

SUMMER WILD TURKEY SIGHTING SURVEY 2017



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 2017, we received over 900 reports of turkey flocks during the August survey, similar to last year, but 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 785 hen-flocks and the average number of poults per hen was 2.5 (Figures 1-3). This is a decline from last year (2.8 poults/hen) and is the second year in a row where productivity declined. Reproductive success (as measured by this survey) gradually improved from the low observed in 2009 through 2015, but the past two years have been below the 10-year average. It is also important to note that reproductive success is lower over the past decade (2007-2017) than during the first ten years of the survey (1996-2006; Figure 1).

This year's poult/hen estimate was the lowest observed since 2009 (Figure 1). Only DEC Region 1 (Long Island) and 9 (Western NY) observed above-average reproductive success (about 3.7 poults/hen; Figure 2 and 5). About 23% of the hen-flocks observed in 2017 did not have poults. This is higher than last year and above the ten-year average (20%). Data from the National Agricultural Statistics Service indicate that rainfall averaged about 2.6 inches above normal from April through May and 4.8 inches above normal from April through June. Above-average rainfall in May and June likely negatively affected nest and poult success (Figure 4).

Based on the decline in reproductive success from 2016 to 2017 we expect the fall harvest to be lower than fall 2016. In areas with good hard and soft mast production, birds will be less vulnerable to harvest. Based on average to above-average production in 2014 and 2015 and two mild winters, there will be a greater proportion of adult birds on the landscape than last year.

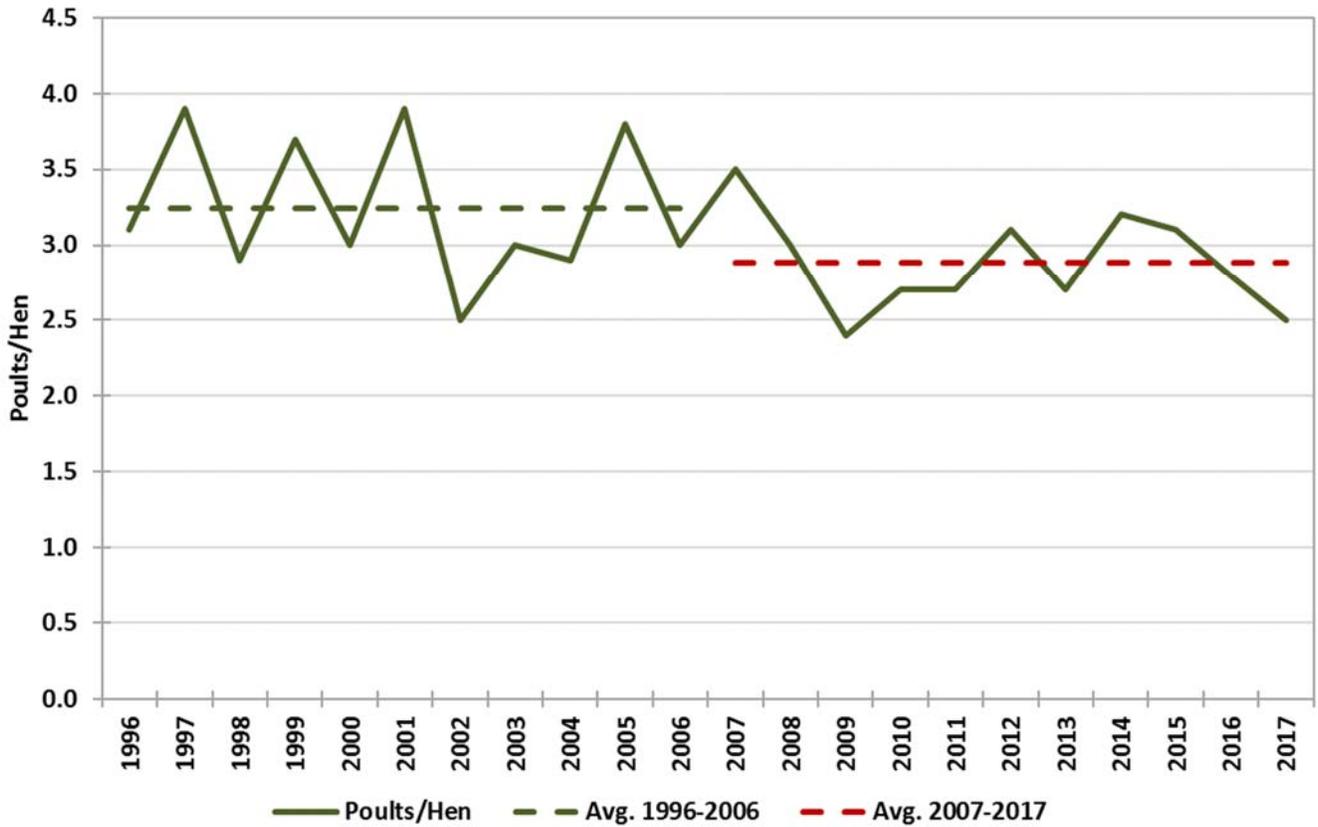


Figure 1. Poults/hen from the summer sighting survey, 1996-2017.

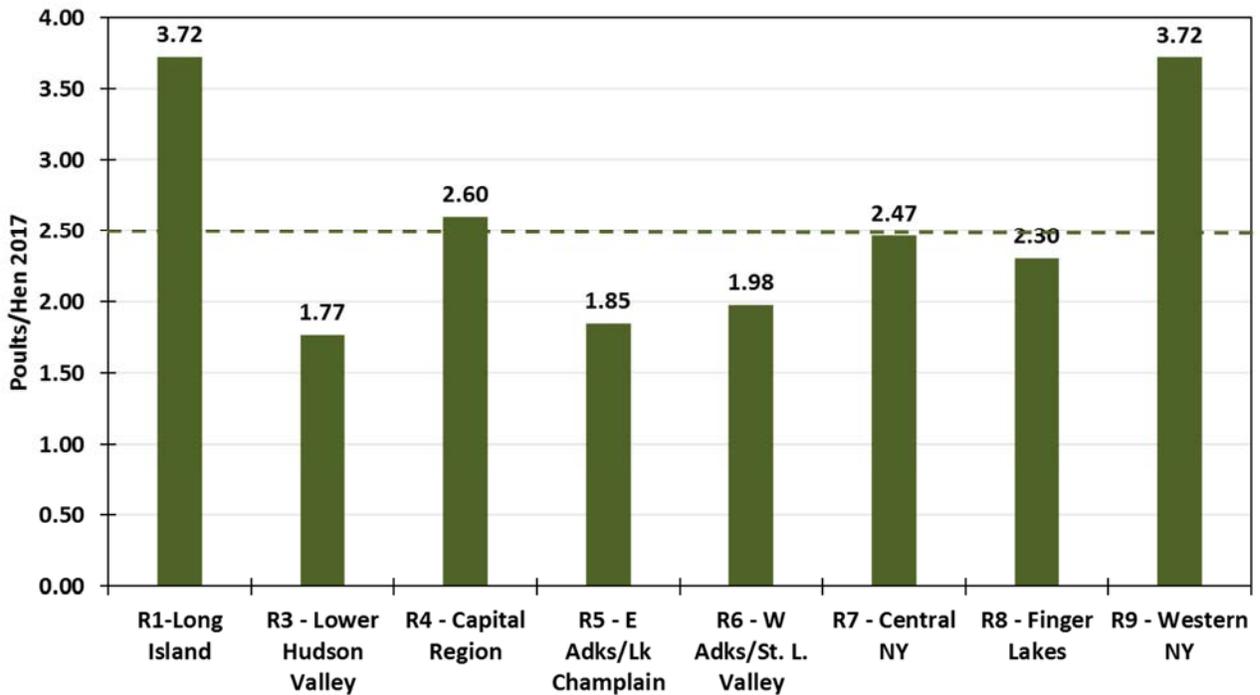


Figure 2. Poults/hen estimates by DEC region, summer 2017. The 2017 statewide average (dashed line) was 2.5 poults/hen.

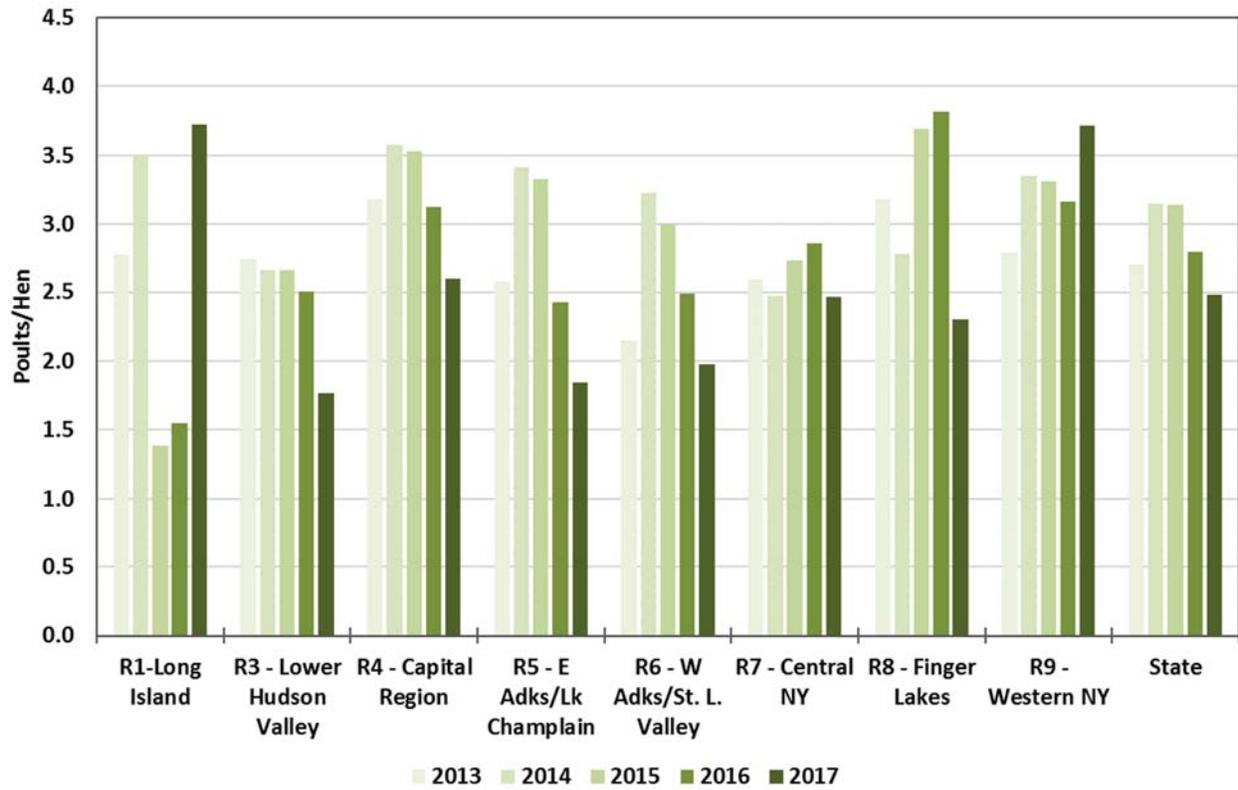


Figure 3. Poults/hen by DEC Region, 2013-2017. The statewide average for this five-year period was 2.85 poults/hen.

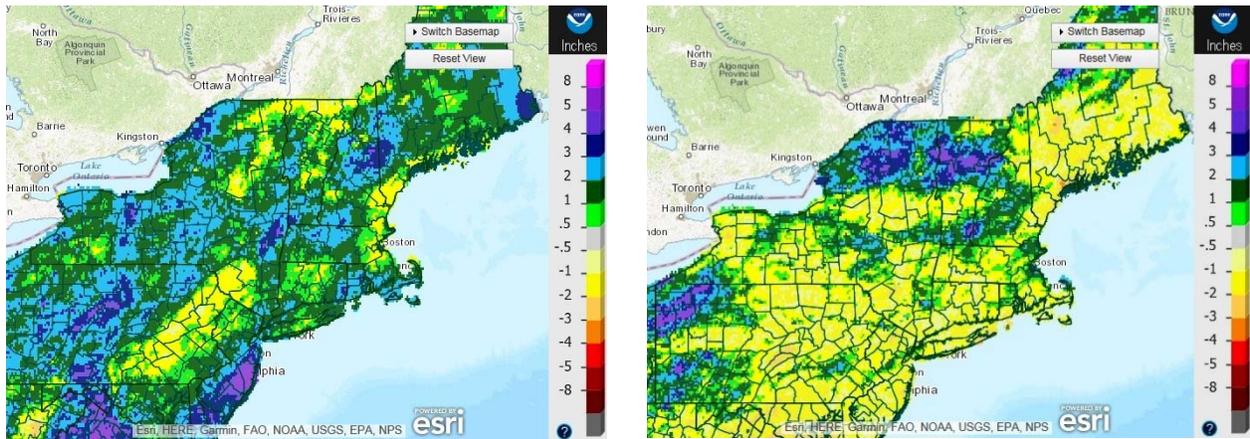
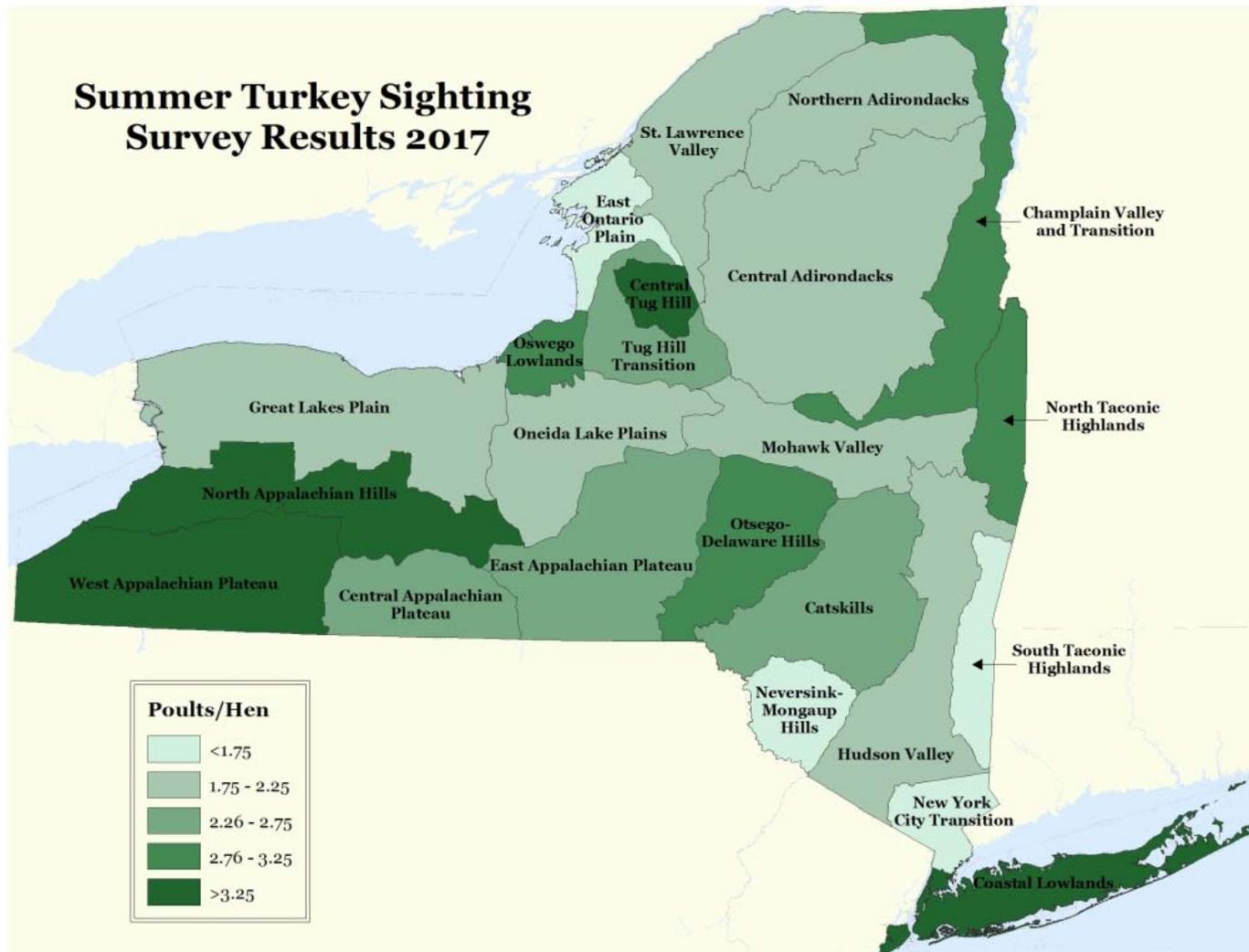


Figure 4. Departure from normal rainfall in May (left) and June (right), 2017. Images courtesy of the National Oceanic and Atmospheric Administration (NOAA).



WMU Aggregate Sample Sizes (# Hen-Flocks Reported)	Poults/Hen
Central Adirondacks (n=48)	1.8
Central Appalachian Plateau (n=21)	2.7
Catskills (n=38)	2.7
Champlain Valley & Transition (n=19)	3.1
Coastal Lowlands (n=41)	3.7
East Appalachian Plateau (n=31)	2.4
East Ontario Plain (n=27)	1.5
Great Lakes Plain (n=139)	2.1
Hudson Valley (n=108)	2.1
Mohawk Valley (n=31)	2.2
Northern Adirondacks (n=10)	2.2
North Appalachian Hills (n=51)	3.5
Neversink-Mongaup Hills (n=17)	1.5
North Taconic Highlands (n=5)	3.1
New York City Transition (n=7)	0.6
Oneida Lake Plains (n=17)	2.1
Oswego Lowlands (n=6)	2.8
Otsego-Delaware Hills (n=17)	2.9
St. Lawrence Valley (n=52)	1.8
South Taconic Highlands (n=19)	1.5
Tug Hill Transition (n=8)	2.7
Tug Hill (n=2)	4.0
West Appalachian Plateau (n=71)	4.3

Figure 5. Poults/Hen in WMU aggregates of New York State from the Summer Sighting Survey, 2017. Sample size in the table at right indicates the number of hen-flocks used to calculate poults/hen for each aggregate. Statewide regional weighted average poults/hen was 2.5 (n=785).



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