

# The Wild Turkey In North Carolina

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> September 1989 Revised 1993

State of North Carolina James B. Hunt Jr., Governor

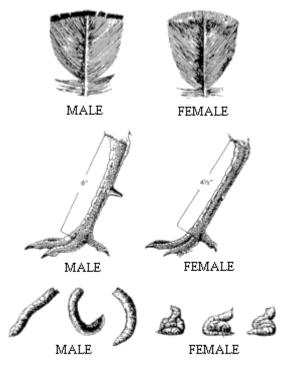
Federal Aid in Wildlife Restoration North Carolina W57. Study A3

### Classification

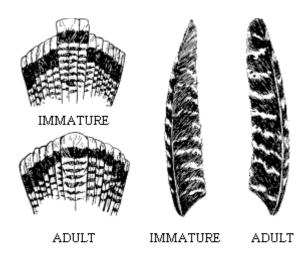
The scientific name of the wild turkey is *Meleagris gallopavo*. It belongs to the Class-Aves, Order-Galliformes, Family-Meleagrididae, Genus- Meleagris, Species-gallopavo. There are six subspecies of wild turkey found in North America. The subspecies occurring in North Carolina is the eastern wild turkey (*Meleagris gallopavo silvestris*).

# **Description**

The wild turkey is our largest game bird and is a streamlined version of its domestic counterpart. Adult hens weigh ten to twelve pounds with gobblers frequently attaining weights of over twenty pounds. Despite their size, their powerful wings can propel them at speeds of over fifty miles per hour. Unless startled, wild turkeys usually prefer to travel and escape danger by walking and running. The head of the wild turkey lacks feathers and is multicolored. The gobbler's head may appear red, blue, white, or some combination thereof, depending on his state of emotional excitement. The feathers of the wild turkey are beautifully iridescent. Gobblers differ from hens in that the breast and body feathers have black rather than brown tips, thus accounting for the overall darker appearance of the males. Adult males and a small percentage of females possess a beard which protrudes from the breast. Although hairlike in appearance, the beard is actually a modified feather. Males also possess a spur on the inside portion of each leg. In females, only a small knob or scale is present. The wild turkey's vocabulary consists of six basic calls: the cluck, the alarm putt, the yelp, the whistle or kee kee of the very young bird, the tree yelp, and the gobble of the mature male. In addition, there are sex and age variations in pitch, tone quality, volume, and inflection.



Sex characteristics: Breast feathers of male are flattened and black-tipped, whereas those of the female are rounded and buff-tipped. Foot of male is about 6" and bears a spur, while foot of female is about 4 1/2" and bears no spur. Dropping configuration can be indicators of sex.



Age characteristics: Left: spread tail shown even contour in adult birds whereas uneven contour is shown in immature birds. Riight: No. 10 primary wing feather of adult bird is broadly rounded and barred with white almost to the tip, whereas it is more pointed and looks barren near the tip on immature birds.



A newly hatched wild turkey poult takes a brief rest after the exhausting process of removing its self from the egg shell.

# **Life History**

Wild turkeys are groundnesting birds with nests often found at the bases of trees, partly concealed by overhanging cover. A clutch of twelve to fourteen eggs is laid from midApril to midMay in North Carolina. The poults hatch out twentyeight days after incubation begins. They are quickly able to follow their mother and begin foraging for themselves. As a result of inclement weather and predators, more than half the young usually die in the first few weeks after hatching. When a nest is destroyed, particularly during the early stages of incubation, the hen will frequently renest.

Part of the adaptability of wild turkeys lies in the variety of foodstuffs on which they are able to subsist. When available, acorns are a favorite; but a wide array of mast, buds, fruits, grasses, seeds, insects, green vegetation, and small animals are consumed regularly.

Ranges for wild turkeys vary widely with season, food supplies, and habitat type and quality. Birds may roam over only a few hundred acres during some seasons and in some habitat types, while annual ranges in different habitat types may cover several thousand acres. Movements of up to fifty miles have been recorded for banded birds but this is the exception rather than the rule.

The maximum recorded lifespan for a turkey in captivity is twelve years and four months. For wild birds, the maximum is less than ten years. The average life expectancy, however, is less than two years; and a four or fiveyearold bird can compliment itself on its survival capabilities.

Bobcats, foxes, raccoons, skunks, owls, hawks, and snakes are all natural turkey predators; but do not pose a serious threat to an established turkey population. Wild or freeranging dogs, on the other hand, are unnatural predators and can pose problems for wild turkeys, especially in newly stocked areas.

# **History**

Turkeys have been of great importance to man in America since before the dawn of history. Fossil turkey bones have been found in numerous deposits dating back to the Upper Pliocene geological period.

Early eastern colonists were surprised at the great numbers of wild turkeys they encountered. The high esteem in which this noble bird was held and its importance on the banquet tables of those days made it the symbol of our national holiday, Thanksgiving. Benjamin Franklin even campaigned for the wild turkey to be the national emblem of this country instead of the bald eagle. No other bird can compare with the wild turkey in importance to the early settlers.



The wild turkey provided excellent food for the table for many early hunters.

Following settlement of this country, the wild turkey disappeared from

large sections of its original range due to unrestricted hunting coupled with elimination of much of its original forest habitat. Diseases introduced from domestic poultry may have also aided in the rapid reduction of the original turkey population. By the late 1800s and early 1900s, the wild turkey had disappeared from many sections of North Carolina and this decline continued through the 1960s despite efforts to reverse this trend. By 1970, the estimated population of wild turkeys in North Carolina was only 2,000 birds.

Although an unpopular move at the time, a moratorium was placed on fall turkey hunting in 1972 and a spring gobbleronly season was established. This move coupled with intensified restoration efforts marks the beginning of the comeback for the wild turkey in North Carolina.

#### Restoration

Early efforts at restoring wild turkey populations by releasing penreared or game farm birds failed miserably. These birds were simply not capable of withstanding the rigors of life in the wild and most quickly died. These efforts may have even been detrimental to the remaining wild birds by introducing diseases to which the wild birds had little or no resistance. For this reason, it is now illegal to release penreared wild turkeys or to allow them to roam freely.

The livetrapping and relocation of wild birds is the only way to insure successful restoration of the wild turkey. Crude traps made of boards and chicken wire were used originally but trapping efforts were not successful at moving large numbers of birds until the advent of the cannon net. Even more advanced rocket nets and sedative drugs are used today to capture the birds.

From 1970 to 1988, over 1,100 birds have been livetrapped and relocated to some sixty different restoration areas in North Carolina. Strict guidelines are followed in evaluating and selecting potential wild turkey restoration areas to insure the success of these projects. Generally, fifteen to twenty birds are released per site at the rate of two to three hens for each gobbler.

The ultimate goal of the wild turkey restoration program is to restore the wild turkey to all suitable habitat. With over two million acres of potential, unoccupied range remaining in North Carolina, restoration will clearly remain the primary objective of the wild turkey project for many more years.

#### **Present Status**

From about 2,000 birds in 1970, the wild turkey population in North Carolina has grown to over 17,000 birds by 1988. The occupied range was expanded from some 5,000 square miles to over 11,000 square miles during this same period. Presently, 80 of the state's 100 counties have a population of wild turkeys. The primary areas of occupation are the Camp Lejeune Marine Corps base and the Roanoke River basin in the coastal region, about ten counties in the piedmont region, and both private and national forest lands in the mountain region.

Successful restoration projects have resulted in increased population levels and harvests in all three geographical regions of the state. In the short term, this trend is expected to continue. However, in the long term, each region faces very different and difficult problems. Largescale draining and clearing operations continue to eliminate much of the habitat in the coastal region. While the piedmont region offers the best quality habitat, this region has also shown the most rapid urbanization and industrialization. Habitat loss will also be the main problem facing the wild turkey in the piedmont region. The mountain region, with vast acreages of national forest lands and private lands offering good habitat, provides the greatest opportunity for the wild turkey in North Carolina in the future. The greatest obstacle in the mountains is the lack of adequate brood range.

# **Hunting**

The most popular method of hunting the wild turkey is by calling. Hunters listen for the bird to gobble at dawn, then quickly move into position and try to call the bird to them. It is helpful to get within 100 to 200 yards of the bird and be above or at least on the same level with him. A tightly choked shotgun with number 4, 5 or 6 shot is the favorite weapon combination and the hunter should aim for the vital head and neck of the bird. Rifles and pistols are not legal for hunting wild turkeys in North Carolina. Total camouflage is a must and the hunter should sit with his back to a tree or lie in a depression and remain perfectly still. A wild turkey's eyesight and hearing are excellent and any movement or unnatural sound will quickly spook the bird. A wide assortment of calls are available and the serious hunter becomes proficient with their use. In hunting the wild turkey, patience is a virtue that is rewarded by the sound of the thundering gobble of a mature bird and the thrilling sight of this magnificent game bird in full strut.



Total camouflage is essential to the turkey hunter. Note the camouflage gun, gloves, and headnet.

# Management

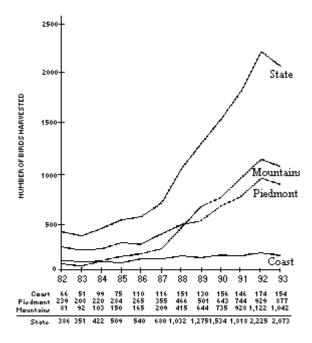
Once the wild turkey population is established in an area, the goal of management is to provide turkey hunting on a sustained yield basis by regulating seasons and bag limits, manipulating habitat, monitoring population trends, and providing protection for the bird. 1) Hunting Season and Bag *Limits* 

- (a) Spring Season-The hunting season for wild turkeys in North Carolina usually opens in April and runs for four consecutive weeks. Only bearded turkeys are legal with a daily bag limit of one bird and a season limit of two birds. The spring season is established at such a time when the peak of mating activity has elapsed. This type of season is the safest form of hunting in terms of the turkey population. At this time, incubation has begun and the chance of a hunter killing a hen accidentally or intentionally is at its lowest. After mating season, the gobblers are not considered to be a vital entity in the population and can be harvested without seriously affecting the productivity of the population.
- (b) Fall Season-The establishment of a traditional fall turkey season, when and where population levels warrant, is one of the goals of the wild turkey project in North Carolina. A fall season would allow hunters to harvest surplus birds from areas with high population densities. Since young birds comprise a large portion of the population in the fall and their sex is difficult to distinguish at this time of year, fall seasons should be eithersex. In formulating recommendations for fall turkey seasons, biologists must not only consider population levels, but also the size of the area in question and the timing in relation to other seasons. Opening relatively small areas to fall eithersex turkey hunting would concentrate hunters and result in higher harvests. If fall turkey seasons were concurrent with other hunting seasons, incidental kills by hunters primarily after other game must be considered.



Biologist monitor movements of radio-equipped wild turkey to learn more about this magnificent game bird.

#### NORTH CAROLINA REPORTED VILD TURKEY HARVEST SUMMARY 1982 - 1993



#### 2) Habitat Manipulation

Habitat quality is the key to the abundance of any game species and the wild turkey is no exception. It can be improved by properly applied timber management practices such as rotation length for cutting; the size, shape, and distribution of cuts; prescribed burning; thinning; and preservation of adequate mastproducing trees. Direct improvements are made by establishing and maintaining openings to provide adequate brood range. These openings can be in the form of fields, logging decks, or seldomused roads that are gated and seeded. Commission biologists cooperate with the U.S. Forest Service and other landowners in an effort to implement these practices.

#### 3) Monitor Population Trends

Proper management requires that we understand wild turkey population dynamics and trends. Mandatory tagging and checking of wild turkey kills began in 1977 and provides the annual harvest information by county. Spring gobble counts and summer brood surveys provide information on range expansion and reproduction. Observations are recorded and tabulated for both restoration areas and statewide. Every five years, wild turkey range maps are prepared. These include occupied range, potential unoccupied range, and an estimate of the population by county.

#### 4) Protection

Protection of the wild turkey from illegal hunting, especially in newly established populations, is critical. Both the North Carolina Chapter of the National Wild Turkey Federation and the North Carolina Bowhunters Association offer rewards to anyone reporting an illegal turkey kill. The Wild Turkey Federation has also played an important role in educating the public to the needs of the wild turkey and donating time, money, manpower, and equipment for habitat improvement, research, and restoration projects. Anyone wishing to report a violation can call the North Carolina Wildlife Resources Commission's tollfree hotline number-18006627137.



Seeded fields and roads provide food for wild turkeys in the form of browse, seeds, and insects.

## **List Of References**

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