



MISSION ACCOMPLISHED

North Carolina's wild turkey restoration program has taken a bird once on the verge of extirpation from bust to boom.

The turkeys had talked for much of the morning, and then suddenly they were quiet. A misty rain that had fallen intermittently since before dawn began again, dropping so softly that it made no noise. As I tried to figure out where the turkeys might have gone, the rain intensified, not yet hard, but more than the gray swirl it had been. I could feel it soaking my gloved hands, and for the first time that day I was grateful that the January temperature was in the mid-50s instead of the mid-30s.

Even if no turkeys ventured out into the pasture, I figured the day could still be classified as a partial success. Despite arriving in Granville County 15 minutes later than planned, I had walked three turkeys from their roosts just 30 yards from where I would set up to hunt. The birds, displaying more grace than seemed possible for their size, had flapped from their trees then pitched down into another pasture. I heard them clucking in the hardwoods for a while and then nothing.

Crows had started to fill in the morning with their caws. One particularly noisy critter sat atop a hickory tree a few feet away, regaling his buddies with whatever crows talk about. I hoped I wasn't the topic of conversation.

written by Jim Wilson

Gradually I had become aware of another noise, a pleasant, low sound that I couldn't quite place. Then I realized I was hearing turkeys, a lot of turkeys. A flock was working its way through the woods, maybe 100 yards away. The sound grew louder, then faded, louder again, then distant and finally there was that silence so complete that it seemed to have a presence of its own.

I flipped up the hood of my coat, and a few cold raindrops slid down my neck. After 15 minutes of hearing and seeing nothing, I cupped my chin in my hands, closed my eyes and started to drift. Good things really can happen when you fall asleep in a blind, often the least of which is sleep. A cluck and a sweet, low turkey purr fetched me back from near-sleep. Just to my left, several hens had topped the pasture ridge and were making their way toward me. More birds followed, and as they marched closer, I picked out a few jakes with the brushy beginnings of beards and three long-bearded gobblers.

Several hens fed their way in front of me, and I raised my shotgun, took aim at one's head but didn't fire. Over the next few minutes I put the gun on four different turkeys, including one busy jake who paraded back and forth within 12 feet of my blind. *Dead turkey walking*, I thought, but still I didn't shoot. Why? I know I had a reason (and have since questioned my judgment). Certainly, I was more interested in waiting out the three gobblers, but they remained well out of range in the middle of the pasture. Maybe it was as simple as feeling that I did not have to kill a bird that morning in order to possess it. It was a great hunt without my firing a shot.

I counted 37 turkeys working over the pasture in the rain, a nice flock, but nothing uncommon in many areas of the state. In 1970, however, a flock of birds the same size would have accounted for nearly 2 percent of North Carolina's entire wild turkey population, which was estimated at just 2,000 birds.



RALPH HENSLEY

DARK DAYS FOR TURKEYS

Biologists believe that the wild turkey, *Meleagris gallopavo*, was plentiful when Europeans colonized the East Coast of the United States. American Indians, through their forest and field management, provided good habitat for the birds and hunted them for both food and feathers for several thousand years. Europeans quickly developed a fondness for turkey on the table and hunted the bird relentlessly. By 1920, wild turkeys had been extirpated from 18 of the 39 states that made up their ancestral range. Biologists estimate that the entire population of wild turkeys in the United States in 1930 consisted of just 30,000 birds.

North Carolina's efforts to restore this popular upland game bird began in 1928 under the aegis of the Department of Game and Inland Fisheries, the predecessor of the N.C. Wildlife Resources Commission. For the next 16 years, that agency's efforts at rebuilding wild turkey populations centered on artificial propagation and the release of pen-raised turkeys. By 1946, Game and Inland Fisheries had released about 10,000 pen-raised turkeys and distributed another 2,000 eggs. Hunting

Biologist Vic French (below left and center) uses a dip net to subdue a turkey that had been drugged for capture. The commission phased out drugs in favor of more trapping with rocket nets (below right).

clubs and individuals released thousands more and continued to do so into the early 1970s.

As with every other state that released pen-raised turkeys, North Carolina's efforts failed. Although game-farm turkeys might have looked like wild turkeys, they lacked the necessary skills to survive in the wild. The pen-reared birds also carried diseases they could pass to wild turkeys. Another threat was their potential breeding with the wild stock.

Having recognized the futility of releasing pen-reared birds, the newly formed Wildlife Commission began experimenting in 1947 with wild turkey refuges, large parcels of land where management was devoted to wild turkeys. These refuges were located at the Orton Plantation near Wilmington, the Uwharrie Mountains, Caswell County and two locations in the Sandhills—one in Richmond County and another in Scotland County.

These refuges were to function in a similar manner as our current bear sanctuaries.

In a Federal Aid Quarterly Progress Report in October 1949, biologist Robert J. Wheeler Jr. wrote, "The primary purpose is to develop and manage each area so as to procure a maximum density of wild turkeys and thus provide a perpetual reservoir that will yield a substantial and sustained surplus of these birds for harvest in the surrounding territories by sportsmen." Later, at least some of these refuges were used as sources for trapping birds for relocation to restoration sites.

Although the idea held promise, the reality was that the commission was unable to grow and trap enough birds to restore the population, although the Caswell Refuge continued as a trapping source until 2005. Mike Seamster, the commission's wild turkey project leader since 1987, remarked in his "History of Wild Turkey Management in North Carolina" that "By the 1960s, turkey numbers on many of these areas had dwindled to the point that it was somewhat of a misnomer to call them turkey management areas." The problem was not so much one of habitat, as biologists would discover, but of habit. And the habit was fall turkey hunting.

"North Carolina, as most states did, had a long tradition of fall turkey hunting," Seamster said. "There was a lot of pressure from those longtime turkey hunters to keep that fall season. That's just the way you hunted turkeys." Even as biologists—and hunters—recognized that turkey populations were falling, North Carolina hunters enjoyed a season that in many years was nearly three months long and carried a season bag limit that once reached six birds (1948–49). The season limit was trimmed to three birds the following year, then dropped to two for the 1954–55 season. It remains two to this day.

FALL HARVEST PROBLEMS

Beginning with the 1948–49 season, hunters could kill only gobblers, the first time they had been so restricted since statewide regulations were instituted in 1929. As biologists would discover, however, eliminating hens from the legal fall harvest did little to aid turkey restoration. "With young birds, it is difficult under hunting conditions to tell the difference between a jake and a young hen," Seamster said. "A lot of the young hens were getting killed anyway, despite the fact it was a gobblers-only season. That has been proven to be the case in all of the states that have had

a fall season. Those hens are going to get killed, and either put in a stump hole or sneaked out of the field. We now know the fall season might as well be either sex."

The problem was that anything above a 10-percent harvest of hens during the fall would prove to have long-term deleterious effects on turkey populations. A harvest between 5 percent and 10 percent would begin to stabilize the population. States that do allow fall turkey hunting try to maintain the hen harvest at 5 percent or less. Although shooting 10 percent of the female population during the fall would seem to be of little consequence, hens already have high mortality in the spring. The females typically lay 10 to 12 eggs over a two-week period and incubate them for 28 days.

"The hens have a lot of pressure on them," Seamster said. "They're nesting on the ground, and when they start incubating those eggs, they're on the nest basically 24 hours a day, leaving only for short periods of time to feed or for water. At night, on the ground, they're very vulnerable to predators, be it a dog, fox, bobcat or coyote. Different studies have shown losses of 25, 35, 40, even 50 percent of the hens during the nesting process. There's not a lot of margin for error. When you start placing additional mortality on those hens with a fall season, you can take a few of them, but if you take very many, with the losses that already are occurring with them, you'll see some population declines."

Decline was the key word for North Carolina, where the wild turkey population was seriously depleted by the late 1960s. Clearly, if the commission wanted any wild turkeys, it would need to abolish the fall season and adopt a spring, bearded-turkey season, which is considered the most biologically conservative harvest strategy. Because male turkeys are polygamous, have usually bred before hunting season begins and contribute nothing to rearing poults, removing some of the gobblers will not harm the population.

The commission began experimenting with a spring gobbler season in 1969, much to the dismay of hunters. In 1970, the commission hired Wayne Bailey, a retired wild turkey biologist from West Virginia, to lead the restoration program. Bailey, who has

attained near-legendary status among hunters and biologists, was instrumental in abolishing the fall season, the last of which was in 1970–71.

"I've got old letters sent to Wayne Bailey and the commission from well-heeled, well-connected turkey hunters who are adamantly, vehemently opposed to a spring turkey season," Seamster said. "You had all these different arguments against the spring season. 'You're going to wipe out what birds that were left. They're no good to eat at that time of year, anyway. They're going to taste like wild onions.'

"They wanted to ride Wayne Bailey out of town on a rail. Do away with a fall season and establish a spring season? I mean, it was one heck of a battle to get it done. You didn't hunt turkeys in the breeding season. That was idiotic. That was the way those people felt, and some of them were very powerful politically.

Turkey restoration efforts began in 1928 and did not end until 2005. The end of fall turkey hunting was a giant step toward the species' recovery.



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They did not want to lose their fall hunting. It was a passion with them.”

ROAD TO RECOVERY

The end of the fall season was a giant step toward the recovery of North Carolina’s wild turkeys. Although the commission had been relocating turkeys since 1953, when nine birds were released on the Flattop Wildlife Management Area in Yancey County, progress had been very slow. From 1953 through 1971, only 220 birds were relocated, all but 26 of them having been trapped inside the state.

By the end of the 1970s, the state’s wild turkey population numbered about 7,500 birds. To that point, all of the turkeys had been released on public lands in the western part of the state. The commission felt an obligation to restock public lands first since wildlife in our state is a public trust—it is owned by all the people. As for why all the relocations were in the west, there a bit of a misconception came into play. Many of the wild turkeys left in the state in the middle of the 20th century were in remote areas of the mountains. The reasoning followed that old-growth habitat must be what they required.

“Back in the ’70s, Bailey felt that the future for the turkey was in those vast, remote wilderness tracts in the mountains, and that the turkey was ultimately doomed in the Piedmont and Coastal Plain,” Seamster said. “But as we got those better sites stocked, or

what were considered better sites at the time, we started trying birds in what was considered marginal habitat. The birds did extremely well. We said, ‘Hey, if they’re doing good there, then we’ve got a whole bunch more habitat that looks just like it over here.’ We gradually realized that birds were able to do well in what a few years ago wasn’t considered turkey habitat.”

With improved tools in the 1980s—rocket nets and more refined capture drugs—the commission was able to release 943 birds during that decade, including 808 trapped and relocated within the state. The total turkey population reached 28,000 birds. Releases also began to be made on private lands during this period.

When Seamster took over as turkey project leader in January 1987, the program was on the verge of jumping into high gear. The reasons for acceleration were several, but two were primary. The first was a matter of success begetting success. As the commission relocated more birds that established themselves around the state, biologists had a larger reservoir of turkeys to trap. The second reason came from outside the Wildlife Commission—the Super Fund program of the National Wild Turkey Federation. Established in 1985, the Super Fund was comprised of money from Turkey Federation chapter fund-raising banquets, plus public and private donations. North Carolina eventually

would receive more than \$300,000 from the program for restoration.

“In 1989 we got the very first birds from out of state through the Super Fund program,” Seamster said. “I remember thinking when we first started talking about getting birds through that program that if I had a million dollars to play with, we could accelerate this whole thing. It was kind of a pipe dream then. Some 10 or 12 years later we had spent over \$930,000 on out-of-state birds. It practically doubled the number of birds that we moved in the ’90s, and we were already moving more than we had previously because we had more areas to trap. Not only did we increase the number of birds that we moved, but we doubled that by getting all of those out-of-state birds.”

The turkeys came by air or by land from a number of states, South Carolina, Wisconsin, West Virginia, Pennsylvania, Iowa, Michigan and Alabama among them. Taking possession of the birds and then hauling them to release sites meant a hectic schedule and long hours on the road for Seamster and other staff. The entire restoration effort, from figuring out which areas were suitable for releases to obtaining agreements with private landowners to trapping the birds, was so massive that it eventually involved almost every biologist and technician within the Division of Wildlife Management.

Turkeys, whether from North Carolina or elsewhere, had to be released quickly. Like other wild animals, turkeys do not take well to being confined within a box. Thus the quicker the birds could be on-site and released the better. “We tried not to hold the birds over more than one night,” Seamster said. Even birds that were trapped in Wisconsin, Iowa, Michigan—these states that are a long ways from us—were usually not held more than one night.”

PRIVATE LANDS, PUBLIC GOOD

Despite some initial misgivings, restorations on private lands were proceeding extremely well and further aided in rebuilding the turkey population. One of the first such releases was at Biltmore Estate near Asheville. The commission released 15 birds there and returned to the site periodically to trap several hundred turkeys for release elsewhere. “A lot of people felt when we put birds out on private land we were really taking a chance on them being poached,” Seamster said. “What happened was just the opposite. When we took those



Mike Seamster, with wildlife officer Mitch Kuykendall (above left) and NWTFF’s James Earl Kennamer (right) has guided turkey restoration since 1987.



restoration of the wild turkey in North Carolina was complete, some 78 years and 6,031 releases after it began.

“Our goal all along was to restore turkeys to all suitable habitat in the state,” Seamster said. “What we didn’t understand was that almost all the state would be suitable. In 1976, Wayne Bailey had written that the ultimate objective of the program was to have a population of 20,000 and an annual spring harvest of 500 to 1,000 birds. I don’t think anybody really realized that we would have birds in all 100 counties, and the population is still growing. Our thoughts on what was really habitat changed over time.” Each year, we’d say, ‘OK, this is what we’ve got left to work with,’ and we’d get all of that stocked and we’d have even more areas to stock.”

What’s next for the wild turkey in North Carolina? The commission’s biologists will examine possible changes to the spring and winter seasons and manipulate the population through management. “The traditional thinking is that at some point, when all the habitat that supports birds is filled and habitat is being gobbled up by development, the turkey population is going to peak,” Seamster said. “From that point we would have a gradual decline consistent with the decline in available habitat as development takes its toll.”

Is that necessarily the scenario that will unfold? Seamster recalled that in the 1970s, biologist Henry Moseby noted that wild turkeys had proven more adaptable than any-

one working with them in the 1950s would have believed. “Here it is 2006, and we’re saying the same thing again. In 20 or 30 years, what are we going to be saying?”

“I had a guy who manages a golf course near Asheville call me and say, ‘We’ve got two flocks of turkeys out here. One’s got 40 birds in it, and the other’s got over 50. They’re up and down the fairways all the time and digging up people’s flower beds.’ Turkeys become acclimated to people in those urban situations, and they’re doing fine. Will turkeys become like white-tailed deer and Canada geese? Who would have thought we’d have geese in parks all across the state?”

The restoration of the wild turkey throughout its original range and beyond is one of the great wildlife management success stories. The population was nearly extirpated in North Carolina, but now supports an annual harvest of about 10,000 birds and both spring and winter seasons. The turnaround from a population of 2,000 birds just 36 years ago to about 150,000 today is dramatic and laudable, involving as it did habitat conservation, cooperation between public and private sectors and intense effort from wildlife managers adaptable enough to adjust their strategies as they learned more about what the wild turkey was—and what it was not. ♦

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WILD TURKEY RESTORATION BY DECADE

