

Forty-eighth Breeding Bird Census

Edited by Willet T. and Aldeen C. Van Velzen

THIS YEAR, 127 Breeding Bird Censuses were submitted, representing thirty-one states and provinces, with Pennsylvania (26), California (10), and Colorado (10) having the highest numbers. Of the censuses listed here, 32 (25.2%) are new, and the longest-standing census was that of A. H. Claugus, of Licking County, Ohio (Census No. 70), now in its 46th year.

A total of 168 observers, spending 4125 hours in the field, censused 1611.3 hectares (3981.5 acres). The highest number of hours spent on any one census was 390, although apparently this total included a large block of time not actually within the breeding season. The aver-

age size of census blocks was 12.6 hectares, with a range of from 2.6 to 64.8. The number of pairs censused per square kilometer ranged from 36 to 3213, and averaged 574. The total number of species found per census ranged from three to 48, averaging 21.1.

The data compiled in the censuses listed in the table below are being stored in a computer at the Laboratory of Ornithology at Cornell University. Requests for information on how to obtain these data should be directed to: Gregory S. Butcher, Cooperative Research Program, Cornell Laboratory of Ornithology, 159 Sapsucker Woods Road, Ithaca, New York 14850 (Tel. 607/256-4999).

List of Participants

Fred Abbott, R. Carroll Abbott, David L. Alles, David A. Anderson, Ken Anderson, Robert A. Askins, Harriette Barker, Leon L. Barkman, Frederick M. Baumgartner, Seth Benz, Michael Berdine, Kris Billing, Dale E. Birkenholz, Shirley A. Briggs, J. Bristow, N. Bristow, Allison Brady, Dorothy Broemsen, Elizabeth W. Brooks, Brooks Bird Club, Lori Bross, J. Brotherton, Norman L. Brunswig, A. R. Buckelew, Kyle Bush, Deborah Byers, Victoria J. Byre, Anthony C. Caprio, Eugene A. Cardiff, Hartsell Cash, E. D. Chandler, E. R. Chandler, A. H. Claugus, Carolyn Conrad, Roland Cowger, H. Creasy, Joan Cris-



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List of Censuses

<i>Habitat</i>	<i>Co.: State or Province</i>	<i>Hectares</i>	<i>Pairs/ sq. km.</i>	<i>Hrs. Obs.</i>	<i>Species</i>	<i>Years of Study</i>	<i>Contributors</i>
A. Eastern—Deciduous Forest							
1 Second-growth Hardwood Forest	Litchfield, CT	10.1	998	15	42	18	Magee
2 Mixed Upland Forest	Ulster, NY	42.3	250	34	48	4	S. Wright
3 Oak—Ridgetop Forest	Ulster, NY	32.2	212	16	32	1	S. Wright
4 Suburban Bird Sanctuary	Nassau, NY	4.3	886	19	21	2	Kolodnicki
5 Aspen (Cut 1980-81)	Centre, PA	4.2	204	6	13	3	Yahner
6 Aspen (Cut 1976-77)	Centre, PA	4.0	709	6	12	3	Yahner
7 Aspen (Cut 1976-77)	Centre, PA	3.3	345	5	11	3	Yahner
8 Mature Aspen (Treated Sector)	Centre, PA	2.6	383	5	13	3	Yahner
9 Mature Mixed Oak (Treated Sector)	Centre, PA	3.2	293	4	14	3	Yahner
10 Mature Aspen (Untreated Sector)	Centre, PA	3.0	250	5	11	3	Yahner
11 Red Maple—Oak Forest	Centre, PA	15.0	460	12	18	1	Yahner, H. Smith, A. Wright
12 Red Maple—Oak Forest	Centre, PA	15.0	420	11	19	1	Yahner, H. Smith, A. Wright
13 Red Maple—Oak Forest	Centre, PA	15.0	263	11	16	1	Yahner, H. Smith, A. Wright
14 Red Maple—Oak Forest	Centre, PA	15.0	424	—	18	1	Yahner, H. Smith, A. Wright
15 Mixed Deciduous Forest	Huntingdon, PA	15.0	287	14	20	1	Yahner, H. Smith, A. Wright
16 Mixed Deciduous Forest	Huntingdon, PA	15.0	180	12	13	1	Yahner, H. Smith, A. Wright
17 Mixed Deciduous Forest	Huntingdon, PA	15.0	143	12	17	1	Yahner, H. Smith, A. Wright
18 Mixed Deciduous Forest	Huntingdon, PA	15.0	213	12	20	1	Yahner, H. Smith, A. Wright
19 Mountain Top, Oak—Maple Forest	Westmoreland, PA	6.1	469	6	18	6	R. Abbott
20 Oak—Maple Ridgetop Forest	Berks, PA	19.3	127	19	12	3	Senner, Loder, Benz
21 Oak—Maple Slope Forest	Berks, PA	16.9	106	19	17	3	Benz, Matz, Senner
22 Sugar Maple—Mixed Hardwood Forest	Washington, PA	9.7	790	28	28	3	Ickes
23 Mature Deciduous Floodplain Forest	Montgomery, MD	7.6	890	55	23	32	Eliot, Thompson, Gauthey
24 Mixed Upland Habitat	Washington, DC	14.2	1285	206	31	26	Briggs,* Cash, D'Imperio, Feather, Holbrook, Hunt, Hunt Patteson, Shedd, Edwards*
25 Oak—Hickory—Tulip-tree Forest	Amherst, VA	13.5	505	25	20	5	
26 Upland Oak—Hickory Forest	Fairfax, VA	11.0	813	74	22	12	Espenshade, Guisti, Per-Lee,* Strong, Watson*
27 Beech—Birch—Maple	Randolph, WV	6.1	321	9	14	1	Brooks Bird Club
28 Maple—Beech—Birch	Tucker-Grant, WV	6.1	206	8	11	1	Brooks Bird Club
29 Maple—Birch—Beech	Tucker, WV	6.1	338	6	16	1	Brooks Bird Club
30 Oak—Maple—Basswood	Randolph, WV	6.1	255	14	12	1	Brooks Bird Club
31 Oak—Tulip-tree—Beech	Wyoming, WV	6.1	478	13	24	1	Brooks Bird Club
32 Floodplain Forest	Orange, NC	13.0	839	22	32	8	Hall, Mueller,* Mueller,* Piper, Wiley
33 Mixed Deciduous Forest	Orange, NC	12.6	642	19	30	9	Hall, Mueller,* Mueller,* Piper, Wiley
34 Virgin Hardwood Swamp Forest	Dorchester, SC	8.9	1741	15	26	4	Brunswick
35 Wooded City Ravine	York, ONT	20.0	210	16	16	15	Nasmith
36 Moist Deciduous Forest	Midland, MI	10.0	215	19	17	2	Francke
37 Mixed Deciduous Second-growth Floodplain Forest	Cook, IL	29.1	604	91	32	2	Byre
38 Oak—Hickory Forest	Lake, IL	9.1	577	11	21	4	Hickman
39 Neotoma Valley	Hocking, OH	20.2	435	70	32	7	Claugus
B. Eastern—Coniferous—Deciduous (Mixed)							
40. Climax Hemlock—White Pine Forest, with Transition Hardwoods	Litchfield, CT	10.5	1036	13	37	18	Magee
41. Maple—Pine—Oak Second-growth Forest	Norfolk, MA	11.8	474	13	23	8	Davis
42. Beech—Spruce—Hemlock Forest	Hamilton, NY	23.9	427	53	23	4	Droege, Schwartz, Noon
		23.9	507	54	22	(1983) 5	(1984) Droege, Billing, Noon

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<i>Habitat</i>	<i>Co.; State or Province</i>	<i>Hectares</i>	<i>Pairs/ sq. km.</i>	<i>Hrs. Obs.</i>	<i>Species</i>	<i>Years of Study</i>	<i>Contributors</i>
43. Beech—Spruce—Maple Forest	Essex, NY	19.4	495	50	23	4	Droege, Schwartz, Noon
						(1983)	
		19.4	547	47	23	5	Droege, Billing, Noon
						(1984)	
44. Upland Mixed Pine—Spruce—Hardwood Plantation	Allegany, NY	16.6	440	16	32	11	Brooks
45. Mixed Oak—Pine Forest I	Luzerne, PA	6.0	818	48	27	8	Gross
46. Mixed Oak—Pine Forest II	Luzerne, PA	11.1	588	55	36	8	Gross
47. Mixed Hardwood Forest	Calvert, MD	11.3	830	21	48	20	Fales
48. Central Hardwood Forest with Scattered Pine	Washington, DC	26.3	253	63	24	25	Criswell,* Czaplak, DeMarco, Ford
49. Hemlock—Tulip-tree	Wyoming, WV	6.1	511	10	17	1	Brooks Bird Club
50. Oak—Tulip-tree—Hemlock	Wyoming, WV	6.1	329	8	12	1	Brooks Bird Club
51. Longleaf Pine—Turkey Oak Sandhills	Hoke, NC	12.8	583	16	33	1	Lee
C. Eastern Coniferous							
52. Red Pine Plantation	Litchfield, CT	8.5	1065	13	35	7	Magee
53. Upland Christmas Tree Farm	Allegany, NY	10.7	420	16	21	2	Brooks
54. Upland Scotch Pine Plantation	Allegany, NY	9.3	688	16	24	16	Brooks
55. Jack Pine Plantation	Oscoda, MI	14.6	99	19	13	1	Rakstad, Probst
56. Red Pine Plantation	Oscoda, MI	9.8	36	11	6	1	Rakstad, Probst
57. Red Pine Plantation	Oscoda, MI	18.3	150	18	18	1	Rakstad, Probst
D. Eastern—Mixed Habitat							
58. Mixed Upland Habitat and Swamp	Fairfield, CT	14.2	169	7	30	17	Barkman
59. Oak—Hemlock Forest, Transition Forest and Thicket	New London, CT	23.1	609		37	14	Askins, Philbrick, Sugeno
					67		
		6.5	622		28	14	
60. Upland Brushy Pasture	Litchfield, CT	8.5	1394	17	39	18	Magee
61. Abandoned Upland Pasture	Allegany, NY	8.0	1969	41	31	1	Pitzrick
62. Deciduous Forest with Pond and Brook	Bergen, NJ	16.2	290	8	27	21	Bristow, Bristow, France, Sjolander, White, Brotherton*
63. Abandoned Pasture with Stream Ravines and Pine Plantation	Erie, PA	8.5	1041	66	44	1	Howlett
64. Laurel Summit Glade, Mountain Top Bog with Mixed Hardwood and Evergreen Edge	Westmoreland, PA	6.1	577	4	22	6	R. Abbott
65. Mountain Top, Mixed Hardwood and White Pine Forest	Westmoreland, PA	6.1	552	6	18	6	R. Abbott
66. Spruce—Laurel Bog	Randolph, WV	6.1	560	18	21	1	Brooks Bird Club
67. Abandoned Pasture Scrubland	Ottawa, ONT	9.0	611	18	27	3	Silieff
68. Mixed Hardwood—Agriculture	Wellington, ONT	4.4	822	16	8	1	Kevan
69. Transitional Mixed Forest—Field	Simcoe, ONT	6.0	700	20	17	5	Dietz, Mills
70. Disturbed Oak—Hickory Forest, Pine Stand, Edge, and Pond	Licking, OH	14.2	579	22	38	46	Claugus
71. Deciduous Clearcut	Washington, TN	20.2	551	11	23	10	Lewis
72. Mixed Mesophytic Woods, Fields, and Brush	Putnam, TN	27.0	378	60	38	8	Simmers
73. Brushy Old Field with Hedgerows	Wayne, IN	4.3	762	9	14	2	Miller, Young
74. Mixed Habitat Second-growth and Old Field	Wayne, IN	11.1	620	14	27	2	Miller, Young
E. Central—Prairie							
75. Restored Tall Grass Prairie	McLean, IL	12.1	338	16	12	9	Birkenholz, Bross
76. Tall Grass Prairie I	Dickinson, IA	16.0	275	23	12	3	Lowther
77. Tall Grass Prairie II	Dickinson, IA	64.8	255	38	17	3	Lowther

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Habitat	Co.: State or Province	Hectares	Pairs/ sq. km.	Hrs. Obs.	Species	Years of Study	Contributors
78. Tall Grass Prairie II	Dickinson, IA	44.8	268	40	20	3	Lowther
79. Kentucky Blue Grass Prairie	Stutsman, ND	4.8	227	3	10	13	Eldridge, D. Johnson
80. Mixed Prairie I	Stutsman, ND	10.0	310	8	18	13	Eldridge, D. Johnson
81. Mixed Prairie II	Stutsman, ND	6.1	131	3	8	13	Eldridge, D. Johnson
82. Mixed Prairie III	Stutsman, ND	6.1	107	4	10	13	Eldridge, D. Johnson
83. Mixed Prairie IV	Stutsman, ND	6.1	139	5	13	13	Eldridge, D. Johnson
84. Mixed Prairie V	Stutsman, ND	6.1	107	4	6	13	Eldridge, D. Johnson
F. Central—Disturbed Habitat							
85. Improved Pasture and Oak—Pine Forest	Delaware, OK	9.1	610	30	29	6	Baumgartner
86. Oak—Pine Ravine Forest with Clearings	Delaware, OK	7.4	810	32	21	6	Baumgartner
G. Central—Deciduous							
87. River Bottom Forest	MAN	14.0	471	21	20	8	Koonz
88. Deciduous Floodplain Forest	Delaware, OK	6.7	1474	46	24	6	Baumgartner, Elert
H. Western—Deciduous							
89. Scrub Oak—Mountain Mahogany Woodland	El Paso, CO	8.0	294	33	13	5	F. Abbott, Byers, Van Horn*
90. Canyon Floor Dominated by White Alder Woodland	San Bernardino, CA	13.8	2097	38	48	1	Kramer, Zembal
91. Narrow Riparian Belt through Boulder-strewn Floodplain	San Bernardino, CA	16.2	1106	28	45	1	Kramer, Zembal
I. Western—Coniferous							
92. Douglas Fir—Ponderosa Pine Forest	El Paso, CO	7.5	624	16	15	3	Van Horn
93. Ponderosa Pine Forest	Boulder, CO	8.1	334	37	8	16	Hering
94. Lodgepole Pine—Mixed Coniferous Forest	Clark, WA	9.3	296	10	12	3	D. Anderson

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Asia & Africa
Japan: 23 days, 5/31 • Burma/Thailand: 23 days, 11/2 • Sri Lanka: 18 days, 2/15, 7/5, 11/15 • Nepal/Sikkim/Bhutan: 23 days, 3/14, 10/10 • Foothills of Western Himalayas: 19 days, 4/18 • Kenya: 22 days, 1/31, 7/18, 10/17 • Madagascar/Reunion/Mauritius: 24 days, 7/7, 10/6.

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List of Censuses

<i>Habitat</i>	<i>Co.; State or Province</i>	<i>Hectares</i>	<i>Pairs/ sq. km.</i>	<i>Hrs. Obs.</i>	<i>Species</i>	<i>Years of Study</i>	<i>Contributors</i>
95. Burned Pine—Fir Forest	Sierra-Nevada, CA	8.5	331	40	25	4	Yoder-Williams, Liverman, With
96. Mature Pine—Fir Forest	Nevada, CA	8.5	408	39	18	4	Yoder-Williams, Liverman, With
J. Western—Coniferous—Deciduous (Mixed)							
97. Burned Open Oak—Madrean Evergreen Woodland	Pima, AZ	29.0	155	34	22	1	Caprio
98. Riparian Woodland—Live Oak—Juniper	Cochise, AZ	9.1	2070	91	34	6	Barker
99. Mendocino Cypress— Bolander's Pine—Pygmy Forest I	Mendocino, CA	10.0	600	57	14	1	Huntley
100. Mendocino Cypress— Bolander's Pine—Pygmy Forest II	Mendocino, CA	10.0	585	54	22	1	Huntley
K. Western—Mixed Habitat							
101. Alpine Willow Carr, Meadow, and Krummolz	Boulder, CO	10.0	280	11	6	1	Hallock
102. Montane Mesic Willow Carr	Boulder, CO	13.0	1409	47	23	2	Figgs
103. Montane Mesic Willow Carr	Boulder, CO	3.8	1875	36	20	2	
104. Mountain Meadow and Open Coniferous Forest	Boulder, CO	13.0	506	50	30	4	Stiles-Wainwright, Wainwright
105. Open Aspen Grove— Scattered Conifers	Larimer, CO	14.0	457	38	29	6	Alles
106. Mixed Mountain Bottomland	BC	6.4	1063	15	23	3	Gyug
107. Scattered Mixed Coniferous Forest in Subalpine Meadows and Spruce Bogs	Grant, OR	32.4	86	20	11	12	Hudson
L. Western—Desert and Scrub							
108. Bajada Desert Scrub	Pima, AZ	8.1	562	15	15	1	Tweit, Tweit
109. Coastal Scrub	Marin, CA	8.1	624	245	24	12	Geupel, Moholt, Depkin
110. Disturbed Coastal Scrub A	Marin, CA	4.7	533	184	24	12	Geupel, Brody, Meyer
111. Disturbed Coastal Scrub B	Marin, CA	8.1	531	244	21	13	Geupel, Cross
M. Wetlands							
112. Shrubby Swamp and Sedge Hummocks	Litchfield, CT	8.1	544	15	10	18	Magee
113. Gulf Coast Salt Marsh	Levy, FL	20.0	360	390	3	5	McDonald
114. Tamarack Bog and Hardwood	Berrien, MI	8.5	235	8	16	9	Mullins, Mullins
115. Wetland Sedge Meadow I	Hall, NE	16.2	195	6	9	4	Lingle, Labeledz
116. Wetland Sedge Meadow II	Hall, NE	16.2	216	7	10	3	Lingle, Labeledz
117. Bulrush and Cat-tail Marsh in Conifer Forest	Lake, MT	40.5	356	25	41	10	Bishop
118. Desert Riparian—Fresh- water Marsh and Ponds	San Bernardino, CA	15.4	1437	23	36	8	Cardiff, Kniffen, Kniffen, Kniffen
N. Fields and Cultivated Areas							
119. Abandoned Field I	Luzerne, PA	6.0	1169	48	29	7	Gross
120. Abandoned Field II	Luzerne, PA	4.3	797	34	19	6	Gross
121. Abandoned Field	Washington, PA	6.4	573	28	7	2	Lawrence
122. Mixed Agricultural and Old Field	Wayne, IN	6.6	121	5	5	2	Miller, Young
123. Subirrigated Grassland	Hall, NE	16.2	71	4	6	4	Lingle, Labeledz
124. Subirrigated Native Hay	Hall, NE	16.2	133	6	9	4	Lingle, Labeledz
O. Residential							
125. Village	Wyandot, OH	15.5	355	40	12	1	Claugus
126. Suburban College Campus	Jefferson, CO	18.3	350	14	12	2	Hayes
P. Late Report							
127. Floodplain Cottonwood Forest	Jefferson, CO	9.7	3213	12	7	13	Kingery

* = Indicated compiler or co-compiler.

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Bananaquit	Great Grey Owl
Ivory Gull	Flesh-footed Shearwater



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