

2020
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 2020. 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 10th 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 1,474 brood observation reports from this year's 2020 Summer Brood Survey (Table 1). As in previous years the most brood sighting reports (806 or 54.68% 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 5.83% 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 27.27%, unit J2 at 16.01% and unit L at 13.77% (Table 2).

Table 1. Number and Percent of Brood Observations by Region (Summer 2020)

Region	# of Brood Reports	% of Total	WMU's Covered
North	36	2.44%	A,B,C1,C2
White Mtn.	50	3.39%	E,F
Conn. River	111	7.53%	D1,D2,G
E. Central	290	19.68%	J1,J2
Southwest	181	12.28%	H1,H2,I1,I2
Southeast	806	54.68%	K,L,M
Statewide	1,474		

Table 2. Number and Percent of Brood Observations by WMU's (Summer 2020)

Wildlife Mgt. Unit	Number of Brood Observations	% of Total		Wildlife Mgt. Unit	Number of Brood Observations	% of Total
A	16	1.09%		H1	33	2.24%
B	9	0.61%		H2	62	4.21%
C1	5	0.34%		I1	52	3.53%
C2	6	0.41%		I2	34	2.31%
D1	14	0.95%		J1	54	3.66%
D2	30	2.04%		J2	236	16.01%
E	15	1.02%		K	201	13.64%
F	35	2.37%		L	203	13.77%
G	67	4.55%		M	402	27.27%

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 East Central region had the highest poults per hen average of 2.5. The Southeast region had the lowest poults per hen average of 1.98 this year (Table 3).

For the state as a whole, the average was 2.13 poults per hen which is the lowest in the past 10 years since the survey began. This is down for the third consecutive year compared to 3.23 poults per hen in 2019 and 4.15 poults per hen in 2018. 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 2020)

Region	Number of Hens	Number of Poults	Poults per Hen Average	Number of reports
North	32	77	2.41	19
White Mtn.	55	135	2.45	26
Conn. River	166	376	2.27	72
E. Central	285	712	2.50	119
Southwest	222	449	2.02	81
Southeast	887	1,753	1.98	340
(Statewide)	1647	3,502	2.13	657

Table 4. Statewide Productivity during August 2011-2020

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
2020	2.13

Estimated Hatching Periods

The majority of hatching occurred between June 9- June 22 (24.70%) and June 23- July 6 (24.52%) when nearly half of all young hatched. Hatching continued into July with 18.29% occurring between July 7-20 (Table 5).

Regionally the average hatching varied from June 19 to July 1. The average hatching date statewide was June 23 which is very similar to the previous year the statewide average which was June 22 (Table 6).

Table 5. Estimated Percentage of Poults Hatched by 2-Week Periods (Summer 2020)

Time period	Total Number of Poults	% of Total
May 1 – May 11	19	0.31%
May 12 – May 25	515	8.31%
May 26 – June 8	1,024	16.53%
June 9 – June 22	1530	24.70%
June 23 – July 6	1519	24.52%
July 7 - July 20	1133	18.29%
July 21 – August 3	377	6.09%
August 4 – August 17	78	1.26%
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
2020	July 1	June 29	June 19	June 19	June 26	June 23	June 23

Towns with the Most Observations

A total of 14 towns reported 20 or more broods during summer 2020. The top three towns were: Auburn (48 broods), Manchester (47 broods) and Londonderry (36 broods). All three of these towns are in the southeastern part of the state where both the turkey population and human population are highest. (Table 7).

There were 27 towns which recorded 100 or more total turkeys (hens and poults combined). The following towns recorded the highest number of turkeys observed (Table 8): Londonderry (354), Manchester (347), Bedford (290), Auburn (291) and Bedford (290).

Table 7. Towns with 20 or More Brood Observations (Summer 2020)

Town	# of Observations		Town	# of Observations
Alton	31		Goffstown	25
Auburn	48		Hooksett	22
Barnstead	22		Lisbon	22
Bedford	32		Londonderry	36
Dover	20		Manchester	47
Epsom	22		Merrimack	24
Gilford	21		Pittsfield	20

Table 8. Towns with 100 or More Total Turkeys (Hens and Poults) Observed per Town (Summer 2020)

Town	Total Turkeys		Town	Total Turkeys
Alton	204		Hampstead	127
Amherst	103		Hollis	127
Auburn	291		Hooksett	157
Barnstead	270		Hudson	186
Barrington	130		Lee	143
Bedford	290		Lisbon	193
Canterbury	112		Londonderry	354
Concord	148		Manchester	347
Derry	132		Merrimack	183
Dover	145		New Boston	112
East Kingston	134		Pittsfield	175
Epsom	147		Weare	106
Gilford	159		Wolfeboro	154
Goffstown	191			

Public Attitudes Towards Wild Turkeys

Only 2 of 1,474 (0.14%) respondents strongly disliked turkeys. The majority of respondents (92.5%) continue to feel favorably toward turkeys with 1,365 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 2020. Reports from past years have been: 2014 (5), 2015 (11), 2016 (6), 2017 (4), 2018 (0) and 2019 (2).

Conclusions

- There were 1,474 brood observation reports in summer 2020. Most of the reports or 806 (54.68%) were from the Southeast Region.
- For the state as a whole, the average was 2.13 poults per hen which is the lowest in the past 10 years since the survey began. This is down for the third consecutive year compared to 3.23 poults per hen in 2019 and 4.15 poults per hen in 2018.
- The average hatching date statewide was June 23 which is very similar to the previous year the statewide average which was June 22
- The most brood reports were from the 27 towns with the three highest being: Londonderry (354), Manchester (347) and Bedford (290). Each of these is a city in the southeastern part of the state where both turkeys and humans are numerous.
- Reports of avian pox continue to remain low. Only 2 reports indicate turkeys with signs of avian pox were observed.
- An overwhelming 92.5% of respondents like or strongly like wild turkeys.