

## WINTER BIRD POPULATION STUDY: 1992

Habitat	State/ Prov.	Compiler	Plot Size (ha)	Ind. per 40 ha	Num. spp.	Hrs obs.	Yr study
<b>Broadleaf Forests</b>							
1. Mixed Upland Broadleaf Forest	DC	S.A. Briggs	14.2	408	38	55.3	33
2. Oak-Maple Bottomland	MA	L.E. Taylor	6.7	38.5	11	10.8	11
3. Mature Deciduous Floodplain Forest	MD	D. Gauthey	17.8	299	37	29.8	41
4. Upland Second-growth Oak-Hickory Forest	MS	H. Moore	10.0	708	36	24.4	4
5. Disturbed Bottomland Oak-Gum-Cypress Forest	MS	G. Alexander, Jr	11.4	199	31	13.3	17
6. Young White Ash-Red Maple Forest on Lake Shore	NY	G.R. Maxwell	16.2	197	24	10.0	6
7. Mature Urban Deciduous Forest II	NY	C.A. Jaslowitz	10.0	139	13	19.0	1
8. Beech-Maple Swamp Forest	OH	B. Fletcher	8.3	161	20	6.8	6
9. Riparian Deciduous Forest	OH	E.J. Tramer	18.0	276	30	22.2	4
10. Black Willow-White Ash Forest	ON	M.F.G. Clark	13.0	121	18	11.8	9
11. Sugar Maple-Mixed Hardwood Forest	PA	R.A. Ickes	9.7	164	19	24.2	9
12. Upland Oak-Red Maple Forest	RI	W.R. Eddleman	10.1	63.0	12	17.0	1
13. Semi-evergreen Broadleaf Forest	TA	R.L. Boyd	23.0	160	63	34.3	2
<b>Needleleaf Forests</b>							
14. Ponderosa Pine Forest	CO	L. Hering	8.1	169	22	18.5	12
15. Mature Red Spruce Forest	ME	T.P. Skaling	16.0	101	14	28.2	3
16. Upland Scotch Pine Plantation	NY	E.W. Brooks	9.3	72.0	12	9.4	8
17. Mature Eastern Larch Forest	PQ	M.D. Demers	25.0	144	18	22.5	2
18. Mature White Pine Forest	RI	W.R. Eddleman	10.1	63.7	10	15.7	2
<b>Broadleaf/Needleleaf Forests</b>							
19. Ponderosa Pine-Scrub Oak Forest	CO	J.S. Kent	12.0	229	21	9.0	2
20. Mature Broadleaf-Coniferous Forested Wetland	CT	T. Harrington	21.5	355	31	21.5	1
21. Mixed Pine and Deciduous Forest	IN	D. Webster	14.5	82.8	23	26.7	8

## WINTER BIRD POPULATION STUDY: 1992 (Continued)

<i>Habitat</i>	<i>State/ Proc.</i>	<i>Compiler</i>	<i>Plot Size (ha)</i>	<i>Ind. per 40 ha</i>	<i>Num. sp.</i>	<i>Hrs obs.</i>	<i>Yr study</i>
22. Maple-Pine-Oak Second-growth Forest	MA	W.E. Davis, Jr.	11.8	16.1	11	12.0	16
23. Upland Mixed Pine-Spruce-Hardwood Plantation	NY	E.W. Brooks	16.6	56.3	16	11.3	18
24. Coniferous-Deciduous Forest	ON	M.F.G. Clark	9.2	106	14	11.4	7
25. Mature Deciduous-Coniferous Forest with Stream	TN	S.J. Stedman	10.2	423	41	14.5	3
<b>Mixed Habitats</b>							
26. Suburban Cemetery	AL	T.A. Imhof	15.0	2484	41	21.0	13
27. Floodplain Forest and Cultivated Bottomland	NY	V.M. Pitzrick	51.8	80.9	36	19.8	22
28. Field, Ridge, and Shrubby Trees	ON	M.F.G. Clark	6.6	195	16	10.3	7
29. Shrubby Trees, Ridge, and Woods	ON	M.F.G. Clark	7.3	123	12	9.5	4
30. Urban Park	SC	D.M. Forsythe	25.9	345	37	17.6	5
<b>Non-forested Wetlands</b>							
31. Coastal Freshwater Marsh	CA	J.P. Kelly	10.5	682	53	8.1	7
32. Barrier Beach and Saltwater Estuary	FL	R.W. Lofin	213.0	724	71	15.0	15
<b>Shrublands</b>							
33. Coastal Scrub	CA	E. Elias	8.1	329	21	18.7	4
34. Disturbed Coastal Scrub A	CA	D. Hardesty	4.7	911	30	17.0	3
35. Disturbed Coastal Scrub B	CA	G. Ballard	8.1	463	28	19.8	4
36. Chihuahuan Desert Scrub	NM	C.I. Sandell	16.0	162	17	8.5	2
<b>Successional Field</b>							
37. Abandoned Upland Pasture	NY	V.M. Pitzrick	8.0	111	19	6.1	9
<b>Cultivated</b>							
38. Mixed Croplands	PA	P.W. Schwalbe	40.5	88.7	8	5.3	10

## 1. MIXED UPLAND BROADLEAF FOREST

### BOSQUE MIXTO DE HOJA ANCHA DE ALTURA

SHIRLEY A. BRIGGS

7605 Honeywell Lane  
Bethesda, Maryland 20814

**Location:** District of Columbia; Washington; Glover-Archbold Park; 38°55'N, 77°5'W; Washington West Quadrangle, USGS. **Continuity:** Established 1960; 33 yr. **Size:** 14.2 ha. **Description of Plot:** See *Aud. Field Notes* 14:502-503. **Weather:** Mean temperature 3.7°C (range 0-10°C). Patches of snow during one visit. Jan. and Feb. temperatures were 3-3.7% above average. **Coverage:** 55.3 hrs; 14 visits (mornings): 22 Dec.; 1, 8, 12, 24, 25, 30 Jan.; 8, 17, 21, 22, 28 Feb.; 1 Mar. **Count:** Carolina Chickadee, 23.5 ind./visit, (14 visits); American Crow, 20.4, (14); Tufted Titmouse, 14.8, (14); House Finch, 9.5, (13); Red-bellied Woodpecker, 8.9, (14); Carolina Wren, 7.5, (14); White-breasted Nuthatch, 6.5, (14); Northern Cardinal, 6.4, (14); Common Grackle, 6.2, (4); Mourning Dove, 5.1, (13); Downy Woodpecker, 4.9, (14); American Robin, 4.4, (3); White-throated Sparrow, 4.1, (13); Blue Jay, 3.0, (11); Cedar Waxwing, 2.9, (2); Northern Flicker, 2.3, (12); Hairy Woodpecker, 1.9, (13); House Sparrow, 1.5, (7); Northern Mockingbird, 1.4, (10); European Starling, 1.1, (5); Rock Dove, 0.9, (6); Dark-eyed Junco, 0.9, (5); Red-shouldered Hawk, 0.9, (4); Ring-billed Gull, 0.9, (4); American Goldfinch, 0.8, (5); Rufous-sided Towhee, 0.6, (8); Canada Goose, 0.6, (3); Pileated Woodpecker, 0.5, (4); Song Sparrow, 0.5, (7); Turkey Vulture, 0.4, (3); Yellow-bellied Sapsucker, 0.4, (3); Mallard, 0.3, (1); Sharp-shinned Hawk, 0.3, (4); Red-tailed Hawk, 0.3, (4); Winter Wren, 0.3, (2); Hermit Thrush, 0.2, (1); Fish Crow, 0.1, (1); Gray Catbird, 0.1, (1). **Total:** 38 species; 145 ind./visit (408 ind./40 ha). **Remarks:** Individuals per visit and individuals per 40 hectares were well above average for the 33 years of the study. Two causes are probable: Jan. and Feb. were warmer than usual, and one observer made a practice of staying out longer than normal, often for five hours. This can increase the opportunity to find the few additional species that can be missed on shorter visits. **Other Observers:** Ann Feather and Mary D'Imperio.

## 2. OAK-MAPLE BOTTOMLAND

### BOSQUE DE ROBLE-ARCE EN TIERRAS BAJAS

LEE E. TAYLOR

28 Bellington Street  
Arlington, Massachusetts 02174

**Location:** Massachusetts; Middlesex Co.; Waltham; Metropolitan State Hospital; 42°24'N, 71°12'W; Lexington Quadrangle, USGS. **Continuity:** Established 1982; 11 yr. **Size:** 6.7 ha. **Description of Plot:** See *Am. Birds* 37:31-32 (1983). **Weather:** Mean temperature -5.2°C (range -16-4°C). Mean snow depth 0.4 cm (range 0-2 cm). The ground was bare on seven visits. Total snowfall for the season was far below average. Light rain during one visit. **Coverage:** 10.8 hrs; 11 visits (mornings): 28 Dec.; 1, 4, 5, 11, 18, 19, 20, 27 Jan.; 8, 15 Feb. **Count:** Black-capped Chickadee, 3.4 ind./visit, (4 visits); Tufted Titmouse, 1.1, (3); Downy Woodpecker, 0.5, (3); White-breasted Nuthatch, 0.5, (3); Hairy Woodpecker, 0.3, (3); Northern Mockingbird, 0.3, (3); Eastern Screech-Owl, 0.1, (1); Brown Creeper, 0.1, (1); American Robin, 0.1, (1); American Tree Sparrow, 0.1, (1); American Goldfinch, 0.1, (1). **Total:** 11 species; 6.5 ind./visit (38.5 ind./40 ha). **Remarks:** One 30-minute pre-dawn trip, to search for owls, was included in the last visit. A single Eastern Screech-Owl was detected.

## 3. MATURE DECIDUOUS FLOODPLAIN FOREST

## BOSQUE DECIDUO MADURO INUNDABLE

DICK GAUTHEY

6603 Reynard Drive  
Springfield, Virginia 22152

**Location:** Maryland; Montgomery Co.; Glen Echo; Cabin John Island; 38°58'N, 77°8'W; Falls Church Quadrangle, USGS. **Continuity:** Established 1947; 41 yr. **Size:** 17.8 ha. **Description of Plot:** See *Aud. Field Notes* 2:155–156. **Weather:** Mean temperature  $-0.3^{\circ}\text{C}$  (range  $-7$ – $4^{\circ}\text{C}$ ). A record warm winter with one light snowfall during the count period. Scattered snow cover on one visit. **Coverage:** 29.8 hrs; 9 visits (mornings): 7, 8, 17, 22, 28 Jan.; 3, 6, 11, 23 Feb. **Count:** Carolina Chickadee, 28.2 ind./visit, (9 visits); American Goldfinch, 12.1, (8); Mallard, 10.3, (7); Northern Cardinal, 10.1, (9); Tufted Titmouse, 8.9, (9); Carolina Wren, 8.9, (9); European Starling, 4.9, (6); Downy Woodpecker, 4.8, (9); Mourning Dove, 4.1, (9); American Crow, 3.9, (8); House Finch, 3.7, (5); American Robin, 3.3, (5); Song Sparrow, 3.3, (7); Red-bellied Woodpecker, 3.2, (9); White-breasted Nuthatch, 3.1, (8); Golden-crowned Kinglet, 3.1, (8); White-throated Sparrow, 2.6, (8); Belted Kingfisher, 1.8, (8); Pileated Woodpecker, 1.8, (9); Brown Creeper, 1.6, (7); Winter Wren, 1.4, (6); Hairy Woodpecker, 1.3, (7); Northern Flicker, 1.3, (8); Dark-eyed Junco, 1.1, (2); Great Blue Heron, 0.8, (4); Yellow-bellied Sapsucker, 0.8, (6); American Black Duck, 0.6, (1); Hooded Merganser, 0.4, (1); House Sparrow, 0.4, (3); Canada Goose, 0.2, (1); Sharp-shinned Hawk, 0.2, (2); Ruby-crowned Kinglet, 0.2, (2); Cooper's Hawk, 0.1, (1); Red-tailed Hawk, 0.1, (1); Barred Owl, 0.1, (1); Fish Crow, 0.1, (1); Northern Mockingbird, 0.1, (1). **Total:** 37 species; 133 ind./visit (299 ind./40 ha). **Remarks:** A second record warm winter in a row, with generally open water and one light snowfall, was probably a factor in producing the largest number of birds per visit (less European Starling) ever recorded on the site. Carolina Wren, Northern Cardinal and ground-feeding Emberizids were at levels not seen since the 1970s. House Sparrow was recorded for the first time. **Other Observers:** Dick Homan and Letty Limbach.

## 4. UPLAND SECOND-GROWTH OAK-HICKORY FOREST

## BOSQUE SECUNDARIO ROBLE-NOGAL DE ALTURAS

HAL MOORE

1 Lakeside Drive  
Vicksburg, Mississippi 39180

**Location:** Mississippi; Warren Co.; Vicksburg; Lake Park Tract; 32°14'N, 90°49'W; Big Black Miss Quadrangle, USGS. **Continuity:** Established 1989; 4 yr. **Size:** 10.0 ha. **Description of Plot:** See *J. Field Ornithol.* 61 (Suppl.):8 (1990). All of the Sassafras on this plot have died. Some were up to 50.8 cm dbh. **Weather:** Mean temperature  $3.3^{\circ}\text{C}$  (range  $-2$ – $12^{\circ}\text{C}$ ). Slight fog during one visit. **Coverage:** 24.4 hrs; 12 visits (mornings): 14, 15, 17, 19 Dec.; 15, 17, 20, 21, 24, 25, 31 Jan.; 1 Feb. **Count:** Common Grackle, 37.5 ind./visit, (2 visits); Red-bellied Woodpecker, 21.3, (12); Tufted Titmouse, 15.9, (12); Yellow-rumped Warbler, 13.8, (12); Carolina Wren, 12.4, (12); Carolina Chickadee, 11.1, (12); American Robin, 10.8, (11); American Goldfinch, 9.4, (9); White-throated Sparrow, 8.8, (12); American Crow, 5.8, (12); Hermit Thrush, 5.3, (12); Northern Cardinal, 4.7, (12); Ruby-crowned Kinglet, 3.0, (11); Downy Woodpecker, 2.8, (10); Yellow-bellied Sapsucker, 2.0, (9); Pileated Woodpecker, 2.0, (11); Northern Flicker, 1.7, (9); Blue Jay, 1.5, (7); Eastern Bluebird, 1.3, (5); Red-shouldered Hawk, 1.1, (8); Eastern Phoebe, 0.9, (6); Golden-crowned Kinglet, 0.8, (5); Dark-eyed Junco, 0.8, (1); Hairy Woodpecker, 0.5, (4); Wild Turkey, 0.3, (1); Black Vulture, 0.3, (2); Red-headed Woodpecker, 0.3, (2); Turkey Vulture, 0.2, (2); Red-tailed Hawk, 0.2, (2); Pine Warbler, 0.2, (1); Great Blue Heron, 0.1, (1); *Accipiter* species, 0.1, (1); Mourning Dove, 0.1, (1); Brown Creeper, 0.1, (1); Solitary Vireo, 0.1, (1); Rufous-sided Towhee, 0.1, (1). **Total:** 36 species; 177 ind./visit (708 ind./40 ha). **Remarks:** Vultures were actively searching the site for food during deer-hunting season.

## 5. DISTURBED BOTTOMLAND OAK-GUM-CYPRESS FOREST

### BOSQUE INUNDABLE PERTURBADO DE ROBLE-GOMA-CIPRÉS

G. EDWARD ALEXANDER, JR.

930 S. Washington  
Greenville, Mississippi 38701

**Location:** Mississippi; Washington Co.; Hollandale; LeRoy Percy State Park; 33°10'N, 90°57'W; Swan Lake NW Quadrangle, USGS. **Continuity:** Established 1971; 17 yr. **Size:** 11.4 ha. **Description of Plot:** See *Aud. Field Notes* 25:638-639 (1971) and *J. Field Ornithol.* 63 (Suppl.):9-10 (1992). **Weather:** Mean temperature 10.9°C (range 4-21°C). Weather during the count period was unusually mild, although a freak snowstorm occurred on 18 Jan. **Coverage:** 13.3 hrs; 8 visits (7 mornings, 1 afternoon): 4, 11, 25, 26 Jan.; 1, 9, 21, 23 Feb. **Count:** Dark-eyed Junco, 6.4 ind./visit, (7 visits); Common Grackle, 6.3, (4); Northern Cardinal, 5.1, (8); White-throated Sparrow, 5.1, (6); American Robin, 5.0, (8); Rusty Blackbird, 3.9, (5); Red-bellied Woodpecker, 3.0, (8); Tufted Titmouse, 2.9, (8); Carolina Chickadee, 2.5, (8); Carolina Wren, 2.3, (8); Blue Jay, 2.1, (8); Downy Woodpecker, 1.5, (8); Ruby-crowned Kinglet, 1.5, (8); Cedar Waxwing, 1.5, (1); Golden-crowned Kinglet, 1.4, (4); Swamp Sparrow, 1.0, (4); Hermit Thrush, 0.8, (4); Song Sparrow, 0.8, (3); Hairy Woodpecker, 0.5, (4); Pileated Woodpecker, 0.5, (2); Red-winged Blackbird, 0.5, (2); Yellow-bellied Sapsucker, 0.4, (3); Winter Wren, 0.4, (2); Yellow-rumped Warbler, 0.4, (3); Red-headed Woodpecker, 0.3, (2); Northern Flicker, 0.3, (2); Orange-crowned Warbler, 0.3, (1); *Buteo* species, 0.1, (1); Mourning Dove, 0.1, (1); Brown Thrasher, 0.1, (1); Rufous-sided Towhee, 0.1, (1). **Total:** 31 species; 56.8 ind./visit (199 ind./40 ha). **Remarks:** Poison Ivy berries were very scarce while other food seemed plentiful.

## 6. YOUNG WHITE ASH-RED MAPLE FOREST ON LAKE SHORE

### BOSQUE JOVEN DE FRESNO BLANCO-ARCE ROJO EN ORILLAS DE LAGOS

GEORGE R. MAXWELL

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Red Creek, New York 13143

**Location:** New York; Wayne Co.; Fair Haven; Metzger Road - Blind Sodus Bay; 43°20'N, 76°44'W; Oswego Quadrangle, USGS. **Continuity:** Established 1987; 6 yr. **Size:** 16.2 ha. **Description of Plot:** See *J. Field Ornithol.* 60 (Suppl.):17 (1989). **Weather:** Mean temperature -2.3°C (range -15-6°C). Mean snow depth 7.3 cm (range 0-30 cm). The ground was bare on five visits. **Coverage:** 10.0 hrs; 10 visits (5 mornings, 5 afternoons): 4, 8, 11, 12, 17, 18, 22, 24, 25, 30 Jan. **Count:** Canada Goose, 25.0 ind./visit, (1 visit); Mourning Dove, 11.2, (10); House Finch, 9.7, (9); Black-capped Chickadee, 6.9, (10); House Sparrow, 5.7, (9); Cedar Waxwing, 3.0, (1); American Tree Sparrow, 2.4, (9); American Goldfinch, 2.2, (5); Blue Jay, 2.0, (8); Red-bellied Woodpecker, 1.4, (9); Downy Woodpecker, 1.4, (8); Tufted Titmouse, 1.2, (6); European Starling, 1.2, (5); White-breasted Nuthatch, 1.1, (9); American Robin, 1.1, (3); Dark-eyed Junco, 1.0, (5); Wild Turkey, 0.9, (1); Northern Cardinal, 0.8, (5); White-throated Sparrow, 0.5, (5); American Crow, 0.4, (2); Common Redpoll, 0.3, (2); Red-tailed Hawk, 0.1, (1); Northern Flicker, 0.1, (1); Northern Shrike, 0.1, (1). **Total:** 24 species; 79.7 ind./visit (197 ind./40 ha). **Acknowledgments:** My thanks to the following students for assistance: Kimberly Baker, Brandy Bonafede, Jeffrey Bradley, Margaret Clark, Terry Cook, Shannon Cunningham, Melissa Epp, Deborah George, Robin Hofmann, John Laskowski, Anthony Lee, Hilary Matthews, Laura Muhleisen, Michael Reeves, Penny Vaillancourt.

## 7. MATURE URBAN DECIDUOUS FOREST II

## BOSQUE DECIDUO MADURO URBANO II

CARL A. JASLOWITZ

124 Gale Place

Bronx, New York 10463

**Site Number:** NY0991069. **Location:** New York; Bronx Co.; New York City; Northwest Forest, Van Cortlandt Park; 40°54'N, 73°53'W; Yonkers Quadrangle, USGS. **Continuity:** New. **Size:** 10.0 ha. **Description of Plot:** See *J. Field Ornithol.* 63 (Suppl.):50 (1992) **Weather:** Mean temperature  $-1.8^{\circ}\text{C}$  (range  $-11$ – $6^{\circ}\text{C}$ ). Temperatures were at near normal levels. Precipitation was well below normal with no snow cover during the study period. There were intermittent snow flurries during one visit. **Coverage:** 19.0 hrs; 10 visits (mornings): 1, 5, 18, 19, 24, 28, 31 Jan.; 1, 6, 12 Feb. **Count:** American Goldfinch, 9.4 ind./visit, (10 visits); American Crow, 6.2, (10); Blue Jay, 4.3, (10); Tufted Titmouse, 4.1, (10); Black-capped Chickadee, 2.6, (8); Dark-eyed Junco, 1.9, (4); European Starling, 1.7, (7); White-breasted Nuthatch, 1.5, (9); Downy Woodpecker, 1.0, (7); Red-bellied Woodpecker, 0.8, (7); Northern Cardinal, 0.8, (5); Red-tailed Hawk, 0.3, (3); Great Horned Owl, 0.2, (2). **Total:** 13 species; 34.8 ind./visit (139 ind./40 ha). **Remarks:** American Goldfinches were always observed feeding on the seeds of Black Birch. Black-capped Chickadees were occasionally observed feeding on the buds of Tuliptree. A pair of Great Horned Owls attempted to raise a brood in a squirrel's nest situated in a Tuliptree some 30 m off the E edge of the plot, but the nest was blown down during a windstorm. Prior to this mishap, the male would be driven onto the plot by crows while the female was incubating.

## 8. BEECH-MAPLE SWAMP FOREST

## BOSQUE PANTANOSO DE HAYA-ARCE

BRIAN FLETCHER &amp; NELSON J. MOORE

Department of Biological Sciences

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Ada, Ohio 45810

**Location:** Ohio; Hardin Co.; Ada; Moore-Shadley Woods; 40°43'N, 83°48'W; Alger Quadrangle, USGS. **Continuity:** Established 1975; 6 yr. **Size:** 8.3 ha. **Description of Plot:** See *Am Birds.* 29:760–761 (1975). **Weather:** Mean temperature  $2.2^{\circ}\text{C}$  (range  $-2$ – $9^{\circ}\text{C}$ ). Mean snow depth 0.7 cm (range 0–4.9 cm). The ground was bare on eight visits. **Coverage:** 6.8 hrs; 10 visits (afternoons): 12, 17, 19, 24 Dec.; 7, 9, 21, 23, 27 Jan.; 18 Feb. **Count:** European Starling, 7.5 ind./visit, (3 visits); Carolina Chickadee, 5.7, (10); Tufted Titmouse, 3.4, (10); White-breasted Nuthatch, 3.4, (7); Downy Woodpecker, 2.4, (10); Dark-eyed Junco, 1.9, (10); Northern Cardinal, 1.3, (3); Blue Jay, 1.2, (5); American Tree Sparrow, 1.1, (5); House Finch, 1.1, (6); Canada Goose, 1.0, (3); American Crow, 1.0, (1); Northern Flicker, 0.8, (3); House Sparrow, 0.4, (2); Red-tailed Hawk, 0.3, (3); Hairy Woodpecker, 0.3, (3); Brown Creeper, 0.3, (2); Ring-necked Pheasant, 0.1, (1); Red-bellied Woodpecker, 0.1, (1); Field Sparrow, 0.1, (1). **Total:** 20 species; 33.4 ind./visit (161 ind./40 ha). **Remarks:** Two feeders in the plot contained black oil sunflower seeds.

## 9. RIPARIAN DECIDUOUS FOREST

## BOSQUE DECIDUO RIVEREÑO

ELLIOT J. TRAMER

Department of Biology

University of Toledo

Toledo, Ohio 43606

**Location:** Ohio; Lucas Co.; Waterville; Old Canal Lands; 41°27'N, 83°46'W; Grand Rapids Quadrangle, USGS. **Continuity:** Established 1989; 4 yr. **Size:** 18.0 ha. **Description of**

**Plot:** See *J. Field Ornithol.* 61 (Suppl.):43 (1990). **Weather:** Mean temperature  $-0.9^{\circ}\text{C}$  (range  $-7$ – $3^{\circ}\text{C}$ ). Mean snow depth 7.0 cm (range 0–25 cm). The ground was bare on two visits. On average, a very mild winter. No record low temperatures and nighttime lows generally well above average. A heavy snowfall on 14 Jan. persisted for two and one-half weeks, but otherwise there was very little snow. **Coverage:** 22.2 hrs; 9 visits (mornings): 15, 21 Dec.; 8, 15, 20, 29 Jan.; 5, 11, 21 Feb. **Count:** American Crow, 30.9 ind./visit, (6 visits); House Finch, 20.9, (9); Dark-eyed Junco, 11.9, (9); Northern Cardinal, 9.3, (9); White-breasted Nuthatch, 7.0, (9); Black-capped Chickadee, 5.2, (9); Downy Woodpecker, 4.9, (9); House Sparrow, 4.9, (9); Mourning Dove, 4.7, (8); Tufted Titmouse, 4.2, (9); Blue Jay, 3.2, (9); American Goldfinch, 2.6, (8); Hairy Woodpecker, 2.1, (9); Carolina Wren, 2.1, (8); European Starling, 1.9, (6); Golden-crowned Kinglet, 1.4, (3); Brown Creeper, 1.2, (5); Yellow-rumped Warbler, 1.0, (2); American Tree Sparrow, 1.0, (5); Rufous-sided Towhee, 0.8, (4); Cooper's Hawk, 0.6, (3); Song Sparrow, 0.6, (5); Pine Siskin, 0.4, (2); Great Horned Owl, 0.3, (3); White-throated Sparrow, 0.3, (3); Northern Flicker, 0.2, (2); American Robin, 0.2, (2); Red-bellied Woodpecker, 0.1, (1); Winter Wren, 0.1, (1); Purple Finch, 0.1, (1). **Total:** 30 species; 124 ind./visit (276 ind./40 ha). **Remarks:** There was a large increase in the number of American Crows, which foraged on the plot and on adjacent river ice after the snowfall of 14 Jan. With snow melt, the crows left the plot and returned to upland farm fields. Northern Cardinal numbers increased for second consecutive year. Mourning Dove use of the plot declined significantly for unknown reasons. Rufous-sided Towhee was new to the winter count.

## 10. BLACK WILLOW-WHITE ASH FOREST

### BOSQUE DE SAUCE NEGRO-FRESNO BLANCO

MICHAEL F.G. CLARK

27 Skyline Drive

Dundas, Ontario L9H 3S3

**Location:** Ontario; Municipality of Hamilton-Wentworth; Dundas; Cootes Paradise;  $43^{\circ}16'\text{N}$ ,  $79^{\circ}56'\text{W}$ . **Continuity:** Established 1984; 9 yr. **Size:** 13.0 ha. **Description of Plot:** See *J. Field Ornithol.* 60 (Suppl.):9 (1989). **Weather:** Mean temperature  $2.1^{\circ}\text{C}$  (range  $-5$ – $7^{\circ}\text{C}$ ). Mean snow depth 1.6 cm (range 0–9.5 cm). The ground was bare on five visits. Light hail during one visit. The creek traversing the plot and the adjacent pond were frozen on most visits. Temperatures were above zero on six visits, reflecting a  $1.6^{\circ}\text{C}$  above normal Dec. to Mar. area average. Source: Environment Canada. **Coverage:** 11.8 hrs; 8 visits (5 mornings, 3 afternoons): 7, 21, 26 Dec.; 2, 11, 27 Jan.; 8 Feb.; 7 Mar. **Count:** Black-capped Chickadee, 15.6 ind./visit, (7 visits); Canada Goose, 5.3, (2); Downy Woodpecker, 3.4, (7); Brown Creeper, 2.4, (6); White-breasted Nuthatch, 2.1, (8); American Crow, 1.9, (4); Hairy Woodpecker, 1.8, (6); American Goldfinch, 1.5, (2); European Starling, 1.4, (2); Northern Cardinal, 1.3, (6); Cedar Waxwing, 1.1, (1); Mourning Dove, 0.4, (2); Winter Wren, 0.4, (1); American Tree Sparrow, 0.4, (1); Northern Flicker, 0.3, (1); Red-tailed Hawk, 0.1, (1); Carolina Wren, 0.1, (1); Red-winged Blackbird, 0.1, (1). **Total:** 18 species; 39.4 ind./visit (121 ind./40 ha). **Remarks:** The total of 315 birds observed was the highest for this study, 54.2% above the 9-yr average of 204.3. This was perhaps a result of the mild winter, little permanent snow, and unusually low winds during five visits. The high single count was 84 birds (7 Dec.); low was 14 birds (8 Feb.). Six species showed an increase of 4–10 birds over their 9-yr averages. Winter Wren was noted for the first time in five years. Cedar Waxwing and Carolina Wren were new to the plot.

## 11. SUGAR MAPLE-MIXED HARDWOOD FOREST

### BOSQUE MIXTO DE MADERAS DURAS-ARCE DE ALMIBAR

ROY A. ICKES

Washington and Jefferson College

Washington, Pennsylvania 15301

**Location:** Pennsylvania; Washington Co.; Washington; Abernathy Property;  $40^{\circ}8'\text{N}$ ,  $80^{\circ}11'\text{W}$ ; Washington East Quadrangle, USGS. **Continuity:** Established 1983; 9 yr. **Size:** 9.7 ha.

**Description of Plot:** See *Am. Birds* 37:55–56 (1983). **Weather:** Mean temperature  $-3.1^{\circ}\text{C}$  (range  $-7$ – $-1$ ). Mean snow depth 3.0 cm (range 0–8.9 cm). The ground was bare on four visits. Temperatures and snowfall were about average. **Coverage:** 24.2 hrs; 8 visits (mornings): 20, 26, 27, 31 Dec.; 2, 28, 29, 30 Jan. **Count:** Tufted Titmouse, 7.5 ind./visit, (8 visits); White-breasted Nuthatch, 6.8, (8); Downy Woodpecker, 6.5, (8); Carolina Chickadee, 5.4, (8); Red-bellied Woodpecker, 3.5, (8); Black-capped Chickadee, 3.1, (8); Hairy Woodpecker, 1.3, (6); Blue Jay, 1.0, (3); Northern Cardinal, 0.8, (4); Mourning Dove, 0.6, (1); Carolina Wren, 0.6, (3); Golden-crowned Kinglet, 0.6, (2); Pileated Woodpecker, 0.5, (4); Northern Flicker, 0.4, (3); Eastern Bluebird, 0.4, (1); Ruffed Grouse, 0.3, (2); Brown Creeper, 0.3, (2); Dark-eyed Junco, 0.3, (1); Great Horned Owl, 0.1, (1). **Total:** 19 species; 39.8 ind./visit (164 ind./40 ha). **Remarks:** Total numbers for Tufted Titmouse and White-breasted Nuthatch were similar to last year's below average values. Great Horned Owl was new to the plot. **Acknowledgments:** Thanks to Ernest Abernathy for the use of his property.

## 12. UPLAND OAK-RED MAPLE FOREST

### BOSQUE DE ROBLE-ARCE ROJO DE ALTURAS

WILLIAM R. EDDLEMAN

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Department of Natural Resources Science

University of Rhode Island

Kingston, Rhode Island 02881

**Location:** Rhode Island; Washington Co.; Peace Dale; Hazard Tract;  $41^{\circ}27'N$ ,  $71^{\circ}29'W$ ; Narragansett Pier Quadrangle, USGS. **Continuity:** New. **Size:** 10.1 ha. **Description of Plot:** See *J. Field Ornithol.* 62 (Suppl.):47–48 (1991). **Weather:** Mean temperature  $-0.8^{\circ}\text{C}$  (range  $-10.0$ – $5.5^{\circ}\text{C}$ ). Mean snow depth 0 cm. **Coverage:** 17.0 hrs; 10 visits (8 mornings, 2 afternoons): 1 Jan.; 2, 3, 4, 5, 10, 11, 12, 13, 14 Feb. **Count:** Black-capped Chickadee, 5.9 ind./visit, (10 visits); American Crow, 2.4, (8); White-breasted Nuthatch, 2.1, (10); American Robin, 1.3, (3); European Starling, 1.2, (1); Tufted Titmouse, 1.1, (7); Carolina Wren, 0.7, (4); Mourning Dove, 0.4, (3); Downy Woodpecker, 0.4, (3); Blue Jay, 0.2, (2); Great Horned Owl, 0.1, (1); Red-bellied Woodpecker, 0.1, (1). **Total:** 12 species; 15.9 ind./visit (63.0 ind./40 ha). **Remarks:** Contribution #2797 of the College of Resource Development, University of Rhode Island, with support from Rhode Island Agricultural Experiment Station. **Other Observers:** Andrew Bernick, Daten Cohen, Michelle Guay, Jeff Koy.

## 13. SEMI-EVERGREEN BROADLEAF FOREST

### BOSQUE DE HOJA ANCHA SEMI-SIEMPREVERDE

ROGER L. BOYD & HUEI LIU

Biology Department

Baker University

Baldwin City, Kansas 66006

**Site Number:** TM0091016. **Location:** Tamaulipas, Mexico; Gomez Farias; Ant Trail at Rancho Cielito;  $23^{\circ}22'N$ ,  $99^{\circ}14'W$ . **Continuity:** Established 1991; 2 yr. **Size:** 23.0 ha. **Description of Plot:** See *J. Field Ornithol.* 63 (Suppl.):13–14 (1992). **Weather:** Mean temperature  $14.6^{\circ}\text{C}$  (range  $10$ – $23^{\circ}\text{C}$ ). Unusually cool and rainy. Drizzle or light rain during five visits. This is normally the dry season with sunny days and no rain. Daily high temperatures were mostly  $15$ – $19^{\circ}\text{C}$  and lows were mostly  $10$ – $18^{\circ}\text{C}$ . **Coverage:** 34.3 hrs; 10 visits (7 mornings, 3 afternoons): 10, 11, 12, 13, 14, 15, 16, 17 Jan. **Count:** Blue-gray Gnatcatcher, 9.3 ind./visit, (10 visits); Brown Jay, 6.5, (7); Golden-crowned Warbler, 6.4, (9); Dusky-capped Flycatcher, 6.2, (10); Solitary Vireo, 5.2, (10); Boat-billed Flycatcher, 4.3, (8); Wilson's Warbler, 3.3, (9); Black-throated Green Warbler, 2.5, (8); Elegant Trogon, 2.5, (5); Tropical Parula, 2.5, (7); Black-and-white Warbler, 2.4, (9); Masked Tityra, 2.1,

(6); Squirrel Cuckoo, 2.0, (5); Lineated Woodpecker, 1.9, (10); Orange-crowned Warbler, 1.9, (7); Audubon's Oriole, 1.9, (6); Red-lore Parrot, 1.8, (8); Ivory-billed Woodcreeper, 1.7, (7); Social Flycatcher, 1.5, (5); Rose-throated Becard, 1.5, (4); White-tipped Dove, 1.4, (9); Altamira Oriole, 1.4, (4); Plain Chachalaca, 1.3, (6); Eastern Phoebe, 1.3, (8); Clay-colored Robin, 1.2, (5); Couch's Kingbird, 1.1, (5); Spot-breasted Wren, 1.0, (5); Brown-crested Flycatcher, 1.0, (7); Roadside Hawk, 0.9, (7); Olive Sparrow, 0.9, (3); Mottled Owl, 0.8, (8); Green Jay, 0.8, (7); Ruby-crowned Kinglet, 0.8, (4); Rose-breasted Grosbeak, 0.8, (3); Bronze-winged Woodpecker, 0.7, (3); Collared Forest-Falcon, 0.5, (5); Fan-tailed Warbler, 0.5, (3); Great Kiskadee, 0.5, (5); Melodious Blackbird, 0.5, (4); Tufted Titmouse, 0.5, (4); Western Tanager, 0.5, (4); Crimson-collared Grosbeak, 0.5, (2); Northern Oriole, 0.5, (4); *Empidonax* species, 0.4, (4); Pale-billed Woodpecker, 0.4, (2); Thicket Tinamou, 0.4, (2); Hermit Thrush, 0.4, (3); White-eyed Vireo, 0.4, (3); Ovenbird, 0.4, (4); Northern Waterthrush, 0.4, (4); Flame-colored Tanager, 0.3, (3); Golden-fronted Woodpecker, 0.3, (3); Hooded Oriole, 0.3, (3); Black-headed Saltator, 0.2, (2); Gray-collared Becard, 0.2, (2); Yellow-throated Euphonia, 0.2, (2); Ferruginous Pygmy-Owl, 0.2, (1); Greater Pewee, 0.2, (2); Blue-crowned Motmot, 0.1, (1); Common Pauraque, 0.1, (1); Buff-bellied Hummingbird, 0.1, (1); Yellow-breasted Chat, 0.1, (1); Blue Bunting, 0.1, (1). **Total:** 63 species; 92.0 ind./visit (160 ind./40 ha). **Remarks:** Most birds are found in mixed foraging flocks. Cool and wet weather delayed flock formation in the morning and decreased the periods of activity of the flocks. The number and diversity of parrots in the area has decreased drastically in recent years. This is apparently a direct result of pressure from the pet trade. The decrease of other endemic species suggests that loss of forest habitat may also be an important factor. **Other Observers:** Kristen Mitchell, Shawn Hathaway, Jan Boyd, Cynthia Scheibe. **Acknowledgments:** We thank Gorgas Science Foundation for the opportunity to stay at Rancho El Cielito. This project was part of a course in tropical ecology at Baker University.

## 14. PONDEROSA PINE FOREST

### BOSQUE DE PINO PONDEROSA

LOUISE HERING

1055 Adams Circle, Apt. 225

Boulder, Colorado 80303

**Location:** Colorado; Boulder Co.; Boulder; Enchanted Mesa; 39°50'N, 105°16'W; Boulder Quadrangle, USGS. **Continuity:** Established 1966; 12 yr. **Size:** 8.1 ha. **Description of Plot:** See *Aud. Field Notes* 8:372 (1954). The pines were thinned drastically in 1982. **Weather:** Mean temperature 3.7°C (range -7-12°C). Mean snow depth 3.1 cm (range 0-8 cm). The ground was bare on three visits. It was snowing during two visits. **Coverage:** 18.5 hrs; 16 visits (mornings): 19 Oct.; 1, 11, 16, 23 Nov.; 1, 7, 14, 21, 29 Dec.; 11, 25 Jan.; 1, 15 Feb.; 2, 14 Mar. **Count:** Pygmy Nuthatch, 11.7 ind./visit, (15 visits); Mountain Chickadee, 4.9, (16); Black-billed Magpie, 3.7, (14); White-breasted Nuthatch, 2.2, (12); Brown Creeper, 1.8, (13); Steller's Jay, 1.8, (12); Pine Siskin, 1.6, (5); Dark-eyed Junco, 1.2, (6); Northern Flicker, 1.0, (13); Golden-crowned Kinglet, 0.9, (5); Hairy Woodpecker, 0.8, (12); American Robin, 0.7, (6); Red Crossbill, 0.7, (4); Evening Grosbeak, 0.3, (1); Mountain Bluebird, 0.3, (3); Red-breasted Nuthatch, 0.2, (2); Townsend's Solitaire, 0.1, (2); Sharp-shinned Hawk, 0.1, (1); Great Horned Owl, 0.1, (1); Downy Woodpecker, 0.1, (1); Ruby-crowned Kinglet, 0.1, (1); Cassin's Finch, 0.1, (1). **Total:** 22 species; 34.1 ind./visit (169 ind./40 ha). **Other Observer:** Dave Hallock. **Acknowledgments:** Thanks to Dave Hallock for keeping the study going by doing most of the field work this year.

## 15. MATURE RED SPRUCE FOREST

### BOSQUE MADURO DE ABETOS ROJOS

THOMAS P. SKALING

10 Cumberland Street

Brunswick, Maine 04011

**Location:** Maine; Somerset Co.; West Forks; Boise Cascade Tract; 45°25'N, 70°10'W; Enchanted Pond Quadrangle, USGS. **Continuity:** Established 1990; 3 yr. **Size:** 16.0 ha.

**Description of Plot:** See *J. Field Ornithol.* 61 (Suppl.):57 (1990). **Weather:** Mean temperature  $-7.9^{\circ}\text{C}$  (range  $-18$ – $2^{\circ}\text{C}$ ). Mean snow depth 27.5 cm (range 5–54 cm). The average temperature during the study period was  $-11^{\circ}\text{C}$  which was normal for the season. Total precipitation was 18 cm, 4 cm below average; snowfall was 140 cm, 25 cm below average. Source: Northeast Regional Climate Center, Cornell University, and on-site instruments. **Coverage:** 28.2 hrs; 10 visits (mornings): 11 Dec.; 8, 10, 23, 25 Jan.; 5, 22, 28 Feb.; 3, 6 Mar. **Count:** Black-capped Chickadee, 8.2 ind./visit, (10 visits); Red-breasted Nuthatch, 7.2, (10); Pine Siskin, 6.6, (6); Boreal Chickadee, 5.6, (10); White-winged Crossbill, 5.6, (7); Ruffed Grouse, 1.7, (10); Downy Woodpecker, 1.2, (9); Golden-crowned Kinglet, 1.1, (2); Hairy Woodpecker, 1.0, (8); Pine Grosbeak, 0.6, (3); Evening Grosbeak, 0.6, (2); Gray Jay, 0.4, (2); Pileated Woodpecker, 0.3, (3); Blue Jay, 0.3, (3). **Total:** 14 species; 40.4 ind./visit (101 ind./40 ha). **Remarks:** A dramatic increase in activity was witnessed this season. The previous high count was 15.4 ind./visit during the winter of 1989–90. The previous high species total was 12, also during 1989–90. Five species (Black-capped Chickadee, Red-breasted Nuthatch, Boreal Chickadee, White-winged Crossbill, and Pine Siskin) accounted for 82% of the increase. An excellent Red Spruce cone crop and continued harvesting of mature soft wood from nearby areas may have had a bearing on the increased activity. **Acknowledgments:** I thank Boise Cascade for their continued support of this project.

## 16. UPLAND SCOTCH PINE PLANTATION

### PLANTACIÓN EN ALTURA DE PINO ESCOCÉS

ELIZABETH W. BROOKS

1435 Waterwells Road

Alfred Station, New York 14803

**Location:** New York; Allegany Co.; Alfred; Foster Plantation;  $42^{\circ}7'N$ ,  $77^{\circ}45'W$ ; Andover Quadrangle, USGS. **Continuity:** Established 1984; 8 yr. **Size:** 9.3 ha. **Description of Plot:** See *Aud. Field Notes* 23:743–744 (1969) and *Am. Birds* 38:38 (1984). **Weather:** Mean temperature  $-3.9^{\circ}\text{C}$  (range  $-11$ – $3^{\circ}\text{C}$ ). Mean snow depth 15.5 cm (range 0–24 cm). The ground was bare on one visit. Average temperature in Dec. ( $-2.5^{\circ}\text{C}$ ) was  $0.9^{\circ}$  colder than the 68-yr average, while Jan. average temperature ( $-4.4^{\circ}\text{C}$ ) was  $0.9^{\circ}$  warmer than normal. Snowfall in Dec. (64.8 cm) was 20 cm greater than the 68-yr average, while Jan. snowfall (40.0 cm) was 3.2 cm greater than normal. Source: Alfred Cooperative Weather Station. **Coverage:** 9.4 hrs; 8 visits (3 mornings, 5 afternoons): 12, 19, 26 Dec.; 13, 25, 27, 29 Jan.; 5 Feb. **Count:** Black-capped Chickadee, 10.5 ind./visit, (8 visits); Ruffed Grouse, 2.3, (6); Golden-crowned Kinglet, 1.0, (4); Blue Jay, 0.8, (4); Red-breasted Nuthatch, 0.6, (5); American Tree Sparrow, 0.6, (3); Wild Turkey, 0.4, (2); Downy Woodpecker, 0.1, (1); Brown Creeper, 0.1, (1); Northern Cardinal, 0.1, (1); Purple Finch, 0.1, (1); Evening Grosbeak, 0.1, (1). **Total:** 12 species; 16.8 ind./visit (72.0 ind./40 ha). **Remarks:** Northern Cardinal was new to the study. Most species were at or slightly below the 7-yr averages, but American Tree Sparrow was slightly higher. Only Black-capped Chickadee was seen on every visit. **Other Observer:** Peter Gradoni. **Acknowledgments:** Appreciation to Cynthia Clements and Phil Foster for permission to use the study area and to Rick Walker for weather data.

## 17. MATURE EASTERN LARCH FOREST

### BOSQUE MADURO DE ALERCE

MARC D. DEMERS

10 Cartier

La Tuque, Québec

Canada G9X 3L6

**Site Number:** PQ2891005. **Location:** Quebec; Laviolette/Champlain Co.; La Tuque; Golfwoods;  $47^{\circ}27'N$ ,  $72^{\circ}47'W$ ; La Tuque Quadrangle. **Continuity:** Established 1991; 2 yr.

**Size:** 25.0 ha. **Description of Plot:** See *J. Field Ornithol.* 63 (Suppl.):16 (1992). **Weather:** Mean temperature  $-15.5^{\circ}\text{C}$  (range  $-30$ – $-3^{\circ}\text{C}$ ). The season was very cold, with record low temperatures and above normal snowfall. Snow cover was 20 cm on the first visit and 137 cm at the last visit. It snowed during two visits. **Coverage:** 22.5 hrs; 11 visits (3 mornings, 8 afternoons): 22, 29 Dec.; 4, 11, 19, 26 Jan.; 2, 9, 16, 22, 29 Feb. **Count:** Common Redpoll, 28.2 ind./visit, (9 visits); Black-capped Chickadee, 22.5, (11); Common Raven, 11.3, (11); Evening Grosbeak, 10.2, (8); Hoary Redpoll, 7.8, (9); Common Merganser, 1.9, (8); Common Goldeneye, 1.8, (10); European Starling, 1.5, (5); Pine Siskin, 1.1, (1); Hairy Woodpecker, 1.0, (6); Blue Jay, 0.9, (6); Bohemian Waxwing, 0.9, (1); Mourning Dove, 0.3, (1); Red-breasted Nuthatch, 0.3, (3); Boreal Chickadee, 0.2, (1); Red-winged Blackbird, 0.2, (1); Downy Woodpecker, 0.1, (1); Brown Creeper, 0.1, (1). **Total:** 18 species; 90.2 ind./visit (144 ind./40 ha). **Remarks:** Large flocks of Common Ravens were seen again this winter. More species and individuals were seen this year. The birds were active throughout the day with no differences noted between morning and afternoon.

## 18. MATURE WHITE PINE FOREST

### BOSQUE MADURO DE PINO BLANCO

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**Location:** Rhode Island; Washington Co.; West Kingston; Marion Eppley Wildlife Sanctuary;  $41^{\circ}30'\text{N}$ ,  $71^{\circ}35'\text{W}$ ; Slocum Quadrangle, USGS. **Continuity:** Established 1991; 2 yr. **Size:** 10.1 ha. **Description of Plot:** See *J. Field Ornithol.* 62 (Suppl.):54–55 (1991). **Weather:** Mean temperature  $-7.3^{\circ}\text{C}$  (range  $-15.5$ – $-2.2^{\circ}\text{C}$ ). Mean snow depth 0 cm. Winds were gusty during one visit. **Coverage:** 15.7 hrs; 11 visits (mornings): 1, 2, 8, 12, 27, 29, 30 Jan.; 3, 7, 11, 13 Feb. **Count:** Black-capped Chickadee, 11.7 ind./visit, (11 visits); Brown Creeper, 1.1, (6); Blue Jay, 0.8, (5); American Crow, 0.8, (8); Tufted Titmouse, 0.6, (4); Downy Woodpecker, 0.5, (3); Golden-crowned Kinglet, 0.2, (1); American Robin, 0.2, (1); Great Horned Owl, 0.1, (1); Red-breasted Nuthatch, 0.1, (1). **Total:** 10 species; 16.1 ind./visit (63.7 ind./40 ha). **Remarks:** Contribution #2796 of the College of Resource Development, University of Rhode Island, with support from Rhode Island Agricultural Experiment Station. **Other Observers:** David M. Clayton and Nancy W. Clayton. **Acknowledgments:** Thanks to Patrick Dorcas and the Audubon Society of Rhode Island for permission to use the site.

## 19. PONDEROSA PINE-SCRUB OAK FOREST

### BOSQUE DE PINO PONDEROSA-MATORRAL DE ROBLE

JAMES S. KENT & JOHN W. OBRINGER

HQ USAFA/DFB

US Air Force Academy, Colorado 80840

**Location:** Colorado; El Paso Co.; Colorado Springs; USAFA Winter Bird Survey;  $38^{\circ}57'\text{N}$ ,  $104^{\circ}50'\text{W}$ ; Pikeview Quadrangle, USGS. **Continuity:** Established 1991; 2 yr. **Size:** 12.0 ha. **Description of Plot:** See *J. Field Ornithol.* 62 (Suppl.):56–57 (1991). Plot size was reduced from 13.8 ha due to road construction on the S end of the plot. **Weather:** Mean temperature  $7.2^{\circ}\text{C}$  (range  $2$ – $12^{\circ}\text{C}$ ). Mean snow depth 5.8 cm (range 0–30 cm). The ground was bare on seven visits. Generally a mild winter with one major snowfall. **Coverage:** 9.0 hrs; 10 visits (4 mornings, 6 afternoons): 5, 30 Dec.; 2, 3, 18, 19, 20 Jan.; 5, 9, 13 Feb. **Count:** Mountain Chickadee, 31.2 ind./visit, (10 visits); Dark-eyed Junco, 12.1, (10); Pygmy Nuthatch, 8.1, (9); White-breasted Nuthatch, 3.9, (10); House Finch, 3.7, (10); Hairy

Woodpecker, 2.6, (9); Canada Goose, 1.6, (1); Steller's Jay, 1.3, (3); Downy Woodpecker, 0.9, (5); Gray Jay, 0.6, (2); crossbill species, 0.6, (1); Black-capped Chickadee, 0.5, (3); Red-breasted Nuthatch, 0.3, (3); Great Horned Owl, 0.2, (2); Clark's Nutcracker, 0.2, (1); Plain Titmouse, 0.2, (2); Brown Creeper, 0.2, (2); Northern Goshawk, 0.1, (1); Red-tailed Hawk, 0.1, (1); Common Raven, 0.1, (1); Cassin's Finch, 0.1, (1). **Total:** 21 species; 68.6 ind./visit (229 ind./40 ha). **Other Observers:** Jeff Hays and Patricia Coomber.

## 20. MATURE BROADLEAF-CONIFEROUS FORESTED WETLAND

### BOSQUE MADURO DE ARBOLES DE HOJA ANCHA-CONIFEROS

TOM HARRINGTON

30 South Windham Road  
Willimantic, Connecticut 06226

**Site Number:** CT1291035. **Location:** Connecticut; Hartford Co.; Manchester; Oak Grove Nature Center; 41°46'N, 72°30'W; Manchester Quadrangle, USGS. **Continuity:** New. **Size:** 21.5 ha. **Description of Plot:** See *J. Field Ornithol.* 63 (Suppl.):74 (1992). **Weather:** Mean temperature -3.0°C (range -8-4°C). Average temperatures during the count period were above normal (Jan. was 2°C above normal; Feb. was 1°C above). Precipitation during the count period was below normal (Jan. was 77% of normal, Feb. was 65%). Light rain during three visits. Snow cover never lasted more than two days. **Coverage:** 21.5 hrs; 10 visits (mornings): 23 Dec.; 1, 6, 11, 18 Jan.; 1, 2, 8, 15, 22 Feb. **Count:** Black-capped Chickadee, 50.6 ind./visit, (10 visits); Tufted Titmouse, 17.4, (10); House Finch, 16.7, (9); Blue Jay, 15.8, (10); American Goldfinch, 14.9, (9); American Crow, 13.4, (10); Mourning Dove, 10.1, (9); Dark-eyed Junco, 9.0, (8); American Robin, 8.6, (5); Mallard, 8.3, (8); White-breasted Nuthatch, 6.1, (10); Golden-crowned Kinglet, 3.5, (8); European Starling, 3.0, (6); Northern Cardinal, 2.5, (7); White-throated Sparrow, 2.3, (8); Downy Woodpecker, 2.2, (9); House Sparrow, 1.2, (5); Red-bellied Woodpecker, 0.8, (7); Hairy Woodpecker, 0.7, (7); Song Sparrow, 0.7, (7); Northern Flicker, 0.5, (4); Brown Creeper, 0.4, (2); Carolina Wren, 0.4, (4); Northern Mockingbird, 0.4, (3); Common Grackle, 0.4, (1); Cedar Waxwing, 0.3, (2); American Black Duck, 0.2, (1); Cooper's Hawk, 0.1, (1); Red-tailed Hawk, 0.1, (1); Eastern Bluebird, 0.1, (1); Red-winged Blackbird, 0.1, (1). **Total:** 31 species; 191 ind./visit (355 ind./40 ha). **Remarks:** On 1 and 2 Feb., large flocks (47 and 25 ind.) of American Robins were observed feeding on holly berries. On 8 Feb., no holly berries were seen. A large flock of 68 Mourning Doves was seen on 2 Feb., but there was no apparent reason for the occurrence. **Acknowledgments:** Sue Craig supplied additional information about the nature center.

## 21. MIXED PINE AND DECIDUOUS FOREST

### BOSQUE MIXTO DE PINOS Y DE ARBOLES DECIDUO

DAN WEBSTER

Hanover College  
Hanover, Indiana 47243

**Location:** Indiana; Jefferson Co.; Hanover; 38°42'N, 85°35'W; Kent Quadrangle, USGS. **Continuity:** Established 1977; 8 yr. **Size:** 14.5 ha. **Description of Plot:** See *Am. Birds* 32: 27-28 (1978). Almost two-thirds of the large pines are standing dead or have fallen. **Weather:** Mean temperature -0.9°C (range -4-8°C). Mean snow depth 0.6 cm (range 0-5 cm). The ground was bare on seven visits. Snow cover was erratic and brief. The creek was open and flowing on each visit. An average winter for the area except that Jan. and Feb. were unusually dry. **Coverage:** 26.7 hrs; 9 visits (8 mornings, 1 afternoon): 18, 31 Dec.; 6, 11, 20, 27 Jan.; 3, 10, 18 Feb. Four additional afternoon/evening visits for owls only: 27, 28 Dec.; 27 Feb. **Count:** Golden-crowned Kinglet, 6.0 ind./visit, (9 visits); Tufted Titmouse, 4.9, (9); Carolina

Chickadee, 4.1, (9); American Crow, 1.7, (8); Northern Cardinal, 1.7, (7); Downy Woodpecker, 1.3, (9); Carolina Wren, 1.3, (6); Pileated Woodpecker, 1.2, (7); Red-bellied Woodpecker, 1.1, (6); American Robin, 1.1, (2); Northern Saw-whet Owl, 0.8, (3); Blue Jay, 0.8, (3); White-breasted Nuthatch, 0.8, (6); Dark-eyed Junco, 0.8, (2); Hairy Woodpecker, 0.7, (5); Yellow-rumped Warbler, 0.7, (2); Brown Creeper, 0.4, (3); Red-headed Woodpecker, 0.3, (2); Red-shouldered Hawk, 0.2, (2); Northern Flicker, 0.2, (2); Red-breasted Nuthatch, 0.1, (1); Eastern Bluebird, 0.1, (1); White-throated Sparrow, 0.1, (1). **Total:** 23 species; 30.0 ind./visit (82.8 ind./40 ha). **Remarks:** A Turkey Vulture circled over the plot one day and a flock of three Rock Doves flew over once. Additional Red-shouldered Hawks and American Crows also flew over. The wild fruit crop was poor. [The number of ind./visit was calculated using nine visits for all species except Northern Saw-whet Owl, which was calculated using only the four owling visits.-Ed.] **Other Observers:** Dwight Chamberlain, Richard Davis, Juanita Webster.

## 22. MAPLE-PINE-OAK SECOND-GROWTH FOREST

### BOSQUE SECUNDARIO DE ARCE-PINO-ROBLE

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*Boston University*

*Boston, Massachusetts 02215*

**Location:** Massachusetts; Norfolk Co.; Foxboro; Town of Foxboro conservation land, off Willow and E. Sts.; 42°4'N, 71°12'W; Mansfield Quadrangle, USGS. **Continuity:** Established 1977; 16 yr. **Size:** 11.8 ha. **Description of Plot:** See *Am. Birds* 31:50-51 (1977). **Weather:** Mean temperature -3.4°C (range -10-1°C). Mean snow depth 0.6 cm (range 0-2.5 cm). The ground was bare on eight visits. For Dec., Jan., and Feb., respectively, temperature departures from normal were 1.3, 0.8, and 0.9°C; equivalent precipitation departures were -4.8, -2.2, and -3.6 cm. Source: U.S. National Weather Service, Boston. **Coverage:** 12.0 hrs; 12 visits (mornings): 12, 16, 22, 24 Dec.; 1, 2, 7, 12 Jan.; 6, 9, 13, 17 Feb. **Count:** Black-capped Chickadee, 1.9 ind./visit, (8 visits); White-breasted Nuthatch, 0.7, (5); Tufted Titmouse, 0.4, (4); Dark-eyed Junco, 0.4, (1); American Crow, 0.3, (3); Downy Woodpecker, 0.3, (2); Golden-crowned Kinglet, 0.3, (3); Red-tailed Hawk, 0.2, (2); Brown Creeper, 0.2, (1); Northern Mockingbird, 0.1, (1); American Goldfinch, 0.1, (1). **Total:** 11 species; 4.8 ind./visit (16.1 ind./40 ha). **Remarks:** The Red-tailed Hawk was perched on both occasions. The largest mixed-species flock contained two chickadees, two nuthatches, two titmice, and one goldfinch.

## 23. UPLAND MIXED PINE-SPRUCE-HARDWOOD PLANTATION

### PLANTACIÓN MIXTAS DE PINO-ABETO MADERAS DURAS DE ALTURAS

ELIZABETH W. BROOKS

*1435 Waterwells Road*

*Alfred Station, New York 14803*

**Location:** New York; Allegany Co.; Alfred; Philips Creek State Reforestation Tract; 42°8'N, 77°45'W; Andover Quadrangle, USGS. **Continuity:** Established 1974; 18 yr. **Size:** 16.6 ha. **Description of Plot:** See *Am. Birds* 28:699-700 (1974). **Weather:** Mean temperature 0.1°C (range -4-7°C). Mean snow depth 9.0 cm (range 0-15 cm). The ground was bare on two visits. A portion of the stream remained open during the study period. See WBPS #16 for general summary. **Coverage:** 11.3 hrs; 8 visits (4 mornings, 4 afternoons): 11, 14, 20, 27 Dec.; 22, 26, 28 Jan.; 3 Feb. **Count:** Black-capped Chickadee, 14.5 ind./visit, (8 visits); Red-breasted Nuthatch, 2.9, (8); Blue Jay, 1.5, (6); Brown Creeper, 1.4, (6); Golden-

crowned Kinglet, 1.3, (6); Wild Turkey, 0.4, (1); Downy Woodpecker, 0.3, (2); Purple Finch, 0.3, (2); Ruffed Grouse, 0.1, (1); Hairy Woodpecker, 0.1, (1); Pileated Woodpecker, 0.1, (1); White-breasted Nuthatch, 0.1, (1); Winter Wren, 0.1, (1); Dark-eyed Junco, 0.1, (1); American Goldfinch, 0.1, (1); Evening Grosbeak, 0.1, (1). **Total:** 16 species; 23.4 ind./visit (56.3 ind./40 ha). **Remarks:** All species were at or near the 17-yr averages. Black-capped Chickadee and Red-breasted Nuthatch were seen on every visit. Timber removal and cleanup from the Mar. 1991 ice storm continues. **Acknowledgments:** Appreciation to Rick Walker for weather data.

## 24. CONIFEROUS-DECIDUOUS FOREST

### BOSQUE DE CONÍFEROS-DECIDUO

MICHAEL F.G. CLARK

27 Skyline Drive

Dundas, Ontario L9H 3S3

**Location:** Ontario; Municipality of Hamilton-Wentworth; Dundas; Dundas Valley Plot #3; 43°14'N, 80°2'W. **Continuity:** Established 1986; 7 yr. **Size:** 9.2 ha. **Description of Plot:** See *J. Field Ornithol.* 60 (Suppl.):11 (1989). **Weather:** Mean temperature 2.6°C (range -4-7°C). Mean snow depth 1.9 cm (range 0-7 cm). The ground was bare on five visits, but the ground cover was largely frozen. Light hail during one visit. The low wind during seven visits was not typical of this plot. **Coverage:** 11.4 hrs; 8 visits (5 mornings, 3 afternoons): 7, 21, 28 Dec.; 2, 11 Jan.; 1 Feb.; 5, 7, Mar. **Count:** Black-capped Chickadee, 16.4 ind./visit, (8 visits); Brown Creeper, 2.1, (5); White-breasted Nuthatch, 1.9, (5); Hairy Woodpecker, 0.9, (5); Northern Cardinal, 0.9, (4); American Crow, 0.4, (2); American Robin, 0.4, (2); Pine Siskin, 0.4, (1); Ruffed Grouse, 0.3, (2); Mourning Dove, 0.3, (2); American Tree Sparrow, 0.3, (1); Great Horned Owl, 0.1, (1); Downy Woodpecker, 0.1, (1); Pileated Woodpecker, 0.1, (1). **Total:** 14 species; 24.4 ind./visit (106 ind./40 ha). **Remarks:** The total of 195 birds observed is 52.3% above 1991, but slightly lower than the 7-yr average of 207.1. The most species (9) and high single count (47 birds) were recorded on 7 March. Among the dominant trophic group, the bark foragers (88.2% of birds, 6 species), the seven Hairy Woodpeckers and 17 Brown Creepers were considerably above average. Only one Downy Woodpecker was noted. Only six of the 20 species detected on the plot over the seven years have been present each year.

## 25. MATURE DECIDUOUS-CONIFEROUS FOREST WITH STREAM

### BOSQUE MADURO DECIDUO-Y-DE CONÍFEROS CON ARROYO

STEPHEN J. & BARBARA H. STEDMAN

2675 Lakeland Drive

Cookeville, Tennessee 38501

**Location:** Tennessee; Putnam Co.; Cookeville; City Lake Natural Area (Old Cookeville Filtration Plant); 36°8'N, 85°27'W; Cookeville East Quadrangle, USGS. **Continuity:** Established 1990; 3 yr. **Size:** 10.2 ha. **Description of Plot:** See *J. Field Ornithol.* 62 (Suppl.): 17 (1991) and 63 (Suppl.):18-19 (1992). **Weather:** Mean temperature 2.0°C (range -6-11°C). **Coverage:** 14.5 hrs; 10 visits (mornings): 5, 7, 10, 19, 26, 29 Jan.; 2, 9, 14, 16 Feb. **Count:** House Finch, 40.7 ind./visit, (9 visits); European Starling, 8.4, (7); Tufted Titmouse, 6.6, (10); Yellow-rumped Warbler, 5.0, (10); White-throated Sparrow, 5.0, (9); Northern Cardinal, 4.6, (10); Carolina Chickadee, 4.3, (10); Downy Woodpecker, 3.1, (10); Carolina Wren, 3.0, (10); Blue Jay, 2.8, (9); Song Sparrow, 2.8, (10); Red-bellied Woodpecker, 1.7, (9); Rufous-sided Towhee, 1.7, (8); Field Sparrow, 1.7, (5); Mourning Dove, 1.5, (5); White-breasted Nuthatch, 1.5, (10); American Goldfinch, 1.5, (9); Rock Dove, 1.4, (3); Great Blue Heron, 0.9, (7); Common Grackle, 0.9, (1); Belted Kingfisher, 0.8, (7); Eastern

Phoebe, 0.8, (7); American Robin, 0.8, (6); Swamp Sparrow, 0.8, (5); Yellow-bellied Sapsucker, 0.7, (5); American Crow, 0.7, (3); Brown Creeper, 0.7, (7); Northern Flicker, 0.6, (5); Hooded Merganser, 0.5, (1); Golden-crowned Kinglet, 0.5, (4); Eastern Bluebird, 0.4, (3); Hairy Woodpecker, 0.3, (3); Cedar Waxwing, 0.3, (1); Pileated Woodpecker, 0.2, (2); Sharp-shinned Hawk, 0.1, (1); Cooper's Hawk, 0.1, (1); Red-shouldered Hawk, 0.1, (1); Winter Wren, 0.1, (1); Chipping Sparrow, 0.1, (1); Dark-eyed Junco, 0.1, (1); Purple Finch, 0.1, (1). **Total:** 41 species; 108 ind./visit (423 ind./40 ha). **Remarks:** This plot, owned by the city of Cookeville, was renamed City Lake Natural Area and is being administered by Cookeville Leisure Services. Some grading to enlarge the small parking lot occurred this year; additionally, two small observation platforms, one on the lake and another at the main waterfall, were built. Much brush along the lake was removed. Bird species and numbers seemed little affected by these changes, but more changes are planned for the future.

## 26. SUBURBAN CEMETERY

### CEMENTERIO SUBURBANO

THOMAS A. IMHOF

1036 Pike Road  
Birmingham, Alabama 35218

**Location:** Alabama; Jefferson Co.; Birmingham; Oakland Cemetery ; 33°29'N, 86°54'W; Bessemer Quadrangle, USGS. **Continuity:** Established 1978; 13 yr. **Size:** 15.0 ha. **Description of Plot:** See *J. Field Ornithol.* 63 (Suppl.):88 (1992). **Weather:** Mean temperature 13.3°C (range 4–24°C). A mild winter with abundant wild food. On 18 Jan., 14 cm of snow fell and 2.5 cm was still on the ground during the 20 Jan. visit. **Coverage:** 21.0 hrs; 21 visits (17 mornings, 3 afternoons, 1 evening): 26, 27, 28, 29, 30 Nov.; 1, 7, 11, 17, 23, 30 Dec.; 6, 13, 20, 27 Jan.; 4, 11, 17, 22, 28 Feb.; 4 Mar. **Count:** Common Grackle, 554.1 ind./visit, (17 visits); European Starling, 144.0, (21); Red-winged Blackbird, 38.0, (14); American Robin, 28.9, (21); House Sparrow, 24.8, (21); House Finch, 22.2, (21); Mourning Dove, 20.0, (20); Rock Dove, 16.6, (20); Rusty Blackbird, 13.0, (12); White-throated Sparrow, 9.7, (21); Brown-headed Cowbird, 9.2, (8); Blue Jay, 8.4, (21); Northern Mockingbird, 6.4, (21); Northern Cardinal, 5.7, (21); Rufous-sided Towhee, 5.3, (21); Cedar Waxwing, 4.1, (7); Northern Flicker, 3.0, (21); Tufted Titmouse, 2.5, (19); Carolina Chickadee, 2.1, (18); American Crow, 2.0, (17); Yellow-rumped Warbler, 1.6, (16); Red-bellied Woodpecker, 1.5, (19); Carolina Wren, 1.4, (19); Brown Thrasher, 1.2, (13); Red-headed Woodpecker, 1.1, (18); Red-tailed Hawk, 0.7, (13); Golden-crowned Kinglet, 0.7, (11); Ruby-crowned Kinglet, 0.7, (10); Yellow-bellied Sapsucker, 0.6, (10); Downy Woodpecker, 0.5, (8); Field Sparrow, 0.2, (3); Orange-crowned Warbler, 0.2, (1); Song Sparrow, 0.2, (4); Sharp-shinned Hawk, 0.1, (3); American Kestrel, 0.1, (3); American Goldfinch, 0.1, (2); Merlin, 0.1, (2); Killdeer, 0.1, (1); Eastern Phoebe, 0.0, (1); White-breasted Nuthatch, 0.0, (1); Pine Warbler, 0.0, (1). **Total:** 41 species; 931 ind./visit (2484 ind./40 ha). **Remarks:** Heavy feeding by blackbirds explains the high number of individuals. Blackbirds were present daily but were only counted when they fed on the plot, often in flocks of 500–2000 birds. The 14 cm record snowfall was aided by falling onto very cold ground; usually the air and ground are warm so big snows are rare. The reason for the low Downy Woodpecker count may be this: Downy Woodpecker pairs normally feed far apart and call at regular intervals to keep in contact. One bird of this pair apparently died early and the remaining bird fed quite silently for most of the winter and so was often difficult to locate.

## 27. FLOODPLAIN FOREST AND CULTIVATED BOTTOMLAND

### BOSQUE INUNDABLE Y TIERRAS CULTIVADAS

VIVIAN MILLS PITZRICK

*Amity Lake*

*Belmont, New York 14813*

**Location:** New York; Allegany Co.; Scio; Maybee Plot; 42°10'N, 77°59'W; Wellsville North Quadrangle, USGS. **Continuity:** Established 1971; 22 yr. **Size:** 51.8 ha. **Description of Plot:** See *Am. Birds* 25:644-645 (1971). **Weather:** Mean temperature -7.5°C (range -20-0°C). Mean snow depth 6.5 cm (range 0-17.8 cm). The ground was bare on one visit. Temperatures averaged 6.7°C above normal with Lake Erie freezing on 19 Jan., two weeks late. Precipitation, mostly snow, was 5.4 cm below normal. **Coverage:** 19.8 hrs; 8 visits (mornings): 21 Dec.; 16, 22, 28 Jan.; 1, 8, 15, 23 Feb. **Count:** House Finch, 13.8 ind./visit, (8 visits); Mallard, 10.0, (5); Cedar Waxwing, 9.9, (2); American Goldfinch, 9.8, (8); European Starling, 7.9, (6); Mourning Dove, 6.9, (6); Black-capped Chickadee, 6.3, (8); American Crow, 5.8, (7); American Tree Sparrow, 5.1, (7); Rock Dove, 4.8, (3); Common Merganser, 3.1, (6); Dark-eyed Junco, 2.9, (7); House Sparrow, 2.9, (8); Ring-billed Gull, 2.3, (5); Blue Jay, 2.3, (6); Belted Kingfisher, 1.8, (8); Red-winged Blackbird, 1.5, (1); Northern Cardinal, 1.4, (3); Great Blue Heron, 1.1, (7); American Robin, 1.0, (1); Downy Woodpecker, 0.9, (4); American Black Duck, 0.8, (2); Red-tailed Hawk, 0.6, (5); Herring Gull, 0.4, (2); Canada Goose, 0.3, (1); Common Goldeneye, 0.3, (1); Pileated Woodpecker, 0.3, (2); White-breasted Nuthatch, 0.3, (2); Horned Grebe, 0.1, (1); Northern Pintail, 0.1, (1); Hooded Merganser, 0.1, (1); Sharp-shinned Hawk, 0.1, (1); Hairy Woodpecker, 0.1, (1); Northern Shrike, 0.1, (1); Song Sparrow, 0.1, (1); Purple Finch, 0.1, (1). **Total:** 36 species; 105 ind./visit (80.9 ind./40 ha). **Remarks:** Comparing 1992 results with the 1971-1991 average (in parentheses): total species, 36 (26); mean ind./visit, 105 (152); and excluding American Crow and Snow Bunting, 99 (102). The number of species was the highest ever with the total number of individuals only 3% below the 21-yr average. This was a reflection of the abundance of wild food as well as better coverage with more observers. Also, there were two new feeders at the plot edge. However, there were few corn gleanings and no top dressings. Horned Grebe (possibly a migrant), Canada Goose, Northern Pintail, and Northern Shrike were new to the study. On visit three a vole hole was found with bloodied snow and wing marks on either side. **Other Observers:** Michael Pitzrick, Elvira Pitzrick, Esther Pitzrick. **Acknowledgments:** Sincere appreciation to Calvin Maybee for permission to use his property.

## 28. FIELD, RIDGE, AND SHRUBBY TREES

### CAMPOS, COLINAS Y ARBUSTOS

MICHAEL F.G. CLARK

*27 Skyline Drive*

*Dundas, Ontario L9H 3S3*

**Location:** Ontario; Municipality of Hamilton-Wentworth; Dundas; Dundas Valley Plot #1; 43°15'N, 79°54'W. **Continuity:** Established 1986; 7 yr. **Size:** 6.6 ha. **Description of Plot:** See *J. Field Ornithol.* 60 (Suppl.):14 (1989). **Weather:** Mean temperature -1.4°C (range -14-4.5°C). Mean snow depth 0.8 cm (range 0-5 cm). The ground was bare on six visits. Fine hail during one visit. The largely snowless count days reflect area snow cover decrease from Dec. to Mar. norm of 31.4 cm. Source: Environment Canada. **Coverage:** 10.3 hrs; 8 visits (mornings): 1, 14, 23, 30 Dec.; 25 Jan.; 8, 22 Feb.; 14 Mar. **Count:** Black-capped Chickadee, 8.1 ind./visit, (7 visits); American Robin, 6.4, (5); American Tree Sparrow, 4.9, (7); Dark-eyed Junco, 2.9, (3); House Finch, 2.8, (4); Northern Cardinal, 1.9, (7); American Crow, 1.4, (5); Blue Jay, 1.1, (4); Cedar Waxwing, 1.1, (2); Hairy Woodpecker, 0.6, (4); Ruffed Grouse, 0.3, (1); Northern Mockingbird, 0.3, (2); American

Goldfinch, 0.3, (2); Red-tailed Hawk, 0.1, (1); Downy Woodpecker, 0.1, (1); White-breasted Nuthatch, 0.1, (1). **Total:** 16 species; 32.3 ind./visit (195 ind./40 ha). **Remarks:** The total of 258 birds observed (second highest for this study) is 40.2% above 1991, and 26.4% above the 7-yr average of 204.1. The high single count was 64 birds (22 Feb.); low was 14 birds (8 Feb. and 14 Mar.). Black-capped Chickadee (65 birds) was the highest species for the third year. American Robins (51 birds) found the mild winter and scanty snow to their liking. Seven of the 28 species detected on the plot over the seven years have been present each year.

## 29. SHRUBBY TREES, RIDGE, AND WOODS

ARBUSTOS, COLINAS Y BOSQUES

MICHAEL F.G. CLARK

27 Skyline Drive

Dundas, Ontario L9H 3S3

**Location:** Ontario; Municipality of Hamilton-Wentworth; Dundas; Dundas Valley Plot #2; 43°14'N, 80°0'W; **Continuity:** Established 1986; 4 yr. **Size:** 7.3 ha. **Description of Plot:** See *J. Field Ornithol.* 60 (Suppl.):14–15 (1989). **Weather:** Mean temperature 0.0°C (range -12–7°C). Mean snow depth 1.3 cm (range 0–4.5 cm). The ground was bare on five visits. Light rain to rain during one visit. Light fog at the start of another visit. The wind was unusually low during all visits. **Coverage:** 9.5 hrs; 8 visits (7 mornings, 1 afternoon): 1, 14, 23, 28, 30 Dec.; 25 Jan.; 1, 22 Feb. **Count:** Black-capped Chickadee, 12.5 ind./visit, (8 visits); American Tree Sparrow, 2.9, (3); American Robin, 2.4, (4); Northern Cardinal, 1.5, (5); Ruffed Grouse, 0.9, (4); Cedar Waxwing, 0.8, (1); Dark-eyed Junco, 0.6, (2); Downy Woodpecker, 0.4, (3); White-breasted Nuthatch, 0.3, (2); woodpecker species, 0.1, (1); American Crow, 0.1, (1); American Goldfinch, 0.1, (1). **Total:** 12 species; 22.5 ind./visit (123 ind./40 ha). **Remarks:** The most species (8) and high single count (37 birds) were recorded on 14 December. The low count was on 22 Feb. (12 birds, 2 species). The 11 identified species was the lowest number for this study. The total of 100 Black-capped Chickadees is 40.3% above the 4-yr average of 71.3. The dominant trophic group was the bark foragers (58.9% of birds, 3 species). An increase of almost 200% in American Tree Sparrow perhaps reflects a westward shift from the Dundas Valley Plot #1 (Field, Ridge, and Shrubby Trees), where House Finch and Northern Cardinal have increased considerably.

## 30. URBAN PARK

PARQUE URBANO

DENNIS M. FORSYTHE

Department of Biology

The Citadel

Charleston, South Carolina 29409

**Location:** South Carolina; Charleston Co.; Charleston; Hampton Park; 32°48'N, 79°58'W; Charleston Quadrangle, USGS. **Continuity:** Established 1971; 5 yr. **Size:** 25.9 ha. **Description of Plot:** See *J. Field Ornithol.* 62 (Suppl.):20–21 (1991). **Weather:** Mean temperature 9.5°C (range 3–18°C). Light rain during one visit. Temperatures and precipitation were above normal for the study period. **Coverage:** 17.6 hrs; 13 visits (mornings: 6, 11, 17, 21, 30 Dec.; 2, 10, 11, 17, 24, 30 Jan.; 5, 13 Feb. **Count:** Rock Dove, 67.1 ind./visit, (13 visits); European Starling, 49.6, (13); Ring-billed Gull, 37.8, (13); Fish Crow, 14.8, (12); Mourning Dove, 9.6, (13); Blue Jay, 7.3, (13); Northern Mockingbird, 6.5, (12); Yellow-rumped Warbler, 3.8, (10); House Sparrow, 3.5, (9); Northern Flicker, 3.2, (12); Red-bellied Woodpecker, 2.5, (12); Northern Cardinal, 2.0, (10); Common Grackle, 1.9, (13); American Robin, 1.8, (4); Brown Thrasher, 1.4, (8); Ruby-crowned Kinglet, 1.3, (9);

White Ibis, 1.2, (6); Loggerhead Shrike, 1.2, (9); Double-crested Cormorant, 1.1, (10); Yellow-bellied Sapsucker, 1.0, (8); Boat-tailed Grackle, 1.0, (6); Cedar Waxwing, 0.9, (1); Downy Woodpecker, 0.5, (2); Red-tailed Hawk, 0.4, (5); Killdeer, 0.3, (2); American Kestrel, 0.2, (3); Belted Kingfisher, 0.2, (3); Solitary Vireo, 0.2, (2); Orange-crowned Warbler, 0.2, (2); Palm Warbler, 0.2, (2); Song Sparrow, 0.2, (2); Great Egret, 0.1, (1); Sharp-shinned Hawk, 0.1, (1); Carolina Chickadee, 0.1, (1); Tufted Titmouse, 0.1, (1); White-throated Sparrow, 0.1, (1); Northern Oriole, 0.1, (1). **Total:** 37 species; 223 ind./visit (345 ind./40 ha). **Acknowledgments:** I wish to thank D.W. Forsythe for assistance in the field, B. Powell for typing the manuscript, personnel of the Parks Department, City of Charleston, for park access, and The Citadel Development Foundation for funds for page charges.

### 31. COASTAL FRESHWATER MARSH

#### PANTANO COSTANERO DE AGUA DULCE

JOHN P. KELLY

*Cypress Grove Preserve*

*P.O. Box 808*

*Marshall, California 94940*

**Location:** California; Marin Co.; Marshall; Livermore Marsh; 38°10'N, 122°54'W; Tomales Quadrangle, USGS. **Continuity:** Established 1986; 7 yr. **Size:** 10.5 ha. **Description of Plot:** See *J. Field Ornithol.* 60 (Suppl.):64 (1989). Arroyo Willow now covers approximately 10% of the middle marsh in patches 2–6 m high. **Weather:** Mean temperature 8.3°C (range 5–11°C). **Coverage:** 8.1 hrs; 7 visits (mornings): 16, 24, 30 Jan.; 13, 20, 26, 29 Feb. **Count:** Canvasback, 41.4 ind./visit, (7 visits); Song Sparrow, 14.7, (7); Red-winged Blackbird, 14.0, (6); Ruddy Duck, 12.9, (7); American Coot, 12.7, (7); Black-crowned Night-Heron, 9.6, (7); Marsh Wren, 9.6, (7); Mallard, 8.7, (6); American Wigeon, 8.6, (3); Golden-crowned Sparrow, 6.4, (7); Yellow-rumped Warbler, 6.0, (7); Common Yellowthroat, 4.0, (7); Dark-eyed Junco, 3.0, (2); Bufflehead, 2.1, (5); Turkey Vulture, 1.7, (1); Black Phoebe, 1.7, (6); Wrentit, 1.7, (6); Common Snipe, 1.6, (4); Ring-necked Duck, 1.4, (2); Northern Pintail, 1.3, (2); White-crowned Sparrow, 1.3, (3); Pied-billed Grebe, 1.1, (5); Cinnamon Teal, 1.1, (2); Allen's Hummingbird, 1.0, (2); Scrub Jay, 1.0, (6); Brewer's Blackbird, 1.0, (1); Chestnut-backed Chickadee, 0.7, (3); Great Blue Heron, 0.6, (3); Northern Flicker, 0.6, (3); American Crow, 0.6, (2); Ruby-crowned Kinglet, 0.6, (3); Lincoln's Sparrow, 0.6, (3); Swamp Sparrow, 0.6, (3); Northern Shoveler, 0.4, (1); Greater Scaup, 0.4, (2); Belted Kingfisher, 0.4, (3); California Towhee, 0.4, (2); Fox Sparrow, 0.4, (3); Snowy Egret, 0.3, (2); Northern Harrier, 0.3, (2); Cooper's Hawk, 0.3, (2); Red-tailed Hawk, 0.3, (2); Virginia Rail, 0.3, (1); American Robin, 0.3, (2); American Pipit, 0.1, (1); Mourning Dove, 0.1, (1); Anna's Hummingbird, 0.1, (1); Tree Swallow, 0.1, (1); Common Raven, 0.1, (1); Bewick's Wren, 0.1, (1); Winter Wren, 0.1, (1); Western Meadowlark, 0.1, (1); House Finch, 0.1, (1). **Total:** 53 species; 179 ind./visit (682 ind./40 ha). **Remarks:** Seventeen Black-crowned Night-Herons (based on one flush count) occupied a winter roost in the lower marsh bulrushes. Two male Allen's Hummingbirds and one male Anna's Hummingbird occupied breeding territories. Canvasback numbers fluctuated as they moved approximately 6 km to and from Abbott's Lagoon. The peak number at Livermore Marsh was 80. Red-winged Blackbirds were males exhibiting early territorial behavior. **Acknowledgments:** Data were compiled by Susan Kelly. This work was supported by Chevron USA, Inc., San Francisco, CA, and Audubon Canyon Ranch, Stinson Beach, CA.

### 32. BARRIER BEACH AND SALTWATER ESTUARY

#### ESTUARIOS DE AGUA SALADA Y PLAYAS DE BARRERA

ROBERT W. LOFTIN

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*4567 St. Johns Bluff Road South*  
*Jacksonville, Florida 32224-2645*

**Location:** Florida; Duval Co.; Mayport; North Jetties Area; 30°25'N, 81°25'W; Mayport Quadrangle, USGS. **Continuity:** Established 1978; 15 yr. **Size:** 213.0 ha. **Description of**

**Plot:** See *Am. Birds* 33:47-48 (1979). **Weather:** Mean temperature 16.2°C (range 2.7-24.4°C). Slightly warmer than normal. Average for Dec. was 14.2°C (1.5°C above normal); Jan. average was 11.4°C (0.3°C below normal); Feb. average was 14.7°C (1.8°C above normal). **Coverage:** 15.0 hrs; 8 visits (1 morning, 7 afternoons): 1, 23 Dec.; 1, 18, 29 Jan.; 9, 16, 29 Feb. **Count:** Herring Gull, 1507.3 ind./visit, (8 visits); Ring-billed Gull, 876.4, (8); Laughing Gull, 470.6, (8); Dunlin, 129.5, (8); Royal Tern, 124.4, (7); Sanderling, 102.8, (8); Black Skimmer, 96.6, (8); Western Sandpiper, 65.0, (6); Great Black-backed Gull, 64.5, (8); Ruddy Turnstone, 56.3, (7); Brown Pelican, 47.8, (8); Double-crested Cormorant, 44.5, (8); Yellow-rumped Warbler, 43.9, (8); Forster's Tern, 32.3, (8); Red Knot, 27.9, (3); Red-breasted Merganser, 23.9, (7); Black-bellied Plover, 19.6, (7); Short-billed Dowitcher, 17.3, (3); Common Grackle, 15.9, (8); Red-winged Blackbird, 9.1, (5); European Starling, 9.0, (7); Mourning Dove, 8.0, (7); Northern Gannet, 7.9, (4); Snowy Egret, 5.5, (6); Semipalmated Plover, 4.9, (5); Piping Plover, 4.6, (7); Sandwich Tern, 3.8, (1); Great Egret, 3.5, (8); Wilson's Plover, 3.5, (2); Northern Cardinal, 2.9, (6); Northern Mockingbird, 2.6, (5); Savannah Sparrow, 2.4, (5); Caspian Tern, 1.9, (6); Killdeer, 1.8, (4); Clapper Rail, 1.6, (4); Willet, 1.5, (5); Rufous-sided Towhee, 1.5, (5); Horned Grebe, 1.4, (3); White Ibis, 1.3, (2); Great Blue Heron, 1.0, (4); Osprey, 1.0, (6); Lesser Black-backed Gull, 1.0, (4); Belted Kingfisher, 0.9, (6); Tricolored Heron, 0.6, (3); American Kestrel, 0.6, (4); Marbled Godwit, 0.6, (3); Loggerhead Shrike, 0.6, (4); Little Blue Heron, 0.5, (3); House Wren, 0.5, (3); Orange-crowned Warbler, 0.5, (2); Palm Warbler, 0.5, (3); Song Sparrow, 0.5, (3); Boat-tailed Grackle, 0.5, (3); American Goldfinch, 0.5, (1); Northern Harrier, 0.4, (3); Long-billed Curlew, 0.4, (3); Hooded Merganser, 0.3, (1); American Oystercatcher, 0.3, (1); Bonaparte's Gull, 0.3, (2); Common Ground-Dove, 0.3, (2); Tree Swallow, 0.3, (1); Common Loon, 0.1, (1); American White Pelican, 0.1, (1); Cooper's Hawk, 0.1, (1); Merlin, 0.1, (1); Peregrine Falcon, 0.1, (1); Common Snipe, 0.1, (1); Blue Jay, 0.1, (1); Ruby-crowned Kinglet, 0.1, (1); Gray Catbird, 0.1, (1); Swamp Sparrow, 0.1, (1). **Total:** 71 species; 3858 ind./visit (724 ind./40 ha). **Remarks:** Herring and Ring-billed Gulls were at all-time highs this year. Herring Gull had a mean of 1507 ind./visit vs the 14-yr mean of 503 ind./visit, while Ring-billed Gull had 876 vs 234. Laughing Gull was above the 14-yr mean (471 vs 422) but far below the all-time high of 1002 in 1985. Black Skimmer was low (97 vs 254), as were Short-billed Dowitcher (17 vs 67), Willet (2 vs 10), Dunlin (130 vs 236), and Brown Pelican (48 vs 94). Semipalmated Plover was at an all-time low (5 vs 81). **Other Observer:** Robert Richter.

### 33. COASTAL SCRUB

#### MATORRAL COSTANERO

ELIAS ELIAS & GEOFFREY R. GEUPEL

*Point Reyes Bird Observatory*

*4990 Shoreline Highway*

*Stinson Beach, California 94970*

**Location:** California; Marin Co.; Bolinas; Palomarin Field Station; 37°55'N, 122°45'W; Bolinas Quadrangle, USGS. **Continuity:** Established 1971; 4 yr. **Size:** 8.1 ha. **Description of Plot:** See *Am. Birds* 25:1003-1004 (1971). **Weather:** Mean temperature 9.1°C (range 5-12°C). Total precipitation during the study period was 11.8 cm, continuing the drought conditions of the last five years. **Coverage:** 18.7 hrs; 8 visits (mornings): 7, 14, 20, 24, 31 Jan.; 8, 17, 24 Feb. **Count:** Wrentit, 17.3 ind./visit, (8 visits); Song Sparrow, 8.8, (8); Rufous-sided Towhee, 7.9, (8); Bewick's Wren, 7.3, (8); Ruby-crowned Kinglet, 5.5, (8); White-crowned Sparrow, 3.9, (6); American Robin, 3.5, (7); Bushtit, 2.8, (6); Scrub Jay, 2.4, (8); Fox Sparrow, 1.5, (7); Hermit Thrush, 1.3, (6); Anna's Hummingbird, 0.9, (4); Rufous-crowned Sparrow, 0.8, (4); Northern Flicker, 0.6, (5); Blue-gray Gnatcatcher, 0.5, (4); Hutton's Vireo, 0.5, (4); Chestnut-backed Chickadee, 0.4, (3); Yellow-rumped Warbler, 0.4, (3); California Quail, 0.3, (1); Winter Wren, 0.3, (2); Golden-crowned Kinglet, 0.3, (2). **Total:** 21 species; 66.6 ind./visit (329 ind./40 ha). **Remarks:** Species diversity was similar to winter 1982-83, although decreased from 1990-91. Marked decreases were seen

in the numbers of Chestnut-backed Chickadees, Northern Flickers, Yellow-rumped Warblers, and Bushtits, compared with previous year. Wrentits, Rufous-sided Towhees, and American Robins were at all-time high densities, and Song Sparrow numbers markedly increased after a substantial decrease last year. Hutton's Vireo and Winter Wren were present on the plot for the first time. **Acknowledgments:** We thank the Point Reyes National Seashore for their cooperation. This is PRBO contribution No. 562.

### 34. DISTURBED COASTAL SCRUB A

#### MATORRAL COSTANERO PERTURBADO A

DENISE HARDESTY & GEOFFREY R. GEUPEL

*Point Reyes Bird Observatory  
4990 Shoreline Highway  
Stinson Beach, California 94970*

**Location:** California; Marin Co.; Bolinas; Palomarin Field Station; 37°55'N, 122°45'W; Bolinas Quadrangle, USGS. **Continuity:** Established 1980; 3 yr. **Size:** 4.7 ha. **Description of Plot:** See *Am. Birds* 26:987-988 (1972). **Weather:** Mean temperature 8.6°C (range 4-12°C). Total precipitation during the study period was 11.8 cm, continuing the drought conditions of the last five years. **Coverage:** 17.0 hrs; 8 visits (mornings): 7, 13, 21, 27 Jan.; 4, 13, 22, 27 Feb. **Count:** California Quail, 19.9 ind./visit, (7 visits); Wrentit, 14.5, (8); Bushtit, 11.1, (7); Song Sparrow, 9.6, (8); White-crowned Sparrow, 8.3, (8); Ruby-crowned Kinglet, 6.1, (8); Rufous-sided Towhee, 5.1, (8); Golden-crowned Sparrow, 4.6, (6); Northern Flicker, 4.3, (7); Bewick's Wren, 3.8, (8); Scrub Jay, 3.0, (8); Anna's Hummingbird, 2.6, (8); Chestnut-backed Chickadee, 1.9, (5); Fox Sparrow, 1.8, (6); American Robin, 1.6, (5); Yellow-rumped Warbler, 1.6, (3); California Towhee, 1.5, (7); Pine Siskin, 1.1, (3); Steller's Jay, 1.0, (5); Winter Wren, 0.8, (5); Hutton's Vireo, 0.6, (5); Townsend's Warbler, 0.6, (3); Golden-crowned Kinglet, 0.5, (4); Hermit Thrush, 0.4, (2); Cooper's Hawk, 0.1, (1); Say's Phoebe, 0.1, (1); Tree Swallow, 0.1, (1); Varied Thrush, 0.1, (1); Dark-eyed Junco, 0.1, (1); Purple Finch, 0.1, (1). **Total:** 30 species; 107 ind./visit (911 ind./40 ha). **Remarks:** Total number of species was only slightly higher than last year although total number of individuals was significantly higher. Twelve species had an increase in numbers of 50% or greater. They were: California Quail, Wrentit, Bushtit, Song Sparrow, White-crowned Sparrow, Ruby-crowned Kinglet, Rufous-sided Towhee, Northern Flicker, Bewick's Wren, Anna's Hummingbird, Chestnut-backed Chickadee, and Fox Sparrow. New species seen this year were Cooper's Hawk, Say's Phoebe, Varied Thrush, Townsend's Warbler, and Pine Siskin. **Acknowledgments:** We thank the Point Reyes National Seashore for their cooperation. This is PRBO contribution No. 560.

### 35. DISTURBED COASTAL SCRUB B

#### MATORRAL COSTANERO PERTURBADO B

GRANT BALLARD & GEOFFREY R. GEUPEL

*Point Reyes Bird Observatory  
4990 Shoreline Highway  
Stinson Beach, California 94970*

**Location:** California; Marin Co.; Bolinas; Palomarin Field Station; 37°55'N, 122°45'W; Bolinas Quadrangle, USGS. **Continuity:** Established 1980; 4 yr. **Size:** 8.1 ha. **Description of Plot:** See *Am. Birds* 25:1002-1003 (1971). **Weather:** Mean temperature 7.7°C (range 4-12°C). Total precipitation during the study period was 11.8 cm, continuing the drought conditions of the last five years. **Coverage:** 19.8 hrs; 9 visits (mornings): 7, 14, 21, 29 Jan.; 5, 13, 22, 26 Feb.; 10 Mar. **Count:** Song Sparrow, 17.8 ind./visit, (9 visits); Wrentit, 15.4, (9); California Quail, 12.0, (8); Bushtit, 10.6, (6); White-crowned Sparrow, 7.4, (9); Rufous-sided Towhee, 5.2, (9); Golden-crowned Sparrow, 3.8, (6); Bewick's Wren, 3.7, (9); Scrub

Jay, 2.7, (8); European Starling, 2.0, (4); Northern Flicker, 1.6, (7); California Towhee, 1.6, (6); Ruby-crowned Kinglet, 1.4, (7); Yellow-rumped Warbler, 1.4, (6); Anna's Hummingbird, 1.1, (3); Winter Wren, 0.9, (6); Western Bluebird, 0.8, (2); American Robin, 0.7, (2); Townsend's Warbler, 0.7, (2); Dark-eyed Junco, 0.7, (2); Brewer's Blackbird, 0.6, (1); Chestnut-backed Chickadee, 0.4, (3); Hermit Thrush, 0.4, (4); Orange-crowned Warbler, 0.3, (1); Pine Siskin, 0.3, (1); American Kestrel, 0.1, (1); Steller's Jay, 0.1, (1); Blue-gray Gnatcatcher, 0.1, (1). **Total:** 28 species; 93.8 ind./visit (463 ind./40 ha). **Remarks:** Species diversity was similar to previous years, although an increase in number of individuals was seen. Wrentit, California Quail, and Scrub Jay continued their upward trends while Song Sparrow, Bushtit, White-crowned Sparrow, Rufous-sided Towhee, Bewick's Wren, and California Towhee also showed increases in numbers this year. Ruby-crowned Kinglet numbers decreased again. New species seen this year were Western Bluebird and Townsend's Warbler. American Robin and Yellow-rumped Warbler were recorded for the first time since 1982. **Acknowledgments:** We thank the Point Reyes National Seashore for their cooperation. This is PRBO contribution No. 561.

### 36. CHIHUAHUA DESERT SCRUB MATORRAL DESÉRTICO DE CHIHUAHUA

CATHERINE I. SANDELL

8101 North Main

Las Cruces, New Mexico 88001

**Site Number:** NM5691029. **Location:** New Mexico; Dona Ana Co.; Las Cruces; Dripping Springs Natural Area; 32°20'N, 106°36'W; Organ Peak Quadrangle, USGS. **Continuity:** Established 1991; 2 yr. **Size:** 16.0 ha. **Description of Plot:** See *J. Field Ornithol.* 63 (Suppl.): 26-27 (1992). **Weather:** Mean temperature 12.1°C (range 6-18°C). Winter 1991-92 was one of the wettest on record with as much rain falling in Dec. and Jan. as usual for the entire year. It was warmer than average with more days below 0°C but no extreme cold. **Coverage:** 8.5 hrs; 8 visits (mornings): 8 Dec.; 12 Jan.; 13 Feb.; 14 Mar. **Count:** Black-throated Sparrow, 32.0 ind./visit, (8 visits); Brewer's Sparrow, 11.0, (8); Dark-eyed Junco, 5.9, (8); White-crowned Sparrow, 4.1, (7); Canyon Towhee, 2.0, (7); House Finch, 1.9, (5); Gambel's Quail, 1.4, (4); Bewick's Wren, 1.1, (5); Ruby-crowned Kinglet, 1.0, (3); Rufous-crowned Sparrow, 0.9, (2); Chipping Sparrow, 0.9, (5); Green-tailed Towhee, 0.8, (3); White-winged Dove, 0.5, (3); Cactus Wren, 0.5, (4); Crissal Thrasher, 0.5, (4); Verdin, 0.1, (1); Loggerhead Shrike, 0.1, (1). **Total:** 17 species; 64.6 ind./visit (162 ind./40 ha). **Remarks:** An unusually wet summer resulted in an increase in grass production and may account for the higher number of winter sparrows. **Other Observer:** Katie Skaggs. **Acknowledgments:** Bureau of Land Management and The Nature Conservancy, who manage Dripping Springs Natural Area.

### 37. ABANDONED UPLAND PASTURE PASTIZAL DE ALTURAS ABANDONADO

VIVIAN MILLS PITZRICK

Amity Lake

Belmont, New York 14813

**Location:** New York; Allegany Co.; Scio; Saunders Plot; 42°13'N, 77°59'W; Wellsville North Quadrangle, USGS. **Continuity:** Established 1984; 9 yr. **Size:** 8.0 ha. **Description of Plot:** See *Am. Birds* 39:119 (1985) and *J. Field Ornithol.* 63 (Suppl.):109 (1992). **Weather:** Mean temperature -2.0°C (range -14-6°C). Mean snow depth 5.3 cm (range 0-13 cm). The ground was bare on four visits. Temperatures averaged 6.7°C above normal with Lake Erie freezing on 19 Jan., two weeks late. Precipitation, mostly snow, was 5.4 cm below normal. The intermittent stream was open on all but one visit. **Coverage:** 6.1 hrs; 9 visits

(7 mornings, 1 afternoon, 1 evening): 12, 30 Dec.; 14 Jan.; 2, 6, 9, 13, 21 Feb.; 1 March. **Count:** Cedar Waxwing, 8.0 ind./visit, (3 visits); American Robin, 4.3, (5); Black-capped Chickadee, 2.9, (5); American Crow, 1.6, (7); Blue Jay, 1.4, (6); Evening Grosbeak, 1.0, (2); Red-tailed Hawk, 0.6, (5); Rough-legged Hawk, 0.4, (4); Downy Woodpecker, 0.3, (3); American Tree Sparrow, 0.3, (2); Hairy Woodpecker, 0.2, (2); European Starling, 0.2, (2); Northern Cardinal, 0.2, (2); Canada Goose, 0.1, (1); Ruffed Grouse, 0.1, (1); Pileated Woodpecker, 0.1, (1); White-breasted Nuthatch, 0.1, (1); Eastern Bluebird, 0.1, (1); Northern Shrike, 0.1, (1). **Total:** 19 species; 22.2 ind./visit (111 ind./40 ha). **Remarks:** The number of species was the highest ever and the total bird population was 78% higher than the 1984–1991 average. Canada Goose and European Starling were new to the study. No species appeared on every visit. The excellent count may be attributed to the mild winter, a good wild food supply, and better coverage with more observers. The Northern Shrike was seen catching a small, dark rodent, possibly a shrew. American Robins and Cedar Waxwings were found feeding on buckthorn fruits. **Other Observers:** Michael Pitzrick and Elvira Pitzrick. **Acknowledgments:** Thanks to Gail and Victor Funk for permission to use their property.

### 38. MIXED CROPLANDS

#### CULTIVOS MIXTOS

PAUL W. & GLENNA P. SCHWALBE

*546 Wilson Street*

*Jersey Shore, Pennsylvania 17740*

**Location:** Pennsylvania; Clinton Co.; South Avis; South Avis Fields; 41°10'N, 77°17'W; Jersey Shore Quadrangle, USGS. **Continuity:** Established 1983; 10 yr. **Size:** 40.5 ha. **Description of Plot:** See *Am. Birds* 38:56–57 (1984). **Weather:** Mean temperature –5.0°C (range –16.2–9.4°C). Mean snow depth 0.8 cm (range 0–4.9 cm). The ground was bare on seven visits. There were no extremes in either the temperature or the wind. The drought conditions of the area continued, with very little snow cover. **Coverage:** 5.3 hrs; 9 visits (8 mornings, 1 afternoon): 28, 30, 31 Dec.; 1, 15, 22, 27 Jan.; 6, 8 Feb. **Count:** Rock Dove, 60.0 ind./visit, (6 visits); Horned Lark, 12.7, (4); Mourning Dove, 11.8, (3); European Starling, 3.0, (1); American Crow, 1.9, (4); Common Raven, 0.2, (2); Red-tailed Hawk, 0.1, (1); Rough-legged Hawk, 0.1, (1). **Total:** 8 species; 89.8 ind./visit (88.7 ind./40 ha). **Remarks:** Once again, the number of Rock Doves is probably atypical for this type of habitat.