



Tundra Swan Hunting Season

Joint Chairmen's Report

Page 82

Submitted by:

Maryland Department of Natural Resources
Wildlife and Heritage Service
Annapolis, Maryland 21401

The facilities and services of the Maryland Department of Natural Resources are available to all without regard to race, color, religion, sex, sexual orientation, age, national origin, or physical or mental disability. This document is available in alternative format upon request.

Summary of Current Tundra Swan (*Cygnus Columbianus*) Information Pertinent to Maryland



Tundra Swan
Photo by John and Karen Hollingsworth, USFWS

Tundra Swan Annual Cycle

The Eastern Population (EP) of tundra swans nests throughout northern Canada and as far west as Alaska. In the fall, they typically leave nesting areas in early October and travel generally southeast across the boreal forest, northern plains, upper Mississippi Valley, the great lakes, arriving in the Atlantic flyway in December (Figure 1). From December through February, swans feed on submerged aquatic vegetation (SAV), invertebrates (e.g., clams), and agricultural crops such as winter wheat and waste grain. By late February, swans are staging throughout the mid-Atlantic in preparation for spring migration, and most swans depart Maryland by the second week of March. The spring migration route is generally a reverse of the fall, however swans take more time to travel that distance in the spring. The additional time allows swans to attain the body weight necessary for breeding and egg production.

State and Flyway Population Trends

Tundra swans in Maryland and throughout the Atlantic Flyway (AF) are monitored with the Mid-winter Waterfowl Survey conducted each year in early January. Mid-winter counts of tundra swans in the AF increased steadily from the 1960s to the early 2000's, stabilized in the 90,000-110,000 range and recently experienced some declines (latest 3 year average is around 75,000) (Figure 2). In the early years of the Mid-winter Survey, Maryland supported about two thirds of the AF total. Since that time, the number wintering in Maryland and the proportion of

the AF total they represent has declined (Figure 3) (latest 3 year average Mid-Winter Survey count is around 7,000).

Most of the EP tundra swans winter from Pennsylvania to South Carolina, with approximately 98% wintering in four states: North Carolina (80%), Maryland (8%), Virginia (6%), and Delaware (4%). Recent satellite-telemetry research has shown that after arrival on the wintering grounds, swans will readily move throughout their winter range. Winter range movements tend to be toward the south early after arrival and northward prior to spring migration, but short trips between the wintering states are not uncommon. These movements suggest that the EP should be considered one population as opposed to multiple distinct sub-populations. Management philosophies should continue to encourage a wide range approach in terms of habitat conservation and harvest allotment as the means to best manage this resource.

Crop Damage and Other Complaints

In some areas of the state, large numbers of tundra swans feed in harvested grain fields. However, data collected by the United States Department of Agriculture - Animal and Plant Health Inspection Service - Wildlife Services, include few complaints related to tundra swan crop damage in Maryland. A report provided by APHIS showed only three crop damage complaints in the last 10 years (Table 1). There are a number of aviation-related complaints reported each year (62 complaints over the same 10-year period) primarily regarding swans occupying areas near runways and taxiways. However, the paucity of agricultural complaints suggests that they are not causing major economic loss in commodity crops. No collisions between swans and aircraft have been reported.

Swan Hunting Guidelines

Maryland is considered a wintering state in the “[Management Plan for the Eastern Population of Tundra Swans](#),” signed by the flyway councils in 2007. As such, we could be eligible for a percentage of the total number of permits allocated for the eastern population (5,600). Maryland would receive approximately 478 permits, which would constitute roughly 10% of our recent wintering population. The management plan harvest strategy assumes a 50% success rate for hunters that draw permits, however the actual success rate would likely be closer to 35% (167 swans). This would translate to 2-3% of Maryland’s wintering swan population being harvested.

The tundra swan harvest strategy section of the management plan referenced above details the procedure for “new hunt states” to request a tundra swan season. Requests to Flyway Tech Section and Council need to be made at the winter Atlantic Flyway Tech Section (AFTS) meeting the year prior to initiating a new season to ensure the proper state allocation requests can be calculated by the fall Atlantic Flyway Council meeting. The winter AFTS meeting is scheduled for the week of February 27, 2023 with the fall AFC meeting scheduled for late August/early September 2023. For Maryland, that would mean the 2024-25 season would be the earliest that a hunt could be held.

The new hunting season permit request cannot exceed an estimated 5% harvest rate of the most recent 3-year average of peak seasonal numbers in the new hunt location. New seasons will be

considered experimental for 3 years and harvest will be monitored by a special survey, which will be summarized in an annual report to be provided to the United States Fish and Wildlife Service (USFWS) and Atlantic Flyway Council. Each state forms a separate Memorandum of Agreement with the USFWS that establishes hunting season evaluation procedures (permits, tags etc.).

Table 1. USDA, APHIS Wildlife Services Tundra Swan Damage Report for Maryland, 08/1/2012 – 8/19/2022.

Resource	Damage	Incidents Reported	Value
Aircraft	Damage threat - none reported	12	none reported
Agriculture	Damage threat - none reported	3	none reported
Human Health and Safety (aviation)	Damage threat - none reported	62	none reported

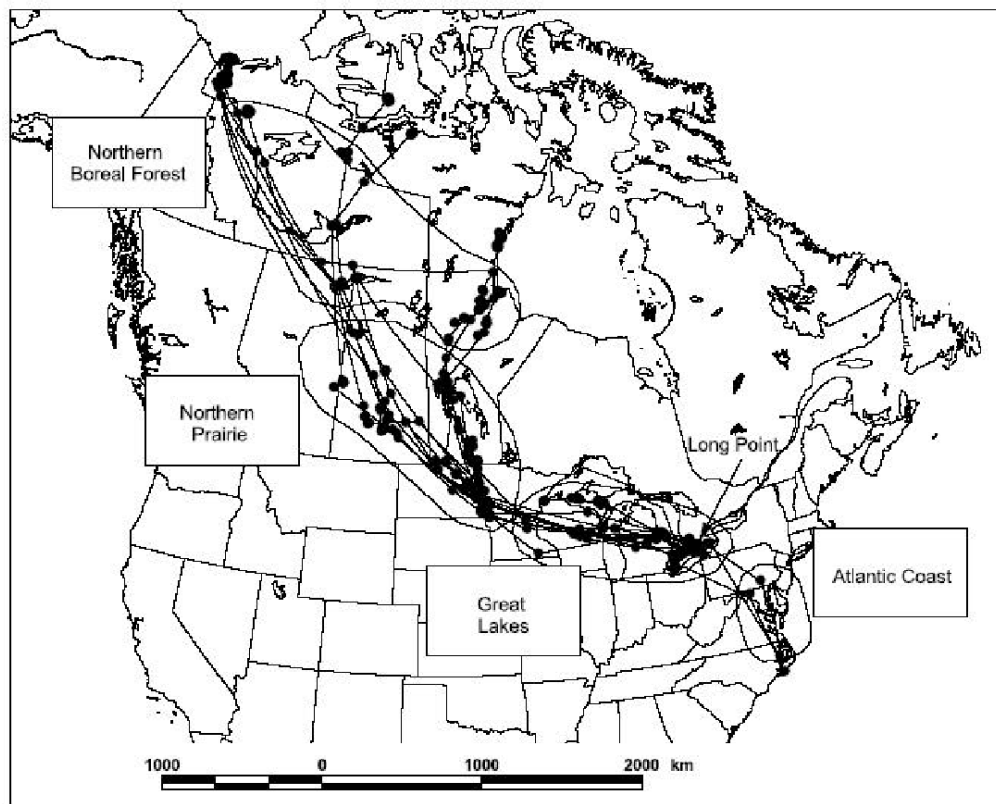


Figure 1. Movement patterns and key migratory stopovers of satellite marked Eastern Population tundra swans (Petrie and Wilcox 2003).

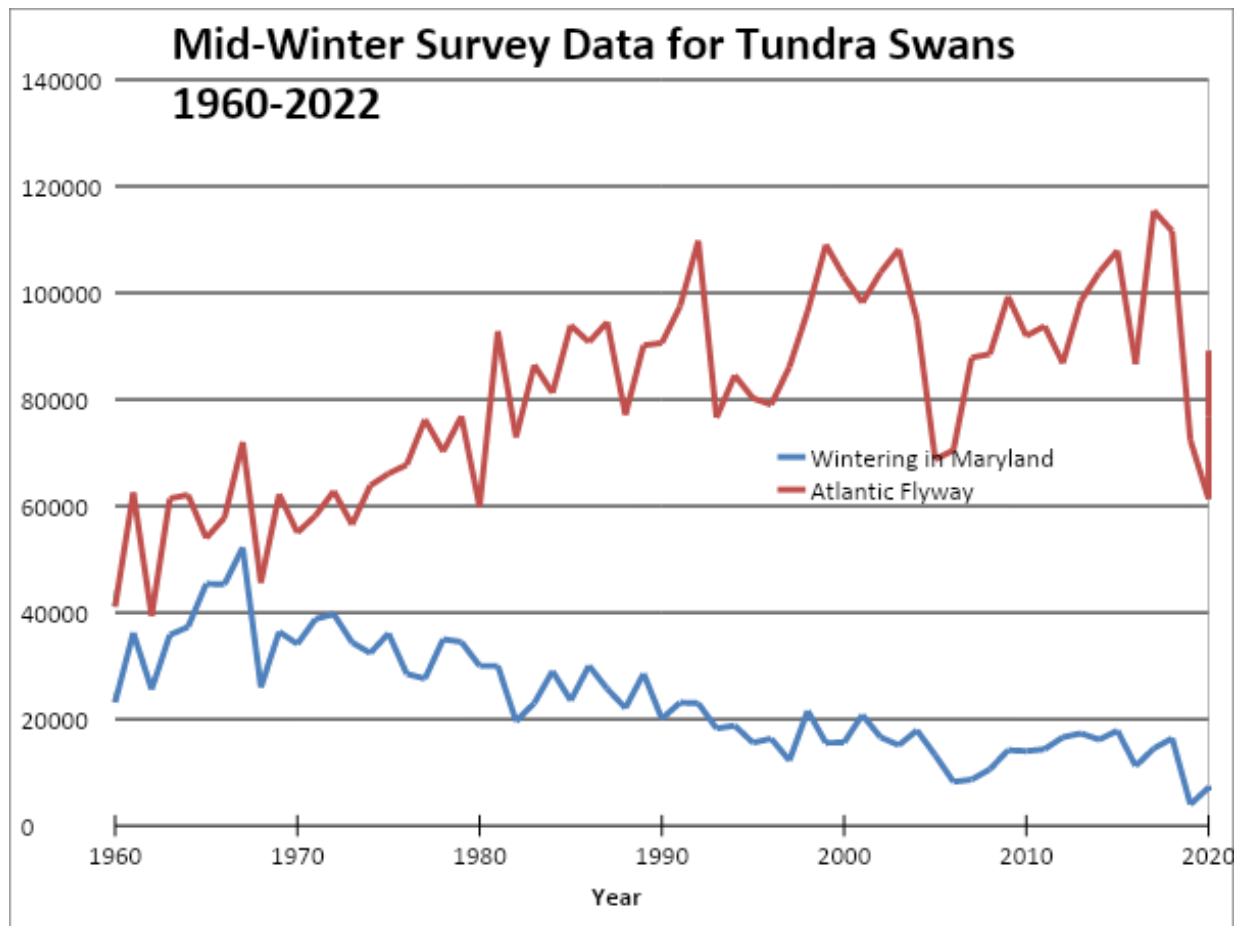


Figure 2. Mid-winter Survey results for Maryland and Atlantic Flyway Tundra Swans (Atlantic Flyway Databook and committee reports)

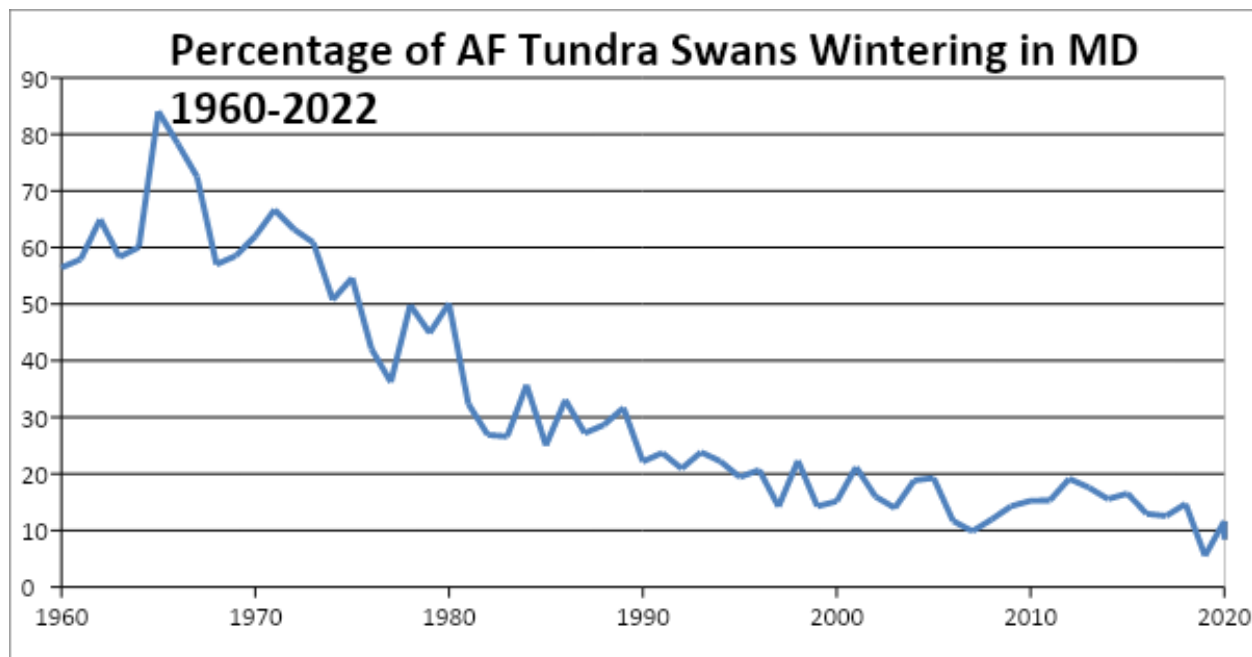


Figure 3. Percentage of Tundra Swans Wintering in Maryland (Atlantic Flyway Databook and AF Committee Reports)

Process and Timeline for Requesting a Tundra Swan Hunting Season

- 1) Requests to add a tundra swan hunting season must be submitted to the Atlantic Flyway Technical Sections and Council during the winter meeting to initiate the review process. The next winter meeting is scheduled for February 26-March 2, 2023. Requests filed by states at this time allows the AF Technical Section and Council to calculate the number of permits allocated to each state using the most recent 3-year average of the Mid-Winter Survey tundra swan estimate. Permit allocations between states are compiled using the relative percentage of the tundra swan population each state winters. Using current Mid-Winter Survey tundra swan data we estimate Maryland would receive 478 permits with an estimated harvest of around 160-180 birds.
- 2) The USFWS Service Regulation Committee (SRC) reviews information discussed at the winter meeting in April 2023 however this is a non-decisional meeting.
- 3) The Atlantic Flyway Technical Section and Council would consider and vote on the request to have a Tundra Swan hunting season at the summer/fall meeting, which will be held in August or September 2023. The request would include hunt, harvest monitoring, and data collection plans at this point.
- 4) The U.S. Fish and Wildlife Service Regulation Committee would also review and vote on this request at their 2023 October decisional meeting. If approved, the measure would be published in the 2024-25 proposed Federal Frameworks, which outline all migratory game bird seasons for state hunting season selections.

- 5) Maryland also has a regulatory process related to hunting seasons. Maryland would need to propose a tundra hunting season during our annual public review process for all migratory game bird seasons. The public review process typically begins with the presentation of all proposed migratory game bird seasons to the Migratory Game Bird Advisory Committee and Wildlife Advisory Commission in January of each year and concludes with the end of the public comment period in late February of each year. Comments garnered during this process would determine if and when a tundra swan hunting season would be held and the mechanisms that would be used to select and disperse the permits.
- 6) After completion of the public review process, the Maryland Department of Natural Resources (Department) would present the final season selections to the Wildlife Advisory Commission for a vote then forward Maryland's final migratory game bird season selections (including the tundra swan season) to the USFWS in April 2024. These season selections would be published by the USFWS as "final" in the federal register.

NOTE: Holding a tundra swan season requires hunt states to report annual harvest data to the USFWS. These reporting requirements and the limited number of permits would necessitate the formation of a formal process used to issue individual permits to hunters wishing to acquire a tundra swan hunting permit and to collect their hunting data.

Considerations For Tundra Swan Hunting In Maryland

While the process by which the Department would work with the Atlantic Flyway Council and the U.S. Fish and Wildlife Service is not a barrier to obtaining authorization to hold a tundra swan season in Maryland, other factors warrant consideration prior to moving forward. Those considerations include:

- Population concerns - Although the number of tundra swans in the Atlantic Flyway has grown substantially since the 1960's, the number wintering in Maryland has declined (Figure 1). The percentage of tundra swans that choose to winter in Maryland has declined relative to other Atlantic Flyway states (mainly Virginia and North Carolina) from around 65% of the flyway total in the 1960's to about 8% now (Figure 2).
- Necessity - In some areas of the state, large numbers of tundra swans feed in harvested grain fields. However, data collected by USDA, APHIS Wildlife Services, include few complaints related to tundra swan crop damage in Maryland. A report provided by APHIS showed three crop damage complaints in the last 10 years. There are a number of aviation-related complaints reported each year (66 over the same 10-year period). However, the paucity of agricultural complaints suggests that they are not causing major economic loss in commodity crops.
- Public perception - Cultural views of tundra swans may pose a significant challenge to garnering large-scale public support for opening a hunting season on tundra swans in Maryland.
- Future populations - While the overall tundra swan population has been healthy and stable (80,000) their reproductive effort has been hampered in recent years by late spring thaws on northern Canadian and Alaskan nesting grounds, similar to reduced

reproductive effort experienced by other arctic and sub-arctic nesting waterfowl during this same time (Figure 3.).

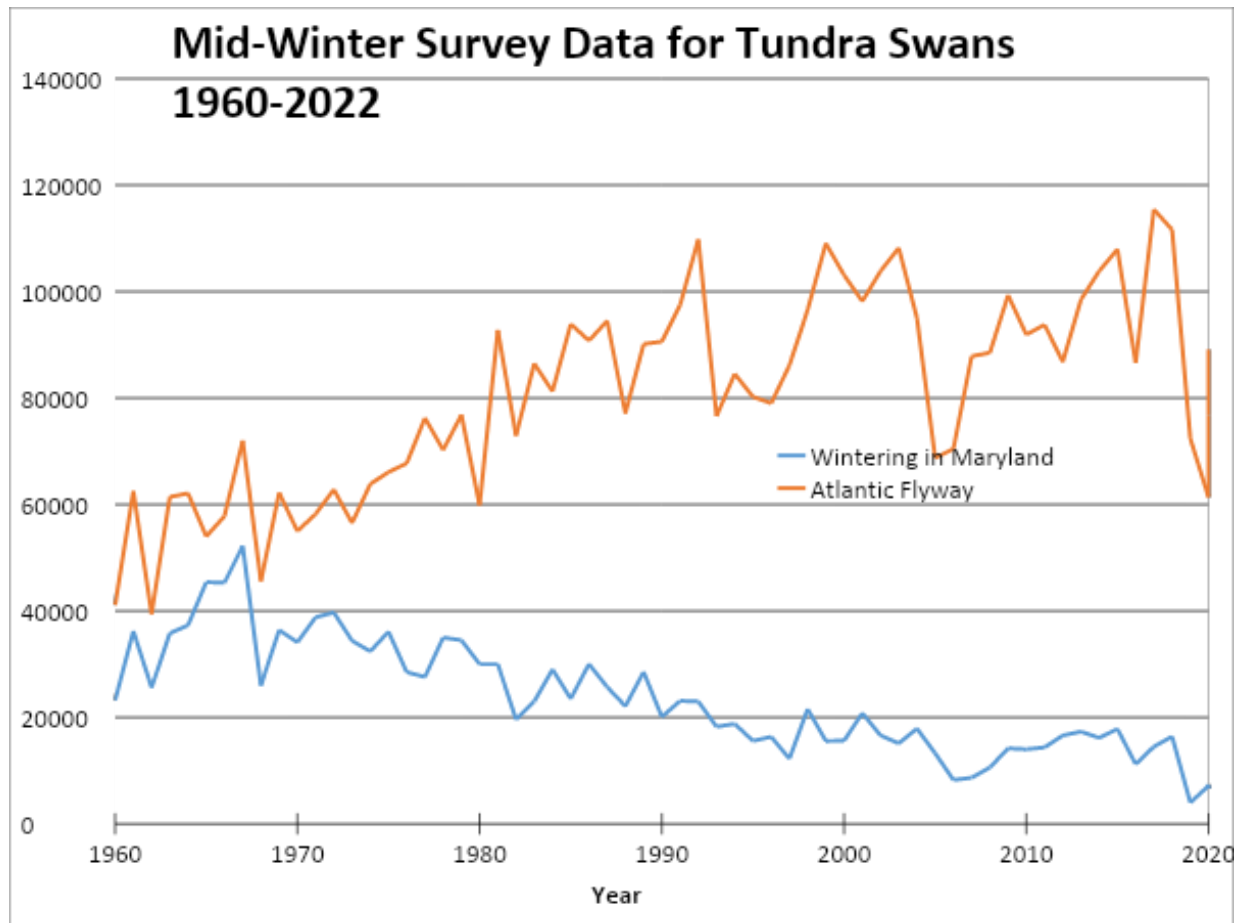


Figure 2. Mid-winter Survey results for Maryland and Atlantic Flyway Tundra Swans (Atlantic Flyway Databook and committee reports)

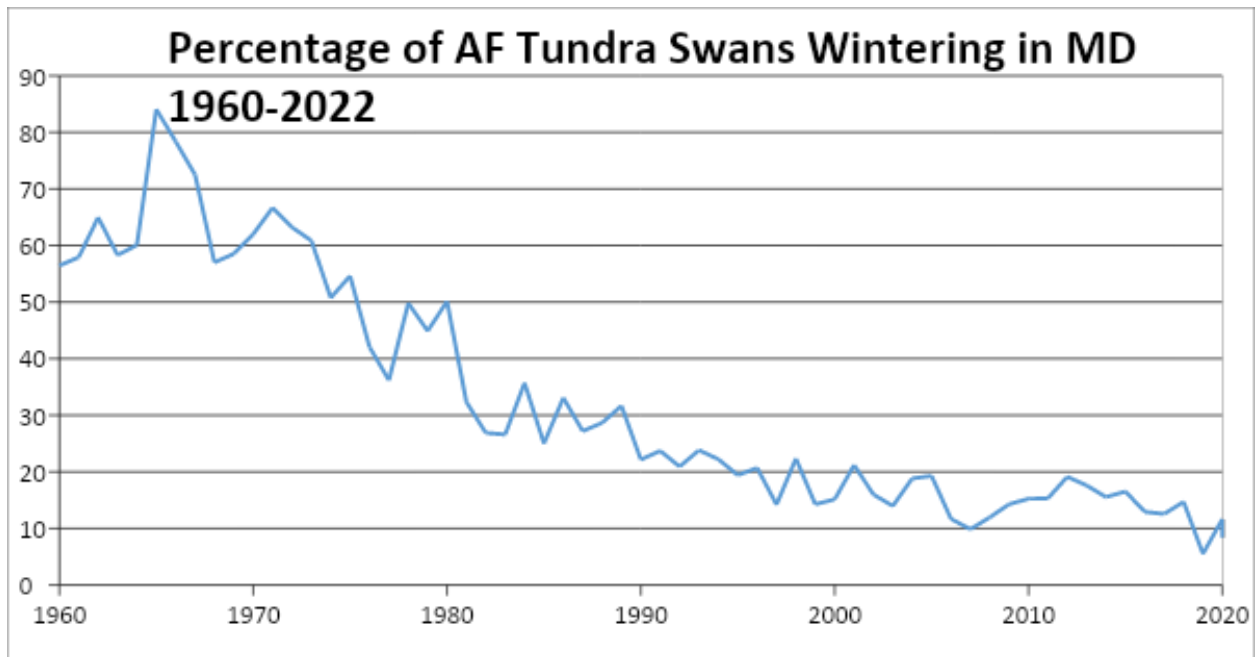


Figure 3. Percentage of Tundra Swans Wintering in Maryland (Atlantic Flyway Databook and AF Committee Reports)