### Literature Cited

Combs, Daniel L., Brent Ortego, James Kennamer, 1984. Nesting biology of a resident flock of Canada geese, *Proc. Annu. Conf. Southeast. Assoc. Fish and Wildl. Agencies* 38:228-238.

Drennen, Daniel, 1989. Ross' Goose (Chen rossii) observed on Eufaula National Wildlife Refuge. Alabama Birdlife, Vol. 36, No. 1, 1-2.

Johnson, Stephen C., 1976. Reproductive success of the resident Canada goose flock at the Eufaula National Wildlife Refuge. *Proc. Annu. Conf. Southeast. Assoc. Fish and Wildl. Agencies.* 30:617-626.

Oberhou, J.C. 1973. Success of resident Canada geese on National wildlife refuges in the Southeast. *Proc. Annu. Conf. Southeast Assoc. Game and Fish Comm.* 27:56-61.

Daniel J. Drennen, Eufaula National Wildlife Refuge, Rt. 2, Box 97-B, Eufaula, Alabama 36027.

### ALABAMA CHRISTMAS BIRD COUNTS, 1990-91

## Thomas A. Imhof

BIRMINGHAM, Dec. 22, 43 observers, 80.5 party-hours.

Pied-b Grebe, 13; Gt Blue Heron, 25; Canada Goose, 48; Wood Duck, 4; Mallard, 18; Blue-wg Teal, 1; Gadwall, 2; Canvasback, 14; Ring-nk Duck, 22; Hooded Merganser, 2; Ruddy Duck, 4; ducks, 13; Turkey Vulture, 5; Sharp-shin Hawk, 5; Cooper's Hawk, 2; Red-shld Hawk, 12; Red-tail Hawk, 46; Am Kestrel, 5; Merlin, 1; hawk, 1; Bobwhite, 18; Am Coot, 8; Killdeer, 95; G Yellowlegs, 2; Least Sandp, 1; Com Snipe, 14; Rock Dove, 956; Mourning Dove, 775; Screech Owl, 4; Barred Owl, 2; Rufous Hummingbird, 1; hummingbird, 1; B Kingfisher, 30; Red-hd Wdpkr, 32; Red-bel Wdpkr, 104; Y-b Sapsucker, 23; Downy Wdpkr, 48; Hairy Wdpkr, 3; Red-cockaded Wdpkr, 3; Flicker, 85; Pileated Wdpkr, 15; E Phoebe, 20; Blue Jay, 452; Am Crow, 414; Caro Chickadee, 301; Tufted Titmouse, 169; White-br Nuthatch, 46; Brown-hd Nuthatch, 90; Brown Creeper, 5; Caro Wren, 150; Winter Wren, 1; Golden-cr Kinglet, 63; Ruby-cr Kinglet, 113; E Bluebird, 97; Hermit Thrush, 14; Am Robin. 340; Catbird, 1; Mockingbird, 158; Brown Thrasher, 41; Am Pipit, 30; Cedar Waxwing, 911; L Shrike, 11; Starling, 1869; Orange-cr Warbler, 1;

### ALABAMA BIRDLIFE

Myrtle Warb, 52; Pine Warb, 54; Cardnal, 353; Towhee, 178; Chipping Sparrow, 170; Field Sp, 76; Vesper Sp, 6; Savannah Sp, 30; Grasshopper Sp, 1; Fox Sp, 5; Song Sp, 167; Swamp Sp, 20; Whitethroat, 409; Whitecr Sp, 2; Junco, 262; Redwing, 3813; E Meadowlark, 62; Rusty Blackbird, 260; Brewer's Blackbird, 25; Com Grackle, 5282; Brown-hd Cowbird, 1013; blackbird, 4000; Purple Finch, 20; House Finch, 124; Pine Siskin, 3; Am Goldfinch, 280; House Sp, 124. Count Week, Bufflehead, Ring-b Gull.

Total species, 87; individuals, 24,551.

Compiler, Thomas A. Imhof, 1036 Pike Road Birmingham, AL 35218

GULF SHORES, Dec 29, 56 observers, 181 party-hours.

Com Loon, 174; Pied-b Grebe, 34; Horned Grebe, 24; Gannet, 213; Brown Pelican, 239; D-c Cormorant, 1052; Gt Blue Horon, 162; Gt Egret, 9; Snowy Egret, 7; Little Blue Heron, 7; Green Heron, 2; Blk-cr N Heron, 2; Snow Goose, 2; Wood Duck, 18; Mottled Duck, 5; Mallard, 90; Pintail, 1; Blue-wg Teal, 1; Gadwall, 7; teal, 6; Redhead, 41; Ring-nk Duck, 95; L Scaup, 56; Oldsquaw, 1; Bufflehead, 233; Hooded Merganser, 36; Redbr Merganser, 277; duck, 12; Turkey Vulture, 17; Osprey, 5; Harrier, 27; Sharp-shin Hawk, 9; Cooper's Hawk, 5; accipiter, 2; Red-shldr Hawk, 7; Red-tail Hawk, 39; buteo, 4; Am Kestrel, 122; Peregrine Falcon, 1; Bobwhite, 35; Clapper Rail, 22; King Rail, 1; Virginia Rail, 4; Sora, 13; Moorhen, 7; Am Coot, 13; rail, 1; Sandhill Crane, 27; Black-b Plover, 15; Snowy Plover, 7; Semipalm Plover, 3; Killdeer, 839; G Yellowlegs, 24; L Yellowlegs, 6; Willet, 60; Spotted Sandp. 2; Ruddy Turnstone, 6; Sanderling, 331; Western Sandp, 141; Least Sandp, 68; Dunlin, 170; Stilt Sandp, 4; Com Snipe, 24; Am Woodcock, 3; Parasitic Jaeger, 1; Laughing Gull, 1058; Bonaparte's Gull, 269; Ring-b Gull, 741; Herring Gull, 212; Caspian Tern, 4; Royal Tern, 206; Sandwich Tern, 1; Com Tern, 2; Forster's Tern, 342; Black Skimmer, 2; Rock Dove, 243; Mourning Dove, 1277; Ground Dove, 17; Barn Owl, 1; Screech Owl, 23; Gt Horned Owl, 3; Whip-poor-will, 1; Bel Kingfisher, 61; Red-bel Wdpkr, 152; Yel-b Sapsucker, 19; Downy Wdpkr, 32; Hairy Wdpkr, 7; Flicker, 150; Pileated Wdpkr, 21; woodpecker, 1; E Phoebe, 130; Tree Swallow, 126; Blue Jay, 353; Am Crow, 60; Fish Crow, 40; Caro Chickadee, 27; Tufted Titmouse, 32; Red-br Nuthatch, 1; Brown-hd Nuthatch, 78; Carolina Wren, 121; House Wren, 60; Sedge Wren, 10; Marsh Wren, 44; Golden-cr Kinglet, 29; Ruby-cr Kinglet, 184; Bl-gr Gnatcatcher, 22; E Bluebird, 293; Hermit Thrush, 40; Wood Thrush, 2; Am Robin, 33,213; Catbird, 108; Mockingbird, 468; Brown Thrasher, 50; Am. Pipit, 376; Cedar Waxwing, 838; L Shrike, 134; Starling, 2040; White-e Vireo, 1; Solitary Vireo, 28; Yellow-thr Vireo, 1; Orange-cr Warbler, 20; Myrtle Warb, 7676; Pine Warb, 247; Palm Warb, 49; Ovenbird, 1; Com Yellowthroat, 34; Cardinal, 234; Towhee, 193; Chipping Sparrow, 190; Field Sp, 124; Vesper Sp. 66; Savannah Sp. 460; Grasshopper Sp, 2; Henslow's Sp. 1; Le Conte's Sp. 2; Sharp-tl Sp, 2; Seaside Sp, 3; Song Sp, 150; Lincoln's Sp, 2; Swamp Sp, 321; White-thr Sp, 421; White-cr Sp, 1; sparrow, 45; Junco, 2; Red-wg Blkbd, 22,765; E Meadowlark, 596; Brewer's Blkbd, 3; Boat-tl Grackle, 68; Com Grackle, 975; Brown-hd Cowbird, 210; blackbird, 2525; Purple Finch, 2; House Finch, 28; Am Goldfinch, 141; House Sparrow, 194. Count Week, Am Bittern, Green-wg Teal, Surf Scoter, Black Vulture. Total Species, 147; individuals, 86,378.

Compiler, Greg D. Jackson, 2220 Baneberry Drive, Birmingham, AL 25244

## MOBILE-TENSAW, Dec 22, 12 observers, 54 party-hours.

Pied-b Grebe, 51; White Pelican, 611; Brown Pelican, 98; D-cr Cormorant, 290; Gt Blue Heron, 83; Gt Egret, 188; Snowy Egret, 64; L Blue Heron, 33; Tricolored Heron, 14; Cattle Egret, 1; Blk-cr N Heron, 9; White Ibis, 290; Glossy Ibis, 10; Snow Goose, 36; Wood Duck, 4; Greenwg Teal, 220; Mallard, 11; Blue-wg Teal, 27; Shoveler, 3; Gadwall, 111; Am Wigeon, 200; Canvasback, 2; Redhead, 50; Ring-nk Duck, 175; L Scaup, 247; scaup, 17; Bufflehead, 12; Hooded Merganser, 10; Red-br Merganser, 7; Ruddy Duck, 2; duck, 377; Blk Vulture, 18; Turkey Vulture. 57; Osprey, 11; Harrier, 3; Sharp-shin Hawk, 3; Cooper's Hawk, 1; Red-shldr Hawk, 7; Red-tail Hawk, 16; buteo, 3; Am Kestrel, 27; falcon, 1; Turkey, 10; Bobwhite, 26; Com Moorhen, 8; Am Coot, 3129; Blkb Plover, 71; Killdeer, 92; Blk-nk Stilt, 68; Am Avocet, 93; G Yellowlegs, 25; L Yellowlegs, 17; yellowlegs, 32; Spotted Sandp. 1; Long-b Curlew, 2; Western Sandp, 85; Least Sandp, 80; Dunlin, 146; S-b Dowitcher, 20; Com Snipe, 15; Am Woodcock, 15; peep, 300; Laughing Gull, 892; Bonaparte's Gull, 51; Ring-b Gull, 439; Herring Gull, 100; gull, 430; Caspian Tern, 30; Royal Tern, 19; Forster's Tern, 266; Blk Skimmer, 8; tern, 25; Rock Dove, 10; Mourning Dove, 296; Ground Dove, 5; B Kingfisher, 27; Red-b Wdpkr, 32; Y-b Sapsucker, 9; Downy Wdpkr, 4; Flicker, 35; Pileated Wdpkr, 11; wdpkr, 1; E Phoebe, 37; Blue Jay, 93; Am Crow, 14; Caro Chickadee, 13; Tufted Titmouse, 8; Brown-hd Nuthatch, 4; Brown Creeper, 1; Caro Wren, 27; House Wren, 7; Sedge Wren, 3; Golden cr Kinglet, 37; Ruby-cr Kinglet, 56; Bl-gr Gnatcatcher, 5; E Bluebird, 101; Hermit Thrush, 1; Am Robin, 1179; Catbird, 4; Mockingbird, 43; Brown Thrasher, 8; Cedar Waxwing, 42; LShrike, 3; Starling, 156;

### ALABAMA BIRDLIFE

Solitary Vireo, 9; Orange-cr Warb, 6; Myrtle Warb, 557; Pine Warb, 65; Com Yellowthroat, 3; Cardinal, 39; Towhee, 26; Chipping Sp. 122; Field Sp, 1; Song Sp, 11; White-thr Sp, 100; Junco, 1; Red-wg Blkbd, 3477; E Meadowlark, 41; Rusty Blkbd, 1; Boat-tl Grackle, 193; Com Grackle, 59; Brown-hd Cowbd, 42; blkbd, 3675; House Finch, 7; Am Goldfinch, 38; House Sp, 11.

Total species, 116; individuals, 20,638.

Compiler, Roger Clay, 306 N Bayview, Fairhope, AL 36532

MONTGOMERY, Dec 29, 19 observers, 51 party-hours.

Pied-b Grebe, 1; D-c Cormorant, 611; Am Bittern, 1; Gt Blue Heron, 100; Gt Egret, 251; Canada Goose, 4; Wood Duck, 225; Black Duck, 2; Mallard, 430; Pintail, 1; Blue-wg Teal, 5; Gadwall, 3; Wigeon, 15; Ringnk Duck, 80; Bufflehead, 20; Hooded Merganser, 2; Blk Vulture, 1; Osprey, 1; Harrier, 4; Sharp-shin Hawk, 1; Cooper's Hawk, 1; Red-shld Hawk, 4; Red-tail Hawk, 33; Am Kestrel, 29; Turkey, 4; Bobwhite, 40; Am Coot, 2; Killdeer, 277; G Yellowlegs, 8; Spotted Sandp, 1; Least Sandp, 9; Dunlin, 1; peep, 3; Com Snipe, 46; Ring-b Gull, 186; Herring Gull, 4; Rock Dove, 158; Mourning Dove, 472; Gt Horned Owl, 2; Barred Owl, 3; B Kingfisher, 24; Red-hd Wdpkr, 14; Red-bel Wdpkr, 42; Y-b Sapsucker, 36; Downy Wdpkr, 20; Flicker, 78; Pileated Wdpkr, 1; E Phoebe, 23; Blue Jay, 192; Am Crow, 60; Fish Crow, 2; Caro Chickadee, 153; Tufted Titmouse, 66; Brown-hd Nuthatch, 11; Brown Creeper, 4; Caro Wren. 85; House Wren. 1; Winter Wren. 2; Marsh Wren. 1; Goldencr Kinglet, 22; Ruby-cr Kinglet, 57; E Bluebird, 45; Hermit Thrush, 1; Am Robin, 4523; Mockingbird, 204; Brown Thrasher, 22; Am Pipit, 49; Cedar Waxwing, 231; L Shrike, 47; Starling, 1481; Solitary Vireo, 1; Orange-cr Warb, 1; Myrtle Warb, 426; Pine Warb, 39; Palm Warb, 16; Cardinal, 261; Towhee, 55; Chipping Sparrow, 3; Field Sp, 28; Vesper Sp, 1; Savannah Sp. 35; Fox Sp. 1; Song Sp. 151; Swamp Sp. 61; White-thr Sp. 396; sparrow, 100; Junco, 52; Redwing, 2433; E Meadowlark, 134; Com Grackle, 1965; Brown-hd Cowbird, 44; blackbird, 5000; (N) Baltimore Oriole, 1; Purple Finch, 15; House Finch, 348; Am Goldfinch, 37; House Sp. 95. Count Week, Turkey Vulture, Cathird, Brewer's Blackbird. Total species, 94; individuals, 22,237.

Compiler, Lawrence Gardella, 350 Cloverdale Rd., Montgomery, AL 36104.

WATERLOO, Dec 15, 23 observers, 70 party-hours.

Com Loon, 9; Pied-b Grebe, 26; Horned Grebe, 11; D-c Cormorant, 51; Gt Blue Heron, 363; Gt Egret, 1; Wood Duck, 17; Green-wg Teal, 1; Black

Duck, 1; Mallard, 375; Pintail, 5; Gadwall, 220; Am Wigeon, 10; Ring-nk Duck, 7: L Scaup, 4: Com Goldeneve, 35; Bufflehead, 182; Hooded Merganser, 310; Red-br Merganser, 2; Bald Eagle, 51; Harrier, 5; Sharpshin Hawk, 2: Red-shldrd Hawk, 5: Red-tail Hawk, 34; Am Kestrel, 12; Bobwhite, 29: Am Coot, 85: Killdeer, 163: Com Snipe, 75; Am Woodcock, 1: Bonaparte's Gull, 687; Ring-b Gull, 583; Herring Gull, 34; Forster's Tern, 1; Rock Dove, 109; Mourning Dove, 205; Screech Owl, 4; Barred Owl. 7: B Kingfisher, 27; Red-hd Wkpkr, 1; Red-bel Wdpkr, 63; Yel-b Sapsucker, 24; Downy Wdpkr, 58; Hairy Wdpkr, 9; Flicker, 80; Pileated Wdpkr, 16; E Phoebe, 7; Horned Lark, 101; Blue Jay, 267; Am Crow, 242; Caro Chickadee, 237; Tufted Titmouse, 180; Red-br Nuthatch, 10; White-br Nuthatch, 30; Brown Creeper, 11; Carolina Wren, 115; Winter Wren, 9; Golden-cr Kinglet, 79; Ruby-cr Kinglet, 83; E Bluebird, 121; Hermit Thrush, 25; Am Robin, 310; Mockingbird, 55; Brown Thrasher, 5; Am Pipit, 19; Cedar Waxwing, 410; L Shrike, 8; Starling, 581; Myrtle Warb, 25; Pine Warb, 10; Cardinal, 326; E Towhee, 66; Chipping Sp. 2; Field Sp, 294; Savannah Sp, 24; Fox Sp, 19; Song Sp, 250; Swamp Sp, 46; White-th Sp, 365; White-cr Sp, 25; Junco, 351; Red-wg Blkbd, 102; E Meadowlk, 141; Brewer's Blkbd, 100; Com Grackle, 909; Brn-hd Cowbd, 76: Purple Finch, 24: House Finch, 22: Am Goldfinch, 261: House Sp. 102. Total species, 90; individuals, 10,445.

Compilers, Paul Kittle, Box 5161, Univ. N. Alabama, Florence, AL 35632, and Ned Piper, 1302 Rush St., Tuscumbia, AL 35674.

LIST OF OBSERVERS with initials of count in which each participated. Bob Andrews, MT; Gussie Arnett, GS; Laurie Bailey, GS, MT; Russell Bailey, B; Raymond Bates, B; Michael Beuerlein, Wa; Paul Blevins, GS; Joel Black, Mg; Roberta Bonwit, GS; Laura Bounds, MT; Bill Bremser, GS; Lela Brewer, GS; Walt Burch, Wa; Linda Buzzard, B, GS; Roger Clay, MT; Karen Coghill, B; Dwight Cooley, GS; Gwen Cox, GS; Dick Crittenden, B, GS; Vanessa Crittenden, GS; Ed Cross, Wa; Martha Dagg, B: Margaret Dauber, Mg: Mark Dauber, Mg: Kim Davis. GS; Bob Duncan, GS; Lucy Duncan, GS; Scott Duncan, GS; William Duncan, GS; Carol Eldridge, B; Owen Fang, GS; Gene Fleming, GS; Carolyn Flory, GS; Mary Floyd, GS, MT; Paul Franklin, B, GS; Venetia Friend, MT; Lawrence Gardella, Mg; Ben Garmon, G, GS; Jeff Garner, Wa; Sid Garner, Wa; David George, B, GS; Peggy Gibbs, GS; Philip Gidiere, Mg; Stephen Gidiere, Mg; Billy Gilliland, B; Jimmy Gilliland, B; Marsha Goldstein, B; Tom Haggerty, Wa; Bill Haley, Wa; Martin Hardy, Wa; Paulette Haywood, B; Jeff Hill, Wa; Sharon Hudgins, B; Marilyn

#### ALABAMA BIRDLIFE

Huev. B: Gina Imhof. B: Thomas Imhof. B: Greg Ippolito. B: Greg Jackson, GS; Bettye James, B; Joyce Johnson, GS; Alice Johnston, GS; Lan Jones, WA: Jim Keeler, Mg: Charles Kennedy, Mg: Curtis Kingsbery, GS; Helen Kittinger, B, GS; Paul Kittle, Wa; Richard Landry, B; Ira Kupferberg, Mg; David Larsen, B; Eric Lefstad, GS; Wilma Lindberg, B; Jan Lloyd, GS; Frank Logan, GS; Mike McMillan, GS; Andrea Menyhert, Mg; Buzz Merchlewitz, GS; Pat Meyer, GS; Daryl Michael, GS; Ann Miller, GS; Howard Morris, Mg; Sue Morris, Mg; Barbara Munson, B; Larry Neill, Wa; Jane Newell, Wa; Victor Nichols, GS; Minnie Nonkes, GS, MT; Phyllis Nofzinger, Wa; Dee Patterson, Wa; James Peavy, GS; James Pfeiffer, GS; Bill Phillips, Mg; Ned Piper, Wa; Pat Price, B; Eloise Rafferty, B; Elberta Reid, B, GS; Robert E Reid, GS; Robert R Reid, B, GS; Bill Rogers, Wa; Ila Roose, GS; Miriam Rueger, B; Michael Russell, B, GS; Jenisa Ryals, MT; Bob Sargent, GS; Martha Sargent, GS; Maureen Shaffer, B. GS: Floyd Sherrod, Wa: Don Simbeck, Wa: Maude Skiba, MT; Idalene Snead, B; Donna Spencer, B; Jody Springer, Wa; Julie Strong, Mg; Betsy Tetlow, GS; Phil Tetlow, GS; Mary Tiller, GS; Ralph Tiller, GS; Therese Tonitis, B; Helen Thigpen, B; Wayne Tubberville, Mg; Lisa Vera, MT; Susanne Wadsworth, Wa; Mary Wakefield, Wa; Ralph Wallace, Wa; Steve Ward, Mg; Donald Ware, GS; Ted Weems, GS; Jerry Weidler, Mg; Mary Weidler, Mg; Chan West, GS; Carter Whatley, Mg; John Winn, MT; Jimmy Woolbright, Mg; total 133.

# A SUMMARY OF CHRISTMAS BIRD COUNTS AT AUBURN, ALABAMA, 1954–1990

## Julian L. Dusi

Christmas bird counts have been taken in the Auburn, Alabama area since 1954. Some of the counts were recorded in *Alabama Birdlife*; others are just recorded in my field journals. Unfortunately, counts could not be made every year. Many participants took part in the counts. However, the number of participants was never great enough to cover the entire area, so the counts each year covered the north university pond area, the campus area, and various spots in the city, staying within the 7.5 mile radius of the center of Auburn and were done within the Audubon count period.

Many fluctuations in species and numbers can be seen in Table 1. Often fluctuations can be attributed to the date and weather of the count day and that preceeding it; often to the abilities of the participants. The