

SUMMER WILD TURKEY SIGHTING SURVEY 2019



Department of
Environmental
Conservation

DEC conducts the Summer Wild Turkey Sighting Survey annually during the month of August to estimate the average number of wild turkey poults (young of the year) per hen statewide and among major geographic regions of the State. This index allows us to gauge reproductive success in a given year and allows us to predict fall harvest potential. Weather, predation, and habitat conditions during the breeding and brood-rearing seasons can all significantly impact nest success, hen survival, and poult survival.

In 2019, we received almost 1,200 reports of turkey flocks during the August survey, significantly higher than previous years. The primary reason for the increase in the number of reports is improved awareness of the survey and the ease with which observations can be submitted on-line through the DEC website.

We received reports of 1,023 hen-flocks and the average number of poults per hen was 2.3 (Figures 1-3). This is a decrease from last year (2.7 poults/hen) and is below the five-year and ten-year averages (2.85 and 2.79 poults/hen, respectively). Reproductive success (as measured by this survey) gradually improved from the low observed in 2009 through 2016, but the past three years have been below the 10-year average. It is also important to note that reproductive success is lower over the past 12 years (2008-2019) than during the first 12 years of the survey (1996-2007; Figure 1).

The estimated number of poults/hen statewide declined from 2018 to 2019 (Figures 1 and 3). The 2017 poult/hen estimate was the lowest observed since 2009, until summer 2019 when the average of 2.3 poults/hen was the lowest observed since this survey has been conducted (Figure 1). The estimated number of poults per hen was similar in 2018 and 2019 in DEC Regions 3 (Lower Hudson Valley) and 8 (Finger Lakes) and increased between years in DEC Region 1 (Long Island; Figure 3). Reproductive success declined between years in all other DEC Regions (Figure 3).

Data from the National Agricultural Statistics Service indicate that rainfall was above average in May and June in most of the state (Figure 4). Above-average rainfall in May and June likely negatively affected nest and poult success.

Based on the decline in reproductive success from 2018 to 2019 we expect the fall 2019 harvest to be lower than fall 2018. In addition, in areas with good hard and soft mast production, birds will be less vulnerable to harvest as they do not have to roam far in search of food.

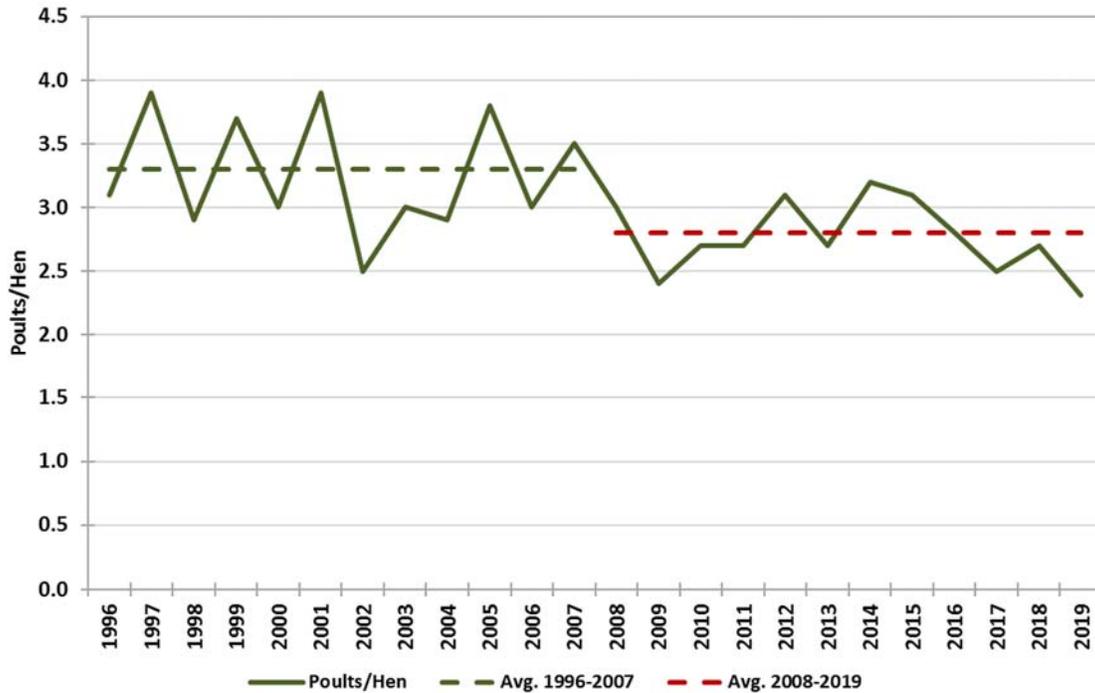


Figure 1. Poults/hen from the summer sighting survey, 1996-2019.

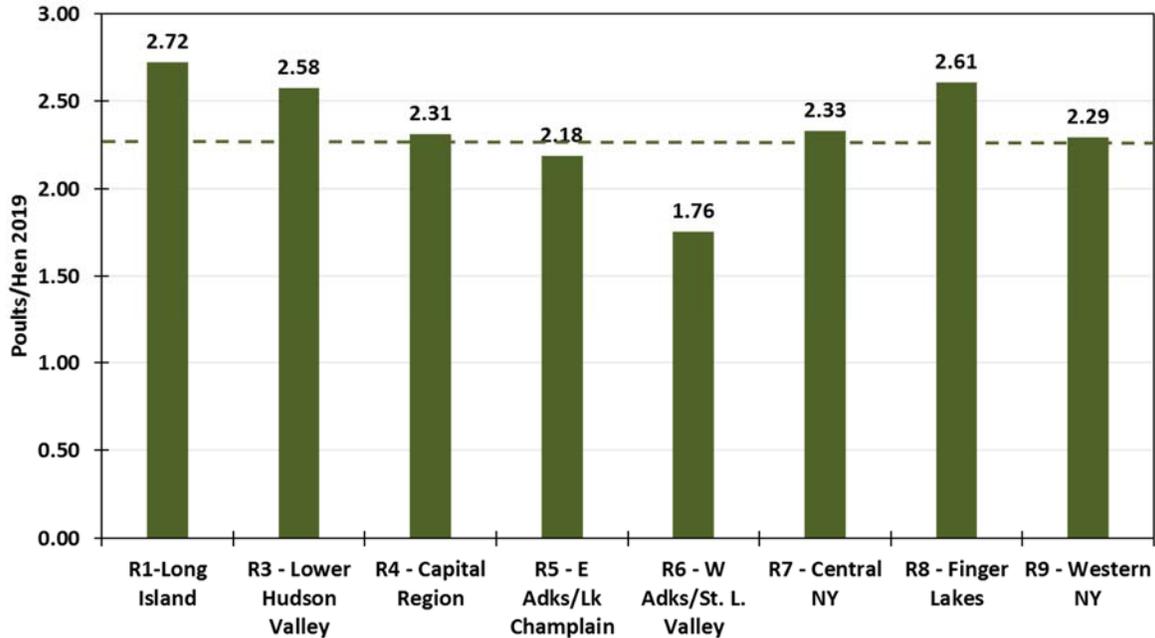


Figure 2. Poults/hen estimates by DEC region, summer 2019. The 2019 statewide average (dashed line) was 2.3 poults/hen.

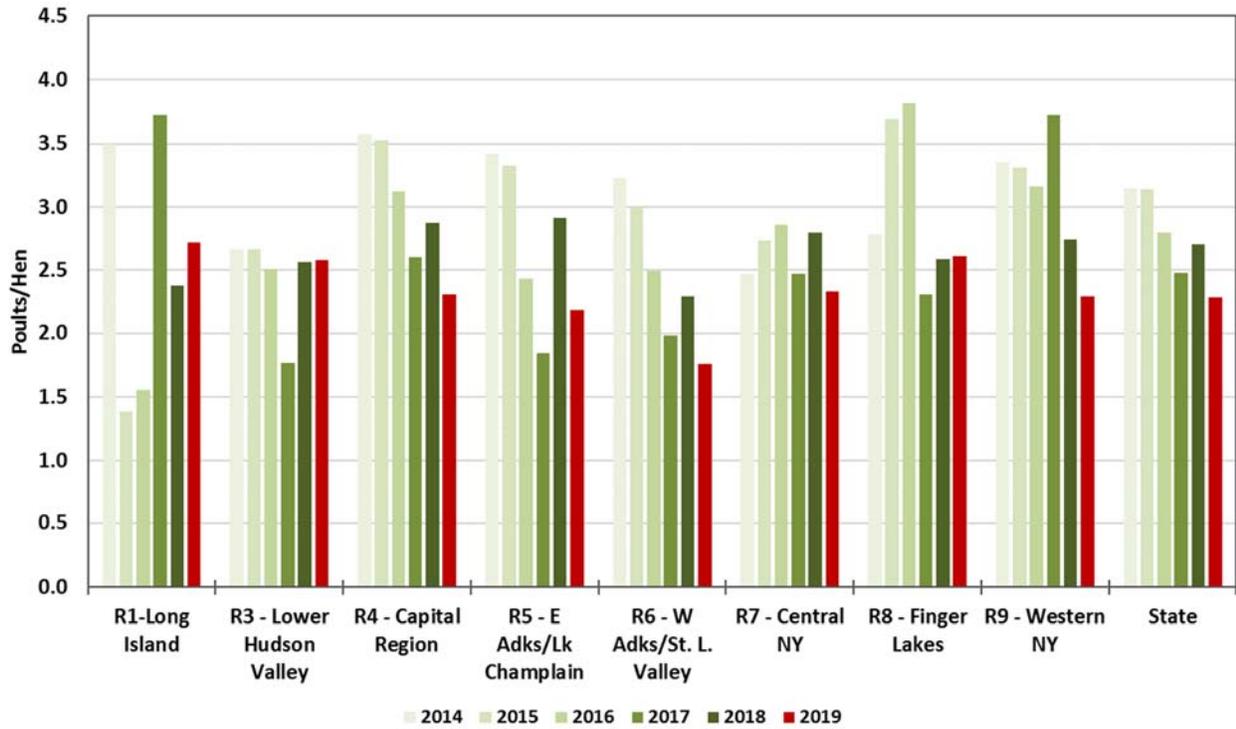


Figure 3. Poults/hen by DEC Region, 2014-2019. The statewide average for 2014-2018 was 2.85 poults/hen.

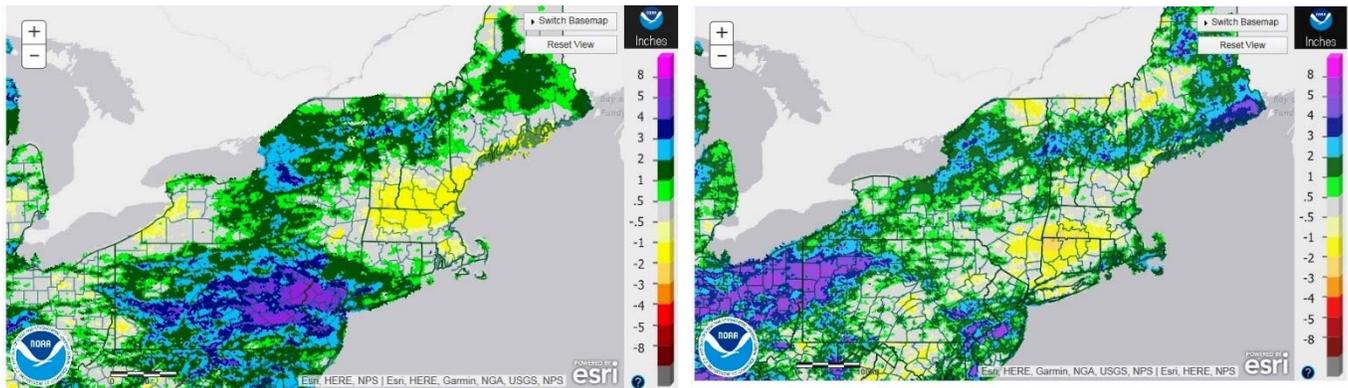
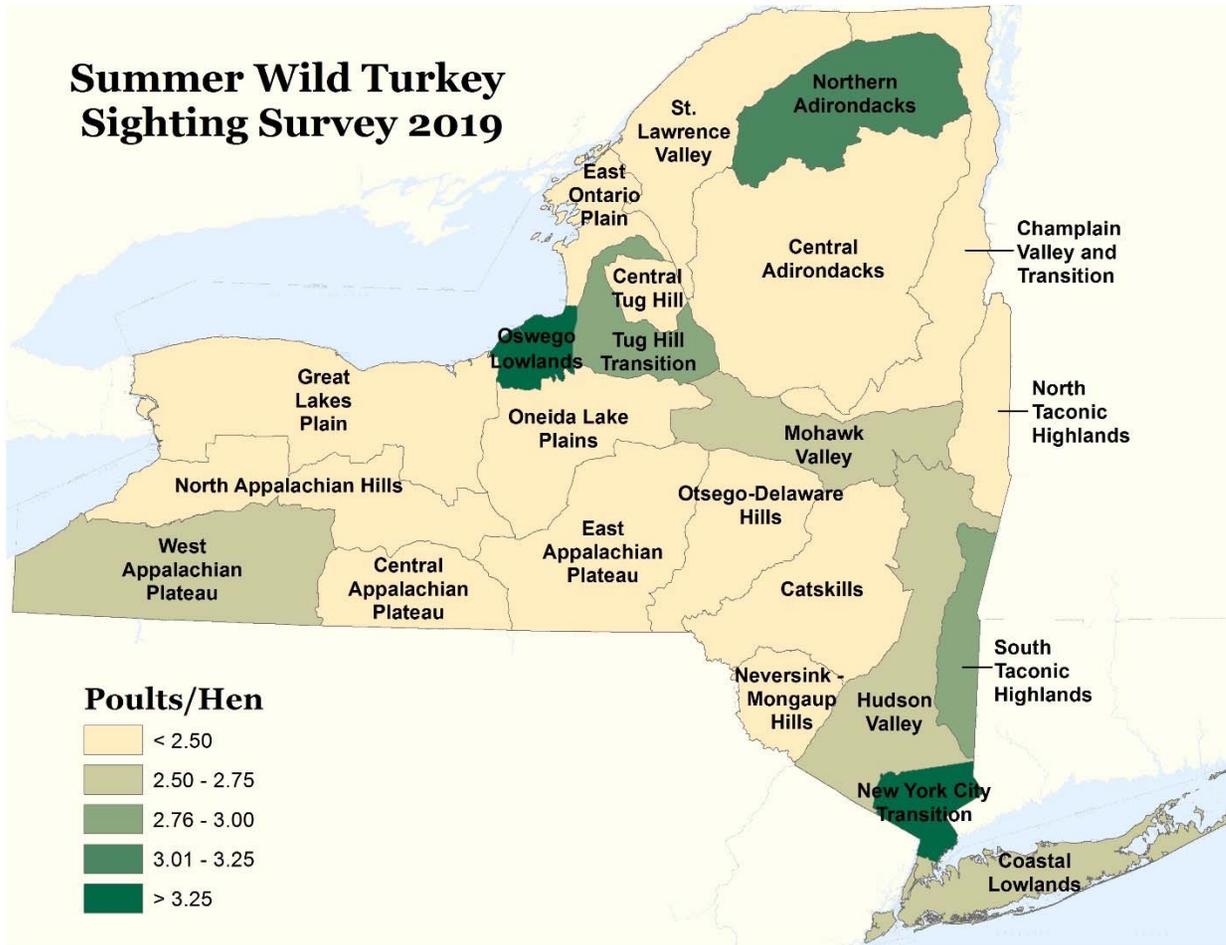


Figure 4. Departure from normal rainfall in May (left) and June (right), 2019. Images courtesy of the National Oceanic and Atmospheric Administration (NOAA).



WMU Aggregate	Poults/Hen	# Hen-Flocks
Central Adirondacks	2.03	59
Central Appalachian Plateau	2.32	17
Catskills	2.12	60
Champlain Valley & Transition	2.10	74
Coastal Lowlands	2.72	52
East Appalachian Plateau	2.33	72
East Ontario Plain	0.92	49
Great Lakes Plain	2.31	71
Hudson Valley	2.59	121
Mohawk Valley	2.57	77
Northern Adirondacks	3.12	23
North Appalachian Hills	2.25	49
Neversink-Mongaup Hills	1.95	9
North Taconic Highlands	1.64	37
New York City Transition	4.30	7
Oneida Lake Plains	1.91	39
Oswego Lowlands	4.60	3
Otsego-Delaware Hills	2.43	40
St. Lawrence Valley	1.65	41
South Taconic Highlands	2.93	12
Tug Hill Transition	3.00	21
Tug Hill	2.25	2
West Appalachian Plateau	2.63	88

Figure 5. Poults/Hen in WMU aggregates of New York State from the Summer Sighting Survey, 2019. The number of hen-flocks in the table at right indicates the sample size used to calculate poults/hen for each aggregate. Statewide regional weighted average poults/hen was 2.3 (n=1,023).



The information presented in this report was supported by Federal Aid in Wildlife Restoration Grant W-173-G.