

## SUMMER WILD TURKEY SIGHTING SURVEY 2020



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 2020, we received 952 reports of turkey flocks during the August survey, including reports of 846 hen-flocks. The average number of poults per hen was 2.8 (Figures 1-3). This is an increase from last year (2.3 poults/hen) and close to the five-year and ten-year averages (2.7 and 2.8 poults/hen, respectively). Reproductive success (as measured by this survey) gradually improved from the low observed in 2009 through 2016 but was below average two of the past three years. 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 in 2017 and 2019 were among the lowest observed since this survey began 25 years ago. While 2020 represents a marked improvement over last year, turkey numbers may still be lower than previous years due to multiple years with poor reproductive success. Evidence for improved production in 2020 is supported by the percent of hen-flocks observed with poults. About 76% of hen-flocks had poults in 2017 and 2019, whereas 82% had poults in 2020 (Figure 3). The percentage of hen-flocks with poults in 2020 was the highest recorded since 2012.

DEC regions 3 (lower Hudson Valley), 4 (Capital Region), 5 (Eastern Adirondacks/Champlain Valley), and 9 (western NY) were above the statewide average of 2.8 poults/hen, while regions 7 (central NY) and 8 (Finger Lakes) were below the statewide average (Figures 2 and 6). The estimated number of poults per hen increased from 2019 to 2020 in six of eight DEC regions, was similar between years in Regions 1 (Long Island) and 7 (central NY), and declined in Region 8 (Finger Lakes; Figure 4).

Data from the National Agricultural Statistics Service indicate that rainfall was slightly below average in May and June in most of the state (Figure 5). Below-average rainfall in May and June likely positively affected nest and poult success.

Based on the improvement in reproductive success from 2019 to 2020 we expect the fall 2020 harvest to be higher than fall 2019. 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, so hunters should scout the area they plan to hunt to identify sites where birds may be foraging.

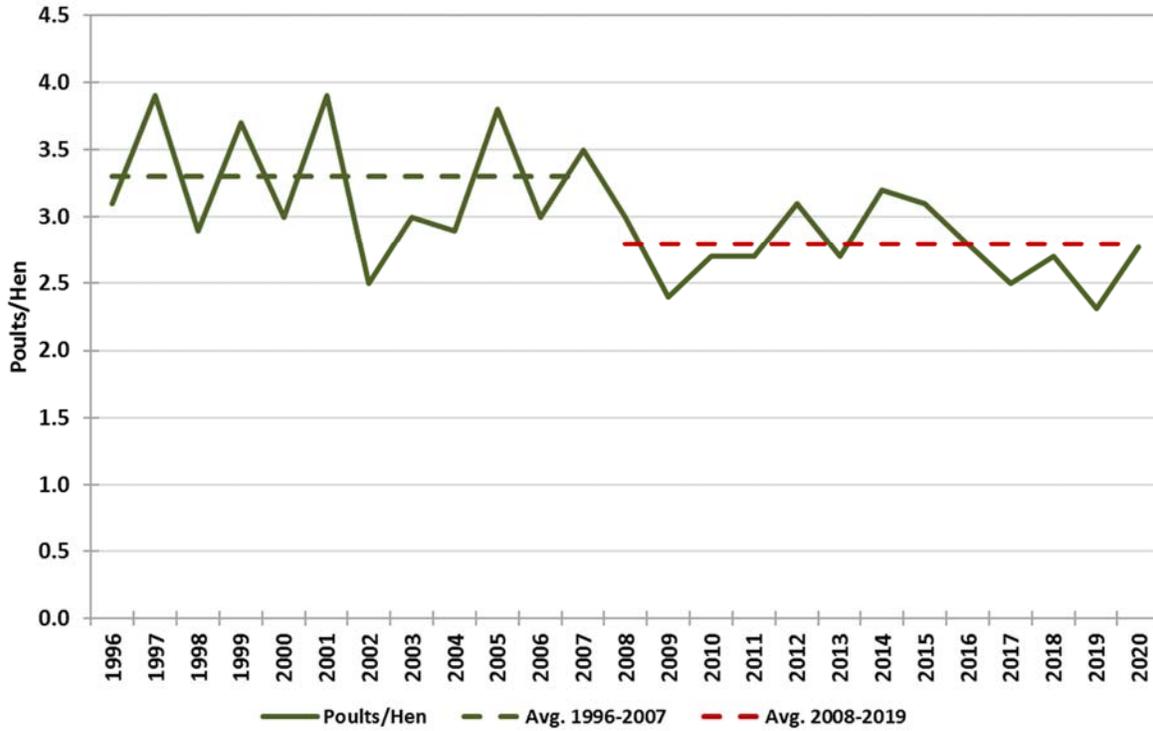


Figure 1. Poults/hen from the summer sighting survey, 1996-2020.

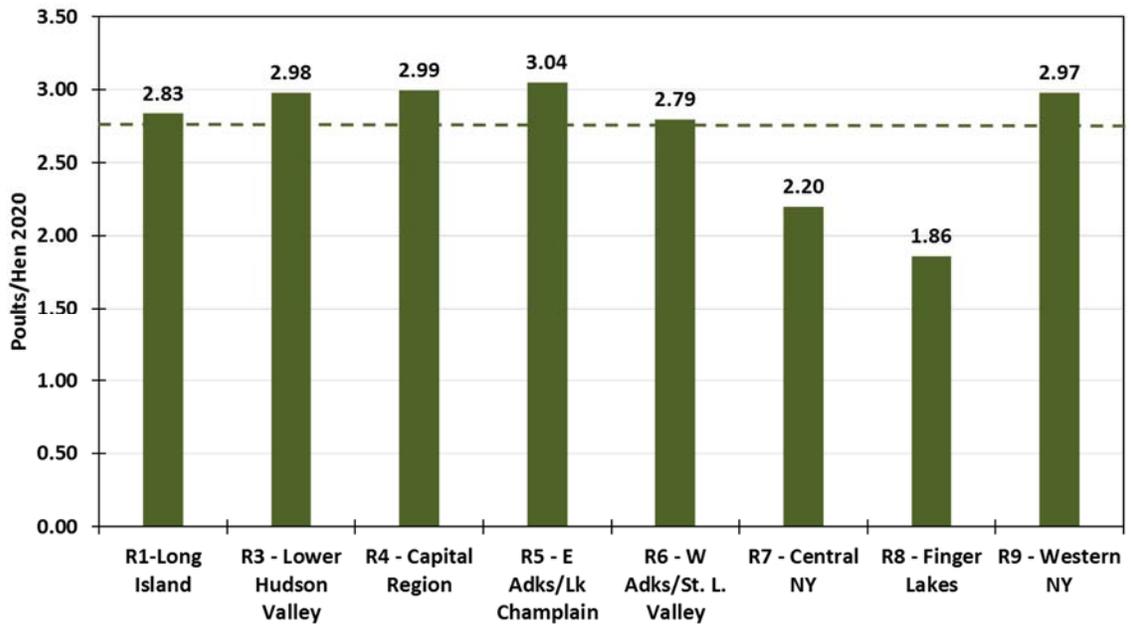
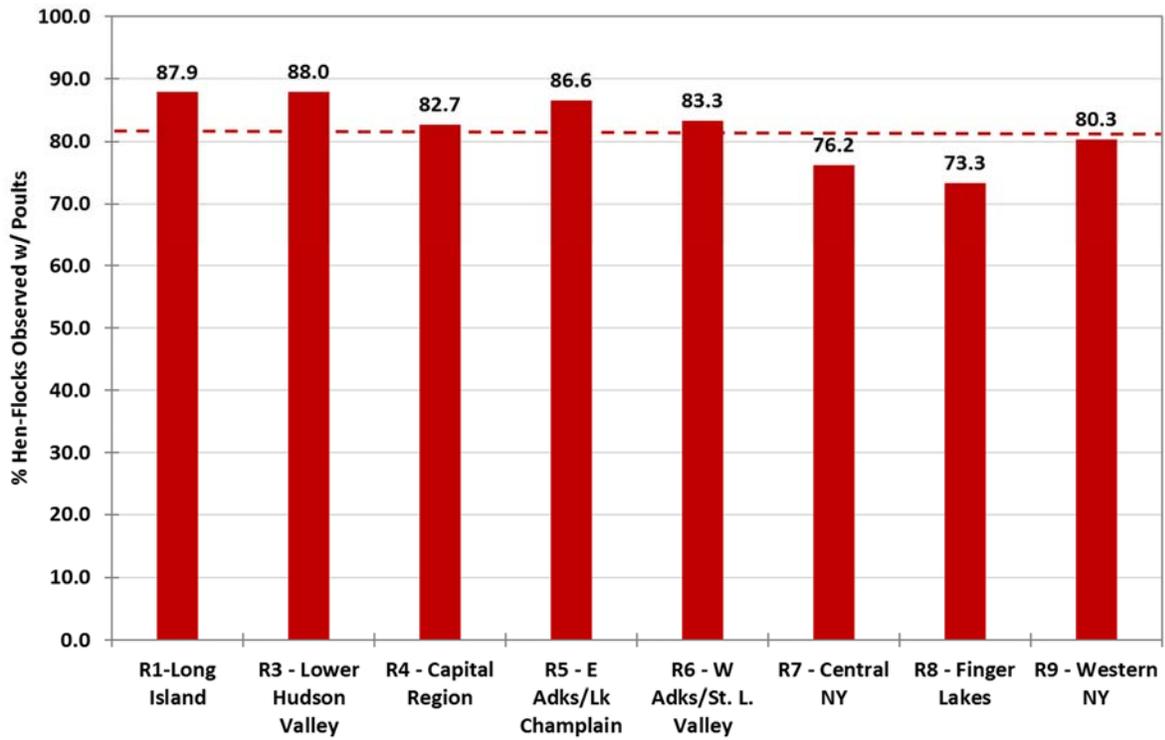
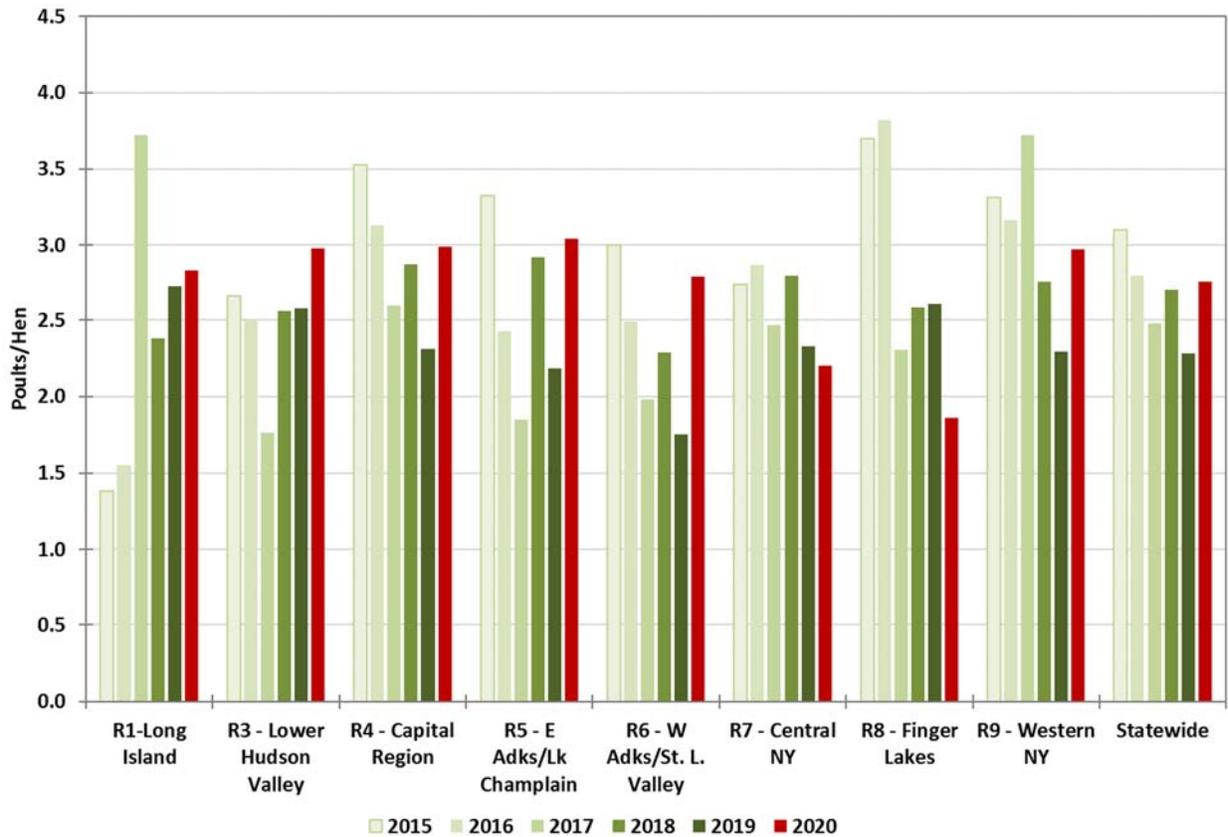


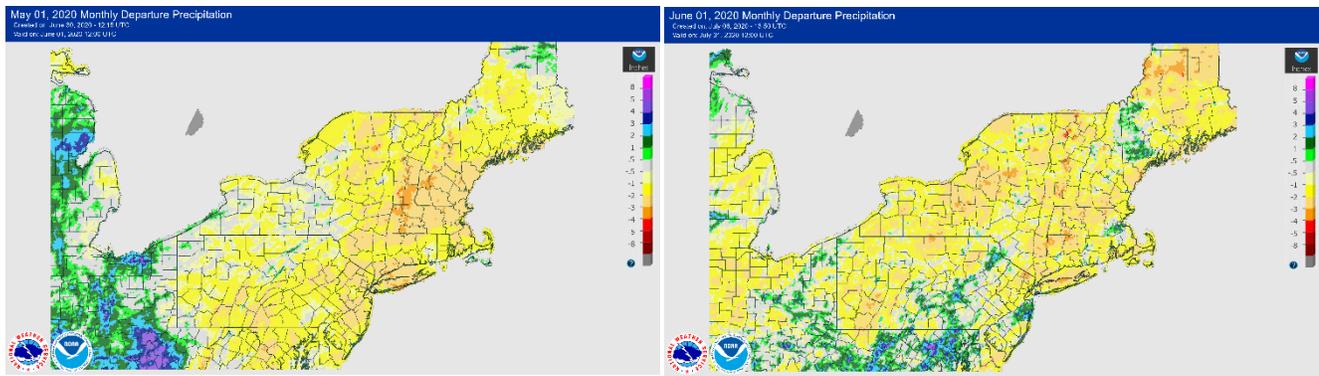
Figure 2. Poults/hen estimates by DEC region, summer 2020. The 2020 statewide average was 2.8 poults/hen (dashed line).



**Figure 3.** Percent of hen-flocks observed with poults by DEC region, summer 2020. Statewide, 82% of hen-flocks observed had poults (dashed line).

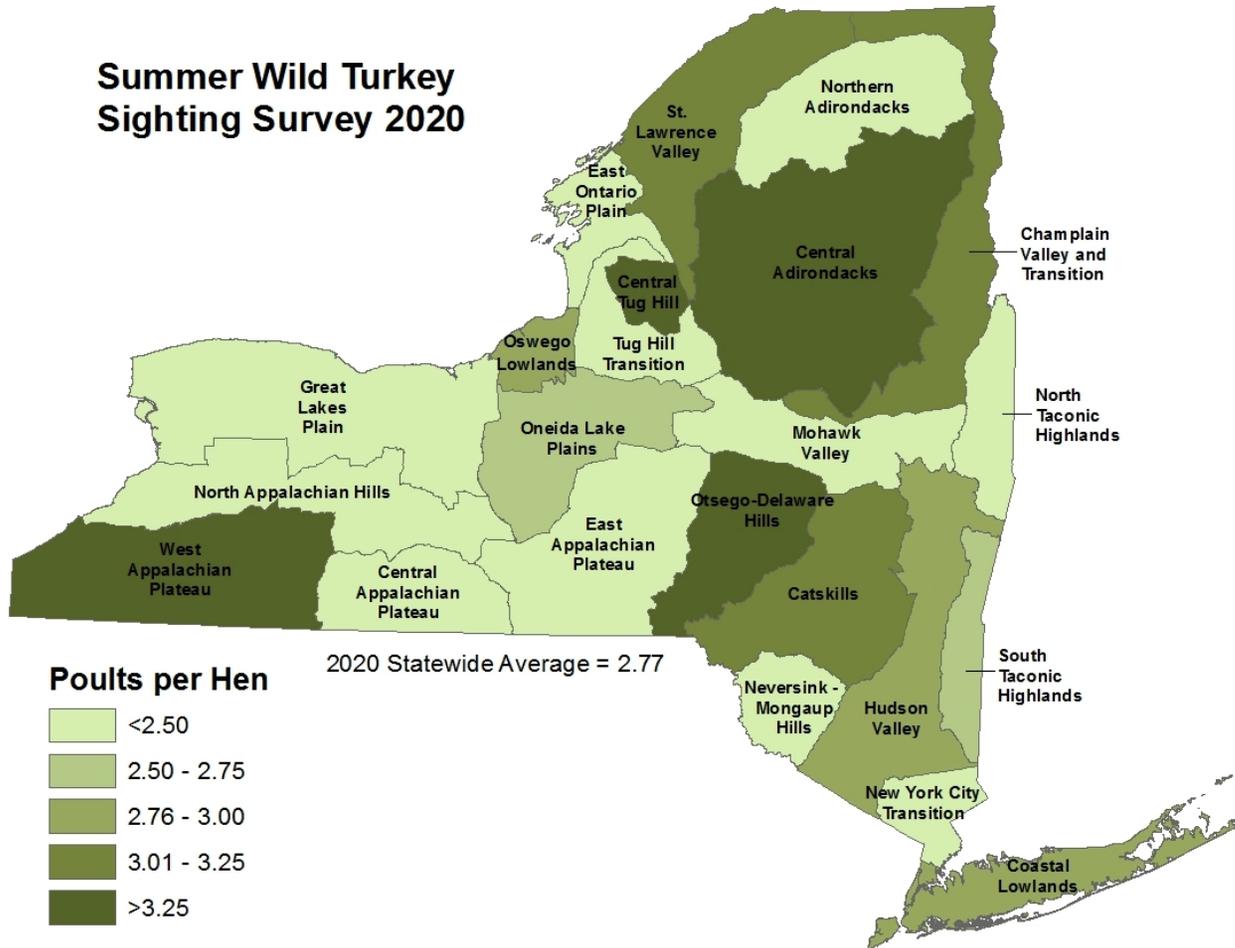


**Figure 4.** Poults/hen by DEC Region, 2015-20. The statewide average for 2015-19 was 2.67 poults/hen.



**Figure 5.** Departure from normal rainfall in May (left) and June (right), 2019. Images courtesy of the National Oceanic and Atmospheric Administration (NOAA).

## Summer Wild Turkey Sighting Survey 2020



WMU Aggregate	Poult/Hen	# Hen-Flocks
Central Adirondacks	3.6	99
Central Appalachian Plateau	1.3	5
Catskills	3.3	78
Champlain Valley & Transition	3.1	37
Coastal Lowlands	2.8	33
East Appalachian Plateau	2.0	53
East Ontario Plain	1.1	7
Great Lakes Plain	1.8	64
Hudson Valley	2.9	100
Mohawk Valley	2.3	50
Northern Adirondacks	2.2	13
North Appalachian Hills	2.2	55
Neversink-Mongaup Hills	1.9	7
North Taconic Highlands	2.2	14
New York City Transition	2.3	5
Oneida Lake Plains	2.6	38
Oswego Lowlands	2.8	5
Otsego-Delaware Hills	3.3	31
St. Lawrence Valley	3.2	34
South Taconic Highlands	2.6	15
Tug Hill Transition	2.2	14
Tug Hill	3.6	7
West Appalachian Plateau	3.3	82

**Figure 6.** Poults/Hen in Wildlife Management Unit (WMU) aggregates of New York State from the Summer Sighting Survey, 2020. The number of hen-flocks in the table at right indicates the sample size used to calculate poults/hen for each aggregate. Regional weighted average was 2.8 poults/hen (n=846).



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