

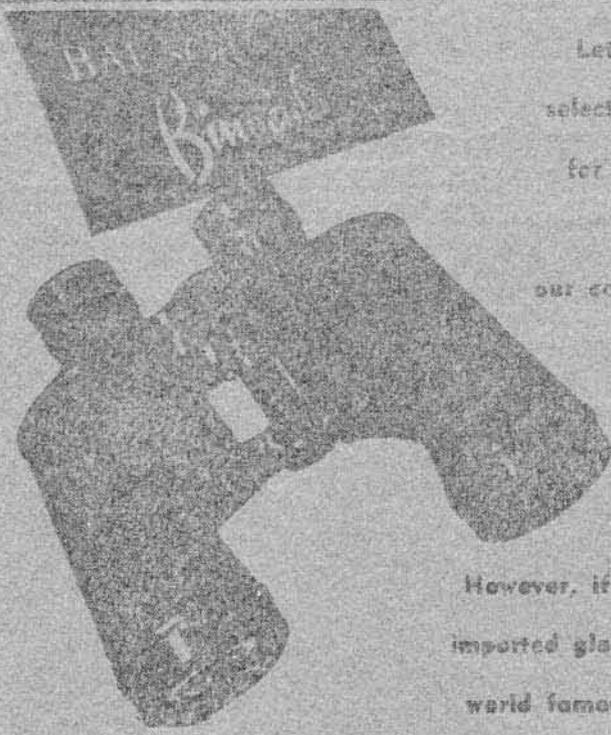
THE MIGRANT

A QUARTERLY JOURNAL
DEVOTED TO TENNESSEE BIRDS

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DECEMBER
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ANNUAL AUTUMN HAWK COUNT 1961

By THOMAS W. FINUCANE

The 1961 count of the migration of hawks southbound through Tennessee gave a total of 6000, of which about 95% were Broad-winged Hawks. This is the third largest total compiled by the Tennessee Ornithological Society in 12 consecutive fall counts. In 1959 we had 11,000 and in 1960 we had 10,000. The combined count for 12 years is about 50,000. More than half of this total was compiled in the last three counts.

An outstanding feature of the 1961 project was that 10 Bald Eagles were reported. Five of these were seen at the Rogersville-Kyles Ford lookout, four at Elder Mt., and one at the Mendota Fire Tower, in all cases by experienced observers. In 1959 we had six Bald Eagles and three Golden Eagles. Excluding 1959 and 1961, the average count has been two Bald Eagles; only one Golden Eagle had been reported before 1959.

The higher totals for the project in the last three years can be attributed to increased interest and participation in the T.O.S. hawk study. Besides adding to the size of the record, increased participation provides better coverage of the area and gives the project the benefits of the talents of a greater variety of observers.

In particular, there is a report this year from Oliver Irwin, about 400 hawks, based on 65 consecutive days of observation in Memphis. His observations were made in an area where heavy flights are not seen, but the variations in the numbers of hawks with changes in the weather were carefully detailed and present an interesting picture. The data show five peaks, all coinciding with passages of cold fronts. The period covered begins Sept. 25, when a cold front passed across Tennessee, and extends to November 29. It includes the last part of the Broad-wing migration and gives an account of Red-tailed migration through the heart of Memphis. These are the only data we have had on hawk movement after the middle of October.

The Elder Mt. Lookout, manned by the Chattanooga group, recorded 1814 hawks on Sept. 17, the largest day's total for any lookout this year. The season's total for Elder Mt. was nearly 3000. Last year 4985 hawks were counted there, Sept. 25. Results for the past six years show that Elder Mt., where Adele West established a hawk lookout for the Chattanooga area, can be considered the best place to count hawks in the T.O.S. project area and the best place for Broad-wings anywhere south of Pennsylvania.

Some of the factors which make a good lookout are: geographical location, geophysical features, and good observers. It would not be unreasonable to argue that the geographical factor gives Elder Mt. an advantage over stations east of Knoxville. The argument would take into account

the flights that pass north of the Mendota Fire Tower and other stations near the east end of Tennessee, but avoid migration routes very far west of Chattanooga, which seem to be less attractive to the Broad-wings. Elder Mt. could then be considered to be in a geographical funnel.

Since Broad-wings fly across Pennsylvania in large numbers, headed for Mexico, some stations in the latitude of Tennessee are obviously closer than others to the average center of the flight line. In the long run we may be able to determine where the center of the flight stream is located. The outstanding contributions from Elder Mt., especially over the last three years, may be related to the peculiar atmospheric conditions during the period. Observations above 4000 ft. have been unaccountably poor during the last four years, as pointed out by Fred Behrend. Elder Mt. is 1880 ft. If for some reason the Broad-wings have been avoiding the higher mountains in recent years, their flights would be more concentrated in lower terrain, and this would be a factor in the larger counts we have had.

It is possible, furthermore, that as the season progresses, the tendency for the flights to avoid the high mountains increases. Fred Behrend reported a small flow of Broad-wings during the last week of August, spotted during noon-hour observations along Holston Mountain this year. In previous years he has reported August flights also in the Elizabethton area. In contrast, flights of Broad-wings in the second week of October have been reported from Knoxville and Chattanooga.

Aside from the geographical factor, the ideal place to see good Broad-wing flights should be from a mountain with a well defined ridge, not too long, and with steep sides. Such a lookout provides updrafts for the hawks and visibility for the observers. It should be taller than other peaks in the area, to minimize the effect of alternative routes which would deprive the observers of some of their hawks. Chimney Top, between Kingsport and Greeneville, should be very good, on the basis of these criteria. Haytor's Knob, in Virginia, is another example. We hope to give them more attention in the next few years.

Oliver Irwin's observations from a rooftop in Memphis demonstrate another kind of lookout, not far from the Mississippi River, which he has shown to be better than many of our mountain lookouts. The largest flights (20,000 hawks in one day) are recorded near the shores of the Great Lakes.

The peak date for Broad-wing flight across Tennessee is between Sept. 21 and 22. This year, however, the count reached 62% of its total on Sept. 17. Even without the 1809 Broad-wings recorded at Elder Mt. that day, the count would have reached 48% earlier than in any previous year.

The passage of cold fronts across Tennessee occurred on Sept. 14 and 25, according to the version of the daily weather map published in the New York Times. During most of the month a warm air mass occupied eastern United States. There was very little rain in East Tennessee. The frontal system bordering the warm air mass advanced and retreated repeatedly, and several cold fronts crossed New England during September before the Sept. 14 front, which crossed the entire eastern area of North America and advanced across Tennessee from west to east.

This front was followed, Sept. 15, 16, and 17, by 60% of the Broad-wings listed in this year's T.O.S. report. On Sept. 15, Maxie Swindell counted 729, all she was able to count in a large flight that was streaming through the clouds overhead, just west of Knoxville. Furthermore, an

estimated 1000 hawks (reduced to 300 Broad-wings for inclusion in this summary) were seen near Rutledge, not far east of Knoxville. The big flight recorded at Elder Mt., Sept. 17, was two days after Mrs. Swindell's observation and three days after the front. Also on Sept. 17, the Clinch Mt. lookout north of Rogersville had its best day of the season, with 275 Broad-wings and two Bald Eagles. The Mendota Fire Tower had 138 Broad-wings on Sept. 16 and 125 on Sept. 17. McQueen's Knob recorded 18 Broad-wings on Sept. 16, in contrast to zeros for Sept. 9 and 18. Feathercamp Fire Tower listed 23 Broad-wings on Sept. 16, its best contribution so far. Rich Mt. had 61, and the Union County Lookout, on Clinch Mt., had 12 Broad-wings on Sept. 17. Thus, all stations had something to report in connection with the passage of the cold front on September 14.

The counts on Clinch Mt., however, at Mendota, Kyles Ford, and Union County, were not high compared to many counts made along the Clinch in years past. Furthermore, on the Mendota Fire Tower lookout, Sept. 15, one day after the passage of the front, Mrs. Switzer reported a total of only 13 Broad-wings, 1 to 4 p. m.

The Sept. 25 front passed across Tennessee a little east of southeast. On that day Holmes Rolston recorded 442 Broad-wings, a steady stream from early morning to late afternoon and, except for the 1959 flights, the highest total ever recorded on the Mendota Fire Tower lookout. The average for the two previous days at this lookout was 161 Broad-wings. On September 26 Elder Mt. recorded 322. Since it is well established that bird migration is related to the movements of cold fronts, it would be simple to conclude that these Sept. 25 and 26 maxima were caused by the Sept. 25 front. If this were correct, it would suggest, from the Mendota data, that there could be an increase in the flight well before the arrival of the front. This might be a reasonable concept were it not for the fact that the front was traveling east and the Broad-wings west.

The much more definite effects of the Sept. 14 front were one day late in Knoxville and three days late in Chattanooga (Elder Mt.). To accumulate hawks in such large numbers the front would have had to move them eastward, because the front was moving eastward. As explained earlier (*THE MIGRANT* 31, 2, 1960) there is a limit to how far the hawks can afford to move to the east, in exchange for a quick trip south, the limit depending on how far south they are. The Chattanooga flight lost contact with the front three days to the northeast and the Knoxville flight one day before the hawks were sighted, according to the data.

Oliver Irwin received a communication from the Hawk Mt. Sanctuary, Pennsylvania, which he quoted as follows:

"Poorest hawk flights in history due to static high throughout the East."

Evidently conditions to the north were even worse than in 1959, the year the T.O.S. project had its best count. The phenomena which were the basis of our explanation for our good results in 1959 did not operate in 1961, according to the weather maps, and consistent with this difference, there was no spectacular entry of Broad-wings into our territory from the east this year. Furthermore, our 1961 count, although good, was 45% below our 1959 count. A similar drop in the Hawk Mt. count, below their low 1959 figure, would be more than enough to give them the worst year in the history of record keeping at Hawk Mountain.

In summary, it can be said that the 1961 hawk count has been particularly interesting. The Chattanooga group made an outstanding contribution, not only because of the big count on Sept. 17 but also because of nearly continuous coverage between Sept. 17 and Oct. 1. Oliver Irwin made an outstanding contribution. The Bristol Chapter did some good observing mainly at stations where the count is low but, nevertheless, significant. Meteorological and other factors beyond our control contributed in the right way to make the survey more interesting, interpretation fairly simple, and the weather fine. The advantages of our area for studying Broad-wing migration continue to be convincingly demonstrated.

NOTES

(The item numbers correspond with the numbers in the column in the table).

2. This entry combines three reports from Fred Behrend's noon-hour counts: 5, 4, 4, 1, 6, Broad-wings, on Aug. 28, 29, 30, 31, and Sept. 1.

3. This entry combines 5 Broad-wings, Sept. 5, and 5, Sept. 6.

12. Maxie Swindell sent the following note: "Friday, Sept. 15.; time was from 10 a. m. until noon. Temperature was 54 at 7 a. m. and 70 at 3 p. m. Wind at tree level was from the north at about 8-12 m.p.h. The sky was clearing (no rain at all here that day) after several days of unsettled weather. Puffy clouds, not too high, were tumbled southward by a stronger wind current than the one at tree level. Hawks were visible through the breaks in the clouds — now seen, now obscured, but clouds and birds were moving swiftly southward. It was easy to recognize silhouettes without glasses at the flight level, and markings were clearly visible with glasses. I counted 729, but one person could not possibly count them all. I estimated about 96% of the ones counted were Broad-wings, but there were a few Red-tailed, Red-shouldered, Cooper's, Sharp-shinned, and Sparrow Hawks. All were using the tailwind to full advantage: the birds' wings were spread, and the wind carried them along; very rarely were the tips of a pair of wings just faintly crooked."

Last year Holly Overton saw 643 hawks not far from the scene described above.

14. This report was received from Tanner, via Howell, who reported that someone had seen "1000 hawks" in the Rutledge area (east of Knoxville). Although the number may very well have been more than 1000, it was reduced to 300 Broad-wings in the interest of caution.

15. The Bald Eagle was an adult. It wheeled around and around at eye level about a half mile out over the valley to the south of the Mendota Fire Tower, 9:15 a. m.

16. The Osprey was seen by Wallace Coffey on his trip home.

17. This report and the last one were the most productive of results of the series of six included as part of a program organized by the Bristol Chapter and directed by Wallace Coffey. The object in part was to compare Feathercamp, McQueen's, and Holston with other lookouts. Sept. 16, after the front, was distinctly better at these lookouts.

18. The flight started before 9 a. m. and totaled 68 before 9:30. For the next hour the count was only 8. Between 11:30 and noon, 996 Broad-wings were counted, and 424 in the next hour. From 1:00 to 2:30 not a single Broad-wing was recorded, but 225 were counted between 2:30 and 3:00, when the flight stopped, although the observers remained until 5:00.

20 & 21. Two lookouts manned by the Greeneville Chapter, Sept. 17. In both cases, the hawks were flying early in the morning, and none was seen after noon. At the fire tower north of Rogersville, the hawks were seen in two groups, with none between 10:00 & 11:00.

22. All hawks seen in the morning. None from noon until 4:30.

23. Holmes Rolston reported: "Unidentified birds between 11 and 11:30 were large hawks, and I am pretty sure not buteos or accipiters. The two flew together over the mountains for some minutes, turning, circling, and although I could see that they were brownish, I could not make an identification."

29. Enno VanGelder reported: "Many small birds were migrating over ridge (mostly east to west). Black-throated Blue Warblers were definitely identified; also Goldfinches, Vireos, and Nuthatches were heard.

35. Sept. 25, the best day at the Mendota Fire Tower, 453 hawks counted by Holmes Rolston. "Weather at the start was clear and sunny, an almost cloudless sky. Birds were already flying when I got to the tower. From here on through the mid morning the hawks flew low, well below the horizon, in singles and groups of up to 8, all along a well-defined path east to west over the south side of the mountain, fairly close in."

Noon: "These 75 were all in one long flight, very high overhead. There may have been more; the leading birds were nearly past before I spotted them, in a long chain which must have extended easily one mile along the mountain ridge."

Between 9:30 and 3:30 there was only one ½-hr. period with less than 10 Broad-wings. By 12:30 the flight had become so high that "they were mere specks to the unaided eye". By 3:00 they were flying low again.

Mr. Rolston and Mrs. Swindell (Note 12) reported they saw Chimney Swifts attacking Hawks.

36. This is the first of 65 consecutive days of observation by Oliver Irwin, who has been a student of bird migration and its relation to weather for a number of years, but this is his first substantial contribution to the T.O.S. hawk project. In addition to its being only the second report that has come from Memphis, it contains many interesting features. One is the close coincidence between the presence of hawk flights and the occurrence of frontal weather. Another is the migration of the Red-tailed Hawk, which flies through the Hawk Mt. Lookout in large numbers in November and December, but its late migration has never been part of our report before. Although Mr. Irwin's report is much condensed in this summary, the original material is on file as part of our permanent record.

The following is quoted from Oliver Irwin's communication: "Observation from a roof-top in the center of Memphis daily during noon hours, 9/25 to 11/19. A total of 378 southwardly migrating hawks were recorded in approximately 150 passages on 15 days of active migration on 65 days of observation. No hawks were recorded on 12 days with strong opposing southerly winds, 15 days with low-hanging clouds, 9 of which were very rainy, 14 days of clear, cold weather following frontal systems. Good flights preceded cooler weather, ending abruptly when clearing skies moved across the area.

"Most hawks in Sept. were Broad-winged. I don't know when the last one was seen here. Most hawks after 10/13 were Red-tailed. I don't know when the first was seen here. Marsh Hawks and Red-shouldered were seen in lesser numbers. None was seen on clear, bright days after fronts although daily checks were made from 10 to 2 p. m."

HAWK OBSERVATIONS FALL OF 1961

No.	Date	Ob.	h.	Lookout	All.	Wind	F	Sky	Shrp	Coop	Rdfl	Rdsh	Brdw	Mrsh	Ospr	SpH	BEgl	Uni- dent
1	8/27	B-D	4	Jane Bald		..	..	FR	3	..	2	..	..	1	..	1	..	..
2	30	B	3	Near Eliz.	2000	..	..	..	..	..	..	..	20	..	..	1	..	3
3	9/5	B	2	Near Eliz.	2000	..	..	..	..	..	..	..	10	..	..	..	..	1
4	4	HR	2	Mendota FT	3000	0-2 N	w	MB	..	2	..	..	..	..	..	..	..	2
5	9	F	8	Mendota FT	3000	2-4 E	hot	BH	5	..	2	..	6	..	..	..	..	2
6	9	RG	4	Holston FT	4350	2-4 SE	6-7	VC	..	..	..	..	..	..	..	..	..	..
7	9	Co	6	McQueens FT	3885	0-4 ESE	6-8	CC	..	..	..	..	..	..	..	..	..	1
8	10	W-L	5	Elder Mt.	1880	3-4 SE	..	BC	..	..	..	..	..	1	2	..	..	3
9	10	F	6	Mendota FT	3000	2 SSE	8	BH	..	..	3	..	4	..	..	..	..	1
10	11	RG		Bristol	1700	..	..	..	..	..	..	..	21	..	..	..	..	..
11	11	HR	3	Mendota FT	3000	0-1 var	w	PC	..	1	2	1	21	..	..	..	..	..
12	15	MS	2	West Knox		3 N	5-7	PC	..	..	..	..	700	..	..	..	..	29
13	15	Sw	3	Mendota FT	3000	var N	7	BC	..	..	1	..	13	..	..	..	..	..
14	16			Rutledge		..	..	..	..	..	..	..	300	..	..	..	..	..
15	16	F	9	Mendota FT	3000	3-5 E	4-5	S	1	..	1	..	138	..	2	..	1	2
16	16	Co	3	Feathercamp	3700	3-4 E	4-5	S	..	..	..	..	23	..	(1)	1	..	..
17	16	A-K	5	McQueens	3885	5-6 N	4-6	S	..	..	..	..	18	..	..	..	..	..
18	17	WLC	8	Elder Mt.	1880	E	..	S	..	..	..	..	1809	..	..	..	..	5
19	17	T	4	Clinch, U. Co.	2100	2-3 E	6-7	CC	1	..	..	..	12	..	..	..	..	..
20	17	D-C	3	Rich Mt. FT		4 NNE	6	BH	..	1	..	2	61	..	..	..	..	2
21	17	N	5	Rogvl FT	3000	6 E	7	PC	..	1	..	..	275	..	1	..	2	..
22	17	F	8	Mendota FT	3000	4-6 E	..	S	..	..	1	..	125	..	1	..	..	..
23	18	HR	4	McQueens	3885	0-4 SE	co	CC	..	..	..	..	..	1	1	..	..	5
24	19	L		Elder Mt.	1880	..	..	..	..	..	..	..	220	..	..	..	..	..
25	21	C	5	Lookout Mt.	2000	3 SW	..	CC	..	..	..	..	118	..	..	..	..	..
26	21	CC	6	Elder Mt.	1880	3 SW	..	CC	..	..	..	..	3	..	..	..	..	..
27	23	XX	8	Elder Mt.	1880	2 ESW	..	..	..	..	..	..	41	1	..	..	2	8
28	23	YY	8	Mendota FT	3000	1	6-8	CC	..	4	2	..	111	..	..	3	..	4
29	23	RG	5	McQueens	3885	2-5 NW	7	SC	..	..	..	..	..	..	..	..	..	3
30	23	CoB	3	Feathercamp	3700	0-2 N	7	CO	..	..	..	..	..	..	..	..	..	..
31	24	WLC	8	Elder Mt.	1880	0-2 var	..	CC	..	..	1	..	116	..	..	..	2	8

32	24	Gvl	5	Rogrsvl FT	3000	0-6 NW	9	SC	5	1				102		1	3	7													
33	24	F	8	Mendota FT	3000	0-3 NE	8	S	1	2	1	1		211				3													
34	25	L		Elder Mt.	1880									79																	
35	25	HR	7	Mendota FT	3000	0-2 S&W	w	S	5	2		1	442	1		1		2													
36	25	I	3	Memphis 14			6-8	Cl					14																		
37	26	I	6	Memphis 14		3 N	5-8	PC	1				71					4													
38	26	CLT	5	Elder Mt.	1880	2 E							322					1													
39	27	I	5	Memphis 14		1-2 S	6-8	S		2			83																		
40	27	CL	3	Elder Mt.	1880	2 ESE	7	S					8					3													
41*	27	D-C	5	Rogrsvl FT	3000	3-4 NNW	5-7	SC		1		1	203			1		7													
42	28	I	3	Memphis 14		3-4 N	7-8			3			11																		
43	28	CL	3	Elder Mt.	1880	4 ENE	7	PC					2	1																	
44	29	L		Elder Mt.	1880								26																		
45	29	CF	2	Mendota FT	3000	2		S		2		1																			
46	30	WL	6	Elder Mt.	1880	S&SE	7	O		1			10					13													
47	30	F	8	Mendota FT	3000	5-6 SE	6	S	1	3	3	3	62		1			1													
48	10/1	I	4	Memphis 14		3-4 S	6-7	LC		3			11		1			1													
49	1	ZZ	8	Elder Mt.	1880	var		TC		1			75					12													
50	1	TF	6	Mendota FT	3000	6 ESE	7	S	1	1	2		5	1				6													
51*	2	I	5	Memphis 14		5 NW	5-6	DO		1			16			2		1													
52	3	I	5	Memphis 14		3 NW	4-7	VC					3																		
53	6	CF	2	Mendota FT	3000		6	H	1	2								3													
54	14	I	5	Memphis 14		3-4 N	5-7	PC				6						2													
55	25	I	3	Memphis 14		3-4 S	5-8	Cl				4		1				1													
56	11/5	I	4	Memphis 14		3 SE		Cl				40						9													
57	6	I	4	Memphis 14		3 NE		Cl				29				2		4													
58	16	I	4	Memphis 14								4																			
59	17	I	4	Memphis 14								27																			
60	18	I	4	Memphis 14								5																			
61	19	I	3	Memphis 14		2-3 NW	4-5	PC				14																			
62	27	I	8	Memphis 14		4 N	4-6	CM				6																			
63	28	I	8	Memphis 14		3-4 NE	3-5	P				7																			
TOTALS														286								25	34	163	10	5915	8	10	13	10	159

* 1 Rough-legged Hawk A fraction was arbitrarily assigned to "Unident", from the Memphis data. See Note 51.

41. Sept. 27: Elva Darnell and Carrie Christiansen, both of Greenville, made the following comment: "Of the unidentified, four were flying low — large hawks, long narrow wings, but the underneath pattern and coloring just doesn't match anything in the books — immatures probably, but I won't hazard a guess. The other three were just too far away. The Rough-leg came in low, soon after we got up on the tower; the under-pattern was clearly visible."

Of the 214 hawks listed, all but one appeared before 11:30; so the observers left at 1:30. This is the final report of the year from the Rogersville Fire Tower, on Clinch Mt., probably the best lookout we have, on the basis of the record, except for Elder Mt.

51. Oct. 2: "Bitter cold, 56 deg. high, NW wind 20 m.p.h., dark overcast. Monarch butterflies by the hundred thousands passed. From 11:00 to 1:00 they completely dominated the sky as far as the eye could see with 7x50 binoculars".

(Arthur Stupka once saw a large flight of monarchs passing across Newfound Gap).

The editor of the RAVEN, J. J. Murray, suggested that we should be on the watch for Swainson's Hawk in fall migration.

SKY CODE

Sky conditions in the language of the reports. BC—Broken Clouds; BH—Bright, with Haze; CC—Clear to Cloudy; CI—Cloudy to Clear; CM—Clouds and Mist; CO—Clear to Overcast; DO—Dark Overcast; FR—Fog and Rain; H—Haze; LC—Low Clouds; MB—Murky, with Blue patches; O—Overcast; P—Perfect; PC—Partly Cloudy; S—Sunshine; SC—Scattered Clouds; TC—Thin scattered Clouds; VC—Very Cloudy.

Temperatures are given in degrees F, divided by 10, and rounded off to one figure. Wind speeds are according to the Beaufort Wind Scale (THE MIGRANT 31, 10, 1960)

KEY TO REPORTERS

A-K—Judith Abbott and Thelma Kennedy, Bristol; B—Fred Behrend, Elizabethton; B-D—Behrend and Dubke; CC—Mrs. Crownover and Mrs. Cross, Chattanooga; CoB—Wallace Coffey and Fletcher Bingham, Bristol; CF—Charlotte Finucane, Kingsport; CL—Rock Comstock and J. E. Lawson, Chattanooga; CLT—Mrs. Crownover, Mrs. Tunsberg, and Mr. Lawson; D-C—Mrs. Elva Darnell and Mrs. Carrie Christiansen, Greenville; F—Finucane, Kingsport; Gvl—Dr. and Mrs. Spees, Lynn, Karl, David, and Wade Spees, Mrs. Darnell, and Mr. and Mrs. Nevius; HR—Holmes Rolston, Bristol; I—Oliver Irwin, Memphis; L—J. E. Lawson, Chattanooga; MS—Maxie Swindell, Knoxville; N—Nevius, Greenville; RG—Enno van Gelder and son Roger, Bristol; Sw—Ann Switzer, Kingsport; T—James Tanner, Knoxville; TF—Thomas Finucane and son Tommy; W—Adele West, Chattanooga; XX—Mr. and Mrs. West, Mrs. Crownover, Miss Gladys Conner, Miss Mable Norman, and Mr. Lawson; YY—Thomas, Joseph, and Daniel Finucane, T. A. Odum, Holmes Rolston, and Rockwell Smith; ZZ—Mr. and Mrs. West, Mr. and Mrs. Crownover, Mr. Lawson, and Mrs. Harvey Wilkinson, Chattanooga.

THE 1961 CHRISTMAS SEASON BIRD COUNT

By T.O.S. Members

The thirty-first annual Christmas Bird Count tabulated in THE MIGRANT lists 118 species and subspecies. This number has been exceeded on only three counts, 1954, 1955 and 1960, when 122 species were listed each year. This count was equalled in 1959. Counts were reported from fifteen areas which, is equalled only by the 1960 count. Thirteen of the counts are listed in the table while the two high altitude counts (Cosby and Big Bald Mountain) are recorded in paragraph form under the appropriate heading. Only one species, Common Raven, occurs only in the high altitude lists. The Red-cockaded Woodpecker appears in the list for the first time. This brings the total number of species and subspecies which have been recorded on all Christmas Counts, beginning in 1931, to 162.

Seventeen species occur in all of the tabulated lists while eight other species are absent from only one list. Twenty-five species were listed at only one location and nine of these were represented by a single individual.

Information on the counts and localities represented are presented progressively, across the state, from west to east.

INFORMATION ON THE COUNTS

MEMPHIS. — 1953 areas generally; wooded bottomlands 22%, deciduous woods, city parks & cemeteries 30%, pastures, farms, airfield 20%, suburban roadsides 25%, river edge 3%. Dec. 24, 7 a. m. to 4:30 p. m. Overcast, temp. 30-35, wind 9-14 NW, muddy, many bottoms flooded, part inaccessible. 21 observers in 7 parties. Total party-hours, 77 (59 on foot, 18 by car); total party-miles, 173 (53 on foot, 120 by car). Meadowlarks quiet, account unfavorable weather; Westerns regularly at Penal Farm, 5 heard, fast run, Dec. 25, BC (1 Turkey Vulture same time). Screech Owl called at Coffey Grounds Dec. 20 & 26; Barn Owl, Dec. 26, Oliver Irwin; Red-breasted Nuthatch near Museum Dec. 22 & 27, Earl Fuller. Tree Sparrows (LC) first on Count since 1954. Pine Siskins, 1st on a Memphis Count, special search by McCamey (3 there, Dec. 2, BC). Small blackbird roost on river towhead, inaccessible, not included except partial flight line nearby. Mr. and Mrs. Ben B. Coffey, Jr., Mrs. Ed Carpenter, Mary Davant, Jack Embury, Earl Fuller, Oliver Irwin, Ed King, Franklin McCamey, Jr., Charles McPherson, Jr., Mrs. J. H. McWhorter, Nelle Moore, John Morrow, George Peyton, Jr., S. Jack Rini, Jim Rini, Prof. and Mrs. Arlo Smith and Lynn Smith, Mr. and Mrs. Charles Wilmeth. Also Mrs. Charles Seahorn and Mrs. Paul C. Owen in their yards.

REELFOOT LAKE. — All points within a 15-mile diameter circle, center Reelfoot Lake; lake 20%, marsh 5%, deciduous woods 45%, field and farm 18%, roadside 12%. Dec. 30; 7 a. m. to 5 p. m. Scattered clouds; temp. 20° to 37°; wind E 0-2 m.p.h. 8 observers in 3 parties. Total party-hours, 26 (6 on foot, 16 by car, 4 by boat); total party-miles, 161 (13 on foot, 143 by car, 5 by boat). (Seen in count period but not on count day: Ruddy Duck). Mikey Buzzard, Evelyn Cole, John R. Conder (compiler), John L. DeLime, W. Fickel, Willard Gray, Dr. Hunter M. Hancock, James W. Wilke.

NASHVILLE. — Dec. 30. Approx. same area as in past 11 years, area of a 15 mile diam. circle centering on Harding 7 mi. W. of Nashville. Included were river bottoms, 10 suburban feeding stations, Bush's 42 acre lake and Radnor 80 acre lake. 6:30 a. m. to 4:30 p. m.; clear up to 3 p. m.; temp. 20 to 39 degrees; wind very light; ground bare and frozen after period of snow and cold. Total 84 species (a record number), 9,800 individuals. Robins, Grackles and Cowbirds are wintering elsewhere this year; Starlings not abundant; Bluebirds still relatively scarce. The single acre of Bush's lake not frozen over was full of waterfowl, including Coots, gulls and 13 species of ducks. 8 parties including 23 observers (6 to 10 hours afield) were: B. H. Abernathy, O. C. Ault, Mrs. Wm. F. Bell, Ruth Castles, Annella Creech, Mrs. L. DeBrohun, Milbrey Dugger, John O. Ellis, Chas. F. Farrell, Albert F. Ganier (compiler), Katherine Goodpasture, Virginia Hagan, Wayland Hayes, Mr. and Mrs. John S. Herbert, Will H. Hon, Marguerite McKinney, John Ogden, Henry E. Parmer, Jennie Riggs, Mrs. Kirby Stringer, Paul Stumpf, Laurence and Larry Trabue, Jesse E. Wills and Ruth White. Mrs. Stringer compiled a list of 37 species observed by other members watching their feeding stations and home grounds, as follows: Merrill Carter, Mrs. Chas. Cornelius, Mrs. K. B. Everly, Mrs. Ralph Faitoute, Mrs. Wm. Fentress, Miss Mary Frazer, Dr. and Mrs. Hugh L. Fry, Mr. and Mrs. A. B. Grose, Mrs. Herman Knauth, Mrs. R. E. Lynn, Mrs. W. A. Puryear, Mr. and Mrs. Max Schuerman.

OLD HICKORY. — The first Christmas Count for this area was taken within a 15 mi. diameter circle with the center at Cages Bend and included the north and south shores of Old Hickory Lake as well as the adjacent farm land and woods between the dam and Gallatin Bridge; lake shores 35%, mixed cedars, deciduous woods 30%, farm land 15% and brushy fields 20%. Jan. 1, 1962; 8 a. m. to 4:30 p. m.; Temp. 31° to 29°; wind NW, 10 to 12 m.p.h.; sky overcast, ground bare. Three observers in one party. Total hours, 8½ (2½ on foot, 6 by car); total party-miles, 88 (4 on foot, 84 by car. The Black Vultures were all in one group, possibly from a nearby roost. This is only the second consecutive winter that Bonaparte's Gulls have wintered on the lake. Alan R. Munro, John C. Ogden (compiler) and Henry E. Parmer.

LEBANON. — Selected areas on a 7-mile radius from Lebanon, including Lock 5 Wildlife Refuge and adjacent portions of Old Hickory Lake (Cumberland River). Areas covered about evenly divided among open fields, woods, flooded fields and open water. December 28, 4 a. m. (for owls) to 4 p. m. Cloudy and snowing in flurries all day. Ponds and small streams frozen except at spring runs, temperature ranged from 20 to 29 degrees. Twelve observers in nine parties. Observations made on foot, by car and motor boat. Impossible to make a close estimate of number of miles covered. Territory covered is substantially the same as that covered in all recent censuses. Mrs. George R., Misses Jane and Mildred Bouton, Misses Margaret and Martha Campbell, John M. Drennon, Judge Sam B. Gilreath, Dixon Merritt (compiler), Henry Parmer, Mrs. Henry Waters, Miss Mary Wharton and Dr. R. D. Wilkinson.

COOKEVILLE. — All points within 15-mile diameter circle. Dec. 28; 7:30 a. m. to 4:30 p. m. Cloudy, little sunshine, snow flurries; temp. 20° to 34°; wind 2-20 m.p.h. Thirteen observers. Dr. J. O. Cummins, Mrs. Caprice Haile, Roy Hinds, P. L. Hollister (compiler), Miss Elizabeth Killifer, Dr. & Mrs. Sidney McGee, Dr. and Mrs. J. T. Moore, Mrs. Connie Peterson, Miser Richmond, Miss Chrissa Wendt, Mrs. Milo Williams.

CHATTANOOGA. — (all points within a 15-mile diameter circle, center National Cemetery in city; fields and pastures 35%, woodlands 20%, ponds and lake 15%, creeks and river 15%, roadside 10%, residential 5%). Dec. 31; 6 a. m. to 5 p. m. Cloudy, occasional rain; temp. 34° to 41°; wind SW, 5 m.p.h. Seventeen observers in 9 parties. Total party hours, 70 (38 on foot, 32 by car); total party miles, 316 (42 on foot, 274 by car). Total, 76 species; 12,066 individuals. (Seen in area count period, but not on count day: Hooded Merganser.) Leo Acuff, Mr. and Mrs. T. Stanley Barr, Benton Basham, Mr. Rock L. Comstock, Jr. (compiler), Mrs. Rock L. Comstock, Jr., Miss Gladys Conner, Mrs. Leon F. Cross, Mrs. Hugh Crownover, John R. Freeman, E. O. Grundset, Mr. & Mrs. Nat Halverson, John Leach, James A. Tucker, Mr. & Mrs. Eugene M. West. (Chattanooga Chapter, T.O.S.)

KNOXVILLE. — (All points within a 15-mile diameter circle, center Oak Ridge Highway and Ball Camp Pike, to include Powell Station, Fountain City, Island Home, mouth of Little River and Andrew Jackson Lake): deciduous and pine woodlots 15%, open farmland and old fields 30%, feeding stations and suburban 5%, river and lakes 15% and roadsides 35%.

Jan. 1, 1962; 7:30 a. m. to 5:30 p. m.; Temp. 31° to 36°; wind NE 0-5 m.p.h. in afternoon; overcast, with a 3-4 inch snow falling until noon. Snow hampered complete coverage because of hazardous driving conditions and some birding was done in vicinity of homes and feeding stations. Eight observers in 7 parties, plus three at feeding stations. Total party-hours, 56 (45 on foot, 11 by car); total party-miles, 70 (28 on foot, 42 by car). Total species, 57, about 2,628 individuals. (Seen in area count period, but not on count day: Lincoln's Sparrow, Marsh Hawk, Common Snipe, Screech Owl, E. Bluebird, Redwinged Blackbird, Brown-headed Cowbird). The Lincoln's Sparrow came into my yard, which is next to a woods and field overgrown with honeysuckle on Dec. 28 (the day it snowed) and ate wild bird seed mixture along with possibly 40 other birds, including White-throated, Fox, Swamp and Field Sparrows, Cardinals, Towhees, and Mourning Doves. I saw it through the window, about 12' away, also with binoculars and carefully looked it over for about 3 or 4 minutes, when it became suspicious and left. It did not come back. It had all of the field marks of Lincoln's Sparrow, including the broad buffy band across the breast and fine distinct streaks, since I've seen Lincoln's Sparrow on 3 occasions, with ornithologists present, I'm positive of it (Mary Enloe). Dorothy Boruff, Jessie Dempster, John Elson, Mary Enloe (compiler), Beth Lacy, Holly Overton, J. B. Owen, Maxie Swindell.

GREAT SMOKY MOUNTAINS NATIONAL PARK. — (all points within a 15-mile diameter circle, center near Crib Gap, approximately 3 miles east of Cades Cove; open farm land, 15 per cent; old fields, 20 per cent; forests, 35 per cent; roadsides, 20 per cent; stream courses and 60-acre reservoir, 10 per cent).

THE 1961 CHRISTMAS SEASON BIRD COUNT

	Memph.	Reelf.L.	Nash.	Old Hic.	Leb.	Cooke.	Chat.	Knox.	G. Smo.	Green.	King.	Br.	Eliz.
Common Loon				5									
Horned Grebe				12			19				1		
Pied-bld. Grebe	3	1	1	8		1	3		2		3		4
Dbl.-cr. Cormorant		15											
Grt. Bl. Heron	4	43	6					27	2		2	1	1
Common Egret		1											
Bl.-cr. N. Heron			14	17			1						
Canada Goose		10,000	1		35					13			
Hutchin's Goose		125											
Blue Goose			1										
Mallard	17	35,000	19	10	6,100	7	6		5		1		
Black Duck	2	225	8		1,900	3	131		3			12	
Gadwall		1,500			50		5						
Pintail		350	4		10								
Gr.-w. Teal		75	1										
Bl.-w. Teal	1	7											
Am. Widgeon	2	650	8	5									
Shoveler		456	9										
Wood Duck		35			10								1
Redhead		5	21										
Ring-necked Duck	8	2,800	52	7	200		69	1	29	1			17
Canvasback		200	27		5		12						
Greater Scaup			5										
Lesser Scaup	75	10	83	27	125	2	29						3
Com. Goldeneye	3	25	3	6			2						10
Bufflehead		10	2	1			1					1	33
Ruddy Duck	1		5						2				
Hd. Merganser		25		76									4

Yel.-bel. Sapsucker	27	8	15	1	4	5	17	9	6	6	2	1	4
Hairy Woodpecker	16	7	20		2	4	9	2	12	1			
Downy Woodpecker	44	31	87	3	12	22	48	27	55	16	7	8	15
Red-cock. Woodpecker							2						
E. Phoebe			2		2	4	2	1	8	3		1	2
Horned Lark	935		200	5		13	11	15		2			17
Blue Jay	368	21	88	26	43	136	428	75	44	45	30	18	32
Com. Crow	45	766	980	59	200	260	356	128	360	1,000	25	55	166
Fish Crow	74												
Black-cp. Chickadee													
Carolina Chickadee	107	129	170	18	8	29	141	58	140	64	37	28	46
Tufted Titmouse	62	89	155	11	13	50	122	66	65	71	35	22	29
Wh.-br. Nuthatch	4	21	8		2	14	45	16	14	13	12	6	6
Red-br. Nuthatch		6	1				3	12	33	11	4		9
Brown Creeper	13	5	5		2	2	7	5	8	4	3	2	2
Winter Wren	12	8	3				4	1	17	2			
Bewick's Wren			14		8	4	2	2	2	4			
Carolina Wren	64	8	53	2	11	6	91	39	20	21	8	8	13
Mockingbird	93	9	110	10	12	30	97	37	4	31	10	12	24
Catbird									1				
Brown Thrasher	23		1			3	25	2	1			1	
Robin	74	3	11		30		470	1	6	5		3	4
Hermit Thrush	10	2	5				3	1	25				4
E. Bluebird	1	5	40			7	24		12	3			
Go.-cr. Kinglet	31	23	5	4	1		23	19	59	2	3		7
Ruby-cr. Kinglet	14	21	5				12	1	12		1	1	2
Water Pipit			91	16			67	4					
Cedar Waxwing	57		16				710	34			6		
Lgr.-hd. Shrike	16	8	21	5	8	2	21	3	5	4			2
Starling	15,000	1,000,000	3,000	320	500	2,250	3,820	852	110	1,010	160	165	1,480
Myrtle Warbler	55	2	210	3	20		235	27	30	6		1	10
Pine Warbler							1						

Palm Warbler			2										
House Sparrow	610	405	300	22		207	252	83	50	107	20	186	421
E. Meadowlark	353	82	360	8	13	103	411	105	202	74	1	8	120
Redw. Blackbird	10,000	1,500,000	183			4	79		22				1
Rusty Blackbird	73					2	54						
Brewer's Blackbird	1	2											
Com. Grackle	5,000	700,000	68			575	36	2		9			
Br.-hd. Cowbird	1,000	500,000				2			1				35
Cardinal	558	199	525	109	104	222	449	181	143	125	39	32	102
Evening Grosbeak													1
Purple Finch	42		5		7	26	75	15	5	12	2	2	7
Pine Siskin	10												
Am. Goldfinch	153	2	195	3		2	298	28	26	23	3		45
Rufus-sd. Towhee	112	2	105	10	20	65	183	75	11	3	4	8	5
Savannah Sparrow	14	1	16			2	7	11					1
Vesper Sparrow							18						
Sl.-col. Junco	663	139	475	86	116	123	499	89	340	137	17	30	212
Chipping Sparrow		2					11						
Tree Sparrow	5												
Field Sparrow	198	25	215	47	21	26	623	38	140	126	8		46
Wh.-cr. Sparrow	16	27	29	12	19	8		21		25	2		28
Wh.-th. Sparrow	1,353	176	248	23	27	74	529	136	55	193	30	30	46
Fox Sparrow	69	16	22		1		6	10	3			1	6
Swamp Sparrow	118	301	104	5	3	6	59	1	150				5
Song Sparrow	231	43	227	28	5	5	301	69	106	53	9	11	44
Lapland Longspur	501												
SPECIES	76	83	84	51	57	50	75	56	62	50	38	34	54
Individuals	636,473	3,755,683	9,812	1,641	10,915	4,456	11,616	2,602	2,610	3,403	519	696	3,123

GRAND TOTAL SPECIES, 118; GRAND TOTAL INDIVIDUALS, 4,442,718, including high altitude counts.

December 31, 1961. 7:30 a. m. to 5:30 p. m. Overcast; temperatures 28° to 40°; wind variable, 1-7 m.p.h.; 1 to 3 in. snow on ground, some waters frozen.

19 observers in 5 parties. Total party-hours, 48 (41 on foot, 7 by car); total party-miles, 167 (37 on foot, 130 by car). Total, 63 species (1 additional race); 2,610 individuals.

Robert Bennett, Mildred Edmundson, John Elson, Mary Enloe, Elizabeth French, Mr. and Mrs. H. C. Garlinghouse, David Highbaugh, Dr. Joseph C. Howell, Phillip Huff, Henry W. Lix, Susan Lix, Vernon N. Lix, Arthur Stupka, Mrs. T. C. Swindell, Dr. Isabel H. Tipton, Dr. Samuel R. Tipton, Mr. and Mrs. George R. Wood (Tennessee Ornithological Society, National Park Service, and guests).

COSBY. — Eastern Smoky Mountains. Start at Cosby Recreation area to Low Gap on the Appalachian Trail along trail to Black Mountain to Valentine's nursery by way of Maddron Bald and Indian Camp Creek trail then along northern boundary of park for 1½ miles; evergreen woods 30%, mixed woods 65%, bald growth 5%. Jan. 7; 8 a. m. to 4:30 p. m. Heavy fog up to 4,500', cloudy from there on; temp. 32° to 25°; wind 2 to 40 m.p.h. Lower elevations little snow, upper elevations covered 90% with crusty snow. One observer. Total hours 8½ on foot; total miles 18 on foot. Ruffed Grouse, 8; Pileated Woodpecker, 1; Hairy Woodpecker, 12; Downy Woodpecker, 5; Common Raven, 5; Black-capped Chickadee, 22; Carolina Chickadee, 17; Tufted Titmouse, 7; White-breasted Nuthatch, 2; Red-breasted Nuthatch, 7; Brown Creeper, 11; Winter Wren, 2; Golden-crowned Kinglet, 12; Ruby-crowned Kinglet, 7; Cardinal, 2 and Slate-colored Junco, 57. Total, 17 species; about 178 individuals. Richard Nevius, Greeneville.

GREENEVILLE. — (All points within a 15 mile diameter circle, center Mt. Pleasant Church, to include Lick Creek, Roaring Fork, Davey Crocket Lake, Nolichucky River, Paint Creek, Albany, Marvin, Tusculum, Greeneville; woodland 50%; deciduous with small patches of pines and cedars, open fields and pastures 40%, includes ponds and lakes; towns 9%, farmyards 1%).

Dec. 31; 8:30 a. m. to 5:15 p. m. (at 11:30 p. m. the two Great-Horned Owls were heard for 30 min.) cloudy, occasional short flurries of sleet; temp. 28 to 34 degrees; practically no wind; 2 to 4 inch snow covering 80% of the ground, all ponds and small streams frozen over.

Seventeen observers in 9 parties. Total party-hours, 19 (14 on foot, 5 by car); total party-miles, 65 (5 on foot, 60 by car).

Total, 51 species; about 3429 individuals. (Seen in area during count period, but not on count day: Great Blue Heron, Palm Warbler, Screech Owl, Common Snipe and a large flock of Horned Larks.)

Mrs. O. C. Armitage, Dr. and Mrs. Turner Clinard, Mr. and Mrs. Willis Clemens, Mrs. Carrie Christiansen, Mrs. Chester Darnell, Mr. and Mrs. King Gaut, Mr. and Mrs. Walter Gray, Mrs. Wilma Irvin, Mrs. Ollie Jaynes, Mrs. Richard Nevius, Richard Nevius (compiler), Dr. and Mrs. Royal Spees, Karl and David Spees.

BIG BALD MOUNTAIN, Unicoi Co. Tenn. - Madison Co. N. Car. — Ascent from Higgins Creek to Appalachian Trail to top of Big Bald, side trip to Slipper Spur. Deciduous woodland 70%, grassy treeless areas 20%, open mountain road 10%. Dec. 31; 7:15 a. m. to 3:30 p. m. Cloudy, snow

flurries, fog; SW wind 3 to 15 m.p.h. Trees covered with frost and snow, 4-13" snow. One observer. Six miles on foot, 3,100-5,500'. Pileated Woodpecker, 1; Hairy Woodpecker, 4; Downy Woodpecker, 2; Common Raven, 2 (only birds at elevation above 4,500') Carolina Chickadee, 2; Tufted Titmouse, 1; White-breasted Nuthatch, 2; Cardinal, 2; Slate-colored Junco, 2. Total, 9 species; about 18 individuals. Fred W. Behrend, Elizabethton.

KINGSPORT. — Same area as in previous years. Jan. 1, 1962; 9 a. m. to 5 p. m. Foul weather, rain and wet snow falling, 1" snow; small ponds frozen, rivers open; wind light; temp. 34° to 37°. Five observers; party-hours 22; party-miles 10, on foot. Joseph and Thomas Finucane, E. W. Gift, Mrs. J. Winston Smith, Mrs. R. M. Switzer.

BRISTOL. — Same area as in previous years. Dec. 31; 8 a. m. to 5 p. m. Cold - snow, 28° to 30°. Eleven observers. Mr. & Mrs. E. H. Dickey, Sr., Mr. and Mrs. H. C. Epperson, Mr. & Mrs. Robert Faucette (compiler), Mrs. Earl Francisco, Mr. and Mrs. Herbert Miller, Mr. and Mrs. H. Nunley.

ELIZABETHTON. — All points within 15-mile diameter circle, center Wilbur Dam. Dec. 30; 7:30 a. m. to 5:30 p. m. Snow flurries during early morning to sunshine during afternoon. 2" to 4" of snow on ground, lakes and streams open. Temp. 21° to 32°; wind 0 to 15 m.p.h. Five observers in 4 parties. Total party-hours, 26 (12 on foot, 14 by car); total party-miles, 68 (16 on foot, 52 by car). (Seen in area during count period but not on count day: Horned Grebe, Ruffed Grouse). J. C. Browning, Ed Davidson, Mr. Lee R. Herndon (compiler), Mrs. Lee R. Herndon, Roby D. May, Jr.

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- Dickcissel—1959: 24, 30; 1960: 11, 33, 64, 70, 79, 80; 1961: 10, 33, 42.
- Dove, Mourning—1959: 16, 22, 34, 37, 61, 65; 1960: 13, 14, 17, 22, 31, 39, 46, 47, 48, 59, 69, 75; 1961: 6, 31, 67, 69.
- Rock (Pigeon)—1959: 22, 65; 1960: 31, 39, 59, 72, 75; 1961: 31.
- Dowitcher, Short-billed—1959: 19; 1960: 58, 69; 1961: 3, 4.
- Duck, Black—1959: 11, 16, 58, 64; 1960: 18, 30, 44, 54, 68, 72, 74; 1961: 7, 9, 30, 68.
- Ring-necked—1959: 16, 21, 33, 64; 1960: 14, 18, 30, 68, 74; 1961: 9, 30, 43, 68.
- Ruddy—1959: 9, 21, 25, 33, 64; 1960: 68, 75; 1961: 65, 68.
- Wood—1959: 11, 21, 58, 64; 1960: 18, 30, 54, 68, 72, 74, 80; 1961: 6, 9, 68.
- Dunlin—1959: 9, 36; 1960: 10, 11, 69; 1961: 5, 18, 19.
- Eagle, Bald—1959: 3, 4, 9, 16, 57, 65; 1960: 5, 8, 9, 10, 72, 75, 80; 1961: 3, 5, 7, 24, 27, 57, 59, 60, 62, 63, 69.
- Golden—1959: 57, 62, 65; 1960: 4, 5, 6, 8, 9; 1961: 11, 17, 24, 57.
- Egret, Cattle—1961: 35.
- Common—1960: 15, 44, 48; 1961: 68.
- Snowy—1960: 49, 58, 80; 1961: 29, 43.
- Falcon, Peregrine—1959: 2, 3, 4, 38; 1960: 8, 9, 44; 1961: 24, 27, 28, 30, 69.
- Finch, Purple—1959: 10, 11, 14, 16, 24, 41, 67; 1960: 12, 13, 14, 15, 16, 17, 18, 33, 36, 37, 73, 77, 78; 1961: 6, 8, 9, 10, 33, 52, 71.
- Flicker, Red-shafted—1959: 60, 66.
- Yellow-shafted—1959: 16, 19, 22, 66; 1960: 16, 31, 39, 59, 64, 69, 75; 1961: 31, 43, 69.
- Flycatcher, Acadian—1959: 22; 1960: 31, 39; 1961: 13, 31.
- Alder (see Traill's)—1960: 39.
- Beardless—1961: 11, 12.
- Great Crested—1959: 22, 38; 1960: 31, 39; 1961: 31.
- Least—1959: 22; 1960: 31; 1961: 31.
- Olive-sided—1959: 22; 1960: 31, 39.
- Sulfur-bellied—1961: 12.
- Traill's—1959: 40; 1960: 55, 64, 80; 1961: 4, 13, 52, 53.
- Vermillion—1961: 11.
- Yellow-bellied—1959: 15; 1960: 64; 1961: 31, 44.
- Gadwall—1959: 11, 16, 21, 64; 1960: 30, 68, 74; 1961: 9, 30, 68.
- Gallinule, Common—1960: 11; 1961: 42, 44.
- Purple—1959: 9; 1961: 43.
- Gnatcatcher, Blue-gray—1959: 23; 1960: 32, 39, 47, 59; 1961: 32.
- Goldeneye, Common—1959: 9, 11, 16, 64; 1960: 14, 15, 18, 68, 74; 1961: 5, 9, 68.
- Goldfinch, American—1959: 15, 18, 24, 58, 67; 1960: 39, 59, 70, 77, 78; 1961: 10, 33, 41, 61, 71.
- Goose, Blue—1959: 55, 62, 64; 1960: 29, 30, 43, 44, 68, 74; 1961: 5, 7, 8, 9, 30, 68.
- Canada—1959: 11, 16, 21, 25, 33, 54, 64; 1960: 18, 30, 47, 52, 68, 71, 74, 80; 1961: 5, 9, 30, 35, 36, 68.
- Hutchin's—1960: 71, 74; 1961: 68.
- Snow—1959: 56; 1960: 43, 68, 71, 74; 1961: 41.
- White-fronted—1961: 35, 36.
- Grackle, Common—1959: 5, 7, 8, 11, 16, 17, 24, 29, 34, 38, 60, 61, 67; 1960: 14, 17, 18, 33, 39, 49, 59, 77;

- 1961: 6, 8, 9, 33, 66, 71.
- Grebe, Holboell's (see Red-necked)
- Horned—1959: 11, 20, 21, 24, 34, 64; 1960: 17, 18, 30, 67, 74, 78; 1961: 9, 29, 42, 68, 73.
- Pied-billed—1959: 12, 16, 21, 34, 37, 64; 1960: 17, 18, 30, 67, 74; 1961: 5, 9, 29, 68.
- Red-necked—1961: 39.
- Western—1960: 22.
- Grosbeak, Blue—1959: 24, 25, 36, 38; 1960: 33, 44; 1961: 33, 42, 45, 46.
- Evening—1959: 11, 67; 1960: 13, 15, 16, 18, 33, 45, 48, 53, 80; 1961: 6, 8, 9, 10, 71.
- Rose-breasted—1959: 15, 24, 37, 41, 42; 1960: 10, 33, 39, 55, 59, 63, 64; 1961: 33, 42.
- Grouse, Ruffed—1959: 21, 38, 63, 65; 1960: 30, 75, 78; 1961: 30, 69, 72, 73.
- Gull, Bonaparte's—1959: 34, 65; 1960: 31, 75; 1961: 5, 42, 49, 66, 69.
- Franklin's—1960: 45, 69; 1961: 51.
- Herring—1959: 22, 34, 65; 1960: 18, 31, 69, 72, 75; 1961: 9, 30, 43, 69.
- Laughing—1960: 31; 1961: 30, 41, 51.
- Ring-billed—1959: 16, 22, 34, 65; 1960: 18, 31, 39, 44, 69, 75; 1961: 9, 30, 51, 69.
- Hawk, Broad-winged—1959: 1, 2, 3, 4, 21, 38; 1960: 1, 2, 3, 4, 5, 6, 7, 3, 9, 30, 44, 47; 1961: 5, 22, 23, 24, 25, 26, 27, 28, 30, 57-63.
- Cooper's—1959: 2, 3, 4, 16, 21, 65; 1960: 6, 8, 9, 30, 68, 75; 1961: 24, 26, 27, 30, 60, 62, 63, 69.
- Duck (see Falcon, Peregrine).
- Harlan's—1961: 3, 15.
- Marsh—1959: 2, 4, 16, 21, 33, 65; 1960: 6, 8, 9, 30, 68, 75; 1961: 24, 26, 27, 30, 61, 62, 63, 67, 69.
- Pigeon—1960: 68; 1961: 3, 29, 30, 41.
- Red-shouldered—1959: 4, 16, 21, 33, 65; 1960: 5, 6, 8, 9, 30, 68, 75; 1961: 24, 26, 27, 30, 60, 61, 62, 63, 69.
- Red-tailed—1959: 1, 2, 3, 4, 16, 20, 21, 33, 65; 1960: 6, 8, 9, 30, 35, 68, 73, 75; 1961: 14, 24, 26, 27, 30, 57, 60, 61, 62, 63, 69.
- Rough-legged—1959: 16, 65; 1960: 72, 75; 1961: 63, 64, 69.
- Sharp-shinned—1959: 1, 2, 3, 4, 21, 63; 1960: 6, 8, 9, 30, 46, 73, 75; 1961: 5, 15, 21, 24, 26, 27, 30, 60, 62, 63, 69.
- Sparrow—1959: 1, 3, 4, 16, 21, 39, 65; 1960: 2, 5, 6, 8, 9, 30, 39, 68, 75; 1961: 14, 24, 26, 27, 30, 60, 62, 63, 69.
- Swainson's—1961: 64.
- White-tailed—1961: 12.
- Heron, Black-crowned Night—1959: 2, 9, 21, 26, 33, 64; 1960: 30, 48, 67, 74; 1961: 29, 68.
- Great Blue—1959: 8, 10, 11, 16, 17, 21, 64; 1960: 17, 18, 30, 47, 63, 67, 74; 1961: 6, 29, 43, 68, 72.
- Green—1959: 19, 21, 33; 1960: 30, 39, 59, 67; 1961: 29, 46.
- Little Blue—1959: 64; 1960: 44, 48, 49; 1961: 29, 43, 46.
- Yellow-crowned Night—1960: 30; 1961: 29, 42, 44.
- Hummingbird, Broad-billed—1961: 11.
- Black-chinned—1961: 11.
- Costa's—1961: 11.
- Rivoli's—1961: 11.
- Ruby-throated—1959: 22, 1960: 31, 39, 47, 69; 1961: 14, 31.
- White-eared—1961: 11.
- Ibis, White—1960: 58, 80.
- Wood—1960: 44.
- Jay, Blue—1959: 6, 8, 11, 16, 22, 29, 34, 41, 66; 1960: 14, 31, 39, 51, 59, 73, 76, 78, 80; 1961: 31, 46, 70.
- Junco, Carolina—1961: 33.
- Oregon—1960: 11, 16, 19, 79.
- Slate-colored—1959: 9, 13, 15, 16, 24, 41, 42, 63, 67; 1960: 11, 14, 19, 33, 37, 70, 73, 77, 78; 1961: 33, 71, 72.
- Killdeer—1959: 16, 21, 33, 35, 61, 65; 1960: 30, 39, 54, 68, 75; 1961: 18, 19, 30, 45, 69.
- Kingbird, Eastern—1959: 22, 34; 1960: 31, 39, 69; 1961: 5, 31, 45.
- Western—1961: 4.
- Kingfisher, Belted—1959: 16, 22, 34, 66; 1960: 14, 16, 31, 69, 75; 1961: 21, 69.
- Kinglet, Golden-crowned—1959: 16, 59, 63, 66; 1960: 32, 73, 76; 1961: 32, 70, 72.
- Ruby-crowned—1959: 11, 16, 23, 66; 1960: 32, 64, 72, 73, 76; 1961: 32, 70, 72.
- Kite, Mississippi—1959: 21, 36; 1960:

- 30, 44; **1961**: 11, 30, 41.
 Swallow-tailed—**1959**: 19.
 Knot—**1961**: 19.
 Lark, Horned—**1959**: 22, 34, 66; **1960**: 13, 16, 31, 36, 37, 69, 76; **1961**: 5, 10, 31, 50, 70, 72.
 Limpkin—**1961**: 42, 48, 49.
 Longspur, Lapland—**1959**: 67; **1960**: 10, 11, 16, 36, 37, 72, 77, 80; **1961**: 4, 5, 71.
 Smith's—**1960**: 11; **1961**: 4.
 Loon, Common—**1959**: 21, 33; **1960**: 15, 30, 39, 48, 67, 74; **1961**: 7, 9, 29, 68.
 Red-throated—**1959**: 11; **1960**: 15, 17, 74, 78; **1961**: 9.
 Magpie, Black-billed—**1960**: 16.
 Mallard—**1959**: 8, 11, 16, 21, 25, 33, 58, 64; **1960**: 18, 30, 39, 44, 50, 54, 62, 63, 64, 68, 74; **1961**: 7, 9, 30, 68.
 Martin, Purple—**1959**: 10, 14, 17, 22, 28, 34, 38; **1960**: 11, 14, 17, 31, 39, 48, 59, 70; **1961**: 4, 10, 31, 45, 46.
 Meadowlark, Eastern—**1959**: 16, 24, 30, 34, 67; **1960**: 14, 16, 33, 39, 59, 70, 77; **1961**: 6, 33, 65, 71.
 Western—**1959**: 20, 24, 30, 67; **1960**: 10, 14, 77; **1961**: 4.
 Merganser, Common—**1959**: 9, 33, 65; **1960**: 68; **1961**: 7, 9, 10, 30.
 Hooded—**1959**: 11, 16, 21, 33, 64; **1960**: 18, 30, 68, 75, 78; **1961**: 9, 30, 67, 68.
 Red-breasted—**1959**: 33; **1960**: 18, 30, 68; **1961**: 30, 69.
 Mockingbird—**1959**: 8, 10, 16, 18, 23, 25, 34, 39, 40, 66; **1960**: 13, 14, 32, 39, 46, 59, 70, 76; **1961**: 8, 32, 70.
 Nighthawk, Common—**1959**: 22; **1960**: 10, 31, 39, 58, 59, 69, 80; **1961**: 9, 31, 45.
 Nuthatch, Red-breasted—**1959**: 11, 22, 41, 42, 63, 65, 66; **1960**: 10, 12, 18, 32, 76, 78; **1961**: 8, 31, 65, 70, 72.
 White-breasted—**1959**: 11, 16, 22, 66; **1960**: 16, 18, 32, 76, 78; **1961**: 31, 68, 70, 73.
 Oldsquaw—**1959**: 33; **1960**: 45, 75, 78; **1961**: 5, 7, 9, 10, 42.
 Oriole, Baltimore—**1959**: 24, 30; **1960**: 33, 43; **1961**: 33, 44, 46.
 Orchard—**1959**: 24, 36; **1960**: 33, 39; **1961**: 33, 39.
 Osprey—**1959**: 2, 3, 4, 21, 37, 63, 65; **1960**: 5, 6, 8, 9, 30, 68; **1961**: 24, 26, 27, 30, 44, 45, 60, 62, 63.
 Ovenbird—**1959**: 15, 20, 23, 37, 42; **1960**: 33, 39, 46, 63, 64, 65, 67; **1961**: 13, 32, 43.
 Owl, Barn—**1959**: 22, 24, 34, 65; **1960**: 31, 75; **1961**: 7, 15, 31, 65, 69.
 Barred—**1959**: 16, 22, 31, 66; **1960**: 31, 75; **1961**: 31, 49, 69.
 Burrowing—**1961**: 16.
 Great Horned—**1959**: 22, 65; **1960**: 14, 75; **1961**: 31, 44, 69, 72.
 Long-eared—**1959**: 16.
 Mexican Spotted—**1961**: 12.
 Screech—**1959**: 22, 31, 65; **1960**: 31, 75; **1961**: 14, 16, 31, 67, 69, 72.
 Short-eared—**1961**: 3, 7.
 Snowy—**1961**: 1, 3.
 Parakeets—**1959**: 29.
 Parrot, Red-crowned—**1959**: 29.
 Penguins—**1961**: 36.
 Gento—**1961**: 36.
 Jackass—**1961**: 36.
 Rockhopper—**1961**: 36.
 Pewee, Eastern Wood—**1959**: 19, 22; **1960**: 31, 39, 45, 55, 59, 64, 69; **1961**: 31.
 Phalarope, Northern—**1959**: 55.
 Red—**1959**: 55, 56.
 Wilson's—**1959**: 55.
 Pheasant, Ring-necked—**1959**: 65; **1960**: 22, 28, 30, 34; **1961**: 7, 30.
 Phoebe, Eastern—**1959**: 9, 11, 16, 18, 19, 22, 25, 66; **1960**: 14, 17, 18, 31, 44, 69, 73, 76; **1961**: 8, 10, 31, 39, 70.
 Black—**1961**: 12.
 Pigeon, Band-tailed—**1961**: 11, 12.
 Pintail—**1959**: 16, 64; **1960**: 18, 44, 68, 74; **1961**: 9, 68.
 Pipit, Sprague's—**1960**: 11; **1961**: 4.
 Water—**1959**: 34, 59, 66; **1960**: 12, 70, 76; **1961**: 4, 8, 32, 70.
 Plover, American Golden—**1959**: 36; **1961**: 11, 54, 68; **1961**: 3, 4, 18, 19, 41, 42, 49.
 Black-bellied—**1959**: 35, 37; **1960**: 45, 69; **1961**: 19, 43.
 Semipalmated—**1959**: 19, 21, 33, 35, 37, 38; **1960**: 30, 54, 68; **1961**: 30.
 Upland—**1959**: 35; **1960**: 31, 44, 69; **1961**: 4, 41, 42.
 Wilson's—**1961**: 44.

- Puffin—1959: 59.
- Rail, Black—1961: 12.
 King—1960: 30; 1961: 10, 30, 42, 43.
 Virginia—1960: 63, 64; 1961: 30, 44, 45.
 Yellow—1960: 63, 64.
- Raven—1960: 31, 76, 78; 1961: 24, 31, 65, 72, 73.
- Redhead—1959: 9, 11, 64; 1960: 14, 18, 29, 30, 74; 1961: 5, 9, 68.
- Redstart, American—1959: 20, 24, 38, 42; 1960: 11, 33, 39, 59, 63, 64, 65; 1961: 33.
- Robin—1959: 6, 8, 9, 11, 12, 13, 16, 17, 23, 25, 29, 34, 37, 39, 63, 66; 1960: 12, 13, 14, 15, 16, 17, 32, 37, 39, 59, 76, 78, 79, 80; 1961: 3, 6, 8, 9, 32, 43, 45, 66, 70.
- Sanderling—1959: 35, 37, 55; 1960: 11, 46, 69; 1961: 19, 29, 30.
- Sandpiper, Baird's—1961: 42.
 Buff-breasted—1959: 35, 37; 1960: 69; 1961: 18.
 Least—1959: 22, 34, 35; 1960: 10, 11, 14, 31, 45, 46, 69, 72, 75; 1961: 5, 18, 19, 30, 45.
 Pectoral—1959: 22, 35, 37; 1960: 11, 12, 14, 31, 44, 45, 46, 47, 54, 69; 1961: 4, 19, 30.
 Red-backed (see Dunlin).
 Semipalmated—1959: 9, 35, 55; 1960: 10, 11, 31, 45, 54, 59, 69; 1961: 19.
 Solitary—1959: 10, 22; 1960: 31, 54; 1961: 30.
 Spotted—1959: 10, 14, 21, 34, 35, 37, 55, 60, 65; 1960: 10, 11, 31, 46, 54, 69; 1961: 18, 19, 30.
 Stilt—1959: 35, 37; 1960: 31, 48, 58, 69; 1961: 43.
 Western—1960: 59, 80; 1961: 43.
 White-rumped—1959: 9, 37; 1960: 31, 45, 47, 54, 69; 1961: 41.
- Sapsucker, Yellow-bellied—1959: 11, 41, 66; 1960: 16, 31, 63, 64, 76; 1961: 31, 70.
- Scaup, Greater—1960: 50, 68, 71, 72, 74, 80; 1961: 5, 42, 68.
 Lesser—1959: 11, 16, 21, 25, 33, 37, 64; 1960: 14, 18, 30, 46, 50, 54, 68, 74; 1961: 9, 30, 68.
- Scoter, Surf—1961: 17.
 White-winged—1961: 17.
- Shoveler—1959: 16, 33, 64; 1960: 18, 63, 74; 1961: 30, 68.
- Shrike, Loggerhead—1959: 16, 23, 34, 60, 67; 1960: 32, 70, 76; 1961: 14, 32, 70.
- Siskin, Pine—1959: 11, 67; 1960: 10, 33, 71, 78; 1961: 4, 6, 8, 10, 33, 65, 71.
- Snipe, Common—1959: 11, 16, 21, 34, 65; 1960: 16, 30, 69, 71, 75; 1961: 8, 18, 19, 30, 67, 69, 72.
- Sora—1959: 21, 25, 38; 1960: 30, 47, 64; 1961: 30, 42, 43, 45.
- Sparrow, Bachman's—1959: 24; 1960: 15, 33; 1961: 4, 33.
 Chipping—1959: 10, 15, 24, 34, 41; 1960: 13, 17, 33, 39, 59, 64, 77; 1961: 5, 10, 33, 71.
 Field—1959: 16, 18, 24, 34, 41, 58, 67; 1960: 16, 33, 36, 37, 39, 59, 64, 70, 77; 1961: 9, 10, 33, 47, 67, 71.
 Fox—1959: 16, 41, 67; 1960: 12, 13, 14, 16, 17, 37, 64, 77; 1961: 67, 71.
 Grasshopper—1959: 24, 38; 1960: 33, 63, 64; 1961: 33.
 Harris'—1959: 41; 1960: 11, 77; 1961: 4.
 Henslow's—1961: 42.
 House—1959: 16, 24, 26, 33, 34, 39, 60, 67; 1960: 14, 17, 33, 35, 37, 39, 44, 59, 70, 77; 1961: 15, 17, 33, 47, 71.
 Lark—1960: 46, 70.
 LeConte's—1960: 33; 1961: 4.
 Lincoln's—1959: 9, 24, 41, 58; 1960: 33, 45, 71, 77; 1961: 7, 10, 33, 67.
 Rufous-winged—1961: 12.
 Savannah—1959: 24, 34, 67; 1960: 16, 33, 64, 70, 77; 1961: 10, 33, 43, 71.
 Sharp-tailed—1960: 63, 64, 70.
 Song—1959: 16, 24, 34, 41, 58, 67; 1960: 13, 16, 33, 36, 37, 39, 59, 64, 77, 78; 1961: 9, 10, 33, 71.
 Swamp—1959: 24, 60, 67; 1960: 33, 64, 70, 77; 1961: 33, 67, 71.
 Tree—1959: 16, 41; 1960: 10, 12, 15, 29, 33, 37, 38, 77, 80; 1961: 4, 5, 33, 65, 71.
 Vesper—1959: 15, 24, 34, 62, 67; 1960: 33, 64, 70, 71, 77, 78; 1961: 9, 10, 33, 71.
 White-crowned—1959: 10, 15, 24, 37, 41, 67; 1960: 16, 17, 33, 70, 72,

- 77; **1961:** 8, 10, 33, 71.
 White-throated—**1959:** 10, 16, 24, 29, 37, 41, 58, 60, 67; **1960:** 14, 16, 17, 33, 36, 37, 39, 64, 70, 72, 77, 78; **1961:** 9, 10, 15, 33, 67, 71.
- Spoonbill, Roseate—**1959:** 59.
- Starling—**1959:** 11, 13, 16, 17, 23, 26, 29, 34, 38, 39, 60, 61, 67; **1960:** 13, 14, 17, 32, 39, 46, 59, 68, 70, 76, 79; **1961:** 2, 6, 8, 9, 14, 32, 66, 70.
- Swallow Bank—**1959:** 14, 20, 22, 34; **1960:** 11, 31, 44, 45, 70; **1961:** 31, 41, 43.
- Barn—**1959:** 14, 22, 34; **1960:** 31, 45, 47, 70; **1961:** 31, 39, 43.
- Cliff—**1959:** 14, 22, 34, 54; **1960:** 31, 43, 44, 45, 70; **1961:** 31, 37, 38, 39, 40, 41, 42, 44.
- Rough-winged — **1959:** 14, 22, 34; **1960:** 31, 59, 70; **1961:** 31, 37, 40, 42, 45.
- Tree—**1959:** 14, 22, 34, **1960:** 11, 31, 44, 70; **1961:** 31, 45.
- Swan, Whistling—**1959:** 56, 68.
- Swift, Chimney—**1959:** 17, 22, 29, 34, 39; **1960:** 31, 39, 47, 48, 59, 69; **1961:** 31, 42, 61.
- Vaux's—**1961:** 11.
- Tanager, Scarlet—**1959:** 15, 24; **1960:** 33, 39, 47, 59, 64; **1961:** 33, 42.
- Summer—**1959:** 15, 24; **1960:** 33, 39, 51, 59, 64, 80; **1961:** 33, 54.
- Teal, Blue-winged—**1959:** 9, 11, 21, 31, 37, 38, 64; **1960:** 18, 30, 44, 54, 63, 64, 68, 72, 74; **1961:** 30, 42, 68.
- Green-winged — **1959:** 9, 16, 64; **1960:** 18, 39, 68, 74; **1961:** 68.
- Tern, Black—**1959:** 34, 37; **1960:** 44, 46, 69; **1961:** 3, 18, 19, 30, 43, 49, 51.
- Caspian—**1959:** 14; **1961:** 4, 18, 19, 29, 30, 49.
- Common—**1959:** 14, 22, 24, 38; **1960:** 31, 69; **1961:** 43, 51.
- Forster's—**1959:** 14, 22, 24, 34; **1960:** 46; **1961:** 31, 41, 42, 43.
- Least—**1959:** 14, 34; **1960:** 47; **1961:** 31.
- Thrasher, Brown—**1959:** 10, 11, 16, 23, 29, 34, 39, 40, 41, 66; **1960:** 12, 13, 14, 32, 39, 63, 64, 70, 76; **1961:** 5, 6, 8, 9, 32, 70.
- Thrush, Bicknell's—**1961:** 10.
- Gray-cheeked—**1959:** 23; **1960:** 32, 64; **1961:** 13, 32.
- Hermit—**1959:** 11, 16, 18, 23, 41, 62, 66; **1960:** 14, 18, 32, 64, 73, 76; **1961:** 32, 70.
- Olive-backed (see Swainson's).
- Swainson's—**1959:** 15, 23, 36, 58; **1960:** 32, 59, 63, 64; **1961:** 10, 13, 32.
- Wood—**1959:** 15, 23, 41; **1960:** 32, 39, 59, 64; **1961:** 32.
- Titmouse, Tufted—**1959:** 10, 16, 22, 34, 41, 66; **1960:** 13, 15, 31, 39, 59, 70, 73, 76; **1961:** 31, 70, 72, 73.
- Towhee, Rufous-sided—**1959:** 10, 16, 18, 24, 41, 67; **1960:** 33, 36, 39, 46, 59, 77, 78; **1961:** 31, 67, 71.
- Trogon, Coppery-tailed—**1961:** 11.
- Turkey—**1959:** 65; **1961:** 45, 69.
- Veery—**1959:** 23, 37, 42; **1960:** 32, 39, 64; **1961:** 32, 45.
- Vireo, Philadelphia—**1959:** 23, 37, 58; **1960:** 32, 45, 64, 65; **1961:** 14, 32, 44.
- Red-eyed—**1959:** 14; **1960:** 32, 39, 59, 63, 64, 65, 67; **1961:** 32.
- Solitary—**1959:** 20, 23; **1960:** 32, 63, 64; **1961:** 32.
- Warbling—**1959:** 23; **1960:** 32, 39; **1961:** 32, 44.
- White-eyed—**1959:** 23; **1960:** 32, 39, 59, 64; **1961:** 14, 32, 45.
- Yellow-throated — **1959:** 23; **1960:** 32, 39, 64; **1961:** 32.
- Vulture, Black—**1959:** 16, 21, 26, 61, 65; **1960:** 2, 3, 7, 17, 30, 35, 75; **1961:** 10, 17, 30, 66, 69.
- Turkey—**1959:** 16, 21, 60, 65; **1960:** 2, 7, 16, 30, 35, 68, 75; **1961:** 30, 65, 69.
- Warbler, Bachman's—**1959:** 19.
- Bay-breasted — **1959:** 15, 23, 37; **1960:** 33, 39, 59, 64, 65; **1961:** 32.
- Black and White—**1959:** 11, 20, 23, 42; **1960:** 32, 39, 64, 65; **1961:** 32, 47.
- Blackburnian—**1959:** 15, 23, 37, 42; **1960:** 32, 39, 46, 64; **1961:** 32.
- Blackpoll—**1959:** 23, 38; **1960:** 33, 39, 59, 63, 64; **1961:** 32.
- Black-throated Blue—**1959:** 15, 23, 42; **1960:** 32, 45, 64; **1961:** 32, 61.
- Black-throated Gray—**1961:** 11.
- Black-throated Green—**1959:** 15, 23, 37; **1960:** 32, 46, 64; **1961:** 32.
- Blue-winged—**1959:** 20, 23; **1960:** 32, 55; **1961:** 32, 51.

- Brewster's—1960: 45, 55, 80; 1961: 42.
- Canada—1959: 24, 37, 38, 42; 1960: 33, 39, 46, 59, 64; 1961: 33.
- Cape May—1959: 23; 1960: 32, 39; 1961: 32.
- Cerulean—1959: 23, 37; 1960: 32, 39, 64; 1961: 32.
- Chestnut-sided—1959: 23, 42; 1960: 32, 59, 64; 1961: 32.
- Connecticut—1959: 23, 36; 1960: 45, 59, 80; 1961: 10, 33, 47.
- Golden-winged — 1959: 23, 36, 37; 1960: 32, 46, 55, 64; 1961: 32.
- Hooded—1959: 20, 24, 42; 1960: 33, 39, 64; 1961: 33.
- Kentucky—1959: 23, 42; 1960: 33, 39, 64; 1961: 13, 33, 47.
- Lucy's—1961: 11.
- Magnolia—1959: 23, 37; 1960: 32, 46, 63, 64, 65, 67; 1961: 13, 14, 32.
- Mourning—1960: 46, 63, 64; 1961: 33, 41, 42, 44.
- Myrtle—1959: 10, 23, 34, 37, 67; 1960: 13, 16, 17, 18, 32, 64, 70, 77; 1961: 10, 32, 70.
- Nashville—1959: 23, 37, 58; 1960: 32, 64, 65; 1961: 32.
- Orange-crowned—1959: 20, 23, 36, 58; 1960: 45, 63, 64; 1961: 4, 32.
- Palm—1959: 11, 23, 62, 67; 1960: 33, 64, 67, 71, 77; 1961: 32, 71, 72.
- Parula—1959: 23, 42; 1960: 11, 32, 63, 64; 1961: 32.
- Pine—1959: 23, 67; 1960: 16, 33, 39, 63, 64, 77; 1961: 32, 70.
- Prairie—1959: 23; 1960: 33; 1961: 32.
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