2022 ONLINE SUMMBER 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 2022. 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 12th 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 1,094 brood observation reports from this year's 2022 Summer Brood Survey (Table 1). As in previous years the most brood sighting reports (552 or 50.5% 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 79 broods observed or 7.2% of the statewide total of brood observation reports. This is understandable because these two regions have the least amount of suitable turkey habitat, fewer turkeys and fewer people to report them.

Of the states 18 wildlife management units, those with the most brood sighting reports were from: unit M at 24.41%, unit J2 at 16.54% and unit L at 14.90% (Table 2).

Table 1. Number and Percent of Brood Observations by Region (Summer 2022)

Region	# of Brood Reports	% of Total	WMUs Included
North	26	2.4%	A,B,C1,C2
White Mountain	53	4.8%	E, F
CT River	61	5.6%	D1,D2,G
E. Central	223	20.4%	J1, J2
Southwest	179	16.4%	H1,H2,I1,I2
Southeast	552	50.5%	K, L, M
Statewide	1094		All

Table 2. Number and Percent of Brood Observations by WMU's (Summer 2022)

WMU	# of Brood	% of		WMU	# of Brood	% of
	Observations	Total			Observations	Total
A	9	0.82%		H1	25	2.29%
В	4	0.37%		H2	85	7.77%
C1	7	0.64%		I1	43	3.93%
C2	6	0.55%		I2	26	2.38%
D1	6	0.55%		J1	42	3.84%
D2	12	1.10%		J2	181	16.54%
Е	14	1.28%		K	122	11.15%
F	39	3.56%		L	163	14.90%
G	43	3.93%	•	M	267	24.41%

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 North Region had the highest poults per hen average of 5.59. The White Mountain region had the lowest poults per hen average of 1.52 this year. Both regions had relatively low sample sizes with 10 and 9 reports respectively (Table 3).

For the state as a whole, the average was 3.22 poults per hen which is up compared to the previous two years when 2.95 poults per hen were reported in 2021 and only 2.13 poults per hen were reported in 2020. The highest average on record was 4.38 poults per hen reported during 2011 which was the first year of the survey (Table 4).

Table 3. Regional and Statewide Poults per Hen Average (August 2022)

Region	# of Hens	# of Poults	Poults per Hen Average	# of Reports
North	27	151	5.59	10
White Mountain	25	38	1.52	9
CT River	97	205	2.11	17
E. Central	143	454	3.17	52
Southwest	110	357	3.25	41
Southeast	300	1055	3.52	114
Statewide	702	2260	3.22	243

Table 4. Statewide Poults per Hen Average by Year

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
2021	2.95
2022	3.22

Estimated Hatching Periods

Statewide, over half (60%) of all hatching occurred within one month period from May 26th through June 22nd. The most hatching occurred during the following 2-week periods: May 26 - June 8 (32.60%), June 9 - 22 (27.40%) and June 23 - July 6 (13.53%). This is consistent with timing of hatching last year. Hatching continued throughout July and August which is likely due to hens renesting (Table 5).

Regionally the average hatching varied from June 1 to June 13. The average hatching date statewide was June 11 which was the earliest average hatch date recorded in the past 10 years.

Table 5. Estimated Percentage of Poults Hatched by 2-Week Periods (Summer 2022)

Time Period	Total Number of Poults	% of Total
May 1 – May 11	45	0.56%
May 12 – May 25	858	10.75%
May 26 – June 8	2602	32.60%
June 9 – June 22	2187	27.40%
June 23 – July 6	1080	13.53%
July 7 – July 20	799	10.01%
July 21 – August 3	297	3.72%
August 4 – August 17	68	0.85%
August 18 – August 31	46	0.58%

Table 6. Regional and Statewide Average Hatching Dates

Region	North	White	CT River	E. Central	Southwest	Southeast	Statewide
		Mtn					
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
2021	June 22	June 18	June 22	June 12	June 18	June 15	June 15
2022	June 9	June 1	June 10	June 13	June 10	June 12	June 11

Towns with the Most Brood Observations

Reports were received from a total of 203 towns in 2022 which is down compared to last year when 239 towns reported observations. A total of 7 towns reported 15 or more broods during summer 2022. The top towns were: Londonderry (30), Alton (20) and Bedford, Deerfield and Hooksett reported 19 broods each (Table 7).

There were 6 towns that recorded 175 or more total turkeys (hens and poults combined). The following towns recorded the highest number of turkeys observed: Londonderry (264), Deerfield (226), Hooksett (222) Alton (199), Bedford (178) and Epsom (176) (Table 8).

Table 7. Towns with 15 or More Brood Observations (Summer 2022)

Town	Total # of Reports
Londonderry	30
Alton	20
Bedford	19
Deerfield	19
Hooksett	19
Dover	18
Epsom	17

Table 8. Towns with 175 or More Total Turkeys (Hens and Poults) Observed per Town (Summer 2022).

Town	Total # of turkeys
	Reported
Londonderry	264
Deerfield	226
Hooksett	222
Alton	199
Bedford	178
Epsom	176

Public Attitudes Towards Wild Turkeys

Only 2 of 1,094 respondents strongly disliked turkeys. The majority of respondents (94.5%) continue to feel favorably towards wild turkeys with 1,034 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) were up this year compared to last but still remained low. Only 13 symptomatic turkeys were reported for summer 2022. Reports from past years have been: 2014 (5), 2015 (11), 2016 (6), 2017 (4), 2018 (0), 2019 (2), 2020 (2) and 2021 (3).

Conclusions

- There were 1,094 brood observation reports in summer 2022 with the majority of the reports being from the southeastern part of the state where both the turkey and human populations are highest.
- The statewide annual productivity for summer 2022 was 3.22 poults per hen which is up from the previous two years when 2.95 pph were reported in 2021 and 2.13 pph were reported in 2020.
- Over half of all hatching occurred over a one month period between May 26 June 22. The average statewide hatch date was June 11 this year which is the earliest average hatch date recorded in the past 10 years.
- Six towns reported totals exceeding 175 turkeys (hens and poults combined) this year. The most turkeys were from the towns of: Londonderry (264), Deerfield (226) and Hooksett (222).
- Public attitudes towards turkeys remain high 94.5% of respondents like or strongly like seeing turkeys on the landscape; and incidents of turkey viruses remained low with 13 reports of symptomatic turkeys this year.