

## SUMMER WILD TURKEY SIGHTING SURVEY 2022



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 each 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.

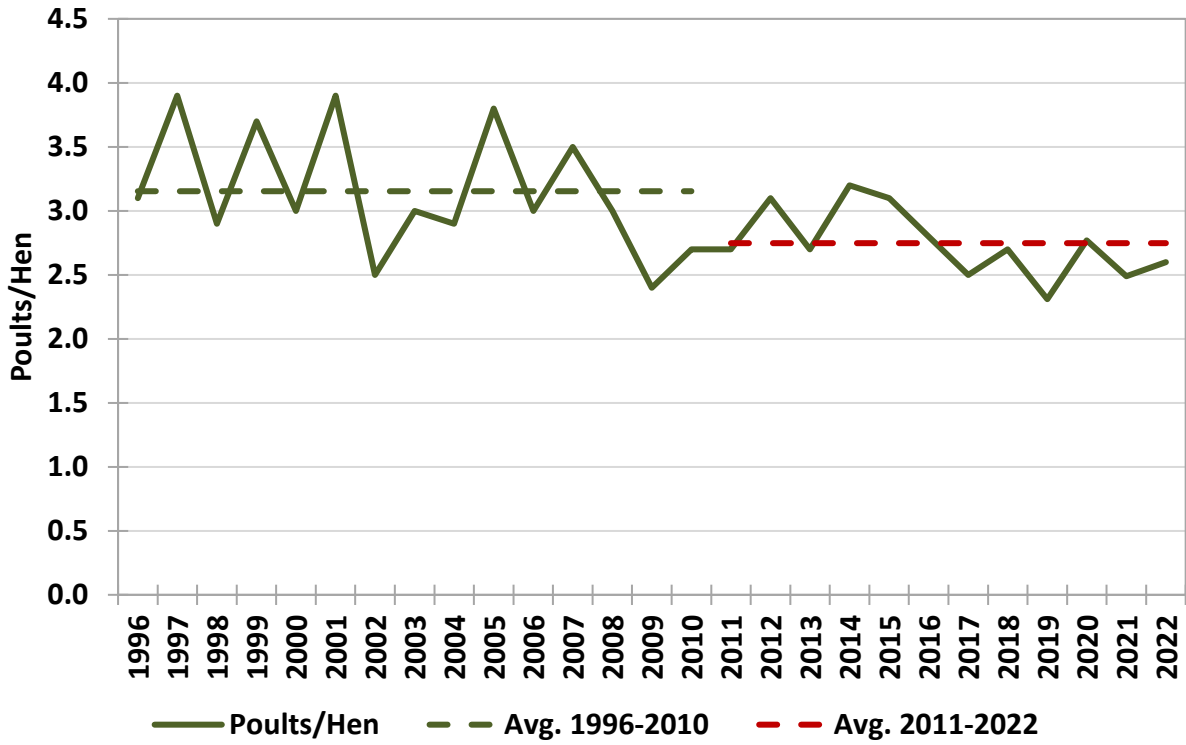
In 2022, DEC transitioned to an online survey. The change resulted in significantly more participation. We received 2,268 reports of turkey flocks during the August survey, including reports of 1,767 hen-flocks. That is approximately twice as many observations as 2021. The increased sample sizes lower the uncertainty around estimates, especially at smaller scales like the wildlife management unit aggregate and regional scales. The average number of poults per hen in 2022 was 2.65 (Figures 1-3). This is a minimal increase from last year (2.5 poults/hen), similar to the five-year average (2.6 poults/hen), and slightly below the ten-year average (2.8 poults/hen).

Reproductive success (as measured by this survey) remains significantly lower than the early 2000s (Figure 1). The estimated number of poults/hen in 2017, 2019, 2021, and 2022 were four of the six lowest productivity estimates since the survey began in 1996. As a result, current turkey numbers may be lower than previous years. Evidence for below-average production in 2022 is supported by the percent of hen-flocks observed with poults. About 80% of hen-flocks had poults in 2022 (Figure 3), similar to other poor production years like 2017, 2019, and 2021.

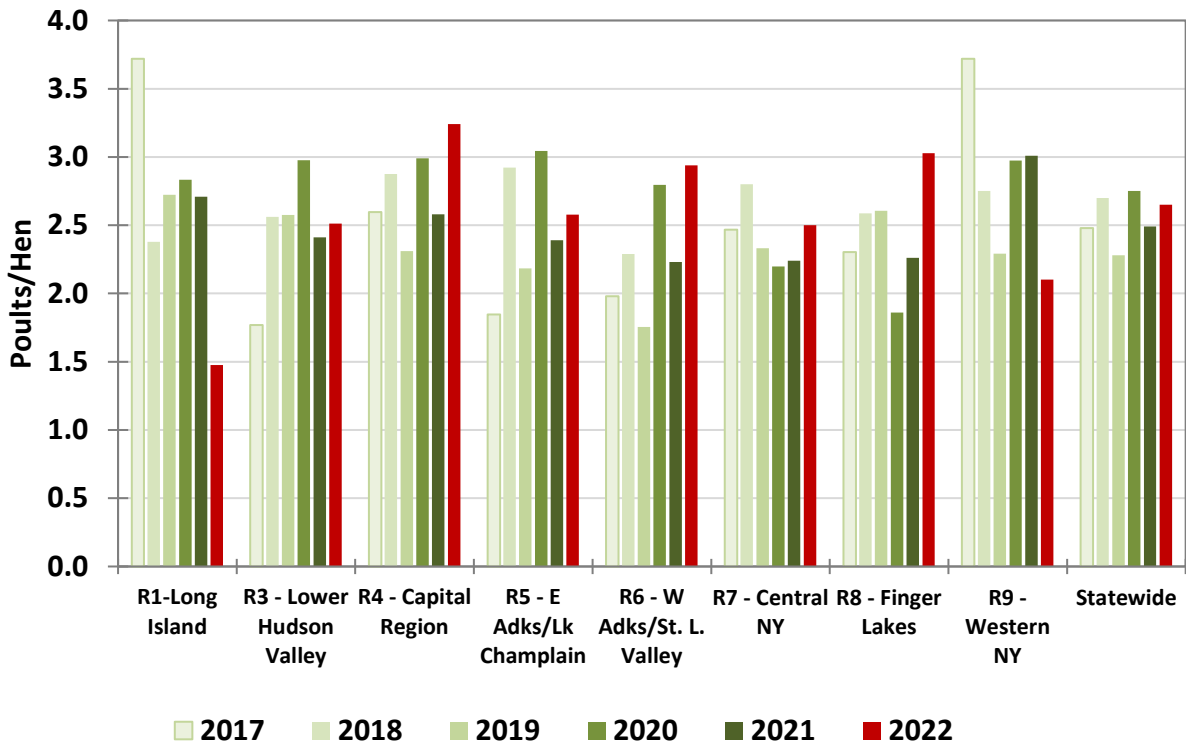
Regions 1 and 9 were meaningfully lower than the 2022 statewide average (Figure 4) and regions 4, 6 and 8 were higher than the statewide average. Overall, every region has consistently been below 3 poults per hen.

Data from the National Agricultural Statistics Service indicate that rainfall was slightly below average in May (Figure 5). However, in June, the eastern half of the state was slightly above average. Below-average rainfall in May and June is usually associated with good nest and poult success, but this pattern was not evident on a statewide scale in 2022. While overall rainfall amounts may have been close to normal, this does not account for geographic variability (Figure 5), which could cause variation in nest or poult survival in different parts of the state (Figure 6).

Based on the low reproductive success over the past 6 years, we expect the 2022 harvest to be similar to 2021. 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.** Estimated poults/brood and poults/hen from the summer sighting survey, 2001-2022. Dashed lines are the ten-year averages (1996-10 and 2011-22).



**Figure 2.** Poults/hen estimates by DEC region, 2017-2022. The 2022 statewide average was 2.65 poults/hen.

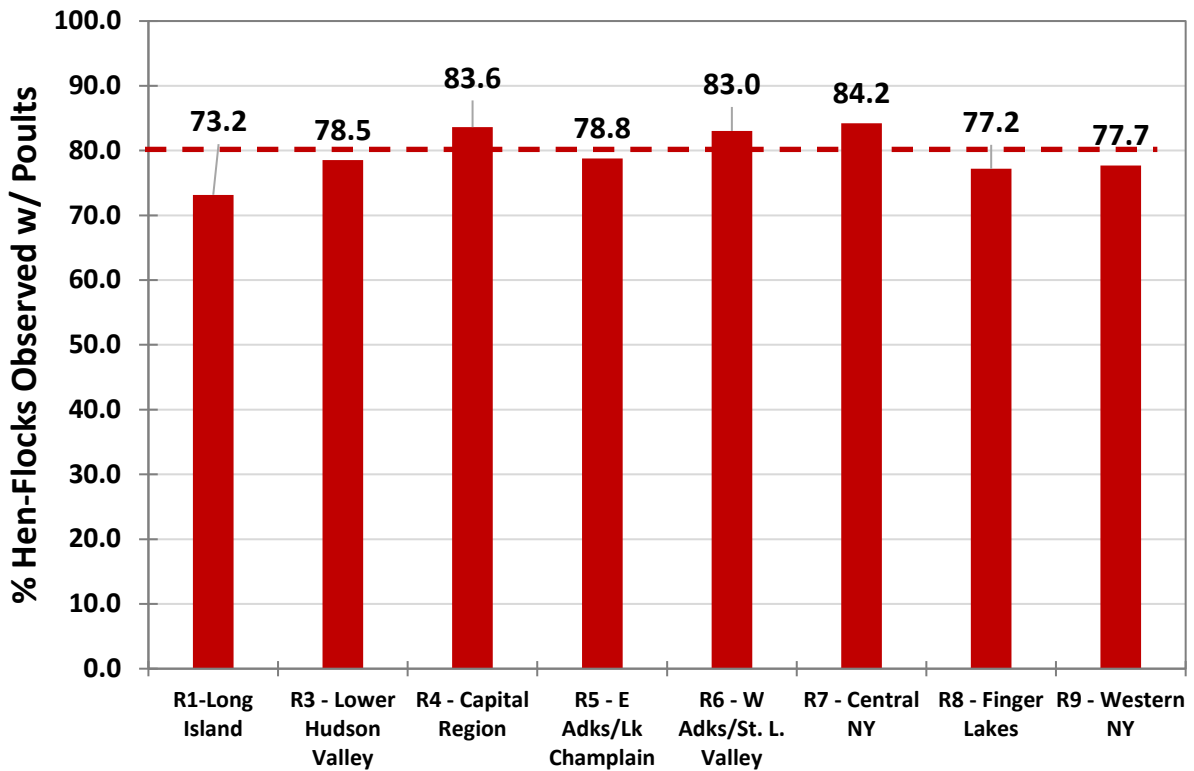


Figure 3. Percent of hen-flocks observed with poults by DEC region, summer 2022. Statewide, 80% of hen-flocks observed had poults (dashed line).

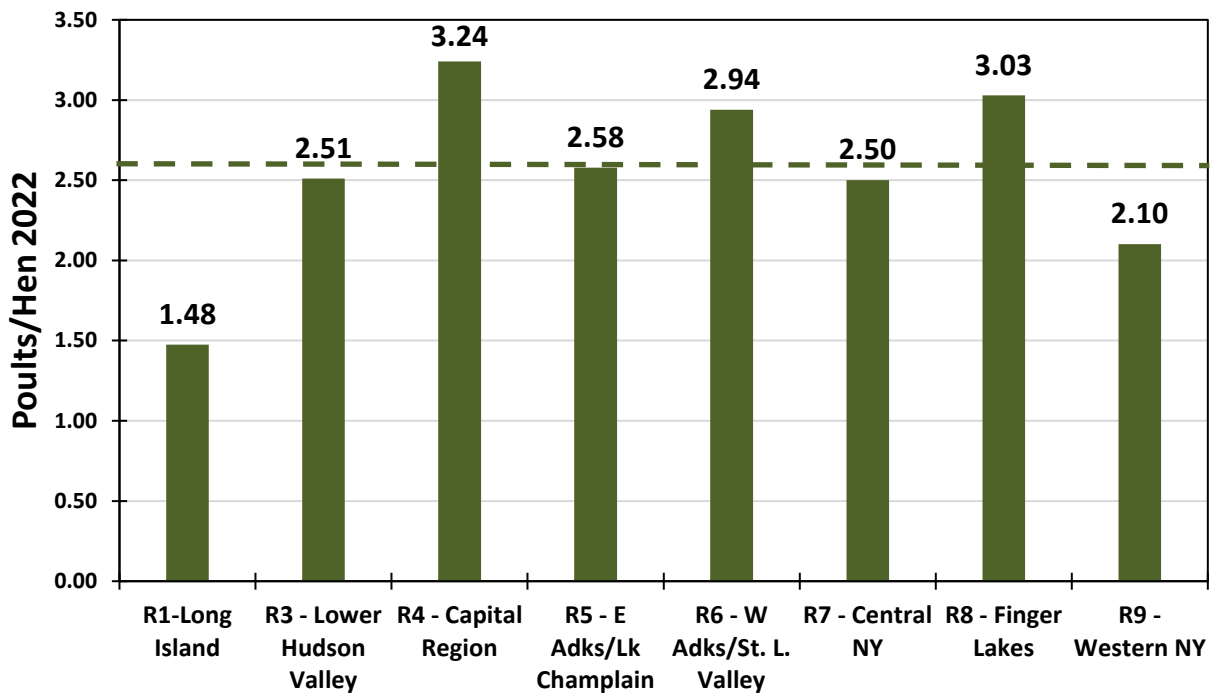
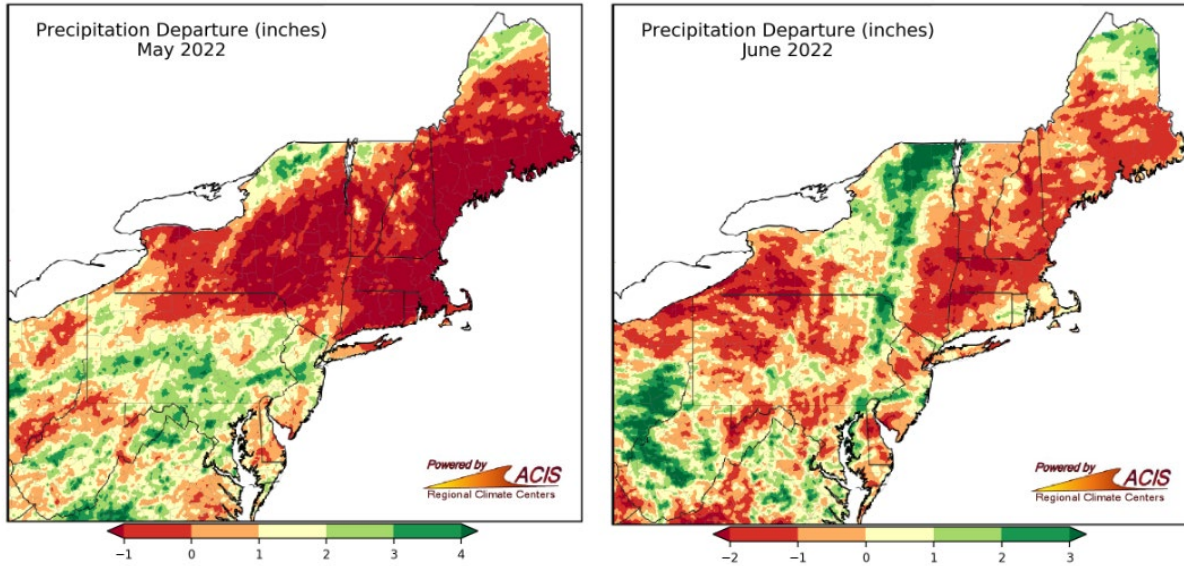
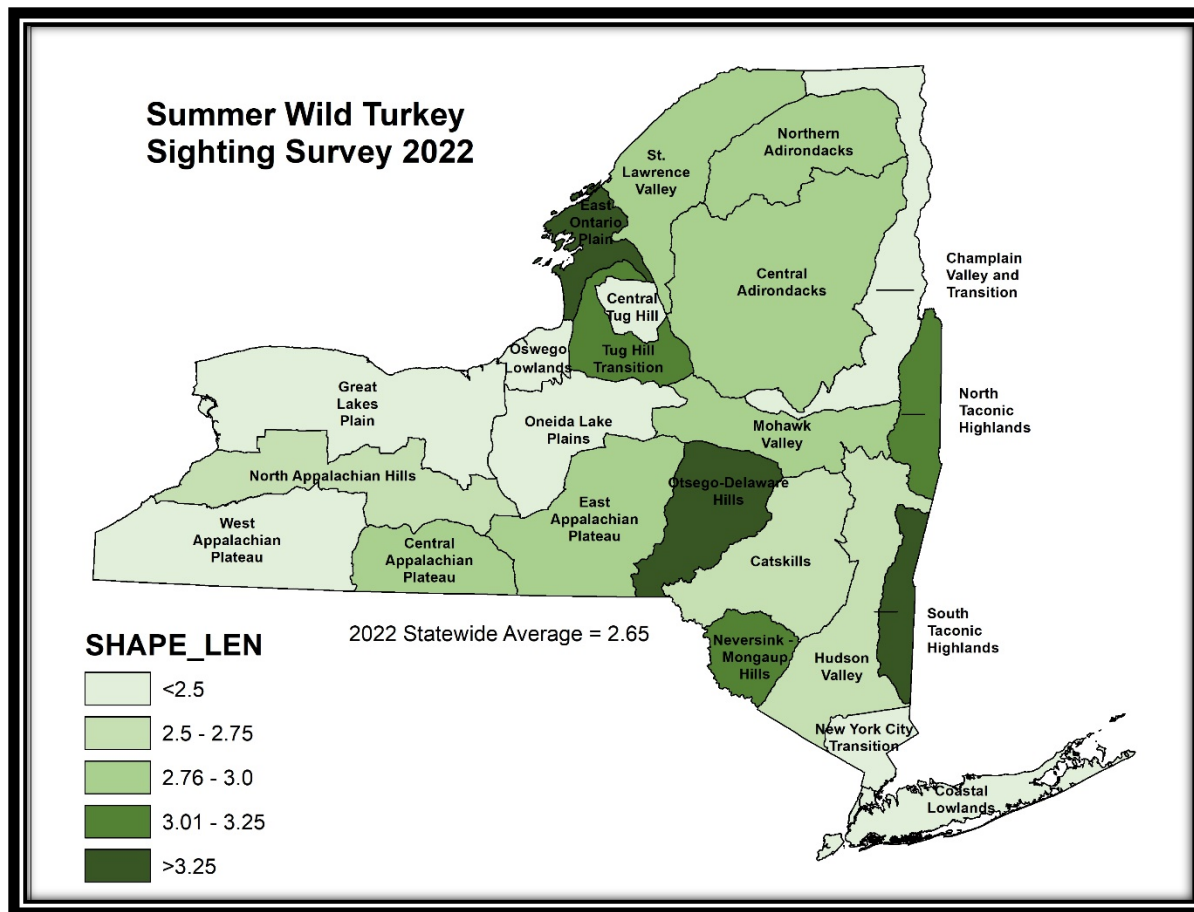


Figure 4. Poults/hen by DEC Region, 2022. The statewide average for 2022 was 2.65 poults/hen (dashed line).



**Figure 5.** Departure from normal rainfall in May (left) and June (right), 2022. Images courtesy of the [Northeast Regional Climate Center](#).



WMU Agg	Poults/Hen	# hen flocks
South Taconic Highlands	4.45	30
Otsego-Delaware Hills	3.30	83
East Ontario Plain	3.27	45
North Taconic Highlands	3.23	30
Tug Hill Transition	3.13	94
Neversink-Mongaup Hills	3.11	23
Northern Adirondacks	2.99	50
Central Appalachian Plateau	2.96	171
Central Adirondacks	2.91	40
Mohawk Valley	2.84	44
East Appalachian Plateau	2.83	135
St. Lawrence Valley	2.82	137
Hudson Valley	2.74	312
North Appalachian Hills	2.71	132
Catskills	2.62	72
Great Lakes Plain	2.44	187
Champlain Valley and Transition	2.27	161
Oneida Lake Plains	2.24	114
West Appalachian Plateau	2.18	80
Central Tug Hill	2.13	4
New York City Transition	1.50	111
Coastal Lowlands	1.48	45
Oswego Lowlands	1.22	16
State	2.65	1767

**Figure 6.** Poults/Hen in Wildlife Management Unit (WMU) aggregates of New York State from the Summer Sighting Survey, 2022. 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 2.65 poults/hen (n=1,767).

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

