## **Atlantic Population Canada Goose Harvest Management**

## **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

Legend

Atlantic Population

North Atlantic Population, Low Harvest

North Atlantic Population

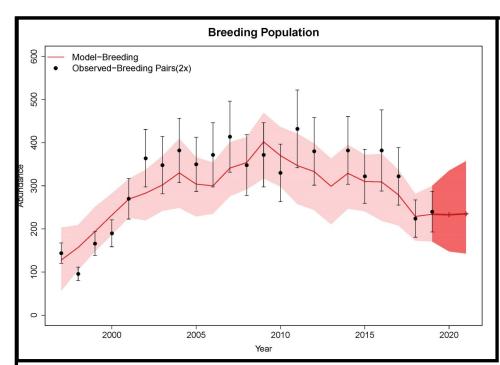
Southern James Bay Population

Southern James Bay Population

York, AP geese are a significant proportion of the harvest. The map (above) 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. With a restrictive hunting seasons for migrant birds and liberal seasons for resident birds occurring in close proximity to one another for more than a decade now, hunters of-



ten 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, they are nearly impossible to distinguish visually and 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 simple: 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, regulations must be more restrictive to ensure harvest opportunities is sustainable and migratory Canada geese are around for current and future generations to enjoy.



## Population Status as of 2021:

Nearly every spring since 1996, biologists have flown survey transects in the AP goose breeding range to estimate the breeding population. The population of AP geese have fluctuated from as few as 70,000 breeding birds in the early to mid-1990s to over 400,000 during the 2000s. As a result of the low population in the 1990s, the hunting season was closed for a number of years while the population recovered. By 2002, the population had rebounded to ~360,000 breeding birds and remained near that level until 2016. From 2010-2020 AP breeding birds have experienced a number of below average productivity years compounded by increased harvest. A combination of poor productivity and in-

creasing harvest caused a precipitous decline in the population from 2016 (384,000 birds) to 2018 (224,000 birds). If weather conditions would have resulted in average to above average productivity, we may not have experienced such a decline, however poor breeding conditions have persisted more often than not.

Due to Covid-19 restrictions, biologists were not able to conduct surveys in 2020 and most likely 2021. However, due to the tremendous amount of data biologists have collected over the past 30 years we have a strong understanding of the relationships between harvest, productivity, and weather. This data can be used to estimate the population status for a few years, even in the absence of new data (table top left). The current population estimate for 2021 is approximately 235,000 birds. We anticipate surveys and banding efforts in northern Canada will resume in 2022 at the latest.

## **Hunting Season Length and Bag Limit**

In an effort to avoid closed seasons, the Atlantic Flyway Council and the USFWS recommended dropping down to a restrictive regulations framework of 30 day seasons with a two bird bag limit in northern states and a 30 day season and one bird bag limit in southern terminus states in 2019. Historically, to maintain equal opportunity to harvest AP geese, northern states were afforded slightly more liberal season structures than southern AP states like Maryland, Virginia and Delaware. However, during the first year of the restrictive seasons (2019-2020), the distribution of harvest shifted from predominantly occurring in the Delmarva, to more birds being harvested in northern states for the first time and the harvest rate (~5% in 2019) exceeded what is predicted to be necessary for the population to rebound (~3% harvest rate).

Due to excessive harvest rate and shift in harvest distribution, the Atlantic Flyway Council recommended that when seasons are restrictive, all states should have the same regulations to allow populations to rebound as quickly as possible. Therefore, the regular Canada goose season will be reduced to a 30-day season with a daily bag limit of one in the AP zones (West Central, East Central, Northeast, Lake Champlain, and Hudson Valley). Harvest restrictions have also been made in Quebec and Ontario. The reduction in harvest will hopefully shorten the amount of time we have restrictive seasons. When the population rebounds, we anticipate season lengths and bag limits will be liberalized.

