

GIANT CANADA GOOSE RESTORATION AND DISTRIBUTION IN TENNESSEE

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During the 1800's, Canada geese were reported to nest in Tennessee at Reelfoot Lake (Bent 1925). Hanson (1965) wrote that Canada geese at Reelfoot were very plentiful in the fall, and large numbers remained the entire year. The Reelfoot resident was considerably heavier than its migratory relative (Hanson 1965) and apparently nested on cypress snags (Hankla and Rudolph 1967). Nests were still being found there by the early 1930's (Gainer 1933). Today, Canada geese still nest at Reelfoot, but it is not known if these birds are descendants of the ones reported earlier. Except for this Reelfoot population, Canada geese were not known to nest in Tennessee (Hanson 1965).

In 1951, a Middle Tennessee resident, Wick Comer purchased 12 pinioned Canada geese from a game farm operator in North Carolina. These geese were released on his 1,200-acre estate four miles east of Hendersonville. The flock survived, multiplied, and eventually spread to nearby Old Hickory Reservoir (Gore and Barstow 1969, Coe and Pollock 1975). Gore and Barstow (1969) identified these birds as giant Canada geese using the criteria described by Hanson (1965).

Aware of the potential of this flock on Old Hickory, the Tennessee Wildlife Resources Agency (TWRA) in 1966 initiated the resident Canada goose project. The goal was to have enough geese for recreational hunting (Gore and Barstow 1969) which was in response to the low numbers of over-wintering geese attributed to "short-stopping" in northern states (Crider 1967, Hanson 1965, Hankla and Rudolph 1967, Hubbard 1976, Yates and Whitehead 1979).

In 1967, the TWRA began constructing elevated nesting structures on the reservoir and closed goose hunting in the five surrounding counties. In 1968, approximately 60 pinioned geese were obtained from the state of Missouri. Half of these birds were used in a propagation facility at the Old Hickory Nursery. The other half were used to supplement the flock on Mr. Comer's property. Progeny from both sources colonized the reservoir, and the flock continued to expand each year. The propagation facility at Old Hickory was dismantled in 1972, but the naturalized flock was large enough that artificial supplementation was unnecessary (C. J. Whitehead, TWRA, Nashville, Tenn., pers. commun.). By 1975, over 2,500 geese were inventoried during the summer (Coe and Pollock 1975). From 1967 through 1977, the TWRA banded 4,568 geese there (Cromer 1978).

The U.S. Fish and Wildlife Service started a resident goose flock on Cross Creeks National Wildlife Refuge (NWR) in 1964, two years after the refuge was established. The objective was to attract geese that were displaced from the Kentucky Woodlands NWR, Kentucky, where Barkley Reservoir had inundated goose habitat. The initial stocking of 15 geese came from Horseshoe Lake Refuge, Illinois, and Swan Lake NWR, Missouri. In 1967, 11 giant Canadas were received from Minnesota, and in 1970, six more were transferred from Wapanocca NWR, Arkansas. The first successful broods were raised in 1969, and by 1973 the post-nesting population had reached 73 birds (Oberheu 1973). A survey in 1987 revealed 239 adults and 39 goslings (Robinson 1990). These geese moved outside of Cross Creeks NWR to areas around Tennessee NWR and the Tennessee Valley Authority's (TVA) Land Between the Lakes. The estimated summer population in the area is estimated to exceed 1,600 birds (TWRA 1995).

In 1970, the TWRA and TVA began a cooperative project to artificially propagate giant Canada geese at the Buffalo Springs Research Center. The brood stock was the original

pinioned birds from the dismantled Old Hickory Nursery and an unknown number donated from the Michigan and Ohio departments of natural resources. Over one thousand geese were artificially propagated and released from this facility (Yates and Whitehead 1978). Releases began in 1972 on Melton Hill Reservoir and Cove Lake State Park and continued there through 1975 (Hubbard 1976). Goslings from Buffalo Springs were used to successfully establish 26 different flocks, 19 in Tennessee, four in Georgia, and one each in Kentucky, Alabama, and Virginia (Yates and Whitehead 1978). A few were transported to Hatchie NWR and Millington Naval Air Station in West Tennessee. When the goslings reached breeding age, the population grew at a rate of 24 percent per year, doubling every three years (Hubbard 1976). During the period 1972-74 Buffalo Springs served as the primary source of birds for Tennessee's restoration.

In the mid-1970's the TWRA began capturing and moving goslings and some adults from Old Hickory to Cordell Hull, Percy Priest, Tims Ford, and Woods reservoirs in Middle Tennessee. Geese were also stocked on private ponds of one acre or greater with the permission of the landowner (Coe and Pollock 1975, West 1976). Similar roundups were held at Melton Hill Reservoir, and geese were translocated to unoccupied habitats. To hasten the expansion, additional geese were imported from Michigan, Ohio, and Ontario and were released on Watts Bar and Melton Hill reservoirs. Counties where the restoration was occurring were closed to goose hunting. By 1989 every reservoir and major river system in the state had a least one stocking of Canada geese. Numerous farm ponds were also stocked with goslings and wing-clipped adults during this period. Exact numbers are not available because most of the records were destroyed in a fire at the Buffalo Springs Game Farm. Resident Canada geese can be found in all 95 counties of the state with the highest concentrations being along the U.S. Army Corps of Engineers and TVA reservoirs in Middle and East Tennessee.

The giant Canada goose quickly adapted to living in close proximity to humans and became concentrated in urban areas such as city parks, golf courses, shopping centers, and residential areas. The problems which occurred primarily in Middle and East Tennessee were grazing damage and fecal contamination on residential lawns, golf courses, beaches and in swimming pools, city parks, cemeteries, shopping centers, and industrial areas. Animal Damage Control (USDA-APHIS) manages the Canada goose depredation program in Tennessee.

Since the early 1980's, special resident Canada goose seasons have been held in Middle and East Tennessee to provide recreational hunting and to control the growth of established populations. Areas hunted were regulated by a harvest check-in or a hunter quota system, which used kill tags that were required to be attached to the dead birds immediately upon retrieving. Beginning in 1986, some areas in south central and southeast Tennessee were opened to limited hunting with no harvest controls except limited days. The TWRA expanded the harvest check-in system statewide in 1993 to monitor the harvest of all Canada geese during the regular season. Estimated harvests have ranged from 220 in 1980/81 at Old Hickory to nearly 3,750 for the 1993 season which included 70 of the state's 95 counties. Presently, these counties have seasons directed exclusively towards giant Canada geese including September seasons. Weighted band recoveries show that 57% of Tennessee's total Canada goose harvest is from giants of which 44% are Tennessee birds. The TWRA recognizes the giant Canada goose as a valuable wildlife resource for hunting and viewing and has set goals to maintain viable goose populations for the future.