

**2019
ONLINE SUMMMER BROOD SURVEY
SUMMARY REPORT**

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Introduction

Many thanks to all the people throughout New Hampshire who submitted sightings of wild turkey broods in 2019. The results of the survey summarized here will help the NH Fish and Game Department keep track of the status and reproductive success of the wild turkey population around the state. This was the 9th year of the internet-based turkey brood survey which covers observations made statewide between June 1 and August 31.

Number of Broods Reported

There were 713 brood observation reports from this year’s 2019 Summer Brood Survey (Table 1). As in previous years the most brood sighting reports (438 or 61.43% of the total) were from the Southeast Region, primarily because this region has the highest turkey density and also the highest human density to report turkey broods. The North Region and the White Mountain Region had a combined total of only 5.89% of the statewide total of brood observation reports. This is understandable because these two regions have the least amount of people, and the least amount of turkeys and turkey habitat.

Of the states 18 wildlife management units, those with the most brood sighting reports were from: unit M at 35.62%, unit L at 13.88% and unit K at 11.92% (Table 2).

Table 1. Number and Percent of Brood Observations by Region (Summer 2019)

Region	# of Brood Reports	% of Total	WMU’s Covered
North	28	3.93%	A,B,C1,C2
White Mtn.	14	1.96%	E,F
Conn. River	42	5.89%	D1,D2,G
E. Central	94	13.18%	J1,J2
Southwest	97	13.60%	H1,H2,I1,I2
Southeast	438	61.43%	K,L,M
Statewide	713		

Table 2. Number and Percent of Brood Observations by WMU’s (Summer 2019)

Wildlife Mgt. Unit	Number of Brood Observations	% of Total		Wildlife Mgt. Unit	Number of Brood Observations	% of Total
A	16	2.24%		H1	22	3.09%
B	7	0.98%		H2	26	3.65%
C1	0	0.00%		I1	30	4.21%
C2	5	0.70%		I2	19	2.66%
D1	4	0.56%		J1	14	1.96%
D2	8	1.12%		J2	80	11.22%
E	3	0.42%		K	85	11.92%
F	11	1.54%		L	99	13.88%
G	30	4.21%		M	254	35.62%

Number of Poults Per Hen

The six regions of the state were compared for the month of August because at this time the poults are larger and more readily seen and counted, and most attrition of young turkeys has already occurred. The southwest region had the highest poults per hen average of 4.55. The Connecticut River region had the lowest poults per hen average of 1.47 this year (Table 3).

For the state as a whole, the average was 3.23. This is down compared to last year (4.15) but similar to the previous year in 2017 when poults per hen average was 3.32. The highest average was the first year of the survey in 2011 with 4.38 poults per hen. (Table 4).

Table 3. Regional and Statewide Poults per Hen Average (August 2019)

Region	Number of Hens	Number of Poults	Poults per Hen Average	Number of reports
North	35	130	3.71	15
White Mtn.	14	43	3.07	6
Conn. River	79	116	1.47	30
E. Central	82	255	3.11	32
Southwest	87	396	4.55	38
Southeast	342	1121	3.28	137
(Statewide)	639	2061	3.23	258

Table 4. Statewide Productivity during August 2011-2019

Year	Poults per Hen Average
2011	4.38
2012	3.90
2013	3.33
2014	3.40
2015	3.90
2016	2.97
2017	3.32
2018	4.15
2019	3.23

Estimated Hatching Periods

Hatching began to take place over the Memorial Day holiday into the beginning of June with 20.57% of hatching occurring between May 26 – June 8. The majority of hatching occurred between June 9- June 22 (26.05%) and June 23- July 6 (24.41%) when over half of all young hatched. (Table 5).

Regionally the average hatching varied from June 20 to June 28. The average hatching date statewide was June 22 which is very similar to the previous two years statewide average which was June 20, 2018 and June 21, 2017 (Table 6).

Table 5. Estimated Percentage of Poults Hatched by 2-Week Periods (Summer 2019)

Time period	Total Number of Poults	% of Total
May 1 – May 11	28	0.60%
May 12 – May 25	236	5.03%
May 26 – June 8	965	20.57%
June 9 – June 22	1222	26.05%
June 23 – July 6	1145	24.41%
July 7 - July 20	814	17.35%
July 21 – August 3	205	4.37%
August 4 – August 17	76	1.62%
August 18 – August 31	0	0.00%

Table 6. Regional and Statewide Average Hatching Dates by Year

	North	White Mtn	CT River	E. Central	Southwest	Southeast	Statewide
2011	June 13	June 17	June 15	June 10	June 7	June 7	June 8
2012	June 11	June 14	June 23	June 12	June 12	June 15	June 15
2013	July 7	June 28	June 27	June 23	June 30	June 24	June 25
2014	June 23	June 20	June 22	June 18	June 15	June 20	June 19
2015	June 19	June 16	June 17	June 19	June 20	June 19	June 19
2016	June 29	June 19	June 19	June 19	June 18	June 19	June 19
2017	June 30	June 25	June 26	June 25	June 25	June 19	June 21
2018	June 16	June 19	July 5	June 15	June 23	June 18	June 20
2019	June 27	June 28	June 26	June 24	June 24	June 20	June 22

Towns with the Most Observations

A total of 17 towns reported 10 or more broods during summer 2019. The top three towns were: Dover (29 broods), Londonderry (23 broods) and Bedford (18 broods). All three of these towns are in the southern part of the state where both the turkey population and human population are highest. (Table 7).

There were 18 towns which recorded 100 or more total turkeys (hens and poults combined). The following towns recorded the highest number of turkeys observed (Table 8): Dover (255), Londonderry (236), and Auburn (172).

Table 7. Towns with 10 or More Brood Observations (Summer 2019)

Town	# of Observations		Town	# of Observations
Auburn	11		Londonderry	23
Barnstead	10		Merrimack	15
Barrington	14		Newton	10
Bedford	18		Pelham	11
Concord	13		Salem	13
Derry	14		Seabrook	10
Dover	29		Stratham	13
Goffstown	10		Weare	11
Lebanon	11			

Table 8. Towns with 100 or More Total Turkeys (Hens and Poults) Observed per Town (Summer 2019)

Town	Total Turkeys		Town	Total Turkeys
Atkinson	104		Londonderry	236
Auburn	172		Merrimack	140
Barrington	148		Newton	102
Bedford	110		North Hampton	111
Derry	113		Pelham	108
Dover	255		Salem	129
Fremont	113		Seabrook	132
Goffstown	127		Somersworth	146
Lee	101		Stratham	137

Public Attitudes Towards Wild Turkeys

Public attitudes towards wild turkeys remains high across the state. No respondents indicated that they strongly disliked turkeys. The majority of respondents continue to feel favorably toward turkeys with 92.57% indicating they either like or strongly like seeing wild turkeys in New Hampshire.

Symptoms of Avian Pox and LPDV Virus

Reports of turkeys displaying symptoms of Avian Pox or Lymphoproliferative Disease Virus (LPDV) remained low this year. Only 2 symptomatic turkeys were reported for summer 2019. The pox reports from past years have been: 2014 (5), 2015 (11), 2016 (6), 2017 (4), and none during 2018.

Conclusions

- There were 713 brood observation reports in summer 2019. Most of the reports or 438 (61.43%) were from the Southeast Region.
- For the state as a whole, the average productivity was 3.23 poults per hen. This is down compared to last year (4.15) but similar to the previous year in 2017 when poults per hen average was 3.32.
- The average hatching date statewide was June 22 which was very similar to the previous two years. (June 20 and June 21).
- A total of 17 towns reported 10 or more broods during summer 2019 and 18 towns recorded 100 or more total turkeys (hens and poults combined). Towns with the highest number of turkeys reported include: Dover (255), Londonderry (236), and Auburn (172).
- Public attitudes towards wild turkeys remains high. An overwhelming 92.57% of respondents like or strongly like wild turkeys.
- Incidents of avian pox and LPDV remain low. Only 2 reports indicated symptomatic turkeys were observed.