

2020 Pennsylvania Wild Turkey Sighting Survey Results

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This annual survey allows us to estimate the number of turkey poults (young of the year) per hen throughout the state; an index of reproductive success. We use this in our turkey population model and to establish fall turkey seasons. This national standardized survey allows direct comparison of reproductive success across states and regions.

Thanks to all volunteers and PGC staff for contributing to this survey!

2020 RESULTS:

We received 3,863 reports (similar to 2019) totaling 17,573 turkey sightings (3,596 sightings by staff + 13,977 by public), up from 16,345 total turkey sightings in 2019 (5,273 sightings by staff + 11,072 by public).

Reproductive Index: 2.7 poults per all hens observed, similar to 2.8 in 2019.

- Reproductive index for the 23 Wildlife Management Units (WMU) compared to 2019 (Table 1):
 - 11 increased
 - 7 decreased
 - 5 similar.

Spring and summer rainfall & cold temperatures affect turkey reproductive success as well as habitat conditions, predation, insect abundance and hen condition. Weather across PA during late spring and summer 2020 were relatively warm and dry, but varied by WMU as well as the other factors which affect reproduction.

Reproductive success varied considerably among the northeastern States (Table 2).

- Lowest in Delaware (1 poult/hen) but sample size was low,
- Highest in Vermont (4.4).
- Large sample sizes in Pennsylvania, New Hampshire, Vermont and New York provided greater confidence for these estimates compared to the other states.

Thanks to the popularity of this survey in Pennsylvania we have high confidence in our estimates. Let's maintain these results in 2021 and even increase participation!

Table 1. Pennsylvania turkey poults seen per all hens seen by Wildlife Management Unit (WMU) and year. Data from 2016-2018 were from the August public & PGC staff sightings surveys. ^a Since 2019 the survey includes July & August.

WMU	2016	2017	2018	2019 ^a	2020
1A	2.6	2.6	2.6	2.6	2.3
1B	2.6	2.4	2.6	2.3	2.8
2A	3.7	2.3	2.5	3.1	1.9
2B	2.6	2.4	2.0	2.8	2.2
2C	3.2	2.7	2.3	2.8	2.7
2D	2.7	2.8	2.1	4.0	2.7
2E	3.4	1.8	2.1	3.1	3.0
2F	3.3	3.1	3.2	2.8	2.3
2G	3.0	3.3	3.0	2.8	3.2
2H	3.4	3.7	3.5	2.8	2.9
3A	3.4	3.2	4.3	2.2	3.6
3B	2.9	3.6	2.5	2.4	3.2
3C	3.1	3.3	2.2	2.8	3.0
3D	2.5	2.4	2.3	2.8	2.3
4A	2.8	2.3	4.2	2.7	3.1
4B	3.4	4.8	3.5	2.8	3.0
4C	2.9	3.4	2.5	2.9	3.4
4D	3.2	2.5	2.8	3.0	3.1
4E	3.6	3.2	2.1	3.0	2.9
5A	2.7	2.7	2.4	2.5	3.1
5B	2.9	2.8	2.7	2.9	2.6
5C	2.5	2.7	2.9	1.4	1.4
5D	1.3	2.4	4.5	1.9	2.0
Unk	3.5	3.9			2.0
State	2.9	2.8	2.6	2.8	2.7

Table 2. Turkey poults seen per all hens seen, summer 2020, in Pennsylvania and surrounding states, and the total observations of turkeys after data filtering.

State	Observations after filtering	Poults per Hen
Delaware	80	1
Maryland	339	1.9
West Virginia	171	2.01
New Jersey	31	2.5
Ohio	248	2.7
Pennsylvania (Agency + Public)	2,742	2.74
New York (Agency + Public)	845	3.35
Rhode Island	274	3.8
New Hampshire	1192	4.02
Maine	167	4.02
Vermont	848	4.4