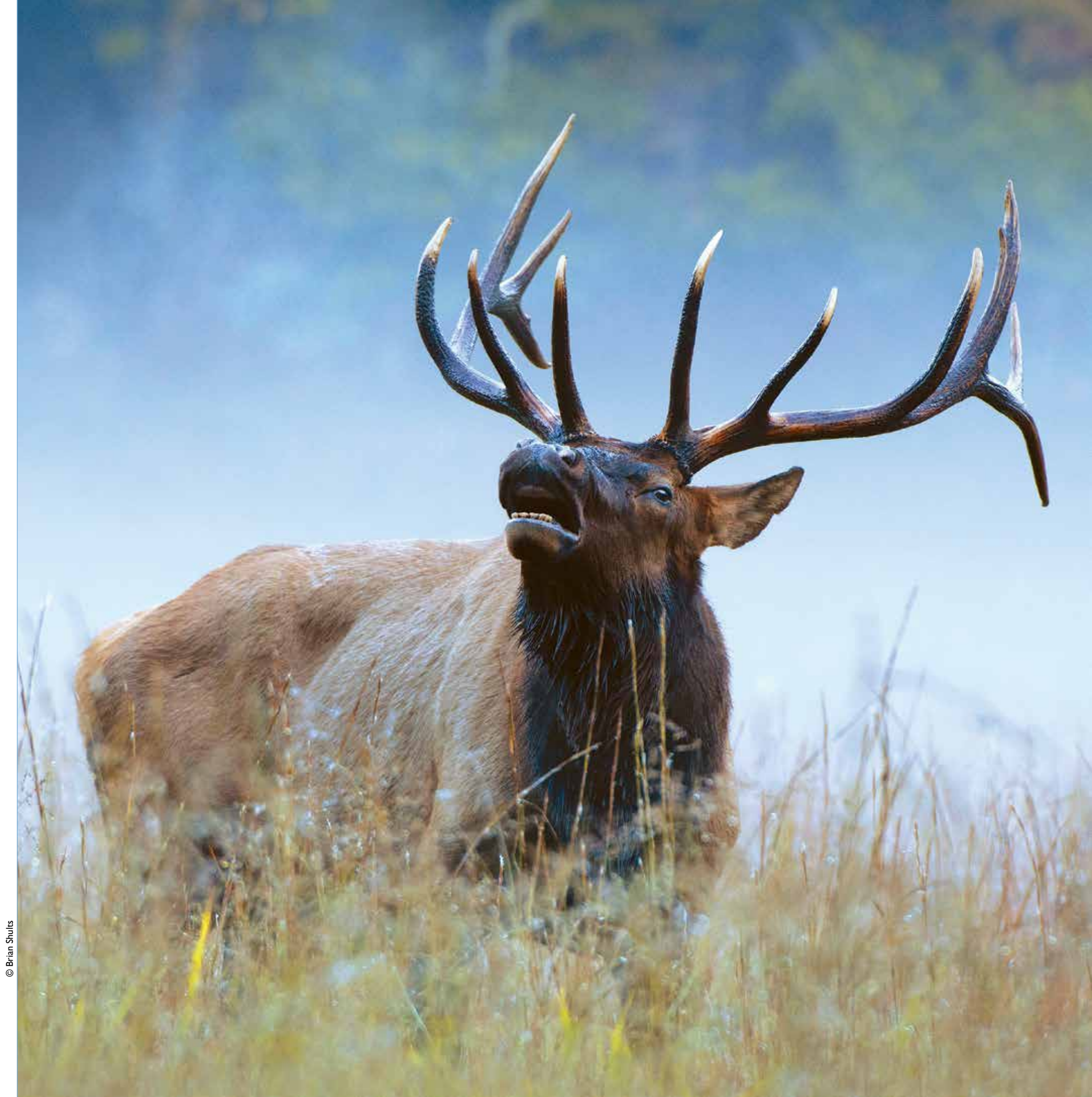
Many Americans would agree that we are losing our connection with nature and that it is an unfortunate occurrence. A 2018 survey conducted by Keller and colleagues of over 12,000 people nationwide found that 87 percent of Americans believe an understanding of nature is as important as reading, writing, and math, and that being outdoors is vital for both physical and mental health. These same participants are spending only six to nine hours a week outdoors, compared to some 13 to 19 hours in front of a television or other digital device.

To this I say: Bring your kids, friends, and family, and come see and hear the elk! You will likely find yourself loving the experience, immersed in southwest Virginia's wonderland.

The big bull we are watching today is amazing to observe, as he is showing off for his mates. He is constantly circling to keep them close as they eat. He will tend to his females daily, ensuring he passes on his genes. When necessary, he will defend them aggressively against other bulls that may want to intrude. This impressive animal will lose about 20 percent of his body weight from September to November, because during this time of year mating success is more important than eating. To make it through the season, this elk will need to manage his energy reserves effectively.

Virginia's *Elk Management Plan* has just been drafted and published for public comment. The goals of the plan directly reflect the Department's (DGIF) mission to conserve wildlife, connect people to wildlife, and protect against wildlife-related conflicts. As a newly restored species, elk will require some specific and unique care for their conservation.

They have an unparalleled ability to connect people to wildlife. Elk bugling, for example, draws a great deal of attention! Unfortunately, elk also have the potential to cause conflicts with humans if they are not managed properly, and the DGIF will be vigilant in trying to mitigate and prevent such conflicts.



© Brian Shults



Lynda Richardson / DGIF

For three years, David Kalb has been working for DGIF overseeing the growing elk herd.

Elk viewing and related tourism activity associated with wildlife watching are hopeful outcomes of the elk restoration that took place four years ago. In Virginia's most southwestern counties, where coal was once king, there is a need and a hope for an additional economic boost. Previous elk restorations throughout states east of the Mississippi River from Pennsylvania to Wisconsin, and south through the Great Smoky Mountains, have become destination sites for tourists because of growing elk herds. Folks who desired a trip west to hear one of nature's greatest mating pleas are now able to make a day trip within their own state or a neighboring one.

To facilitate these opportunities, Virginia now has public viewing platforms established on the Spearhead ATV Trail at Poplar Gap Park in Vansant. These platforms overlook unique habitat in far southwest Virginia: open fields. Early successional habitats have historically been a

rare commodity, but due to reclamation efforts on previous coal mining sites, the elk now have exactly what they need to thrive.

For those who cannot travel to the far reaches of Virginia, the Department has been working with several sponsors to establish a live broadcast of some hotspots within the elk range. The public can access the broadcast anytime from the Department's website (www.dgif.virginia.gov/elk). Because of the quality of this restored landscape, other wildlife such as black bear, white-tailed deer, turkey, and small game are prevalent in these areas as well.

I know that by the end of the mating season our bull will look tired and sluggish, but right now he is slick and muscular, a lean 900 pounds—the new king of his domain. Herd health has been, and still is, a critical component of elk management. The DGIF tests each elk it can sample for diseases that

could be detrimental to cattle and other wildlife. This process will continue as hunting season begins within the Elk Management Zone (EMZ) of Buchanan, Dickenson, and Wise counties. While elk can be harvested on a license holder's deer tag outside of these counties, no one has done so in over four years. Several people have passed on an opportunity, while others have tried in vain to find an elk within the neighboring counties of Lee, Scott, Russell, and Tazewell.

Elk hunting is, of course, a highly anticipated goal of the restoration plan. Unlike Virginia's previous efforts of the early 1900s, we will be patient. Planning an open hunting season for a properly designed harvest regime, at the proper time, when our elk herd is large enough to handle additional mortality, will ensure that future sportsmen can enjoy this pursuit. If you are lucky enough to harvest an elk, your reward will be 200 or more pounds of low-fat, high-protein, organic



Lynda Richardson / DGIF

Public areas like this one offer comfortable and accessible viewing platforms to observe elk and other wildlife. Construction and materials for these structures were donated by local Rocky Mountain Elk Foundation members, volunteers, and Noah Horn Well Drilling.

meat with a sweeter and more delicate taste compared to traditional white-tailed venison (elk meat is still venison in name). The work of cutting and packing an elk out of the woods exemplifies the truest definition of earning your meal.

Restoration is not all positive, however. There are also some costs. Elk have the potential to cause vehicle collisions more severe than deer strikes. Elk can damage agricultural crops as well, destroy gardens and fences, consume stored hay, and potentially transmit diseases if an outbreak occurs. The Department is taking this program slowly so we can learn about how Virginia elk interact with residents and how we, as an agency, can foresee and help mitigate conflicts. Generally, we've had few issues reported—primarily because of an abundance of habitat work where the elk currently reside.

Despite being native to Virginia, there is still a lot that we do not know about these charismatic creatures. Many

questions still need answers. As DGIF focuses on addressing the opportunities and challenges associated with elk restoration, we plan to learn as much as possible to ensure the future is positive both for the animals and for the people who call southwest Virginia home.

* * *

Each time I observe these animals, it is hard for me to believe that a 900-pound bull and 25 cows can disappear like the mist that rolls through the valley as the morning sun rises. In the past, I have tried to keep up with the herd to take one last picture, but my attempt is useless. The animals are native to these hills and instinctively cover the terrain effortlessly.

Those of us at the release site this morning give the elk privacy to continue their day in the shade until the cool evening hours, but we are not quiet. With the animals out of sight, the conversation returns to a normal volume and centers

on our gracious hosts, the bull elk and his harem that have shared a glimpse of their majestic fall ritual with us. As we leave, the bull bugles one last time, fueling a new outdoor passion for all within earshot. No doubt, his natural charisma will lure us to return to the outdoors to witness that magnificence once again. 🦌

David Kalb, Ph.D. is the elk project leader for the Department, working out of the Marion office.

RESOURCES

Keller, S., D. J. Case, and Associates. 2018. Nature of Americans: A national initiative to understand and connect Americans and nature: <https://natureofamericans.org>

Rocky Mountain Elk Foundation, Southwest Virginia Coalfields Chapter www.rmef.org

Then and NOW

Lifelong hunters share their insights about changes in waterfowling on the Eastern Shore.

By Gail Brown

The year 2018 marks the 100th anniversary of enactment of the Migratory Bird Treaty Act (MBTA), a broad-ranging federal law to protect migratory birds. In part, the law dictates limits as to how, when, and how many birds can be taken.

When enforcement of this law accelerated in the 1960s and '70s, the change came hard to the Eastern Shore. "At that time, in the Chesapeake region," says Conservation Police Officer Steve Garvis, "They believed killing ducks was not a crime."

Ultimately, compliance prevailed and the dramatic decline in waterfowl populations began to stabilize. Today, different issues—just as lethal—pose new threats to these birds. Of key concern is the destruction of their habitat, due in large part to the consequences of climate change. Rising tides, a result of warming oceans, continue to erode shorelines, flood marshes, and degrade the breeding habitats so necessary to waterfowl survival.

This presents new and difficult challenges to those dedicated to the conservation of natural resources.

It presents challenges to waterfowl hunters dedicated to preservation of the sport as well. For hunters Steve Garvis, Grayson Chesser, P.G. Ross, and Ben Lewis, preservation of our natural resources, respect for the law, and staying connected to the natural world are core to who they are. In pursuit of these values, their lives and work have crisscrossed to the benefit of us all.

When Conservation Police Sergeant Steve Garvis moved to the Eastern Shore, he was taken by the wildlife in the marshes. That was over 23 years ago; things were different then.

"I remember 50,000 sea ducks on Hog Island Bay, scoters, long-tails," says Garvis. At that time, Garvis was the only Conservation Police Officer (CPO) in Northampton County. "I found this to be two distinctly different geographic coastal areas, bayside to seaside with its Atlantic

Coast marshes. I learned you need to earn people's trust through community policing. Grayson [Chesser] became my mentor."

Chesser, professional decoy carver, hunting guide, and former "special game warden," is a lifelong resident of Accomack County, as was his father and father's father, "... probably," says Chesser, "dating back to the late 1600s." When Ben Lewis, Jr., a statewide waterfowl biologist for the Department, needed samples for a study on avian influenza, Chesser saved harvested waterfowl for Lewis to swab. Lewis has ties with Garvis as well through their work on various Department projects. P.G. Ross, a lifelong friend of Chesser, is also a carver and hunting guide with family roots in Accomack County that date back to the 1600s. On the Eastern Shore, such connections are valued. We asked these waterfowlers to share their memories, observations, and hopes for the future of waterfowling. Here, in part, is what they had to say.

"When I was a boy, if you got a goose you carried him around until he started to stink you were so proud. If they gave you a million dollars you wouldn't have been happier."

— Grayson Chesser

Do you remember your first hunt?

Garvis: "I remember everything about my first day hunting. I learned from my dad. My dad would go hunting and I always wanted to go. He would load Fella, our Brittany spaniel bird dog, and all the gear into our Plymouth. In those days everyone had a station wagon, right? It was an upland bird day and that day I got to go. I was about seven then. I'll never forget it."

Chesser: "It was around 1959 or '60 ... For a time, my father worked for the state as a 'special warden'. He had to go if there were problems, like duck trapping or deer lighting. The state had a 42-foot boat named *The John D. West*. One guy always had to stay with the boat.

"I was not very old. I wanted to go duck hunting. One of them took three decoys and me to a little point. We went in the swash behind Parramore Island. We stayed aboard the boat. The next year I had some decoys and started hunting with my father. We hunted nine or ten years before he died."

Lewis: "I remember always wanting to go with my dad when I was too young to

carry a gun. He probably knew that the odds of bagging anything with me along were slim, but he would still take me. My first actual hunt was a dove hunt and I had a single-shot 20 gauge. I think I was 12 years old. Surprisingly, I actually shot a dove that day."

Ross: "I remember more than anything what a big deal it was to be out with the men. I was about 12. My granddad and dad always had to take a boat ride and I have a sense of being on a boat, the weather cold, out on the edge of the bay. We had a handmade wooden scow; Victor Simpson made it. Everything felt big, immense and open, a little scary. We were on Pungoteague Creek which opens onto the bay. We used wooden decoys and hunted from a blind. A lot of times the blind was made of cedar and wax myrtle. Both have a distinctive smell. Anytime I smell them, it takes me back."

How has waterfowling changed?

Chesser: "Before, everyone learned from a family member; almost everyone had family that lived in the country. Now

we're urbanized; there's a disconnect between humans and nature. There's a huge divide between rural and city people, too. It worries me. When I started you went with older guys. When I was a boy, if you got a goose you carried him around until he started to stink you were so proud. If they gave you a million dollars you wouldn't have been happier. Now there's a generation of hunters with no tradition. They get introduced by videos."

Garvis: "It's a different skill set today. Now there is more of a reliance on technology. You can get a lot of information online that if you started in the 1950s or '60s you couldn't get. Now, some people are so goal-oriented that if they don't get something they feel, 'I wasted my day' or maybe think, 'I need to reposition my cameras' or, 'I need to be there by 10 so I'm done at 1'. Time is the issue."

"I'm not saying it's right or wrong, it's just what I've observed. I'm a traditional hunter. For me, a big part of the enjoyment is just being in the woods."



“I would urge current and experienced hunters to mentor or try to find someone who may be interested in taking someone else to hunt, and encourage them to do so.”

— Ben Lewis

Chesser: “A lot of people who hunt now don’t know the history. When I started there were ten times the violations. The market hunters started as young men. Most were commercial watermen. I have loads of friends who [back then] were violators who weren’t wasteful. They might take 30 birds, but only killed enough to ‘market’, to support their family. It was hard work: First you had to row to where you hunt, then put out your decoys, kill the birds, carry them home, pick the birds, all before you could deliver them to a buyer. Then you had to load your shells to be ready for the next day. A lot of work. Outboard motors, store-bought gun shells, and repeating shotguns made that easier. But it was still a lot of work. By the ’60s most waterfowl populations were in trouble again. The populations were going downhill.”

Ross: “In areas where I hunt, the numbers and species are different. The marsh is different. We used to hunt on little pieces of marsh, small areas called ‘tumps’. They’re gone now.

“It’s harder to get my dad to hunt with me; he sees the reduced population of ducks. Each generation has different benchmarks for what is ‘a lot’. We start settling for what we are used to seeing. We’re resigned to it, what it is.”

Lewis: “As far as waterfowl populations go we have seen some decreases in certain species, like mallards and black ducks, and increases in others, like gadwall and ring-necked ducks. Specific to the Eastern Shore, we historically had a significant population of local breeding black ducks that is almost gone now due to erosion of the bayside barrier islands—which they used as nesting habitat. We also have recently had milder winters than we’ve

had in the past and milder than which you hear people speak about historically. This cold weather is what is required to push the primary wintering population of mallards and black ducks to the mid-Atlantic area.”

How have laws changed things?

Garvis: “We don’t have the volume of violations here on the Shore that we used to have in the ’50s and ’60s. Today, there are really three kinds of violators: The inadvertent violator, those who just didn’t know; it never occurred to them it could be against the law. Like, for example, late shooters. They may think sunset is when you can’t see anymore. Then there’s the violator that’s opportunistic, maybe sees something, maybe in a seaside marsh or pond, and might kill four or five black ducks that day. This type of person did not plan to commit a game law violation, but when the opportunity presented itself, took it. The intentional violator, maybe only one percent, is prepared to kill wildlife on a large scale and holds a disregard for the game and fish laws.”

Chesser: “In the ’50s, the populations dropped. Everything was much more restrictive. When I started, brant were everywhere. Black ducks were on the barrier islands. Now? Last year I killed one. Duck season was 30 days long, from Thanksgiving to Christmas, with a three-bird limit. Now it’s 60 days with a six-bird limit. There was no hunting on Sundays. Now duck season runs to the last Saturday in January. Many of the ducks are paired up by then. Everything is more liberal now. I think many of these changes are harmful.”

Garvis: “CPOs on the Eastern Shore do not have to deal with blind law violations.

The main type of MBTA violations we deal with today are after-hour hunting, baiting, and over-limit. We’re also just starting to deal with another generation of wildlife crimes. There are core groups of deer or turkey poachers who don’t use what they kill at all, or deer poachers who hunt at night. All they want is to kill and post it online. It’s a different mentality.

“But most people today take a more positive approach; behaviors and mind-sets have changed. They understand. They believe ‘this is my resource’. They want to take care of it.”

Ross: “Here’s a *family* law. My mother had a rule: You kill it, you eat it. When I was about 12, I had a Daisy BB gun. My mother had a lot of feeders. I shot at a cardinal and got caught ‘red-handed’. She saw me from the window and pointed her finger at me. I was lucky I missed.”

What are the challenges facing the sport today?

Lewis: “For waterfowl hunters in the mid-Atlantic, finding a place to hunt is the biggest challenge. Unfortunately, the Atlantic Flyway is faced with the challenge of having the highest number of hunters and the lowest number of waterfowl. I think this discourages some hunters from participating in the sport.”

Garvis: “The biggest obstacle today is access. They say, ‘I want to go hunting. Where can I go?’ For deer hunting, most land is all leased out.”

Chesser: “That’s the way it is with waterfowling. During my time, access to hunting areas was not a big deal. Here on the shore there’s thousands of acres of public land. But private land is much harder to access now. Now it’s hard for the

average guy who only goes on weekends. And waterfowl hunting is extremely costly...most want a boat, a motor, a dog. Today, for a dog who can just do the basics?...you can get a thousand for it. Expense relates to access and equipment. People depend on ‘stuff’. They are convinced they have to have it.”

Garvis: “For waterfowling, some of the equipment *is* fantastic. A hunter in his mid-twenties, he’ll go buy it. I remember when my father went turkey hunting. He had one box call, a coat that looked like an old Vietnam service coat, and a standard off-the-shelf 870 shotgun. Nothing special. It doesn’t dawn on some you can hunt without all that new stuff.”

What’s the answer?

Lewis: “I think the traditional mentorship that most hunters starting at a young age receive is what it takes to make a lifelong hunter—someone who is going to purchase a license and a duck stamp and go hunting every year regardless of the weather, bird numbers, other priorities

they have in their lives. I would urge current and experienced hunters to mentor or try to find someone who may be interested in taking someone else to hunt, and encourage them to do so.”

Garvis: “If you wanted to start hunting today, you could start with the Department. Fifty years ago, it was family. Today, the Department can serve as the mentor through its classes and training, whether it’s fishing, birdwatching, boating, or hunting. There are hunter safety and training courses. The Department saw the need and stepped in.

“A big part of our mission is connecting people with the outdoors.”

Ross: “Future generations need to connect on all levels. Waterfowl hunting can be humbling. It gives us our sense of place in the web...our memories of the smells, taste, salt on the skin...and the anxiety when the wind comes up and you have to get home. It makes us slow down and take stock of what’s gone, and remember.”

Chesser: “I had calls from four guys. The first time they hunted was with me. One guy I remember from the ’70s. He was 12 or 13 years old. My wife told him I was booked up, but I took him. It was him and his father. The tide was all over, nothing was moving. Then a black duck jumped up and he got him with one shot. A black duck with one shot! I told him, ‘It’s all downhill from here.’

“They all still hunt today. It makes me feel so good for the future. It gives me hope.” ❧

Gail Brown is a retired teacher and school administrator.



By Jason Davis

The war isn't going as well as you might have hoped. The enemy has us outnumbered. They've infiltrated our neighborhoods and homes. They attack our family, children, and pets. They're stealing our resources to power their endless waves of expansion. Worse yet, many of our best and newest weapons are already failing. No matter what ingenuity we bring to the battlefield, they always seem to find a way around it. The weapons of our war with pests and parasites, and the unintended consequences of their adaptations to them, are impacting both our day-to-day lives and the wild world around us.

Our society spends an absolutely amazing amount of time and money fighting vermin. Each year in the United States we use over one billion pounds of pesticides. Our assault on pests has been so all-encompassing that there is no water source on Earth, from the bottom of the ocean, to the rain falling from clouds in the isolated reaches of the Amazon, where

pesticide molecules cannot be found.

Humans have almost certainly been using pesticides in one form or another for a seriously long time. Archaeologists have uncovered evidence of plant extracts from bay, camphor, chrysanthemums, and cedar, as well as simple sulfur and salt used to defend granaries all across the ancient world. Even frankincense and myrrh, of Three Wise Men fame, may have been used to protect food stores from infestation. Some scholars have even suggested that humans first added spices like peppers and cinnamon to our foods in part to prevent them from being eaten up by pests. Ancient cultures also used far less "organically friendly" poisons too—mercury, arsenic, and lead have been staple poisons around the globe for thousands of years.

As impressive as that arsenal is, over the past hundred years we've seriously upped our pesticide game. For vertebrate pests we now deploy anticoagulants like coumarin that cause internal bleeding,

phosphides that create suffocating gases when ingested, hypercalcemics like calciferol that stop the heart in its tracks, and neurotoxins like strychnine that shut down signals in the central nervous system. For invertebrates we employ deadly organochlorines that inactivate the nervous system, synthetic pyrethrins that overstimulate nerves, and hormone mimics like methoprene and ecdysone that fool their endocrine systems, preventing growth and reproduction, just to name a few.

For all of that effort and intensity, you'd think we'd be winning the war against pests, but it turns out that this is far from a one-sided fight. We may have the bigger brains, the longer lifespans, the ability to invent and innovate, but pests have their own ways of dealing with the dangers that we throw at them, and evolution definitely seems to be on their side.

Pest species tend to have relatively short reproductive cycles. House mice can have up to ten litters per year and take

only six weeks to become reproductively mature. Sadly, that seems positively glacial in comparison to mosquitos, which can produce a generation every two weeks in ideal weather. Pest species also tend to have a lot of young at once: One mouse can have as many as 15 pups per litter and one mosquito can lay up to 200 eggs per clutch. Those short generation times and truly impressive birthrates mean that these species have a flat out mathematical edge over us.

Fortunately for us, the world is a harsh place where most offspring don't survive, so we're in no danger of being buried up to our eyes in mice. Unfortunately for us, the weaker, less adapted individuals are generally the first to die, while the tougher, healthier individuals are more likely to survive long enough to pass their useful, survival-inducing genes on to the next generation. This is evolu-

the structure of channels and receptors on the surface of their cells. Bed bugs and lice have evolved resistance to the neurotoxic actions of pyrethrins. Cucumber beetles, boll weevils, and even fleas have altered their hormonal networks to decrease their sensitivity to drugs that would otherwise sterilize or incapacitate them.

Resistances compound, add up, and even cross species lines. Army worms have become simultaneously resistant to organochlorines, pyrethrins, and hormone modulators. Atlantic tomcod, which feed on species and in places that often accumulate insecticides, have evolved to metabolize a range of organochlorines in much the same way as their prey. Some mites and ticks have even borrowed genes from bacteria, enabling them to produce enzymes that can transform cyanide into a harmless amino acid.

The best defense that many species

that there's no effect. To the contrary, sometimes the most destructive aspects of our ongoing war emerge as unintended consequences.

The first response of any farmer or gardener when a pesticide starts to become less effective is simple: use more of it. Most, but not all, pesticides will degrade over time into a less potent form, but the more we put out, the more remains over time. As pesticide remnants disperse through air and groundwater, their effects are felt farther and farther away from their original target.

To make matters worse, if a poison kills one species it will almost always kill other biologically similar species. For instance, organochlorines and pyrethrins have been shown to play a significant role in honeybee colony collapse not only by killing bees directly, but also by weakening them, making them more vulnerable to

Our assault on pests has been so all-encompassing that there is no water source on Earth, from the bottom of the ocean, to the rain falling from clouds in the isolated reaches of the Amazon, where pesticide molecules cannot be found.

tion by natural selection and it holds just as true for pesticides as it does for predation. Whatever kills off the weak does, in a sense, make a population stronger.

So exactly how do our pest-y adversaries overcome our impressive biochemical assaults? Their adaptations are just as numerous and impressive as the weapons themselves. Both rats and mice have independently evolved changes in their blood clotting systems, decreasing their sensitivity to anticoagulants. Mosquitos have evolved resistance to organochlorines like DDT by altering

can muster is so simple; just learn to avoid the poison. Coyotes in high pesticide dispersal areas, for example, rapidly learn to sniff out and avoid poisoned baits and traps. They seem to pass this cautious nature on to their offspring as well, leading to a population of wary and watchful coyotes that can eat their way through an entire garbage dump while avoiding only the poisoned pills.

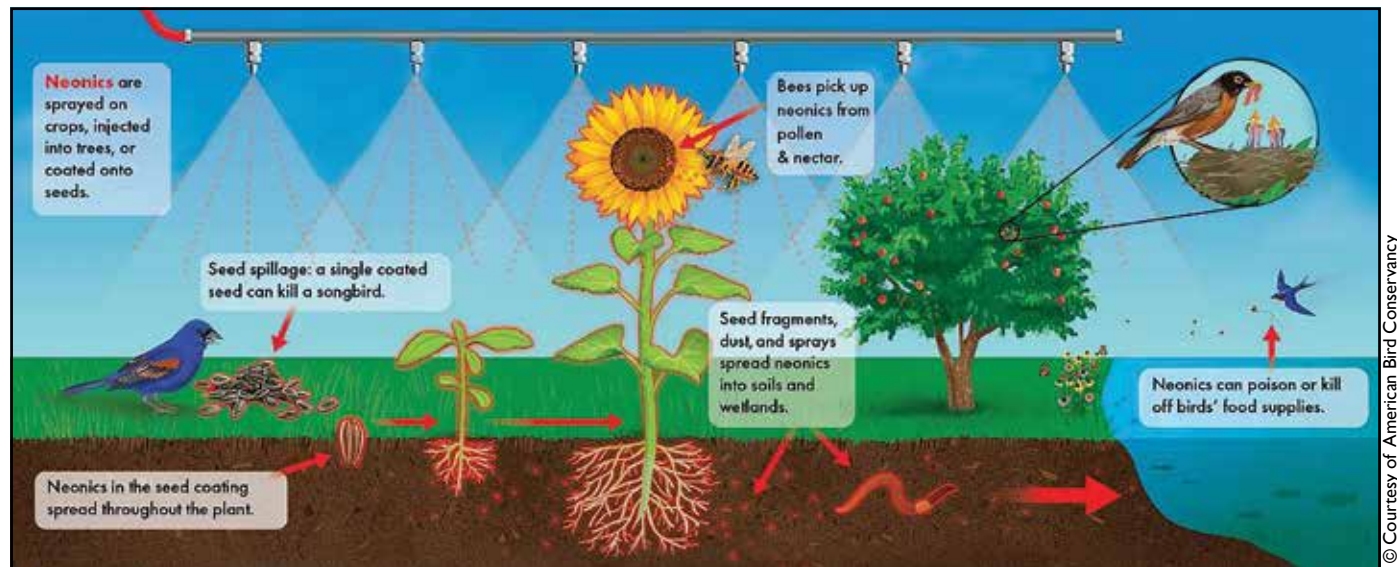
So, the arms race rages on and on. We keep inventing new poisons and techniques, and our pests keep evolving ways around them. But resistance doesn't mean

infectious diseases and fungi. Similar impacts can be seen on the various native species of bees, many of which have seen massive population collapses that can be directly related to pesticide application.

It would seem that pesticides might become less of a problem as they are distributed across larger areas, eventually diluting themselves down to safe levels. Unfortunately, food webs have a way of re-condensing these poisons back into higher concentrations. As pesticides spread out, small non-fatal doses are incorporated into the tissues of insects.



All photos © Shutterstock



As pesticide remnants disperse through air and groundwater, the effects are felt farther and farther away from their target. In this case, the water-soluble nature of Neonicotinoids allows them to be taken up by the plant roots, absorbed through leaves and stems, and licked up by pollinators collecting nectar. They can also poison avian food supplies and directly kill songbirds that ingest treated seeds.



Animals that feed on these insects, like tree frogs, trout, or bluebirds, consolidate the pesticides in larger doses into their own tissues. Any larger animal that in turn feeds on these animals then gets an extra-high dosage of the original chemical. In the case of organochlorines, this bioaccumulation can lead to serious consequences for a range of wildlife, including cancers, birth defects, and reduced fertility. Many studies have correlated the overuse of organochlorines directly to decreases in the populations of eagles, hawks, and pelicans.

Beyond direct chemical effects, fundamentally altering a biome by removing principal players can have cascading negative impacts. As much as we might want to get rid of all mosquitos, they are an important food source for many other species like dragonflies and bats. Killing too many pests can cause these predators to starve, eliminating our natural allies in this war and leading to a rebound in pest populations.

The spread of resistant strains of pests can also lead to them pushing out non-resistant species, creating simpler,

less diverse ecosystems that are more vulnerable to collapse. With their competition wiped out, pests can spread out of control, carrying diseases with them. Over-application of pesticides has actually been linked to the spread of malaria, as the mosquitos that hosted the malarial parasite became resistant and faced fewer natural obstacles after their competitors and predators had been killed.

So where does the war go from here? There are many alternatives to pesticides, some quite new and some surprisingly old. Natural pesticides like nicotine and caffeine can certainly be effective, but pests are able to evolve ways around them just like their more modern counterparts, as has been the case for species like tobacco hornworms and coffee borer beetles. Introducing natural predators to regulate vermin can also be effective, though the predators also have a tendency to cause trouble. As an example, consider your cat. Domestic cats are great at keeping rats and mice in check, but they'll also kill pretty much anything they can catch, including a variety of native rodents and birds.

We've also begun to pioneer genetic modifications to pest species. By introducing or altering genes, we can limit population growth or increase vulnerability to pesticides. This has proven highly effective in some cases, but evidence already suggests that pests are evolving their way around these methods too.

The challenge with our war against pests, like any war, is that the enemy changes. They regroup. They adapt. This isn't a war that we win; it's a war that we're likely to keep fighting forever. Our best option may be to keep fighting, but to be fully aware of the cost of collateral damage and unintended consequences. 🦋

Jason Davis is an assistant professor of biology at Radford University. His research focuses on physiological processes in wild animals.



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GIVING BACK:

VETERANS' SALUTE



Guides Robert Satterwhite (L) and Dennis Holland with shooter Bruce Lamb.



Former DGIF staff Jerry Sims (L) helps out during a Fort A.P. Hill Wounded Warrior hunt.



Some last-minute coaching is given to this disabled hunter.



Army Specialist Robert Andrzejczak with his incredible A.P. Hill 19 pointer.



The late Buddy Fines, center, enjoys an after-hunt lunch with participants.



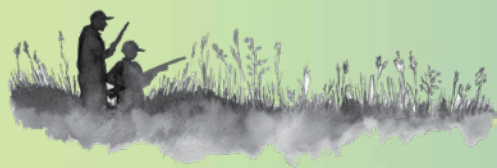
Outdoors writer Ken Perrotte guided this Wounded Warrior to a nice buck during his first-ever deer hunt at Fort A.P. Hill.



In 2011, Buddy Fines accepts an award presented to the Virginia Deer Hunters Association in appreciation of 25 years of service working with the Virginia Mid-Atlantic Chapter of Paralyzed Veterans of America.

Veterans Day is a time to pause and consider the sacrifices made by so many to protect our personal freedoms. In Virginia, several fine organizations reach out to veterans to say “Thank You” and enjoy fellowship outdoors—including folks at military installations like A.P. Hill, at Project Healing Waters, at the Wounded Warrior Project, at the Virginia Deer Hunters Association, and others.

The first Virginia Deer Hunters Association (VDHA) Disabled American Veterans Hunt was held on January 1, 1986 in Chesterfield County. Fifteen disabled veterans and over 40 deer hunters—helping as drivers, guides, and assistants—started what has now become one of the most respected veteran support programs of its kind. Each hunting season, veterans from the Hunter Holmes McGuire Veterans Medical Center in Richmond are hosted by the VDHA for an annual deer hunt. Over the past several years, hunts have been organized by the Northern Neck Chapter of the VDHA. The hunt is now known as the Buddy Fines Memorial Veterans Hunt, dedicated to the memory of Buddy Fines, a driving force behind the original veterans hunt. The event, which has enjoyed much success and provides an opportunity for fellowship among veterans and VDHA members alike, is being held at Dahlgren Military Base this year. Disabled American Veterans and deer hunters who would like to learn more can visit virginiadeerhunters.org.



AFIELD & AFLOAT



Outdoor Classics by Beth Hester

The Great Hound Match of 1905: Alexander Henry Higginson, Harry Worcester Smith, and the Rise of Virginia Hunt Country

By Martha Wolfe
2016 Lyons Press, a Division of
Rowman & Littlefield
www.rowman.com
800-462-6420, ext. 3024
Hardcover with black and white photos

For Harry Worcester Smith, only one kind of hound was fit for an American Sportsman: a hound that emulated his countrymen—bold, self-assured, independent, heuristic, and quite possibly, downright arrogant. To Higginson, there was “no such thing as an American hound.”

—Martha Wolfe

Between the winter of 1904 and the spring of 1905, a series of contentious letters from two very passionate and wealthy foxhunters, both current masters of their respective hunts, was published by the editors of *Rider & Driver* debating the various merits of the American foxhound vs. the English foxhound. Harry Worcester Smith advocating for the American foxhound, and Alexander Henry Higginson, with the condescension of a hidebound Anglophile, promoting the English foxhound. This combative back

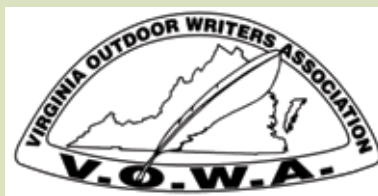
and forth led to a marathon two-week foxhunting match between the men, their huntsmen, whippers-in and hounds, held in Virginia's green and pleasant northern Piedmont Valley. Observed by their respective entourages, members of other hunts, and enthusiastic locals, the match would seek to prove which was the better hound.

I won't tell you who won the match—it would spoil the fun of reading Wolfe's lively, and well-imagined narrative—but I will tell you that the match and attendant events were action packed, complete with breathtaking rides, broken bones, missing teeth, horse trading, pageantry, trespassing, and trickery. It was a match that set newspapers, not just the Richmond Times-Dispatch, chirruping. Importantly, Wolfe pays homage to the real stars of any hunt: the hounds whose courageous beating hearts, stamina, loyalty, and instinct propel the hunt forward. She vividly portrays the people who helped to create northern Virginia's hunt country culture, locals and outsiders alike, whose love of the hunt continues to influence today's equestrian traditions and land conservation ethic.

But Wolfe's story is about much more than the match itself. She sets the hound match within the context of the era in which it took place. By alternating chapters on the actual hunt itself, with chapters on world events, inventions, war, and scientific discoveries, we see the Great Hound Match as a micro-drama reflecting old world vs. new world tensions during the closing years of America's Gilded Age. Wolfe uses the match and its more global influence to talk about the evolution of dog breeding, hounds and the science of scent, women in foxhunting, and the intersection of equestrian pursuits and prevailing attitudes about valor and military service.

Though the acrimony between Smith and Higginson never really died out, by 1931 Higginson is adopting a more reflective tone: “Looking back at the incidents with which those two weeks in the fall of 1905 were crowded, it seems to me that Mr. Smith and I both took the outcome of the match too seriously...I think we both felt that the reputation of American and English foxhounds depended upon the outcome of the match, whereas in reality if we had only known something more about foxhunting we might have realized that both sorts of hounds have their uses, and are excellent under certain conditions of scent and country.”

Read the book to find out who won, and enjoy a little hunt country magic by visiting Middleburg and the surrounding countryside this holiday season (christmasinmiddleburg.org).



Youth Writing Contests

Grab your laptop and get to work. The Virginia Outdoor Writers Association annually sponsors two writing competitions for Virginia high school students (grades 9-12) and undergraduate students attending a Virginia college or university. Awards are offered for winning entries.

www.vowa.org

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For more information: www.vbgov.com/government/departments/parks-recreation/special-events/Pages/winter-wildlife-festival.aspx



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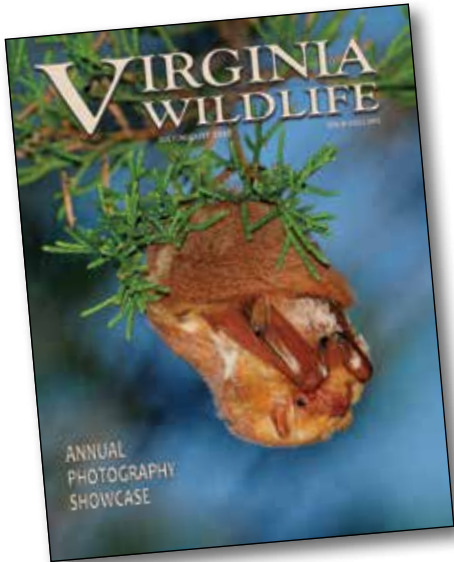
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PICS FROM THE FIELD

Walking out to his porch in Virginia, **Alan Wallace**, now of Canal Winchester, Ohio, spotted what he thought was a fallen sycamore leaf. When he reached to pick it up, the wings opened immediately and “eyes” stared back at him. Alan ran to grab his camera and the lo moth posed for its portrait. Canon PowerShot SX610 HS camera, ISO 1600, 1/400, f/4.5.

Alan could have used his camera back on Sept 11, 2001 when, as a fireman, he was outside the Pentagon awaiting the arrival of President Bush. On that fateful day he and his crew barely escaped with their lives when a hijacked airliner crashed into the Pentagon right next to the fire truck where they were standing. In tribute to all of the brave men and women serving our country, we want to THANK YOU for your service, bravery, and sacrifice.



You are invited to submit one to five of your best photographs to “Pics from the Field,” Virginia Wildlife Magazine, P.O. Box 90778, Henrico, VA 23228-0778. Send high-resolution jpeg, tiff, or raw files on a CD/DVD or flash drive and include a self-addressed, stamped envelope or other shipping method for return. Also, please include any pertinent information regarding how and where you captured the image, what camera and settings you used, and your phone number. We look forward to seeing and sharing your work with our readers!

Don't Forget Your Duck Stamps and HIP Registration



2018 Virginia Migratory Waterfowl Conservation Stamp artwork, ©Brian Murillo

All hunters (licensed or license-exempt) who plan to hunt doves, waterfowl, rails, woodcock, snipe, coots, gallinules, or moorhens in Virginia must be registered with the Harvest Information Program (HIP). HIP is required each year and a new registration is needed for the upcoming season.

In addition, to hunt waterfowl in Virginia hunters (age 16 and older) must obtain a Federal Duck Stamp and the Virginia Migratory Waterfowl Conservation Stamp. Both stamps can be purchased from DGIF license agents or from the Department's website:

www.gooutdoorsvirginia.com

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Paid Distribution by Other Classes Through USPS	6	7
Total Paid Distribution	26,101	26,067
Free or Nominal Rate Outside-County Included on PS Form 3541	2,147	2,173
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Free or Nominal Rate Copies Mailed at Other Classes Through USPS	156	396
Free or Nominal Rate Distribution Outside the Mail	592	592
Total Free or Nominal Rate Distribution	2,895	3,161
Total Distribution	28,996	29,228
Copies Not Distributed	1,921	5,772
Total	30,917	35,000
Percent Paid and/or Requested Circulation	90%	89%



CONGRATULATIONS to our most recent Conservation Police Officer graduates!

A NOTE FROM THE EDITOR

Dear Friends,

With this final issue of 2018, I bid you a warm farewell and turn my attention to new adventures. Working on this magazine has been the very best of jobs and no doubt the pinnacle of my nearly 35 years of conservation work.

Along the way I have met remarkable people and made lifelong friends. I have found people in this line of work to be the most dedicated, ethical, energetic force in their mission to protect wild animals and the habitat resources they need to thrive. The sheer joy of educating others, of sharing such complexity and beauty, is a pure calling and one that we do for the pleasure of contributing to something greater than ourselves.

To the writers and photographers and magazine staff who joined in the production of this magazine, you have touched me with your wisdom, your humor, your generosity, and your honesty. I will miss each of you. And to those readers who sent letters or called and reached out to me over the years, I thank you for reminding me of your presence and your perspective.

No one would argue that we live in turbulent times. A message in a fortune cookie of ten years ago still haunts me: "We treat this world of ours as though we had a spare in the trunk." Indeed, warming temperatures have the capacity to wipe out the most vulnerable cultures and species, and undo all that we have accomplished over the past 50 years on the conservation front. But I believe that each of us can do something meaningful to lighten our load on the planet. We need to take it personally. We need to pay attention to the wisdom of fortune cookies.

—Sally Mills



Dear Luke,
I just moved to the area from Newark (the one in Jersey) and met a man recently who seems nice but he has a dog and hunts. Being from the city, I don't know what hunters are like. Should I invest any time dating him?

—Vickie S., Charlottesville

Dear Vickie,
Admittedly, I am biased—especially if he has a retriever or a hunting dog of some sort. However, because it appears that you lack experience with hunting, in general, I feel I should explain the pros and cons of dating a man who hunts.

Pro: If he and the dog have been together for a while, they have bonded. This means he is not only a responsible man but also knows what love and affection are all about.
Con: Because they have bonded, don't think that you will immediately jump into the No.1 spot for his affections. In fact, if you can hold onto the No. 2 spot, do so without complaining. Complaining about your position will only cause tension and make him have to choose. He may choose to get another dog—which drops you another spot in the ranking.

Pro: He likes the outdoors, so he is probably a healthy individual. Being with him should help you exercise more, stay trim, and put some real color (no brush-on blush) on those big city, pasty cheeks of yours.
Con: Do not think that an outdoorsman with a dog will be content walking hand-in-hand with you in some city park. If he has a retriever or a bird dog, he will want to spend hunting season alongside his dog

and then the off-season working his dog to keep it sharp. In the off-season, you will get some fresh air and exercise by carrying and placing armfuls of training dummies 100 to 300 yards away to open fields, hedgerows, and ponds while he steadies his pup to send it on blind or multi-retrieves. Make a note to yourself to purchase several cans of tick and chigger repellent, as you will likely be in some high weeds.

Pro: You may learn a new activity! More and more women are participating in shooting sports, and there are specific shooting organizations dedicated to women. Give it a try! There are instructors in your area, so book a private lesson or two. You do not have to become an expert marksman; just learn the basics and build your confidence. Instructors tell me that women make better students than men because women realize what they do not know and "LISTEN" to the instructor and follow directions. I think you will be pleasantly surprised how much fun busting clay targets can be!
Con: You don't have to buy an expensive shotgun to get started. Most instructors will loan you one for the lesson. However, when you do start shopping for one you may want to accessorize the new gun with new shooting outfits, gloves, boots, etcetera. This can be expensive, especially if you follow women's fashion trends found in British outdoor magazines. But then again, think of the fun of spending some cold winter days on a fancy quail plantation in southern Georgia or northern Florida!

Pro: You will learn something new that many women may not know much about. This makes you stand out when speaking

with men at cocktail parties. There is nothing more attractive to men than meeting a woman who understands some of their hunting and fishing lingo and participates in activities they enjoy. That doesn't mean you have to be a duck, turkey, or elk hunter, but knowing something about the sport and being able to converse a bit about it certainly makes you more interesting and approachable. Your new boyfriend will be proud—plus, he could realize that he should "up his game."

Con: This could make the spouses (or significant others) a little jealous because you may draw a crowd of men around you...but who cares? Your goal is for your boyfriend to see how lucky he is to be with you.

Pro: You will be introduced to new people at social events such as Ducks Unlimited, Quail/Pheasants Forever, and Trout Unlimited dinners. Shopping at Orvis and Cabela's will offer plenty of new options in clothing and accessories.

Con: Don't see any.

From my perspective, Vickie, you can't lose. You will have invested your time wisely by meeting new people and having new adventures. The return on your investment can pay off for the rest of your life!

Keep a leg up,
Luke

Luke spent many sunrises hunting up good stories with Clarke C. Jones, and thankfully, left us a cache of colorful tales. You can learn more about Clarke and Luke at www.clarkecjones.com.





A Walk in the Woods

By Mike Roberts

Few North American birds are as striking in appearance as a drake wood duck. The vivid color combinations of this elegantly attired dabbling employ the best of artistic imagination. Add the gleaming rays of early morning sunlight to accentuate feather iridescence, a stand of flooded oaks, the sparkling reflections from frost-covered leaves, and an outdoor canvas comes to life in the minds of all who appreciate waterfowl—whether they prefer the click of a camera’s shutter, the smell of gun powder, or the tricks of trout foolery. Even so, whenever caught up in the excitement of photography, collecting table fare, or tying dry flies and streamers, sportsmen have a tendency to overlook the wood duck’s connection with America’s wildlife conservation history. It is a 400-year-old story of natural resource wealth, its decimation, and its remarkable restoration.

While the pressures of year-round sustenance and market hunting and the loss of millions of acres of wetlands were responsible for the drastic decline of waterfowl populations during America’s first three centuries, the ax and cross-cut saw initiated the demise of the wood duck. Farming-minded settlers cleared vast expanses of hardwood forests for pastures and croplands. Mature trees growing along bottomlands bordering riparian corridors were cut and burned to access rich, floodplain soils. Then, in the 1800s a strengthening economy and booming railroad industry further whetted this country’s appetite for lumber. Because the wood duck’s breeding range included the whole of eastern North America, and the birds depended on tree cavities for nesting facilities, the destruction of hardwood habitat sent their numbers into what seemed an irreversible, downward spiral.



Luckily for all who love the outdoors, the late 19th century marked the beginning of the North American conservation movement. With numerous species of animals decimated, and several already extinct, sportsmen rose to the task. Unlike the preservationist mindset of John Muir, Theodore Roosevelt emphasized intelligent use of natural resources, which was the basis of the benchmark conservation organization he founded in 1887: the Boone and Crockett Club.

Then, with the signing of the Lacey Act in 1900, the future of America’s dwindling wildlife resources caught the full attention of the U. S. Congress. In 1916, the United States and Great Britain (for Canada) passed international legislation to protect birds migrating across their respective boundaries. The Migratory Bird Treaty Act was signed again in 1918 which, among other legislative directives, ended the lucrative plume trade and regulated waterfowl hunting; the latter, providing full protection to wood ducks.

In 1934, with the conservation movement escalating, President Franklin D. Roosevelt appointed Jay “Ding” Darling as head of the U. S. Biological Survey (forerunner of the U. S. Fish and Wildlife Service). Darling understood the pressing need to protect wetlands and proposed

the Federal Duck Stamp Act as a means of collecting revenue to support purchases of these rapidly dwindling resources. Approved on March 16, 1934, the legislation required all waterfowl hunters over the age of 16 to purchase the stamp annually. An award-winning cartoonist, Darling designed the first stamp—which sold for one dollar.

Additional legislation was passed benefitting the wood duck, but perhaps none more significant than the *Federal Aid in Wildlife Restoration Act*, which was introduced to Congress by Senator Key Pittman of Nevada and Representative A. Willis Robertson of Virginia. Signed in 1937, the Pittman-Robertson Act provided a steady stream of revenue through an innovative, 11-percent excise tax on firearms and ammunitions. The key to this unprecedented legislation’s success was that monies collected could be used only to support wildlife restoration.

Because of state and federal legislation, enforcement of new laws, billions of dollars collected through Pittman-Robertson, wetland preservation, improved wildlife and forest resource management methods, conservation organization funding, and installment of nesting boxes in wetland habitat, our beloved wood duck was back in waterfowl bag limits by 1941. Thanks in part to regenerated hardwood buffers along rivers and streams, the poster bird of wildlife conservation remains a common sight across the commonwealth today.

Sometimes, appreciating wildlife not only necessitates a walk in the woods but retracing our steps back through history!

A lifelong naturalist and wildlife photographer, Mike Roberts enjoys sharing his knowledge with others.



PHOTO TIPS

By Tommy Kirkland

Wildlife Dispositions Dictate Successful Photos

The whitetail eases closer. Your sensor is finally full for a clean shot. The auto focus point locks down, zeroing in on the buck’s pupil. He holds a breathtaking pose. Everything is in play!

Suddenly, the mature buck breaks the silence with a heart-pounding “snort.” Expelling air from his lungs and nostrils, he swiftly pivots and thunderbolts into the vegetative understory, leaving you with only the vision of a raised tail and no photograph.

What went wrong? Your set-up was slow and cautious. This buck, living in a national park, was thought to be generally accustomed to human visitors and their cameras. What caused him to disappear? Was it a particular temperament that the deer possessed, making it extremely nervous?

Perhaps. A critical factor that influences a successful wildlife photo is an animal’s distinct behavioral disposition, or what is commonly called a personality. Of course, wild animals do not possess personalities with the mental reasoning of humans. To think so would be to humanize wildlife, what scientists call anthropomorphism.

With that said, wild animals such as deer respond based on their inherent instinct for “fight” or “flight.” For example, if the instinct of *flight* is a predominant trait in a particular buck, that deer is going to be extremely alert. He will be ultra-sensitive to sound, scent, and movement. Combine this trait with a cautious mother that reared her buck fawn from



rut (or breeding season), for example, make sure a buck does not sense a threat from your camera.

Locating game in areas with minimal or no hunting pressure—such as state and national parks, as well as wildlife refuges—is by far the best option to begin photographing them without much preparation. Here, most wild animals are accustomed to seeing humans on a daily basis; in turn, wildlife are more tolerant of photographic work. But remember, one cannot just rush in and start clicking. Give the animals space and try to not disturb their behaviors and routines while striving for the desired camera angle and proximity.

What if the subject in pursuit is not so accustomed to human activity? If this is the case, the odds for consistent, quality photos are going to be tough to come by. Given this challenge, it’s even more important to know your subject and its habits.

Understanding an animal and its basic, inherent disposition is an important consideration sometimes overlooked. If possible, try to take the time to study the subject at hand and to what degree it will tolerate your human presence; also, if it is predisposed toward fight or flight. This could very well determine the outcome of your photographic success.

infancy, and you’ve got a deer that is going to be difficult to photograph. He is more skittish than the average deer.

On the other end of this instinct spectrum is the predisposition to *fight*. Here, a buck tends to be more assertive. When this disposition takes control, a buck may literally approach without fear or caution. He is so determined to dominate that his alert senses are suppressed, providing a good opportunity for quality photographs simply because the fight instinct makes the deer more tolerant than normal.

For wildlife photographers, this fight instinct can create the potential for safety issues. Use caution, give the animal space, and by all means work your telephoto lenses. When photographing during the

Wildlife photographer Tommy Kirkland is a frequent contributor to this magazine. He can be reached at: tommy_kirkland@hotmail.com

Venison & Boar Parrilla, Uruguayan-Style

A 2018 wingshooting trip to Uruguay yielded predictably great bird hunting with the bonus of enjoying an abundance of superb meats, much of it cooked over a wood fire. In South American “parrilla” (iron grill) cooking, oak or other hardwoods and sometimes fruitwoods are burned in what is called a “feeder” fire. The burning hot embers are then collected and pushed or scooped beneath the cooking surface. The chef monitors closely, controlling how much heat is used. The results are delicious, especially when combined with basic South American sauces.

We don’t have a traditional parrilla so we improvised, using a brick barbecue pit. A piece of quarter-inch-thick steel was positioned about 18 inches above the oak feeder fire in the hearth. A Camp Chef Lumberjack Over Fire Grill was then placed atop the steel. We shuttled embers from the feeder fire to the Camp Chef grill, occasionally adding pieces of one-inch-diameter apple wood to develop more smoky flavors.

Ingredients (whatever you want to grill, but we used the following)

6 pounds front shoulder of wild boar (bone-in)
2 pounds venison bottom rounds (3) and a couple of backstraps

Preparation

We used Goya Mojo Criollo marinade, which has bitter orange, lemon, garlic, and onion nuances, resting the meat in this tangy bath overnight in the refrigerator. Alternatively, use a favorite marinade. Those with fruit juice work well with this style of grilling. Add largest cuts to the grill first. Ensure embers are hot enough to get a good sear on the meat, then reduce heat and slow-cook until desired temperature (170°F for the pork and 130°F for the venison). Once the meat has a good sear, baste twice with chimichurri; once shortly after achieving a complete sear, and then again about 8 minutes before taking off the grill. Let the meat rest for a few minutes before cutting and serving. Top with or serve on the side a fresh criollo sauce.

We ate picnic style. Side dishes included a watermelon, blueberry, and blackberry fruit salad; a coleslaw made with pickle juice instead of vinegar; and a caprese salad. A couple of experienced venison eaters proclaimed it the finest they’d ever had.



Chimichurri

Several large cloves of minced garlic
½ cup chopped fresh parsley
½ cup chopped fresh basil
1 tbsp chopped fresh rosemary
1 tbsp chopped fresh thyme
2 tbsp chopped fresh oregano
¼ cup finely chopped mixed spicy and sweet peppers (be judicious)
1 to 2 tsp dried red pepper flakes
1½ cups olive oil
¼ cup red wine vinegar
Salt and black pepper to taste

Mix all ingredients in a jar and shake. Let stand for an hour or two. Note: If substituting dried herbs, use about half the recipe amount and hydrate in a little warm water first.

Criolla Sauce

2 cups diced mixed colors, sweet bell peppers
1 cup diced onion
1 cup diced tomatoes
½ cup red wine vinegar
½ cup olive oil
Salt and black pepper to taste

Mix in a jar and let stand for at least a half-hour. Serve as a sauce/side with the grilled meat. It’s almost akin to a chutney or salsa.

Sauce Notes: Our sauces are adaptations of ones used by Edward Cardona, executive chef at Uruguay Lodge, and a recipe from *Feasting on Wild Birds* by Mercedes de Castro, our hostess at the lodge. Both chimichurri and criollo can be made a few days in advance and stored in the refrigerator. If chilled, let both reach room temperature to liquefy the oil before using.



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Thanks to Department staff from all corners of the state who help us bring this magazine to our readers.

—Sally Mills, Editor



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A large, detailed photograph of a fish, likely a striped bass, is the background for the lower half of the page. The fish is shown in profile, facing right, with its mouth open and holding a colorful lure. The lure has a red and white body with a black eye and a silver hook. The fish's scales are detailed with green and yellow patterns. The background is a green, textured surface, possibly water or a backdrop.

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