

BREEDING BIRD CENSUS: 2002

1. IRRIGATED MIXED WILLOW RIPARIAN BOSQUE RIBEREÑO DE SAUCE, IRRIGADO

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Location: California; Mono Co.; Mono City; Wilson Creek; 38°03'N, 119°09'W; Lundy & Negit Island Quadrangles, USGS. **Continuity:** Established 2000; 3 yr. **Size:** 15 ha. **Description of Plot:** See 2001 report (this volume). **Weather:** Mean temp., 16°C (range -6–37°C). Mean monthly (May–August) high and low temperatures (derived on site for June–August and from <http://www.monobasinresearch.org/> for May) were respectively higher and lower than long-term averages (1950–1988, NOAA Western Regional Climate Center data for Lee Vining, CA). Mean monthly precipitation was above average in May, just below average in June, just above average in July, and well below average in August. **Coverage:** 370.6 h; 70 visits (64 sunrise, 6 sunset). **Census:** Spotted Towhee, 17.5 (47); Song Sparrow, 15.0 (40; 25N,27FL); Yellow Warbler, 7.0 (19; 7N,6FL); Green-tailed Towhee, 5.0 (13; 1N); Northern Flicker, 2.5 (3N); Brewer's Sparrow, 2.5 (3N,5FL); American Kestrel, 2.0 (1N,3FL); American Robin, 2.0 (2N); Bewick's Wren, 1.5; Bushtit, 1.0; Blue-gray Gnatcatcher, 1.0; Vesper Sparrow, 1.0 (1N,2FL); Belted Kingfisher, 0.5; Sage Thrasher, 0.5; Northern Rough-winged Swallow, col; Cliff Swallow, col. (3N,1FL); Red-winged Blackbird, col. (7N,8FL); Mallard, unk. (1N); Green-winged Teal, unk. (2N,3FL); Mourning Dove, unk. (1N,2FL); Long-eared Owl, unk. (1N); Black-billed Magpie, unk. (13N,12FL); Savannah Sparrow, unk. (2N,3FL); Western Meadowlark, unk. (3N,3FL); Brown-headed Cowbird, unk. (23N,6FL). **Total:** 25 species; 59.0 territories (157/40ha). **Visitors:** Greater Sage-Grouse, Killdeer, Wilson's Snipe, Wilson's Phalarope, Common Nighthawk, Gray Flycatcher, Dusky Flycatcher, Western Kingbird, Loggerhead Shrike, Warbling Vireo, Sage Thrasher, European Starling, MacGillivray's Warbler, Common Yellowthroat, Black-headed Grosbeak, Brewer's Blackbird, Bullock's Oriole. **Remarks:** Common Yellowthroat now absent as a nester (single pair in 2001). A single Long-eared Owl pair nested atop an old magpie nest; fledglings were observed in previous years. Greater Sage-Grouse females and broods were

observed in late July; likely dispersing from nearby upland breeding areas to consume forbs and grasses found in wetter areas. Cowbirds parasitized 61% of host species' (Green-tailed Towhee, Yellow Warbler, Song Sparrow, and Red-winged Blackbird) nests. Predation accounted for 60% of all nest failures. The magpie colony (at least 13 pairs) likely contributes to nest predation; individuals were observed harassing birds whose nests then failed. We did not determine territorial densities for colonial species, nor for species difficult to document with the spot-mapping method due to their lack of vocalization or loosely held territory boundaries. We also did not map species that primarily used the irrigated pasture next to our study plots (Savannah Sparrow, Western Meadowlark), though their territories encompassed the riparian somewhat. These species' territories are indicated as "col" (colonial) or "unk." (unknown) above; nest numbers provide some indication of their prevalence. **Acknowledgements:** Financial and logistical support was provided by the National Fish and Wildlife Foundation, Bureau of Land Management, United States Forest Service Partners in Flight – Region 5, Inyo National Forest, California Department of Fish and Game, Mono Lake Tufa State Reserve, Eastern Sierra Audubon Society, White Mountain Research Station – Eastern Sierra Institute for Collaborative Education, Mono Lake Committee, Cornell University – Golondrinas de Las Americas project, Sierra Nevada Aquatic Research Lab, Joel Ellis, and Jan Simis. This is PRBO contribution # 1529.

2. RECOVERING MIXED WILLOW-BLACK COTTONWOOD RIPARIAN I BOSQUE RIBEREÑO DE ÁLAMO Y SAUCES, EN RECUPERACIÓN I

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Location: California; Mono Co.; Lee Vining; Rush Creek; 37°56'N, 119°04'W; Lee Vining Quadrangle, USGS. **Continuity:** Established 2000; 3 yr. **Size:** 39 ha. **Description of Plot:** See *Western Birds* 35:197–209 (2004). **Weather:** Mean temp., 18°C (range -5°–36°C).

Mean monthly (May–August) high and low temperatures were respectively higher and lower than long-term averages (1950–1988, NOAA Western Regional Climate Center data for Lee Vining, CA). Mean monthly precipitation (www.monolake.org) was above average in May, just below average in June, just above average in July, and well below average in August. **Coverage:** 521 h; 82 visits (77 sunrise, 5 sunset). **Census:** Yellow Warbler, 93.5 (96; 93N,91FL); Song Sparrow, 22.5 (23; 11N,2FL); Spotted Towhee, 21.0 (22; 7N,7FL); Bewick's Wren, 9.0 (9); Green-tailed Towhee, 7.0 (7); American Robin, 5.0 (5; 3N,4FL); Black-headed Grosbeak, 5.0 (3N,3FL); Bushtit, 4.0 (4; 4N); Brewer's Sparrow, 3.5 (4; 1N,2FL); Northern Flicker, 3.0 (3; 3N,13FL); Willow Flycatcher, 3.0 (4N,2FL); MacGillivray's Warbler, 3.0; Savannah Sparrow, 2.0; Warbling Vireo, 1.0 (1N); American Kestrel, 0.5 (1N,2FL); Black-billed Magpie, col. (2N); Violet-green Swallow, col.; Northern Rough-winged Swallow, col. (2N); Red-winged Blackbird, col. (4N,2FL); Brewer's Blackbird, col. (11N); Gadwall, unk. (1N,12FL); Mallard, unk. (1N); Green-winged Teal, unk. (1N); Killdeer, unk. (1N); Spotted Sandpiper, unk. (3N,10FL); Mourning Dove, unk. (8N,8FL); Brown-headed Cowbird, unk. (63N,27FL). **Total:** 27 species; 183.0 territories (188/40ha). **Visitors:** California Quail, Black-crowned Night-Heron, Northern Harrier, Red-tailed Hawk, Wilson's Snipe, Great Horned Owl, Common Nighthawk, Belted Kingfisher, Hairy Woodpecker, Western Wood-Pewee, Gray Flycatcher, Dusky Flycatcher, Loggerhead Shrike, Western Scrub-Jay, Pinyon Jay, Common Raven, Cliff Swallow, Blue-gray Gnatcatcher, Sage Thrasher, European Starling, Orange-crowned Warbler, Common Yellowthroat, Western Tanager, Brewer's Sparrow, Black-throated Sparrow, Sage Sparrow, Yellow-headed Blackbird, Bullock's Oriole, Cassin's Finch, House Finch. **Remarks:** Warbling Vireo and Bushtit were new to the plot this year, potentially responding to vegetation growth in this recovering system. Yellow Warblers and Black-headed Grosbeaks increased slightly. Cowbirds parasitized 51% of host species' (Warbling Vireo, Willow Flycatcher, Yellow Warbler, Song Sparrow, Spotted Towhee, Brewer's Blackbird, and Red-winged Blackbird) nests. Predation accounted for 57% of all nest failures. We did not determine territorial densities for colonial species, nor for species difficult to document with the spot-mapping method due to their lack of vocalization or loosely held territory boundaries. These species' are indicated as "col" (colonial) or "unk." (unknown) above; nest numbers provide some indication of their prevalence. **Acknowledgements:** Financial and logistical support was provided by the National Fish and Wildlife Foundation, Bureau of Land Management, United States Forest Service Partners in Flight – Region 5, Inyo National Forest, California

Department of Fish and Game, Mono Lake Tufa State Reserve, Eastern Sierra Audubon Society, White Mountain Research Station – Eastern Sierra Institute for Collaborative Education, Mono Lake Committee, Cornell University – Golondrinas de Las Americas project, Sierra Nevada Aquatic Research Lab, Joel Ellis, and Jan Simis. This is PRBO contribution No. 1526.

3. RECOVERING MIXED WILLOW–BLACK COTTONWOOD RIPARIAN II

BOSQUE RIBERENO DE ÁLAMO Y SAUCES, EN RECUPERACIÓN II

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Location: California; Mono Co.; Lee Vining; Lee Vining Creek; 37°58'N, 119°06'W; Lee Vining Quadrangle, USGS. **Continuity:** Established 2000; 3 yr. **Size:** 29.5 ha. **Description of Plot:** Added since 2001: 0.5 ha of mature aspen stand and 4.5 ha of deltaic shrub willow on Mono Lake's edge; otherwise unchanged from 2001 report (this volume). **Weather:** Mean temp., 17°C (range -3°–33°C). Mean monthly (May–August) high and low temperatures were respectively higher and lower than long-term averages (1950–1988, NOAA Western Regional Climate Center data for Lee Vining, CA). Mean monthly precipitation (www.monolake.org) was above average in May, just below average in June, just above average in July, and well below average in August. **Coverage:** 483.2 h; 91 visits (89 sunrise, 2 sunset). **Census:** Yellow Warbler, 41.0 (56; 75N,60FL); Song Sparrow, 29.0 (39; 40N,54FL); Spotted Towhee, 22.5 (31; 5N,10FL); Green-tailed Towhee, 14.0 (19; 3N,3FL); American Robin, 6.0 (8; 9N,6FL); Lazuli Bunting, 6.0 (2N,2FL); Western Wood-Pewee, 4.0 (5; 3N,3FL); European Starling, 4.0 (4N); Brewer's Sparrow, 3.5 (5); American Kestrel, 3.0 (4; 1N,3FL); Bullock's Oriole, 3.0 (3N); Northern Flicker, 2.5 (3N,2FL); Steller's Jay, 2.0 (1N); Bushtit, 2.0 (3N,4FL); Bewick's Wren, 2.0 (2N); House Wren, 2.0 (3N,3FL); Belted Kingfisher, 1.0; Red-breasted/Red-naped Sapsucker hybrid, 1.0 (1N,3FL); Warbling Vireo, 1.0 (2N); American Dipper, 1.0 (1N,3FL); Lesser Goldfinch, 1.0 (1N); Black-billed Magpie, col. (2N); Violet-green Swallow, col. (1N); Northern Rough-winged Swallow, col.; Red-winged Blackbird, col. (78N,38FL); Brewer's Blackbird, col.; Mallard, unk. (5N,9FL); Green-winged Teal, unk. (1N); California Quail, unk.; Killdeer, unk. (4N,8FL); Spotted Sandpiper, unk. (11N,38FL); Brown-headed Cowbird, unk. (42N,16FL). **Total:** 32 species; 151.5 territories (205/40ha). **Visitors:** Black-crowned Night-Heron, Mourning Dove, Common Nighthawk, Hairy Woodpecker, Gray Flycatcher, Dusky Flycatcher,

Western Scrub-Jay, Clark's Nutcracker, Common Raven, Cliff Swallow, Mountain Chickadee, Blue-gray Gnatcatcher, Orange-crowned Warbler, Western Tanager, Black-throated Sparrow, Sage Sparrow, Black-headed Grosbeak, Cassin's Finch. **Remarks:** Changes unrelated to the plot additions include the following: Warbling Vireo, Bushtit, and Western Wood-Pewee were new to the plot this year. The later species is potentially responding to vegetation growth in this recovering system, the former nested in a patch of remnant exotic white poplars. Lesser Goldfinch was also a new breeder this year, and Lazuli Buntings increased. Cowbirds parasitized 24% of host species' (Lazuli Bunting, Warbling Vireo, Yellow Warbler, Song Sparrow, and Red-winged Blackbird) nests. Predation accounted for 64% of all nest failures. Infrared video cameras recorded a garter snake devouring a cowbird nestling and a Bewick's Wren puncturing a Lazuli Bunting egg. We often observed Steller's Jays harassing other birds and nest failures within jay territories were high. We did not determine territorial densities for colonial species, nor for species difficult to document with the spot-mapping method due to their lack of vocalization or loosely held territory boundaries. These species' are indicated as "col" (colonial) or "unk." (unknown) above; nest numbers provide some indication of their prevalence. **Acknowledgements:** Financial and logistical support was provided by the National Fish and Wildlife Foundation, Bureau of Land Management, United States Forest Service Partners in Flight – Region 5, Inyo National Forest, California Department of Fish and Game, Mono Lake Tufa State Reserve, Eastern Sierra Audubon Society, White Mountain Research Station – Eastern Sierra Institute for Collaborative Education, Mono Lake Committee, Cornell University – Golondrinas de Las Americas project, Sierra Nevada Aquatic Research Lab, Joel Ellis, and Jan Simis. This is PRBO contribution No. 1527.

4. REMNANT BLACK COTTONWOOD RIPARIAN FOREST

REMANENTES DE BOSQUE RIBEREÑO DE ÁLAMO

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Location: California; Mono Co.; Mono City; Mill Creek; 38°03'N, 119°08'W; Lundy Quadrangle, USGS. **Continuity:** Established 2000; 3 yr. **Size:** 15 ha. **Description of Plot:** See 2001 report (this volume). **Weather:** Mean temp., 19°C (range -5°–36°C). Mean monthly (May–August) high and low temperatures were respectively higher and lower than long-term averages (1950–1988, NOAA Western Regional

Climate Center data for Lee Vining, CA). Mean monthly precipitation (www.monolake.org) was above average in May, just below average in June, just above average in July, and well below average in August. **Coverage:** 426.5 h; 73 visits (70 sunrise, 3 sunset). **Census:** Spotted Towhee, 21.5 (57; 7N,7FL); Yellow Warbler, 10.0 (27; 8N,16FL); Green-tailed Towhee, 9.0 (24; 2N); Song Sparrow, 8.0 (21; 8N,9FL); Northern Flicker, 7.0 (19; 7N,4FL); Bewick's Wren, 7.0 (2N); Bushtit, 6.0 (16; 8N,5FL); American Robin, 6.0 (6N,2FL); House Wren, 5.0 (13; 6N,2FL); Brewer's Sparrow, 5.0; American Kestrel, 4.0 (11; 4N,8FL); Bullock's Oriole, 4.0 (2N); Western Wood-Pewee, 3.0 (8; 1N); Juniper Titmouse, 3.0 (3N,4FL); Hairy Woodpecker, 2.0; Belted Kingfisher, 1.0 (1N); Steller's Jay, 1.0; American Dipper, 1.0; Blue-gray Gnatcatcher, 1.0 (1N); European Starling, 1.0 (1N); Lazuli Bunting, 1.0; Black-billed Magpie, col. (4N,3FL); Violet-green Swallow, col.; Northern Rough-winged Swallow, col.; Brewer's Blackbird, col. (22N,33FL); Mallard, unk. (1N,3FL); California Quail, unk.; Killdeer, unk.; Brown-headed Cowbird, unk. (14N,6FL). **Total:** 29 species; 106.5 territories (284/40ha). **Visitors:** Green Heron, Black-crowned Night-Heron, Red-tailed Hawk, Wilson's Snipe, Barn Owl, Great Horned Owl, Common Nighthawk, Anna's Hummingbird, Calliope Hummingbird, Red-breasted Sapsucker, Willow Flycatcher, Gray Flycatcher, Dusky Flycatcher, Say's Phoebe, Loggerhead Shrike, Warbling Vireo, Pinyon Jay, Clark's Nutcracker, Common Raven, Mountain Chickadee, White-breasted Nuthatch, Sage Thrasher, Orange-crowned Warbler, MacGillivray's Warbler, Common Yellowthroat, Western Tanager, Chipping Sparrow, Black-throated Sparrow, Sage Sparrow, Savannah Sparrow, Dark-eyed Junco, Black-headed Grosbeak, Red-winged Blackbird, Yellow-headed Blackbird, Cassin's Finch, House Finch. **Remarks:** Yellow Warblers expanded into the lower half of the plot and occupied 3 territories there. Cassin's Finches did not hold territories as in previous years. Screens were placed over holes in the adjacent subdivision, likely responsible for fewer European Starling territories along Mill Creek. Cowbirds parasitized 58% of host species' (Green-tailed Towhee, Spotted Towhee, Yellow Warbler, and Song Sparrow) nests. Predation accounted for 58% of all nest failures. We did not determine territorial densities for colonial species, nor for species difficult to document with the spot-mapping method due to their lack of vocalization or loosely held territory boundaries. These species' are indicated as "col" (colonial) or "unk." (unknown) above; nest numbers provide some indication of their prevalence. **Acknowledgements:** Financial and logistical support was provided by the National Fish and Wildlife Foundation, Bureau of Land Management, United States Forest Service Partners in Flight – Region 5, Inyo National Forest, California

Department of Fish and Game, Mono Lake Tufa State Reserve, Eastern Sierra Audubon Society, White Mountain Research Station – Eastern Sierra Institute for Collaborative Education, Mono Lake Committee, Cornell University – Golondrinas de Las Americas project, Sierra Nevada Aquatic Research Lab, Joel Ellis, and Jan Simis. This is PRBO contribution # 1528.

5. MIXED HARDWOOD POLETIMBER

BOSQUE MIXTO MADERERO

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Site Number: CT1265009. **Location:** Connecticut; Litchfield Co.; Litchfield; White Memorial Foundation–Wheeler Hill; 41°42'N, 73°13'W; Litchfield Quadrangle, USGS. **Continuity:** Established 1965; 36 yr. **Size:** 8.5 ha. **Description of Plot:** See Aud. Field Notes 19:609–610 (1965) and J. Field Ornithol. 64 (Suppl.):36 (1993). The shrub layer is continuing to thicken and expand, especially on the east side of the plot. **Weather:** Mean start temp., 21.7°C (range 17–26°C). May was much colder and wetter than normal, including some snow that fell but did not stick on the 18th and seven nights with temperatures below 0°C. These conditions proved disastrous for most early-nesting birds. May had a total of 15.4 cm of rainfall, which is 4.7 cm above average. Nineteen days were wet this month. May's average temperature was 12°C, which is 2.2°C below normal. June's weather was much better for birds. Rainfall totaled 12.1 cm spread out over 12 days. This is about 2 cm more than average. June's mean temperature was 17.9°C, which is very close to average (18.5°C). July's total rainfall measured 10.7 cm, which is somewhat less than the average of 13 cm. Only six days had any rainfall. It was a hot month, with a mean temperature of 21.3°C, which is normal. **Source:** White Memorial Foundation weather station. **Coverage:** 17.5 h; 9 visits (1 sunrise, 2 sunset); 7, 16, 23, 30 May; 7, 17, 24 Jun; 5, 13 Jul. **Census:** Ovenbird, 13.5 (64; 16FL); Red-eyed Vireo, 12.0 (56; 13FL); Veery, 10.0 (47; 1N,17FL); Eastern Towhee, 9.0 (42; 1N,17FL); Gray Catbird, 8.0 (38; 3N,17FL); Northern Cardinal, 6.5 (31; 1N,14FL); Wood Thrush, 6.0 (28; 1N,8FL); Chestnut-sided Warbler, 6.0 (1N,11FL); American Redstart, 6.0 (11FL); Black-capped Chickadee, 4.5 (21; 1N,21FL); American Robin, 4.5 (3N,13FL); Black-and-white Warbler, 4.5 (11FL); Tufted Titmouse, 4.0 (19; 1N,22FL); Common Yellowthroat, 4.0 (10FL); Blue Jay, 3.0 (14; 8FL); Scarlet Tanager, 3.0 (5FL); American Crow, 2.0 (2N,7FL); Blue-winged Warbler, 2.0 (3FL); Yellow Warbler, 2.0 (3FL); Baltimore Oriole, 2.0 (1N,5FL); Wild Turkey, 1.5 (5FL); Mourning Dove, 1.5 (1N,2FL); Downy Woodpecker, 1.5 (5FL); Northern Flicker, 1.5 (2FL); Eastern Wood-

Pewee, 1.5; Eastern Phoebe, 1.5 (2N,8FL); Great Crested Flycatcher, 1.5; White-breasted Nuthatch, 1.5 (4FL); Blue-gray Gnatcatcher, 1.5 (2FL); Rose-breasted Grosbeak, 1.5 (2FL); Barred Owl, 1.0 (2FL); Red-bellied Woodpecker, 1.0 (2FL); Cedar Waxwing, 1.0; Chipping Sparrow, 1.0 (3FL); Song Sparrow, 1.0 (3FL); Brown-headed Cowbird, 1.0 (2FL); House Finch, 1.0 (1N,3FL); American Goldfinch, 1.0 (3FL); Cooper's Hawk, 0.5 (2FL); Broad-winged Hawk, 0.5 (2FL); Red-tailed Hawk, 0.5 (2FL); Hairy Woodpecker, 0.5; Yellow-throated Vireo, 0.5; Warbling Vireo, 0.5; House Wren, 0.5; Common Grackle, 0.5; Ruffed Grouse, +; Pileated Woodpecker, +; Hermit Thrush, +; Black-throated Green Warbler, +. **Total:** 50 species; 139.5 territories (656/40 ha). **Visitors:** Least Flycatcher, Fish Crow, Brown Creeper, Carolina Wren. **Remarks:** Birds were abundant this year. So much so that new record highs were established for numbers of species and territorial males. The total of 50 species was one more than the previous record set in 2000 and 2001. Species composition was similar to that of the past four years, except for the addition of Red-tailed Hawk, Ruffed Grouse, and Black-throated Green Warbler. Red-winged Blackbird and Purple Finch did not breed in the plot this year. The total of 139.5 territories shattered the previous record-high of 120.5 set in 1983. It also far surpassed the 1992–2001 average of 97.0 territories. Why? It is probably a combination of improved habitat conditions (thicker shrub layer), an abundant food supply, and a loss of suitable nesting habitat due to land development in the nearby village of Bantam. **Other Observers:** John Eykelhoff, Janet Amalavage, John Grabowski, and Paul Fusco.

6. SECOND-GROWTH HARDWOOD FOREST

BOSQUE SECUNDARIO DE MADERAS DURAS

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Site Number: CT2765006. **Location:** Connecticut; Litchfield Co.; Morris; White Memorial Foundation–Van Winkle Road; 41°42'N, 73°12'W; Litchfield Quadrangle, USGS. **Continuity:** Established 1965; 36 yr. **Size:** 10.1 ha. **Description of Plot:** See Aud. Field Notes 19:590–591 (1965) and J. Field Ornithol. 64 (Suppl.):37–38 (1993). **Weather:** Mean start temp., 21.4°C (range 12–29°C). May was much colder and wetter than normal, including some snow that fell but did not stick on the 18th and seven nights with temperatures below 0°C. These conditions proved disastrous for most early-nesting birds. May had a total of 15.4 cm of rainfall, which is 4.7 cm above average. Nineteen days were wet this month. May's average temperature was 12°C, which is 2.2°C below normal. June's weather was much better for

birds. Rainfall totaled 12.1 cm spread out over 12 days. This is about 2 cm more than average. June's mean temperature was 17.9°C, which is very close to average (18.6°C). July's total rainfall measured 10.7 cm, which is somewhat less than the average of 13 cm. Only six days had any rainfall. It was a hot month, with a mean temperature of 21.3°C, which is normal. Source: White Memorial Foundation weather station. **Coverage:** 16.5 h; 9 visits (1 sunrise, 5 sunset); 7, 16, 23, 30 May; 8, 21, 28 Jun; 11, 16 Jul. Maximum number of observers/visit, 4. **Census:** Red-eyed Vireo, 14.0 (55; 21FL); Ovenbird, 13.0 (51; 2N,29FL); Veery, 11.0 (44; 1N,13FL); American Robin, 4.5 (18; 2N,16FL); American Redstart, 4.0 (16; 2N,14FL); Scarlet Tanager, 4.0 (7FL); Yellow-bellied Sapsucker, 3.5 (14; 2N,12FL); Eastern Wood-Pewee, 3.5; Great Crested Flycatcher, 3.0 (12); Wood Thrush, 3.0 (2N,5FL); Gray Catbird, 3.0 (1N,6FL); Tufted Titmouse, 2.5 (1N,13FL); Common Yellowthroat, 2.5 (3FL); Black-capped Chickadee, 2.0 (9FL); Black-and-white Warbler, 2.0 (7FL); Wild Turkey, 1.5 (7FL); Red-bellied Woodpecker, 1.5 (1N,3FL); Downy Woodpecker, 1.5 (1N,5FL); American Crow, 1.5 (1N,7FL); Chestnut-sided Warbler, 1.5 (3FL); Barred Owl, 1.0 (1N,4FL); Hairy Woodpecker, 1.0 (1N,3FL); Eastern Phoebe, 1.0 (4FL); Yellow-throated Vireo, 1.0; Blue Jay, 1.0 (3FL); White-breasted Nuthatch, 1.0 (1N,5FL); Louisiana Waterthrush, 1.0 (3FL); Eastern Towhee, 1.0; Chipping Sparrow, 1.0 (3FL); Northern Cardinal, 1.0 (2FL); Rose-breasted Grosbeak, 1.0; Brown-headed Cowbird, 1.0 (2FL); American Goldfinch, 1.0; Northern Flicker, 0.5; Blue-gray Gnatcatcher, 0.5 (2FL); Cedar Waxwing, 0.5; Blue-winged Warbler, 0.5; Black-throated Green Warbler, 0.5; Baltimore Oriole, 0.5; Cooper's Hawk, +; Red-tailed Hawk, +; Mourning Dove, +; Eastern Kingbird, +; Blue-headed Vireo, +; Hermit Thrush, +; Song Sparrow, +. **Total:** 46 species; 99.0 territories (392/40 ha). **Visitors:** Black-throated Blue Warbler, Blackburnian Warbler. **Remarks:** The number of breeding species increased to 46 this year, which is four more than last year and two more than the previous 10-year average. Species found this year but not last year included Barred Owl, Blue-winged Warbler, and Chipping Sparrow. Species found last year but missed this year included Broad-winged Hawk and Pileated Woodpecker. The number of territorial males found this year declined by only 1.0 from last year. This is very close to the 10-year average of 101.5. For the past 13 years, there hasn't been much deviation in this figure here. As usual, Red-eyed Vireo was the most abundant species, with Ovenbird a close second, and Veery in third place. With 13.0 territorial males, Ovenbird established a new record high for the species in this plot. American Robin, American Redstart, Scarlet Tanager, Yellow-bellied Sapsucker, Great Crested Flycatcher, and Gray

Catbird also increased in number this year. **Other Observers:** John Eykelhoff, Kathleen Hall, Janet Amalavage, Perry Stafford, and B.K. Stafford.

7. CENTRAL HARDWOOD FOREST WITH SCATTERED PINE

BOSQUE CENTRAL DE MADERAS DURAS CON PIÑOS DISPERSOS

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Location: District of Columbia; Washington; Rock Creek Park; 38°57'N, 77°3'W; Washington West Quadrangle, USGS. **Continuity:** Established 1948; 53 yr. **Size:** 26.3 ha. **Description of Plot:** See Aud. Field Notes 2:153–154 (1948). **Weather:** Mean start temp., 13.8°C (range -1–23°C). Five days were clear, four were partly cloudy, and three were cloudy. There was drizzle during one visit. **Coverage:** 25.4 h; 12 visits (12 sunrise); 23, 30 Mar; 13, 27 Apr; 4, 11, 19, 25 May; 15, 29 Jun; plus two unidentified dates. **Census:** Red-eyed Vireo, 14.5 (22); Acadian Flycatcher, 14.0 (21); Ovenbird, 13.5 (21); Tufted Titmouse, 13.0 (20; 2+FL); Wood Thrush, 11.0 (17); Red-bellied Woodpecker, 8.0 (12); Carolina Wren, 4.5 (7); Northern Cardinal, 3.5 (5); Downy Woodpecker, 3.0 (5; 1FL); Eastern Wood-Pewee, 3.0; Eastern Towhee, 2.5; Brown-headed Cowbird, 2.5; Hairy Woodpecker, 2.0; Northern Flicker, 2.0; Scarlet Tanager, 2.0; Eastern Phoebe, 1.0 (1N,1+FL); White-breasted Nuthatch, 1.0; American Robin, 1.0; Song Sparrow, 1.0. **Total:** 19 species; 103.0 territories (157/40 ha). **Visitors:** Red-shouldered Hawk, Red-tailed Hawk, Mourning Dove, Pileated Woodpecker, Great Crested Flycatcher, Yellow-throated Vireo, Blue Jay, American Crow, Blue-gray Gnatcatcher, Veery, Gray Catbird, European Starling, Black-and-white Warbler, Common Yellowthroat, Common Grackle. **Remarks:** Data were sparse, and I don't feel that they fully represent the activity in the census plot. We needed more maps.

8. MIXED UPLAND BROADLEAF FOREST

BOSQUE MIXTO DE HOJA ANCHA DE ALTURAS

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Washington DC 20016

Site Number: DC1060009. **Location:** District of Columbia; Washington; Glover-Archbold Park; 38°55'N, 77°5'W; Washington West Quadrangle, USGS. **Continuity:** Established 1959; 44 yr. **Size:** 14.2 ha. **Description of Plot:** See Aud. Field Notes 14:502–503 (1960). Construction of the Field School in the SW corner outside the plot was completed. So far, there is no major impact on the plot other than the

clearing of bordering trees and the partial destruction of the trail at the edge of the plot there. **Weather:** Mean start temp., 14.5°C (range 2–24°C). Fifteen days were clear, three were partly cloudy, and five were cloudy. There was occasional rain or drizzle during three visits. **Coverage:** 45.0 h; 23 visits (0 sunrise, 0 sunset); 28, 30 Mar; 4, 6, 10, 12, 18, 21, 24, 26 Apr; 2, 4, 7, 10, 12, 14, 16 May; 10, 16, 19, 26 Jun; 2, 9 Jul. **Census:** Carolina Wren, 30.0 (85; 5FL); Northern Cardinal, 18.0 (51; 1FL); Red-bellied Woodpecker, 12.0 (34; 1N); Gray Catbird, 12.0 (1FL); Red-eyed Vireo, 11.0 (31); Carolina Chickadee, 11.0; White-breasted Nuthatch, 11.0 (1N); Veery, 8.0 (23); Downy Woodpecker, 7.0 (20; 1N); American Crow, 7.0 (2N,12FL); Tufted Titmouse, 6.0 (17; 7FL); Wood Thrush, 6.0; Northern Flicker, 5.0 (14; 1N,6FL); Eastern Wood-Pewee, 5.0; American Robin, 4.5 (13; 10FL); Acadian Flycatcher, 4.0 (11); Hairy Woodpecker, 3.0 (8); Blue Jay, 3.0 (5FL); Blue-gray Gnatcatcher, 3.0; Eastern Towhee, 3.0 (2FL); Common Grackle, 3.0 (3FL); Pileated Woodpecker, 2.0 (1N); Song Sparrow, 2.0; Mourning Dove, 1.0; House Wren, 1.0; European Starling, 1.0 (1N,4FL); House Finch, 1.0; House Sparrow, 1.0 (1N,4FL); Red-shouldered Hawk, 0.5; Chimney Swift, 0.5. **Total:** 30 species; 182.5 territories (514/40 ha). **Visitors:** Turkey Vulture, Ring-billed Gull, Great Crested Flycatcher, Yellow Warbler, American Redstart, Ovenbird, Common Yellowthroat, Scarlet Tanager, American Goldfinch. **Remarks:** The number of deer continues very high with heavily used deer trails. There are occasional large horse parties (10 riders at one sighting), apparently park police training classes, on trails not intended for riding. Lots of trail bikes and dogs off leash. The woods and trails take a very heavy beating in this dense urban area.

9. WHITE OAK SAVANNAH SAVANA DE ROBLE BLANCO

MICHAEL G. G. CLARK
101 Governor's Road, #708
Dundas ON L9H 6L7

Site Number: ON2893110. **Location:** Ontario; Municipality of Muskoka; Torrance; Southwood Shield Plateau; 44°56'N, 79°30'W. **Continuity:** Established 1993; 8 yr. **Size:** 10.4 ha. **Description of Plot:** See J. Field Ornithol. 65 (Suppl.):60–61 (1994). Large numbers of dead white oaks (the plot's dominant species) and smaller trees and shrubs may have significantly reduced the plot's attractiveness to breeding birds. Severe dryness in late spring and early summer affected much of the plot's ground cover. **Weather:** Mean start temp., 20.4°C (range 10–33°C). Temperatures were 3°C below the 30-year (1971–2000) norm in May but at the norm overall for the three-month study period. Precipitation was 29% above the

norm in May and 44% below the norm for June and July combined. Source: Environment Canada. **Coverage:** 16.5 h; 8 visits (4 sunset); 18 May; 3, 6, 17, 18 Jun; 2, 5, 16 Jul. **Census:** Chestnut-sided Warbler, 7.0 (27); Chipping Sparrow, 7.0; Field Sparrow, 6.0 (23); Red-eyed Vireo, 5.0 (19); American Robin, 5.0; Common Yellowthroat, 5.0; Eastern Towhee, 5.0; Brown Thrasher, 3.0; Hermit Thrush, 2.0; Yellow-rumped Warbler, 2.0; Song Sparrow, 2.0; Black-billed Cuckoo, 1.0; Least Flycatcher, 1.0; Great Crested Flycatcher, 1.0; Eastern Bluebird, 1.0; Black-and-white Warbler, 1.0; American Redstart, 1.0; Ovenbird, 1.0; Vesper Sparrow, 1.0. **Total:** 19 species; 57.0 territories (219/40 ha). **Visitors:** Turkey Vulture, Great Horned Owl, Common Nighthawk, Yellow-bellied Sapsucker, Hairy Woodpecker, Northern Flicker, Eastern Kingbird, Blue Jay, Black-capped Chickadee, Red-breasted Nuthatch, Veery, Gray Catbird, Cedar Waxwing, Yellow Warbler, Pine Warbler, Red-winged Blackbird, Baltimore Oriole, American Goldfinch. **Remarks:** A very wet and somewhat cool early-to-mid spring, similar to the last study year (2000), led to near identical results. Much of the habitat is pioneer (lichen, mosses, and grasses) and fragile; unfriendly weather in recent years may have reduced the plot to a low level of resource production for breeding birds. Particularly worrisome on this and other plots is the recent sharp decline in breeding flycatchers. Other serious declines were found in Song Sparrow (down from 14.0 breeding pairs in 1993 to 2.0 pairs this year), Field Sparrow (down from 12.0 to 6.0), and Vesper Sparrow (down from 4.0 to 1.0). Upon visual inspection, a singing apparent Yellow-billed Cuckoo was found to be a Black-billed Cuckoo, a phenomenon not uncommon in this and other parts of Ontario in recent years.

10. OAK–MAPLE–POPLAR HOLLOW BOSQUE DE ROBLE–ARCE–ALAMO HUECO

LINDA INGRAM
Nolde Forest Environmental Education Center
2910 New Holland Road
Reading PA 19607

Site Number: PA1093123. **Location:** Pennsylvania; Berks Co.; Reading; Nolde Forest, Buck Hollow; 40°17'N, 75°57'W; Reading Quadrangle, USGS. **Continuity:** Established 1993; 10 yr. **Size:** 11.3 ha. **Description of Plot:** See J. Field Ornithol. 65 (Suppl.):61 (1994). **Weather:** Mean start temp., 15.2°C (range 4–28°C). There was some precipitation during one visit. It was very dry with winds calm to variable. Normal May temperatures: mean 16.7°C, minimum 11.1°C, maximum 22.2°C. Source: National Climatic Data Center, Asheville, NC (2000). **Coverage:** 25.7 h; 13 visits (13 sunrise, 0 sunset); 1, 7, 8, 19, 20, 26, 28, 29 May; 2, 8, 11, 13, 20 Jun. **Census:** Wood Thrush, 9.0

(32); Ovenbird, 5.5 (19); Red-eyed Vireo, 5.0 (18); Blue Jay, 5.0 (1FL); Veery, 5.0; Red-bellied Woodpecker, 2.0; Eastern Wood-Pewee, 2.0; Tufted Titmouse, 2.0; Chipping Sparrow, 2.0; Northern Cardinal, 2.0; Hairy Woodpecker, 1.0; Pileated Woodpecker, 1.0; Great Crested Flycatcher, 1.0; Scarlet Tanager, 1.0; Rose-breasted Grosbeak, 1.0. **Total:** 15 species; 44.5 territories (158/40 ha). **Visitors:** Downy Woodpecker, White-breasted Nuthatch, Carolina Wren, Winter Wren, American Robin, Gray Catbird. **Remarks:** There is a crow roost outside the census area to the southwest. **Other Observers:** Richard Bonnett, Patricia Mangas, Barry Pounder, Phyllis Reynolds, David Reynolds, and Florence Fink. **Acknowledgments:** Edward Barrell.

11. HARDWOOD SWAMP FOREST

BOSQUE DE MADERAS DURAS PANTANOSO

MICHAEL R. DAWSON
Francis Beidler Forest
336 Sanctuary Road
Harleyville SC 29448

Location: South Carolina; Dorchester Co.; Harleyville; Francis Beidler Forest Sanctuary, Four Holes Swamp; 33°11'N, 80°19'W; Pringletown Quadrangle, USGS. **Continuity:** Established 1979; 12 yr. **Size:** 8.1 ha. **Description of Plot:** See Am. Birds 34:50 (1980) and J. Field Ornithol. 64 (Suppl.):56 (1993). The plot is still recovering from the effects of hurricane Hugo in 1989. Post hurricane brushiness is thinning slowly as understory trees grow up and shade the forest floor. Coarse woody debris is breaking down and rotting away, further opening up the forest floor. Plot vegetation was resurveyed in the summer of 1996 (unpublished). **Weather:** Mean start temp., 12.8°C (range 6–18°C). Temperatures were normal. This was the fourth year of an ongoing drought, and water levels were very low. **Coverage:** 13.0 h; 10 visits (10 sunrise); 30 Mar; 5, 13, 21, 26 Apr; 2, 10, 17, 18, 24 May. **Census:** Blue-gray Gnatcatcher, 25.0 (123); Northern Parula, 13.5 (67); Red-eyed Vireo, 10.0 (49); Tufted Titmouse, 8.5 (42); White-eyed Vireo, 6.5 (32); Acadian Flycatcher, 6.0 (30); Carolina Wren, 5.5 (27); Northern Cardinal, 5.5; Red-bellied Woodpecker, 3.5 (17); Hooded Warbler, 2.5; Yellow-billed Cuckoo, 2.0; Pileated Woodpecker, 2.0; Great Crested Flycatcher, 2.0; Prothonotary Warbler, 2.0; Downy Woodpecker, 1.0; Yellow-throated Warbler, 1.0; American Crow, 0.5; Swainson's Warbler, 0.5. **Total:** 18 species; 97.5 territories (481/40 ha). **Visitors:** Red-shouldered Hawk, Blue Jay, Fish Crow, Carolina Chickadee, White-breasted Nuthatch, Wood Thrush, Kentucky Warbler, Summer Tanager, Brown-headed Cowbird. **Other Observer:** Norman Brunswig.

12. UPLAND CHRISTMAS TREE FARM

FINCAS DE ARBOLES DE NAVIDAD DE ALTURAS

ELIZABETH W. BROOKS
1435 Waterwells Road
Alfred Station, NY 14803

Site Number: NY2483108. **Location:** New York, Allegany Co., Andover; Kent Christmas Tree Farm; 42°10'N, 77°50'W; Andover Quadrangle, USGS. **Continuity:** Established 1983; 20 consecutive years. **Size:** 10.7 ha. **Description of Plot:** See Am. Birds 38:91 (1984). **Weather:** Mean start temp., 19.1°C (range 11.1–27.8°C). June was hot and wet; July was hot and dry. Data collected at the Alfred Cooperative Weather Station indicated that average daily temperatures in June (15.9°C) and July (20.2°C) were both above average. The June precipitation total (9.53 cm) was about average, but July (5.6 cm) was below the 57-year mean. **Coverage:** 12.5 h; 11 visits (0 sunrise, 3 sunset); 8 Apr; 3, 12, 19, 27 Jun; 4, 11, 19, 27 Jul; 2, 9 Aug. **Census:** Chipping Sparrow, 21.5 (80; 2N,5FL); Song Sparrow, 20.0 (75; 3N,3FL); Cedar Waxwing, 10.0 (37; 1N); American Robin, 8.5 (32); Yellow-rumped Warbler, 5.0 (19; 1N); Purple Finch, 4.0 (15); Field Sparrow, 3.5 (13; 3N,6FL); American Woodcock, 2.0; Mourning Dove, 2.0; Magnolia Warbler, 2.0; Prairie Warbler, 2.0; American Goldfinch, 2.0; Brown Thrasher, 1.0; Common Yellowthroat, 1.0; Eastern Towhee, 1.0 (1N,3FL); Red-winged Blackbird, 1.0; Brown-headed Cowbird, 1.0; Vesper Sparrow, 0.5; Savannah Sparrow, 0.5; Bobolink, 0.5. **Total:** 20 species; 89.0 territories (333/40 ha). **Visitors:** Black-billed Cuckoo, Yellow-bellied Sapsucker, Black-capped Chickadee, Indigo Bunting, and Common Grackle. **Remarks:** The number of territories (89.0) was well above the mean (62.9). Magnolia Warbler was new to the study. Song Sparrow and American Robin were at the highest levels ever. Indigo Bunting was missing after being present in the previous seven years; Grasshopper Sparrow was missing after having been recorded in 15 of the past 18 years. No nests were found parasitized by cowbirds. **Acknowledgments:** Appreciation to Rick Walker for weather data and to Tom and Kathy Kent for their continued interest and permission to conduct the study on their land.

13. UPLAND SCOTCH PINE PLANTATION

PLANTACION DE PIÑO ESCOCES EN ALTURAS

ELIZABETH W. BROOKS
1435 Waterwells Road
Alfred Station, NY 14803

Site Number: NY2470024. **Location:** New York; Allegany Co., Alfred; Foster Plantation; 42°7'N, 77°45'W; Andover Quadrangle, USGS. **Continuity:** Established 1969; 34 consecutive years. **Size:** 9.3 ha.

Description of Plot: See Aud. Field Notes 23:743–744 (1969), *Am. Birds* 38:38 (1984), *J. Field. Ornithol.* 66 (Suppl.):69 (1995), and 1998 Upland Scotch Pine Plantation BBC (unpublished). **Weather:** Mean start temp., 19.6°C (range 11.1–26.7°C). For additional weather comments, see Upland Christmas Tree Farm BBC. **Coverage:** 8.4 h; 8 visits (1 sunrise, 4 sunset); 8 Apr; 4, 10, 17, 25 Jun; 9, 13, 20 Jul. **Census:** Yellow-rumped Warbler, 6.0 (26); Cedar Waxwing, 6.0; Common Yellowthroat, 5.0 (22); American Robin, 4.0 (17); Magnolia Warbler, 4.0; Golden-crowned Kinglet, 3.0 (13); White-throated Sparrow, 3.0; Blue-headed Vireo, 2.0; Blue Jay, 2.0; Black-capped Chickadee, 2.0; Black-throated Green Warbler, 2.0; Dark-eyed Junco, 2.0; Chestnut-sided Warbler, 1.5; Chipping Sparrow, 1.5; Ruffed Grouse, 1.0; Mourning Dove, 1.0; Red-breasted Nuthatch, 1.0; Veery, 1.0; Wood Thrush, 1.0; Gray Catbird, 1.0; Ovenbird, 1.0; Canada Warbler, 1.0; Eastern Towhee, 1.0; Song Sparrow, 1.0; Brown-headed Cowbird, 1.0; Purple Finch, 1.0; American Goldfinch, 1.0; House Wren, 0.5; Blue-winged Warbler, 0.5; Blackburnian Warbler, 0.5. **Total:** 30 species; 58.5 territories (252/40 ha). **Visitors:** Yellow-bellied Sapsucker, Northern Flicker, Pileated Woodpecker, Brown Thrasher, Field Sparrow, and Indigo Bunting. **Remarks:** Veery and Canada Warbler were new species. Indigo Bunting was missing for the first time since 1976; Nashville Warbler was missing again after being reported for 18 of the past 22 years. White-throated Sparrow numbers were the highest ever. Acknowledgments: Appreciation to Cynthia Clements and Phil Foster for permission to conduct the study on their land and to Rick Walker for weather data.

14. HIGH ALTITUDE RED SPRUCE FOREST BOSQUE DE ABETOS ROJOS DE ALTURAS

ALLAN TRENTLY
6319 Kingsport Highway, Apt. 88
Johnson City TN 37615

Site Number: TN2392093. **Location:** Tennessee; Unicoi Co.; Unicoi; Unaka Mountain; 36°8'N, 82°18'W; Unicoi Quadrangle, USGS. **Continuity:** Established 1992; 10 yr. **Size:** 9.9 ha. **Description of Plot:** See *J. Field Ornithol.* 64 (Suppl.):69–70 (1993). **Weather:** Mean start temp., 21.3°C (range 20–22°C). No visits were impaired by weather conditions. **Coverage:** 25.8 h; 9 visits (9 sunrise); 29 May; 4, 10, 18, 19, 25, 26, 30 Jun; 4 Jul. **Census:** Golden-crowned Kinglet, 13.0 (53); Dark-eyed Junco, 3.5 (14; 8FL); Blue-headed Vireo, 3.0 (12); Magnolia Warbler, 3.0; Red-breasted Nuthatch, 1.0; Veery, 1.0; American Robin, 1.0; Cedar Waxwing, 1.0; Yellow-rumped Warbler, 1.0 (1N); Eastern Towhee, 1.0. **Total:** 10 species; 28.5 territories (115/40 ha). **Visitors:** Hairy Woodpecker, Canada Warbler, Rose-breasted Grosbeak, Red Crossbill, Pine Siskin, American Goldfinch. **Remarks:** The first Yellow-rumped Warbler

nest for Tennessee was found on 18 June. A pair of Yellow-rumped Warblers scolded me as I walked around the nest area on 18 June. The male and female were obviously agitated as I walked by their nest and through their territory. The female was constantly chipping and flying within five feet of me. The nest was placed about 7 m up in a red spruce tree on a horizontal branch. I climbed an adjacent tree on 4 July to check the contents of the nest; the nest was empty. The Yellow-rumped Warblers were still in the territory on this day, but no fledglings were ever found. Acknowledgments: I wish to acknowledge the USDA–Forest Service, Cherokee National Forest for their financial support.

15. CLIMAX HEMLOCK–WHITE PINE FOREST WITH TRANSITION HARDWOODS BOSQUE CLIMAX DE PICEA–PIÑO BLANCO EN TRANSICION A MADERAS DURAS

DAVID ROSGEN
White Memorial Conservation Center
P.O. Box 368
Litchfield CT 06759

Site Number: CT2765008. **Location:** Connecticut; Litchfield Co.; Litchfield; White Memorial Foundation–Catlin Woods; 41°43'N, 73°12'W; Litchfield Quadrangle, USGS. **Continuity:** Established 1965; 36 yr. **Size:** 10.5 ha. **Description of Plot:** See Aud. Field Notes 19:594–595 (1965) and *J. Field Ornithol.* 67 (Suppl.):60 (1996). Regeneration and succession are occurring at a rapid pace in the blow-down areas. At least ten more mature trees have fallen down since August 2001. Hemlock woolly adelgid is now solidly established in the hemlock trees along Webster Road, and they are showing ill-effects. This bug could drastically change this forest. **Weather:** Mean start temp., 20.5°C (range 10–28°C). May was much colder and wetter than normal, including some snow that fell but did not stick on the 18th and seven nights with temperatures below 0°C. These conditions proved disastrous for most early-nesting birds. May had a total of 15.4 cm of rainfall, which is 4.7 cm above average. Nineteen days were wet this month. May's average temperature was 12°C, which is 2.2°C below normal. June's weather was much better for birds. Rainfall totaled 12.1 cm spread out over 12 days. This is about 2 cm more than average. June's mean temperature was 17.9°C, which is very close to average (18.5°C). July's total rainfall measured 10.7 cm, which is somewhat less than the average of 13 cm. Only six days had any rainfall. It was a hot month, with a mean temperature of 21.3°C, which is normal. Source: White Memorial Foundation weather station. **Coverage:** 23.0 h; 11 visits (1 sunrise, 2 sunset); 10, 17, 24 May; 3, 9, 18, 27 Jun; 1, 12, 22, 29 Jul. Maximum number of observers/visit, 3. **Census:** Black-throated Green Warbler, 16.5 (63; 4N,38FL); Ovenbird, 13.5 (51; 1N,24FL); Red-eyed Vireo, 13.0 (50; 20FL); Veery, 12.5

(48; 1N,21FL); Blackburnian Warbler, 11.5 (44; 2N,22FL); Hermit Thrush, 6.5 (25; 3N,18FL); Pine Warbler, 6.5 (3N,17FL); Black-capped Chickadee, 5.0 (19; 30FL); Black-and-white Warbler, 4.0 (15; 1N,9FL); Scarlet Tanager, 4.0 (7FL); Brown Creeper, 3.5 (13; 1N,8FL); Great Crested Flycatcher, 3.0 (11; 4FL); Wood Thrush, 3.0 (6FL); Yellow-rumped Warbler, 3.0 (1N,7FL); Eastern Wood-Pewee, 2.5 (4FL); Blue-headed Vireo, 2.5 (6FL); Tufted Titmouse, 2.5 (13FL); American Robin, 2.5 (1N,10FL); Blue Jay, 2.0 (2FL); Canada Warbler, 2.0; Yellow-bellied Sapsucker, 1.5 (1FL); Hairy Woodpecker, 1.5 (3FL); Pileated Woodpecker, 1.5 (1N,4FL); Purple Finch, 1.5; Wild Turkey, 1.0 (8FL); Mourning Dove, 1.0 (2FL); Red-breasted Nuthatch, 1.0 (3FL); Gray Catbird, 1.0 (2FL); Magnolia Warbler, 1.0; Brown-headed Cowbird, 1.0 (2FL); American Goldfinch, 1.0 (3FL); Broad-winged Hawk, 0.5 (3FL); Great Horned Owl, 0.5; Downy Woodpecker, 0.5; Eastern Phoebe, 0.5 (4FL); American Crow, 0.5 (3FL); White-breasted Nuthatch, 0.5 (4FL); Cedar Waxwing, 0.5 (3FL); American Redstart, 0.5; Northern Cardinal, 0.5; Barred Owl, +; Northern Flicker, +; Eastern Kingbird, +; Yellow-throated Vireo, +; Chipping Sparrow, +; Song Sparrow, +. **Total:** 46 species; 137.0 territories (522/40 ha). **Visitors:** Ruffed Grouse, Black-throated Blue Warbler, Rose-breasted Grosbeak. **Remarks:** The total of 46 species found this year was the second highest ever. The record high was 48, set in 1994. Species found on territory this year but not last year included Cedar Waxwing, Eastern Kingbird, Yellow-throated Vireo, Chipping Sparrow, and Song Sparrow. All of these were taking advantage of increased edge habitat created by blow-downs. Species found last year but not this year included Winter Wren, Common Grackle, Dark-eyed Junco, Blue-gray Gnatcatcher, and eastern Towhee. The number of territorial males found this year (137.0) was slightly less than the record-high of 141.0 found last year, but still far above the 10-year average of 120.0 territories. Improved habitat diversity and an abundant food supply continue to be the most likely reasons for this increased abundance of birds. Species which increased in number this year included Black-throated Green Warbler, Red-eyed Vireo, Blackburnian Warbler, Black-capped Chickadee, Black-and-white Warbler, Brown Creeper, and Tufted Titmouse. **Other Observers:** Eric Adam, John Eykelhoff, Kathy Hall, and Russ Naylor.

16. YOUNG MIXED HARDWOOD-CONIFER STAND

BOSQUE JOVEN-MIXTO DE MADERAS
DURAS/RODAL DE CONIFEROS

DAVID ROSGEN

White Memorial Conservation Center

P.O. Box 368

Litchfield CT 06759

Site Number: CT2778262. **Location:** Connecticut; Litchfield Co.; Morris; White Memorial Foundation-

Pitch Road; 41°42'N, 73°10'W; Litchfield Quadrangle, USGS. **Continuity:** Established 1978; 25 yr. **Size:** 8.5 ha. **Description of Plot:** See Am. Birds 33:72 (1979). **Weather:** Mean start temp., 19.9°C (range 9–26°C). May was much colder and wetter than normal, including some snow that fell but did not stick on the 18th and seven nights with temperatures below 0°C. These conditions proved disastrous for most early-nesting birds. May had a total of 15.4 cm of rainfall, which is 4.7 cm above average. Nineteen days were wet this month. May's average temperature was 12°C, which is 2.2°C below normal. June's weather was much better for birds. Rainfall totaled 12.1 cm spread out over 12 days. This is about 2 cm more than average. June's mean temperature was 17.9°C, which is very close to average (18.5°C). July's total rainfall measured 10.7 cm, which is somewhat less than the average of 13 cm. Only six days had any rainfall. It was a hot month, with a mean temperature of 21.3°C, which is normal. **Source:** White Memorial Foundation weather station. **Coverage:** 16.0 h; 9 visits (1 sunrise, 4 sunset); 10, 18, 30 May; 8, 20 Jun; 1, 12, 16, 25 Jul. **Census:** Ovenbird, 10.0 (47; 1N,16FL); Veery, 9.5 (45; 1N,15FL); Red-eyed Vireo, 9.0 (42; 10FL); Scarlet Tanager, 5.0 (24; 8FL); Wood Thrush, 4.5 (21; 1N,9FL); Hermit Thrush, 4.0 (19; 1N,11FL); American Robin, 3.5 (16; 1N,9FL); Black-capped Chickadee, 3.0 (14; 2N,15FL); American Redstart, 3.0 (8FL); Eastern Wood-Pewee, 2.5; Tufted Titmouse, 2.5 (15FL); Gray Catbird, 2.5 (3FL); Yellow-bellied Sapsucker, 2.0 (1N,4FL); Great Crested Flycatcher, 2.0 (3FL); Black-and-white Warbler, 2.0 (1N,3FL); Common Yellowthroat, 2.0 (4FL); Northern Cardinal, 2.0 (4FL); American Crow, 1.5 (1N,4FL); White-breasted Nuthatch, 1.5 (8FL); Blue-gray Gnatcatcher, 1.5 (2FL); Louisiana Waterthrush, 1.5 (3FL); Eastern Towhee, 1.5 (2FL); Wild Turkey, 1.0 (5FL); Barred Owl, 1.0 (3FL); Northern Flicker, 1.0; Eastern Phoebe, 1.0 (1N,4FL); Blue Jay, 1.0; Chestnut-sided Warbler, 1.0; Black-throated Blue Warbler, 1.0; American Goldfinch, 1.0; Ruffed Grouse, 0.5; Mourning Dove, 0.5; Ruby-throated Hummingbird, 0.5; Red-bellied Woodpecker, 0.5; Downy Woodpecker, 0.5; Hairy Woodpecker, 0.5; Pileated Woodpecker, 0.5; Eastern Kingbird, 0.5 (2FL); Blue-headed Vireo, 0.5; Cedar Waxwing, 0.5; Blue-winged Warbler, 0.5; Black-throated Green Warbler, 0.5; Rose-breasted Grosbeak, 0.5; Brown-headed Cowbird, 0.5 (1FL); Baltimore Oriole, 0.5; Purple Finch, 0.5; American Woodcock, +; Yellow-rumped Warbler, +; Blackburnian Warbler, +; Pine Warbler, +. **Total:** 50 species; 92.5 territories (435/40 ha). **Visitors:** Cooper's Hawk. **Remarks:** The number of breeding species reached a new record high this year. The previous record was 49 in 1992. Species found this year but not last year included Ruffed Grouse, Ruby-throated Hummingbird, Red-bellied Woodpecker, Eastern Kingbird, Cedar Waxwing, and Blue-winged Warbler. Species found last year but not

this year included Brown Creeper, Magnolia Warbler, Worm-eating warbler, and Chipping Sparrow. The number of territorial males found this year was 92.5. That's 1.5 more than were found last year, equal to the number found in 2000, and only 0.5 above the 10-year average. The most abundant species this year was Ovenbird. Veery was number one last year but dropped back to second place due to a decrease of 1.0 territory. The third most abundant species was Red-eyed Vireo, which held that position last year, too. In 1999 and 2000, Red-eyed Vireo was in the number one spot. This plot does have problems with trespassing by dirt bikers and ATV users. **Other Observers:** Elisa Schoelsohn, Russ Naylor, and Lukas Hyder.

17. RIPARIAN WOODLAND ARBOLADO RIVERENO

SCOTT R. ROBINSON
Bureau of Land Management
3815 N. Schreiber Way
Coeur d'Alene ID 83815

Location: Idaho; Kootenai Co.; Coeur d'Alene; Blackwell Island; 47°41'N, 116°48'W; Coeur d'Alene Quadrangle, USGS. **Continuity:** Established 1997; 6 yr. **Size:** 8.9 ha. **Description of Plot:** See 1997 BBC report (unpublished) and 2001 report (this volume). Blackwell Island has been scheduled for development into a day-use recreation area with boat launch, picnic area, and boardwalk for birdwatchers. Construction began this year with ground disturbance in anticipation of laying asphalt before next breeding season. **Weather:** Mean start temp., 8.8°C (range -2–14°C). The eight sunrise visits explain the lower starting temperatures than in past years. This was the third year out of the past six that the plot was flooded. The mosquito hatch after the water receded (by 18 June) provided a good food source for bird chicks. **Coverage:** 13.5 h; 8 visits (8 sunrise); 8, 14, 22, 29 May; 4, 11, 18, 24 Jun. **Census:** Tree Swallow, 6.0 (27; 6N); American Robin, 5.5 (25); Yellow Warbler, 4.5 (20); Song Sparrow, 4.5; Red-winged Blackbird, 4.0 (18); Cedar Waxwing, 3.0 (13); Canada Goose, 2.0 (2N,10FL); Mallard, 2.0 (2N,6FL); Spotted Sandpiper, 2.0 (1N,1FL); Calliope Hummingbird, 2.0; Gray Catbird, 2.0; European Starling, 2.0; California Quail, 1.0; Killdeer, 1.0 (1N); Hairy Woodpecker, 1.0; Northern Flicker, 1.0 (1N); Willow Flycatcher, 1.0; Violet-green Swallow, 1.0; Black-capped Chickadee, 1.0; Yellow-rumped Warbler, 1.0; Chipping Sparrow, 1.0; Black-headed Grosbeak, 1.0; Brown-headed Cowbird, 1.0; Bullock's Oriole, 1.0; House Finch, 1.0. **Total:** 25 species; 52.5 territories (236/40 ha). **Visitors:** Wood Duck, Blue-winged Teal, Bufflehead, Ruffed Grouse, Great Blue Heron, Osprey, Bald Eagle, Ring-billed Gull, Warbling Vireo, American Crow, Common Raven, Red-breasted Nuthatch, Pygmy Nuthatch,

American Redstart, Spotted Towhee, White-crowned Sparrow, Dark-eyed Junco, Brewer's Blackbird, Pine Siskin, American Goldfinch. **Remarks:** Artificial nest boxes were established years ago. Tree Swallows, European Starlings, and Northern Flickers have continually occupied these nest boxes in place of Wood Ducks.

18. UPLAND MIXED PINE-SPRUCE-HARDWOOD PLANTATION

PLANTACION MIXTA DE
PIÑO-ABETO-MADERAS DURAS EN ALTURAS

ELIZABETH W. BROOKS
1435 Waterwells Road
Alfred Station, NY 14803

Site Number: NY2474107. **Location:** New York; Allegany Co., Ward; Phillips Creek State Reforestation Tract; 42°8'N, 77°45'W; Andover Quadrangle, USGS. **Continuity:** Established 1974; 29 consecutive years. **Size:** 16.6 ha. **Description of Plot:** See Am. Birds 28:699–700 (1974), J. Field Ornithol. 63 (Suppl.):79–80 (1992), and 66 (Suppl.):79–80 (1995). **Weather:** Mean start temp., 20.8°C (range 14.4–26.7°C). See Upland Christmas Tree Farm BBC for additional weather comments. **Coverage:** 10.9 h; 9 visits (1 sunrise, 3 sunset); 24 Apr; 26 May; 2, 9, 16, 23, 30 Jun; 7, 13 Jul. **Census:** Magnolia Warbler, 12.0 (29); Blackburnian Warbler, 9.0 (22); Golden-crowned Kinglet, 8.0 (19); Dark-eyed Junco, 8.0; Yellow-rumped Warbler, 6.0 (14); Black-throated Green Warbler, 5.0 (12); Blue-headed Vireo, 3.0 (7); Black-capped Chickadee, 3.0; Red-breasted Nuthatch, 3.0; Brown Creeper, 3.0; American Robin, 3.0; Ovenbird, 2.5; Chipping Sparrow, 2.5; Blue Jay, 2.0; Mourning Warbler, 2.0; Common Yellowthroat, 2.0; Purple Finch, 2.0; Wild Turkey, 1.0; Mourning Dove, 1.0; Downy Woodpecker, 1.0; Great Crested Flycatcher, 1.0; Winter Wren, 1.0; Hermit Thrush, 1.0; Wood Thrush, 1.0; Cedar Waxwing, 1.0; Song Sparrow, 1.0; White-throated Sparrow, 1.0; Hairy Woodpecker, 0.5; Red-eyed Vireo, 0.5; American Crow, 0.5; Common Raven, 0.5; Chestnut-sided Warbler, 0.5. **Total:** 32 species; 88.5 territories (213/40 ha). **Visitors:** Broad-winged Hawk, Belted Kingfisher, Eastern Wood-Pewee, Canada Warbler, and Indigo Bunting. **Remarks:** Total territories (88.5) was slightly above the 28-year average (85.1). Broad-winged Hawk was missing after being recorded on 12 of the past 15 counts. Brown-headed Cowbird was missing for only the sixth time since 1974, and Indigo Bunting was missing for only the third time. Selective harvesting of red pine in a 4.9 ha section of the plot during the breeding season has created a large opening of briars and downed treetops. Black-throated Green Warbler totals continue to decline. Acknowledgments: Appreciation to Rick Walker and Dennis Smith for weather data.

19. PITCH PINE-SLABROCK

AREA DE PIÑO RESINA

LYNN BOWDERY, LIN FAGAN, TOM SARRO AND

ALLAN BOWDERY

*Daniel Smiley Research Center**Mohok Lake, 1000 Mountain Rest Road**New Paltz NY 12561*

Site Number: NY1392063. **Location:** New York; Ulster Co.; Gardiner; The Near Trapps; 41°44'N, 74°12'W; Gardiner Quadrangle, USGS. **Continuity:** Established 1992; 3 yr. **Size:** 15.8 ha. **Description of Plot:** See J. Field Ornithol. 64 (Suppl.):86–87 (1993). The canopy height range is now 3–12 m, and huckleberry is now one of the dominant ground cover plants. **Weather:** Mean start temp., 15.1°C (range 3–25°C). The average temperature for May was 13.8°C (0.7°C below the long-term average), and the precipitation was 12.1 cm (1.3 cm above the long-term average). The average temperature for June was 20.6°C (1.7°C above the long-term average), and the precipitation was 15.8 cm (5.8 cm above the long-term average). Source: Mohok Lake Cooperative Weather Station. **Coverage:** 27.6 h; 13 visits (12 sunrise, 1 sunset); 16, 20, 23, 27, 30 May; 3, 10, 13, 18, 20, 24, 27 Jun; 1 Jul. Maximum number of observers/visit, 6. **Census:** Chipping Sparrow, 10.0 (25; 1N,3FL); Eastern Towhee, 6.0 (15); Indigo Bunting, 6.0; Black-and-white Warbler, 5.5 (14); Prairie Warbler, 4.0 (10); Mourning Dove, 2.0; Great Crested Flycatcher, 2.0; Black-capped Chickadee, 2.0; American Robin, 2.0; Cedar Waxwing, 2.0; Pine Warbler, 2.0; American Goldfinch, 2.0; Red-eyed Vireo, 1.5; Scarlet Tanager, 1.5; Eastern Phoebe, 1.0; Blue Jay, 1.0 (3FL); American Redstart, 1.0; Dark-eyed Junco, 1.0; Tufted Titmouse, 0.5; Common Yellowthroat, 0.5; Northern Cardinal, 0.5; Downy Woodpecker, +; Northern Flicker, +; Eastern Wood-Pewee, +; Blue-headed Vireo, +; Eastern Bluebird, +; Wood Thrush, +; Ovenbird, +. **Total:** 28 species; 54.0 territories (137/40 ha). **Visitors:** Yellow-billed Cuckoo, Ruby-throated Hummingbird, Red-bellied Woodpecker, Hairy Woodpecker, Pileated Woodpecker, Yellow-throated Vireo, White-breasted Nuthatch, Winter Wren, Gray Catbird, Chestnut-sided Warbler, Yellow-rumped Warbler, Black-throated Green Warbler, Worm-eating Warbler, Rose-breasted Grosbeak, Red-winged Blackbird, Baltimore Oriole. **Remarks:** Territorial species present in 1997 (last census) but missing this year: Hermit Thrush, Brown-headed Cowbird, Purple Finch, and Black-throated Blue Warbler. Territorial species present this year but missing in 1997: Northern Cardinal and Eastern Bluebird. **Other Observers:** Ruth Elwell, Barbara Rubin, John Thompson, Jill Crispell, and Mary Edwards-Ransom. Acknowledgments: Thanks for the cooperation of the Mohok Preserve.

20. FIELD, RIDGE, SHRUBBY TREES, AND WOODS

CAMPOS, COLINAS, ARBUSTOS Y BOSQUES

MICHAEL F. G. CLARK

*101 Governor's Road, #708**Dundas ON L9H 6L7*

Location: Ontario; Municipality of Hamilton-Wentworth; Dundas; Dundas Valley Plot #1; 43°15'N, 79°54'W. **Continuity:** Established 1994; 9 yr. **Size:** 5.8 ha. **Description of Plot:** See J. Field Ornithol. 60 (Suppl.):14 (1989), 66 (Suppl.):27–28 (1995), and 67 (Suppl.):73–74 (1996). **Weather:** Mean start temp., 18.1°C (range 10.0–24.0°C). Temperatures were 3° below the 30-yr norm (1971–2000) in May and at the norm in June. Precipitation levels were 9% below the norm for May and June combined. Source: Environment Canada. **Coverage:** 13.5 h; 8 visits (0 sunrise, 3 sunset); 1, 15, 25, 28 May; 13, 23, 24, 28 Jun. **Census:** Yellow Warbler, 34.0 (234); Gray Catbird, 28.0 (193); Northern Cardinal, 8.0 (55); Song Sparrow, 7.0 (48); Field Sparrow, 6.0 (41); Blue-winged Warbler, 5.0 (34); Indigo Bunting, 4.0 (28); Baltimore Oriole, 4.0; American Goldfinch, 4.0; American Robin, 3.0 (21); Blue Jay, 2.0; Black-capped Chickadee, 2.0; Common Grackle, 2.0; Northern Flicker, 1.0; House Wren, 1.0; Cedar Waxwing, 1.0; Eastern Towhee, 1.0; Rose-breasted Grosbeak, 1.0; Brown-headed Cowbird, 1.0. **Total:** 19 species; 115.0 territories (793/40 ha). **Visitors:** Ruby-throated Hummingbird, Hairy Woodpecker, Great Crested Flycatcher, Warbling Vireo, American Crow, Brown Thrasher, Common Yellowthroat. **Remarks:** Total breeding territories (115.0: 10% below the 9-yr average) was the second lowest noted on this revised plot. The 19 breeding species was at the mean. Below normal spring temperatures and rainfall and a late May full leafing-out (last two years were early May) likely contributed to the low breeding numbers. The top three breeding species over nine years (Yellow Warbler, Gray Catbird, and Song Sparrow) accounted for 60% of the total, although the 7.0 territorial Song Sparrows was 5.0 below average, possibly owing to vegetative succession. Succession and weather factors may have favored the larger species. Mimids and thrushes held their own, while the 7.0 icterid territories was the most in six years. No flycatchers have bred for the past two years.

21. DESERT RIPARIAN-FRESHWATER MARSH

DESIERTO RIVEREÑO-PANTANO

EUGENE A. CARDIFF

*San Bernardino County Museum**2024 Orange Tree Lane**Redlands CA 92374-4560*

Location: California; San Bernardino Co.; Morongo Valley; Big Morongo Wildlife Reserve; 34°3'N,

116°35'W; Morongo Valley Quadrangle, USGS. **Continuity:** Established 1977; 25 yr. **Size:** 15.4 ha. **Description of Plot:** See J. Field Ornithol. 62 (Suppl.):76 (1991), 64 (Suppl.):92–93 (1993), and 65 (Suppl.):106–107 (1994). **Weather:** Mean start temp., 12.8°C (range 8–18°C). **Coverage:** 25.5 h; 8 visits (8 sunrise); 15, 23, 30 Apr; 6, 14, 21, 30 May; 6 Jun. **Census:** Bewick's Wren, 16.0 (42; 2FL); House Finch, 11.0 (29; 4N); House Wren, 10.0 (26; 2N); Song Sparrow, 9.0 (23); Lesser Goldfinch, 8.0 (21); Spotted Towhee, 7.0 (18); Common Yellowthroat, 6.0 (16; 1N); Brown-headed Cowbird, 6.0; Nuttall's Woodpecker, 3.0 (8; 1N,1FL); Brown-crested Flycatcher, 3.0 (1N); Verdin, 3.0; Yellow-breasted Chat, 3.0; Virginia Rail, 2.0; Mourning Dove, 2.0; Anna's Hummingbird, 2.0 (1N); Bushtit, 2.0; California Towhee, 2.0 (1N); Gambel's Quail, 1.0; Ladder-backed Woodpecker, 1.0; Black Phoebe, 1.0 (1N); Ash-throated Flycatcher, 1.0; Western Scrub-Jay, 1.0; Western Bluebird, 1.0 (1N); California Thrasher, 1.0; Phainopepla, 1.0 (1N); Yellow Warbler, 1.0; Summer Tanager, 1.0; Blue Grosbeak, 1.0; Hooded Oriole, 1.0. **Total:** 29 species; 107.0 territories (278/40 ha). **Visitors:** American Kestrel, White-winged Dove, Black-chinned Hummingbird, Costa's Hummingbird, Say's Phoebe, Cassin's Kingbird, Western Kingbird, Bell's Vireo, Hutton's Vireo, Common Raven, Cactus Wren, European Starling, Black-headed Grosbeak, Scott's Oriole, Lawrence's Goldfinch. **Remarks:** The 29 species on 107 territories was down from 31 species and 168 territories last year. The 107 territories was the lowest since the fire of 1992 (79 territories). This was the driest year on record in southern California during the past 100 years of record keeping. In most areas (other bird surveys), very few birds fledged young. There was very little evidence that breeding pairs on this plot fledged young this year. Brown-crested Flycatchers were observed feeding on hummingbirds at feeders, and Summer Tanagers were feeding at suet feeders, indicating a scarcity of natural food. House Finches and other species spent much time at feeders. The pair of Cooper's Hawks failed to fledge young. **Other Observers:** Dori Myers, Alice Ashbaugh, and Dee Zeller. **Acknowledgments:** San Bernardino County Museum, San Bernardino Valley Audubon Society, and Bureau of Land Management.

22. SHRUBBY SWAMP AND SEDGE HUMMOCKS

PANTANO ARBUSTIVO-MOGOTE

DAVID ROSGEN

White Memorial Conservation Center

P.O. Box 368

Litchfield CT 06759

Location: Connecticut; Litchfield Co.; Litchfield; White Memorial Foundation–North Shore Marsh; 41°43'N, 73°13'W; Litchfield Quadrangle, USGS. **Continuity:**

Established 1965; 36 yr. **Size:** 8.1 ha. **Description of Plot:** See Aud. Field Notes 19:625–627 (1965). Succession is continuing at a rapid pace despite frequent flooding events. Shrubs now dominate this entire wetland, and pole-size red maple trees dominate the northern one-third of the plot. The amount of sedge hummocks and other herbaceous vegetation is now greatly reduced. Most of the large black willow trees near the mouth of the Bantam River have enough dead sections that they now are providing an excellent microhabitat for cavity nesters. **Weather:** Mean start temp., 22.5°C (range 9–30°C). May was much colder and wetter than normal, including some snow that fell but did not stick on the 18th and seven nights with temperatures below 0°C. These conditions proved disastrous for most early-nesting birds. May had a total of 15.4 cm of rainfall, which is 4.7 cm above average. Nineteen days were wet this month. May's average temperature was 12°C, which is 2.2°C below normal. June's weather was much better for birds. Rainfall totaled 12.1 cm spread out over 12 days. This is about 2 cm more than average. June's mean temperature was 17.9°C, which is very close to average (18.5°C). July's total rainfall measured 10.7 cm, which is somewhat less than the average of 13 cm. Only six days had any rainfall. It was a hot month, with a mean temperature of 21.3°C, which is normal. Source: White Memorial Foundation weather station. **Coverage:** 25.0 h; 12 visits (1 sunrise, 3 sunset); 5, 14, 20, 31 May; 4, 10, 17, 24 Jun; 2, 8, 15, 22 Jul. **Census:** Red-winged Blackbird, 38.0 (188; 3N,87FL); Swamp Sparrow, 35.0 (173; 64FL); Yellow Warbler, 31.0 (153; 6N,61FL); Common Yellowthroat, 21.0 (104; 3N,35FL); Gray Catbird, 16.0 (79; 4N,36FL); Common Grackle, 8.5 (42; 5N,20FL); Song Sparrow, 8.0 (40; 2N,20FL); American Goldfinch, 6.0 (30; 3N,10FL); Cedar Waxwing, 3.5 (17; 8FL); Willow Flycatcher, 3.0 (15; 1N,5FL); Least Flycatcher, 3.0 (1N,6FL); Eastern Kingbird, 3.0 (2N,8FL); Warbling Vireo, 3.0 (2N,8FL); Tree Swallow, 3.0 (2N,11FL); Alder Flycatcher, 2.5 (1N,5FL); Black-capped Chickadee, 2.5 (2N,13FL); Veery, 2.5 (4FL); Chestnut-sided Warbler, 2.5 (1N,5FL); Baltimore Oriole, 2.5 (1N,5FL); American Robin, 2.0 (2N,8FL); Northern Waterthrush, 2.0; Mallard, 1.5 (1N,8FL); Downy Woodpecker, 1.5 (1N,3FL); Northern Flicker, 1.5 (1N,3FL); Great Crested Flycatcher, 1.5 (1N,3FL); Blue-gray Gnatcatcher, 1.5 (2FL); Black-and-white Warbler, 1.5 (1N,5FL); Northern Cardinal, 1.5 (4FL); Great Blue Heron, 1.0; Spotted Sandpiper, 1.0; Mourning Dove, 1.0; Hairy Woodpecker, 1.0 (1N,3FL); Tufted Titmouse, 1.0 (7FL); Marsh Wren, 1.0; American Redstart, 1.0; Canada Goose, 0.5; Mute Swan, 0.5; Wood Duck, 0.5 (3FL); Red-bellied Woodpecker, 0.5; Yellow-throated Vireo, 0.5; Red-eyed Vireo, 0.5; White-breasted Nuthatch, 0.5; Brown-headed Cowbird, 0.5; Common Merganser, +; Virginia Rail, +; American Woodcock, +. **Total:** 46 species; 220.0 territories

(1086/40 ha). **Visitors:** Pileated Woodpecker. **Remarks:** Continued vegetational succession has created enough habitat diversity in this plot to make 2002 another record-breaking year for both number of species and territories. This year, 46 species were found, compared to 43 last year, 40 in 2000, and a 10-year average of 33.6. This is a continuation of a significant, steady increase which began in 1997. The 220.0 territorial males found this year shattered the old record of 196, set in 1981 and again in 2000. Last year, 191.0 were found, and the 10-year average was 167. Most of the increases this year occurred among shrub-nesting species (or among species that might ordinarily nest on the ground or among herbaceous vegetation but have switched to shrubs for nest sites). Species increasing the most included Red-winged Blackbird, Swamp Sparrow, Yellow Warbler, Common Yellowthroat, and American Goldfinch. Only ten species declined in number. **Other Observers:** Eric Adam and John Eykelhoff.

23. COASTAL SCRUB

MATORRAL COSTANERO

ALEX ROSENTHAL AND DENNIS JONGSOMJIT

PRBO Conservation Science

3820 Cypress Drive #11

Petaluma CA 94954

Location: California; Marin Co.; Bolinas; Palomarin Field Station; 37°55'N, 122°45'W; Bolinas Quadrangle, USGS. **Continuity:** Established 1971; 28 yr. **Size:** 8.1 ha. **Description of Plot:** See Am. Birds 25:1003–1004 (1971). **Weather:** Mean start temp., 13°C (range 4–26°C). **Coverage:** 203.7 h; 70 visits (36 sunrise, 20 sunset). **Census:** Bewick's Wren, 8.0 (40); Wrentit, 8.0; Spotted Towhee, 8.0; Orange-crowned Warbler, 4.5 (22); Wilson's Warbler, 4.0 (20); Purple Finch, 3.0 (15); Allen's Hummingbird, 2.0; Bushtit, 2.0; White-crowned Sparrow, 2.0; Anna's Hummingbird, 1.5; Song Sparrow, 1.5; California Quail, 1.0; Western Scrub-Jay, 1.0; Chestnut-backed Chickadee, 1.0; Northern Flicker, 0.5; Red-tailed Hawk, +; Mourning Dove, +; Hutton's Vireo, +; Steller's Jay, +; Swainson's Thrush, +; American Robin, +; California Towhee, +. **Total:** 22 species; 48.0 territories (237/40 ha). **Visitors:** None reported. **Remarks:** Species holding at least a partial territory on the plot that were not recorded last year include Hutton's Vireo, Swainson's Thrush, Anna's Hummingbird, and California Towhee. Species showing a marked increase include Bewick's Wren (from 2.5 to 8.0 territories) and Orange-crowned Warbler (from 0.5 to 4.5). Cover of trees (firs) and shrubs continues to increase and is likely responsible for some changes in bird numbers and community composition. **Other Observers:** Geoff Geupel, Grant Ballard, Roy Churchwell, Tom Gardali, Mary Chase, and Blaine MacDonald. Acknowledgments: We thank

Point Reyes National Seashore for their cooperation. This is PRBO contribution No. 1520.

24. DISTURBED COASTAL SCRUB A

MATORRAL PERTURBADO A

BLAINE MACDONALD AND DENNIS JONGSOMJIT

PRBO Conservation Science

3820 Cypress Drive #11

Petaluma CA 94954

Location: California; Marin Co.; Bolinas; Palomarin Field Station; 37°55'N, 122°45'W; Bolinas Quadrangle, USGS. **Continuity:** Established 1972; 28 yr. **Size:** 4.7 ha. **Description of Plot:** See Am. Birds 26:987–988 (1972). **Weather:** Mean start temp., 13°C (range 4–26°C). **Coverage:** 176.9 h; 70 visits (43 sunrise, 0 sunset). **Census:** Wrentit, 4.5 (38; 6N,11FL); Song Sparrow, 3.0 (26; 3N,6FL); Anna's Hummingbird, 2.5; Bushtit, 2.5 (1N); Bewick's Wren, 2.5; Orange-crowned Warbler, 2.0; Spotted Towhee, 2.0 (2N,2FL); California Quail, 1.0 (1N,>4FL); Allen's Hummingbird, 1.0; Wilson's Warbler, 1.0 (1N); Brown-headed Cowbird, 1.0; American Goldfinch, 1.0 (1N,4FL); Mourning Dove, 0.5; Western Scrub-Jay, 0.5; American Robin, 0.5 (1N,2FL); Purple Finch, 0.5; Red-tailed Hawk, +; Northern Flicker, +; Pacific-slope Flycatcher, +; Hutton's Vireo, +; Chestnut-backed Chickadee, +; Golden-crowned Kinglet, +; Swainson's Thrush, +; California Towhee, +; White-crowned Sparrow, +. **Total:** 25 species; 26.0 territories (221/40 ha). **Visitors:** Sharp-shinned Hawk, Cooper's Hawk, American Kestrel, Downy Woodpecker, Olive-sided Flycatcher, Steller's Jay, Red-breasted Nuthatch, Winter Wren, Hermit Thrush, European Starling, Dark-eyed Junco, Black-headed Grosbeak, Red-winged Blackbird, Brewer's Blackbird, Pine Siskin. **Remarks:** Cover of trees (firs) and shrubs continues to increase. **Other Observers:** Geoff Geupel, Grant Ballard, Roy Churchwell, Emily Morrison, Christopher Berner, and Mary Chase. Acknowledgments: We thank Point Reyes National Seashore for their cooperation. This is PRBO contribution No. 1519.

25. DISTURBED COASTAL SCRUB B

MATORRAL PERTURBADO B

EMILY MORRISON AND DENNIS JONGSOMJIT

PRBO Conservation Science

3820 Cypress Drive #11

Petaluma CA 94954

Location: California; Marin Co.; Bolinas; Palomarin Field Station; 37°55'N, 122°46'W; Bolinas Quadrangle, USGS. **Continuity:** Established 1971; 28 yr. **Size:** 8.1 ha. **Description of Plot:** See Am. Birds 25:1002 (1971) and J. Field Ornithol. 66 (Suppl.):104 (1995). **Weather:** Mean start temp., 13°C (range 4–26°C). **Coverage:**

265.2 h; 93 visits (67 sunrise, 0 sunset). **Census:** Wrentit, 11.0 (54); Song Sparrow, 9.0 (44); American Goldfinch, 6.0 (30); Orange-crowned Warbler, 4.0 (20); Anna's Hummingbird, 3.0 (15); Chestnut-backed Chickadee, 3.0; Bushtit, 3.0; Swainson's Thrush, 3.0; Allen's Hummingbird, 2.5; Bewick's Wren, 2.5; Spotted Towhee, 2.5; Purple Finch, 2.5; Wilson's Warbler, 2.0; Western Scrub-Jay, 1.5; American Robin, 1.5; Brown-headed Cowbird, 1.5; White-crowned Sparrow, 1.0;

Mourning Dove, 0.5; Northern Flicker, 0.5; Red-tailed Hawk, +; Hutton's Vireo, +. **Total:** 21 species; 60.5 territories (299/40 ha). **Visitors:** None reported. **Remarks:** Cover of trees (firs) and shrubs continues to increase. **Other Observers:** Geoff Geupel, Mary Chase, Grant Ballard, Sacha Heath, Roy Churchwell, and Tom Gardali. Acknowledgments: We thank Point Reyes National Seashore for their cooperation. This is PRBO contribution No. 1521.