

BUREAU OF WILDLIFE MANAGEMENT

MONTHLY REPORT

December 2021

Carole Stanko, Chief

**NEW JERSEY WILDLIFE RESEARCH AND MANAGEMENT
GRANT NO. W-68-R**

STUDY PLAN I. WHITE-TAILED DEER

Jodi Powers, Senior Wildlife Biologist

Megan Mills, Biologist Trainee (Northern Region)

Megan McCafferty, Biologist Trainee (Southern Region)

Annual Deer Harvest (Job I-A)

Project staff spent a considerable amount of time returning inquiries from hunters who experienced errors or needed assistance with their deer harvest reporting during the Permit Muzzleloader, Permit Shotgun, and Six-day Firearm Seasons. Hunters using the wrong harvest tags as well as the inability to report a harvest made up the majority of the reporting issues.

Deer season dates for the remainder of the 2021-22 season were reviewed for accuracy.

J. Powers began edits to the deer harvest data.

Special Areas

J. Powers contacted Special Areas about any changes to season structure or dates.

Extension Activities

J. Powers attended a website wireframe meeting. Edits and additions to the wireframe were submitted to Chief Stanko.

Project staff continues to field questions from hunters regarding season dates, bag limits, and deer diseases including EHD, CWD, and COVID-19.

Project staff assisted USDA with COVID sampling in deer. Sampling was conducted at butcher shops and included taking nasal swabs and blood samples.

Other Activities

M. Mills and J. Gyurcsak continued collecting CWD samples from a butcher in Oak Ridge, Passaic County. To date, 135 samples have been collected and confirmation numbers and locations verified.

M. McCafferty continued collecting heads for CWD sampling from 3 butcher shops in the southern region. M. Mills and J. Gyurcsak assisted M. McCafferty with sampling. To date, approximately 150 samples have been collected and confirmation numbers and locations verified.

Staff continues to collect ages from additional deer heads from butchers.

Community Based Plan for Management of Suburban Deer Populations: Job I-C

J. Powers presented the Princeton Township Community Based Deer Management Program application to the Fish and Game Council. The application was approved.

STUDY PLAN III. UPLAND WILDLIFE AND FURBEARERS

Ted Nichols, Supervising Biologist
Andrew W Burnett, Principal Biologist
James Sloan, Senior Biologist
Joseph R. Garris, Wildlife Technician I
Keith Santini, Seasonal Technician

Objective 1 – Conduct annual or periodic monitoring programs of the upland game and furbearer resource, their users, and the habitats on which they depend.

Hunter and Trapper Harvests

The Upland Project had been waiting for Aspira technicians to import data for location of harvest, species, and data for the condition of the harvested coyotes or gray foxes. That data became available to the project in late November.

A total of 105 coyote and 7 gray fox harvest mortalities were recorded via the Aspira (AHRS) reporting system and coyote reports reported directly to Division offices for the FY. A chart showing method of harvest/mortality for the FY, including vehicle mortalities is below.

Archers could harvest coyotes and gray foxes beginning October 2. Shotgun hunters could legally harvest coyotes or gray foxes incidentally to small game hunting on November 6. Trappers using a cable restraint, or a cage trap could harvest coyotes beginning on November 15. Deer hunters could harvest coyotes during the muzzleloading rifle and shotgun deer season incidentally to deer hunting.

Method	Coyote	Gray Fox
Archery	26	3
Trapping	21	2

Muzzleloading Rifle	8	
Shotgun	49	2
Nuisance/Damage	1	
Vehicle	3	
Totals	108	7

Beaver and River Otter

Beaver bridge surveys by zone are underway during the segment.

Seals and other materials for the 2021-22 beaver and otter check stations which will be manned on February 26, 2022, were organized and the boxes of materials were given to Project Leader Burnett for distribution to the central and southern NJ locations.

Beaver and river otter harvest must be reported via AHRS as well as being physically measured and sealed at the mandatory check stations. A query structure was set up within Insights so that the 2021-22 beaver harvest data could be monitored daily.

P. Stark and E. Topp printed and mailed out the 2021-22 NJ Beaver and Otter Trapping Supplement to beaver and otter permit holders.

Ruffed Grouse

Sighting report of a male observed on 11-16-21 within the Delaware Water Gap National Recreation Area.

Wild Turkey

J. Sloan and other members of the Bureau of Wildlife Management removed nuisance turkeys from Toms River, NJ on December 2nd.

Objective 2 – To participate in business meetings and monitoring programs of the National Bobwhite Technical Committee (NBTC), Northeast Fur Resources Technical Committee (NEFRTC), Northeast Upland Game Bird Technical Committee (NEUGBTC), and Short-leaf Pine Initiative (SPI).

National Bobwhite Technical Committee (NBTC)

J. Sloan met with John Morgan, Director of the National Bobwhite Conservation Initiative, virtually on December 15th to discuss his upcoming 25 state road trip.

Objective 4 – To provide technical guidance to landowners interested in providing wildlife habitat on their lands.

J. Sloan attended a habitat management meeting at Landis Sewerage Authority on December 14th to discuss prescribed burn plans and NRCS commitments for the upcoming year.

Objective 5 – To disseminate accurate and appropriate information on upland game and furbearer programs to sportsmen, public, state and local agencies, and other organizations.

J. Sloan met with a representative from Greenbriar Homeowners Association in Brick, NJ on December 16th to discuss nuisance turkey issues.

Extension Activities

Garris answered questions and provided input and identified various species of wildlife and scat from pictures/videos/audio and conversations with constituents.

P. Stark attended the New Jersey Trappers Association meeting on December 5th.

Other Activities

Garris completed a draft of the Winter 2021-22 Furbearer Newsletter. The draft was sent to Project Leader Burnett for approval/editing.

WATERFOWL - STUDY PLAN IV

Ted Nichols, Supervising Biologist

Lisa Clark, Senior Biologist

Austin Damminger, Biologist Trainee

Objective 1 – Migratory game bird monitoring programs

Recruitment Surveys for Atlantic Brant and Tundra Swans

Program biologists conducted productivity surveys for Atlantic brant. Recruitment is measured on the wintering grounds because brant nest in remote arctic wilderness. Productivity surveys are done by examining flocks of birds with spotting scopes and discerning plumage differences between young and adult birds. Plumage differences in brant are subtle in that juveniles have light-edging on wing coverts whereas adults have uniform-colored wing coverts. Productivity surveys measure the proportion of young in the fall flight and can be used in population modeling. Ancillary data also include the mean number of young in family groups surviving from hatch through migration to the wintering grounds. Results will be reported in the next monthly segment.

In New Jersey, surveys were conducted 17-24 November and Atlantic brant flocks ($n=7,388$ birds examined) contained 8.0% young. New York conducted a similar survey and combined ($n=17,975$ birds examined) with New Jersey data, indicated 7.5% young in the 2021 fall flight. This fall flight ratio 57% below the long-term (1976-2020) average of 17.3% young.

Program staff conducted recruitment surveys for tundra swans on 9-10 December. Productivity surveys measure the proportion of young in the fall flight and can be used in population modeling. Because tundra swans nest in remote arctic wilderness, recruitment

is measured on the wintering grounds. Productivity was 7.3% young in the fall flight (n=191 birds examined) and was similar to brant, in that it was not a production bust but was less than half the long-term average (mean=14% young).

Mid-Winter Waterfowl Survey

Several logistical arrangements for the 2022 Mid-Winter Waterfowl Survey (MWS) were made. Nichols and Clark took 2 online USDOJ flight training modules. The Division uses US Department of Interior aircraft and pilot at no cost to the Division for the MWS in New Jersey. The MWS will be conducted in early January.

Objectives 3 and 4 – Research studies

Sea Duck Productivity Study

During 2018, Atlantic Flyway states implemented a photo survey to evaluate the utility of digital images to estimate annual productivity of sea ducks. Photos of scoters (white-winged, black, and surf) and long-tailed ducks were taken during the fall and winter and plumage patterns used to develop age ratios for each species. Reliable estimates of productivity are expected to aid in the development of future population models and inform harvest management decisions of sea ducks. Program staff and volunteers collected photos from 2 sites from 25 October - 10 December. 33 usable photos were collected for use. These photographs will be combined with other states to develop a 2021 productivity estimate for sea ducks.

Contaminant Loads in Waterfowl of the Northeast Atlantic Flyway: New Threats and Outdated Advisories

Staff resumed sampling by intercepting hunters at boat ramps on the busy hunting days between Christmas and New Year's seeking donations of specimens for the study.

American Black Duck Research Study

Program staff continued collaboration with 7 other Atlantic Flyway states, the USFWS, CWS, and Mitch Weegman (University of Saskatchewan; lead investigator) on a study funded by the Black Duck Joint Venture entitled: *Quantifying the influence of environmental conditions and American black duck behavior and movements throughout the full annual cycle on subsequent productivity using state-of-the-art tracking devices*. This study will use backpack transmitters on black ducks captured on the wintering grounds. Staff participated in several planning calls and contacted landowners to obtain access requirements. Field work will begin following the close of the duck seasons in January.

Identifying Limiting Factors of Eastern Mallards.

The breeding population of Eastern mallards has declined 40% in Atlantic Flyway states since the mid-1990s. Managers need reliable estimates of productivity and seasonal survival at the sub-population scale to guide management actions for this declining population. Understanding demographic rates of eastern mallards and potential important

differences between populations in eastern Canada and eastern U.S. is imperative for managers to effectively model population dynamics and subsequent harvest strategies. Further, understanding biases within current datasets (e.g. banding data) is imperative to develop useful population models used in harvest management decisions. This project will potential answer several questions that will improve our understanding of bird movement during the pre-season banding window.

To address this knowledge gap, Atlantic Flyway Council member states and cooperators will be instrumenting female mallards (both juvenile and adult age cohorts) both in eastern Canada and in the US portion of the eastern mallard range with Global Positioning System (GPS)-Global System for Mobile communication (GSM) transmitters to better understand demographic rates, migration chronology, and habitat usage differences between the two sub-populations throughout the annual cycle.

Study Objectives are:

- 1) Quantify and compare recruitment metrics such as nesting attempts, full-term incubation, and brood-rearing between mallards in the northeast US and eastern Canada, and the extent to which behavior and weather explain variation in recruitment metrics.
- 2) Estimate seasonal survival rates of female mallards in Eastern Canada vs. Northeastern US.
- 3) Quantify and compare female mallard movements and habitat use and selection throughout the annual cycle in the northeastern US and Eastern Canada

Mallards will be captured during January-February with transmitter devices apportioned across states and provinces based on the mean breeding population and harvest of mallards in the flyway. Based on these estimates, 15 mallards will be marked during each of the next 3 winters in New Jersey beginning in February 2022. Staff participated in several planning calls and contacted landowners to obtain access requirements. Field work will begin following the close of the duck seasons in January.

Objective 5 – Outreach

T. Nichols worked with Matt Hencheck to develop a video concerning the reduction in the 2021 Canada goose bag limit in Atlantic Population Canada goose zones, which in New Jersey is the North and South Zones. The video was posted at:

<https://www.youtube.com/watch?v=aKXFRvmGOoc>

Patterns of duck hunting activity and success in New Jersey, 2011-2020

Biologist trainee A. Damminger began synthesizing the past 10 years of Harvest Information Program data to discern contemporary patterns of duck hunter activity and success in New Jersey at the zone level. Results will be presented in the next monthly segment.

Atlantic Brant Ecology Study (2BRANTXX)

Program staff responded to recoveries of transmitters and geolocator-marked specimens that were shot by hunters by sending postage paid packages to retrieve the devices for data download or refurbishment. Staff prepared transmitter harnesses, tarsal bands, leg bands, and other materials for the winter 2022 marking phase of this study. Planning for captures began and trapping will begin at the end of the brant hunting season in late January.

WILDLIFE SERVICES SECTION

Anthony McBride, Supervising Wildlife Biologist

Mike Madonia, Principal Wildlife Biologist

Joe Burke, Wildlife Technician I

Amy DeCheser, Wildlife Technician I

Emilia Topp, Wildlife Technician II

Michael Patrick, Wildlife Technician II

Peter Stark, Wildlife Worker

Bear Control: Lethal and Non-Lethal

The black bear unit received a total of 53 bear calls from November 20, 2021 to December 21, 2021; this compares with 42 calls from the same time period in 2020.

The black bear unit received 7 Category I calls, 20 Category II calls and 26 Category III calls for the time period November 20, 2021 to December 21, 2021; this compares to 2 Category I calls, 13 Category II calls and 27 Category III calls for the same time period in 2020.

The black bear unit received a total of 759 bear calls from January 1, 2021 to December 21, 2021; this compares with 1400 calls from the same time period in 2020.

The black bear unit received 74 Category I calls, 268 Category II calls, and 410 Category III calls for the time period January 1, 2021 to December 21, 2021; this compares to 74 Category I calls, 598 Category II calls and 723 Category III calls for the same time period in 2020.

As of December 21, 2021, the total number of calls received by the Division decreased 45.7 percent from the same time period in 2020. Category I incidents had 0.0 percent change, Category II calls decreased 55.1 percent and Category III calls decreased 43.2 percent from 2020. This data does not include calls made to local police departments.

Research

Project personnel continue to edit and input research data into the bear database.

Damage/Nuisance Control

Project personnel continue to provide technical advice for damage complaint incidents and set traps for Category 1 behavior.

Cooperative Research

Project personnel continue to work on cooperative research projects with East Stroudsburg and Stockton University.

Beaver calls and Complaints

Unit staff began matching beaver trappers to complaint sites for the upcoming recreational beaver trapping season.

Other Activities

Unit employees continued conducting statewide beaver/otter zone point surveys.

Unit staff attended several internal meetings on wireframe construction and content inclusion for the Division's new website. Link edits were compiled and forwarded to Chief Stanko on December 7th.

P. Stark and A. McBride removed a bobcat that was incidentally captured in a cable restraint in Oxford, Warren County. The bobcat was released on site.

Wildlife Nuisance Complaints/ Technical Guidance (Federal Aid Project)

BREAKDOWN OF COMPLAINTS BY SPECIES

Bat	3	Hawk	2
Bear	53	Heron	1
Beaver	22	Muskrat	1
Bird	2	Opossum	1
Bobcat	3	Raccoon	7
Coyote	22	Skunk	1
Deer	42	Squirrel	3
Duck	1	Turkey	3
Eagle	1	Unknown	1
Fox	24	Vulture	4
Gull	1	Woodchuck	1

146 calls for the Federal Aid Project.

Total calls: 199 (*black bear calls are not included in this project)