

SOUTH FLORIDA RESEARCH CENTER

Report T-605 Twenty-nine Year Synopsis of the Coot Bay Christmas Bird Count



Everglades National Park, South Florida Research Center, P.O. Box 279, Homestead, Florida 33030

**TWENTY-NINE YEAR SYNOPSIS OF THE
COOT BAY CHRISTMAS BIRD COUNT
EVERGLADES NATIONAL PARK**

Report T-605

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South Florida Research Center
Everglades National Park
Homestead, Florida 33030**

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Introduction

Christmas bird counts have been conducted in the United States since the early 1900's. These counts of birds within a 7.5 mile radius from a given point provide a yearly nation-wide survey of bird populations in winter. Christmas bird counts, such as at Coot Bay, Florida, provide long-term data bases on the occurrence and abundance of birds in that particular area. This report summarizes data from Coot Bay Christmas Bird Counts from 1951 through 1979.

The first Coot Bay Christmas Bird Count was conducted on December 23, 1950. The count centered at the intersection of Bear Lake road and Flamingo road (main park road). The area included West Lake, Florida, Whitewater and Coot Bays, and the coastal marshes from Flamingo to House Ditch. The first count had 24 observers in 8 parties recording 117 species and 166,245 individuals. The following year (December 22, 1951), the count circle was moved to the present site, centering one mile northwest of Bradley Key (Fig. 1). This was a move of approximately 2 miles southwest and eliminated West Lake. Because of the change in the count circle, we chose not to include the 1950 count data.

Count Location

All points within a 7.5 mile radius centering at coordinates $25^{\circ}08'1''N$ and $80^{\circ}57'1''W$, or one mile northwest of Bradley Key and including East Cape Sable, eastern Lake Ingraham, southern Whitewater Bay, Snake Bight, and Curry, Bradley, Joe Kemp, Cormorant, Palm, Frank, Murray, Oyster, Johnson, Clive, Catfish, Dildo, and Sandy Keys in Florida Bay (Fig. 1).

Habitat Coverage

The count area consists of approximately 25% mangrove, buttonwood and tropical hardwood forest, 25% coastal prairie, 45% lakes, bays and shallow-water back country flats, and 5% disturbed or developed area. The dominant forest species are red mangrove (Rhizophora mangle), black mangrove (Avicennia germinans), and buttonwood (Conocarpus erecta). The tropical hardwood forests account for less than 1% of the total area and are located near Coot Bay, East Cape and Bear Lake road. Coastal prairie habitat is dominated by saltwort (Batis maritima) and glasswort (Salicornia virginica), and is found from Snake Bight Trail to East Cape. Water areas include bays, lakes and shallow-water flats. The largest of these are Florida, Whitewater and Coot Bays, and Bear and Mud Lakes. Water depth varies from a few inches in back-water flats to 12 feet in Florida Bay, and during low tide numerous mud flats are exposed. Florida Bay is the largest water area occupying approximately one-third of the count circle. Flamingo, the only developed area, includes a park visitor center, hotel, marina, residences, maintenance compound, sewage treatment plant, and campgrounds. In addition, trails and roads are located throughout the area.

Coverage of the count area has been by foot, car, canoe, power boat, helicopter, and fixed-wing aircraft.

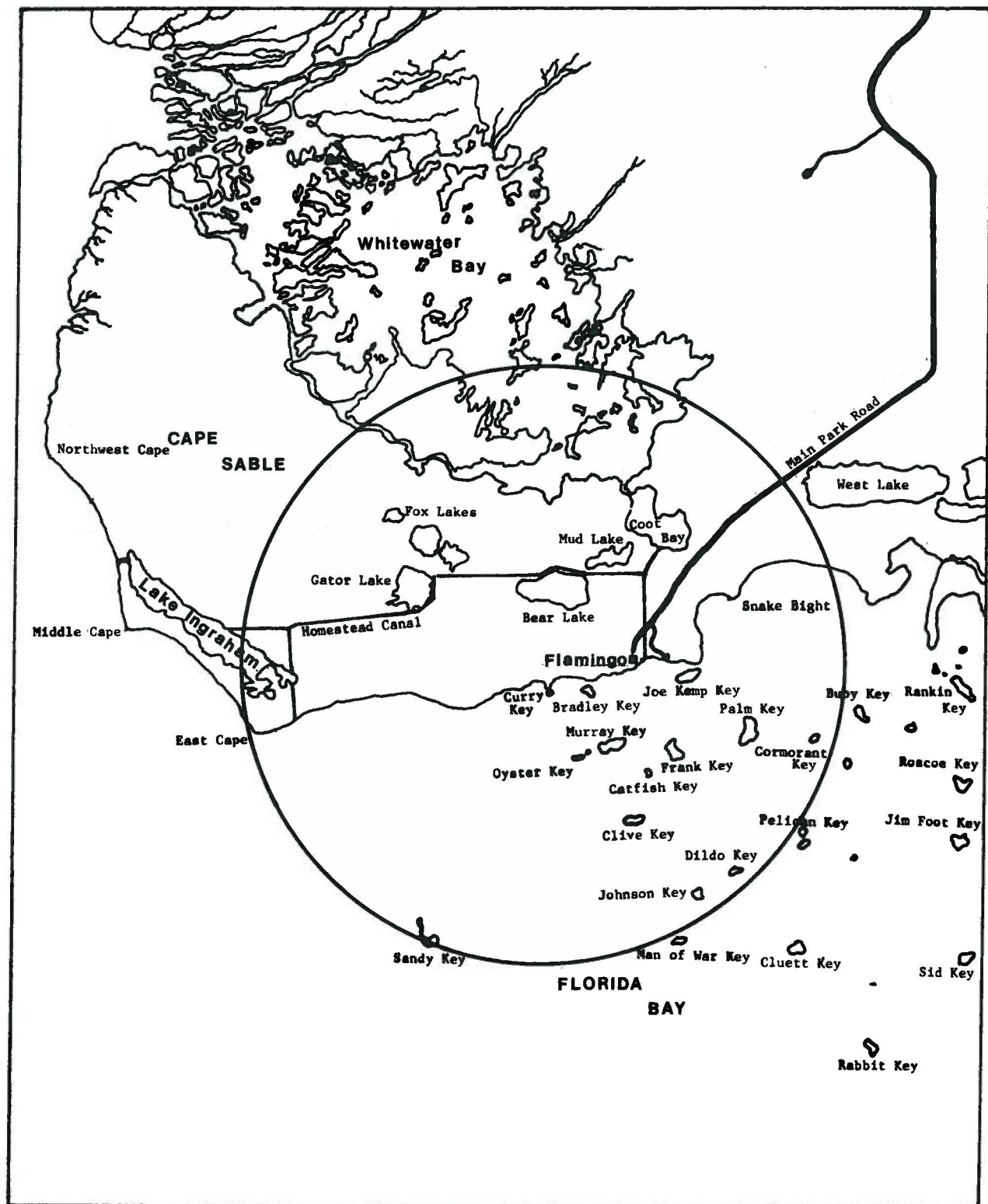


Figure 1. Coot Bay Christmas Bird Count area.

Count Synopsis

The following information is presented for each count: 1) date of count, 2) species observed, 3) number of individuals of each species, 4) total number of species observed, 5) number of observers, 6) number of parties, 7) total party hours, 8) total party miles, 9) approximate total number of birds observed, and 10) number of years each species observed. In addition, high and low counts for each category are underlined. Only the high is underlined for those species recorded in fewer than 28 of 29 counts.

A total of 241 species, 2 forms and 1 hybrid have been recorded for the 29 counts. Only 81 species have been observed on each of the 29 counts. The highest number of species observed was 180 on January 2, 1966. The lowest number of species was 114 on the first count, December 2, 1951. Overall, 20 of the 29 counts have recorded 150 species or more. The Coot Bay Christmas count consistently ranks among the leaders for most species observed.

Acknowledgement

We acknowledge all those who have participated in the Coot Bay Christmas Bird Count over the past 29 years. Special acknowledgement is given Henry P. Bennette (1951-55), Alexander "Sandy" Sprunt IV (1956), William B. Robertson, Jr. (1956-62), Richard Cunningham (1963-66), John C. Ogden (1967-72) and James M. King (1972-77) as count compilers. We thank Betty Curl and Dottie Anderson for manuscript preparation.

Jan 1 1967	Dec 31 1967	Dec 29 1968	Dec 28 1969	Jan 3 1971	Jan 2 1972	Dec 31 1972	Dec 30 1973	Dec 29 1974	Dec 28 1975	Jan 2 1977	Dec 31 1977	Dec 30 1978	Dec 30 1979	# YRS SEEN
-	8	1	3	5	-	2	3	4	3	7	8	-	2	21
-	-	-	-	-	-	-	-	-	-	-	1	-	-	3
2	1	8	4	7	6	4	6	23	4	5	36	-	7	25
650	428	683	<u>935</u>	475	110	49	56	101	<u>29</u>	72	31	30	31	29
2,800	2,200	2,600	2,100	1,750	2,200	1,020	866	1,279	1,894	1,407	803	4,024	1,620	29
773	355	600	400	495	700	630	524	649	1,024	654	450	383	459	29
1,700	1,300	1,900	1,450	1,400	1,500	980	1,275	1,733	2,337	2,239	2,419	1,670	1,534	29
118	69	28	37	57	58	86	128	146	50	25	37	31	74	29
8	3	4	1	4	3	-	<u>12</u>	7	2	4	5	1	8	25
490	360	450	275	430	425	660	417	707	484	322	329	225	334	29
281	275	360	185	285	375	470	331	503	181	749	<u>866</u>	409	214	29
236	174	349	285	210	145	160	240	176	203	158	117	142	135	29
1,300	680	1,200	1,100	1,200	1,200	910	1,166	1,088	1,360	1,391	1,228	699	599	29
<u>200</u>	31	68	41	37	20	18	26	33	154	30	12	12	26	22
55	25	39	22	27	30	25	63	64	25	32	<u>78</u>	61	42	29
5,500	1,765	2,100	2,000	1,550	1,600	2,100	1,007	2,166	2,674	1,932	1,588	2,147	1,766	29
4,200	1,250	1,050	1,700	2,100	1,100	1,800	1,110	1,723	2,362	1,673	1,648	1,480	2,396	29
<u>1,800</u>	400	400	500	575	425	440	482	1,140	1,036	1,433	990	1,186	804	29
127	112	108	130	<u>10</u>	32	68	47	54	23	42	61	25	31	29
78	65	80	60	29	63	53	90	118	60	<u>142</u>	18	18	25	29
-	-	1	<u>3</u>	-	-	-	2	1	-	-	-	-	-	5
2	4	5	<u>22</u>	10	4	70	15	<u>1</u>	<u>1</u>	2	4	8	21	29
800	900	900	1,100	240	130	620	455	664	410	289	325	227	693	29
9	22	15	68	44	49	77	<u>116</u>	10	71	51	17	95	26	18
-	<u>2</u>	-	-	-	-	-	-	-	-	-	-	-	-	2
-	-	-	-	-	-	-	-	-	-	-	1	1	1	3
12,000	6,875	<u>16,000</u>	8,500	3,550	2,100	2,800	3,500	2,382	7,362	2,344	2,324	7,999	2,024	29
550	600	450	450	400	275	450	520	413	<u>1,426</u>	727	624	565	395	29
2	3	-	2	-	10	6	-	12	<u>15</u>	9	1	-	1	17
-	-	-	-	2	-	-	-	-	-	-	-	-	-	3
-	-	-	<u>1</u>	-	-	-	-	-	-	-	-	-	-	1
-	1	10	-	3	-	-	-	-	-	<u>46</u>	3	5	2	9

[illegible]

SPECIES	Dec 22 1951	Dec 20 1952	Jan 2 1954	Jan 1 1955	Jan 1 1956	Dec 30 1956	Dec 28 1957	Dec 21 1958	Jan 3 1960	Dec 31 1960	Dec 30 1961	Dec 30 1962	Dec 29 1963
King Rail	-	-	1	-	-	-	<u>2</u>	-	-	-	-	-	1
Clapper Rail	9	1	1	1	<u>-</u>	2	1	6	11	3	18	26	<u>44</u>
Virginia Rail	1	-	-	-	-	-	1	-	-	-	-	-	1
Sora Rail	-	1	1	3	1	1	2	2	4	3	-	-	6
Black Rail	-	-	-	-	-	-	-	-	-	-	-	-	-
Purple Gallinule	-	-	-	-	-	-	-	-	-	-	-	-	-
Common Gallinule	-	-	4	5	1	1	-	7	12	5	6	-	5
American Coot	<u>20,000</u>	276	10,055	3,054	2,798	5,103	526	439	1,838	2,265	220	919	828
Semipalmated Plover	51	1	<u>-</u>	45	47	<u>451</u>	179	25	99	9	33	78	306
Piping Plover	-	-	-	-	<u>13</u>	-	2	-	-	-	4	1	3
Snowy Plover	-	-	-	-	-	-	-	-	-	-	-	-	-
Wilson's Plover	<u>2</u>	16	16	<u>67</u>	5	30	5	66	5	3	12	45	39
Killdeer	115	130	394	185	<u>1,119</u>	46	119	64	74	95	49	24	104
American Golden Plover	-	-	-	-	-	-	-	-	-	-	-	-	1
Black-bellied Plover	277	241	163	195	978	738	754	763	642	620	393	495	<u>-</u>
Ruddy Turnstone	15	<u>2</u>	9	70	3	8	42	12	<u>224</u>	28	65	65	122
Common Snipe	1	1	-	-	1	4	7	2	5	6	-	2	2
Long-billed Curlew	-	2	2	3	3	10	8	5	<u>24</u>	1	7	3	3
Whimbrel	-	-	10	4	16	9	-	13	11	7	16	2	3
Spotted Sandpiper	<u>59</u>	23	25	19	11	52	38	44	48	5	19	5	10
Solitary Sandpiper	1	-	1	-	-	-	-	-	-	-	-	-	1
Willet	325	659	566	563	192	710	925	<u>3,400</u>	719	414	109	<u>99</u>	264
Greater Yellowlegs	113	101	<u>1,216</u>	52	35	12	30	75	102	65	42	204	112
Lesser Yellowlegs	535	196	<u>2,337</u>	225	60	219	55	25	19	42	<u>17</u>	125	77
Red Knot	-	<u>88</u>	3	8	-	-	18	15	25	25	1	20	28
Pectoral Sandpiper	-	-	-	-	-	-	1	-	-	-	-	<u>4</u>	-
Least Sandpiper	<u>3</u>	56	180	230	4,376	1,386	3,261	1,242	1,781	490	805	1,733	2,275
Dunlin	<u>70</u>	2,448	7,645	489	1,206	2,804	3,989	2,774	4,185	3,770	625	3,011	1,533
Short-billed Dowitcher	<u>237</u>	1,130	612	411	336	1,089	657	1,300	967	612	410	<u>2,353</u>	1,275
Long-billed Dowitcher	-	-	-	-	-	-	-	-	-	-	-	-	<u>30</u>
Stilt Sandpiper	-	-	2	-	-	-	-	-	-	-	-	-	6
Semipalmated Sandpiper	251	2,611	703	1,320	1,356	<u>7,790</u>	5,025	1,202	1,036	1,320	220	762	3,176
Western Sandpiper	<u>-</u>	4	70	101	4,123	1,134	2,621	1,200	1,653	1,395	50	700	1,555
Marbled Godwit	97	87	9	<u>1</u>	<u>1</u>	121	42	8	105	41	13	2	63
Sanderling	-	-	3	20	2	2	1	-	25	-	12	18	63

Jan 1 1967	Dec 31 1967	Dec 29 1968	Dec 28 1969	Jan 3 1971	Jan 2 1972	Dec 31 1972	Dec 30 1973	Dec 29 1974	Dec 28 1975	Jan 2 1977	Dec 31 1977	Dec 30 1978	Dec 30 1979	# YRS SEEN
-	-	<u>2</u>	1	-	-	-	-	-	-	-	-	-	-	7
16	23	29	32	8	10	23	19	14	2	4	3	4	13	28
-	-	-	-	-	-	2	1	-	-	-	-	-	<u>3</u>	7
4	2	2	7	11	8	13	11	3	4	2	3	4	7	26
-	-	-	2	-	-	-	-	-	-	-	-	-	-	1
-	-	-	-	-	-	-	-	-	-	-	-	-	1	1
4	2	9	6	7	4	<u>104</u>	43	20	3	4	1	3	7	25
11,500	4,230	3,600	9,900	1,160	<u>20,000</u>	2,030	7,208	3,886	3,456	930	<u>33</u>	5,099	14,364	29
219	310	240	370	35	110	65	84	<u>451</u>	243	289	256	93	169	28
3	-	9	9	-	5	-	-	6	-	1	1	-	10	15
-	-	-	<u>1</u>	-	-	-	-	-	-	-	<u>1</u>	-	-	2
20	18	46	29	13	70	20	11	18	7	52	31	14	13	29
233	41	195	275	21	<u>7</u>	47	30	80	32	148	23	51	23	29
-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
459	586	555	325	315	310	640	291	1,517	903	<u>2,507</u>	900	350	472	28
73	50	114	109	180	75	104	100	149	27	78	106	44	81	29
2	11	2	7	3	1	2	1	1	3	3	1	-	3	25
6	4	3	4	3	6	2	3	5	2	6	5	2	7	27
4	8	11	8	4	22	9	10	5	30	<u>47</u>	13	45	33	26
23	23	18	19	30	26	33	39	51	<u>-</u>	32	37	45	38	28
-	1	1	-	-	-	<u>2</u>	-	-	-	-	-	-	-	8
571	467	1,450	285	550	700	332	390	1,700	640	3,242	2,857	785	1,127	29
158	375	350	170	82	15	130	30	486	<u>11</u>	200	96	16	54	29
143	274	300	340	107	70	90	27	130	24	170	77	23	85	29
1	28	13	10	30	17	0	4	14	26	35	51	29	8	25
-	-	-	-	-	-	-	-	-	-	-	1	-	-	3
3,250	650	3,400	2,900	1,125	1,550	115	1,566	3,500	2,491	<u>6,413</u>	3,252	4,093	1,723	29
1,750	3,600	3,900	3,200	835	2,700	2,575	530	1,276	2,708	4,904	5,065	1,444	3,791	29
241	750	1,500	750	485	1,150	1,990	903	1,621	1,696	1,887	1,555	1,163	1,791	29
-	-	-	-	-	2	-	1	-	2	1	2	1	-	8
2	12	4	2	12	-	-	-	4	<u>43</u>	8	33	-	6	14
3,050	2,500	4,700	1,450	2,350	1,100	1,098	460	1,749	192	395	837	<u>106</u>	508	29
1,400	1,240	1,400	450	365	450	130	1,712	895	2,963	<u>5,315</u>	1,760	1,868	2,850	28
51	67	355	44	195	260	250	60	<u>493</u>	138	390	217	5	121	29
23	21	33	26	59	9	96	221	87	184	<u>446</u>	246	34	21	24

[illegible]

SPECIES	Dec 22 1951	Dec 20 1952	Jan 2 1954	Jan 1 1955	Jan 1 1956	Dec 30 1956	Dec 28 1957	Dec 21 1958	Jan 3 1960	Dec 31 1960	Dec 30 1961	Dec 30 1962	Dec 29 1963
<u>Chaetura</u> sp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Ruby-throated Hummingbird	3	4	11	<u>1</u>	2	3	5	19	25	2	8	23	9
Belted Kingfisher	90	112	126	120	165	70	109	102	250	<u>259</u>	120	175	186
Common (Yellow-shafted) Flicker	7	6	12	5	6	14	24	19	<u>46</u>	5	3	<u>2</u>	14
Pileated Woodpecker	8	11	3	14	6	7	3	<u>2</u>	15	5	3	<u>2</u>	7
Red-bellied Woodpecker	48	70	40	25	33	47	43	35	87	55	38	43	<u>110</u>
Yellow-bellied Sapsucker	-	1	3	-	3	2	1	6	17	32	5	8	22
Hairy Woodpecker	-	-	-	-	-	-	-	-	-	-	-	-	-
Downy Woodpecker	-	-	-	-	-	<u>1</u>	-	-	-	-	-	-	<u>1</u>
Eastern Kingbird	-	-	-	-	-	<u>1</u>	-	-	-	-	-	-	-
Western Kingbird	-	-	-	-	-	-	-	1	-	-	5	-	-
Scissor-tailed Flycatcher	-	-	-	-	-	1	1	-	-	-	-	-	-
Great-crested Flycatcher	46	37	41	34	21	49	32	26	56	29	52	41	107
Eastern Phoebe	28	60	54	23	21	78	72	28	44	32	106	51	130
Least Flycatcher	-	-	-	-	-	-	-	-	-	-	-	-	<u>1</u>
<u>Empidonax</u> sp.	-	-	-	-	-	-	-	1	1	-	1	1	1
Eastern Wood Pewee	-	-	-	-	-	-	-	-	-	-	-	-	-
Vermilion Flycatcher	-	-	-	-	-	-	-	-	<u>1</u>	-	-	-	-
Tree Swallow	1	317	<u>-</u>	885	2,718	5	16	39	5	196	70	281	170
Rough-winged Swallow	-	-	-	-	-	-	-	1	-	-	-	-	-
Barn Swallow	-	-	-	1	-	-	-	3	-	2	-	-	2
Blue Jay	-	-	-	-	-	-	-	-	-	8	-	1	2
Common Crow	<u>71</u>	127	138	90	197	222	169	136	128	245	195	192	215
Fish Crow	2	<u>15</u>	-	-	-	1	6	-	-	-	-	-	-
Tufted Titmouse	-	-	-	-	-	-	-	-	-	-	-	-	-
House Wren	60	69	30	38	<u>25</u>	79	125	54	172	105	235	292	<u>384</u>
Winter Wren	-	-	-	-	-	-	-	-	-	-	-	-	-
Carolina Wren	7	4	9	3	6	1	1	1	2	2	3	1	8
Long-billed Marsh Wren	-	-	1	5	-	-	-	-	3	-	-	2	5
Short-billed Marsh Wren	6	4	3	7	<u>-</u>	1	9	2	3	4	5	4	6
Mockingbird	24	83	59	35	27	149	94	25	184	68	113	145	204
Gray Catbird	14	101	42	83	39	126	111	<u>11</u>	247	116	94	202	<u>308</u>
Brown Thrasher	1	4	-	-	-	3	9	5	8	8	10	5	14
American Robin	-	-	112	113	9	15	8	1	<u>1,965</u>	22	3	151	1,323

Jan 1 1967	Dec 31 1967	Dec 29 1968	Dec 28 1969	Jan 3 1971	Jan 2 1972	Dec 31 1972	Dec 30 1973	Dec 29 1974	Dec 28 1975	Jan 2 1977	Dec 31 1977	Dec 30 1978	Dec 30 1979	# YRS SEEN
-	-	-	-	-	-	-	-	-	-	-	-	<u>1</u>	-	1
27	23	27	5	11	<u>1</u>	4	3	15	2	8	13	21	7	29
198	140	170	171	126	<u>69</u>	156	215	153	176	102	74	73	78	29
26	12	25	12	15	12	30	20	7	3	3	18	10	12	29
<u>2</u>	14	16	16	18	12	<u>19</u>	13	9	5	6	8	7	7	29
83	109	104	58	81	53	80	70	46	<u>22</u>	33	71	30	59	29
17	13	29	12	17	7	13	13	12	2	11	11	3	9	27
-	<u>1</u>	-	-	-	-	-	-	-	-	-	-	-	-	2
-	-	-	-	-	-	-	<u>1</u>	-	-	<u>1</u>	<u>1</u>	-	-	6
-	-	-	-	-	-	-	-	<u>1</u>	-	-	-	-	-	2
<u>7</u>	1	4	2	-	-	-	1	-	-	1	2	-	2	10
2	1	-	2	-	1	-	<u>5</u>	-	-	-	-	-	-	7
<u>120</u>	70	87	62	84	30	64	43	30	<u>14</u>	21	36	18	55	29
95	65	115	82	88	41	60	25	20	<u>9</u>	11	37	13	26	29
-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
1	<u>2</u>	1	-	1	-	-	<u>2</u>	-	1	1	-	-	-	14
1	-	-	-	-	-	-	-	-	-	<u>3</u>	-	-	-	3
-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
1	150	250	285	<u>3,525</u>	23	62	260	1,631	428	3	214	136	489	28
2	-	-	-	-	-	1	-	<u>6</u>	-	-	-	-	-	4
-	2	-	-	-	-	-	-	<u>16</u>	-	-	2	-	5	9
-	2	1	-	8	-	<u>12</u>	1	-	-	2	-	-	4	11
185	202	202	240	240	160	210	162	288	224	214	182	239	157	29
-	2	-	-	-	-	-	4	3	-	2	-	-	1	9
-	-	<u>1</u>	-	-	-	-	-	-	-	-	-	-	-	1
193	198	238	144	102	38	144	47	37	29	102	131	54	104	29
-	-	-	-	-	-	<u>1</u>	-	-	-	-	-	-	-	1
-	4	2	-	1	1	4	-	5	2	2	1	-	3	25
2	3	33	<u>65</u>	10	1	27	7	2	22	5	8	5	6	21
4	1	23	<u>32</u>	2	5	12	4	2	12	4	12	8	5	28
124	120	95	55	157	108	155	61	36	45	28	57	<u>12</u>	39	29
140	159	221	109	111	151	205	68	69	35	65	88	38	109	29
7	7	<u>16</u>	6	3	12	12	2	1	3	5	9	2	10	26
-	3	20	257	9	1	6	14	30	25	15	-	1	69	25

SPECIES	Dec 22 1951	Dec 20 1952	Jan 2 1954	Jan 1 1955	Jan 1 1956	Dec 30 1956	Dec 28 1957	Dec 21 1958	Jan 3 1960	Dec 31 1960	Dec 30 1961	Dec 30 1962	Dec 29 1963
<i>Hylochichla</i> sp	-	-	-	-	-	-	-	-	-	-	-	-	-
Hermit Thrush	-	-	-	-	-	2	-	-	-	2	-	-	-
Swainson's Thrush	-	-	-	-	-	-	-	-	<u>1</u>	-	-	-	-
Blue-gray Gnatcatcher	<u>137</u>	182	230	139	212	640	375	239	492	170	538	414	<u>766</u>
Ruby-crowned Kinglet	-	-	1	-	3	2	-	-	-	1	11	20	<u>41</u>
Water Pipit	-	-	-	-	-	-	<u>1</u>	-	-	<u>1</u>	-	-	-
Cedar Waxwing	-	-	-	-	-	-	-	-	-	-	-	5	-
Loggerhead Shrike	3	1	2	1	-	2	5	1	-	2	3	2	<u>9</u>
Starling	-	-	-	-	-	-	-	-	-	-	-	-	-
White-eyed Vireo	13	15	22	11	<u>3</u>	71	35	21	147	74	94	77	<u>168</u>
Yellow-throated Vireo	-	-	1	-	-	<u>10</u>	-	3	3	3	1	2	5
Solitary Vireo	<u>1</u>	3	7	5	8	23	9	5	4	<u>32</u>	6	<u>1</u>	2
Red-eyed Vireo	-	-	-	-	-	-	-	-	-	-	-	-	<u>1</u>
Black-and-white Warbler	<u>8</u>	14	10	12	12	<u>102</u>	33	29	38	17	80	40	82
Worm-eating Warbler	-	1	-	-	-	<u>2</u>	-	-	-	-	-	-	1
Tennessee Warbler	-	-	-	-	-	-	-	-	-	-	-	-	-
Blue-winged Warbler	-	<u>1</u>	-	-	<u>1</u>	-	-	-	-	-	-	-	-
Orange-crowned Warbler	6	26	13	16	<u>3</u>	56	15	7	16	17	42	54	54
Northern Parula Warbler	4	10	7	<u>2</u>	11	38	9	12	17	<u>40</u>	20	24	25
Yellow Warbler	-	-	-	-	-	1	-	-	4	-	2	-	2
Magnolia Warbler	-	-	-	-	-	-	-	-	-	-	-	1	1
Cape May Warbler	-	5	1	-	-	-	-	-	-	-	5	1	-
Black-throated Blue Warbler	-	1	-	1	-	-	-	-	-	2	4	2	3
Yellow-rumped (Myrtle) Warbler	1	-	37	<u>1,152</u>	16	225	39	-	-	235	11	1,078	2
Black-throated Gray Warbler	-	-	1	-	-	-	-	-	-	-	-	-	-
Black-throated Green Warbler	-	-	1	-	1	-	-	-	-	1	-	-	-
Yellow-throated Warbler	3	<u>2</u>	5	6	5	40	16	6	36	31	53	31	47
Blackburnian Warbler	-	-	-	-	-	-	-	-	-	-	-	-	-
Bay-breasted Warbler	-	-	-	-	-	-	-	-	-	-	-	-	-
Pine Warbler	-	-	-	-	-	1	-	-	-	<u>4</u>	-	-	-
Prairie Warbler	18	<u>11</u>	23	19	16	109	83	42	129	60	119	110	111
Palm Warbler	150	134	134	100	115	288	245	169	217	356	640	453	<u>1,075</u>
Ovenbird	-	3	-	1	1	4	5	2	7	5	7	2	8
Northern Waterthrush	-	-	2	1	6	23	11	4	9	5	6	7	39

Jan 1 1967	Dec 31 1967	Dec 29 1968	Dec 28 1969	Jan 3 1971	Jan 2 1972	Dec 31 1972	Dec 30 1973	Dec 29 1974	Dec 28 1975	Jan 2 1977	Dec 31 1977	Dec 30 1978	Dec 30 1979	# YR: SEE
-	<u>1</u>	-	-	-	-	-	-	-	-	-	-	-	-	1
<u>5</u>	-	1	-	-	-	1	-	-	-	-	-	-	-	7
-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
490	468	392	342	279	184	262	520	480	645	378	441	315	388	29
2	6	21	8	2	3	3	2	1	-	1	1	-	3	21
-	-	-	-	-	-	-	-	-	-	-	-	-	-	3
-	-	-	-	11	-	-	<u>31</u>	20	-	-	-	-	-	6
4	1	4	-	1	1	-	-	-	-	1	2	1	-	21
-	-	-	1	-	-	-	1	2	-	-	8	16	<u>52</u>	7
113	81	90	56	72	65	53	70	45	34	41	73	45	97	29
4	2	1	1	-	3	1	-	3	-	6	3	3	4	21
3	<u>1</u>	12	14	3	<u>1</u>	3	<u>1</u>	<u>1</u>	2	10	6	4	6	29
-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
86	50	45	29	40	29	33	46	42	25	49	50	39	59	29
1	-	<u>2</u>	-	-	-	-	-	1	-	-	-	-	<u>2</u>	8
-	-	<u>1</u>	-	-	-	-	-	-	-	-	-	-	-	1
-	<u>1</u>	-	-	-	-	-	-	<u>1</u>	-	-	-	-	-	4
48	24	<u>75</u>	21	15	7	11	6	7	13	43	32	14	23	29
36	20	37	15	14	21	7	22	30	10	14	12	4	27	29
7	6	8	7	5	4	7	4	6	3	9	6	5	7	20
-	2	-	-	-	-	2	2	-	-	1	-	1	<u>4</u>	9
3	-	-	-	1	-	4	2	5	2	7	4	2	<u>17</u>	16
5	2	3	<u>6</u>	3	1	1	-	2	-	4	3	1	2	20
2	-	67	5	-	37	60	2	89	14	6	3	5	48	24
-	-	1	1	-	-	-	-	-	-	-	-	<u>2</u>	-	4
<u>3</u>	1	<u>3</u>	<u>3</u>	-	1	1	1	-	-	2	-	-	2	12
<u>85</u>	45	33	15	15	11	32	18	41	10	13	34	11	23	29
-	-	-	-	-	-	-	-	-	-	-	-	<u>1</u>	-	1
-	-	-	-	-	-	-	-	-	-	-	-	<u>1</u>	-	1
-	-	-	-	-	-	-	-	-	-	-	-	1	-	3
115	130	168	98	89	46	80	49	70	59	72	<u>277</u>	91	115	29
344	550	435	248	254	133	380	195	120	<u>56</u>	96	243	67	141	29
12	6	<u>26</u>	12	11	3	2	2	-	3	6	4	6	6	26
17	14	<u>40</u>	15	17	8	10	8	5	8	5	8	3	15	27

[illegible]

Jan 1 1967	Dec 31 1967	Dec 29 1968	Dec 28 1969	Jan 3 1971	Jan 2 1972	Dec 31 1972	Dec 30 1973	Dec 29 1974	Dec 28 1975	Jan 2 1977	Dec 31 1977	Dec 30 1978	Dec 30 1979	# YRS SEEN
1	-	-	-	-	-	-	-	-	-	-	-	-	-	3
-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
422	565	826	460	685	265	<u>1,090</u>	496	300	361	370	732	427	474	29
<u>10</u>	2	5	3	-	1	3	-	-	2	2	1	1	1	22
-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
3	6	4	3	<u>15</u>	-	5	3	9	3	6	3	7	11	26
<u>67</u>	12	22	20	15	40	54	42	40	26	31	40	30	3	23
-	<u>1</u>	-	-	-	-	-	-	-	-	-	-	-	-	1
129	97	52	77	67	43	42	35	16	<u>14</u>	22	51	51	32	29
-	<u>1</u>	<u>1</u>	-	-	-	-	-	-	-	-	-	-	-	3
1,450	2,530	2,450	4,200	1,415	<u>5,900</u>	1,090	2,244	844	1,165	2,341	726	1,273	504	29
1	1	2	1	2	<u>6</u>	<u>6</u>	4	4	1	1	-	-	1	17
-	-	-	-	<u>1</u>	-	-	-	-	-	<u>1</u>	-	-	-	4
-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
<u>1</u>	-	-	-	-	-	-	-	-	-	-	-	-	-	1
32	137	82	475	81	112	167	190	97	39	71	175	108	115	28
383	94	543	<u>4,050</u>	88	650	464	370	145	184	145	147	259	666	29
4	3	-	-	3	-	-	-	-	1	-	4	-	-	7
-	-	-	-	-	-	-	-	-	-	-	<u>4</u>	-	-	1
-	-	-	-	-	-	-	-	-	-	<u>1</u>	-	-	-	1
127	85	145	56	145	73	123	67	69	89	73	112	61	106	29
<u>1</u>	-	-	-	-	-	-	<u>1</u>	-	-	-	-	-	-	2
-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
1	4	22	2	3	-	4	2	-	1	-	12	-	3	19
41	46	<u>94</u>	34	20	9	13	11	16	7	<u>2</u>	10	4	6	29
-	-	-	-	<u>1</u>	-	-	-	-	-	-	-	-	-	1
-	-	-	1	-	-	-	<u>31</u>	-	-	-	4	-	-	3
363	83	530	455	104	14	66	368	296	242	154	239	46	19	29
12	4	15	6	7	18	13	5	2	4	2	13	3	3	29
221	258	<u>330</u>	216	124	<u>25</u>	127	45	<u>25</u>	43	67	43	50	51	29
60	6	20	4	1	-	2	2	-	1	7	4	-	2	25
2	26	<u>41</u>	39	12	3	25	6	2	19	12	14	3	12	28
-	-	<u>1</u>	-	-	-	-	-	-	-	-	-	<u>1</u>	-	3

SPECIES	Dec 22 1951	Dec 20 1952	Jan 2 1954	Jan 1 1955	Jan 1 1956	Dec 30 1956	Dec 28 1957	Dec 21 1958	Jan 3 1960	Dec 31 1960	Dec 30 1961	Dec 30 1962	Dec 29 1963
Vesper Sparrow	-	-	-	-	-	-	-	-	-	-	-	-	-
Lark Sparrow	-	-	-	-	-	-	-	-	-	-	-	<u>4</u>	2
Chipping Sparrow	-	-	2	-	-	-	-	-	-	-	2	-	<u>3</u>
Clay-colored Sparrow	-	-	-	-	-	-	-	-	-	-	-	-	1
Field Sparrow	-	-	-	1	-	-	2	-	-	1	1	-	<u>7</u>
White-throated Sparrow	-	-	-	-	-	-	<u>1</u>	-	-	-	-	-	-
Lincoln's Sparrow	-	-	-	-	-	2	<u>6</u>	-	-	-	-	1	2
Swamp Sparrow	<u>5</u>	44	36	57	22	16	67	35	99	55	131	95	242
Song Sparrow	1	-	-	-	-	2	1	-	-	-	1	-	-
Number of Observers	21	20	26	31	<u>16</u>	33	44	34	65	71	69	60	78
Number of Parties	9	9	11	11	<u>7</u>	11	15	13	<u>19</u>	<u>19</u>	13	<u>19</u>	17
Party-hours	77	89	102	84	<u>74</u>	127	150	122	180½	189½	183	179	184
Total Party-miles	230½	212	<u>154</u>	180½	180	218	319	329	593	<u>626</u>	341	244	341
Total No. of Species	<u>114</u>	126	139	132	131	146	152	140	146	150	153	154	172
Approximate Number of Birds	39,653	74,069	42,238	<u>19,457</u>	35,155	44,167	35,849	41,065	67,614	52,916	21,767	51,742	54,361

Jan 1 1967	Dec 31 1967	Dec 29 1968	Dec 28 1969	Jan 3 1971	Jan 2 1972	Dec 31 1972	Dec 30 1973	Dec 29 1974	Dec 28 1975	Jan 2 1977	Dec 31 1977	Dec 30 1978	Dec 30 1979	# YRS SEEN
-	1	-	-	-	-	-	-	-	-	1	<u>6</u>	1	-	5
-	-	-	-	-	-	-	-	-	-	-	-	-	-	3
-	-	2	-	1	-	-	2	-	-	-	-	-	-	6
<u>3</u>	-	-	-	-	-	-	-	-	-	-	-	-	-	3
<u>7</u>	-	1	-	2	-	4	-	-	-	1	-	-	-	12
-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
<u>6</u>	1	5	-	5	-	-	-	-	-	-	3	-	-	11
279	150	184	<u>385</u>	76	27	154	42	14	28	34	139	23	21	29
2	-	-	-	-	1	-	1	-	-	-	<u>13</u>	-	1	10
71	72	71	66	56	59	60	60	65	54	71	54	64	41	
17	16	16	15	14	14	15	13	17	14	16	15	17	15	
196	185	157	130	140	139	166	<u>208</u>	223	<u>208</u>	177	181	168½	129	
501	470	410	337	373	337	307	321	514	308	478	308	390	281	
169	170	170	166	161	152	159	163	161	151	170	163	157	164	
100,506	75,492	83,990	89,608	47,772	69,974	37,732	<u>175,002</u>	60,653	61,138	105,009	44,812	67,436	67,595	