A Note from the Editor

I find myself writing this piece for our Fall Guide on our nation’s Independence Day—July 4th. As we celebrate our unique freedoms, another little-known freedom we possess here in America comes to mind. The North American Model of Wildlife Conservation is unique in the world. In most countries, the wildlife resources are owned by the government or landowners and are reserved for the privileged few. However, in the United States and Canada, fish and wildlife belong to all citizens and are managed to ensure that their populations will be sustained forever.

There are seven basic tenets to the North American model which are often referred to as the “Seven Sisters for Conservation.”

1: Wildlife Is Held in the Public Trust. Natural resources and wildlife are managed by government agencies to ensure that the public will have access to utilize these resources.

2: Prohibition on Commerce of Dead Wildlife. In most circumstances, commercial hunting and the sale of wildlife is prohibited to ensure the sustainability of wildlife populations.

3: Democratic Rule of Law. The public has a say in hunting and fishing laws through involvement in their government management processes.

4: Hunting Opportunity for All. According to law, all citizens have an opportunity to hunt and fish.

5: Non-Frivolous Use. Under law, citizens may legally kill certain wild animals for food and fur, self-defense and property protection. However, it is unlawful to casually kill wildlife merely for antlers, horns, feathers or other parts.

6: International Resources. Working together, the United States and Canada coordinate wildlife and habitat management strategies because wildlife and fish migrate across geographic boundaries.

7: Scientific Management. Sound science is essential to management activities for fish and wildlife.

Following these seven principles has resulted in the United States and Canada having wildlife populations and hunting and fishing opportunities that are the envy of the world. There is nowhere else on the planet where all citizens can pursue the abundance and diversity of fish and game that can be pursued here. This is a freedom that is to be celebrated, cherished and preserved for future generations.

Finding a Place to Hunt When You Don’t Have a “Back 40”

By Clint Barden, technical assistance biologist, N.C. Wildlife Resources Commission

One of the common things that veteran sportsmen and women lament is the loss of places to hunt, trap and fish. The “Good Ole Days” of having plenty of private land to access are gone in many places due to urban sprawl, farm consolidation and other land use changes. It’s an unfortunate reality that fewer and fewer people have family land or land of their own to access. Fortunately, even today, several options exist for finding a place to go afield.

Game lands offer an outstanding opportunity to pursue a longbeard, target a whitetail or search for many species of small game. The N.C. Wildlife Resources Commission manages about 2 million acres of both public and privately-owned game lands, and these lands provide a multitude of hunting opportunities. These game lands are well distributed throughout the state with most located within a couple hours drive of a large percentage of the state’s population. To learn more about game land opportunities in your area, visit ncwildlife.org/Hunting/Where-To-Hunt-Shoot/Public-Places.
Many times, private property closer to home may hold your interest. Private land hunting often provides less hunting pressure and/or higher success rates compared to game lands. Everyone wants to have some successful hunts throughout the season, but this is especially important for maintaining the interest of a young hunter. The good news is that you probably know someone with huntable land. Family and friends are the low-hanging fruit. Don’t forget to ask co-workers, church members and business associates for permission to hunt. If permission to hunt can’t be obtained, then many hunters choose to join hunt clubs that lease hunting rights from large landowners.

The next logical place to seek hunting access would be with a landowner you don’t know. The old-fashioned approach of knocking on a door still has its place in today’s world. It’s best to make this approach at an agreeable time, perhaps early afternoon on a Sunday. Be polite, clean-cut, and well-dressed. Be prepared to be told no and accept this with a smile. After thanking them for their time, ask if they have a neighbor who may be willing to let you hunt.

What about that tract with no door to knock on where no one is ever around? In days past, you may have had to do some serious leg work to track down the owner. Technology now makes that information readily accessible. Most, if not all, counties in North Carolina have a Geographic Information Systems (GIS) website. These websites allow you to find the parcel you are interested in and see information pertinent to hunting such as an aerial view, topographic lines, location of streams and open areas. Most importantly, these sites allow you to obtain the name and mailing address of the property owner.

More than a Form Letter
Now that you’ve researched a property that you’d like to access and have also tracked down how to contact the owner, what’s the next step? A hunter in North Carolina named Zarek Melton has been in this situation before and has come up with an excellent way to approach a landowner that you can’t ask face to face. Melton has developed a detailed letter that can be mailed to a landowner with the following pertinent information:

- The parcel you are interested in accessing
- Why you would like to have access
- Potential legal issues for the landowner and how you will address them as well as relieve the landowner of any liability in writing
- Background on who you are and why your presence would benefit the land
- A polite and professional tone to the letter

You can develop your own letter covering important points for your situation and customize your letter to fit your needs. Structure your letter in a way that asks for a reply and be sure to include a self-addressed and stamped return envelope. Melton’s concept offers a great starting point in this process.

Once you’ve done the legwork of seeking permission and gaining access, remember to nurture the relationship you’ve built. If the property is a farm, offer to help mend fences or do other chores. If the property is a woodlot, offer to help control invasive plant species, cut a load of firewood or clean up downed trees and debris. Always remove any trash you find no matter who left it behind.

Once hunting season arrives and you’ve had a successful hunt, offer to share the harvest with the landowner. If they decline, send them a picture of a meal you prepared with the animal you harvested from their land. Simple gestures such as this will let the landowner know you truly value the opportunity to hunt on their land and will help ensure your future access as well as the future of our hunting tradition.

Don’t get hung up on only targeting big game. Many landowners might already be deer and turkey hunting on their property but might be willing to give you access to hunt squirrels and rabbits. If you are a trapper, ask them if you can trap coyotes or other furbearers on their property. This approach may give you a “foot in the door” that evolves into other opportunities down the road.
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going started in the outdoors can be a daunting task no matter the pursuit. Even for folks who already enjoy an outdoor activity or two, just getting to step one can seem like a chore.

Take birding for example: One could get started by just going outside and looking for birds, but soon more is wanted. So, a feeder and feed are purchased and hung. Next a birding ID app is downloaded, then a field guide or two is purchased, followed by a pair of binoculars. Then these are not good enough and another pair are purchased.

Next comes the birding by ear apps, the neutral clothing, the backpack and gear, then the spotting scope and tripod. Soon it’s realized that photographing birds would be a great next step, so gear is purchased, software is downloaded on a laptop, digital storage is obtained, time is spent learning the art of photograph touch-up and so on. Then the life list becomes ever more important, and trips start getting scheduled to local habitats where rare birds might be found. From there, the trips get longer and encompass more days, a hotel stay or two, more gas money, more food expenses and more time.

Eventually, the birder becomes a full-blown identity-defining enthusiast and schedules vacation time for birding trips to destination locations to feed the passion. Next comes conservation advocacy groups, birding clubs and photography clubs to be as involved as possible in the outdoor pursuit but also for the conservation of the birds and their habitat. Congratulations, you are a birder!

The outline mentioned earlier could be used as a roadmap, I suppose, but it really starts with the awareness that birding is a thing and grows from there. Now, think about getting started in other outdoor pursuits, like hunting. With only about 5 percent of North Carolina’s population involved in hunting and with access to hunting land becoming harder and harder to find, getting started has quite a few more barriers than birding.

On the positive side, a recent survey showed that 26 percent of respondents had previously participated, and 31 percent had an interest in hunting in the future. For comparison’s sake, 20 percent currently view wildlife with 43 percent doing it in the past and 76 percent having an interest in the future. Although finding a hunting mentor seems like finding a needle in a haystack, data shows that the pool is bigger than we might think with past hunters and present hunters combined.

Baby Steps to Hunting

So, how does someone get started hunting? I know a few folks who have taken to the challenge with the determination of a mule. They became aware of the outdoor pursuit, became curious and interested in learning more, then jumped in with both feet. There’s something to be said for these folks, but it would be wrong to assume that most people are like that.

Most hunters are born into the sport. It’s a family tradition that gets passed down and learned. There are many points of entry if it’s part of your familial culture but not so many when it’s not. Getting started as a hunter can be tough. However, the benefits of self-discovery, value of self-reliance, closeness with nature, visceral connection to food and the health benefits associated with all of it have piqued interest.

It always comes back to getting started. The gear alone is quite an investment. Then add the steep learning curve of finding your quarry, the hunting regulations and license requirements, the range practice, the safety and responsibility of your actions, the concern of the other hunters, the worry of wounding an animal and not finding it, the anxiety attack of actually downing an animal like a deer and what to do with it then, and the list goes on. It’s no wonder it’s hard to get started.

Tough as it is, interest is growing. State agencies like the N.C. Wildlife Resources Commission are investing staff time and money to help interested folks learn to hunt. Many non-governmental organizations, businesses and industries are getting involved as well. The main reason for changes to hunting is that as our culture has shifted away from the land, the familial connection to hunting has shifted as well. Fortunately, the connection to food from field to table is being rejuvenated. From backyard gardens and chickens to farmers markets, people want to know where their food comes from. Hunting places people as close to their food as possible.
How do I Start?

So, how does a person get started hunting? Maybe a better question is, “how do I get someone started hunting?” That’s always been the question. There’s ownership on the student, but beyond his or her interest, the rest is up to the mentor. If I as a hunter value hunting and its myriad benefits, then I need to find people interested and teach them. It’s on me. It has always been on me.

Mentoring and teaching is almost as tough as learning. I’ve found that the time commitment is great. It takes years to make a hunter. It takes range time, scouting and hunting trips. It’s being available for questions and conversations about rules, ethics, safety, methods and techniques. It’s coaching, support, teaching and correction. To properly mentor is as big of a commitment as deciding to learn to hunt. But it’s worth it.

It’s worth passing on skills that connect people and land and wildlife on a level that’s as deep and personal as hunting. It’s satisfying building upon centuries of hunting stories around a campfire in the middle of silent, natural perfection. And it’s deeply fulfilling knowing that you’ve been part of the shaping of an ethical hunter who will care and advocate for the land and the wildlife that use it. It’s work. It’s love. So, how do you get started? Simply put, you find somebody! 🍁

Historically, most hunters were born into families where hunting is a family tradition and young hunters learned from their older relatives. Today, however, many Americans are not so lucky and depend on the mentorship of friends, state wildlife agencies and even strangers to help them learn how to be a hunter.

At some point, young hunters will continue on their own, but the lessons and relationship built with a mentor will always remain.
Deer Habitat
By John Shaw, deer biologist, and John Isenhour, technical assistance biologist, N.C. Wildlife Resources Commission

As most North Carolinians know, white-tailed deer can live just about anywhere. However, individual deer, like all animals, are heavily dependent on their habitat to provide biologic needs such as adequate food, water, shelter and space. While hunter harvest and other sources of mortality can shape herd demographics, habitat is the underlying factor that explains much of the variation we see in deer body size and herd productivity.

A closer look at the habitat needs of North Carolina’s deer reveals water is not a limiting factor. On the other hand, food and cover can be limiting factors for whitetails in our state. Active management to improve deer habitat is often overlooked but can be an effective tool for landowners to make their property more attractive to deer and promote a more resilient herd. Managing for improved deer habitat comes down to managing for food, cover, and the interspersion of habitat types.

Soils are the foundation of habitat management and have a tremendous influence on type, growth rate, nutritional value and quantity of vegetation on a given site. In turn, habitat quality is directly dependent on vegetation available to the local deer herd. For the most part, improving soil productivity on a significant scale is not a practical goal. However, all sites can be actively managed to improve habitat on the soils that are available. Improved habitat can boost the health and condition of bucks, does and fawns increasing herd survival and reproductive rates.

Deer will eat any type of plant and any part of a plant, but they are highly selective if a diversity of forages are available. Unlike cattle, which are grazers, deer do not easily digest grass. They are considered concentrate browsers, which means they consume very little grass (oats, wheat and cereal rye excluded) and primarily browse on stems, buds, leaves and mast from a wide variety of broadleaf plants.

Across the white-tailed deer range, average annual diets consist of 46 percent browse (woody plant parts), 24 percent forbs (broadleaf nonwoody plants), 11 percent mast (fruits, acorns, etc.), 8 percent grass, 4 percent crops, 2 percent fungus and 5 percent other vegetation. Digestion is dependent on microflora in their gut, and diets are ultimately dependent on what is readily available. When you think about optimizing deer forage, focus on forage diversity. Provide the buffet and let deer themselves determine what meets their needs at a given time of the year. And remember, forages that cannot be reached by a deer aren’t providing nutrition for a deer. Focus attention on the vegetation no more than 6 feet above the ground as well as mast producing plants that drop food on the ground.

Managing for improved deer habitat comes down to managing for food, cover, and the interspersion of habitat types.

Seasonal Foraging
Many wildlife enthusiasts, whether hunters or watchers, pay a great deal of attention to what deer eat during the fall. When the leaves drop from the deciduous trees and shrubs, deer are more noticeable in the forests, around neighborhoods or along roadsides. Not only are the viewing conditions more conducive to spotting a deer, but deer are more mobile during this time of year. The lush food supplies of the spring and summer are fading, and deer need high-energy forages as they build up fat reserves for the winter and prepare for the physical stress of breeding season. Grains, woody browse, acorns and late-season soft-mast producers can be a vital source of energy for deer in the fall in many areas. Acorns can dominate a deer’s diet in the fall depending on their availability.

As New Year’s passes each year, many deer hunters and watchers shift their focus to other hobbies and may not give much thought to deer forage requirements during winter. Remaining browse, grains and mast sustain deer through the relatively mild winters in the Southeast, and the vast majority of deer survive without significant hardship. During spring, forbs and fresh woody growth provide much-needed protein and nutrients for pregnant does, newborn fawns and bucks recovering from the winter.

This time of abundant forages is followed by the most stressful time of the year for deer in the Southeast—summer. During summer, high-energy foods are needed by milk-producing does, growing fawns and bucks growing antlers. During late summer, heat and parasite loads peak, and these factors stress deer populations. Woody browse hardens off, plant growth slows and forage becomes less digestible. These hardships can be mitigated by quality habitat containing a diversity of vegetation.

Cover is often overlooked but is a vital part of a deer’s day-to-day needs. The main role of cover for adult deer in the Southeast is as refuge from disturbance. Generally speaking, thicker is better for white-tailed deer because it allows deer to hear and smell surrounding activity. Dense cover provides a place to hunker down or concealment for them to slip away unseen.

For fawns, particularly during the first few months of life, cover may serve an important role in survival. Fawns need understory vegetation to hide, but ideal fawning habitat is not well understood. Researchers are trying to determine how characteristics such as density, vegetation composition and cover configuration impact fawn survival. Recent data has shown increased fawn survival in areas with lots of edge. These linear transition zones serve as corridors and offer small patches of diverse vegetation which may reduce predation on fawns. In cold climates, thermal cover, generally comprised of an evergreen canopy, is an important consideration when managing for deer cover. Thermal cover is less important in the Southeast.

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Deer Management Best Practices

**Mast Tree Release:** Mast production can be increased by releasing selected trees and shrubs through removing surrounding competition. While oaks are typically thought of when discussing mast for deer, don’t overlook persimmon, plum, crabapple and honey locust. Identify mast trees to release, then cut or treat competitors with herbicide to allow the mast tree’s canopy space to grow on at least three sides.

**Gap Creation:** Allowing sunlight to reach the forest floor will promote growth of sprouts, vines and herbaceous forbs. Hinge cutting is often touted as a great practice, but simply felling trees in a closed canopy forested stand can produce similar results without the time-consuming detail of leaving the tree attached to the stump. Opening the canopy promotes a flush of browse from stump sprouting as well as a growth response from grape and green brier. Gap creation can enhance both cover and food availability.

**Enhance Edge:** Expanding transition zones between two habitat types, known as softening the edge, serves to enhance food, cover and interspersion components of habitat. Focus efforts on utility transmission rights-of-way, forest roads and field edges to get the most benefit. Clearcutting or heavily thinning these areas are the most effective way to improve habitat quality. However, simply removing low growing branches to allow more sunlight can have modest results. Use species-selective herbicides to maintain these edges in shrubs, briars and vines.

**Manage Openings:** While the natural tendency of most landowners is to turn old fields and logging decks into a food plot, in most instances promoting volunteer vegetation may fill a greater need on your property. Fall disking promotes volunteer forbs such as ragweed, sumac, beggar’s lice, pokeweed and goldenrod. These species provide high quality forage for deer but also can produce excellent cover. Consider managing openings on rotation to optimize habitat diversity. Disk half the opening acreage in the fall, broadcast a winter grain such as rye or wheat and allow it to stand for a year and a half. Treat the other half of your openings the following year.

**Prescribed Burning:** Prescribed fire is not a magic bullet for habitat management. It has little benefit in closed canopy forests because sunlight cannot reach the ground to make beneficial plants grow. Also, burning can be a challenge in some urbanized parts of the state. However, in forested stands with open canopies and in fallow fields, burning does set back woody species and increases the palatability and nutritional value of browse. The removal of leaf and needle litter allows more herbaceous forbs to germinate on bare mineral soil. A three to four year burning interval is a good goal for deer management.

**Commercial Thinning:** The most effective time to impact habitat quality in a forested stand is during a commercial harvest. Heavy equipment is already on site, and any trees that are cut can be sold at the mill. This is a great time to install canopy gaps, heavily thin specific areas, expand edges and daylight roads. Make sure that your forester understands your wishes for the harvest before the timber sale contract is finalized and before loggers move equipment to the property and begin setting up logging decks.
Managing Shrubs and Woody Understories

By Dr. Chris Moorman, professor, North Carolina State University, and Dr. Craig Harper, professor, The University of Tennessee

Across North Carolina, there are many shrubs that provide high-value food and cover for various wildlife species. These include sumac, wild plum, beautyberry, blueberry, huckleberry, spicebush and blackberry (technically a bramble but often included as a shrub). Other shrubs are common to the Coastal Plain and include gallberry, pepperbush, wax myrtle and fetterbush. Others common to the Mountains include mountain laurel, rhododendron and buffalo nut.

Despite this diversity of beneficial shrub species, we tend to overlook the value and importance of these and other shrubs when managing plant communities for focal wildlife species. In fact, our management activities (or lack of management) often reduce or eliminate shrub cover even when those shrubs produce critical cover and food for focal wildlife species.

Many of you are working hard to establish and maintain early successional communities that are important for various wildlife species. Two primary tasks you face include eradicating undesirable plants like nonnative grasses (such as tall fescue and bermudagrass) and controlling tree invasion. Undesirable plants can severely diminish food and cover availability for many wildlife, and forest re-growth can take over an early successional community. However, when many landowners manage undesirable plants and forest succession, they often overlook the importance of maintaining some critical shrub/woody cover for wildlife.

Encroaching trees are always an issue when managing early successional communities in North Carolina due to our abundant rainfall and long growing seasons. Unlike our friends in the drier parts of the West who can often walk away from a site for many years, there is hardly a site in North Carolina that would not become a forest if left alone for six to eight years without some type of disturbance. However, not all woody stems need to be removed.

From Oklahoma to Kentucky to North Carolina, data clearly indicate that shrub cover should not be more than about 80 yards apart on areas managed for bobwhite if maximum population response is the objective. In fact, because of the close association of bobwhites and shrub cover, the Northern bobwhite is considered by many scientists to be a shrubland obligate; that is, you will not find robust bobwhite populations unless there is adequate shrub cover available. One thing is abundantly clear: The Northern bobwhite is not a bird of pure grasslands. If there are not shrubs available for cover from predators or extreme weather and forbs available for brood cover, insects, and seed, bobwhite will not be present. Optimal habitat for bobwhite includes no more than 30 percent grass coverage. Given these facts, why are we still hung-up on planting so much grass for quail? Moreover, we all know where most of the rabbits are found—in low, dense shrubs and brambles with scattered forbs and grass—not in dense, extensive fields of grass!

Tree sprouts also serve as important sources of cover. Sprouts of hickory and oak in an old-field or savanna can provide critical thermal cover for bobwhite broods. A wild turkey hen nesting in an old-field is almost always found under the overhanging limbs of a young oak, persimmon or other tree sprout following fire. Shrub cover and tree sprouts also are important in forests and woodlands with open tree canopies. When forests are thinned and burned, hardwood tree and shrub sprouts are prolific. As long as frequent fire keeps them short in structure, they provide cover for deer fawns as well as nesting and foraging substrate for Northern cardinal, hooded warbler, and several other forest songbirds.

Many forest communities tend to have a dense woody understory even under closed canopies. Examples include the ericaceous shrub layers of stream head pocosins in the Sandhills region and the rhododendron thickets of streamside forests in the Mountains. This type of structure is essential for species such as hooded warbler, Swainson’s warbler, and ruffed grouse. However, other closed canopy forest communities lack woody understory. Hence, thinning to open the canopy and allow sunlight penetration is critical to increase coverage of woody understory. Remember that without relatively frequent prescribed fire after thinning, tree sprouts will grow into the midstory and shade out herbaceous plants and some shrubs.

Fire Builds Diversity

Whether managing upland hardwoods or open pine woodlands and savanna, variations in burning regimes strongly influence the extent of woody understory cover. Frequent prescribed fire, especially
when conducted later in the growing season, tends to reduce the extent of woody cover and favor more forbs. In contrast, less frequent fire allows greater woody cover and eventually taller woody understory stems that shade-out herbaceous groundcover.

Through our research and observation, we have learned much over the past two decades about the interaction between prescribed fire and woody understory cover and the implications for wildlife. Notably, species such as blueberry and blackberry typically do not produce fruit until two years after prescribed burning, so fire-return intervals more frequent than every three years may reduce soft mast availability. However, that is not a problem unless you are burning large areas. Smaller-scaled management incorporating fire somewhere on the property every year allows the most diverse conditions benefiting the most species.

Forbs and woody vegetation sprouting back immediately after fire offer high-quality forage for deer as the young plant tissue is highly palatable and nutritious. In the years following fire, wild turkey and Northern bobwhite hens select nest sites that have greater amounts of woody understory cover than randomly available, and this is especially true in frequently burned uplands. Even Bachman’s sparrows, a bird typically associated with herbaceous groundcover, select nest sites with greater woody understory than typically available in frequently burned Coastal Plain forests. Hence, maintaining some shrubs and other woody understory cover, even in fire-maintained longleaf pine communities, is critical to most wildlife species that use these areas.

It is important to recognize that no structural or compositional condition or management strategy is good for all species. What benefits some species does not benefit other species, and this highlights the importance of having a diversity of vegetation types and successional stages on your property if you want to see increased wildlife diversity. For example, there are some species in the East that require extensive areas of grass, especially the grassland-obligate songbirds such as Eastern meadowlark, grasshopper sparrow and Henslow’s sparrow. Other wildlife species require extensive coverage of woody understory provided by either shrubs or sprouting trees. Yellow-breasted chat, golden-winged warbler, white-eyed vireo, brown thrasher and Eastern towhee are a few that come to mind that prefer moderate to dense woody stems.

To sum it up, we support efforts to increase and enhance early successional communities and open woodlands to help populations of declining wildlife species that require such areas. However, remember that these species do not benefit from dense, extensive areas of pure grass. Instead, leaving and promoting appropriate amounts of shrub cover will provide much-improved conditions for many wildlife species. ✩

Pine woodlands and savannas managed for quail should have understories dominated by various forbs that provide seed and cover while supporting insects so important for broods. Scattered shrub cover and tree sprouts provide cover necessary for broods and adults. Grass coverage should be no more than about 30 percent.
When the Pieces Come Together: Quality Habitat and a Happy Landowner

By John Isenhour, technical assistance biologist, N.C. Wildlife Resources Commission

I was recently asked to give a talk at the North Carolina Chapter of The Wildlife Society’s annual meeting about habitat management on privately owned property. To nobody’s surprise, my presentation addressed landowner objectives, challenges facing landowners and my signature “finding a balance” sermon. The presentation concluded with a few quick case studies of private lands successes. Several of the landowners I discussed have been highlighted in past issues of The Upland Gazette, but the last case study addressed a tract which has had very little recognition: Cheryl Conlin’s property in Richmond County.

While I stop short of naming my favorite landowner, Cheryl is certainly someone I enjoy working with, and I wish I could find more landowners that share her conservation ethic. She and I first met at a Sandhills Prescribed Burn Association (PBA) event in mid-2015. During the event, we exchanged contact information and tentatively agreed to schedule a site visit to her property in the near future. I was a bit skeptical as to whether I would hear from Cheryl or not as many outreach contacts simply do not pan out. Little did I know the kind of person I had just met.

As I arrived for my initial site visit, I was greeted by Cheryl and her golden retriever mix, Abby. They were both excited to see me, and soon we all ventured out to investigate the property. As we walked along the forest paths, the conversation progressed from broad topics and questions to more specific details about the property and management objectives. I came to find out that Cheryl and her husband, Carlton, had moved to the Sandhills, fell in love with the area and purchased their property in 1997. While they enjoyed the natural surrounding and solitude of the property, they had implemented little active management during their ownership tenure.

While discussing management objectives with Cheryl, she stated that she wanted a place “for wildlife to live.” This is a common goal for many landowners but is so broad that it leaves a great deal of room for interpretation, misunderstanding and frustration. What I refer to as “wildlife” and “wildlife habitat” may not be what the landowner has in mind for their property. After a few more minutes of discussion, Cheryl uttered one of the clearest land management objectives I have ever heard, “I want it to look like the Sandhills Game Land just down the road.”

This one statement was the “Eureka!” moment when we both knew our management destination. The goal was further solidified as she mentioned fox squirrels, red-headed woodpeckers and wiregrass.

Creating a Plan

Deep, well-drained Candor and Wakulla sand, which are the soil types across the property, are ideal for longleaf pine. Limited soil moisture and low fertility limit competition while favoring herbaceous groundcover, which is adapted to the challenging...
environment and frequent fires of the Sandhills. However, the absence of burning on this property for at least 30 years had allowed a dense jungle of scrub oaks to take over, shading out most all the herbaceous groundcover that is critical for a healthy longleaf ecosystem. All that remained were impacted patches of wiregrass along the driveway and in small gaps in the forest canopy. The density of longleaf pines had been impacted as well with several areas only holding one or two longleaf per acre. A brief explanation of the current situation and a quick outline of what it would take to reach her objectives did not seem to daze Cheryl as she made it clear—"let’s do what we can!"

Moving forward, the first step was to develop a management plan that addressed reintroducing prescribed fire to the property and possibly removing the dense scrub oaks. With a plan, Cheryl reached out to Jesse Wimberley with the Sandhills PBA to help find a burning contractor who could assist with the needed burns. It just so happened that one of Cheryl’s neighbors, David Auman and his son-in-law Josh Galloway, were willing and able to fill this critical role.

David had many years of burning experience on nearby tracts, and Josh had recently completed his prescribed burner certification. Now the pieces began to fall in place. With a plan and a burner, Cheryl now needed financial help to jump-start her burning program. To get this needed assistance, she applied for the USDA Natural Resources Conservation Service’s Environmental Quality Incentive Program (EQIP). In early 2016, Cheryl was awarded an EQIP contract to conduct two prescribed burns on her 70-acre property.

**Time to Burn**

The management of this property moved forward as scheduled. Josh and David conducted the first prescribed burn in the spring of 2017, and a second burn was scheduled for the spring of 2019. However, the advanced growth of the scrub oak was undaunted by the initial burn. A more intensive treatment was needed, but herbicide was not very desirable due to fuel load and esthetic concerns. This left cutting and removing the dense oaks as the best, but unlikely, option.

In a “Hail Mary” effort, David Auman talked to a handful of local foresters to see if there was a logging crew in the area that could harvest and chip the oaks to open the forest canopy. After a few months, Consulting Forester Terry Sharpe was able to coordinate with a logging crew to chip the oaks, harvest a small stand of mature loblolly and leave a few pockets of oaks, persimmon and dogwood to provide a source for mast. Again, the pieces came together.

You would think that such aggressive implementation of the management plan I would bring me nothing but joy, yet my first visit to the property after the timber harvest caused me outwardly evident stress. Cheryl certainly read me right as I was concerned that the impact on what was essentially her front yard was a bit more extreme than she was expecting. Cheryl vividly recalls, “when John asked what I thought about the chipping you could tell he was worried. It was like a cloud was lifted from him when I told him how excited I was about the progress.”

In the fall of 2018, Josh conducted the second prescribed burn on the property to complete Cheryl’s EQIP contract. We promptly updated her management plan, and she applied for her second EQIP contract. At this time, it appears that she will get a contract to spot treat oak sprouts with herbicide in the summer of 2019, plant widely spaced longleaf seedlings in the winter of 2020 and conduct a third prescribed burn in the winter of 2021. All these practices will steadily move the property in a direction to meet Cheryl’s objectives.

Private landowners come face to face with many challenges as they go through the process of managing their property. It seems that these challenges are magnified when wildlife habitat enhancement is the landowner’s primary objective. Ms. Conlin’s story should serve as an inspiration to those landowners who seem overwhelmed with management options and implementation difficulties. Don’t get discouraged. Reach out for assistance from friends, neighbors and natural resource professionals that share your passion. But above all, do what you can, be excited about the progress you make, and enjoy your property as all the pieces come together.

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Left: Landowner Cheryl Conlin (left) discusses the next management steps to be implemented to enhance the longleaf ecosystem on her property. Jesse Wimberley, David Auman and Terry Sharpe have proven integral to the success of the project.

Top left: Two prescribed burns and a commercial timber harvest have removed the dense oaks, reduced thatch and increased sunlight reaching the forest floor in what was once a dense wall of scrub oak trees. Native groundcover has responded well, but continual management is needed to maintain progress.

Top right: A common buckeye butterfly rests on a winged sumac. Management on the Conlin property has increased plant diversity and the diversity of animals that utilize those plants.
North Carolinians are a proud bunch. The state is blessed with wonderful hunting and rich traditions, and our predecessors who developed such are legends too. When thinking of Tar Heel hunting, giant Northern Piedmont whitetails, abundant waterfowl and monster coastal black bears come to mind. For many, though, proud traditions of Plott hounds or decoy-making take center stage.

While the state is rightly renowned for many sporting endeavors, it’s the Old North State’s penchant for decoy-making that is arguably its most important contribution to the sporting and art world combined. Identified by simple and flowing “sculpture” and even simpler paint, those who made decoys during North Carolina’s golden age of waterfowling had it pinned down. Better yet, they produced decoys in such great quantities that the total number is likely incalculable. Scant personal diary entries, tattered bills of sale and occasional living testimony are what constitutes the overall ledger of decoy production though the thousands of old North Carolina decoys in today’s collections also relay the tale.

Relating to folk art and subsequent collectability, North Carolina’s old working decoys cover the spectrum from refined simplicity to crude-but-functional. Singularly, a handful of decoys will stand the test of time as truly iconic decoys representing not only North Carolina, but America and decoy-making as a whole.

Lee Dudley’s tiny ruddy ducks and Alvirah Wright’s totemic canvasbacks come to mind as iconic examples. Still, they’re not what make the Tar Heel tradition so famous. It’s the everyday decoys that people from anywhere in the country can positively proclaim as “North Carolina-made.” They look like decoys—not ducks. It’s important to note a few things when surveying North Carolina’s old-time decoys and makers.

Artistic Tools
First, the decoys were tools. Any artful quality was generally incidental or accidental to functionality. Second, as tools, they had to be useful and durable to withstand long days of hunting on some of the continent’s most dangerous bodies of waters. Banging and clanging together bodes badly for anything, especially decoys. With open, expansive waters, a decoy’s visibility and size were considerations as well, which further handicapped their use and longevity. Lastly, most of these decoys were made in villages and communities where today’s conveniences, such as paved roads, reliable electricity and even lumber, simply didn’t exist. Still, decoy makers carried on, as did everyone else, with whatever had to be done.

Few makers who perfected any craft, while consequently creating art on a scale significant enough to share with the world, can be found anywhere. Not so with many of North Carolina’s decoy makers. No proper examination of North Carolina decoys is complete or noteworthy without mentioning Ned Burgess, Currituck County’s hand-powered “decoy factory.”

Many would consider Burgess’ decoys to be the “end-all, be-all” of North Carolina’s decoy heritage. Practicality and ease of production dictated his method for construction with a no-frills, albeit visually pleasing, finished product. It’s likely Burgess made thousands of decoys as many dozens of his decoys have been found at numerous hunting clubs. Still, dozens of

Top: Canvasback decoys from Currituck County are always special, but none more quintessential than those made by Ned Burgess. Bottom: The canvas covered decoy is, to many, as iconic of the Outer Banks as the ocean itself. While Mannie Haywood is credited with being the most prolific, the Tillett family likely perfected the craft.
Currituck makers were almost as productive, all in varying degrees of sublimity.

Traveling south, the Outer Banks region is synonymous with graceful, canvas-covered goose decoys. They are uniquely North Carolina and were made in such great numbers that hundreds of good examples still exist, though few are distinguishable enough as to who among a large group of close friends might have made them. The construction method is a direct reflection of abundant materials found in virtually every enclave of the beach prior to World War II.

A North Carolina Tradition

Sculpturally appealing brant and goose decoys made from Hatteras to Portsmouth are as North Carolinian as good barbecue. They are the epitome of folk art—unintended to be art, yet often beautiful. Many of these large decoys were chopped from ship masts and telegraph poles and can be rather large and heavy. Heavily worn painted surfaces and crusty, rusty rigging speak directly to the harsh environment and conditions where these decoys were often used. Some also have “rootheds,” which is a misnomer since the heads were generally made from holly and cedar branches because the natural growth allowed for a more durable head and neck than a sawn-head pattern. It was ingenuity in its simplest form!

Eldon Willis and Elmer Salter chopped out tens of thousands of decoys for use in Core Sound with the great majority being redheads and blackheads (colloquial name for scaup). Willis made decoys the old-fashioned way for the better part of six decades—an accomplishment few can claim. Furthermore, his carving career saw decoys transition from tools to collectibles, and he answered the bell in both regards throughout his career while also employing several other great craftsmen to match the demand for large rigs of decoys. If any maker demonstrates an evolving style more so than Willis, this author is unaware. He was talented and speedy, but sadly few examples representing both traits remain.

Certainly, decoys were made all over America. It’s often said that there are only two art forms that are uniquely American: blues music and the duck decoy. Decoys from other regions are as variable as our own with some makers able to produce stand-alone examples of working art. The N.C. Wildlife Resources Commission is no stranger to the importance of decoys to our nation’s waterfowl heritage. The Outer Banks Center for Wildlife Education in Corolla houses one of the world’s top collections of antique Tar Heel decoys and associated paraphernalia.

A handful of quality literature exists to help grow collectors’ interests in the craft. What’s better is the growing contingency of contemporary decoy makers within this state’s borders that not only continue the tradition but also strengthen it. Whether it’s collecting, researching or just enjoying North Carolina’s old decoy makers, it’s one of the best ways to connect with our collective past as a durable and pragmatic people. Come to the Corolla Center and see for yourself!
Managing Aggressive Stands of Showy Partridge Pea
By Jason Smith, technical assistance biologist, N.C. Wildlife Resources Commission

Many landowners and managers have planted partridge pea in their habitat seed mixes. The most common variety that occurs in commercial seed mixes is showy partridge pea (Cassia fasciculata), which is a tall prolific seeding annual plant. Often, the perfect storm happens due to the timing of management practices and unfavorable environmental factors causing partridge pea to dominate large areas of habitat. This can occur even when planted at very low rates. Although, dense stands of partridge pea produce an abundance of seed and attract many insects, occasionally the growth becomes too aggressive and needs to be suppressed to allow other forbs and native warm season grasses to re-establish and provide more diverse and high-quality habitat.

Aggressive partridge pea can be “too much of a good thing,” and herbicides can be an important tool to suppress overaggressive stands of partridge pea and enhance habitat quality. One method that has been successful starts with an early spring mowing to eliminate all dead and standing plant material that may impede herbicide contact with foliage. Once the partridge pea averages 6 inches tall, apply a premixed herbicide containing dicamba (1 lb./gal. active ingredient) and 2,4-D Amine (2.9 lbs./gal. active ingredient) at the rate 1.5 pints per acre. Be sure to always apply herbicides according to label specifications and use safety equipment and protective gear.

Typically, a single application of herbicide will be successful in suppressing plant growth to allow bluestems and other native grasses to re-establish. Increasing the grass component not only enhances the habitat structure but also helps carry fire so the habitat can be managed with prescribed burning. Once the grass component is re-established, prescribed fire performed every 2 to 3 years during late winter or early spring should keep a good balance of partridge pea, other forbs and native grasses. In some cases, retreatment may be necessary if the partridge pea shows signs of becoming aggressive.

When planting partridge pea in a habitat mix, consider planting sensitive pea (Cassia nictitans) rather than showy partridge pea (Cassia fasciculata) to reduce aggressive growth patterns. For most wildlife species, remember that diverse native vegetation is usually better than extensive stands of any one type of plant.

and is rarely a limiting factor in North Carolina other than in high elevation areas in the mountain region.

Interspersion or arrangement is the third component to consider in the management of deer habitat. Due to the adaptability of deer, varied habitat quality and the fragmented property ownership in our state, there is no magic formula for the best arrangement of habitat for white-tailed deer. The optimal size and arrangement of habitats is dependent on soils, habitat types and potential for productivity. In general, deer are an edge species and thrive in the transitional zones between different habitat types. Contiguous blocks of uniform vegetation provide little opportunity for edge. Small pockets and linear patches of vegetation with varied age and composition form a quality mosaic of transition zones within a given area.

Deer home ranges vary greatly and fluctuate from a couple thousand acres to as small as a couple hundred acres. Factors such as time of year, age, sex, habitat quality and individual deer habits may all influence how far a deer will venture. Core areas, where they spend most of the time, may be substantially smaller. These home range estimates may seem daunting to the landowner who wants to enjoy hunting or viewing deer on their 30-acre property. While it is unrealistic to think a deer will live solely on a tract this size, it is just as foolhardy to believe that you cannot make a small piece of property more attractive for white-tailed deer.

If your objective is to manage for trophy bucks or optimal deer habitat on 30 acres, you will be disappointed. However, if you want deer to visit your property with more regularity and stay a bit longer when they do visit, there are practices (page 65) you can install to help you reach your objective and enjoy your property more. If nothing else, these practices can make your property more attractive for deer than your neighbor’s.