## POPULATION STUDY

## Thirty-eighth Winter Bird-Population Study

Edited by Roger L. Boyd and Calvin L. Cink

HERE WAS A TOTAL OF 48 STUDies submitted this year, representing 13 states and provinces and the District of Columbia. Once again Indiana had the highest number with 14 studies being submitted by J.S. Castrale and R.T. Speer. California was a close second with 13 studies. These two states accounted for more than 50% of the total. Also, 25 (52%) of this year's studies were new areas. The longest continuous study was in its 34th year. Concerning mature deciduous floodplain forest, it is conducted by J. Eliot, L. Limbach, and D. Gauthey.

Forty-nine observers reported a total of 625 hours in the field and averaged 13.0 hours per plot. The highest total was 70.6 hours in mixed upland habitat in Washington, D.C.

The total area covered this year was 802 hectares (1981 acres) with an average plot of 16.7 hectares. The largest study was 212.5 hectares of barrier beach and saltwater estuary in Florida. The number of birds per square kilometer ranged from 0 (only 4 studies) to 5208 (a 5.3 hectare man-made tidal lagoon in Long Beach, California) and averaged 746. Total species ranged from 0 (only one agricultural study in Indiana) to 60 (barrier beach and saltwater estuary in Florida) and averaged 21 species overall.

Even though there were considerably fewer studies submitted this year, perhaps because we no longer print the full accounts, we want to emphasize that these studies will continue to be of great value in the future. All past studies have been placed on computer disc. This will provide easy access to past as well as future studies. Requests for data should be directed to: Gregory S. Butcher, Cooperative Research Program, Cornell Laboratory of Ornithology, 159 Sapsucker Woods Road, Ithaca, NY 14850 (Telephone: 607-256-4999).

We welcome all new studies and wish to encourage previous contributors to continue to send in their studies. Please submit them to us at the address below no later than June 15, 1986. The editors wish to thank Tracie J. Asher for her assistance in editing and compiling the List of Studies.

## LIST OF PARTICIPANTS

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County; State						
or Province	Hec- tares	Birds/ sq. km.	Hrs Obs.	Spe- cies	Yrs of Study	Contributors
,						Davis
Middlesex, MA	6.7	224	8.9	15	4	Taylor
St. Lawrence, NY	6.5	139	3.0	7	5	Carr, Roelofs, Vreeland
Berks, PA	16. <b>9</b>	36	14.4	10	3	Goodrich, Senner
Berks, PA	19.4	36	6.3	9	3	Senner, Goodrich, Anderson
						. ,
Montgomery, MD	17.8	567	31.6	28	34	Eliot, Limbach, Gauthey
						,,,,
Allegany, NY	16.6	174	8.2	17	12	Brooks
0.1			7.0	9		Gradoni, Brooks
				-		Clark
	19.0	100			-	
San Bernardino, CA	13.8	2529	35.5	49	1	Elpers
,					1	Foerster
-	Norfolk, MA Middlesex, MA St. Lawrence, NY Berks, PA	Norfolk, MA11.8Middlesex, MA6.7St. Lawrence, NY6.5Berks, PA16.9Berks, PA19.4Montgomery, MD17.8Allegany, NY16.6Allegany, NY9.3Wentworth, ONT13.0San Bernardino, CA13.8	Norfolk, MA         11.8         119           Middlesex, MA         6.7         224           St. Lawrence, NY         6.5         139           Berks, PA         16.9         36           Berks, PA         19.4         36           Montgomery, MD         17.8         567           Allegany, NY         16.6         174           Allegany, NY         9.3         173           Wentworth, ONT         13.0         185           San Bernardino, CA         13.8         2529	Norfolk, MA         11.8         119         18.4           Middlesex, MA         6.7         224         8.9           St. Lawrence, NY         6.5         139         3.0           Berks, PA         16.9         36         14.4           Berks, PA         19.4         36         6.3           Montgomery, MD         17.8         567         31.6           Allegany, NY         16.6         174         8.2           Allegany, NY         9.3         173         7.0           Wentworth, ONT         13.0         185         15.2           San Bernardino, CA         13.8         2529         35.5	Norfolk, MA         11.8         119         18.4         15           Middlesex, MA         6.7         224         8.9         15           St. Lawrence, NY         6.5         139         3.0         7           Berks, PA         16.9         36         14.4         10           Berks, PA         19.4         36         6.3         9           Montgomery, MD         17.8         567         31.6         28           Allegany, NY         16.6         174         8.2         17           Allegany, NY         16.6         174         8.2         17           Allegany, NY         16.3         185         15.2         24           San Bernardino, CA         13.8         2529         35.5         49	Norfolk, MA         11.8         119         18.4         15         9           Middlesex, MA         6.7         224         8.9         15         4           St. Lawrence, NY         6.5         139         3.0         7         5           Berks, PA         16.9         36         14.4         10         3           Berks, PA         19.4         36         6.3         9         3           Montgomery, MD         17.8         567         31.6         28         34           Allegany, NY         16.6         174         8.2         17         12           Allegany, NY         9.3         173         7.0         9         3           Wentworth, ONT         13.0         185         15.2         24         2

## List of Studies

	County; State		<b>1</b> 17. 1 1		<u> </u>	Yrs	
Habitat	or Province	Hec- tares	Birds/ sq. km.	Hrs Obs.	Spe- cies	of Study	Contributors
							- <del>,</del>
<b>B.</b> FOREST MIXED WITH OTHER HABITAT: 12. Mixed Upland Habitat	D.C., WA	14.2	648	70.6	37	26	Cash, D'Imperio, Feather, Hunt, Janni, Smith, E.
13. Cottonwood-Abandoned Fields Bottomland	Larimer, CO	8.1	1132	9.7	28	3	Bodner
14. Bottomland Oak-Gum-Cypress	Washington MC	11.4	2965	15.2	37	14	Alexander
Forest Recently Disturbed 15. Chaparral and Woodland	Washington, MS San Bernardino, CA	11.4 11.5	2963 557	13.2 25.7	37 40	14	Gilbert, Zembal, Kramer, Elpers
C. MIXED RIPARIAN HABITATS							
<ol> <li>Sycamore-Ash-Oak Riparian Association</li> </ol>	Pima, AZ	10.4	788	2.4	38	1	Tweit, J., Tweit, R.
17. Mesquite-Hackberry Riparian	Dime 47	11.2	1188	11.0	48	1	Tweit, J., Tweit, R.
Association 18. Riparian Woodland Oak-Juniper	Pima, AZ Pima, AZ	8.1	1049	8.8	40 31	2	Tweit, J., Tweit, R.
Association 19. Narrow Riparian Belt Through	Santa Cruz, AZ						
Boulder-Strewn Floodplain 20. Narrow Side-Canyon Belt of	San Bernardino, CA	16.2	537	35.7	42	1	Zembal, Elpers, Gilbert
Riparian Woodland	San Bernardino, CA	9.8	1303	31.2	40	1	Elpers, Zembal
D. BRUSH, GRASSLAND, AND DESERT	Wantworth ONT	6.1	147	5.9	12	2	Clark
<ol> <li>Brushy Field with Trees and Hills</li> <li>Chaparral on a Floodplain</li> </ol>							
Terrace	San Bernardino, CA	11.7	1188	31.3	38	1	Zembal, Elpers, Gilbert, Kramer
E. HABITATS INCLUDING OPEN WATER							
23. Mixed Upland Habitat and Swamp	Fairfield, CT	14.2	77	6.0	14	12	Barkman
24. Barrier Beach and Saltwater	Duval, FL	212.5	2136	24.0	60	8	Loftin, Richter, West
Estuary 25. Chesney Bog	Oxford, ONT	15.2	36	19.2	18	2	Sandilands
26. Man-Made Tidal Lagoon	Los Angeles, CA	5.3	5208	4.7	28	2	Collins, C., Collins, P.
27. Tidal Lagoon Park	Los Angeles, CA	8.1	2423	10.0	29	3	Critchfield
28. Tidal Channel-Recreational Area	Los Angeles, CA	15.3	689	7.0	18	3	White
F. CULTIVATED CROPLAND	Cootte INI	5.0		2 2	1	1	Costrolo Érobr
29. Chisel-Plowed Cornfield I 30. Chisel-Plowed Cornfield II	Scott, IN Scott, IN	5.9 5.6		3.3 2.5	1 0	1	Castrale, Speer Castrale, Speer
31. Chisel-Plowed Cornfield III	Scott, IN	5.1	294	2.7	3	1	Castrale, Speer
32. Chisel-Plowed Soybean Field	Scott, IN	14.6		2.8	1	1	Castrale, Speer
33. Disked Soybean Field	Scott, IN	10.8	_	3.7	1	1	Castrale, Speer
34. Corn Residue I	Scott, IN	19.1	6	2.5	4	1	Castrale, Speer
35. Corn Residue II	Scott, IN	18.9	11	2.5	2	1	Castrale, Speer
36. Corn Residue III	Scott, IN	14.0	21	3.3	2	1	Castrale, Speer
37. Corn Residue IV	Scott, IN	11.2	18	3.0	2	1	Castrale, Speer
38. Soybean Residue I	Scott, IN Scott, IN	6.0 10.5	50 29	2.3 2.5	2 5	1 1	Castrale, Speer Castrale, Speer
39. Soybean Residue II 40. Soybean Residue III	Scott, IN	10.5	29	2.3	1	1	Castrale, Speer
40. Soybean Residue III 41. Soybean Residue IV	Scott, IN	5.2		2.8	1	1	Castrale, Speer
41. Soybean Residue V 42. Soybean Residue V	Scott, IN	10.3	107	2.8	5	1	Castrale, Speer
G. URBAN HABITAT							
43. Urban Park with Pond	Waterloo, ONT	14.2		14.9	22	4	Sandilands, Dance
44. Urban Residential	El Paso, CO	15.5	1587	9.7	25	1	Bunn
45. Urban Nature Center	Orange, CA	7.3	1918	18.8	39	3	Hall
46. Suburban Abandoned Field	Orange, CA	25.0		20.0	37	1	Boardman
47. Suburban Nature Center	Los Angeles, CA	34.4	1573	28.0	52	7	Keane Smith P
48. Urban River	Los Angeles, CA	42.5	1647	15.0	51	1	Smith, R.