

Status and Management of Atlantic Population Canada Geese

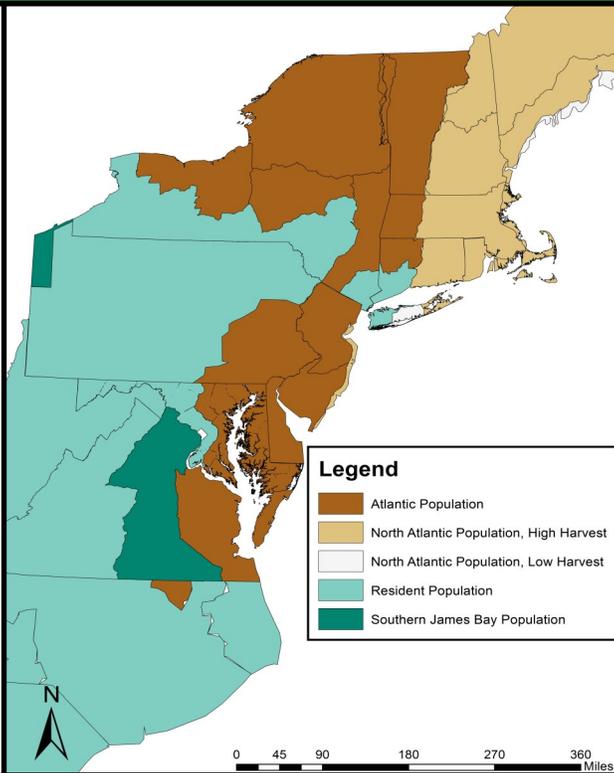
Background:

Across North America, Canada geese have been divided into 12 populations for management purposes. These population designations are based on their breeding, migrating, and wintering ranges. In New York, hunters harvest Atlantic Population (AP), North Atlantic Population (NAP), and Resident Population (RP) Canada geese. AP Canada geese nest throughout much of Quebec, especially along Ungava Bay, the eastern shore of Hudson Bay, and the interior Ungava Peninsula. This population winters from New England to South Carolina, but the largest concentrations occur on the Delmarva Peninsula (Delaware and the eastern shores of Maryland & Virginia). Biologists in the Atlantic Flyway divide harvest zones based on the population that is most frequently harvested in an area (see map on the right). Although the zone boundaries may appear to be arbitrary, they were carefully developed using information from hunter band recoveries, neck collar studies, and satellite telemetry.

Located in the heart of the flyway and spanning from coastal Long Island to the Great Lakes, New York serves as a major migration corridor for both AP and NAP - the two most important migratory populations of Canada geese in the flyway. Throughout much of upstate New York, AP geese are a significant proportion of the harvest. The map (right) shows the Canada goose hunting zones in the northeast Atlantic Flyway and identifies which Canada

goose population is considered when biologists establish annual hunting regulations. Areas managed based on AP Canada goose populations typically have more restrictive seasons compared to the light green areas that are managed based on the population of RP Canada geese. Despite continuous efforts by DEC to inform the public about the Canada goose situation in New York, confusion is common. With a restrictive hunting season for migrant birds and liberal seasons for resident birds occurring in close proximity to one another for more than a decade now, hunters often ask why the seasons for geese vary across the state. Although all 3 of the populations of Canada geese in New York are the same species and they're nearly indistinguishable to the naked eye, the impacts of harvest are far greater on migratory Canada goose populations. The reasons why migratory goose populations are more affected by hunter harvest are many: they take longer to mature and reproduce, lay fewer eggs, have lower survival, and annual productivity can be

greatly influenced by weather on the breeding grounds. For all of these reasons, hunting regulations must be more restrictive to ensure the population is sustainable and migratory Canada geese are around for current and future generations to enjoy.



Map of Canada Goose Population Harvest Areas (dark brown areas are Atlantic Population hunting zones)

Atlantic Population Canada Goose Breeding Pairs

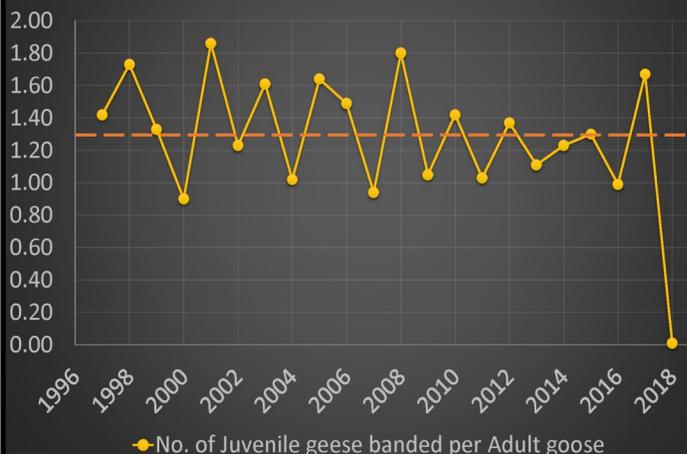


Population Trends and Status:

AP Canada geese have been monitored since 1993 by annual spring surveys on the breeding grounds. In addition to an aerial survey of breeding pairs to estimate the population size, ground crews band adult and juvenile geese on the breeding grounds to monitor annual productivity (the number of young produced). Following a number of years with relatively stable breeding pair counts, the number of pairs fell from approximately 192,000 in 2016 to 112,000 in just two years (nearly a 42% decline; see figure on the left).

In addition to a steep decline in the 2018 breeding population, a very cold, late spring left much of the Atlantic Population breeding grounds covered with greater than 12” snow into June. The result of such a late spring was historically poor productivity (see figure on the right). Normally, one poor year of productivity, even one as bad as 2018, would not have a significant impact on the overall population. However, productivity for AP geese has been poor in seven of the past ten breeding seasons, therefore the snow of 2018 may have a significant impact on the future AP breeding population.

Age Ratio of Atlantic Population Canada Geese



How Canada Goose Season Frameworks are Set:

State and Federal biologists developed season frameworks considering the following objectives: (a) to maintain a sustainable population, (b) to conserve important habitat (c) to provide equitable harvest opportunity among users, (d) to provide subsistence harvest of geese by Indigenous peoples, (e) provides relief from excessive crop depredation to the agricultural community, and (f) to prevent the population from becoming too large to control via sport harvest. To accomplish these objectives, managers have developed a number of population and harvest thresholds that would result in a liberal, moderate, restrictive, or consideration for a closed hunting season. In New York the harvest strategy calls for the following:

When the 3-year average breeding pair index is:	Harvest Package
<60,000	Consideration of a Closed Season
>60,000	Restrictive, 30-day season with a 2-bird bag limit
>150,000	Moderate, 50-day season with a 3-bird bag limit
>225,000	Liberal, 60-day season with a 3-bird bag limit

Changes to the 2019-2020 Hunting Regulations:

Hunting season length and bag limits for AP geese are set based on a hunt plan developed and agreed to by state and USFWS biologists throughout the Atlantic Flyway. Although the population estimate for 2018 slightly exceeded the threshold for a moderate season (greater than 150,000 breeding pairs), due to the drastic and precipitous decline in breeding population estimates and many years of poor productivity (nearly zero young in 2018), the USFWS in collaboration with Atlantic Flyway biologists, have proactively reduced the Canada goose hunting season length and bag limits from the moderate 50 day season and 3-bird bag limit to a restrictive 30 day season with a 2-bird bag limit in New York AP hunting areas. Wintering area states that harvest significantly more AP geese will have a 1-bird bag limit. The Atlantic Flyway Council and USFWS chose to be conservative in hopes that more restrictive or closed seasons can be avoided in the future.

