

The Raven

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J. J. MURRAY, EDITOR LEXINGTON, VA.

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(The Editor will be saved much trouble and correspondents will save time if requests about membership in the V. S. O. and dues for new and old memberships are sent to the Treasuror; and if letters about lost or delayed issues of The Raven and requests for old volumes or issues are sent to the Publisher. The addresses of these and other officers will be found on the following page).

OFFICERS OF THE VIRGINIA SOCIETY OF ORNITHOLOGY

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1951 Class: Mrs. J. W. Wiltshire and Max Carpenter

1952 Class: Dr. John Grey, Miss Gertrude Prior, Jack Perkins

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ANNUAL MEETING

The 1950 Annual Meeting of the V. S. O. will be held in Harrisonburg on either the first or second week-end in May. The exact dates will be announced later.

Mr. Max Carpenter, who has charge of the program, will be glad to hear from members about papers which they may be able to present. Send to him title of paper, length of paper, and equipment desired for the presentation.

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NEST CAVITIES OF THE RED-COCKADED WOODPECKER By Charles C. Steirly

While inspecting seed trees on a logging operation near Stony Creek in Sussex County the writer had the opportunity to study the nest cavities of the red-cockaded woodpecker (Dendrocopus borealis) in loblolly pine (Pinus taeda).

A tract of fifteen acres of even-aged loblolly pine one hundred and five years of age was being cut clear except for seed trees.
The tract contained an estimated 1250 mature trees. A careful
search of the area as well as questioning of the loggers revealed
that only three of the trees contained nest cavities of this species. These were quite evident owing to the large streaks of hardened resin extending above and below the woodpecker holes. None
of the loggers had suspected woodpeckers as the cause of these
whitish streaks, although all of them noticed the particular trees.

At the time of the writer's visit two of the trees had been felled and one was already bucked into logs. None of the cuts in this tree had been made through the hole. This hole was 27 feet above the ground at a point on the tree eleven inches in diameter.

This extended in for four inches until the cavity was reached. The hole entrance was 3.5 inches by 2.75 inches narrowing to a tunnel about two inches in diameter. Pitch streaks were found five feet above and eleven feet below the hole. Many recent chisel-like workings had been made and the log was coated with both old and new exudations of resin. Several feathers were found adhering to the resin in the immediate vicinity of the hole.

The second tree was bucked into logs in the writer's presence and the loggers were persuaded to make a log cut through the hole. Here the hole was 42 feet above the ground at a point 13.5 inches in diameter. Pitch streaks extended six feet above and thirteen feet below the hole, which was three inches in diameter narrowing to a two-inch tunnel. This tunnel penetrated the tree for four inches and extended back nine inches to the back side of the cavity. The cavity itself was 6.75 inches deep as measured from the floor of the tunnel. It was very clean and approximately four inches in diameter. Feathers were found adhering to recent resin exudations near the hole.

In viewing the end of the log, or cross section of the tree through the tunnel, it was observed that the woodpecker had penetrated the tree through a branch stub. Observations on the outside of the log revealed that the old swellings where the branch stubs had healed were barely perceptible. These branch stubs were slightly decayed.

The third tree, being on another drift, was not cut during the writer's visit to the logging operation. An Abney hand level observation indicated that this hole was 37 feet above the ground.

Va. Forest Service, Waverly, Va.

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"THE AWL-BIRDS" - A REVIEW

"The Awl-Birds", by J. K. Stanford, 90 pages, \$2.00, 1949, with illustrations by A. M. Hughes and an introduction by Helen G. Cruickshank, published by The Devi-Adair Company, New York 10, N. Y. The author is a young British war veteran and ornithologist. The book, bosed on facts as far as the birds are concerned, gives in fictional form the story of the reappearance of the Avocet as a breeding bird in England. Derick Gloyne, the hero, having returned with shattered nerves from a German war prison, buys Belgrave Hall in the Norfolk marshes and settles down to rebuild the bombed-out house and watch the birds. It is to his marshes that the Avocets return to nest after an absence of a hundred years from England as breeding birds. Derick finds peace of mind as he lives with his birds and a sense of accomplishment as he saves the nests of the Avocets from an egg collector who has determined to rob them. The struggle between bird lover and vandal

develops dramatically. Indeed, it is too dramatic, for the surprise ending is too ruthless a solution for even such an evil as a greedy and lawless egg collector. The book is beautifully written. The illustrations are not only satisfying ornithologically but are most attractive.

J. J. Murray

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V. S. O. FIELD TRIP TO BACK BAY By F. R. Scott

Twenty-three members and friends of the Virginia Society of Ornithology met at Sandbridge, Princess Anne County, on December 3 for the V. S. O. field trip to Back Bay. Two trucks supplied by Jack Perkins transported the group down the beach to the Refuge headquarters where they divided, half going farther down the beach to the shorebird flats, and the others boarding one of the motorboats for a trip into the Bay. Later, a lunch was supplied by the women of one of the churches near Pungo.

Seventeen species of ducks were seen, including a magnificent flock of about 20,000 Snow Geese. Other interesting birds observed were: Gannet, 263; American Bittern, 1; Oyster-catcher, 1 (Lynn-haven - Grey); Semipalmeted plover, 1; Royal Tern, 1 (Virginia Beach); Vesper Sparrow, 1. The grand total was 66 species.

The observers present were as follows: R. J. Beasley, Mrs. C. L. Burgess, Max Carpenter, Robert Carrigan, Robert Eggleston, J. H. Grey, Muriel Hegwood, Dr. and Mrs. D. R. Hostetter, Kenneth Lawless, Royster Lyle, Mrs. A. H. Michie, Katherine Michie, William Michie, Sydney Mitchell, Jack Perkins, Gertrude Prior, F. R. Scott, Elizabeth Sprague, C. E. Stevens, J. R. Sydnor, Anne Wheaton, Mrs. C. H. Wills.

Hampden-Sydney, Virginia

THE CHRISTMAS CENSUS - 1949 - VIRGINIA

Back Bay National Wildlife Refuge, Va. (refuge area including Long Ialnd, ocean beach from Sandbridge to North Carolina line, Knott's Island (the Va. part), Sigma, Pungo, Pleasant Ridge, North Landing River ferry; open farmland 5%, pine woodland 10%, deciduous woodland 16%, ocean beach 17%, marshes and inland bay 52%). - Dec. 31; 7 a.m. to 6 p.m. Partly cloudy; temp. 280-46°; wind SW, 5-12 m.p.h.; ground bare; water open. Nine observers in 1 to 4 parties. Total hours, 27 (2 in car, 5 in truck on beach and in marsh, 3 in matorboat, 17 on foot); total miles, 90 (55 by car, 20 by truck, 6 by boot, 9 on foot). Common Loon, 1; Horned Grebe, 1; Pied-billed

Grebe, 3; Gannet, 7; Double-crested Cormorant, 2; Great Blue Heron, 10; Little Blue Heron, 1 (im.); Black-crowned Night Heron, 53; Whistling Swen, 2063 (2000 est., 63); Canada Goose, 2722 (2000 est., 722); Snow Goose, 1000 (est.); Blue Goose, 8; Mallard, 1; Black Duck, 446 (300 est., 146); Gadwall, 2; Baldpate, 4300 (est.); Pintail, 3000 (est.); Green-winged Teal, 58; Redhead, 4000 (est.); Canvas-back, 4000 (est.); Scaup Duck (sp.), 1500 (est.); Am. Golden-eye, 14; Buffle-head, 22; Old Squaw, 3; White-winged Scoter, 22; Surf Scoter, 25; Am. Scoter, 95; Ruddy Duck, 81; Hooded Merganser, 5; Am. Merganser, 1; Red-breasted Merganser, 1; Turkey Vulture, 9; Black Vulture, 25; Cooper's Hawk, 2; Red-tailed Hawk, 2; Bald Eagle, 8; Marsh Hawk, 15; Peregrine Falcon, 2; Sparrow Hawk, 9; King Rail, 3; Am. Coot, 4000 (est.); Killdeer, 1; Sanderling, 3; Great Blackbacked Gull, 9; Herring Gull, 68; Ring-billed Gull, 395 (200 est., 195); Loughing Gull, 10; Mourning Dove, 5; Barred Owl, 1; Belted Kingfisher, 2; Yellow-shafted Flicker, 22; Pileated Woodpecker, 2; Red-bellied Woodpecker, 3; Downy Woodpecker, 8; Eastern Phoebe, 3; Blue Jay, 4; Crow, 61; Fish Crow, 168; Carolina Chickadee, 24; Tufted Titmouse, 7; White-breasted Nuthetch, 2; Brown-headed Nuthatch, 11; House Wren, 3 (C.E.S.); Winter Wren, 2; Carolina Wren, 46; Long-billed Marsh Wren, 4; Short-billed Marsh Wren, 10; Mockingbird, 17; Catbird, 16; Brown Thrasher, 1; Robin, 85; Hermit Thrush, 12; Eastern Bluebird, 24; Golden-crowned Kinglet, 25; Ruby-crowned Kinglet, 15; Am. Pipit, 135; Starling, 59; Cape May Warbler, 1 (with Palm Warblers - K.L., F.R.S., C.E.S.); Myrtle Warbler, 627; Pine Warbler, 2; Palm Warbler (Western), 3; Yellow-throat, 11; English Sparrow, 44; Eastern Meadowlark, 46; Red-wing, 207; Bost-tailed Grackle, 24; Cardinal, 39; Purple Finch, 2; Am. Goldfinch, 93; Eastern Towhee, 31; Savannah Sparrow, 60; Sharp-tailed Sparrow, 3; Slate-colored Junco, 32; Field Sparrow, 35; White-throated Sparrow. 146; Fox Sparrow, 3; Swemp Sparrow, 182; Song Sparrow, 164. Total, 98 species; about 30,540 individuals. - P. Fuller, J. H. Grey, K. Lawless, Mike Michell, Mr. and Mrs. Jack Perkins, Mrs. A. C. Reed, F. R. Scott, C. E. Stevens.

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Richmond, Va. (same area as in 5 preceding years, Richmond east to Curles Neck, but with the addition of Meadowville and other adjacent areas on the south side of the James River; open farmland 38%, pine woodlands 10%, deciduous woodlands 17%, residential districts 3%, maple-gum swemp 10%, marshes and river shore 16%, brushy fields 6%). - Dec. 27; 6:30 a.m. to 6 p.m. Fair; temp. 57°-69°; wind S veering to W, 4-10 m.p.h.; ground bare; water open. Three observers in two parties. Total hours, 18 (on foot); total miles, 70 (55 by car, 15 on foot). Common Loon, 1; Pied-billed Grebe, 17; Great Blue Heron, 3; Canada Goose, 4498 (4150 est., 348); Snow Goose, 2; Blue Goose, 3 (2 ad., 1 im., present in area since Nov. 14 - F.R.S.); Mollard, 122; Black Duck, 264 (250 est., 14); Baldpate, 32; Pintail 22; Shoveller, 1; Wood Duck, 2; Ring-necked Duck, 104; Lesser Scaup Duck, 3; Ruddy Duck, 2; Hoodad Merganser, 6; Am. Merganser, 6; Turkey Vulture, 9; Black Vulture, 38; Red-tailed Hawk, 1; Red-

shouldered Hawk, 2; Bald Eagle, 8; Sperrow Hawk, 6; Bob-white, 13; Am. Coot, 122; Killdeer, 25; Woodcock, 1; Wilson's Snipe, 35; Herring Gull, 5; Ring-billed Gull, 251; Mourning Dove, 1; Belted Kingfisher, 2; Yellow-shafted Flicker, 19; Pileated Woodpecker, 4; Redbellied Woodpecker, 16; Yellowpbellied Sepsucker, 2; Hairy Woodpecker, 1; Downy Woodpecker, 22; Eastern Phoebe, 3; Horned Lark (Prairie), 12; Blue Jay, 9; Am. Crow, 117; Carolina Chickadee, 48; Tufted Titmouse, 25; White-breasted Nuthetch, 7; Brown Creeper, 9; Winter Wren, 3; Carolina Wren, 46; Mockingbird, 25; Robin, 5; Hermit Thrush, 3; Eastern Bluebird, 56; Golden-crowned Kinglet, 37; Ruby-crowned Kinglet, 12; Am. Pipit, 62; Cedar Waxwing, 2; Loggerhead Shrike, 5; Starling, 220 (100 est., 120); Myrtle Worbler, 32; English Sparrow, 36; Eastern Meadowlark, 48; Red-wing, 314 (300 est., 14); Brown-headed Cowbird, 150 (est.); Cardinal, 75; Purple Finch, 29; Am. Goldfinch, 67; Eastern Towhee, 24; Savannah Sparrow, 3; Slate-colored Junco, 177; Field Sparrow, 86; White-throated Sparrow, 375; Fox Sparrow, 2; Swamp Sparrow, 12; Song Sparrow, 99. Total, 74 species; about 7906 individuals. (Seen one mile outside of area in Charles City Co. by Lawless and Stevens: Pine Warbler, 1; Palm Warbler (Western), 1). - K. Lawless, F. R. Scott, C. E. Stevens.

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Yorktown, Va. (Newport News Reservoir, Harwood's Mill Reservoir. Colonial Battlefield Park including Wormly Lake and waterfront of Yorktown, York River shore from Yorktown northwest to Felgeters Creek, lower part of Back Creek and the Seaford Peninsula; open farmland 10%, pine woodland 22%, deciduous woodland 16%, brushy fields 5%, marshes and open water 47%). - Jan. 21; 7:30 a.m. to 4 p.m. Clear; temp. 240-460; wind NW to SW, 2-8 m.p.h.; ground bare; water open. Two observers in two parties most of day. Total hours, 13 (3 in car, 10 on foot); total miles, 88 (80 by car. 8 on foot). Common Loon, 20; Horned Grebe, 170; Pied-billed Grebe, 19; Great Blue Heron, 10; Canada Goose, 40; Black Duck, 12; Baldpate, 10; Pintail, 225; Redhead, 22; Ring-necked Duck, 92; Canvas-back, 21; Scaup (sp.), 323; Am. Golden-eye, 157; Bufflehead, 189; Surf Scoter, 49; Am. Scoter, 53; Ruddy Duck, 766; Am. Merganser, 55; Red-breasted Merganser, 247; Turkey Vulture, 11; Bald Eagle, 11; Marsh Hawk, 1; Sparrow Hawk, 2; Bob-white, 8; Killdeer, 45; Wilson's Snipe, 2; Least Sandpiper, 1; Red-backed Sandpiper, 37; Herring Gull, 41; Ring-billed Gull, 333; Mourning Dove, 70; Barred Owl, 1; Belted Kingfisher, 4; Yellow-shafted Flicker, 3; Red-bellied Woodpecker, 9; Yellow-bellied Sapsucker, 1; Downy Woodpacker, 10; Eastern Phoebe, 3; Am. Crow, 84; Carolina Wren, 17; Mockingbird, 2; Brown Thrasher, 1; Robin, 1; Hermit Thrush, 6; Eastern Bluebird, 68; Golden-crowned Kinglet, 25; Rubycrowned Kinglet, 2; Am. Pipit, 32; Cedar Waxwing, 6; Starling, 36; Myrtle Werbler, 306; Pine Werbler, 2; English Sparrow, 9; Eastern Meadowlark, 24; Red-wing, 193; Cardinal, 13; Purple Finch, 2; Am. Goldfinch, 35; Eastern Towhee, 20; Savennah Sparrow, 22; Sharptailed Sparrow, 2; Slate-colored Junco, 97; Field Sparrow, 49;

White-throated Sparrow, 59; Fox Sparrow, 1; Swamp Sparrow, 2; Song Sparrow, 112. Total, 75 species; about 4375 individuals. The movements of small birds were quite restricted, probably as a result of clear and calm weather, hence the low counts on many species such as the Cardinal and Fox Sparrow. Had the participants been able to take this count during the prescribed period three weeks earlier, large flocks of several hundred Baldpate, Redhead, and Canvas-back would have been recorded. Paradoxically, the number of Horned Grebes would probably have been smaller. - J. H. Grey, F. R. Scott.

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Mount Vernon, Va. (George Washington's home, Belvoir peninsula and Lebanon, including Dogue Inlet, Gunston Cove, Pohick and Accotink Bays; water 30%, bottomland woods 30%, upland woods 20% (pine, 1 deciduous), old fields 10%, farmland 10%). - Jan. 1; 6:30 a.m. to 5:30 p.m. Partly cloudy; temp. 33 -490; no wind; ground bare and unfrozen; all water ice-free, river at low tide at 1:13 p.m. Seven observers in two parties. Total hours, 202; total miles 95 (70 by car, 25 on foot). Great Blue Heron, 3; Mallard, 1; Black Duck, 421; Am. Merganser, 9; Turkey Vulture, 9; Sharp-shinned Hawk, 1; Cooper's Hawk, 1; Red-tailed Hawk, 10; Red-shouldered Hawk, 6; Bald Eagle, 21; Marsh Hawk, 4; Sparrow Hawk, 7; Bob-white, 30 (2 coveys); Killdeer, 53; Herring Gull, 46; Ring-billed Gull, 71; Mourning Dove, 18; Kingfisher, 1; Flicker, 7; Pileated woodpecker, 6; Red-bellied Woodpecker, 17; Yellow-bellied Sapsucker, 1; Hairy Woodpecker, 11; Downy Woodpecker, 26; Horned Lark (Prairie), 4; Blue Jey, 28; Crow, 106, Fish Crow, 3; Carolina Chickadee, 82; Titmouse, 45; White-breasted Nuthatch, 30; Red-breasted Nuthatch, 7; Brown Creeper, 6; Winter Wren, 4; Carolina Wren, 26; Mockingbird, 21; Robin, 12; Hermit Thrush, 4; Bluebird, 13; Golden-crowned Kinglet, 42; Ruby-crowned Kinglet, 2; Cedar Waxwing, 8; Migrant Shrike, 3; Starling, 205; Myrtle Warbler, 3; English Sparrow, 137; Meadowlark, 43; Red-wing, 1747 (1600 est., 147); Rusty Blackbird, 42; Cowbird, 17; Cardinal, 68; Purple Finch. 10; Goldfinch, 69; Towhee, 1; Slate-colored Junco, 359; Tree Sparrow, 28; Field Sparrow, 60; White-throated Sparrow, 146; Fox Sparrow, 1; Swamp Sparrow, 2; Song Sparrow, 38. Total, 61 species; about 4203 individuals. - J. M. Abbott, Irston R. Barnes, J. D. Biggs, Enoch Johnson, Catherine Keeley, T. L. Zapt, Lorina Wendt.

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Fort Belvoir, Va. (Same area as in former years; water front 20%, open farmland 30%, deciduous woodland 30%, pine groves 15%, cattail marsh 5%). - Dec. 31; 7:00 a.m. to 4:40 p.m. Clear; temp. 33°-45°; no wind; ground bare with surface frost; all water ice free, river at low tide at 12:33 p.m. Four observers together. Total hours, 9½; total miles, 29 (25 by car, 4 on foot). Great Blue Heron, 1; Mallard, 2; Black Duck, 204; Scaup (sp.), 2; Bufflehead, 4; Am. Merganser, 29; Turkey Vulture, 12; Red-tailed Hawk, 7; Red-shouldered Hawk, 1; Bald Eagle, 17; Marsh Hawk, 1; Sparrow Hawk, 1; Bob-white, 8;

Killdeer, 23; Herring Gull, 60; Ring-billed Gull, 84; Mourning Dove, 5; Barred Owl, 1; Kingfisher, 2; Flicker, 3; Pileated Woodpecker, 2; Red-bellied Woodpecker, 6; Hairy Woodpecker, 1; Downy Woodpecker, 12; Horned Lark (Prairie), 11; Blue Jay, 10; Crow, 114; Fish Crow, 1; Carolina Chickadee, 27; Tufted Titmouse, 11; White-breasted Nuthatch, 9; Red-breasted Nuthatch, 1; Brown Creeper, 2; Winter Wren, 2; Carolina Wren, 10; Mockingbird, 8; Robin, 1; Bluebird, 3; Golden-crowned Kinglet, 1; Starling, 60; Myrtle Warbler, 1; English Sperrow 56; Meadowlark, 66; Red-wing, 90; Rusty Blackbird, 35; Cardinal, 15; Pine Siskin, 4; Goldfinch, 30; Towhee, 1; Slate-colored Junco, 125; Tree Sparrow, 15; White-throated Sparrow, 9; Field Sparrow, 17; Swamp Sparrow, 1; Song Sparrow, 17. Total, 55 species; 1241 individuals. - J. M. Abbott, Frances E. Abbott, B. O. Bird, G. H. Sigel.

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Charlottesville, Va. (Albemarle Lake, Henley's Lake, city reservoir, Thraves Pond, Bellair Pond, Whitehall, Farmington, 8 miles along Rivanna and South Fork Rivanna Rivers from Burnt Mills to town; farmland 35%, lakes and ponds 25%, river-bottom 25%, deciduous woods 10%, pine woods 5%). - Dec. 30; 6:45 a.m. to 5:15 p.m. Fair; temp. 230-420; wind negligible. Three observers in 3 parties in a.m. and 2 parties in p.m. Total hours, 28; total miles, 77 (54 by car, 23 afoot). Great Blue Heron, 1; Mallard, 58; Black Duck, 1; Lesser Scaup Duck, 1; Hooded Merganser, 3; Am. Merganser, 2; Turkey Vulture, 76; Black Vulture, 1; Cooper's Hawk, 1; Red-tailed Hawk, 5; Sparrow Hawk, 4; Bob-white, 19 (2 coveys); Killdeer, 26; Wilson's Snipe, 2; Mourning Dove, 56; Belted Kingfisher, 5; Yellow-shafted Flicker, 4; Pileated Woodpecker, 5; Red-bellied Woodpecker, 7; Redheaded Woodpecker, 1; Yellow-bellied Sapsucker, 1; Hairy Woodpecker, 6; Downy Woodpecker, 19; Phoebe, 2; Prairie Horned Lark, 43; Blue Jay, 8; Am. Crow, 498; Caroline Chickadee, 74; Tufted Titmouse, 30; White-breasted Nuthatch, 12; Red-breasted Nuthatch, 9; Brown Creeper, 1; Winter Wren, 7; Carolina Wren, 29; Mockingbird, 21; Robin, 4; Hermit Thrush, 4; Bluebird, 85; Golden-crowned Kinglet, 32; Ruby-crowned Kinglet, 6; Am. Pipit, 40; Loggerhead Shrike, 7; Starling, 307; English Sparrow, 14; Meadowlark, 46; Red-wing, 226; Rusty Blackbird, 45; Brown-headed Cowbird, 110; Cardinal, 189; Purple Finch, 41; Pine Siskin, 1; Am. Goldfinch, 95; Slate-colored Junco, 477; Tree Sparrow, 23; Field Sparrow, 257; White-crowned Sparrow, 10 (first time this species has been recorded here on a Christmas Bird Count); White-throated Sparrow, 170; Fox Sparrow, 21; Swamp Sparrow, 11; Song Sparrow, 227. Total, 60 species; about 3486 individuals. - Kenneth Lawless, Fred R. Scott, Charles E. Stevens, Jr.

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Warren (Albemarle Co.), Va. (James River from Hetton to Goosby Island and area about Warren, Totier Creek, and Keene; river-bottom 40%, open fields 30%, deciduous woods 20%, pine woods 10%). - Dec. 26; 6 a.m. to 4 p.m. Cloudy in a.m. with fog and drizzle in p.m.; temp. 46°-50°. Two observers together. Total hours, 10; total miles, 27 (15 by car, 12 afoot). Turkey Vulture, 8; Red-tailed Hawk, 2;

Mersh Hawk, 1; Sparrow Hawk, 1; Bob-white, 9; Mourning Dove, 229; Kingfisher, 1; Flicker, 3; Pileated Woodpecker, 2; Red-bellied Woodpecker, 5; Hairy Woodpecker, 5; Downy Woodpecker, 12; Phoebe, 1; Prairie Horned Lark, 2; Am. Crow, 118; Carolina Chickadee, 31; Tufted Titmouse, 9; White-breasted Nuthatch, 7; Red-breasted Nutharch, 2; Brown Creeper, 5; Winter Wren, 5; Carolina Wren, 16; Shortbilled Marsh Wren, 1 (seen and heard in wet meadow near Hatton; first winter record for area); Mockingbird, 6; Bluebird, 10; Golden-crowned Kinglet, 15; Ruby-crowned Kinglet, 1; Am. Pipit, 1; Loggerhead Shrike, 4; Starling, 36; English Sparrow, 41; Meadowlark, 27; Red-wing, 1; Cowbird, 51; Cardinal, 39; Purple Finch, 98; Am. Goldfinch, 52; Slate-colored Junco, 201; Tree Sparrow, 19; Field Sparrow, 107; White-throated Sparrow, 19; Fox Sparrow, 6; Swamp Sparrow, 6; Song Sparrow, 81. Total, 44 species; 1296 individuals. - Gordon Lewis, Charles E. Stevens, Jr.

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Sweet Briar, Va. (Sweet Briar College property and adjacent areas including San Angelo Lake, radius of 2 miles; open fields 20%, mature deciduous woodland 30%, brushy creek bottoms, 25%, lake edges 10%. schrubby hillsides 10%, about farm buildings 5%). - Dec. 25; 7:30 a.m. to 10:30 a.m. and 1:00 p.m. to 5:00 p.m. Fair in morning, 180-30°; overcast in afternoon, 34°-36°; wind 1-3 m.p.h. Two observers together most of day. Total hours, 12; total miles, six on foot. Am. Merganser, 2 (both female); Turkey Vulture, 5; Mourning Dove, 2; Kingfisher, 1; Flicker, 4; Pileated Woodpecker, 1; Hed-bellied Woodpecker, 2; Yellow-bellied Sapsucker, 1; Hairy Woodpecker, 2; Downy Woodpecker, 7; Phoebe, 1; Blue Jay, 7; Crow, 11; Carolina Chickadee. 12; Tufted Titmouse, 6; White-breasted Nuthatch, 6; Red-breasted Nuthatch, 5; Brown Creeper, 2; Carolina Wren, 8; Mockingbird, 2; Bluebird, 1; Golden-crowned Kinglet, 6; Ruby-crowned Kinglet, 2; Shrike, 1; Sterling, 60 (est.); Myrtle Warbler, 20; English Sparrow, 30; Cardinal, 40; Purple Finch, 4; Goldfinch, 15; Slate-colored Junco, 36; Tree Sparrow, 2; Field Sparrow, 6; White-crowned Sparrow, 20 (singing); White-throated Aparrow, 25; Song Sparrow, 16. Total, 35 species; about 371 individuals. (Seen in area Dec. 26: Pied-billed Grebe, 1; Cooper's Hawk, 1; Dec. 30: Wilson's Snipe, 1; Meadowlark, 1). - Ernest Edwards, Gertrude Prior, Anne Wheaton.

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Lynchburs, Va. (Timber Lake area, College Lake area, Airport, Graves' Mill and Tomahowk Swamp area, Rivermont Park; fields 28%, open woods 63%, lakes and marshes 9%). - Dec. 29; 7:00 a.m. to 5:00 p.m. Clear all day; temp. 32°-58°; wind, calm in a.m., W in p.m., 0-10 m.p.h.; ground bare, lakes and streams open. Seven observers, 2 parties in a.m., one party in p.m. Total hours, 15; total miles, 39 (15 on foot, 24 in car). Pied-billed Grebe, 1; Turkey Vulture, 25; Black Vulture, 3; Cooper's Howk, 3; Red-tailed Howk, 1; Wilson's Snipe, 1; Hock Dove, 7; Mourning Dove, 16; Flicker, 3; Pileated Woodpecker, 2; Red-bellied woodpecker, 1; Hairy Woodpecker, 1;

Downy Woodpecker, 13; Phoebe, 1; Prairie Horned Lark, 18; Blue Jay, 9; Crow, 243 (partly est.); Chickadee, 40; Titmouse, 17; White-breasted Nuthatch, 19; Red-breasted Nuthatch, 3; Winter Wren, 1; Carolina Wren, 14; Mockingbird, 7; Hermit Thrush, 2; Bluebird, 23; Golden-crowned Kinglet, 24; Ruby-crowned Kinglet, 26; Starling, 96; Myrtle Warbler, 3; English Sparrow, 15; Cardinal, 60; Purple Finch, 4; Goldfinch, 10; Junco, 249; Tree Sparrow, 112; Field Sparrow, 49; White-throated Sparrow, 34; Fox Sparrow, 4; Swamp Sparrow, 2; Song Sparrow, 39. Total, 42 species; 1206 individuals. - Jane Freer, Ruskin S. Freer, Bob Giles, Jr., Dr. Samuel B. Guss (1 hour in a.m.), Bill Keeton, M. B. Tillotson, Mrs. James W. Wiltshire, Jr.

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Shenandoah National Park, Va. (Big Meadows, Fishers Gap, Hawksbill, Limberlost to foot of White Oak Canyon, Skyland, Old Rag Fire Road from Old Rag Post Office to Skyline Drive; altitude 1200-4049 ft.; deciduous woods 65%, abandoned fields 20%, hemlock groves 10%, birch scrub 3%, pine woods 2%). - Dec. 28; 7 a.m. to 5 p.m. Fair; temp. 240-420; wind NNW, 5-15 m.p.h. on ridge. Two observers in 2 perties. Total hours, 16; total miles, 48 (30 by car, 18 afoot). Turkey Vulture, 5; Red-tailed Hawk, 2; Marsh Hawk, 1; Ruffed Grouse, 6; Pileated Woodpecker, 3; Heiry Woodpecker, 3; Downy Woodpecker, 8; Common Raven, 3; Am. Crow, 11; Corolina Chickadee, 38; Tufted Titmouse, 15; White-breasted Muthatch, 3; Red-breasted Muthatch, 1; Brown Creeper, 6; Winter Wren, 4; Golden-crowned Kinglet, 11; Starling, 17; Cardinal, 12; Purple Finch, 1; Goldfinch, 7; Slate-colored Junco, 99 (both Carolina and typical Slate-colored seen); Tree Sparrow. 11: White-throated Sparrow, 9; Fox Sparrow, 1; Song Sparrow, 2. Total, 25 species (1 additional subspecies); 276 individuals. -Fred R. Scott, Charles E. Stevens, Jr.

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Harrisonburg, Va. (Waterman Wood to Tide Spring, a total distance of 12 miles including oak-hickory-cedar-pine woodlot 60%, oak-hickory woodlot 10%, a small village bordering school campus 10%, cedar-pine wasteland 10%, pasture field and fence rows 10%). Small pond in oakhickory woodlot. Ground wet and muddy; small pools of still water had a thin covering of ice along margins. - Dec. 26; 8:30 a.m. to 2:15 p.m. At beginning sky was entirely hidden by heavy clouds; temp. 42°; wind only slight breeze from SW; noon, heavy clouds with mist; temp. 46°; calm. At close light rain and mist; temp. 49°; calm. Light intermittent showers began at 10:50 a.m.; from 12:30 to close a light rain. Two observers working together within calling distance. Total hours, $5\frac{3}{4}$ on foot; total miles, 8 on foot. Sparrow Hawk, 1; Bob-white, 14 (one covey); Downy Woodpecker, 2; Blue Jay, 2; Crow, 42; Cerolina Chickadee, 11; Tufted Titmouse, 12; Whitebreasted Nuthatch, 3; Carolina Wren, 5; Mockingbird, 14; Goldencrowned Kinglet, 2; Sterling, 85; Polm Worbler, 2; English Sparrow, 149; Cardinal, 37; Goldfinch, 3; Slate-colored Junco, 129; Tree Sparrow, 49; White-throated Sparrow, 10; Song Sparrow, 2. Total, 20 species; 574 individuals. - D. Ralph Hostotter, Daniel B. Suter.

Fairfield (Rockbridge County), Va. Village of Fairfield, north and east to South River, along river to mouth of Irish Creek, 8 miles from Fairfield and return by different roads; village yards and gardens 10%, open fields 30%, hardwood forests 30%, stream banks 30%. Same territory as covered for last three years, except owners of Cherry Grove farm made the count on the farm themselves. Dec. 29; 7:00 a.m. to 5:00 p.m. Clear; temp. 260-420; no wind, ground frozen in morning, light skim of ice on still water. Total miles, 30 (9 on foot, 21 by car, the car used to shift from one locality to others). Two parties varying from two to five at a time. Turkey Vulture, 11; Black Vulture, 8; (approximately 100 Vultures seen roosting in trees late in afternoon across a stream which made it impossible to identify definitely); Marsh Hawk, 1; Sparrow Hawk, 1; Bob-white, 30 (ost.), (3 coveys); Killdeer, 6; Rock Dove (in wild state on Cherry Grove Farm) 26; Yellow-Shafted Flicker, 1; Red-bellied Woodpecker, 3; Heiry Woodpecker, 1; Downy Woodpecker, 5; Phoebe, 1; Blue Jay, 3; Crow, 66; Black-capped Chickadee, 2; Carolina Chickadee, 14; Tufted Titmouse, 11; White-breasted Nuthatch, 6: Red-breasted Nuthatch, 1; Brown Creeper, 1; Winter Wren, 2; Carolina Wren, 4; Mockingbird, 9; Robin, 1; Eastern Bluebird, 4; Ruby-crowned Kinglet, 3; Loggerhead Shrike, 8; Starling, 58; Myrtle Warbler, 3; English Sparrow, 35; Red-wing, 1; Rusty Blackbird, 4; Cowbird, 3; (flock of blackbirds flushed from barnyard estimated at 50 but unable to identify definitely, probably contained Redwings, Cowbirds and Rusty Blackbirds); Cardinal, 29; Purple Finch, 1; Goldfinch, 11; Slate-colored Junco, 34; Tree Sparrow, 19; Field Sparrow, 1; White-throated Sparrow, 2; Song Sparrow, 7. Total number of species, 41. Individual birds identified, 426. - Rev. & Mrs. W. B. Clemmons, Anne, Martha and Bill Clemmons, Jr., Mary Catherine Horne, Mrs. Janet Alexander, Miss Josephine Fultz, Miss Draper Fultz.

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Lexington, Va. (Same area as last year, but more closely worked, and with addition of lower slopes of a mountain: City, 10%, oak woods 30%, cedar woods 25%, open fields 25%, scrub 10%). - Dec. 28; 7:30 a.m. to 5:30 p.m. with one hour out at noon. Clear; temp. 40° at start and finish; wind NW, 5-15 m.p.h.; ground bare, not frozen; water open. Fourteen observers in 3 parties. Total hours, 27 (22 on foot, 5 in cers); total miles, 84 (23 on foot, 61 by car). Turkey Vulture, 50; Black Vulture, 23; Sharp-shinned Hawk, 2; Cooper's Hawk, 3; Red-tailed Hawk, 4; Red-shouldered Hawk, 1; Marsh Hawk, 2; Sparrow Hawk, 7; Bob-white, 8 (pair and covey); Killdeer, 9; Wilson's Snipe, 4; Rock Dove, 72; Barn Owl, 1 (heard from hollow tree after dark, (J.J.M.); Screech Owl, 2; Short-eared Owl, 2; Belted Kingfisher, 2; Flicker, 5; Pileated Woodpecker, 6; Red-bellied Woodpecker, 2; Yellow-bellied Sapsucker, 1; Downy Woodpecker, 12; Phoebe, 5; Horned Lark, 9; Blue Jay, 13; Raven, 2; Crow, 86; Appalachian Chickadee, 1 (J.J.M.); Corolina Chickadee, 73; Tufted Titrouse, 37; White-breasted Nuthatch, 12; Brown Creeper, 2; Winter Wren, 6; Carolina Wron, 26; Mockingbird, 25; Robin, 1; Hormit Thoush, 1; Bluebird, 24; Golden-crowned Kinglet, 7; Ruby-crowned Kinglet, 1; Migrent Shrike, 6; Starling, 356; English Sparrow, 146; Meadowlark, 2; Cardinal, 108; Purple Finch, 5; Goldfinch, 10; Junco, 310; Tree Sparew, 86; Field Sparrow, 40; White-throated Sparrow, 96; Song Sparrow, 26. Total, 51 species; 1740 individuals. - R. P. Carroll, Alice Carroll, Robert Carroll, Jr., Gordon G. Heiner, Michael Junkin, Jack Lackmann, Joe Magee, Robert Moses, Mrs. J. J. Murray, J. J. Murray, Jemes Murray, Jr., Robert Paxton, Charles Ritchey, F. M. Yellott.

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Roanoke, Va. (Murray's Pond, Carvin Cove, Bennett's Spring and intermediate territory). Dec. 31; 7:30 a.m. to 3:00 p.m. Clear; temp. 25° at start, 35° at finish. Seven observers in 2 parties; 25 miles foot and car. Pied-billed Grebe, 2; Mallard, 2; Black Duck, 10; Ruddy Duck, 3; Turkey Vulture, 27; Black Vulture, 4; Marsh Hawk, 5; Sparrow Hawk, 2; Bob-white, 27 (2 coveys); Killdeer, 20; Mourning Dove, 6; Belted Kingfisher, 2; Downy Woodpecker, 8; Phoebe, 3; Horned Lark, 200 (est.); Blue Jay, 13; Crow, 176; Chickadee, 26; Tufted Titmouse, 5; White-breasted Nuthatch, 3; Winter Wren, 1; Carolina Wren, 6; Mockingbird, 11; Robin, 1; Hermit Thrush, 5; Bluebird, 17; Golden-crowned Kinglet, 4; Migrant Shrike, 2; Starling, 2500 (est.); English Sparrow, 115; Meadowlark, 11; Rusty Blackbird, 30; Cardinal, 35; Goldfineh, 60; Savannah Sparrow, 5; Junco, 120; Tree Sparrow, 43; Field Sparrow, 50; White-crowned Sparrow, 26; White-throated Sparrow, 55; Song Sparrow, 35. (Mr. & Mrs. Ernest Adkins report at their summer home on the 31st. Great Horned Owl, 1; Screech Owl, 1; Pileated Woodpecker, 1). (Mrs. N. R. Lehmann reports several species observed at her feeding station on the 31st. and adds following species not listed in the above: Redbellied Woodpecker, 1; Hairy Woodpecker, 2; Purple Finch, 8). Total species, 47; 3689 individuals. - Frank Robertson, L. E. Hawkins. Grace Smyth, Mrs. J. E. Comer, Sellie McLain, Mr. & Mrs. A. O. English.

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Blacksburg, Vn. (V.P.I. campus and farm, Strouble's Creek to New River, Brush Mt. and Tom's Creek to New River, along New River from Pepper's Ferry Bridge to Goodwin's Ferry except through the Redford Ordinance Works grounds; woods 37%, farmland 37%, riverbottom 26%). - Dec. 28; 6:30 a.m. to 5:30 p.m. Partly cloudy; temp. 320-430; wind N shifting to W, 10-15 m.p.h. on mountain tops. calm in valleys until noon, then intermittent breeze, 4-6 m.p.h.; ground bare. Ten observers in 5 parties. Total hours 50.5 (48 on foot, 2.5 in cars used by 3 parties in shifting from place to place and in picking up two other parties at end of day). Total miles, 128 (58 on foot, 70 by car). Mallard, 99; Black Duck, 168; Gadwell, 14; Baldpate, 30; Pintail, 7; Green-winged Teal, 1; Redhead, 1; Ring-necked duck, 14; Lesser Scrup, 4; Am. Golden-eye, 41; Bufflehead, 21; Hooded Merganser, 32; Turkey Vulture, 80; Black Vulture, 19; Cooper's Hawk, 3; Red-tailed Hawk, 3; Red-shouldered Hawk, 1; Marsh Hawk, 1; Sperrow Hawk, 15; Ruffed Grouse, 1; Bob-white, 16

(2 coveys); coot, 1; Killdeer, 12; Wilson's Snipe, 1; Herring Gull, 1; Rock Dove (feril), 59; Mourning Dove, 97; Screech Owl, 1; Great Horned Owl, 1; Belted Kingfisher, 5; Flicker, 5; Pileated Woodpecker, 3; Red-bellied Woodpecker, 4; Red-headed Woodpecker, 5; Yellowbellied Sapsucker, 2; Hairy Woodpecker, 9; Downy Woodpecker, 30; Phoebe, 5; Prairie Horned Lark, 175; Blue Jey, 8; Raven, 2; Crow, 953 (part est.); Chickadee (both Black-capped and Carolina present), 127: Tufted Titmouse, 72: White-breasted Nuthatch, 17: Red-breasted Nuthatch, 13; Brown Creeper, 4; Winter Wren, 20; Carolina Wren, 48; Mockingbird, 12; Robin, I; Hermit Thrush, 3; Bluebird, 31; Goldencrowned Kinglet, 70; Ruby-crowned Kinglet, 1; Migrant Shrike, 6; Starling, 482; Myrtle Warbler, 2; English Sparrow, 96; Meadowlark, 17; Red-wing, 2; Cardinal, 177; Goldfinch, 51; Purple Finch, 32; Pine Siskin, 1; Towhee, 2; Savennah Sparrow, 7; Slate-colored Junco. 223; Tree Sparrow, 56; Field Sparrow, 169; White-crowned Sparrow, 91; White-throated Sparrow, 39; Swamp Sparrow, 2; Song Sparrow, 170. Total, 74 species; about 3994 individuals. - C. O. Handley, C. O. Handley, Jr., John M. Handley, Robert J. Watson, J. W. Murray, Mr. & Mrs. Ellison Smyth, G. M. Shear, A. O. English, Sally E. McLain.

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CHRISTMAS BIRD COUNT STATISTICS - BLACKSBURG, VA. By Charles O. Handley, Jr.

This year's total of 74 species is the largest ever compiled at Blacksburg, 73 being the previous maximum. Also, the number of observers and parties exceeds all other counts except that of 1940. This fact may in some instances account for larger than usual numbers of individuals of some species of birds being seen this Christmas. In the following compilation it may be assumed that any species not mentioned appeared in normal numbers on the 1949 count.

First appearance on count: Herring Gull

First appearance in several years: Pine Siskin (first since 1941); Raven (first since 1940); Lesser Scaup (first since 1945); Redhead (first since 1945).

More recorded than ever before:

_		-	AND THE PERSON NAMED IN COLUMN						
	Gedwall	(14)	exceeds	previous	maximum	of	4	in	1948)
	Baldpate	(30	11	**	11	**	29	in	1948)
	Ring-necked Duck	(14	**	11	***	**	6	in	1939)
	Golden-eye	(41	*1	**	**	**	39	in	1942)
	Hooded Merganser	(32	**	"	11				1946)
	Black Vulture	(19	**	11	**				1940)
	Sparrow Hawk	(15	**	**	**				1947)
	Pigeon	(59	**	**	"				1940)
	Downy Woodpecker	(30	**	**	**				1946)
	Common Crow	(953	3 "	**	**				1937)
	Carolina Wren	(48	11	**	**				1946)
	Migrant Shrike	(6	**	**	**	**			1948)
	Cardinal	(177	7 11	11	11	117			1939)
	Savannah Sparrow	(7	17	**	**	**	3		1942)
								(Table 1)	,

More					2011	/		п.		• 77 FT 0 •	111
	Pintail	(7 is	most	since		(max.				*37 & *	44)
	Turkey Vulture	(80	11	**	1940)	("	**	154	in	1938)	
	Mourning Dove	(97	**	11	1943)	("	**	207	in	1943)	
	Hairy Woodpecker	(9	11	11	1942)	("	**	12	in	1942)	
	Phoebe	(5	**	**	1938)	("	**	5	in	1938)	
	Horned Lark	(175	**	**	1942)	("	**	380	in	1942)	
	Winter Wren	(20	17	**	1946)	(**	11	27	in	1941)	
	Bluebird	(31	11	**	1942)	("	11	79	in	1942)	
	Purple Finch	(32	**	11	1938)	("	**	42	in	1938)	
	Field Sparrow	(169	**	**	1943)	(11	**	188	in	1943)	
	White-thr. Sparrow	(59	**	**	1941)	(**	11	63	in	1941)	
	Song Sparrow	(170	# €	**	1945)	("	**	284	in	1941)	

Less recorded than ever before:

Bob-white (16 is below previous minimum of 19 in 1945) (maximum is 97 in 1942)

Wilson's Snipe (1 is below previous minimum of 5 in '36, '37, '40) (maximum is 27 in 1941)

Tree Sparrow (56 is below previous minimum of 59 in 1947) (maximum is 282 in 1948)

Less recorded than usual:

Mallard	(99 is	least since	1945)	(max.	is 218	in 1948)
Screech Owl	(1	**	1944)	("	7	in 1947)
Flicker	(5	**	1945)	("	22	in 1940)
Blue Jay	(8	**	1939)	(**	86	in 1936)
Brown Creeper	(4	**	1945)	("	15	in '47&'48)
Hermit Thrush	(3	"	1944)	("	11	in 1942)
English Sparrow	(96	**	1944)	("	300	in 1946)
Meadowlark	(17	tt ·	1946)	("	142	in 1945)
Goldfinch	(51	11	1944)	(**	296	in 1945)
Slate-col. Junco	(223	**	1944)	("	729	in 1948)

Usually recorded but completely missed this year:

Barred Owl

Rusty Blackbird

As almost half of the species on the list were more numerous than usual, as proven by this compilation, it seems paradoxical that the observers were almost one hundred per cent in agreement that birds were scarce. Evidently they were generally only hard to observe rather than actually scarce. Only 18 per cent proved to be scarcer than usual.



BULLETIN OF THE VIRGINIA SOCIETY OF ORNITHOLOGY

J. J. MURRAY, EDITOR LEXINGTON, VA.

AOL. XXI	March-April, 1950	Nos. 3	& 4
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PLANS FOR THE 1950 ANNUAL MEETING Harrisonburg, Virginia - May 5 & 6

The 1950 Annual Meeting will be held at Harrisonburg on Friday and Saturday, May 5 and 6. Mr. Max Carpenter, Route 1, Dayton, Virginia, will have charge of the program. Members planning to present papers are asked to send him the title, time required for presentation, and information as to whether a moving picture or slide machine is needed. Dr. D. Ralph Hostetter is planning for the Saturday field trip, with the cooperation of the officials of the George Washington National Forest, headquarters of which are located in Harrisonburg.

Miss Evelyn Watkins, 218 Newman Avenue, Harrisonburg, is making the local arrangements with the assistance of Miss Wintie Heatwold. The afternoon and evening meetings will be held in the auditorium of the Main Street School, which is centrally located. The dinner will be served at the First Methodist Church, which is near the school building, at \$1.50 per plate. Lunch during the field trip will be served at a church located on the route taken.

The following places are available for over-night accomodations:

Kavanaugh Hotel, North Main Street

Single Room \$3.00 up, bath or shower Double Room \$3.75-\$4.50, without bath \$5.50-\$6.00, with bath

Warren Hotel, N. Court Square (smaller hotel)

Single \$2.00, without bath \$2.50-\$3.00, with bath Double \$3.00, without bath \$4.50-\$5.00, with bath

Pure Village Tourist Court, 5 miles south of Harrisonburg (can accomodate 50 if reservations are made a week or two ahead)

Single unit. double bed \$4.00

Twin bed units \$5.00 (Breakfast - 30¢ to \$1.00)

Unit, two double beds \$6.00

Two-room units \$6.00-\$12.00 (can accomodate from 4 to 12 people)

Kagey Tourist Court, 1 mile south of Harrisonburg (can accomodate

21 if reservations are made two weeks in advance)

1 person \$2.50 2 persons, double bed \$3.00 1 cottage, 2 twin beds \$3.00

Double cottage for 4 \$6.00 (can add 2 extra cots at \$1 ea.)

Twin Gables and Flora Park tourist courts listed, about 2 miles north of Harrisonburg, both recommended as modern and attractive and lovely places to stay, but prices not quoted.

Boxwood Inn, Mrs. R. H. Zirkle, 328 S. Mein (Phone 651)
Twin beds \$2.00 per person without bath

\$2.50 " " with bath

Two in a bed \$1.75 per person (Make reservations soon)

Homestead Inn, Mrs. E. L. Foley, 317 S. Main (Phone 1059)
Single \$2.00
Double \$3.00-\$4.00

Wise's Tourist Home, 622 S. Main (Phone 529)

Single rooms \$2.00-\$2.50

Double " \$3.50 for 2 people (Breakfast - 75¢)

4 single beds in 1 room \$6.00

(Can accomodate 24 if reservations are made early)

Horseshoe Lodge, Mrs. Robt. K. Cline, 272 E. Market (Phone 146R) \$1.50 per person (Can accomodate 12 guests if reservations are made ahead)

Stoneleigh Inn, 557 E. Market \$2.50 per person (Early reservation recommended)

Write early for reservations whether at a hotel, tourist court or tourist home, since Madison College May Day will be held May 6. Reservations may be at a premium if V.S.O. members wait too late to make them. Therefore write immediately and directly to the place of your choice for a reservation for May 5-6, 1950.

NOTES AND NEWS

Virginia's State Bird. The Cardinal is now the official State Bird for Virginia. This action was taken at the recent meeting of the General Assembly when, on January 25, 1950, the House passed and the Senate concurred in a resolution offered by Delegate C. W. Cleaton of Mecklenburg.

Recent Virginia Records. A Snowy Owl was caught alive in Loudon County, Virginia, opposite Seneca, Maryland, on January 2, 1950 by John H. McCabe. It was taken in a bow net set for peregrines, with a pigeon as bait. From the measurements of the living bird it appears to be a male, and the amount of spotting would indicate an immature bird. Another Snowy Owl, said to be larger and whiter, was seen at the same place and by the same person, on November 27, 1949. Both were so tame that they could be closely approached.

Dr. David Johnson and Mr. Norman Miller of the U. S. National Museum captured a Saw-whet Owl alive near Wakefield, Virginia, about Thanksgiving, 1949. It was in undergrowth beside the highway and had a broken wing, presumably from having been struck by a car.

In the National Museum collection there is a Snow Bunting, an adult female, from Nelson County, Virginia, dated February 8, 1895. It is from the Wirt Robinson collection.

Cuckoo Captured by a Hawk. On October 12 in a mixed-hardwood forest near Waverly a Red-shouldered Hawk was surprised, and in fleeing, dropped its prey which turned out to be a Black-billed Cuckoo. The victim died in several minutes from talon injuries in its side. This incident took place approximately 500 feet from a nesting tree used by Red-shouldered Hawks during the spring. Identification of the hawk was made at the time it was surprised. Measurements of the cuckoo were as follows: total length 11.0", bill .8", tarsus 1.0", tail 6.0", folded wing 5.5".

Charles C. Steirly, Waverly, Va.

A Correction. The following species were inadvertently left out of the Yorktown, Va. bird count which appeared on pages 6-7 of the January-February issue of The Raven: Carolina Chickadee, 40; Tufted Titmouse, 15; White-breasted Nuthatch, 1; Red-breasted Nuthatch, 6; Brown-headed Nuthatch, 7; Brown Creeper, 1; House Wren, 1 (J.H.G.); Winter Wren, 2.

Wilson Ornithological Club Annual Meeting. An unusual opportunity will be presented to Virginians when the Wilson Ornithological Club holds its annual meeting April 28-29 at Jackson's Mill, West Virginia, twenty miles south of Clarksburg. This will be the first meeting of a national ornithology group in our area since the 1943 meeting of the American Ornithologists' Union in Philadelphia.

An interesting feature of this meeting will be its informality; field and sports clothes will be suitable for all functions. Jackson's Mill is the site of a nationally known youth center, the West Virginia 4-H Camp. Accommodations are comfortable, most being of a dormitory type. Other units are suitable for family groups.

The host organization, the Brooks Bird Club, is anxious to have a good representation from this area. There will be a number of attractions, including a square dance and an exhibit of mountain handicraft articles. The program will include a symposium on Southern Appalachian avifauna, and there will be two interesting field trips on Sunday, April 30.

Meals and lodging from dinner Thursday evening through breakfast Sunday will amount to \$11.43, with lesser prices for shorter periods. For information and reservations contact, as soon as possible, Maurice Brooks, West Virginia University, Morgantown, W. Va. F. R. Scott, Hampden-Sydney, Va.

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BULLETIN OF THE VIRGINIA SOCIETY OF ORNITHOLOGY

J. J. MURRAY, EDITOR LEXINGTON, VA.

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Seventeenth Annual Meeting Harrisonburg, May 5 and 6, 1950 By Florence S. Hague

The luncheon meeting of the Executive Committee on May 5 was attended by Messrs. Eike, Carpenter, English, Handley, Hostetter, Miller and Murray; Mrs. Darden; Misses Hague, Hawkins and Prior; and Mr. and Mrs. Wiltshire. The Treasurer's report showed that 180 members had paid dues for 1950 and about 30 were delinquent; that the cost of publishing and mailing The Raven in 1949 was just about equal to the dues received. Had it not been for a small surplus from earlier years and for gifts, the expenses would have exceeded the funds. After discussion it was decided to recommend to the Society the raising of dues for 1951 from 50¢ to \$1.00 for Junior members; from \$1.00 to \$1.50 for members, and to publicize the \$2.50 sustaining membership, along with the suggestion that those who could should make their sustaining membership more than \$2.50. It was further voted that Mr. Miller should make a gift of \$10.00 to the lady who has helped him with typing letters. To assist in getting the dues paid more promptly, it was voted that The Raven for March-April should not be sent to those whose dues were unpaid. The prices for back issues of The Raven were fixed at: \$1.50 per volume, or 25¢ per issue for 1940 to date, except for special issues which are to be 50¢; \$3.00 per volume, or 50¢ per issue for years prior to 1940. Discussion about a Virginia Check List showed that plans and work for it are progressing. It was voted to affiliate with the Brooks Bird Club of West Virginia, the affiliation being without cost, and meaning that there would be reciprocal notices of Annual Meetings and of Field Trips.

The president, Mr. Eike, opened the afternoon session by introducing Mr. Bell, Supt. of Schools, and Mr. Swift, Principal of the Main Street School, in which the afternoon and evening programs were held. In the paper on "Water Birds of Rockingham County", Dr. Harry G. M. Jopson reported 54 species of water birds found in that area, which is over 100 miles from any sizable body of water. Marshy areas, streams and artificial lakes attract these birds, some of which are on their way to or from the Atlantic Flyway. Some unexpected species were Double-crested Cormorant, Golden-eye, Lesser Snow Goose (?), Golden Plover and Black Tern, the last one having been seen often since 1940.

In presenting "A Game Manager's View of Bird Populations", Dr. Henry Mosby mentioned the general methods of ascertaining populations: for waterfowl, counting the numbers in aerial photographs; for landbirds, counting all of a species in given strips and counting them at different times of the year. They had studied quail particularly in order to find normal populations and fluctuations. The quail population is greatest in the fall and lowest in the spring. As the number of days on which there is an inch or more of snow on the ground increases, the number of quail surviving decreases. The rate of decrease varies with food and cover supply and with climate. Observations on the results of the removal of one-third of the quail popula-

tion and of the results of loss by hunting indicate that winter loss or removal of one-fourth to one-third of the birds may not have an adverse effect on the population the following fall, but that a loss of 40% or more can definitely reduce the subsequent population.

Miss Gertrude Prior reported a flock, sometimes as many as 30 to 40, of White-crowned Sparrows seen frequently at Sweet Briar from the time of the Christmas census (1949) through April, and a few individuals up to May 5. They were frequently singing. The proportion of birds in mature plumage was greater in April than in December.

In "Biotic Zonation in the Southern Appalachians", Dr. J. J. Murray explained that for the past two decades the idea of definite life zones bounded by isothermal lines as set forth by Merriam in the past century has been questioned. While a few birds may be confined to the upper Austral, the Transition or Canadian zones, most birds listed for one of these zones are also found in an adjacent zone. This is possibly less true of birds of the Canadian zone because these are also chiefly of the spruce habitat or biome. However, as the spruce forests have been destroyed by lumbering, the more adaptable species have moved to the Transition zone. Other factors than temperature, such as moisture and hence plant growth, may influence the life of a region.

Mrs. Colgate W. Darden, Jr. played some of the Cornell bird song records and simultaneously had a slide of the particular songster shown. The records are marked so that she can locate the songs of different birds. By writing to Mrs. Darden one may borrow these records and slides for bird study groups. Fruit punch and cookies served by the Audubon Junior Club provided a pleasant and cooling break in the afternoon program at this time.

Dr. B. B. Reynolds has taken parasites from trapped birds, nestlings and from empty nests. The Arthropod forms are external parasites and are chiefly biting lice and mites. There are also some fleas, ticks and blow-fly larvae. Birds may be a means of disseminating some of these parasites, particularly ticks.

In "Further Ornithological Travels in Eastern Panama", Dr. Wetmore showed slides and told of a very recent collecting trip to a proviously unexplored region. Some of the familiar migrants which he saw there are: Turkey Vulture, Chimney Swift, Kingbird, Olivebacked Thrush, Swainson's Warbler, Bay-breasted Warbler, and Baltimore and Orchard Orioles. The showing of the film, "Operations Wildlife", which deals with Virginia animals, closed the afternoon program.

At the opening of the evening session, the Treasurer's report was presented and also the recommendation to raise the dues. It was voted to raise the dues in 1951 as noted in the minutes of the Executive Committee meeting.

Mr. Herbert G. Deignan, Assistant Curator of Birds in the U. S. National Museum, spoke on his experiences in "Bird Hunting in Thailand", telling something about the heterogeneous groups of peoples in that country, the extent of civilization, the climate and the difficulties of jungle travel. All life, including birds, is very abundant both as to species and numbers. Many of their birds are similar to ours, but they have some, such as parrots, which we do not have, and lack some of ours, such as sparrows.

After the luncheon following the Saturday field trip, Mr. Eike called on Mr. English for the report of the Nominating Committee. It was as follows:

President - Mr. James Eike
Vice-president - Mrs. Colgate Darden, Jr.
Secretary _ Dr. Florence Hague
Treasurer - Mr. W. Edwin Miller
For members of the Executive Committee to serve
until 1953 - Dr. Wm. B. McIlwaine, Jr., Petersburg
Mr. R. J. Watson, Blacksburg

There were no nominations from the floor and the slate was approved.

The invitation to have the next Annual Meeting in Danville was accepted. Suggestions for Field trips to Back Bay in August and in December were discussed and Charles E. Stevens, Jr. was appointed to cooperate with Mr. Jack Perkins at Back Bay Refuge in planning these trips.

Sweet Briar, Virginia

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V. S. O. FIELD TRIP HARRISONBURG - 1950 By Max Carpenter

The Field Trip on Saturday, May 6, got off to a good start at 7:00 a.m. from Harrisonburg, Virginia. The so-called "lunatic group" had been out since 4:30 along the Dry River bottomland, and had recorded a nice list of 47 species before breakfast.

The first stop for the group of 13 cars was at Silver Lake in Dayton. This is a small lake, 10 acres in size, that is created by a mill dam at the southern edge. The lake is fed by a large limestone spring at the northern edge. The lake was rather disappointing, since only one female Ruddy Duck was present. A few Troe Swallows were flying over the lake and the only Yellowlegs seen all day, A Greater, flew over and called several times. A Kingfisher and Wilson's Snipe were seen by the group as they headed for Mossy Creek. Two cars of Forest Service men joined the group at Bridgewater, making a total of 15 cars and approximately 65 people for the remainder of the trip.

The Mossy Creek area next visited is a low, swampy piece of ground, the upper end of which is a typical cattail marsh habitat. Like Silver Lake, Mossy Creek is fed by a large limestone spring that comes out of the ground at Mt. Solon. The birds of interest seen here were the Virginia and Sora rails, a Green-winged Teal, a pair of Baldpates, a Screech Owl in a low tree along the road, and a Nighthawk perched on a limb out over the road. Several had to look for some minutes before the Nighthawk could be seen, so well did its coloration blend with that of the tree.

The next and last stop after Mossy Creek was in the mountains in Hone Quarry Hollow. Here the majority of warblers were seen, and Dr. Murray, along with some others, found a pair of Ravens that were feeding young. These Ravens are suspected of nesting along the rocky bluff on Rocky Run Mountain that borders Hone Quarry Hollow, since they have been observed there at various times by the writer.

A very nice luncheon was served by the Ladies Aid of the Briary Branch Church of the Brethren, after which a check was made on the total number of species seen. The group separated except for a few cars that went up to the fire tower on Reddish Knob.

A total of 110 species were seen, as follows:

Pied-billed grobe Great blue heron Green heron Black-crowned night heron Mallard Baldpate Green-winged teal Wood duck Ruddy duck Turkey vulture Red-tailed hawk Sparrow hawk Bob-white quail Virginia rail Sora rail Coot Killdeer Wilson's Snipe Spotted sandpiper Greater yellowlegs Mourning dove Screech owl Nighthawk Chimney swift Hummingbird Belted kingfisher Flicker Pileated woodpecker Hairy woodpecker

Downy woodpecker Eastern kingbird Crested flycatcher Phoebe Acadian flycatcher Wood pewee Tree swallow Rough-winged swallow Barn swallow Cliff swallow Blue jay Raven Fish crow American crow Carolina chickadee Tufted titmouse White-breasted nuthatch House wren Bewick's wren Carolina wren Mockingbird Catbird Brown thrasher Robin Wood thrush Olive-backed thrush Veery Bluebird Blue-gray gnatcatcher

Ruby-crowned kinglet Cedar waxwing Migrant shrike Starling White-eyed vireo Yellow-throated vireo Red-eyed vireo Warbling vireo Black and White warbler Worm-eating warbler Parula warbler Yellow warbler Magnolia warbler Cape May warbler Black-throated Blue warbler Myrtle warbler Black-throated green warbler Blackburnian warbler Chestnut-sided warbler Bay-breasted warbler Pine warbler Prairie warbler *Palm warbler Oven-bird Northern water-thrush Louisiana water-thrush

Maryland yellow-throat Yellow-breasted chat Hooded warbler Redstart English sparrow Meadowlark Red-wing Orchard oriole Baltimore oriole Purple grackle Cowbird Scarlet tanager Cardinal Rose-breasted grosbeak Indigo bunting Purple finch Goldfinch Towhee Grasshopper sparrow Vesper sparrow Junco Chipping sparrow Field sparrow White-throated sparrow Swamp sparrow Song sparrow

* Seen in the evening by the writer

Dayton, Va.

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FURTHER NOTES ON FAUNAL ZONES IN VIRGINIA By Richard L. Hoffman

The subject of life zones in Virginia appears to be one of perennial interest to readers of The Raven, and for this reason I feel justified in presenting some ideas and theories that have occurred to me in recent years. There seems to be a necessity for the eventual reconciliation of the viewpoints of ornithologists and workers in other fields, if a satisfactory understanding of our biotic districts is to be gained. At the present, a situation reminiscent of the six blind men and the elephant seems to obtain in the investigation of faunal zones in Virginia.

Dr. J. Murray has previously (Reven, 1945, 16:20) indicated his conclusion, based on extensive ornithological reconnaisance, that there is little or no "pure Canadian" territory in Virginia, the Mt. Rogers area being the closest approach thereto. After several years of field work in western Virginia, I have become convinced, on the other hand, that certain areas in the state provide as good a Canadian fauna as can be found in, e.g., the Adirondacks. There is a

striking correlation between the incidence of red spruce (Picea rubens Sarg.) and certain animals, even though the latter only rarely live in the spruce stands. Picea and the salamander Desmognathus ochrophaeus occur together in western Virginia at the following localities: (1) western Highland County, (2) Mountain Lake, Giles County, (3) Burkes Garden, Tazewell County, (4) on Clinch Mountain between Russell and Washington Counties, and (5) in the White Top - Mount Rogers region. To the best of my knowledge, ochrophaeus has not been found in Virginia lower than 3000 feet. Another salamander, Plethodon metcalfi, comes into Virginia in the Iron Mountains and at Burkes Garden. Here too, is an amphibian occurring with spruce, and one which does not descend much lower than 3000 feet. Another species of Plethodon, P. welleri, is known from only four localities, two in North Carolina, and White Top and Mount Rogers in Virginia. It seems not to occur anywhere lower than 4000 feet, and on Mount Rogers has not been taken below the 5000 foot level.

Certain mammals, including the deermouse Peromyscus maniculatus nubiterrae and the long-eared bat Corynorhinus rafinesquei, follow the above general pattern, but mammals like birds, have much higher degrees of both ecological tolerance and mobility, which render them less valuable, generally speaking, as zonal indices than are species which are tied down to their particular kind of habitat. The list of invertebrates which induces me to recognize Canadian elements in Virginia could be made long and tedious, but a few representatives will suffice. A rare milliped, Semionellus placidus, occurs in Minnesota, Michigan, northern Indiana, and at two localities on the Blue Ridge in Virginia. The milliped genus Saiulus is clearly boreal, having species in the Pacific Northwest, in Michigan, northern Ohio, New York, and Ontario. Still other forms occur in the Great Smokies, on Mount Rogers, and at Mountain Lake. Are these not Canadian?

Not enough is yet known of spider distribution to permit much inference, but a specimen taken on Alleghany Mountain in Highland County seems to be identical with a species previously known from Ontario. The harvestman Odiellus nubivagus, described from Mount Mitchell, N. C., occurs at Mountain Lake. Big Knob, over 4000 feet, in Alleghany County, provides in addition to various endemic species, a collembolan of the genus Spinistoma, known elsewhere in America only from the Blue Ridge in north Georgia.

The reference to insects brings up another matter to be considered. Robert J. Watson (Raven, 1948, 19:52) has commonted upon the life-zone map in Bailey's The Mammals of Virginia and revealed at least one inaccuracy. Actually, however, the map mentioned was not devised by Dr. Bailey on the basis of mammal distribution, but is based on one prepared by Dr. Austin H. Clark for inclusion in his Butterflies of Virginia, and to my understanding based largely on butterfly records. The fact that Mr. Watson found no Canadian birds or trees in Montgomery County is thus not surprising, since it seems that insects and birds are not restricted to the same extent by conditions of climate and altitude.

May-June 1950

The important point which I wished to make, alluded to earlier, is now revealed; it is this divergence of opinion of what constitutes Canadian Zone territory. Ornithologists do not concur with other specialists, and the result will have to be eventual agreement on a common ground, or the adoption of some curious measure such as the recognition of "Ornithological Canadian" and "Entomological Canadian", for instance:

Obviously a good deal of thought and controversy will have to precede any mutually satisfactory solution. A number of perplexing points suggest themselves, among which may be listed the following:

- l. From the standpoint of horizontal distribution alone, what are to be considered Canadian index species? What about an animal which has a wide distribution in northern states and Canada, and which occurs down through the Appalachians? Must it be, at its southern limits, restricted to high elevations?
- 2. As a corollary to the preceding, which is to be given greater weight climate or elevation? One of the original concepts of Merriam's Life Zones was the idea that "Canadian" species became increasingly altitudinally restricted southward chiefly because the elevation permitted duplication of the cold northern climate demanded by various strictly Holarctic groups. What about isolated areas at low elevations, which are always cold, wet, and shaded, and in consequence have a flora and fauna just like one would find in upstate New York? One such area is McGraw's Gap, near Clifton Forge, where I find the curious harvestman Sabacon crassipalpe, a circumboreal species known from Siberia, the Pacific Northwest, New England, and Mount Mitchell and Grandfather Mountain, N. C. A bird with such a distribution would probably be regarded as a Canadian form, but McGraw's Gap is only 1500 feet above sea level. Sabacon is not the only animal that follows this pattern.
- 3. What criteria are established by ornithologists for recognizing a bird as characteristic of a certain zone? Does the zone make the avifauna, or vice versa? We must recall that life zones have never been defined with any degree of accuracy from the standpoint of climatic conditions only by plant and animal associations. This may be putting the cart before the horse. At the present, a zone is characterized well enough in certain typical regions (such as Labrador, Yucatan, Arizona, et alia) but at peripheral localities, both horizontal and vertical, and overlaps create difficulties.
- 4. At the other extreme from the Canadian, one can find equal difficulty in defining the limits of the Austroriparian Life Zone on the basis of flora and fauna. The Dismal Swamp itself has a number of mammals whose affinities are certain northern, Sorex longirostris fisheri, for example. The crayfish Procambarus blandingii and Cambarus diogenes generally stick closely to the Coastal Plain (which correlates well with the Austroriparian) but they also follow the James River west to the very shadow of the Blue Ridge. These swamp-

loving crayfish would doubtless thrive in the Augusta County sphagnum bogs near Stuart's Draft if introduced. These bogs, incidentally, are certainly coastal in many respects. A botanist might regard them just as good Lower Austral as the North Landing River swamps in Princess Anne County. One is impressed with the occurrence of some animals and plants in "isolated" pockets outside their normal range.

The idea suggests itself that the life zone may be defined in terms of topography, which provides for a certain kind of habitat, and climate, which further affects the floral composition of the habitat type. By this method, the presence of various animal and plant species would be more in the nature of secondary verification than as primary criteria for recognition of various zones.

My own thinking in this respect is not by any means clear at the present, and therefore I am the more anxious to stimulate the thought and comment of others, particulary, as in this case, others familiar with different groups. Clearly there is room for much future work.

Clifton Forge, Virginia

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NOTES AND NEWS

Golden Eagle, Saw-whet Owl, albino Red-tail. In a letter to the Editor, Mr. Herbert G. Deignan, of the United States National Museum, reports some interesting birds seen on a trip in northern Virginia on March 4, 1950. In Fauquier County, about five miles east of Warrenton on the road from Centerville and Fairfax, three Golden Eagles were in sight at once, soaring in wide circles and moving northward. There are not many records for the northward spring flight of these birds. On the Skyline Drive, six and one-half miles south of Panorama he had a close view for a long time of a Saw-whet Owl. On the road down the mountain from Panorama toward Sperryville, and less than a mile from Panorama, an albino Buteo, without much question a Red-tail, was perched near the road. It had dark eyes and one dusky feather in the breast, but otherwise was perfectly white.

Evening Grosbeaks. This northern species again appeared in Lexington this spring, being seen throughout March and most of April. Col. R. P. Carroll first saw two in his yard on March 2. Leter in the month the flock increased, until on March 27 Bobby Paxton and J. J. Murray saw 24 on the V. M. I. post, only three of them being mature males. On April 15 Murray saw 30 at the other end of town, only three being mature males. On April 22 four adult males and four females were seen. A small flock was present in Blacksburg during the same period.

1950 V. S. O. Dues. The Treasurer reports that some thirty-odd members are still in arrears. If these members will send their 1950 dues to the Treasurer (Mr. W. Edwin Miller, State-Planters Bank,

Box 6-E, Richmond, Virginia), it will be of great help in carrying on the work of the Society.

Contributions. The Society has received this year special gifts from the following members, ranging from \$2.00 to \$25.00:

Mr. Harold H. Bailey, Goshen, Va.

Mrs. Herbert D. Thompson, Norfolk, Va.

Mr. O. C. Hemp, Staunton, Va.

Mrs. Colgate W. Darden, Jr., Charlottesville, Va.

Mr. Frederic R. Scott, Richmond, Va.

Mr. W. Edwin Miller, Richmond, Va.

The generosity of these members has helped us to meet the increasing expenses of our work. There may be other members who would like to send such contributions to the Treasurer.

Bird Song Records and Slides Available to V. S. O. Members. Mrs. Colgate W. Darden, Jr., will be glad to let any of the V. S. O. members use the bird song records and slides which she presented at the Harrisonburg meeting. There will be no cost except payment of return postage. She may be addressed at University Station, Charlottesville, Va. It will be well to write about ten days before the records are needed.

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FALL SHASON - 1949 - VIRGINIA by F. R. Scott

The fall season was rather mild, especially in October and November, although it did not nearly measure up to the heat experienced in the late fall of 1948. Precipitation was only slightly below normal. The mild weather and the absence of any hard freezes in November were undoubtedly one of the causes of the many stragglers that lingered later than usual.

Pelagic Birds. There were few inland reports of Common Loons, one in Albemarle County on October 29 being the earliest recorded there. Weber reported one at Cape Charles as early as September 24. Horned Grebes were first noted at Hopewell on October 30 and at Yorktown on November 6. Grey reported heavy flights of Cormorants at Cape Henry from mid-September to November 3.

Herons. The maximum count of herons and egrets was 700 at Chincoteague Refuge on August 8 (Theodore R. Hake). In the Richmond area the peak count of American Egrets was 91 on August 25. Carpenter noted one near Bridgewater, in the Valley, as late as October 19. Snowy Egrets remained late at Back Bay, 3 being seen on November 3 (Grey) and 2 on December 1 (Perkins). On August 19 Scott found 48 Louisiana Herons at Chincoteague Refuge and 3 more with a number of Little Blue Herons perched on the telephone cable paralleling the

causeway. On the night of April 16 Stevens heard 9 Black-crowned Night Herons and 2 Green Herons migrating over Charlottesville. Beasley last recorded the Green Heron on October 23 at the Mariner's Museum near Newport News. One Yellow-crowned Night Heron was seen at Yorktown on October 31 (Scott).

Waterfowl. Canada Geese were reported in good numbers throughout the eastern half of the state. Both Snow and Blue Geese were noted again at Curles Neck first on November 14 (Scott and Sydnor). Gadwall seem to be increasing and were reported from both Charlottesville and Richmond as early as October 29. Baldpate were first seen at Richmond on September 24 and at Lexington on October 21. A Ruddy Duck was seen at Richmond on August 22 and remained until the arrival of migrants on October 2. One was noted at Lexington on October 17 and another November 4-14. A female Baldpate November 7-14 was early at Lexington. With the increasing number of large lakes being created in the western part of the state, reports of waterfowl will undoubtedly increase there. If observers could arrange to cover some of these regularly during migration, many interesting records could be obtained. In the mountains of West Virginia such lakes have yielded large numbers of migrating waterfowl, including Old Squaw, Scoters, flocks of over 100 Horned Grebes, etc.

Birds of Prey. The maximum count of Sharp-shinned Hawks at Cape Charles was 100 on September 24. A Marsh Hawk was first noted at Charlottesville on August 13. Beasley reported two Duck Hawks at Grandview, near Newport News, on October 16. The first Snowy Owl record of the winter comes from John H. McCabe who saw one in Loudoun County on November 27. Shipley found a Long-eared Owl in Bedford County on December 4. Short-eared Owls seem to be increasing; Alva Nye recorded a maximum of 75 in a Microtus-infested field near Leesburg on November 20. A Saw-whet Owl was captured alive near Wakefield about Thanksgiving (David Johnson and Norman Miller).

Marsh Birds. Stevens found 2 King Rails at Hatton, Albemarle County, on August 24, and J. W. Taylor recorded one at the National Airport on October 15. Thirty Clapper Rails were seen along the Chincoteague Causeway on August 6 (Barnes, et al), where the birds had a successful breeding season. A Black Rail was observed for some time at Seaford, York County, on August 21 by Beasley, Lawless, Minor, Scott and Stevens. The same group also found a freshly killed juvenile Virginia Rail at the same time. A Florida Gallinule was seen in June at Timber Lake near Lynchburg (Freer) and was probably breeding. Two immatures and one adult were observed by Frank C. Cross at the National Airport on August 28. Scott found one juvenile Coot in Richmond on August 22.

Shorebirds. The shorebird migration, especially inland, was one of the highlights of the fall season. Late Piping Plovers were banded at Chincoteague Refuge on July 23 by Buckalew, Robbins and Brown. Donnelly recorded one at the National Airport on September 3, the third record for the Washington Region. An immature Piping Plover was seen at Seaford on November 25 by Grey, Scott and Stevens. Lex-

ington had Semipalmated Plovers from August 23 to September 30; Hope-well had one on October 30; and one was seen at Seaford at the amazing date of November 25 (Grey, Scott and Stevens). Carpenter collected a female Golden Plover at Bridgewater on October 5, and another was seen at the National Airport on September 15 (Shelton and Donnelly). Black-bellied Plovers were noted at Four Mile Run, Fairfax County, and National Airport from September 15 to October 2 with a peak of 7.on the latter date. Paxton reported 4 at Lexington on August 28.

An early Wilson's Snipe was seen at Fort Belvoir on August 30-31. The Spotted Sandpiper remained at Lexington until September 24 and in Albemarle County until October 18. Both Yellow-legs passed through the eastern part of the state in good numbers with the Lesser appearing to predominate. The Lesser remained at Hopewell until October 30, and 8 Greaters were seen at Seaford on November 25. There were several reports of White-rumped Sandpipers: 1, Chintoteague Refuge on August 8 (Hake); 1, Chintoteague Refuge on August 19 (Scott); 30, Back Bay on November 3 (Grey); 40, Seaford on November 6 (Beasley). The two November records are especially interesting. "Peep" were rather general inland, and both Least and Semipalmated Sandpipers were reported in good numbers from Lexington, Charlottesville and Richmond, the former remaining at Hopewell until October 23. There were three records of Western Sandpipers from Curles Neck, the latest being November 23. Two were seen at Seaford on November 25. A Stilt Sandpiper was recorded at Lexington September 22-30 (Murray), 2 were collected at Hopewell on October 2 (Scott), and several were seen at Four Mile Run October 1-9 (McKnight and Willison). There were several records of this bird from Chincoteague, the maximum being 19 on July 23. Early fall dates for the Godwits were obtained at Chincoteague by Hake and Buckalew when 1 Hudsonian and 4 Marbled were found on August 9 and 2 Hudsonian and 5 Marbled on August 10. The maximum count of Sanderlings at Chincoteague was 5000 on August 8. A lone Sanderling was noted at Seaford on August 21.

Gulls and Terns. Two early Great Black-backed Gulls were recorded at Chincoteague on August 6. Four more were seen at Back Bay on the VSO field trip on August 20. Two Gull-billed Terns were reported at Chincoteague on September 25 and 5 at Back Bay on August 20. Forster's Terns seemed quite common inland from Richmond east, the largest count being 95 at Newport News on December 2 (Scott), where they probably winter rather regularly. Common Terns, which have been reborded in the Cape Henry region only until September 22, remained at Hopewell until October 23. Five Caspian Terns at Chincoteague on August 6 (Barnes and Buckalew) were early. Inland records for the Black Tern were more numerous than usual, especially at Lexington and Charlottesville. One at Hopewell on October 9 was late. At Chincoteague, where the Black Tern is usually abundant in fall, 95 were seen on July 23 and 70 on August 6.

Cuckoos and Goatsuckers. Late Yellow-billed Cuckoos were reported from Charlottesville on October 13 and Richmond on October 14. Shipley saw a late Nighthawk at Lynchburg on October 16.

Passerine Birds. Murray reports a heavy migration of Phoebes and Wood Pewees in the Blue Ridge near Lexington on September 24. He also observed a Northern Horned Lark with a flock of Prairies on October 22. A pair of Barn Swallows was observed feeding young on the wing at Chincoteague on August 19, a rather late date. Two Purple Martins were noted at Lexington on August 23, where they are now quite scarce. One Raven was seen at Shirley, Charles City County, on September 25. It was being attacked by a number of crows. Wetmore reports a flock of 35 Ravens grouped at a garbage dump at Big Meadows, Shenandoah National Park, on November 27. This is the second largest flock reported for Virginia, the largest being a group of nearly 80 seen by Wetmore just below Thornton Gap, Shenandoah Park in November, 1947. House Wrens seem to be displacing Bewick's Wrons in Albemarle County. Stevens found only a few during the summer and none at all in the fall. The colony of Short-billed Marsh Wrens at Hatton, Albemarle County, had dwindled to 2 birds on October 22.

One Mockingbird just out of the nest was seen at Richmond on August 29. Six Gray-cheeked Thrushes were noted at Cape Charles on September 24. Two very late Blue-headed Vireos were seen at Pine Ridge, Fairfax County, on November 7. Carpenter reported Pipits at Bridgewater as early as October 15.

Abbott recorded an extremely early Orangecrowned Warbler at Fort Belvoir on September 17. A Blue-winged Warbler was noted at Lexington on September 7 (Paxton), where the bird is quite rare. A Nashville Warbler at Hatton on October 18 is the latest date for Albemarle County. A late Yellow Werbler was reported at Charlottesville on August 30. Cape May Warblers were very common throughout most of the state from mid-September to late October. At Richmond. where they were abundant, they were joined by large flocks of Blackpoll Warblers and on October 15 by 5 Tennessee Warblers. Late Chestnut-sided Warblers were seen at Petersburg on October 10 and Albemarle County on October 18. In Albemarle County the Bay-breasted Warbler was recorded as "almost spectacularly common" with a maximum of 26 on September 14. The Western Palm Warbler was "much more common than usual" at Lexington, and 12 were reported from Cape Charles on September 24 where this species has been found abundant at times in fall. Late Yellow-breasted Chats were noted September 24 (Cape Charles) and October 1 (Fort Belvoir, Abbott). McIlwaine reports a Wilson's Warbler at Petersburg on October 8. This bird is unusual anytime this far east in Southside Virginia.

The maximum count of Boat-tailed Grackles was 150 at Chincoteague on September 27. A very late Blue Grosbeak was seen at Hatton on October 22 (Stevens), and Indigo Buntings were noted up to October 18 in Albemarle County. One of the most interesting records was an Ipswich Sparrow which was seen at Seaford, York County, on November 25 (Grey and Stevens) and collected on December 2 (Scott). Wetmore records a Lapland Longspur at Big Meadows on October 22. A Snow Bunting was seen at Big Meadows November 27, and Old Rag View, also in the Park, December 4. Another was reported by Perkins at Back Bay on November 21.

Richmond, Virginia

FINANCIAL REPORT OF THE TREASURER OF THE VIRGINIA SOCIETY OF ORNITHOLOGY FOR THE YEAR 1949

Receipts

Balance on hand January 1, 1949	\$143.73
Received for membership dues	235.00
Received for back issues of The Raven	13.15
Received for luncheon (Annual Meeting)	28.50
Received special contribution	10.00
	\$430.38

Disbursements

Issues of The Raven	\$131.86
Postage, mailing of The Raven	38.04
Postage for mailing memorandums for dues & correspondence	15.19
Supplies	1.94
Stationery	32.65
National Audubon Society, Dues to Oct. 1950	10.00
Expenses of Annual Meeting, Luncheon	68.75
	\$298.43

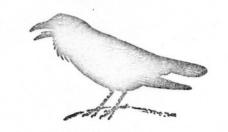
Balance in the State-Planters Bank and Trust Company Richmond, Virginia, December 31, 1949 \$131.95

W. Edwin Miller, Treasurer

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NEW MEMBERS RECEIVED SINCE APRIL 1, 1950

(A)	Mr. Herbert G. Deignan	U. S. National Museum	Washington, D.C.
	Mr. Paul G. Favor, Jr.	Dept. of Interior, Shenandoah Nat. Park	Luray, Va.
(A)	Dr. Walter Gifford	Madison College	Harrisonburg, Va.
(A)	Mrs. Charles O. Gregory	R.F.D.#3, Box 205D	Charlottesville
	Dr. Hollen G. Helbert	150 Franklin St.	Harrisonburg, Va.
(A)	Mrs. A. H. Herrmann	3716 Brookside Road	
,		Forest Hill	Richmond, Va.
(A)	Mrs. Z. Davis Jackson	210 West View St.	Harrisonburg, Va.
	Mr. James Lyles, Jr.	Shenandoah Nat. Park	Luray, Va.
	Mrs. Nancy McCall	437 S. Mason St.	Harrisonburg, Va.
	Mrs. Edith N. Myers	130 Campbell St.	11
	Mrs. Carrie Showalter	337 E. Market St.	"
	Miss Elsie H. Wigley	218 Nowman Av.	11
100	Miss Frances Selliman	Bridgewater College	Bridgewater, Va.
	Miss Dorothy Thomas	Route 1	Dayton, Va.
	Miss Sylvia Yost	2618 Crystal Spring Av.	
(A)	MISS DYIVIG 1050	SOLO OLYBOAL DIVING MV.	modification, van



The Raven

BULLETIN OF THE VIRGINIA SOCIETY OF ORNITHOLOGY

J. J. MURRAY, EDITOR LEXINGTON, VA.

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Contents

Birds of the Cape Henry Region - Part I

By John H. Grey, Jr.

BIRDS OF THE CAPE HENRY AREA By John H. Grey, Jr.

This list of 291 forms of bird life is a preliminary paper in the sense that it attempts to set forth some of the things we do not know about bird life in this area as well as what we do know. It is therefore an appeal for help from all ornithologists who may have worked in this area in the past to add any information they have, but more especially an appeal to members of the Virginia Society of Ornithology to join us in working the area more thoroughly and thus fill in the gaps in our knowledge.

The importance of this area to our knowledge of bird life should lead many to choose it as a study area, for no adequate discussion of coastal bird life has appeared covering any of the long stretch of coast from Cape May, N. J., to Charleston, S. C., a distance of nearly a thousand miles. At the northern limits of this stretch we find the Purple Sandpiper wintering regularly, and at the southern end is the home of the Bachman's Warbler.

This does not mean to imply that noone has studied the bird life of this thousand miles. In fact we have good knowledge of the breeding birds of Cobb's Island, of waterfowl on Currituck and Back Bay, of breeding birds on Pes Island National Wildlife Refuge. Edwin Green published a paper on the birds of Cape Hatteras, and Roxie Collie Simpson one on the bird life at Boaufort, N. C. Likewise there is much about the coast in Birds of North Carolina as well as A Proliminary List of the Birds of Maryland and the District of Columbia. Yet, there is hardly a coastal trip of the Virginia Society of Ornithology or of the Carolina Bird Club that does not add significant information as well as open up a lot of questions about bird life which we are not yet able to answer. For instance, Mrs. Simpson and I found Curlew in June at Beaufort, N. C. and sondered if it were merely a late migrant or if possibly non-breeders summered there as Arthur Wayne says they do at Charleston. Or, does anyone know the status of Brant along this thousand miles, or even that of Red-backed Sandpiper in winter?

Therefore the success of this paper will depend upon the speed with which it becomes out of date, the rapidity with which we supplement our meager knowledge of bird life along the middle Atlantic coast.

The Area

The Cape Henry area is the southeastern tip of Virginia, the region to the east of Dismal Swamp. It includes all of Princess Anne County and the part of Norfolk County which lies outside the Swamp and the city of Portsmouth. Natural barriers surround it on three sides and almost separate it from the rest of Virginia; the Atlantic Ocean on the east; Chesapeake Bay on the north; Hampton Roads, the Elizabeth River, and the Dismal Swamp on the west. The North Carolina line serves as a convenient limit on the southern side - a political limit rather than a natural barrier, as our area has affinities with the

northeastern part of North Carolina to Elizabeth City and along the coast to Cape Hatteras.

The land is a rough rectangle. Twenty miles of ocean beach from the N. C. line to Cape Henry; thence sixteen miles of beach along Chesapeake Bay from Cape Henry to Willoughby Spit; then some twenty air miles from the Spit to the N. C. line, including the Norfolk waterfront together with some beaches and the mouth of the Lafayette and of Elizabeth Rivers.

It seemed best to exclude the Dismal Swamp in this paper, not only because of a difference in habitat, but also because there is some difference in cvifauna: Swainson's and Wayne's Warblers are found in the Swamp but have not yet been recorded in our area; and the breeding bird of the Swamp is the Athens Yellowthroat, while ours is the Maryland.

It is difficult to limit the water area covered in the paper, but in general it is not more than can be seen from the shore. Gannets have been identified by telescope some five miles out, and gulls and ducks are listed that have been seen in the ships channel about seven miles out in Chesapeake Bay. Likewise some birds are mentioned that were seen from the ferry between Little Creek and Cape Charles, a distance of 25 miles. The Northern Skua is the only bird listed outside this water area, and this was seen about 15 miles offshore. In fact, the waters of the Atlantic are unknown territory as far as Virginia ornithologists are concerned.

The Cape Henry area is typical coastal plain with sandy soil and extreme drought in summer. Cultivated land is mainly used for truck farming, with two crops off the same land in a year. Pasture land is rather limited, but there are some extensive grass lands around dairies and also around Camp Pendleton below Virginia Beach. There has been a notable increase in crop land and also in grazing territory in the last ten years, especially in the southern part of the area. In some places old fields have been abandoned and allowed to grow up in woods and small pines, but in general the land that is not used for building or farming is in woodlands or marsh.

Woods are mixed deciduous and evergreen; short-leaf and loblolly pine, white and red cak, with some willow oak, cypress, tulip poplar, and sweet gum. Myrtle bushes are abundant along the coast, and there is a fair amount of holly. There are few stands of pure pine left, which may account for our lack of recent records of the Red-cockaded Woodpecker.

Brackish marshes are plentiful especially about Back Bay and the Elizabeth, North, and Lafayette Rivers. Salt marshes are not extensive. There are two reasons for this. First, there are no breaks in the Atlantic Ocean between Cape Henry and Oregon Inlet a hundred miles to the south in North Carolina. (Ruddy Inlet, just below Virginia Beach is open at times, but frequently sands up). Also, there are only two in the beach on Chesapeake Bay - Lynnhaven and Little Creek - and in

these the land lies several feet above water level so that extensive areas are not flooded by the tide. The second reason is that the City of Norfolk continues to fill in great areas for building purposes and the Navy has done the same for other areas.

Although there is a long beach it is seldom very wide, nor is it suitable as nesting sites for gulls or terms, with the exception of two small colonies of Least Terms. In fact, the beach is more and more taken over for residences and recreation areas, with the result that shorebirds are pushed farther and farther away. Before 1941 it was not unusual to find Willet along Chesapeake Bay, while now one looks for them mainly along the coast at Back Bay. In 1941 there were extensive mud flats along Little Creek, but these are now used for training conters for the Navy or else are in restricted areas forbidden to crnithologists. Back Bay thus becomes more and more a concentration area for shorebirds.

Places that are of particular interest for the bird student are spread all over the area. In the northern section are the Azalea Gardens near the airport, and while the underbrush has been cleared it is always a good place for birds. Likewise the Wildflower Sanctuary beyond the waterworks toward Lynnhaven covers 15 acres of woodlands along Lakes Smith and Lawson and is preserved as a natural park. Mrs. A. C. Reed has a good account of this in the Raven XV: p.39ff, 1944. Also near Cape Henry is Seashore State Park covering some 2000 acres and extending from the beach inland with beautiful stands of timber, including some cypress with accompanying Prothonotary Warblers and Black-crowned Night Herons. In the central part of the area is Stumpy Lake along the Indian River, a favorite haunt of ducks, herons and warblers. Mrs. Reed has also described this (Raven XII: pp. 10-17, 1941).

The choice spot for birding is Back Bay National Wildlife Refuge on the ocean front about half way between Virginia Beach and the N. C. line. It consists of 11,000 acres of marsh and water purchased in 1937 from the Princess Anne and Ragged Island Hunt Clubs. The land along the ocean is from a quarter to half a mile wide between the ocean and Back Bay, the beach proper being a little over 100 yards from ocean to top of sand dunes. Two islands in the Bay form an important part of the Refuge: Ragged Island which is low marsh, and Long Island which is high ground with some cultivated land and some fair-sized trees. Long Island is a good place in warbler migration. The waters around these islands are known as Redhead, Shipps, and Sand Bays. Harry A. Bailey was the first manager of the Refuge from 1939 to 1943; Jack E. Perkins succeeded him in the early winter of 1943. Both men have played host to the V. S. O. as well as to many individuals and groups who wished to study the birds. Without their helpful cooperation over the years this paper would have been much limited.

The area is classified as Austroriparian together with the Dismal Swamp, these being the only parts of Virginia belonging to this life zone, and hence its upper limits on the Atlantic coast. The area is not pure Austroriparian since it lies at the northern limits, but its

real affinities in bird life are with the territory to the south rather than with the rest of Virginia to the west. The prevalence of cypress in the swamps makes it a natural habitat for the Prothonotary Warbler - but these also extend to within a few miles of Richmond, as does likewise the Chuck-will's-widow. These merely indicate that the edges of life zones are not clearly marked areas, but rather territories that intergrade into one another.

Observers

The area is fortunate in having had the services of a good number of field workers who have done a lot of work, and who have left some record of their work.

Harold H. Bailey has many references to the area in his <u>Birds of Virginia</u>, 1913. In a good many instances it is difficult to be certain of the territory to which he refers, as he makes few distinctions between coastal, piedmont, and peninsula area.

Joseph E. Gould worked in the area from 1922 to 1933 and summarized his observations in a paper to J. J. Murray in which he listed 123 forms with notes on each. Gould was primarily an oologist so that he is still our authority for much nesting data.

Almon 0. English of Rosnoke wrote a paper for Murray in 1933 giving his observations for the past 3 years while living in Norfolk; he is the only one who has done any work outside the capes. His list included 194 forms, from which 5 must now be deducted as follows: Redlegged Black Duck which is no longer considered a sub-species; Ruddy Turnstone included on the basis of an Oregon Inlet, N. C. record; Florida Yellow-throat which he distinguished from the Maryland and for which we lack specimens; White-eyed Towhee for which we also lack a specimen; and Sharp-tailed Sparrows which he recorded in summer and hence is open to question if it may not have been Seaside Sparrow, which he did not list. Even this leaves 189 sure forms for his list.

Mrs. Floy Barefield of Memphis lived beside Little Creek until about 1941.

Mrs. A. C. Reed, 1519 Morris Avenue, Norfolk, has done the bulk of the field work. Although she had made many trips through the area before this, she began to keep systematic notes in 1936. Something of the thoroughness of her work is indicated by the fact that of the 291 forms listed she has observations on all but 25, and of these only four forms have been seen more than once. Most of her work was done between 1936 and 1945, after which she has been limited somewhat on account of illness.

Locke L. Mackenzie, M.D., of New York City, did a great deal of field work from 1943 to 1945 while with the Amphibious Training Command. He often confessed that he liked to run up a large daily list - a sort of bird golf, he called it - but he filled in many gaps in our knowledge.

Frederic R. Scott of Richmond has taken the Chesapeake Bay ferries as his hobby and thus gethered much information.

Servicemen who helped during World War II included: Wendell Whittimore, M. D., of Tennessee; Audrey H. Claugus of Ohio; Sammy M. Ray of Louisiana; Kenneth Higby of Wisconsin; and Malcolm Andrews of New York State.

Numerous others referred to in the paper include: Capt. and Mrs. W. A. Anguin; Mrs. Colgeto W. Darden, Jr.; Richard L. Dobie; Clayton H. Ewell; Mrs. St. Julian Marshall; Miss Virginia Pickell; Mrs. Herbert Thompson; and Mrs. Thompson.

My own connection with the area began in 1936 when I built a summer home on Chesapeake Bay above Little Creek. Since that time I have been a regular summer resident for varying periods, and have spent a good deal of time in the area at other seasons of the year. I have seen 217 of the 291 forms listed. As will be evident from the paper, much of my work has been as compiler of data gathered by others.

It has been most helpful to check our observations against those made further south at Pea Island National Wildlife Refuge where for many years my good friend Samuel A. Walker was manager and allowed me full access to his records. Since our area has many things in common with the North Carolina Banks I have tried to gather data from Cape Henry to Cape Hatteras in the hope of a complete study of bird life in this region some day.

Much help has been gained from comparisons with Birds of the Washington, D. C. Region by Miss May Thacker Cooke (Proceedings of the Biological Society of Washington, Vol. 42, pp. 1-80, 1929).

Work That Needs to be Done

We have indicated under various species some collecting that is badly needed, as well as early and late records that are desirable. It would also be a great help if full counts of individuals as well as species were made for a day, something similar to the Christmas Count, as our best counts are often inadequate. This is due to the fact that only recently have we dropped general terms such as common, or abundant, and kept a record of the actual number of individuals.

Another piece of work that might interest someone is gathering breeding records - we have records for only 96 species, compared to 109 at Washington and 113 at Lynchburg. Some of the birds that might be looked for as breeders are: Cormorant, Great Blue Heron, American Egret, Snowy Egret, Louisiana Heron, Bittern, Gadwall, Mersh Hawk, Virginia Rail, Black Rail, Laughing Gull, Forster's Tern, Common Tern, Royal Tern, Black Skimmer, Black-billed Cuckoo, Barred Owl, Rough-winged Swallow, Blue Jay, Fish Crow, Short-billed Marsh Wren, Warbling Vireo, Swainson's Warbler, Wayne's Warbler, Chat, Hooded Warbler, Boat-tailed Grackle, Indigo Bunting, Goldfinch, and Seaside Sparrow.

In the annotated list of 291 species and subspecies, 283 have been observed within the last 20 years.

I have listed what we consider a normal count of birds for one day and also a maximum count. The normal is merely the average of many field trips, and is what one might well expect to find on a suitable day. The maximum is the most that have ever been recorded in one day; and while this should represent a day's work on foot to give an accurate idea of the abundance of a species, it actually represents counts of all kinds - some by automobile, others by boat; some are of individual flocks that passed while one merely watched, and still others are combinations of almost every means of locomotion.

I have attempted to list all records through 1949.

Common Loon. Gavia immer immer. Winter visitor; fairly common. October 26 (Reed) through May 14 (Reed found in summer plumage) with occasional bird in summer. Common as a migrant in November and also late March through early April. It is more common in Chesapeake Bay than along the coast. In April and May 1942 Harry Bailey estimated some 400 birds of this and the following species killed by oil from ships sunk by submarines.

Red-throated Loon. Gavia stellata. Winter visitor; not as common as the above, nor does it migrate in as marked numbers. November 4 (Reed) to May 17 (Grey); average November 5 to April 5; one, July 28, 1949 (Grey).

Holboell's Grebe. Colymbus grisegna holbollii. Rare winter visitor; seven records. English saw one March 29, 1931; and one January 28, 1934. Reed observed one at Lynnhaven Bridge January 9 and 31, 1937; and another at Back Bay December 16, 1943, this bird being recorded on the Christmas Bird Count December 19th. The 1944 count recorded one at Back Bay December 31, 1944. Both birds at Back Bay were in the surf close to shore. Scott saw 24 from Little Creek Ferry January 30, 1949.

Horned Grebe. Colymbus auritus. Winter visitor; regular in small numbers. November 1 to May 11 - in summer plumage - (both Reed); average December 5 to Morch 28. In February 1942 Herry Bailey reported heavy damage to these from oil from the submarine sinkings. One at Lynnhaven July 21, 1944 (Stevens and Grey). Maximum 30.

Pied-billed Grebe. Podilymbus podiceps podiceps. Winter visitor; fairly common. August 30 (Scott and Stevens) to May 13 (Reed); average September 17 to April 19. More common in migration, with an occasional bird in summer. Maximum 22.

Audubon's Shearwater. Puffinus lherminieri lherminieri. Several were observed at Virginia Beach by William Falmer "early in October" (no year given) and reported by William Rives, Auk 18:189...., also 48: 201. On July 28, 1939 Mrs. Reed and I observed one in the surf a mile north of Refuge Headquarters at Back Bay. The bird could fly a short

distance but would flop into the surf, its head dropping below water and its wings outspread as if it were about to die. It would lie on the water in this position until I waded close to it, then would rouse and fly out into deeper water. A few days later on August 1, 1939 we captured a female on the beach (presumably the same bird), which showed the same limber-neck disease, as it was unable to raise its head. The skin was placed in the North Carolina Museum, but I neglected to preserve the body so that it could be studied for parasites.

Greater Shearwater. Puffinus gravis. One bird was seen by Mrs. Reed and me at Cape Henry July 31, 1939. The bird was the size of a Duck Hawk with the black of the head ending inta sharp line below the eye, with clear white below. I was familiar with these birds from a recent Atlantic crossing and felt sure of the identification.

Leach's Petrel. Oceanodroma leucorhoa leucorhoa. Rare: three records. English saw 15 or 20 in Tanner's Creek, a part of Lafeyette River, August 26, 1933 following a great hurricane. This same storm brought many petrels of this species inland at Cape May, New Jersey, where Witmer Stone observed that of the many birds observed at that time all were Leach's except one Wilson's. In fact, he lists Leach's as the more common petrel, at least in late summer and autumn: (Bird Studies at Old Cape May, I:91, 1937). Three birds were seen by Mrs. Reed on August 17, 1945 from the Cape Charles Ferry. She said, "They definitely had forked tails; of that I am positive." Fred Scott saw 6 from the same ferry July 28, 1948.

Wilson's Petrel. Oceanites oceanicus oceanicus. Summer visitor; not common close to shore, but more so out in Chesapeake Bay and off the capes. All records, except two, fall between June 8 (J. R. Sydnor) and August 30 (Scott and Stevens). Lt. Wendell Whittimore reported seeing "many" in Chesapeake Bay on March 21, 1943 while sailing out on the U. S. S. Token. Capt. W. B. Stell, of the Norfolk Pilot Association, tells me that when the pilots had the old Virginia as a pilot boat they used to catch "Mother Cary's Chickens" in the open boiler room in cold weather. Maximum counts are 70 each by Reed July 19, 1948 and Scott on August 8, 1947. Alexander Wetmore reports them common at sea near the the Capes (Auk 42:262). A few birds have been observed in fair weather in Hampton Roads as far as the Newport News - Pine Beach (Norfolk) Ferry. A record of August 24, 1933 may have included both species of petrels though neither was definitely identified in the news article of the Norfolk Virginian Pilot which reported many "Mother Cary's Chickens" in the bay following the hurricane of August 23rd.

Our scant records of petrels pose two problems which some may wish to explore further.(1) How early does Wilson's Petrel arrive? Our date of June 8 is not as early as the earliest at Cape May of May 24th. or New York of May 29th., but it is not much out of line. However, we have the report of Stell of finding these birds in cold weather, and Whittimore's record of March 21st. Possibly we have lacked observers at the right time, and also it is probable that in early spring the birds may come into the Bay only in rough weather. (2) Then we have the question of the ratio of Leach's to Wilson's in our waters. It has been a habit along the coast to assign all records of petrels to Wilson's

unless proved different, partly on account of Peterson's comment in his Field Guide to the Birds: "As the Wilson's Petrel is far commoner off our shores than the Leach's, most sight records of petrels are automatically referred to this species (Wilson's)", (p.9, 5rd. ed.). All the birds I have observed around Cape Henry have been Wilson's, also North Carolina has records only of Wilson's. Yet, at Cape May the birds which are scareewith us are the commoner species there, for with them Leach's is much more common than Wilson's. The easiest way to distinguish the two petrels is by their flight, for even at great distances it becomes evident that Leach's Petrel resembles the flight of a butterfly, while Wilson's Petrel is more steady like a swallow.

Eastern Brown Pelican. Pelcanus occidentalis carolinensis. Three records. Harry Bailey saw 4 birds April 12, 1940 flying among gulls following a run of croakers off the beach at Back Bay. Reginald Denham of New York saw "not less than 6 and not more than 12" stuke-dive bombing for fish in Chesapeake Bay on April 18, 1946 while he was crossing the Cape Charles Ferry. Perkins saw 3 on May 10, 1949 at the Refuge. There is a record from near Suffolk - out of our territory - by George B. Lay of the old Biological Survey, who wrote me that he had seen one "on the wing and also in a tree on June 1, 1936, near Suffolk".

Gannet. Moris bassana. Winter visitor: although recorded every month in the year except June and September; more common in the migrations in November and March. Usually observed in small numbers, but sometimes large flights are observed which are often in connection with schools of fish. Reed saw 1,000 March 27, 1948 and over 600 April 11, 1940; Mackenzie observed a flight of "several hundred birds off the beach at Ocean View" when the birds were flying up the Bay in a flight that lasted over an hour. Scott has seen them as far up the harbor as the Norfolk-Newport News Ferry. A good place to see them is from Sand Bridge, where I observed 35 birds in an hour April 10, 1947, 21 of these being immature. These birds were flying far out to sea, usually singly, but occasional pairs flew by. All were headed north.

European Cormorant. Phalacrocorax carbo carbo. Two records. Lester L. Walsh and Mrs. Reed saw one December 31, 1934 in the Virginia section of Knott's Island. Mrs. Reed saw 3 on December 31, 1945 on the breakwater at the mouth of Little Creek. These birds were noticed because of their larger size compared with Double-crested Cormorants.

Double-crested Cormorant. Phalacrocorax auritus auritus. Abundant migrant; not common winter visitor; a few remain in summer. Average: September 12 to November 27 and March 10 to May 17. Maximum of 1,000 by Reed September 30, 1948 and flocks of 60 to 75 are usual. Counts for the fall of 1948 by Reed give some idea of migrations: September 21 - 102; September 30 - 1,000; October 31 - 200; November 18 - 15; and December 12 - 1. In summer a few may usually be seen below Sandbridge perched on pound poles. A summer bird would be worth collecting as it might prove to be the southern form P. a. floridanus which has not yet been recorded for Virginia. Paul Bartsch collected a specimen in Dismal Swamp which was at first taken to be the southern form, but Ober-

holser identified it as an immature auritus, (Auk 51:78).

Great Blue Heron. Ardea herodias herodias. Resident; more common in migrations; not known to breed. Maximum count for one day is 40 on May 17, 1941 (V.S.O. field trip); however, Jack Perkins estimated there were 100 birds using the Back Bay Refuge in 1945; average is 5 to 10 a day. Reed notes that these birds are becoming scarcer around the city of Norfolk due to the increased building along creeks and rivers, as well as to denuding the shores of lakes of most vegetation - so that by 1948 a bird a day around the city was a good find. Reed also noted before 1941 that this form, and other herons, used Stumpy Lake a great deal, and flew in the direction of North Landing as if there might be a rookery. By 1948 there had come a change which she describes: "I do not think the herons are using Stumpy Lake any more, due to the fact the City drains it completely every summer. I doubt if there is a heronry now below Stumpy Lake; at least the birds do not travel back and forth as they used to."

American Egret. Casmerodius albus egretta. Summer visitor; common to abundant as a post-breeding migrant, but not known to breed. February 8, 1947 (Reed) to December 22 (Mrs. Darden); average April 15 to October 14. Our records indicate a rather steady increase in these birds over the past 25 years. Thus, Gould, who did much of his work in the 1920's, listed it only as a post-breeding migrant with August 2 as his earliest date. English, in 1933, pointed out that the birds had increased 50% in the past 5 years, and found them beginning to become common by mid-summer. English also had one early date of one bird on April 14, 1933. From 1938 through 1942 the birds were recorded each April, and in 1945 and 1946 Jack Perkins found them in March, and in 1947 Reed found one in February. Likewise their increase is indicated in some daily counts in July and August 1938 made between our cottage near Little Creek to Cape Henry, Virginia Beach, Dom Neck, and Knotts Island - some 40 miles - on a total of 5 trips I saw from none to two birds - and only on August 25th. in a boat trip around Knotts Island to Back Bay headquarters did we see some 25 birds. By 1944 counts of 25 were not uncommon around Little Creek, and in 1948 Scott found 102 at Little Creek on July 28th. and Reed found 99 on Cottage Toll Road July 30, 1948. Reed notes that in 1948 we had the largest number since 1937, and they were found everywhere, even in fields. hunting for crayfish perhaps.

Snowy Egret. Leucophoyx thula thula. Summer visitor; not common, more so as a post-breeding migrant. April 22 to September 22 (both Reed); average July to September 10. Maximum 13 on July 28, 1949 (Scott). Two seen by Perkins December 1, 1949. This is another species of heron which is increasing under the protection given it during this century. In 1938 on trips from the cottage to Knotts Island no birds were noted in July and from 1 to 3 in August. However, Reed noted 12 birds August 1, 1937, but on August 1, 1939 we only found 3 birds, and on August 1, 1940 we did not list any. Even in 1944 when Murray and I spent 4 days at Back Bay August 10-13, only one bird was seen, and that on the 13th. It is evident that they are not as regular a migrant as the American Egret, although some can usually be found at suitable places.

Reddish Egret. Dichromanassa rufescens rufescens. Mrs. Reed observed one at Stumpy Lake in 1942, observing it from 3 to 5 hours each of the following days: June 2, 3, 6 and 26. I believe this is the only record north of Florida for the Atlantic States. Mrs. Reed says: "The bird at no time associated with other herons which were near. The bird was in the white phase. The legs appeared dark, not blue. In fact, the bird appeared to me like the white phase of the Reddish Egret as shown by Audubon, plate 256, in Eirds of America, except I did not see the fine nuptial plumes, and the neck appeared roughed-up in places. The books describe the bill as 'flesh-colored'. There were times when I got a pinkish gleam about the bill and eyes, but I could never tell what it was. Howell states lores and eyelids are pale flesh color. The neck of the bird appeared very rough, perhaps what Peterson calls 'shaggy'. When walking in the water it walked slowly. Peterson says its actions are clownish; on the other hand Howell states they walk about slowly in search of their prey. I had never seen a Reddish Egret. But when I saw moving pictures of the bird with that poculiar long white face - due to the large amount of white on the bill - I felt a sense of satisfaction that at last 'there was my bird'. Since the white phase occurs 50-50 in the West Indies, I wonder if this could have been a bird from there. Of course this is only a guess."

Louisiana Heron. Hydranassa tricolor ruficollis. Post-breeding migrant; formerly scarce and not recorded in some years; now recorded regularly in slightly increased numbers. July 3 (Scott) to September 22 (Reed); average July 20 to September 20. Maximum 20 in 1948 (Perkins); average 2. Most of our birds are immature, Reed listing records of 3 adults, one each in different years. These birds breed some 80 miles south on the Pea Island Refuge in N. C. and have been reported nesting on Rogue and Cedar Islands off the eastern shore.

Little Blue Heron. Florida caerulea ceerulea. Summer visitor; common. March 17 (Perkins) to October 19 (Reed); average April 21 to October 8. One immature at Refuge December 31, 1949 (V.S.O.) These birds formerly bred in our area near Fentress, where on June 22, 1934 J. J. Murray estimated there were 400 pair breeding in a heronry that covered about one acre. No other species were with them. (Auk 51:510-511). A year later I visited the heronry and estimated about the same number of birds and nests, but in 1936 the land burned over and there has been no record of the birds frequenting the Fentress territory since. Mrs. Reed feels reasonably sure there is a heronry near North Landing which is probably used by several species. Maximum for one day 98 on July 28, 1948 (Scott); average 15.

Eastern Green Heron. Butorides virescens virescens. Summer visitor; regular in small numbers, breeds. April 2 (Road) to December 22, 1941 (Christmas Count), with next latest October 16, 1932 (English); average April 9 to September 1. English found a nest and eggs May 15, 1932; Mr. and Mrs. Thomas Thompson found one May 20, 1945.

Black-crowned Night Heron. Nycticorax nycticorax hoactli. Uncommon resident. Formerly taken to be only a summer resident with average dates of April 7 to August 17. Christmas counts have turned up a number

of records: January 2, 1949 there were 13 on Long Island, and on December 31, 1949 there were 53 birds. Barefield found an immature at Stumpy Lake February 18, 1941. C. C. Ewell says there was a heronry on Ragged Island in days past. The only place I know to find them regularly is at the pools in Seashore Park. Reed notes that with us this species keeps more to the woods and does not frequent the marshes as does the Yellow-crowned. We have no definite breeding records.

Yellow-crowned Night Heron. Nyctanassa violacea. Uncommon summer visitor; breeds. April 1 (Recd) to October 14; average April 17 to September 28. Three winter records: Darden on December 18. 1939; Mrs. Herbert Thompson reported four stayed the winter of 1947-48, and saw one bird January 8, 1940. Further observation might prove this species to be resident. A few may be found regularly in the salt marshes of North Shore Point in the Lafayette River. It was here the birds nested in 1946, 1947 and 1948 in Mrs. Darden's yard. On April 9, 1947 we watched the pair nest-building. One bird foraged for twigs which were broken from the trees, and then carried to the nest over a route that usually led from one branch to another, so that the bird did not have to fly. The other bird stayed at the nest and received the sticks which were dropped on the nest by the first bird. We did not notice any attempt by the bird at the nest to take the sticks from the beak of the bird who brought them. Instead, the second bird simply walked the sticks into a platform. Mrs. Darden has an interesting article on their nesting in the Raven XVIII, p. 25

American Bittern. Botaurus lentiginosus. Probably a scarce resident, as we have records for every month except February, May, September, and October. Most records occur in spring from March 10 (Reed) to April 29; average March 19 to April 18. The four summer records suggest the possibility of nesting since a nest was recorded on Currituck Sound 40 miles to the south of our area. These records are: June 2, 1938; July 29, 1942; August 1, 1940, and August 20, 1949. Reed's record of November 9, 1939 is actually the only fall date. Winter records include 6 for December, ranging all the way from the 1st. to the 31st., and January 2, 1949.

Eastern Least Bittern. <u>Ixcbrychus exilis</u> exilis. Summer visitor; fairly common, but more common in migrations. April 17 (R. S. Freer, John B. Lewis, and M. G. Lewis) to September 22 (Barefield); average May 8 to August 18. Gould found a nest within the city limits of Norfolk on Smith's Creek July 20, 1926. This bird seems to prefer the brackish and fresh water marshes to the salt marshes; Bay Bay is a favorite haunt for it.

Eastern Glossy Ibis. <u>Plegadis falcinellus falcinellus</u>. C. C. Ewell saw four birds on Regged Island, Back Bay, the "first week in May", 1928. He identified them from skins in Mrs. Reed's collection in 1942 (Raven 14:25).

Waterfowl

The area offers excellent opportunities for seeing all varieties of ducks, geese and swan. Great concentrations are to be found on the Refuge at Back Bay, with peaks usually in December and February in connection with migration. Migration in the fall begins slowly with some birds coming as early as September, then builds up rather steadily to about the second week in December, after which some birds continue southward, while the larger number remain in the area to be joined about mid-February by birds from the south. The spring migration is the reverse of the fall, with large flocks building up suddenly in February to be followed by a tromondous exodus from the Refuge as feeding areas open farther north, and then the numbers taper off until late April when only a few birds remain.

Back Bay Refuge is the place to see concentrations of certain species. As the refuge boat sweeps around the edge of the marsh, great clouds of ducks and geese rise ahead in such numbers that the sight is nothing less than awe-inspiring. While one sees great numbers of waterfowl at the Refuge it is difficult to get close to the birds for individual study. Since the edges of the bay are marshy it is hard to get close to the water from the land, and in the boat the flocks rise well ahead.

Another place for concentrations is Chesapeake Bay with good numbers of Golden-eye, Red-breasted Merganser, and Old Squaw. Good views of these may be had from the Cape Charles-Little Creek Ferry as the birds become accustomed to the boat and one is able to get fairly close views.

Then there are numerous pends and creeks such as those around the Azalea Gardens, Wildflower Sanctuary, and the Norfolk waterworks. While one does not find the great numbers in such places, it is easier to get closer to the birds.

The Fish and Wildlife Service takes an annual census of waterfowl in January when it is believed that the birds are moving about less than at other times. In addition, the warden at the Refuge makes frequent estimates of the birds using the Refuge, and in his quarterly report gives the number of birds in peak concentrations as well as the average number using the Refuge. We have been granted access to these figures with permission to use them by the Service and through the cooperation of the managers. Harry Bailey was Refuge Manager from 1938 to 1942 and Jack E. Perkins succeeded him in 1943. Estimates of flocks of ducks vary with individuals, Perkins being a bit more conservative in his estimates than Bailey. However, I have often thought there were really a lot more ducks present in some years when I was with Bailey than I have seen with Perkins.

The enclosed sheet of the numbers using the Refuge from 1940 through 1949 is based largely on the January counts, and in many cases is less than the peak concentrations observed in December.

Maximum Counts of Waterfowl at Back Bay National Wildlife Refuge

In grouping the waterfowl of the area according to their numbers we have used five divisions -

- I. Abundant: Camada Geese and Snow Geese. To have less than 30,000 Canada Geese or 10,000 Snow Geese suggests a shortage.
- II. Common: eight species which vary with the years so that at times they are almost abundant and in other years they are uncommon. These species fall into three groups -
- 1. Canvas-backs and Rodhoads are found in large rafts which are easy to estimate. Canvas-backs have varied from 30,000 to 1,500 with 10,000 as an average. Redhoads do not vary as much; 10,000 to 1,000 with 5,000 as average.
- 2. Pintail and Baldpate are also found in rafts and on the whole are about equally common, and a little less common than group 1. Pintails have ranged from 20,000 to 2,500 with 10,000 as average. Baldpate vary from 20,000 to 3,000 with 10,000 average.
- 3. Whistling Swan, Black Duck, Scaups (both Greater and Lesser) and Red-breasted Merganser. These vary considerably but an average good year brings two to three thousand of each. Swan and Scaup are easier to estimate as they are in flocks or rafts, but Black Duck are always hard to estimate as they are scattered everywhere in small numbers. Mergansers are likewise hard to estimate with a few on ponds and lakes, but with larger numbers in Chesapeake Bay.
- III. Not common: Mallard, Green-winged Toal, Blue-winged Teal, Ring-necked Duck, and Ruddy. Ring-neck and Ruddy average 1,000 a year; Blue-winged Teal 1,000, Green-winged Teal 500 and Mallard 200.
- IV. Scarce: ten species with averages as follows Blue Goose, 50; Gadwall, 20; Shoveller, 75; Wood Duck, (no satisfactory counts); Goldeneye, 20; Bufflehead, 20; Old Squaw, 20; and the 3 Scoters about 100 ca.
 - V. Rare: Brant and European Widgeon.

Birds which have been recorded as breeding are: Canada Gocse (once); Mallard (once); Black, Blue-winged Teal, Wood Duck and Hooded Merganser (one record that is not entirely satisfactory).

Whistling Swan. Cygnus columbianus. Winter visitor; common, more so in migrations. October 6 (Bailey) to April 9 (Perkins). Usually arrives in early November and stays through March, with the bulk of the birds leaving in February. Old timers seem to feel that the birds were more common in Back Bay and Currituck Sound in the years before the 1933 hurricane, when salt water flooded the Bay and killed the duck food. Also, it is claimed, salt water came through the Chasapeake and Altomarle Canal (until locks were installed) and this made the water more brackish with a loss of food for waterfowl. It is certain that early in the 1930's Swan became more numerous at Lake Matternuskeet, N. C., and it was taken for granted they had been forced from their former

habitat by lack of food. Although there has been a decrease in the birds at Mattamuskeet in recent years, they still winter there in large numbers. The only early count that I have been able to find is the Christmas Count of Caps, Crosby, and Griscom who found 1,050 birds near Codar Island on December 30, 1923.

Common Canada Goose. Branta canadensis canadensis. Winter visitor; abundant, a few remain through the summer and we have one nesting record. Begins to arrive in mid-September, reaches a peak in December, and usually the bulk have left by mid-February. Caps, Crosby and Griscom observed 3,700 on December 30, 1923. Harry Bailey, in his quarterly report of April 1940 says: "Observed and took pictures of two Canada Geese nesting on the Ragged Island property". There is no record of young from this nesting. There is, of course, a possibility that these nesting birds might have been stock formerly used for decoys.

Hutchins's Goose. Branta canadensis hutchinsi. Mackenzie and Barefield observed two small geese at twenty feet November 25, 1943 at Back By, which they identified as this species (Raven 15:36). The Christmas Count of January 2, 1949 listed one which Perkins says was a positive identification as they had excellent views of it, including flying over their heads. Scott has a record for Richmond, which I believe is the only other record for the State.

American Brant. Branta bernicla hrota. It has formerly been listed as a winter visitor in some numbers, but the last record for the area seems to be that of English who found 200 at Dam Neck November 7, 1932. Lester Walsh found 6 at Back Bay Hovember 14, 1931. Caps, Crosby, and Griscom on their Christmas Count saw 50 on December 30, 1932 near Cedar Island. The change of status from a regular winter visitor to our present absence of records for 17 years is due in part to the fact that the birds are marine feeders, and thus as salt water was shut out of Back Bay their food disappeared. Their choice food is eel grass, and a second choice is sea lettuce, and these cannot now grow in the only slightly brackish waters of Back Bay. Then comes the question of why we have not other records for salt water. Recent records for the Pea Island Refuge, which is surrounded by salt water, indicates the birds are quite scarce, with Walker reporting about 400 a year, and some years observing none. Louis Bishop in 1901 said they were the most abundant sea fowl at Pea Island.

White-fronted Goose. Anser albifrons albifrons. Harry Bailey reported two "seen daily" February 5-11, 1939, and one bird (which may have been one of the two he sam) December 29-30, 1938. Two immature specimens in the American Museum of Natural History were taken November 23, 1925 on Redhead Bay in Back Bay (Auk 43:229). We know of no other records for the State.

Lessor Snow Geose. Chen hyperborea hyperborea. The fourth edition of the A.O.U. Check-list lists this form as "casual in....Virginia." A. C. Bent says, "Hast rarely to Rhode Island....more frequently to coasts of Virginia and North Carolina." (Bull. U.S. Mat. Museum no. 130, p. 172, 1925). Hardly distinguishable in the field from the next form.

Greater Snow Goose. Chen hyperborea atlantica. Winter visitor; abundant. October 10 (Bailey) to April 12 (Perkins); average November 20 to February 18. Flocks reach a peak in December, after which many depart for the Pea Island Refuge where 11,000 have been recorded at one time. Another peak is reached in early February, or even January, when birds crowd the Refuge before taking off northward. Rives in his Catalogue of 1890 listed them as "not common winter visitor. A specimen was observed in Virginia in the winter of 1877 by Lt. Wirt Rebinson." Caps, Crosby, and Griscom did not report them in their 1923 census around Cedar Island just below the Refuge - which may prove nothing. November 14, 1928 C. W. Townsend and C. L. Bull saw 2,000 (Auk 46:103). The type specimen for this form was taken on Back Bay.

Blue Goose. Chen caerulescens. Winter visitor; a few are seen regularly with the Snow Geese. October 30 (Bailey) to March 27 (Perkins). Two were seen by Townsend and Bull November 14, 1928 (Auk 46:103). Bailey and I counted 20 birds December 29, 1938, and there have been several counts in other years of equal numbers. I have several counts of which one third of the birds were immatures. Perkins saw two immatures May 15, 1949.

Common Mallard. Anas platyrhynchos platyrhynchos. Winter visitor; not common, but seen regularly in small numbers. October 1 to April 13 (both Bailey); average mid-October to early April. A pair stayed at the Refuge in the spring of 1944 and nested in the boathouse, where 14 eggs were counted and photographed by Mackenzie, Perkins and Grey. Rats destroyed the nest shortly afterwards.

In the early part of this century it was believed the Mallard was not holding its own in comparison to the Black Duck, due to interference over its breeding areas. J. C. Phillips of Massachusetts published some records (Auk 29:533-534, 1912) of the number of Mallards and Black Ducks taken at hunt clubs on Currituck Sound and Back Bay. At the Currituck Hunt Club - 30 miles south of the Virginia line, he had good records for 24 years, 1888-1912. Using the number of Black Ducks taken in a season as 100% he found that over the whole period Mallards taken were 47% of Black Ducks taken. From 1888-98 Mallards were 55%, and from 1898 to 1910 Mallards were 44%. He also had records from the False Cape Hunt Club on Back Bay, just below the Refuge, for six seasons, 1906-07 to 1911-12, when Mallards were 23%; while at Currituck for the seme six seasons Mallards were 37%. He lists the Mallards taken at Currituck for only three seasons:

Season	Total Mallards taken	Takon in November
1909-10	120	50
1910-11	232	107
1911-12	47	29

Phillips makes three comments that qualify the apparent decrease in the number of Mallards. 1. The difference between False Cape and Currituck for the six years may be due in part to heavier bating at Currituck and might only prove that Mallards were responsive to plenty of scattered corn. 2. He points out that from 1858 to 1912 Blacks have

more than doubled their average yearly numbers, while Mallards on the average are a little less than twice as numerous. Thus, there were more Black Ducks to be shot. 3. The hunting season was from November through February, with nearly 50% of the Mallards taken in November, which suggested to Phillips that Mallards wintered to the south of the area in larger numbers than they remained, while Blacks stayed in the area in larger numbers. Since our hunting season is limited to December, it is not possible to compare takes at hunt clubs today - unless someone could locate some old records.

Even with these qualifications it is evident that there was a sharp decrease in Mallards compared to Blacks at Currituck Club - a decrease from 55% to 37%.

Our figures today are not entirely satisfactory. Bailey reported 3,000 Mallards Dweember 22, 1940, and 3,500 in December 1941, compared to Blacks for the same dates of 7,000 and 8,000. This makes Mallards 43% of Blacks for those two years. Perkins in 1943 reported 500 Mallards November 28th. compared to 1,5000 Blacks on December 12th. - giving Mallards 33%. In 1948 he reported only 100 Mallards, and in 1949 200 compared to 6,000 Blacks for each year.

It would be worth while for someone to make a careful study of the Mallards recorded at the Fish and Wildlife Refuges in Virginia and North Carolina. At Pea Island Refuge they are very scarce, and Earle Greene, while at Mattamuskeet, listed counts of only 378 and 150 (Chat I:70, 1937).

Black Duck. Anas rubripes. Winter visitor, common; resident in small numbers. Counts of 6,000 seem maximum, although Bailey reported 8,000. Peaks of concentration in December and March, with most birds gone by April. English noted an increase in the number of birds summering from 1928 to 1933, and found a nest without eggs April 29, 1930. Bailey in his report for May-July 1939 said: "Four broods seen shortly after hatching, but none seen since approximately one week old." He thought the crabs got the young birds. Perkins says the birds nest on the Refuge.

Gadwall. Chaulelasmus streperus. Spring transient in small numbers. March 13 to April 25 (both Reed); four fall records - August 25, 1940 (Bailey); November 8, 1936 and November 28, 1941 (Reed); December 30, 1923 (Caps, Crosby and Griscom). Maximum of six. The absence of fall records is surprising as Miss Cook lists it as a common migrant at Washington, and Walker listed it regularly in fall at the Pea Island Refuge. Scott says it is "common as a fall migrant and probably in winter on the lower York River and presumably on the lower James." (in litt.) Mrs. Reed observes: "The male is one of the easiest ducks to pick out; is conspicuous only for black under-tail coverts, with no white area in front, as in Pintail, Baldpate, etc. In flight instantly becomes flashy."

American Fintail. Anas acuta tzitzihoa. Common transient; coming through in October and November and returning in January; remains com-

mon through February with most flocks departing in early March. Best arrival and departure are September 4 and April 29 (both Reed). Generally speaking, Pintail and Baldpate are about equally common, with Pintail averaging about 7,000.

Bahama Pintail. Anas bahamensis bahamensis. Accidental. Robert Cushman Murphy reports (Auk 56:472, 1939): "On December 17, 1937, Mr. Starling W. Childs shot a Bahama Pintail....on the property of the Horn Point Gun Club, Peter's Cove, Pungo, Va. The bird, which accompanied a flock of 40 or 50 American Pintail, is an adult of undetermined sex The fourth edition of the A.O.U. Check-list (1931) records only two earlier occurrences of the Bahama Pintail in continental North America, namely, one on the east coast of Florida, and one in Wisconsin."

Green-winged Tool. Anas carolinensis. Winter visitor; not common, about the same status as Mallard. October 14 (Reed) to April 3 (Perkins); average early November to late March. Five hundred seems to be a good count for a year, with Bailey reporting 3,5000 in 1941, and Mrs. Reed saw 1,000 on November 8, 1936.

Blue-winged Teal. Anas discors. Transient in small numbers; a few remain as summer visitors and breed. Transients pass through from the middle of August to late October, and in spring from the middle of March to late April. The only winter record is December 9, 1944 (Mackenzie). On July 19, 1944 Charles E. Stevens and I found a family of five in Seashere State Park, three of these being young that were fully feathered, but apparently were not yet able to fly. J. J. Murray and I saw three immature birds in Lynnhaven Inlet on August 17, 1938 which probably were reared in the nearby Seashore State Park.

European Widgeon. Mareca penelopo. Scarce winter visitor; a dozen records for the area since 1912, with half of these records being from 1937 to 1944. Mrs. Reed observed it in Lynnhaven Inlet March 3, 1937; also on April 28, 1940. It was also seen at the Refuge by Mrs. Barefield December 22, 1940 and in Lynnhaven by Mackenzie January 30, 1944. Fuertes listed two specimens (Auk 32:367) December 25, 1914 and January 5, 1915. Cotton and Knappen list three from Back Bay (Auk 56:147) January 22, 1912; February 2, 1912 (A. H. Helmo); and December 16, 1920 (M. A. Church). Mackenzie reported a hunter telling him of shooting a redheaded widgeon at Back Bay about 1942. G. M. Phelps took a female on December 7, 1926 on Back Bay. There are three other records for Virginia from near Washington. Currituck Sound has some ten records of birds taken by hunters, and Pea Island Refuge has single birds seen in 1939 and 1940.

Baldpate. Mareca americana. Winter visitor; common. September 20 (Reed) to May 15, 1949 (Perkins); average October 25 to late March. Peak concentrations are in December and March.

Shoveller. Spatula clypeata. Winter visitor; scarce. C. H. Ewell estimated not over 100 birds for the year 1939-40, and Perkins lists them as uncommon. Mrs. Reed listed them only November 22, 1938, Janua-

ry 21, 1940 and March 29, 1940; this would indicate that outside of the Refuge they are exceedingly scarce. At the Pea Island Refuge some 75 birds winter regularly.

Wood Duck. Aix sponsa. Uncommon as a summer resident; more common in migrations. March 9 to November 30 (both Reed); with the fall migration beginning early in August and lasting into November. Our spring records are two in March - one bird on the 9th. and eight birds on the 18th.; April records of which there are eight, are all of paired birds, while May records are of adult and young. Winter records are: December 3, 1933 (English); December 19, 1943 and December 31, 1944 (both on Christmas Count); January 9, 1941 and January 30, 1949 (both Reed). We have no February records. This is a bird whose status seems to have changed from winter visitor to a migrant, as Rives in his Catalogue of 1890 lists it as a common winter visitor. Miss Cooke, writing of the birds of Washington says that while fifty years ago it was seen principally in winter, in recent years (1929) there are no certain winter records. Mrs. Reed has numerous records of its breeding in our area: eggs April 2; young from May 17 to July 14.

Redhead. Aythya americana. Winter visitor, common. October 30 (Reod) to March 21 (Perkins); average Nevember to March, with peaks in December and February. English noted a decrease of 75% in the ten years before 1933, and Mrs. Reed noted an increase since 1936.

Ring-neck Duck. Aythya collaris. Winter visitor. October 31 (Bailey) to April 30 (Reed); average mid-December to late March. The abundance of this species is not yet determined with accuracy. Bailey had counts of 40,000 December 4, 1939; 35,000 December 1, 1941; 10,000 December 22, 1940; and 15,000 December 20, 1942. Perkins has observed only as many as 3,500 (December 5, 1947) coming into the Refuge for a limited time. Mrs. Reed has many observations of numbers running up to 500, most of these for the ponds around Norfolk, and not at Back Bay, and she feels that after the hunting season they come into the ponds and Back Bay in good quantities. The only record listed from Mackenzie was fifty birds January 16, 1944 at the Refuge. McAtee (Auk 43:251-2) says that in 1909 this species was considered scarce at Back Bay, but that by 1926 it had come in numbers and was considered to be more common than the Lesser Scaup. Miss Cooke lists them at Washington as a rather rare migrant and occasional in winter. This species is rare at Pen Island Refuge.

Canves-back. Aythya valisineria. Winter visitor; the most common duck for the area. November 7 (Perkins) to March 28 (Reed); average November 10 to March 15, with peaks in December and February. Bailey had counts of twenty, thirty and one hundred thousand, while Perkins lists a maximum of 20,000. A good average seems to be 10,000. English noted that by 1933 they were much less common than formerly, and Mrs. Reed notes an increase since 1936.

Greater Scaup Duck. Aythya marila nearctica.

Losser Secup Duck. Lythya affinis. Winter visitor; common. Octo-

bor (Perkins) to April 22 (Reed); average November 8 to April 5. Murray says: "The guides at Cory's Club (on Knotts Island) tell me they can distinguish the two scaups by their movement in flight, that the greater is less common than the lesser, but occurs regularly in winter and some are shot each season." Harry Bailey says the Fish and Wildlife Service estimated that about one fourth of the birds in the large rafts are the greater. Bailey has counts of 20,000 on December 4, 1939 and 14,000 December 22, 1940, with an annual average of 400 on the Refuge. Perkins'estimates run from 500 to 15,000.

American Golden-eye. Glaucionetta clangula americana. Winter visitor in small numbers. November 22 to April 7 (both Reed); average December 5 to March 1. English reported a flock of 15 to 20 birds wintering in Tanner's Creek in 1934. Maximum of 144 on Broad Bay, March 2, 1947 (Scott).

Buffle-head. Glaucionetta albeola. Winter visitor; occurring regularly in small numbers. November 4 (Reed) to March 17 (Grey); average November 23 to February. F. H. Craighill and I found a cripple July 6, 1938 at Wash Woods Coast Guard Station (just over the N. C. line) which is the only summer record. Mrs. Reed lists 150 from Cape Charles Ferry March 27 and 28, 1948.

Old-squaw. Clangula hyemalis. Winter visitor; not common. October 4 (Roed) to March 28 (Grey); average November 23 to February. Counts from 10 to 20 a day are good. It is probable that these birds are more common in the deep water of Chesapeake Bay, as I observed a hundred on March 28, 1940 while crossing from Little Creek to Cape Charles. Mackenzie saw "many" there on December 20, 1944.

White-winged Scoter. Melanitta fusca deglandi. Winter visitor; usually in small rafts near the Refuge and in Chesapeake Bay. November 2 to June 10 (both Reed); average November 13 to March. Maximum count of 850 on March 2, 1947 (Scott), and 200 in the 15 miles from Sandbridge to N. C. line December 28, 1938 (Groy). Mrs. Reed and Harry Bailey reported 1,000 scoters of all three kinds killed by oil from submarine sinkings in February 1942.

Surf Scoter. Molanitta perspicillata. Winter visitor; about like White-winged, possible a little more common. November 1 to June 10 (both Reed); average November 25 to March 3. I got a maximum count of 600 on December 28, 1938 from Sandbridge to N. C. line. Rives says, "I have seen a flock of 'coots' (probably of this species) at Virginia Beach as late as June, which for some reason had failed to migrate."

American Scoter. Oidemia miara americana. Winter visitor; not as common as the others. Mrs. Reed has one record for September 30, 1941, but others fall between November 17 and June 10 (both Reed); average December 2 to March 3. Mrs. Reed noted this species unusually common in 1938 when I listed 450 in the 15 miles from the N. C. line to Sandbridge December 29th. Scott found 681 in Chesapeake Bay April 19, 1949. Mrs. Reed observed 300 as late as April 30, 1939, and found three in Chesapeake Bay June 10, 1939. Fifty a day seems a good count.

Ruddy-Duck. Oxyura jamaicensis rubida. Transient; a few winter. September 30 (Bailey) to December 31 (1944 Christmas Count), and February 10 (Reed) to May 26 (Reed); average October 22 to December and March. Bailey and Perkins have each listed as many as 2,000 birds at peak concentrations and 1,000 seems a good average. Mrs. Reed, Marray, and I saw one bird in the Azalea Gardens August 14, 1944.

Hooded Merganser. Lophodytes cucullatus. Winter visitor, in small numbers. August 7 to April 28 (both Roed); average November 20 to March 26. Maximum count of 60. A. H. Clark saw a young mergenser at four feet - which he took to be this species - in Lynnhaven Inlet on July 3, 1938 (Raven 9:52).

American Merganser. Mergans merganser americanus. Spring transient in smell numbers. January 9 to March 16 (both Reed); average late January to early March. Two fall records: December 22, 1941 (Reed) with 25 birds; and one bird November 25, 1943 (Mackenzie and Barefield). These birds seem to prefer fresh-water ponds among the woods. Maximum 60 on January 18, 1949 (Reed).

Red-breasted Merganser. Mergus serrator. Winter visitor; common, and more common in the March migration. Recorded in every month of the year. Mrs. Reed observes that males arriving in November are usually in eclipse plumage or young males; that in January and February males predominate, while in April we have mostly females. She also thinks that in March there is a definite move away from the sea. Her count of 2,000 for the period February 24 to March 5, 1939 is the maximum. In crossing the Ferry on March 28, 1940 I noticed that birds were abundant in Chesapeake Bay, and that all were males.

Turkey Vulture. Cathartes aura septentrionalis. Common resident, less common in summer from mid-April to late August. Counts for winter range from 30 to 60, and in summer 20 is a good number for one day. Gould listed it as nesting but gave no data. Mrs. Reed has observed evidences of a migration in October and March of several years. In 1941 on October 30th. she recorded 94 birds, which is the largest count for a day; again in 1942 on October 8th. with the wind from the south she observed large numbers in three groups beating their way into the wind; and in 1940 on October 3rd. she noted a good number that appeared to be migrating.

Black Vulture. Coragyps atratus. Resident; common in summer, scarcer in winter with three records for January and two for February. This species is not as regularly observed as the Turkey Vulture, nor are they observed in as large numbers. Counts of 10 to 20 are average and 102 is the maximum. English found a nest with two eggs in the end of a rotten log at Lake Jeyce May 1, 1933. The first record of this species for Virginia was made by John W. Daniel of Lynchburg who reported in 1902 that it was a not uncommon summer resident in Nansemond County.

Sharp-shinned Hawk. Accipiter striatus velox. Uncommon winter visitor. September 30 to March 17 (both Reed), and Gould saw one as late as April 30. Mrs. Reed has observed evidences of migration in October,

and Gould says, "Loose flocks seen in Cape Henry region, where seem to gather preparatory to crossing Chesapeake Bay." It would be worth watching for these birds in late September as 55 were recorded at Kiptopeakethe southern tip of eastern shore - on September 30, 1945, along with many other hawks (Raven XVII:21).

Cooper's Hawk. Accipter cooperii. Resident; fairly common. Gould found a nest near Money Point but did not list the date. Mrs. Reed says, "Most common breeding hawk, except Osprey and Bald Eagle, regular nester at Stumpy Lake, Seashore Park, and road to Dam Neck."

Eastern Red-tailed Hawk. Butco jamaicensis borealis. Uncommon resident (no records for September and October). Mrs. Roed says: "One pair, and probably two between Sandbridge and Williams (near Back Bay Post Office). One pair may have bred in deciduous woods between Kemps-ville and Princess Anne Courthouse. An immature bird seen April 26th. and May 21st., 1942, between Sandbridge and Williams." Gould listed nests at Bayville and Providence.

Northern Red-shouldered Hawk. Buteo lineatus lineatus. Resident; more common than Red-tailed. Mrs. Reed noted an increase in this species as winter visitors since 1940. Gould listed it as nesting but gave no data. Mrs. Reed feels certain it nests at Stumpy Lake, Seashore State Park, and Kempsville.

Broad-winged Hawk. Buteo platypterus platypterus. Transient; recorded once in fall and nine times in spring. Reed saw one September 10, 1946. Barefield and Reed identified one at Stumpy Lake on the amazingly early date of February 18, 1941. The other dates fall between April 15 and May 20; in each case one bird has been seen by Reed. Harold Bailey in Birds of Virginia says there are no breeding records east of Richmond. Since these birds are scarce breeders even at Charlottesville, it would add a great deal to our knowledge if someone would keep a lookout for nests, and thus help determine the range in the State. The birds breed at Raleigh, N. C., so that they might well come eastward as far as Richmond.

American Rough-legged Hawk. Buteo legopus s-johannis. Lester Walsh and Mrs. Reed saw one at Knott's Island on the Virginia side on November 16, 1931 (Raven VI, p.3, 1935). Two were seen by Walsh, Mrs. Reed and others January 2, 1949 on the Christmas Bird Count. Mrs. Reed describes another January 27, 1949 "migrating over open pine woods, cane fields and corn fields near Princess Anne Courthouse. Observed its poworful flight, like an eagle's. As it circled to ascend, when above car, white areas on primaries and white throat (3 white areas) were conspicusous. It was heavily streaked from shoulders to head, and white extended well down on tail. Side view, it appeared light from shoulders to head, contrasting with dark of back and body. It wheeled and soared rapidly, swooping low over cane grasses like a Marsh Hawk."

Golden Eagle. Aquila chrysaetos canadensis. One immature bird was observed at Little Creek May 11, 1944 by Locko L. Mackenzie (Raven 15: 37, 1944). Mrs. Reed saw an adult at Sandbridge November 20, 1945.

being attacked by a Bald Eagle. "When I first watched them, the Bald Eagle was harrowing the Golden Eagle, as if trying to slap it with its wings. Then it manocuvered to get above the Golden Eagle, and four times it made terrific lunges down on the back of the Golden Eagle. At first the Golden paid no attention at all and kept on coming toward me. However, when the Bald Eagle began striking from above, it wheeled to evade and ascend."

Southern Bald Eagle. Haliacetus leucocephalus leucocephalus. Resident; fairly common. Maximum count of 14, January 2, 1949 (Christmas Count); average count three. Reed has recorded it nesting by February 13th. and young in nest by April 4, and well-feathered young in nest April 23rd. Nesting areas in Seashore State Park and Cottage Toll Rd. near Sewell's Point Road. English cited a nest in 1933 which had been occupied for the past 15 years.

Marsh Hawk. Circus cyanous hudsonius. Winter visitor; fairly common. July 29 (Reed, Darden and Grey) to May 20 (Mackenzie); average August 25 to April 24. Recent maximum count is 8 made twice in Docember. A former maximum is 15 made by Caps, Crosby and Griscom on December 30, 1923.

Osprey. Pandion haliastus carolinensis. Summer visitor; common. February 11, 1943 (Barefield) to December 19, 1943 (Barefield); average March 7 to December 6. Actually the bird has been recorded in every month of the year as the V. S. O. field trip party on January 21, 1932 observed two birds. Mrs. Barefield felt certain her bird had just arrived, as she had been watching all winter for them from her home on Little Creek. It is possible that the January date was also an arrival, but more likely a bird which had stayed on through the early part of winter. Nests are common at Sandbridge, and English reported a total of seven nesting sites for the county. Nesting from April 14 to August 28 when two young were observed in a nest. Maximum count 37 on August 16, 1941 when Mrs. Barefield took them to be migrating.

Duck Hawk. Falco percarinus anatum. Trensient; uncommon, a little more common in fall than spring. August 13 (Reed and Berefield) to January 3 (Reed) and March 10 (Reed) to May 5 (V.S.O. field trip). While I have only nine dates for seven years and Reed has 18 records for 10 years, I have the impression that at least one bird can usually be seen at Back Bay Refuge nearly any day in fall. F. H. Craighill and I watched one on September 28, 1938 chasing Herring Gulls and being chased by them in turn over Back Bay. It looked like a game as neither species seemed very excited.

Eastern Pigeon Hawk. Falco columbarius columbarius. Transient; uncommon, more common in fall. September 12 (Reed) to December 20, 1923 (M. S. Crosby recorded a good view of one on the Christmas Census) and April 14 (Mackenzie) to May 9 (Reed). Mrs. Reed and Virginia Pickell observed 20 birds on September 17, 1948 coming into Seashore State Park from the general direction of Cape Charles.

Eastern Sparrow Hawk. Falco sparverius sparverius. Resident; not common, more common in winter. Three a day seems good, with Mackenzie observing 15 on April 28, 1945. Gould recorded it as nesting, and English found a nest at Ocean View in 1934. Grey observed a pair in May 1941 and July 1944 near Shore Drive and Little Creek, but could find no evidence of nesting. Mrs. Reed notes it more common in November and December, and again in February, and that females are more often seen than males; but she has not observed any migration in numbers.

Eastern Bob-white. Colinus virgiens virginianus. Resident; common. Maximum for one day 2 coveys, 26 birds. Reed found nest and 11 eggs May 26.

Texas Bob-white. Colinus virgianus texanus. Introduced species that has intermingled with the above and is now indistinguishable. English saw three that wer taken by hunters.

Ring-necked Pheasant. Phasianus colchicus torquatus. Another introduced species. Some were liberated in Back Bay territory and Mrs. Reed sew one on Long Island Docember 7, 1939. No record since that date and apparently the birds have not survived.

King Rail. Rallus elegans elegans. Resident; common in summer, scarce in winter. We have no February records. Young May 18 carrying food and June 15, 1938 Reed observed an adult with 8 young. They were formerly found in the marsh on Cottage Toll Rd. near the chemical plant, and beyond Lafayette Street. Lester Walsh saw one on Knotts Island Movember 14, 1931.

Northern Clapper Rail. Rallus longirostris crepitans. Resident wherever there are salt marshes. Recorded so far only in small numbers; more common in summer. We have no January or November records. Gould observed one Christmas 1924 when the weather was ten degrees below zero. Breeding: young May 30 (Reed) to July 3 (A. H. Clark). Young have often been seen from the east end of Lynnhaven Bridge on the small island across the channel.

Virginia Rail. Rallus limicola limicola. We have only seven records in 19 years, in each case a single bird, by Ruskin Freer, John B. Lewis, and M. G. Lewis; May 1, 1937 by Mrs. Reed; February 6, 1944 Jack Perkins caught one in a duck trap and observed one August 26, 1944 and September 3, 1946; Mrs. Herbert Thempson had one all summer at her place until October 13, 1948; September 8, 1948 Virginia Pickell saw one at Virginia Beach. Rives in the Catalogue of 1890 estimates the ratio of these as one to fifty Sora. H. H. Bailey in the Birds of Virginia 1910 estimated one to twenty Sora.

Sora. Porzana carolina. Transient; probably much more common than our seven records in fourteen years would indicate. April 15 to June 29 (both Reed) and August 9 (Pickell) to November 18 (English). To get any accurate idea of these birds it would be necessary to hunt a marsh with a dog.

Black Rail. Laterallus jamaicensis pygmaeus. English saw one April 28, 1932 at Sandbridge. Probably more common, but this is our only record.

Purple Gallinule. Porhyrula martinica. Mrs. Reed had a good look at one ten feet from her in Pungo Marsh May 17, 1938. Jack Porkins picked up a dead bird in good condition on the beach at the Refuge May 19, 1946. The only other record for the State in this century is one brought to Murray alive at Lexington May 16, 1940.

Florida Gallinule. Gallinula chloropus cachinnans. Transient in small numbers; rare as a summer visitor. In migration March 19 (Barefield and Whittimore) to May 19 (Recd), and September 30 (Reed) to October 30 (Barefield). Summer records are: Reed saw a young bird at Stumpy Lake July 3, 1938; adults were seen June 2, 1942 and July 14, 1940. Austin H. Clark saw two on the causeway at Knotts Island July 4, 1939; Pickell and Reed saw one August 6, 1946 at the Lotus Pond, Sigma Read, near Pungo.

Coot. Fulica americana. Winter visitor; common. September 18 (English) to May 17 (Reed); average October 25 to April 19. Maximum 20,000 (both Bailey and Perkins). One seen by Grey and Reed July 29, 1940 at Salt Pond, near Dam Neck.

Shorebirds

Our area is not particularly good for shorebirds! This is surprising as the birds certainly migrate through in quantities, and they are abundant on some parts of Eastern Shore and also at Pea Island to the south of us. The only extensive mud flats that I know are at the lower end of Back Bay Refuge, and some around the mouth of the rivers. I have not found the flats in Lynnhaven used to any great extent.

It would be a fine piece of work if the V.S.O. could help build a shallow pond on the Refuge, using a low sand kike that is planted with grass to prevent wind erosion, and use the rainwater in a manner similar to fresh ponds on Pea Island Refuge. Such a place would likely troble the auantity of birds we could find in one day.

Migration reaches a peak around the middle of May and again early in August, frequently the second week. At such times the ocean beach rivals the mud flats in abundance and variety.

Someone could find an interesting project in making actual counts of birds around the Refuge, similar to those made by Charles Urner on the New Jersey coast. Urner was able to establish the abundance and scarcity of each species, as well as the times they were likely to be found in quantities (<u>Bird Life at Old Cape May</u>, Stone, Vol. I.)

American Oyster-catcher. Heanttopas palliatus pelliatus. Straggler. Harry Bailey has two records of one bird each October 31, 1939 and April 27, 1940; and I saw one December 3, 1949 at Lymnhaven Inlet. These

July-August, 1950

birds nest on Cobb's Island and then skip over about 200 miles of coast and are next found breeding at Beaufort, N. C.

Piping Plover. Charadrius melodus. Transient in small numbers. March 19 (Reed) to May 20 (Mackenzie), and July 17 (Reed) to September 28 (Grey); average April 29 to May 17 and July 19 to September 4. Maximum 50 with average for a day of two.

Semipalmated Plover. Charadrius hiaticula semipalmatus. Transient; abundant. April 29 to May 21, and July 16 (all Reed) to December 3 (V.S.O.); average May 2 to May 17 and July 28 to November 4. On August 17, 1939 these birds averaged 25 to the mile in the 15 miles from Sandbridge to the N. C. line.

(We do not have a record of the Wilson's Plover, Charadrius wilsonia wilsonia although these birds nest at Cobb's Island and are fairly common at Pea Island some 80 miles to the south of Back Bay.)

Killdeer. Cheradrius vociferus vociferus. Rosident. Apparently it is common in fall migration, fairly common in winter, and scarce in spring as well as a summor resident. English found a nest May 7, 1930. Reed got unusually large counts 1938-39 with 100 on August 10, 1938 on Hunchback Road; 200 at City Airport November 22, 1938; then 300 at Bayville Farms January 25, 1939 after storms.

American Golden Plover. Pluvialis dominica dominica. Uncommon fall transient. Three birds were observed August 24 and 25, 1938, by Murray and Grey; Mrs. Reed found eleven September 22, 1938 at Little Creek following the hurricane; August 12, 1944 Murray and Grey found one; August 29, 1944 Mackenzie found one and another September 15, 1944 following a hurricane. All records were made at Back Bay except Mrs. Reed's. These birds are darker than the Black-bellied Plover, and in flight do not show the white tail as does the Black-bellied.

Black-bellied Plover. Squatarola squatarola. Abundant migrant, with a few wintering (though January and February records are scarce). Arrives the latter part of July and leaves in late May. Mrs. Reed found ten June 12, 1940 and one June 29, 1942. Counts from Sandbridge to N. C. line on August 24, 1938 were 50; and September 28, 1938 were 61.

Ruddy Turnstone. Arenaria interpres morinella. Transient; common. May 10 to June 18 and July 17 to October 21 (all Reed); average May 13 to June and July 26 to September 23. The birds become common in mid-August, but are rather scarce the first part of the fall migration. Counts from Sandbridge to N. C. line August 3, 1938 were 200, September 28, 1938 were 43.

American Woodcock. Philohela minor. Six records: Mrs. Reed found one on each of following dates: February 27, 1938; December 1 and 21, 1940; and February 11, 1941, all of these in Seashere State Park. English had one March 5, 1932 and had seen three taken by hunters in the area. Gould listed it: "Not common, nests". Kenneth Lawless saw one on Long Island, Back Bay, on January 2, 1949.

Wilson's Snipe. Capella gallinggo delicata. Winter visitor in small numbers. August 24 (Murray and Groy) to May 5 (Reed); average October 30 to April 14. Maximum 4.

Hudsonian Curlew. Numerius phaeopus hudsonicus. Transient; regular in small numbers. April 12 (Perkins) to May 2 (Reed) and July 17 (Reed) to October 30 (Harry Bailey); average April 25 to May 2 and July 17 to September 17. Maximum for one day 12. Bailey noted April 27, 1940 that a large number were migrating through during that week.

(Mrs. Reed published a record in the Raven 14:25 of three Long-billed Curlew, Numerius americanus americanus, seen on Ragged Island by C. H. Ewell in late April or early May 1932, and identified by him in 1942 from skins in Mrs. Reed's collection. Ewell is an excellent field man on waterfowl, and careful in his estimates; however, like other wardens, he is not as interested in other birds, and there is a chance of error, so that the record is listed as hypothetical.)

Upland Plover. Bartramia longicauda. Straggler; three records. September 1934 Gould heard several flying over, and on November 12, 1941, Mrs. Reed and Mrs. Barefield saw four. Reed saw six at Kempsville September 11, 1946.

Spotted Sandpiper. Actitis macularia. Transient; common in spring, apparently scarcer in fall. April 4 to May 26 and July 8 to October 11 (all Recd); average April 22 to May 24 and July 19 to September 10. There is a fairly heavy migration in mid-May, and probably the fall migration is just as heavy, but is not as concentrated. We have no June record, and no record of breeding out of the mountains.

Eastern Solitary Sandpiper. Trings solitaria solitaria. Transient; scarce in spring, uncommon in fall. Five records for spring: May 4, 1931 (English); May 6, 1938 (Reed); May 16 and 17, 1944 (Mackenzie); May 8, 1945 (Mackenzie); and April 4, 1946 (Reed). In fall, July 22 to October 4; average July 23 to September 17.

Eastern Willet. Catoptrophorus semipalmatus semipalmatus. Transient; uncommon in spring, rare in fall. April 15 to June 29 (both Reed); average April 30 to June 11. I collected a male August 30, 1939 near Little Creek, and Mrs. Reed observed one each on September 4, 1940 and August 18, 1942. Mackenzie observed that in the spring migration of 1945 none were seen in a year when the shorebird migration was quite poor.

Western Willet. Catoptrophorus semipalmatus inormatus. Common fall transient. July 17 (Reed) to September 28 (F. H. Craighill); average July 17 to September 20. August 21, 1940 I collected a male and a female near Sandbridge which proved to be this form. Both birds were adults, the female being larger, with a wing of 217 mm., and the male 214 mm., both of these above the average of the Eastern Willet which is given by Chapman as 204 mm. When compared with the skin of the eastern form, these two birds were much paler in color. As a general rule willets on the Atlantic coast in fall are taken to be the western form with an occasional eastern bird sprinkled in. The day the above were collected Mrs. Reed and I saw 30 birds, and while there was con-

siderable difference in size, we did not see one that was different in color from the westerns we collected. August 9 through 13, 1944, Murray and I stayed at Back Bay Refuge, where we were joined by Mackenzie, seeing up to 30 willets a day, but did not list any of them as definitely eastern. Other observations seem to add weight to the assumption that the bulk of our fall migrants are the western birds. Counts from Sandbridge to the N. C. line, 15 miles: August 10, 1940 (50); August 24, 1938 (173); August 17, 1938 (238); September 28, 1938 (16); August 28, 1941 (300). Scott observed birds migrating across Chesapeake Bay, July 28, 1948.

Greater Yellow-legs. Totanus melanoleucus. Transient; common. March 24 (Perkins) to June 12 (Reed), and July 17 to December 12 (both Reed); average March 27 to June 10, and July 26 to October 30. Highest count I have was August 9 (30).

Lesser Yellow-legs. Totanus flavipes. Transient; common in fall, though not as common as the Greater; a few in spring. March 24 (Perkins) to May 21 (V.S.O. field trip) and July 26 (Grey) to November 9 (Reed); average April 26 to May 17 and August 1 to October 16. Maximum count 17, May 10 (Reed). One January 2, 1949, Back Bay (Walsh).

American Knot. Calidris canutus rufus. Transient; not common. May 14 to May 24 and July 28 to October 30 (all Reed); average May 17 to May 20 and August 1 to September 28. Maximum September 3, 100 in ten miles. George H. Mackay in "Observations on the Knot" (Auk X, 1893, pp. 25-34) says, "I have reasons for believing that they have been shot also in large numbers on the Atlantic seaboard (Virginia), in the spring on their way north to their breeding grounds, one such place shipping to New York City in a single spring, from April 1 to June 3, upwards of 6,000 plover, a large share of which were Knots. This was about thirty years ago, but it nevertheless served to illustrate what kind of treatment these birds received in those days, as well as since."

(Purple Sandpiper. Erolia maritima. Mrs. Reed observed one at Cape Charles December 31, 1945 (Raven XVII, p.8) which is the second most southern record, the other being at Charleston, S. C. It would be worth looking around the stone jetties at Little Croek ferry slips.)

Pectoral Sandpiper. Erolia melanotos. Transient; some falls in good numbers; one spring record. May 9, 1937 Mrs. Reed saw 8 birds. July 17 to November 9 (both Reed). August 9 to 13, 1944 counts of 12 to 20 were seen daily at Back Bay. Maximum of 25 on September 10 (Mackenzie).

White-rumped Sandpiper. Erolia fuscicollis. Three records. May 10, 1948 Reed saw three at Little Creek; September 17, 1941 at the Refuge Reed observed four birds; and November 3, 1949 Reed, Darden and Grey found 16 on the mud flats at the Refuge. The scarcity of records is surprising as these birds are regular transients in small numbers at the Pea Island Refuge some 80 miles to the south.

Least Sandpiper. Erclia minutilla. Transient, in good numbers, but not as common as Semipalmated Sandpiper. April 28 (Mackenzie) to May 24 and July 17 to October 14 (all Reed); average May 9 to May 17 and August 4 to September 17. We have five winter records: November 16, 1931 (Reed and Walsh); December 17, 1944 (Mackenzie); December 27, 1928 with six birds by Walsh; January 2, 1949 (Christmas Count; and January 21, 1932 when thirty birds were seen on the V.S.O. field trip. Occasional birds are found along the seashore, but they are usually on the mudflats and in the short dune grass in wet spots. Two field marks help identification besides the legs: in contrast to the Semipalmated Sandpiper they have a wing bend at the wrist instead of a fairly regular curve, and there is more brown on the upper breast especially in front of the wings. Maximum count 50 (Reed) which seems low.

Red-backed Sandpiper. Erolia alpina pacifica. Transient in good numbers; scarce as a winter visitor, apparently being absent some winters. July 19 to May 24 (both Reed). They usually arrive late in fall and it is often past the middle of August before they are seen even in small numbers. Maximum 50 on May 17.

Eastern Dowitcher. Limnodromus griseus griseus. Transient; not common. April 1 (S.A.Walker) to June 12 (Reed) and July 17 (Reed) to December 28 (Walsh); average May 2 to June 12 and July 29 to September 14. Maximum 31 on July 17. I have looked for the Long-billed Dowitcher, scolopaceus, without success, although they are regular transients in small numbers at the Pea Island Refuge.

Stilt Sandpiper. Micropalama himantopus. Uncommon fall transient; once in spring when Reed found it May 10, 1948. Our five records for fall are from August 25 to September 10. September 4, 1940 (Reed, Darden, Barefield and English); August 28, 1944 I collected a male and female near the Azalea Gardens; Mackenzie saw 5 on September 4, 1944; and Six days later - September 10 - saw 14 birds, both records being at the Azalea Gardens when the water was low and left exposed mud banks; Perkins saw 200 at the Refuge August 25, 1946. Further observation will undoubtedly prove these fairly regular transients, and often in good numbers. Mackenzie notes that in addition to the difference in color of legs compared with the Lesser Yellow-legs, the Stilt is much more deliberate in walking and feeding.

Semipalmated Sandpiper. Ereunetes pusillus. Transient; abundant. April 29 (Mackenzie) to June 12 (Reed) and July 17 to November 9 (both Reed); average May 2 to June 11 and July 19 to October 30. Maximum count 150 August 13.

Western Sandpiper. Erounetes maurii. Fall transient; some years appears common, but is scarce in others. Two spring records. July 28 to September 30 (Reed) also November 2, 1938; December 29, 1938 and 3 birds January 2, 1949 (V.S.O.Count). May 19, 1945 (Mackenzie and Reed) and again June 14, 1945 (Mackenzie). A male was collected at Sandbridge August 22, 1938 by Murray. The first record for Virginia seems to be: "The Western Semipalmated Sandpiper on the Coast of Virginia" by C. W.

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Beckham of Washington (Auk II p.110) as found by him and Henry Seebohm at Virginia Beach, September 6 and 7, 1884. Several were shot but only one was preserved. It was seen and identified by Ridgway. In 1944 Murray and I found this species scarce in August at Back Bay, whereas a month later in September Mackenzie noted that at the same place the ratio was 3 Western to 1 Semipalmated. Maximum 23 (Reed), though August 22, 1938 I noted they were common and equal in numbers to Semipalmated. One winter record: 6 birds on January 2, 1949 (Walsh et al.).

Marbled Godwit. Limosa fedoa. Three records, but probably more common than these indicate. August 24, 1938 Murray and Grey observed one at Sandbridge; September 9, 1941 Reed and Darden saw one bird at the Refuge; August 20, 1941 Harry Bailey observed one on the Back Bay Refuge.

Ruff. Philomachus pugnax. Mackenzie noted a male on the mud flats near the Azalea Gardens September 10, 1944 (Raven XVI p.23).

Sanderling. Crocethia alba. Abundant migrant; scarce winter visitor. July 17 to May 24 (both Reed), no June records. Migration heaviest in mid-May and mid-August. Maximum count 654 in 6 miles (Scott and Stevens).

Avocet. Recurvirostra americana. One was observed September 8 and 9, 1939 by Harry Bailey and Griffith of the Biological Survey at Sandbridge. S.A.Walker and F.H.Craighill perhaps saw the same bird September 8, just north of the Virginia line (Auk 58:) Rives in his Catalogue, p.24, quotes the following from Forest and Stream (VIII, 1877, p.269) which may refer to this species: "A beautiful specimen of the large-legged Avocet was shot a short time since on the flats a short distance below the City of Norfolk." There seems to be only one other Virginia record, of two birds collected at Wallops Island, Sept., 1925.

Black-necked Stilt. Himantopus nexicanus. Harry Bailey and A.O. English each saw one, separately, near Sandbridge May 9, 1940. The only other record for the State is a bird seen at Cobb's Island, June 8, 1929.

Wilson's Phalarope. Steganopus tricolor. One was seen September 17, 1941 by Mrs. Reed and Mrs. Darden, and was photographed (Raven 14:24).

Northern Phalarope. Lobipes lobatus. Three records: a male was taken September 27, 1899 at Virginia Beach and is in the Dwight Collection at the American Museum of Natural History, N. Y.; Mrs. Reed saw one at Dam Neck Station after a storm Aug. 13, 1939; and Grey and Mrs. Darden saw one near the mouth of Lafayette River, May 31, 1941.

Pomarine Jacger. Stercorarius pomarinus. Four records: Mackenzie saw one at Back Bay, following a hurricane, September 15, 1944; and Mrs. Reed and Miss Virginia Pickell saw one September 20, 1944 while crossing on the Little Creek-Cape Charles Ferry, taking it to be this species on the basis of the tail feathers being blunt and not sharply pointed; October 9 and 26, 1946 (Reed).

Parasitic Jaeger. Storcorarius parisiticus. One bird seen near Cape Henry and also at Back Bay August 3, 1939 by Reed, Barefield and Grey; and a bird in light phase seen at Sandbridge May 22, 1940 by Murray and Grey.

Northern Skua. Catharacta skua skua. February 5, 1940 Richard H. Pough on a trip from Florida to New York saw one bird shortly after passing the Virginia line. "A Northern Skua came into sight and harried the gulls in the wake of the boat for a few minutes. (Raven XI p.16)



The Raven

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Contents

Birds of the Cape Henry Region - Part II

By John H. Grey, Jr.

Glaucous Gull. Larus hyperboreus hyperboreus. Ludlow Griscom on May 14, 1935 saw a bird in immature, or first year, plumage on the pilings in the upper harbor at Norfolk. (Raven XVI, 1.) There are two other records for Virginia.

Iceland Gull. Larus leucopterus leucopterus. January 11, 1934 two birds were seen at separate places near Cape Henry by W. T. Helmuth III. (Auk, 51:375). On November 24, 1944 one was seen by William H. Drury, Jr., and reported to Griscom as follows: "Lynnhaven Rhodes, Thimble Shoal Channel, feeding on garbage dumped by ships in company with about 100 Herring Gulls, 20 Ring-billed Gulls, 15 Laughing Gulls. The bird was slightly smaller than the Herring Gulls; losing its buffy plumage, which was however, still noticeable. The bill was dark, flight was very light and bouyant which is one of the best marks I know." (Raven XVI p.1).

Great Black-backed Gull. Larus marinus. Winter visitor; uncommon. August 20,1949 (V.S.O. field trip) to April 28 (Bailey). Apparently occurring more commonly in February and March of recent years. The status of this species has changed within the years covered by this paper. From 1933 to 1943 we had five records; with only one record a year for 1940, 1942, and 1943. Mackenzie in 1944 observed it four times - almost as many as in the past ten years. His maximum was five birds December 31, 1944. In 1949 we already have six records between January and August with a maximum of ten birds February 12 (Mrs. Reed). The birds occur regularly at Lynnhaven, and along the coast at Back Bay. North Carolina has experienced a similar increase, only in larger numbers, around Oregon Inlet some eighty miles to the south of Back Bay. There Sam Walker noticed them fairly common in winter between Nag's Head and Oregon Inlet along eight miles of coast where fishermen often hauled seign and left discarded fish on the beach. Walker's maximum was 100 on December 28, 1939, and of these two thirds were immature birds. It is quite likely that the bird at Back Bay on August 20,1949 was a summering bird, and further observation may prove them summering regularly with us.

Herring Gull. Larus argentatus smithsonianus. Abundant winter visitor; in summer an occasional adult and many immature may be found along the coast at Back Bay. Becomes common about the middle of September and stays in good numbers through April. Maximum count of 3825 by Fred Scott on March 2, 1947, who at the same time found only 3 Ring-billed Gulls; next best count is 700 by Mrs. Reed on March 18,1948 in a field following the plow. It is not uncommon to find some 60 immature birds in summer between Sandbridge and the North Carolina line. In 1938 a banded bird was identified as from Wicupesset Island, New York; and in 1939 one was identified from Rezedes Island, Quebec.

Ring-billed Gull. Larus delawarensis. Common winter visitor; some immature remain in summer. They arrive and depart rather like the Herring; and hare here in the ratio of one Ring-billed to two or three Herring. Mrs. Reed has maximum counts of 1,000 birds on November 10, December 30, and March 14. In summer it is usually possible to find a dozen immature birds between Sandbridge and the North Carolina line. Mrs. Reed notes that this species is more apt to be found in plowed fields than the Herring.

Laughing Gull. Larus atricilla. Abundant summer visitor; not known to breed. February 16 (Barefield) to December 26 (Christmas count); average April 4 to November 4. Winter records are scarce with us, although the birds winter regularly around New York City and further observation might prove them to be with us regularly in winter. Murray found a few birds near Knott's Island January 19, 1933; and English and Gould found 150 December 6, 1931. Maximum of 1,000 on November 1, (Mrs. Reed) and Scott on May 1 saw 750. May 22, 1940 Murray and I noted a large number of these birds on the sands at Lynnhaven which were mating. although their nearest known nesting grounds were at Cobb's Island thirty miles away. I have noticed these birds in July and August flying low over the beach dunes and catching insects that were swarming into the air from 50 to 100 feet above the dunes. The action of the gulls at such times suggests the flight of the Nighthawk; rapid flight with alternating flapping of the wings and sailing, together with quick changes of direction as the bird snaps up an insect.

Bonaparte's Gull. Larus philadelphia. Winter visitor; regular in small numbers, sometimes becoming abundant. November 3 to May 17 (Reed); and Mrs. Reed has one record of an immature bird June 12; average November 29 to April 15. Maximum 2,000 at Cape Henry December 15, 1938, with another count of 1,000 on December 26; a good number for one day is 100. While immature birds linger much later than adults, Mrs. Reed noted that April 7, 1946, out of a flock of 80 birds only 25 were immature.

Gull-billed Tern. Gelochelidon nilotica arenea. Transient: not uncommon in fall; four records in spring. July 17 to September 23 (both Reed). In spring Mrs. Reed had recorded them May 10, 1939; May 21, 1942; and June 29, 1942; while English reported them June 28, 1931. Maximum of 40 on September 15 (Mackenzie). A few may usually be found on the mud flats below the Refuge at Back Bay.

Forster's Term. Sterna forsteri. Transient: fairly common in fall; once in spring. July 4 (Scott) to January 19, 1933 (Murray); average July 11 to December 1. Mrs. Reed made the only spring record of one bird March 14, 1943. However, it may be that closer observation in spring will reveal the birds to be here more frequently than we have observed them, for at this season they are difficult to distinguish from the Common Term - the only safe distinguishing feature that I have discovered in spring is the voice, which in the Common sounds like tearing silk cloth, and in the Forster's is a rasping and deeper "zaap". In fall plumage, when we see most of our birds, the black cap is almost gone, and the black patch through the eye contrasts sharply with the white on the back of the head; whereas in the Common there is always some black on the back of the head. Maximums of 38 by Reed December 16 and Scott found 95 off Newport News on December 2, 1949, with the average from 12 to 25.

Common Tern. Sterna hirundo hirundo. Summer visitor; fairly common. April 1 to September 22 (both Reed); average April 24 to September 17. Maximum 75 on July 4 (Scott) with average of 20. There is no evidence of breeding in our area. English recorded these birds on January 7, 1934, but there is some question in my mind if they may not have been Forster's, as Sam Walker at the Pea Island Refuge did not record them after early October; also they are not common in winter even in Florida.

(Arctic Tern. Sterna paradisaea. Mackenzie reported two September 14, 1944 at Back Bey following a hurricane, (Raven, 15:87). Ludlow Griscom advised against accepting this sight record, even though Mackenzie was acquainted with the birds in New England, because no specimens have yet been taken below New York, and also because when the birds are standing on sand the appearance of being short-legged may be accounted for in part by the uneveness of the sand.)

Roseate Tern. Sterna dougallii dougallii. Until 1949 these were included in this list only on the authority of C.L. Phillips saying he had frequently seen it skimming over the waters of Hampton Roads in May 1877 (Ornithologist and Oologist XII,p.122). On August 30, 1948 Scott and Stevens saw five at Back Bay and Mrs. Barefield tells me she had seen it once in spring. Murray and I searched for this species along Back Bay coast many times without avail, and even shot a couple of terns that we thought were this species but proved to be Common Terns in changing plumage. Peterson suggests that the call note of "chivy" is suggestive of the Semipalmated Plover, and the most useful field mark. They occur regularly at Oregon Inlet.

Least Tern. Sterna albifrons antillarum. Summer resident; fairly common. April 15 (Mrs. Reed) to October 23 (English); average April 26 to September 20. A small colony has nested on the beach at Back Bay Refuge, with nest counts as follows: 65 on June 6, 1938 (S.A. Walker); 12 June 19, 1945 (Mackenzie); and 30 in 1946 by Perkins who also saw young birds. Mrs. Darden, Mrs. Grey, and I found 35 nests on Sandy Hook at the mouth of Lafayette River on May 3, 1941 - but the area was soon taken over by the Navy. Much of the credit for the come-back of these birds after their depletion in the early years of this century is due T. Gilbert Pearson and the National Audubon Society.

Royal Term. Thalasseus maximus maximus. Summer visitor; not common. April 8 (Mrs. Reed) to December 3, 1949 (Scott, Stevens, and Lawless), also, Mrs. Reed and Maurice Broun found a sick bird at Back Bay December 28, 1940; average April 13 to September 28. Birds were especially plentiful in the fall of 1949 being seen regularly through October; sixteen birds were at Back Bay November 3, and the one on December 3 did not seem unusual. However, in years before this there were only 3 records after September. No evidence of breeding, in fact the birds are almost absent from mid June to mid July. Maximum 40 on May 20 (Mrs. Reed). The best distinguishing mark is the bill - orange colored in contrast with the coral red of the Caspian Term.

Caspian Tern. Hydroprogne caspia. Transient; fairly common. April 8 (Grey) to May 24 (Mrs. Reed) and July 17 to December 12 (both, Mrs. Reed); average April 11 to May 18 and July 19 to November 22. Maximum 62 on September 20, and 48 on September 9.

Black Tern. Chilidonias nigra surinamensis. Fall transient in fair numbers; two spring records. July 17 to November 28, with next latest September 17 (all Reed); average July 26 to September 4. English has the only spring records of two birds at Lake Drummond May 13, 1931 (this is in Dismal Swemp and really outside our territory by some 5 miles), and another record of April 22, 1933 on the Bay. The birds are casual spring transients at Oregon Inlet and should occur frequently with us. Maximum 63 August 30.

Razor-billed Auk. Alca torda torda. "A male was shot in the vicinity of Norfolk about October 15, 1886 according to Mr. F.S. Webster of Washington," (Auk LV:158). Mrs. Reed and Perkins found a dead bird and saw two flying along coast at Back Bay December 30, 1947, when they noted that all three birds were immature and did not have the white markings on the bill as in the adult.

Brunnich's Murre. Uria lomvia lomvia. Sam Walker picked up a dead bird on the beach off False Cape January 26, 1939, which was identified by W.F. Kubicheck.

Dovekie. Plautus alle alle. One collected January 20, 1923 by J.C, O'Connor at Sandbridge, and one seen the next day, (Auk 40:317). December 5, 1930 one was sent to the Academy of Natural Science, Philadelphia, which was taken at Back Bay (Auk 48:105). November 28, 1932 one seen near the North Carolina line by J.W. Milendorf (Auk 50:332). December 28, 1944 one heavily oiled found on Back Bay by Perkins; and two dead birds were found on the Christmas count by Mrs. Reed December 31, 1944. January 7, 1945 saw some that were heavily oiled but were still able to fly. In 1949 Perkins saw one January 2 and 15 and Mackenzie and Perkins saw one dead and one alive January 22nd.

Rock Dove. Columbia livia livia. Some domestic pigeons have become feral and hence are included.

Eastern Mourning Dove. Zenaidura macroura carolinensis. Resident; fairly common. In July there are flocks of 25 to 35. Mrs. Reed found it nesting in 1943 at the Wildflower Sanctuary.

(Carolina Paroquet. Conuropsis carolinensis carolinensis. The 4th A.O.U. Check-list says "Formerly ranged...north along the Atlantic coast to southern Virginia." However, this might have been the Dismal Swamp rather than our territory.)

Yellow-billed Cuckoo. Coccyzus americanus americanus. Summer visitor; uncommon. April 14 to October 14 (both Reed); average May 9 to September 28. Maximum 6 May 11 (Reed). English had an immature specimen presented to him in 1932 which had been captured in the area.

Black-billed Cuckoo. Coccyzus erythrophthalmus. Three records; all by Mrs. Reed. Two May 24, 1939; one May 19, 1940; and one June 25, 1940. Bailey in his Birds of Virginia commented that we had no tidewater record of breeding.

Barn Owl. Tyto alba pratincola. Resident: apparently in small numbers. March 20, 1949 Dr. Bryan Grinnan of the Edgewater section of Norfolk took from the tower of an old windmill near his place six young birds about the size of baby chicks. The two adults had been disturbing the community for some time so that neighbors declared they could get no rest at night. A couple of years previously Capt. Bowfines had taken several shots at the adults because they were a general nuisance. Finally the windmill was torn down to get rid of the owls. Mrs. Reed found a young bird August 2, 1940 which was able to fly but had been caught at the Wildflower Sanctuary. August 22, 1941 Mr. and Mrs. Reed saw adults and four young in the belfry of Ghent Methodist Church.

Gould said: "Not common. Three young were taken from a nest in a large wooden tank of a veneering company in Portsmouth 1927". Mackenzie had one fly into the lights of his car June 27, 1945. English had seen two dead birds and one that was captured. Perkins had nest and 4 eggs Jenuary 24, 1950 in the tower on Ragged Island.

Eastern Screech Owl. Otus asio naevius. Resident; in small numbers, although English found it a common resident a few years back. June 1, 1941 two young birds were captured by Mrs. Darden's boys near their home on Lafayette River. English found a nest 1933.

Great Honred Owl. Bubo virginianus virginianus. Resident; scarce. Gould said "One had its nest in an old Red-tailed Hawk nest near Bayside, Princess Anne County, a few years ago". Mrs. Reed found two eggs in a nest at Filgrim's Rest Sanctuary January 29, 1941, and young February 17, 1939; and February 11, 1938. Mackenzie found two young April 22, 1945 and apparently they left the nest May 6.

Western Burrowing Owl. Spectyto cunicularia hypugaea. A.C. Bent, Life Histories of North American Birds of Prey, II p. 396, says that on October 22, 1918 one came aboard a naval vessel off Hampton Roads, Va. Murray in the Raven, X, April-May 1939, p.2, checked the record with F.C. Lincoln and found that it was published by William Duncan Strong of Berkley, California in the Condor 24, p. 29, 1922, where he states that their boat was just out of Hampton Roads enroute to New York. The owl flew about the quarter deck for four hours, was captured the next morning, and taken ashore by a marine. It was identified as a Burrowing Owl, but Strong was not able to make the subspecific identification, but guessed it to be the Florida form. H.C. Oberholser was of the opinion it was the western form as the Florida bird is confined to the State and is a resident, while the western bird is quite a wanderer.

Northern Barred Owl. Strix varia varia. Gould listed it as a not common resident, and English found it twice in Black Water Swamp: December 1930, and November 1932. I have listed no other records.

Short-eared Owl. Asic flammeus flammeus. Three records, all in fall. Mrs. Reed saw one on Cottage Toll Road September 20, 1939; another was seen by her on the Refuge November 21, 1941; and a bird was seen on the Christmas count for the area on December 31, 1944. H.H. Bailey listed it in the Birds of Virginia as a resident that bred in the marshes. Miss Cooke in her paper on the birds of the Washington, D.C. region calls it a rare winter visitor with only one record between 1891 and 1929 when she wrote.

Chuck-will's widow. Caprimulgus carolinensis. Summer visitor; somewhat uncommon and localized. April 23 (Mackenzie) to September 2 (Mrs. W.W. Houston). They can frequently be heard in Seashore Park, and while I do not have data on other places it is quite probable that if one listened for them at night throughout the area they could be found in several places. English was given a dead bird in the spring of 1932 that had been killed by contact with wires at the Navy Yard. I believe we have two satisfactory breeding records, though of a somewhat unusual nature. Mrs. Houston told Mrs. Reed that on our latest

date, September 2, 1945 she had seen a family of these birds, which is an interesting late date but not improbable as they have been recorded at Raleigh through September 21. The other breeding evidence involves a change in identification made by Gould, and I do this with considerable hesitation. I did not have the privilege of knowing Gould who was mainly an oologist and therefore looked for nests during the day, rather than listened for birds at night. This may be the reason that he did not list the Chuck at all, although he did much work in the area now known as Seashore Park, and which in his day was referred to as "The Desert" because of tremendous sand dunes which were encroaching on the heavy woods. Therefore, I think his record under Whip-poor-will really belongs under the Chuck: "Not common, nests found at Cape Henry May 17, 1908 and Ocean View May 19, 1915."

Eastern Whip-poor-will. Caprimulgus vociferus vociferus. The status of this species is uncertain. It has not been recorded by Mrs. Reed, Mrs. Barefield, or myself. English listed it as a "summer resident, common in some sections, arrives late Margh: March 11, 1932." Goulds reference has been quoted under the Chuck-will's widow above. Mrs. Marshall, wife of the superintendent of Seashore Park, said that while living in the Park she had heard both the Chuck and the Whip-poor-will on August 5, 1943. Mackenzie listened a great deal for owls and his only record was made June 1, 1944: "I went into Seashore State Park about midnight, hoping to hear some owls. Chuck-will's widows were singing everywhere. Close at hand was one Whip-poor-will, and it was most instructive to hear both of them at once. It would seem that this should be a breeding bird," (Raven 15:48). In eastern North Carolina the Whip-poor-will is replaced by the Chuck, and even when they overlap, it is usually a matter of one arriving for the summer and the other passing through. We need more work on this species in the whole eastern part of Virginia.

Eastern Nighthawk. Chordeiles minor minor. Not common as a summer visitor; more common in migrations. April 28 to September 28 (both Mrs. Barefield); average May 2 to August 30. Mackenzie noted a nest June 3, 1945 on top of a Norfolk building. Between 1936 and 1940 a pair used the territory between Little Creek and the Bay until houses were built there in such numbers.

Chimney Swift. Chaetura pelagica. Summer visitor; fairly common. April 4 to October 7 (both Mrs. Reed); average April 10 to October 3. Young in nest July 28, 1939 (Grey).

Ruby-throated Hummingbird. Archilochus colubris. Summer visitor; fairly common. April 4 to September 14 (both Mrs. Reed); average April 19 to September 10. Maximum 8 September 1 (Mrs. Reed). Nest May 24 to June 19 (Mrs. Reed).

Eastern Belted Kingfisher. Megaceryle alcyon alcyon. Uncommon resident. Maximum count 7, average 1. Mrs. Reed felt that by 1941 the birds were less common than they were in 1936, and that they were a little more common in winter. Gould says they nest. Mrs. Reed saw a male carry a fish into hole in bank Wildflower Sanctuary on May 13.

Southern Flicker. Colaptes auratus auratus. Resident; fairly common. A male collected by Murray and Grey on May 20, 1940 was identified by Wetmore as this species. Mrs. Reed records a nest in 1943. Maximum 60 November 20, and 26 December 30. An average count is 3. Often noted in the marsh at Sandbridge, where it lights on a post or a bush. S.A. Walker has recorded them on the open beach. Some winter birds should be collected as they might prove to be the northern form C. a. luteus.

Southern Pileated Woodpecker. Hylatomus pileatus pileatus. Resident in suitable localities, particularly at Stumpy Lake and Seashore Park. Mackenzie found a nest May 5, 1945. Maximum 8 (Scott).

Red-bellied Woodpecker. Centurus carolinus. Resident; not common. Maximum 6 on November 6 (Mackenzie). Are probably a little more common in winter. Gould says they nest.

Red-headed Woodpecker. Melanerpes erythrocephalus erythrocephalus. Summer visitor; not common. Occasionally may winter. April 4 (Reed) to November 18 (Barefield). English says "a few remain during mild winters, two fed at my traps during 1931-32". Ben Coffey found one December 20, 1942 on the Christmas Census. Mackenzie found one January 21, 1945. Nesting: Mrs. Reed found a nest May 6, 1938 in Seashore Park, and one at Pungo Marsh May 15, 1938; young June 16. Murray and Grey saw young birds flying about at Sandbridge August 10, 1944.

Yellow-bellied Sapsucker. Sphyrapicus varius varius. Winter visitor; uncommon. October 15 (Mrs. Reed) to April 14 (English); average November 3 to March 11. It is interesting that English recorded these birds only twice and Gould only once; whereas in recent years we have had about three records a year. Maximum 5 on October 29 (Mrs. Reed).

Southern Hairy Woodpecker. Dendrocopus villosus auduboni. Uncommon resident. Gould says that it nests. Maximum 4 May 26 (Mrs. Reed), with average counts of only one a day, and that rarely. In the Auk XIX 1902, p.400, John W. Daniel notes the first record for Virginia of the southern form of the Hairy: "In a collection of birds made during May 1902 by the writer in the Lake Drummond area of Dismal Swamp, there is a specimen of the Hairy Woodpecker which proves to be typical of the southern subspecies. (dryobates villosus auduboni) taken May 22, 1902." Murray thinks that William falmer verified the identification. Someone should collect a winter specimen for subspecific identification.

Northern Downy Woodpecker. Dendrocopus pubescens medianus. Resident; fairly common. Gould says that it nests. Maximum 9 October 21 (Mrs. Reed); average 1. In April 1945 Mackenzie noted that Lt. Ludwig of Portsmouth had collected 3 birds; two of which he identified as the northern form (Medianus), and one as the southern form (pubescens). Actually our birds are intermediates, between these two forms, and their identification might depend upon the inclinations of the person examining the skins. Oberholser listed specimens from southeastern Virginia as pubescens (Proc. U.S.N. Mus. Vol. 18, 1895, pp. 547-550), whereas J.H. Riley examined a specimen collected by Murray in Dismal Swemp in May which was intermediate, but seemed to Riley to be mearer medianus.

Red-cockaded Woodpecker. Dendrocopus borealis borealis. December 30, 1923 Caps, Crosby, and Griscom found 3 birds on Cedar Island in Back Bay. English saw one November 19, 1933. Gould is our authority for their nesting, and he says: "I have only known of one pair that had its nest in the hole of a green pine about twenty feet from a much larger pine in which a pair of Bald Eagles had their nest. Both eagles and woodpeckers nested in the same trees for several years, until the timber was cut." Gilbert Pearson once amazed me by spotting a nest fifty yards away in heavy woods while looking toward the sun. He explained that the trick is to catch the sunlight reflected from the rosin which drips down the tree for several feet below the nest which is usually in a live tree.

Eastern Kingbird. Tyrannus tyrannus. Summer resident; common. April 16 (Mackenzie) to September 17 (Mrs. Reed); average April 21 to August 22. Young July 14-24. Maximum 20 September 15 (Mrs. Reed).

Arkansas Kingbird. Tyrannus verticalis. Three records. Mrs. Reed and Walsh saw two on Knotts Island November 16, 1931. One by Mrs. Darden, Mrs. Reed, and Grey near Sandbridge November 3, 1949. Perkins saw two birds November 4, 1949 near Refuge Headquarters.

Scissor-tailed Flycatcher. Muscivera forficata. One shot January 2, 1882 by R.R. Taylor in his yard in Norfolk, and sent to the Smithsonian Institution where it was examined by Robert Ridgway and preserved in alcohol as it was too decomposed to skin. (Bull. Nutall Club VIII, p.59).

Northern Crested Flycatcher. Myiarchulus crinitus boreus. Summer visitor; common. April 4 to October 31 (both Mrs. Reed); average April 22 to September 16. Maximum 20, average 6. Nest May 1 (Barefield).

Eastern Phoebe. Sayornis phoebe. Winter visitor; uncommon, but recorded regularly. October 15 (Mrs. Reed) to April 15 (Mrs. Reed); average October 26 to March 14. Apparently this species is observed more frequently since 1940, as Gould had only one record and English made only five records in 3 years. Between Gould, English, and the first years of Mrs. Reed's work we covered 18 years from which there were but 14 records for this bird, whereas, in recent years we have as many as nine records for 5 years.

Yellow-bellied Flycatcher. Empidonax flaviventris. In August 1944 I saw one in the Azalea Gardens but do not find the exact date. At Fort Eustis, on the Peninsula, Mackenzie and Capt. Reynolds found one May 18, 1945. Miss Cooke lists it at Washington as "tolerably common, but local in migration", and gives the average dates as May 14 to 22, and August 15, to September 16.

Acadian Flycatcher. Empidonax virescens. Scarce summer visitor. April 14 to October (Both Mrs, Reed); average May 10 to August 18. Nest May 31, 1932 (Gould and H.H. Bailey) to June 8 when Mrs. Reed found three nests. Maximum five singing males on May 21 (Mrs. Reed).

Alder Flycatcher. Empidonax traillii traillii. Two records. Mackenzie saw one April 26, 1944; and one was seen by Charles Stevens and William Minor of Charlottesville. September 13, 1946.

Eastern Wood Pewee. Myiochanes virens. Fairly common summer visitor. April 16 (English) to September 17 (Mrs. Reed); average April 29 to September 10. Mrs. Reed and Gould found nests.

Northern Horned Lark. Eremophila alpestris alpestris. Uncommon winter visitor; with only seven records from 1938-1947. November 25 (Barefield and Mackenzie) to February 10 (Walker). Maximum of 60 on December 7, 1949 (V.S.O. field trip). Rives in his Catalogue, 1890, thought this to be the more common form along the coast.

Prairie Horned Lark. Eremphila alpestris praticola. This bird was searched for over many winters before Mrs. Reed saw one among a flock of robins on March 7, 1940. Her other two records are the maximum count of 100 February 20, 1946 in fields near Azalea Gardens - all of them showing the white line over the eye and most having white throats; also one bird February 2, 1949. Mackenzie observed some April 12, 1945; and then made this interesting record on May 18, 1945: "One seen at close range, singing. It then mounted very high in the air, singing until it was out of sight, but the song could still be heard. This bird gave all the earmarks of nesting." Unfortunately he did not list the place.

Tree Swallow. Iridoprocne bicolor. Abundant as a transient especially in fall; a few winter; and we have one breeding record. July 19 (Grey) to May 24 (Mrs. Reed); average July 29 to April 20. A nest was found by John B. Lewis on June 15, 1927, "in an old woodpecker hole in a fencepost between the upper end of Back Bay and the ocean".

(Raven, IX; 109). The migration is heaviest in April and August with many in September. One of the amazing sights at the Refuge in August is to see the wires loaded with these birds for several miles. They are in such quantities that we may have overlooked full counts in many cases, also they vary considerably from year to year. September 28,1938 Craighill and I counted 3,000 Oceana to Sandbridge. October 9, 1946, Mrs. Reed saw 1,000 at Little Creek Ferry and at Cape Charles some 1,500 following a hurricane. January 21, 1940 amid snow and ice, Mrs. Reed saw 100.

Bank Swallow. Riparia riparia riparia. Uncommon transient; but may be more common than our twelve records would indicate. April 4 to June 2 (both Mrs. Reed) and August 13 to September 7 (both Mackenzie). Maximum 4 on May 5.

Rough-winged Swallow. Stelgidopteryx ruficollis serripennis.
Uncommon summer visitor. April 4 (Mrs. Reed) to September 15 (Mackenzie).
Most of our records fall between April 15 and May 28; and July 29 to
September 15. Mrs. Reed thinks it nests in the region of the Wildflower
Sanctuary. English found two nests, which he attributed to the Bank
Swallow - but may be this species - at Lake Smith May 13, 1932, and
April 22, 1934. Maximum 175 on May 5 (Scott). Lynnhaven Inlet and
Broad Bay should be searched in nesting season as there are some good
banks there.

Barn Swallow. Hirundo rustica erythrogaster. Fairly common summer visitor. April 4 to November 3 (both Mrs. Reed); average April 16 to September 15. It nests under bridges everywhere in Norfolk. Nests are abundant in the boathouse at the Refuge where on May 17, 1939 I counted 31, and on May 20, 1944 there were 40. Gould says "The nesting of the Barn Swallow in this locality has been of late (1930). First noted in 1925; since then has become rather common." English noted in 1933 that it had become more common in the last three years since Gould wrote. By 1940 the birds had pushed their breeding range as far south as the southeastern tip of North Carolina where I found them with T. Gilbert Pearson in May 1940. Maximum 500 on May 10 (Mrs. Reed).

(Northern Cliff Swallow. Petrochelidon pyrrhonota albifrons. Has not been recorded in the area, nor from the eastern part of North Carolina although it is a common spring transient at Raleigh which is in about the same geographical relation to that state as Richmond is to Virginia. It would be interesting to discover how far east these birds migrate in Virginia.)

Purple Martin. Progne subis subis. Common summer resident. March 21 to September 30 (both Mrs. Reed); average March 27 to September 7. Some years back it was suggested the Martins were not holding out so well and I started a census for July 4th to cover the seven miles from our cottage up Shore Drive to Willoughby Spit: in 1938 there were 112 birds; in 1940 there were 146; and in 1949 there were 171 using 24 boxes. By the last week in July the young are entirely out of the houses and migration begins almost immediately. In August we frequently have heavy migrations along the coast when the birds cover the telephone wires as do the Tree Swallows.

Blue Jay. Cyanocitta cristata (subspecies). Prior to 1944 this bird was considered a scarce resident in the area, found only near Great Bridge, where one or two birds could be seen on nearly every trip. In April 1944 Mary Leigh reported to Mrs. Reed that she had seen two Blue Jays in Norfolk City. In June 1945 Mackenzie saw one in the yard of Captain McClome at Ocean View. On the Christmas Count December 31, 1949 four birds were recorded; two by Stevens near Pungo and two by Grey in the woods a mile below the Refuge at Back Bay. Collecting one of these birds might prove it to be the Florida form cristata, not yet recorded from Virginia, though found throughout eastern North Carolina.

Northern Raven. Corvus corax principalis. November 14, 1931 four birds were seen at Knotts Island, by Lester Walsh and Mrs. Reed. Mrs. Reed also recorded one at Stumpy Lake June 2, 1942. Walsh says: "I have recorded these on each trip; sometimes as many as 4 individuals, and am wondering if they breed in this vicinity." We have no breeding record in the State except in the mountains, in fact they appear to be scarce even as transients east of the Skyline Drive. Walsh also saw one January 2, 1949 (Christmas Count).

Southern Crow. Corvus brachyrhynchos paulus. Resident; common; apparently more common in winter, when it is probable that some at least are the Eastern Crow, brachyrhynchos. English recorded them as nesting. Maximum 105.

Fish Crow. Corvus ossifragus. Common resident; though apparently not so common as the above. Maximum 186. No positive breeding record. Mrs. Reed and English noted it hovering over the water and picking up food from gulls. There is a difference in the flight pattern of the Common Crow which flies in a straight line, and the Fish Crow which frequently veers to the side.

Southern Carolina Chickadee. Parus carolinensis carolinensis.
Resident; not common. Murray and I collected one at Sandbridge August 26, 1938 which Wetmore identified as this form, thus adding a bird to the State list. Young April 30 to May 18. Maximum 38. It would be worth while collecting a winter bird for subspecific identification.

Tufted Titmouse. Parus bicolor. Fairly common resident; apparently a little more frequently found than the Chickadee. Maximum 30 on October 6 (Mrs. Reed) with an average of 5. Gould listed it as nesting. Mrs. Reed says, "I think there is a general increase of Titmice in fall over and above the regular families. I have noticed this at the Wildflower and the Pilgrim's Rest Sanctuary. Probably just a gathering of families from surrounding territory to more favorable places."

White-breasted Nuthatch. Sitta carolinensis carolinensis. Uncommon resident; with only 13 records in 10 years. Mrs. Reed observed two on June 2, 1942 below Stumpy Lake, which may have been breeders. Reed and I found one August 27, 1941 at the junction of highways 603 and 625. Just outside our territory at Ft. Eustis Mackenzie recorded it breeding May 18, 1945. Apparently the birds have become more common in recent years as Gould did not list it, and English observed it only once. Collecting might prove our bird to be the southern form which would add a bird to the State list.

Red-breasted Nuthatch. Sitta canadensis. Uncommon winter visitor. September 11 (Mrs. Reed) to May 11 (Barefield). Mrs. Reed reported an unusually heavy migration in 1941 from October 21 to November 4. One hundred birds were reported November 21, 1943 by Malcolm Andrews and Audrey H. Claugus in Seashore State Park.

Brown-headed Nuthatch. Sitta pusilla pusilla. Locally common resident, Mrs. Reed thinks they are increasing in numbers. Mrs. Barefield had a fine study of them in the Raven 14:34-37; and recorded young birds out of the nest May 23 and August 10. Mrs. Reed reported 50 on the road to Patterson's Marsh October 29, 1947.

Brown Creeper. Certhia familiaris americana. Winter visitor; regular in small numbers. October 6 to April 14 (both Mrs. Reed); average November 3 to March 1. Maximum 4, average 1.

Eastern House Wren. Troglodytes aedon aedon. Fairly common summer visitor; occasional in winter. April 2 to November 7 (both Mrs. Reed); average April 15 to September 8. English has a record for February 16, 1931; the Christmas Count of January 2, 1949 listed three; and Stevens found 3 December 31, 1949. Murray and I took an adult male near Lynnhaven Inlet July 22, 1949 which Wetmore identified as aedon. It is

possible that baldwini is present at times as Oberholser in his description of this form listed one taken at Smith's Island, Northampton County, May 13, 1910 (Ohio. Journal. Science 34:86-96, 1934). Mrs. Reed reports two broads a year.

Eastern Winter Wren. Troglodytes troglodytes hiemalis. (Stevens). Winter visitor; scarce, with only 12 (Scott) records in 16 years. September 17 (Mackenzie) to March 26 (Mrs. Reed). Maximum 3 (Scott). Gould had only one record of this species, and English recorded it but twice.

Bewick's Wren. Thryomanes bewickii bewickii. The present status seems to be that of a straggler, with 4 records in recent years. Mrs. Barefield December 7, 10, 1939 with two birds on the latter date; and November 26, 1941. Maxkenzie saw one December 9, 1944. Gould has this illuminating note; "In 1906 when I first came to Berkeley, Virginia, now a part of Norfolk, Bewick's Wren was quite common, nesting in my close neighborhood and having as a singing perch a telephone pole in front of my house. Several other pairs were noted a short distance away. At that time there were no House Wrens about. After the House Wrens began to move in and by 1914, the Bewick's Wren had moved out. There are still a few in the county (1933), one was heard singing on a farm near Fentress, Virginia, in 1931." Witmer Stone in Bird Life at Old Cape May observed that this species is seemingly rare where the House Wren is common.

Carolina Wren. Thryothorus ludovicianus ludovicianus. Resident; common. Maximum 25 singing males. It appears to me that this species is not as plentiful as it is at Raleigh, North Carolina, or Charlottes-ville. Gould remarks that: "It nests very early March 2, 1932, one egg in nest, and on March 6, 5 eggs. Temperature March 7 was 24 degrees, and on March 10 it was 17 degrees. All eggs hatched on March 23, and all young raised." June 19 Mrs. Reed found young just out of nest.

Wayne's Long-billed Marsh Wren. Telmatodytes palustris waynei. Abundant summer visitor in the salt marshes; a few remain in winter. March 7 (Gould) to November 29 (Walsh); average April 14 to October 19. Our two winter records probably do not represent the true status; five birds December 30, 1923 on Cedar Island by Caps, Crosby, and Griscom; and four birds December 31, 1949 by Stevens, Scott and Lawless. I saw an immature marsh wren - with yellow lining around the mouth - at Sandbridge December 29, 1938, but was not successful in collecting it; I take for granted it was this species. Howell and Burleigh collected specimens at Pungo May 17-20, 1932; which they identified as waynei (Auk 51: 249-250). English found nests May 29. Long-bills migrate in some quantities as late as May 20, for in 1941 I found many in a marsh near Little Creek, and all birds were gone next day, nor did any nest in the marsh that summer. Collecting might prove them palustris.

Short-billed Marsh Wren. Cistothorus platensis stellaris. Winter visitor; fairly common. August 9 (Murray) to May 20 (Howell and Burleigh); average August 22 to April 30. Maximum 16. There is a possibility that this species breeds in the county, and to prove such would extend its breeding range southward from Cornfield Harbor, Maryland.

Burleigh and Howell May 17-20, 1932 found six pairs in an open marsh near Pungo, and took them to be paired; but were not able to return later to locate nests. (Auk 51:249-250). In a trip in 1936 from May 30 to June, Howell, Tyrrell, and Duvall, were unable to locate any nests in the marsh. Murray and I began searching the marshes in 1938, and August 22 took a male at Sandbridge, where he was singing in company with six or more birds. Since his testes were much enlarged we assumed the species had probably bred in the marsh that summer. However, there was the fact that we had no June or July record. In following years I examined many marshes with no results, and the marsh at Sandbridge was burnt over so many times that it became poor territory. August 9, 1944 Murray found four birds near the Refuge headquarters, but the birds were gone next day, which forced us to the conclusion they were migrants, and that migration begins very early. These birds are fairly easy to distinguish in the field by their under-tail coverts which are almost orange compared to the whiter ones of the longbills.

Eastern Mockingbird. Mimus polyglottos polyglottos. Common resident. Maximum 20; average 10. Nest April 16 to May 2, second nest June 2 (Mrs. Reed).

Catbird. <u>Dumetella carolinensis</u>. Common summer visitor; a few may be found in winter. <u>March 2</u> (Scott) to October; average April 17 to September 20. Our few winter records are: December 20, 1923 six birds on Cedar Island (Caps, Crosby, and Griscom); January 7, 1933 (English); February 20, 1941 (Dobie); January 2, 1949 ten birds (Scott and Stevens); December 31, 1949 sixteen birds on Christmas Count. Nest May 20: young June 4 to August 16 (Mrs. Reed).

Brown Thrasher. Toxostoma rufum rufum. Summer visitor; common; actually recorded every month in the year. Average: March 9 to November 7. Nest April 8 to July 2; eggs July 22. Young April 29 to June 15 (Mrs. Reed).

Eastern Robin. Turdus migratorius migratorius.

Southern Robin. Turdus migratorius achrusterus. Resident as a species; uncommon except in spring migrations. January 18, 1939 Mrs. Reed saw about 1,000 birds, and on January 22, 1941 some 500 were recorded. The number on Christmas counts ranges from 3 to 250, with 25 as usual, which suggests they may not winter in any large numbers. Burleigh and Howell collected a breeding bird at Pungo on their trip May 17-20,1932 which proved to be achrusterus. The eastern form is included on the strength of heavy migrations through the fields in March and April, since in North Carolina, C.S. Brimley and I collected from these flocks and found them to be migratorius, the southern form apparently using lawns in towns in preference to the open fields. Nest April 22 (Mrs. Reed).

Wood Thrush. Hylocichla mustelina. Summer visitor; not common. April 14 to October 6 (both Mrs. Reed); Mrs. Darden and Helen Lester observed one October 22, 1942. Average April 20 to September 17. Mrs. Reed found 3 nests 1943. Maximum 8 compared to Scott's maximum of 75 at Richmond.

Eastern Hermit Thrush. Hylocichla guttata faxoni. Winter visitor; fairly common. September 20 to May 6 (both Mrs, Reed); average October 12 to April 26. Maximum 23 (Scott), average 2.

Olive-backed Thrush. Hylocichla ustulata swainsoni. Uncommon fall transient; two spring records. September 20 (Mrs. Reed, Mrs. Darden, McIlwaine) to November 5 (Mrs. Reed). On October 15, 1943, Mrs. Reed saw 14 birds. Mrs. Reed saw it May 11, 1939, and May 21, 1940.

Gray-cheeked Thrush. Hylocichla minima minima. Scarce transient. Mrs. Reed has seen it May 1, 1940; May 24, 1941; October 15, 1943; and October 16, 1941.

Veery. Hylocichla fuscescens fuscescens. Spring transient; uncommon. May 2, (Mackenzie) to May 25 (Mrs. Reed). Ten records for five years, but probably more common than these indicate.

Eastern Bluebird. Sialia sialis sialis. Resident; uncommon in summer when counts of 3 are average, but more common in winter with counts of 15 to 25: maximum 40. Mackenzie noted migrations in September. Mrs. Reed found it nesting March 25 to May 20.

Blue-gray Gnatcatcher. Polioptila caerulea caerulea. Summer visitor; fairly common. March 29 (Mrs. Reed) to November 27 (Mrs. Barefield); average April 5 to September 4. Maximum 34 (Scott), average 5. Nest April 14 (English) to June 4 (Mrs. Reed) young May 13 to August 11. In 1943 Mrs. Reed found five nests.

Eastern Golden-crowned Kinglet. Regulus satrapa satrapa. Winter visitor; uncommon. October 16 to April 17 (both, Mrs. Reed); average November 3 to March 13. Maximum 25.

Eastern Ruby-crowned Kinglet. Regulus calendula calendula. Winter visitor; regular in small numbers. October 15 (Mrs. Reed) to May 10 (English); average October 30 to April 5. Maximum 44(Scott); average 3.

American Pipit. Anthus spinoletta rubescens. Fairly common winter visitor. October 16 to March 21 (both, Mrs. Reed); average October 27 to March 3. Maximum 383 on January 30 (Mrs. Reed); average 75.

Cedar Waxwing. Bombycilla cedrorum. Erratic winter visitor. August 20, 1949 (V.S.O.) to May 14 (Mrs. Reed). Mrs. Reed has a maximum of 115 on February 29 and 117 April 7. She saw a good many of these birds while crossing the Cape Charles Ferry October 4, 1946 and three birds came aboard the ferry. Mrs. Reed also reports a remarkable flight of these in 1947 when Mrs. Marshall and Mrs. Moss saw 150 on Willoughby Spit on March 17, and on March 18 had 300.

Shrike. Lanius ludovicianus. (Subspecies). Winter visitor; rare. Nine records all between September 12 and December 31; never more than one. It is probable that both forms, ludovicianus and migrans occur. In searching for shrikes along the Virginia-North Carolina line during the breeding season they do not appear to breed east of Petersburg, Virginia, and

Murfreesboro, North Carolina. The northeastern tip of North Carolina appears to have no breeding birds, although they are common to the west and south of this area.

Starling. Sturnus vulgaris vulgaris. Resident; abundant; flocks of 1,000 not unusual. H.H. Bailey records one shot in Norfolk County, January 8, 1912, four days after the first bird was recorded for the State on January 4 in Warwick County. He cited that the Norfolk bird was one of a large flock to appear during a sudden change to cold weather on January 8 (Auk 30:274). Gould says he saw his first bird January 2, 1921 and they began to nest April 28, 1921, with a second brook June 2, 1921, (Auk 40:336). English observes they were first noted in numbers in the spring of 1932.

White-eyed Vireo, <u>Vireo griseus griseus</u>. Summer visitor; fairly common. April 1 (Mackenzie) to October 29 (Barefield); average April 11 to September 28. Four young May 20. Maximum 13 on May 5 (Scott).

Yellow-throated Vireo. Vireo flavifrons. Transient; probably summer visitor. April 4 to May 25 and July 20 to September 29 (all, Mrs. Reed); average April 22 to May 13, and July 29 to September 8. Gould listed it as "common summer resident. Nests." Since we have no recent summer records I have listed it as a transient.

Red-eyed Vireo. Vireo olivaceus. Summer visitor; common. April 4 to October 16 (both, Mrs.Reed); average April 26 to September 17. Maximum 15, normal 4. Nesting May 13. We have no satsifactory counts, and they are probably much more common than our maximum count indicates. Scott has recorded 131 in June along the Chickahominy River just east of Richmond.

Philadelphia Vireo. Vireo philadelphicus. Mrs. Reed and Mrs. Barefield saw one September 30, 1941 in Old's Woods Route 615; and one was observed at the Wildflower Sanctuary May 5, 1945 on the spring census. (Scott and Earle L. White).

Eastern Warbling Vireo. <u>Vireo gilvus gilvus</u>. Mrs. Reed saw one May 11, 1943 at the Wildflower Sanctuary.

Black and White Warbler. Mniotilta varia. Transient in small numbers; scaree summer visitor. April 8 (Mackenzie) to May 26 (Mrs. Reed) and August 25 to October 10 (both, Mrs. Reed); average April 18 to May 18, and September 20 to 28. Our only breeding record is May 24, 1941 when an adult was seen feeding two young out of nest in woods below Stumpy Lake (Mrs. Darden, Mrs. Reed, Mrs. Barefield, Grey). Bailey in Birds of Virginia 1910 listed them as arriving April 5 and said, "those from the north pass through till August 30". Maximum 10.

Prothonotary Warbler. Protonotaria citrea. Summer resident; common in cypress swamps. April 4 to September 14 (both, Mrs. Reed); average April 17 to August 4. Nesting April 22 to May 18; eggs May 21; young August 8 when Mackenzie and I found two adults feeding two young out of the nest near the Azalea Gardens. Mrs. Reed found five nests in one year at Wildflower Sanctuary. Maximum birds 5.

(Swainson's Warbler. Limmothlypis swainsonii. Has been found outside our area in Dismal Swamp, and also from Warwick County on the Peninsula, so that it would be expected in cane breaks within our area. So far we have searched for it in vain.)

Worm-eating Warbler. Helmitheros vermivorus. Mrs. Reed found one September 12, 1946 at the Wildflower Sanctuary. At Cape May there were only two records listed by Witmer Stone in 1937, and Miss Cooke lists it as an uncommon summer resident at Washington. This is a species whose status in eastern Virginia needs clarification.

Tennessee Warbler. Vermivora peregrina. Mrs. Reed observed one for a long time September 15, 1944 feeding in persimmon trees near the sand dunes at Seashore Park (The Season, Audubon Magazine, January-February, 1945) I believe this is the only Tidewater record, and in North Carolina they have not been recorded east of Raleigh.

Orange-crowned Warbler. Vermivora celata celata. One observed by Ludlow Griscom in the live caks of Cedar Island in Back Bay on December 30, 1923 (Bird Lore 26:31). This remained our only record till February 9, 1948 when Carl Bucheister identified one at Mrs. Herbert Thompson's with Mrs. Reed and others. A record that I have some doubts about was a bird reported at Virginia Beach by Maurice Richter, Jr., of New Jersey, on March 31, 1948 (Raven 20:33). At Washington it is accidental, taken only twice and in October; Maryland has two other records. On the basis of records at Cape May and Charleston, South Carolina, I would have expected this to be a scarce but regular transient in our area.

Southern Parula Warbler. Composthlytis parula americana. Summer visitor in small numbers; more common in migrations. March 31 to October 16 (both, Mrs. Reed); average April 15 to October 6. Nesting May 21 (Mrs. Reed). It is probable that our nesting birds leave in August, as there are few records for August or early September, with the fall migration beginning around September 20 with counts of 25 and 50. It would be worth collecting some of these late birds as they would probably be the northern form pusilla.

Eastern Yellow Warbler. Dendroica petechia aestiva. Summer resident; fairly common in the shade trees of Norfolk. April 4 (Mrs. Reed) to August 10 (Grey); average April 15 to July 21. Nesting May 13 (English) to May 24 (Mrs. Reed). This species is recorded at Cape May as late as September 30, so that we may have migrants passing through later than we have recorded them. It would be worth looking for one of the Newfoundland Yellow Warblers (Dendroica petchia amnicola).

Magnolia Warbler. Dendroica Magnolia. Pare transient; three fall records, once in spring, Mrs. Barefield saw it October 8, 1941; Mackenzie October 8, 1944; and Mrs. Barefield and Dobie October 30, 1941. I saw one on Long Island May 17, 1941 on the V.S.O. field trip. Mrs. Herbert Thompson reported one to Mrs. Reed March 17, 1949 which is at least six weeks earlier than the first date for Charlottesbille where

the birds are common and Washington where they are fairly common. In North Carolina they have not been reported east of Raleigh. H.H. Bailey says, "A few migrate through Tidewater about May 1-15, and also again the first week in September." This is another species about which we need more information from the area east of Richmond.

Cape May Warbler. Dendroica tigrina. Transient: scarce in spring according to our records; not common in fall. Most records are by Mrs. Reed. Her only spring record is May 13, 1943 at the Wildflower Sanctuary, but felt sure she had been hearing the song some days before this. In fall she has six records: September 20, 1939; September 28, 1943; September 15, 1944; and September 22, 1944 (six birds); October 6, 1944, and October 10, 1947. I found four birds October 8, 1949. One was found in winter, December 31, 1949 by Scott, Stevens, and Lawless.

Black-throated Blue Warbler. Dendroica caerulencens caerulescens. Scarce transient; usually recorded singly and 3 a day seems to be the record. April 14 to May 24 and October 8 to 14 (all, Mrs. Reed). This is one of the species that is supposed to migrate along the coast, and is common at Cape May.

Myrtle Warbler. Dendroica coronata coronata. Abundant winter visitor. August 29 (Dobie) to May 5 (Scott); average September 30 to April 25. Becomes common by late October and diminishes in abundance after the middle of March. Maximum 627, December 31, 1949, and counts of 200 and 300 are not unusual. I had thought of these birds being abundant along the coast in fall and working inland in late winter; but we have counts of 300 for May. Someone might add to our knowledge by taking accurate counts of these birds throughout the fall and winter.

Black-throated Green Warbler. Dendroica virens virens. Transient: not common. Gould lists it April 28, 1923 and May 22, 1922. Mrs. Reed found it in spring only April 5, 7, 16, 1942 and April 30, 1944. However, Scott found it common April 16, 1950 in Seashore Park, listing 32 birds. In fall it comes through in small numbers from September 22 to October 14 (Mrs. Reed). Wayne's Warbler D.v. waynei breeds in the Dismal Swamp, but has not been recorded from the Norfolk area, hence all records are listed under virens.

Cerulean Warbler. Dendroica cerulea. Gould says: "Only seen once, May 16, 1922." This is a remarkable record because these birds migrate through the lower Mississippi Valley, and mainly west of the Blue Ridge, being found as far east as Charlottesville, where they breed in some quantities.

Blackburnian Warbler. Dendroica fusca. Mrs. Reed saw it September 10, 1938; and September 22, 1946 at the Wildflower Sanctuary. Mackenzie reported that Mrs. Philt had observed a male May 13, 1945 in the Pilgrim's Rest Sanctuary off Granby Street.

Yellow-throated Warbler. Dendroica dominica dominica. Scarce summer resident; as a transient not uncommon in spring with only five fall records. March 20 (Mrs. Barefield) to May 20 (Mrs. Reed); average April 1 to May 6. In fall it has been recorded August 5, 1922 (Gould); September 10, 1942; September 16, 1945; and September 26, 1946 (all, Mrs. Reed). Also on September 16, 1946 by Stevens and Minor. Mrs. Reed saw a bird carrying nesting material April 26, 1943 at the Wildflower Sanctuary. The scarcity of breeding birds is surprising, as they nest in some abundance in eastern North Carolina and in Virginia west to Charlottesville.

Chestnut-sided Warbler. <u>Dendroica pensylvanica</u>. Mrs. Reed has two spring records of one bird each on May 11, 1939 at Seashore Park and April 23, 1940.

Black-poll Warbler. Dendroica striata. Transient: abundant in spring, somewhat uncommon in fall. May 2 to June 7 (both Gould) and September 10 to October 29 (both, Mrs. Reed); average in spring May 7 to 24. Gould says, "Uncommon spring migrant. They frequent old fields, and fields of spinach, kale, cabbage, and turnips in large numbers." Most of our records are for wooded areas, rather than as Gould for fields. Fall maximum 12, with no good counts for spring.

Northern Pine Warbler. <u>Dendroica pinus pinus</u>. Resident; more common in migrations with a few wintering. Returning birds arrive in late February and become common in April and again in September. Nesting April 22 (Mrs. Reed) to May 20 (Magkenzie): young June 8 (Mrs. Reed) to August 10, 1944 when Murray and I found adult feeding young on the wing at the Refuge. Maximum 72 (Scott).

Northern Prairie Warbler. Dendroica discolor discolor. Summer resident: some years fairly common, while in others they are rather scarce. April 7 (Mrs. Reed) to September 29 (Grey); average April 14 to September 23. Common during latter part of April. Young May 20 to July 3 (Grey). I found these birds migrating along Chesapeake Bay as early as July 26, working eastward as though the Bay were somewhat of a barrier to their migration.

Western Palm Warbler. Dendroica palmarum palmarum. Scarce transient: seven records between October 11 and April 10. October 11, 1944 (Mrs. Thomas Thompson); October 20, 1942, and March 16, 1947 (Mrs. Reed); I found it April 10, 1947; Stevens saw 3 near Pungo December 28, 1948; January 2, 1949 and December 31, 1949.

Yellow Palm Warbler. Dendroica palmarum hypochrysea. Transient; some years fairly common; scarce winter visitor. Gould listed it a rare winter visitor, giving March 1 and 8, 1923; and January 20 and 28, 1925. I have seen it only April 10, 1947 at Stumpy Lake. Before 1946 Mrs. Reed had recorded it only November 9, 1939 when she saw two birds and April 25, 1944. In 1946 she made the following records: spring - March 13 (3 birds); April 16 (7); May 20 (2); and in fall - September 7 (1); October 15 (3); October 29 (4); and November 1(2). Here is another chance for someone to add to our knowledge by more fuller study.

Oven-bird. Seiurus aurocapillus aurocapillus. Transient in limited numbers; scarce summer resident. In spring April 3 (Mrs. Reed) to June 24 (Mackenzie); average arrival April 25. In fall we have five records: September 12, 20, and 22, 1946 and October 5, 1947 (all, Mrs. Reed); and September 13, 1946 (Stevens and Minor). English listed it as a tolerably common summer resident; and Gould had it "uncommon summer resident; nests." Gould's note is our only evidence of breeding, although Mackenzie's record of June 24 must have been a breeding bird as well as one by Mrs. Reed of June 2. It has been heard in late May and early June at Little Creek, Wildflower Sanctuary, Stumpy Lake, and Nimmo's Church near Pungo. Maximum 7 (Scott).

Northern Water-thrush. Seirus noveboracensis noveboracensis.
Scarce transient: once in spring; four times in fall, all records by Mrs. Reed. May 13, 1943 at Wildflower Sanctuary. September 23, 1945 in her garden in Norfolk; September 7, and 12, 1946 at Wildflower Sanctuary; and September 15, 1946 at Stumpy. The only record of more than one bird is that of September 12, 1946 when Mrs. Reed and Miss Pickell thought there were 12 Northern and 3 Louisiana.

Louisiana Water-thrush. Seirus motacilla. Uncommon summer visitor; and a regular transient in small numbers. April 4 to October 8 (both, Mrs. Reed); average April 22 to May 11. Gould listed it as nesting, our only breeding record. In fact we have no records between June 16 and September 8. Mrs. Reed has seen it at Seashore Park, Wilaflower Sanctuary, Hunchback Road, and Memo's Church.

Kentucky Warbler. Oporonis formosus. Scarce summer resident; regular transient in spring in small numbers. April 3 to June 16 (both, Mrs. Reed); with May 7 as average arrival. Gould listed as rare, and said that it nested. Scott and Stevens furnish our only date after June with one seen at Seashore Park August 31, 1949. It is also found at Stumpy Lake. Mrs. Reed thinks they are about as common as Oven-bird, with 3 a day as maximum.

Connecticut Warbler. Oporornis agilis. October 16, 1941 Mrs. Reed and Mrs. Darden saw one on Long Island at Back Bay among the thickets near the picnic grounds, (Raven 13:47). Since these birds in Virginia seem to migrate along the mountains, this is an unusual record.

(Mourning Warbler. Oporornis philadelphia. This species has only been recorded satisfactorily in Virginia and North Carolina from the mountains, where it is scarce; but since there have been a few reports from our area it seemed best to list them here. Maurice Richter reported a female at Virginia Beach March 20, 1948 (Raven 20:32 and 36). Wrs. Reed has a record which she has never listed, on which she comments as follows, "I remember the day Connie Darden and I were on Long Island, October 16, 1941. That was the day we saw the Connecticut Warbler. There was quite a flight of warblers, and we were very excited. At the time we saw at least two warblers which I could not make out anything but Mourning Warblers. I never counted the record. It just did not seem possible to me.")

Maryland Yellow-throat. Geothlypis trichas trichas. Abundant summer resident; with a few birds remaining some winters. March 7 to December; average April 7 to October. Nesting April 26 to May 21 (Mrs. Reed); young May 30 (English). In 1934 Thomas Burleigh and Arthur Howell found them common near Pungo and listed specimens as trichas, with typhicola, the Athens Yellowthroat, just over the line in North Carolina and in the Dismal Swamp, (Auk 51:393-4).

Yellow-breasted Chat. Icteria virens virens. Summer visitor in small numbers. April 16 (Mrs. Reed) to October 22, 1940 (Mrs. Darden and Mrs. Lester); average May 4 to middle of July. The only records after July are: August 12, 1944 (Murray and Grey at Back Bay); August 21, 1946 and September 20, 1937 (both, Mrs. Reed). No breeding record. My maximum is six males May 24, though I have the impression this is an inadequate count.

Hooded Warbler. Wilsonia citrina. Fairly common summer visitor.

April 9 to October 16 (both, Mrs. Reed); average April 17 to September 20.

No breeding record. Maximum 19.

American Redstart. Setophaga ruticilla. Transient: regular in fall, much less common in spring. April 14 to June 2 and September 3 to November 28 (all, Mrs. Reed); average April 16 to May 19 and September 10-28. Mrs. Reed has two summer records: June 28, 1945; and July 26, 1939. Their scarcity in spring is indicated somewhat by the fact that in 10 years we have only 3 records for April and 5 for May. Maximum 19 on September 22 (Mrs. Reed).

English Sparrow. Passer domesticus domesticus. Resident. Has spread all over the area, even to Knott's Island and Back Bay Refuge. Young found to July 24.

Bobolink. Dolichonyx oryzivorus. Transient; apparently more common in spring than fall. April 4 (Mrs. Reed) to May 21 (Gould) and August 24 (Murray and Grey) to September 13 (Mrs. Reed); average May 4 to 17, and September 3 to 10. My fall maximums are 50 and 75 while we have counts in spring of 1,000 and 2,000. Mrs. Reed and Mrs. Barefield estimated 2,000 on May 9, 1940 in an impressive flight which Mrs. Reed describes: "We simply did not know how to estimate them. They rose up in groups, wave after wave, from the lespedeza and they literally rained down from the sky. With field glasses looking up at the sky we could see them pouring down before they were visible to the naked eye. The singing of these bobolinks could be heard long before one reached the fields. The day was one of those rare vernal days after cold weather. I presume their migration had been held up farther south by the weather and with the sudden change the whole host of bobolinks came north. This is the high spot of anything I have seen in land birds."

Eastern Meadowlark. Sturnella magna magna. Resident; more common in winter, with maximum of 215 March 3 (Mrs. Reed). Gould says that it nests. Migration observed in May and October. A female was collected May 20, 1940 by Murray and Grey near Little Creek which Wetmore identified as magna, slightly intermediate. The birds found some 75 miles

south at Nag's Head and Oregon Inlet have been identified by Wetmore as the southern form argutula, so that our territory is the southern limit of magna. There is a slight possibility that birds along the southern edge of Princess Anne County might prove to be the southern form, as there is quite a long gap through the middle of the county where I have not found any meadowlarks. In recent years they have become somewhat more numerous as some of the wasteland has been turned into grasslands, and they are now found in most suitable places.

Eastern Red-wing. Agelaius phoeniceus phoeniceus. Resident; abundant in summer and migrations, fairly common in winter. Gould lists it as nesting. Migration is apparent in February and March and in early September. Maximum counts are 5,000 on March 3, and 1,000 in September.

Orchard Oriole. <u>Icterus spurius</u>. Summer visitor; fairly common. April 1 (Mackenzie) to September 28 (Mrs. Anguin); average April 27 to August 11. Gould lists it breeding.

Baltimore Oriole. Icterus galbula. Mrs. Reed has three records: April 27, 1939; April 28, 1942; and eight birds on September 15, 1944.

Rusty Blackbird. Euphagus carolinus. Five records. December 30, 1923 (Caps, Crosby and Griscom) saw 13; Barefield saw 5 October 16, 1941; 200-300 were seen October 3, 1943 by Alex Sprunt, Dobie and Mackenzie; Mrs. Reed saw 150 November 28, 1943. One was seen on the Christmas Count January 2, 1949.

Boat-tailed Grackle. Cassidix mexicanus major. Resident; mainly at Back Bay. Maximum 133. No positive record of breeding.

Purple Grackle. Quiscalus quiscula Subspecies. Resident; abundant in migration, common in summer, fairly common in winter. Mrs. Reed observed them nesting May 20th. The subspecific identity is not fully established. Chapman (Auk 57:225-233 January 1940) tentatively identified worn specimens from Newport News as between quiscula and stonei. H.H. Bailey identified 5 taken at Newport News in May 1895 as the Florida form aglaeus, (Auk 52:27). Howell, Tyrrell, and Duvall collected a female May 30, 1936 which they identified as aglaeus (Auk 54:462). Breeding specimens should be taken for a fuller basis of identification. Maximum 2,700 March 5, and 1,000 March 14 (Mrs. Reed).

Eastern Cowbird. Molothrus ater ater. Abundant as transient and winter visitor; young birds have been recorded but no adults in summer. August 17 to May 20. Mackenzie found two young birds fed by a Maryland Yellowthroat June 3, 1944 - which would seem to indicate that the eggs were laid by migrating birds. We have only two May dates: May 14, 1945 when Mackenzie found several; and May 22, 1940 when Murray and I found eight males and one female at Camp Fondleton.

F.H. Craighill found two males at Jamestown - on the Peninsula and outside our territory - May 30, 1940. Someone should collect females in May and see if the egg sacs show evidence of the bird having laid eggs in the migration.

Scarlet Tanager. <u>Piranga Olivacea</u>. Two records. May 25, 1939 Mrs. Reed and Mrs. Barefield found one, (Raven X nos. 6-7 p.8). Mrs. Reed also found one at North Landing April 30, 1944.

Summer Tanager. <u>Piranga rubra rubra</u>. Summer visitor; not common. April 19 (Mrs. Reed) to September 24 (Mackenzie); average April 28 to September 6. Nesting May 20 and young June 1 (both, Mrs. Reed).

Eastern Cardinal. Richmondena cardinalis cardinalis. Resident; fairly common. Young: April 16 to July 30, first and second broods. Maximum 39, average 10.

Rose-breasted Grosbeak. <u>Pheucticus ludovicianus.</u> Our only record is one Mrs. Reed reported as seen by Mrs. Thomas Thompson on September 24, 1944.

Eastern Blue Gwosbeak: Guiraca caerulea caerulea. Six records. Gould listed them April 1912; English saw some along the edge of Dismal Swamp April 1932; Ben Coffey of Memphis, while visiting his sister-in-law, Mrs. Barefield, found them twice - August 15, 1936 at East Camp; and April 17 and 18, 1939 at Witch Duck Farm. Mackenzie found them May 6, 1944. Mrs. Reed says, "In 1946 Miss Mary Leigh reported to me that she and Miss Sally Ryan saw a pair of blue grosbeaks during the week of June 30, and that later Miss Ryan saw male carrying food. This was at London Bridge."

Indigo Bunting. Passerina cyanea. Common summer visitor. May 5 (Mrs. Reed) to September 14 (Grey); average May 8 to August 10. On July 28 Mrs. Reed counted 10 singing males in 19 miles by car. These birds are not as common with us as they are at Raleigh or at Charlottesville. No breeding record.

Dickcissel. Spiza americane. One was identified at Ocean View by C.A. Reed in 1907, (Birds of North Carolina, first edition 1919, note on page 256).

Eastern Purple Finch. Carpodacus purpureus purpureus. Winter visitor in small numbers. September 11 to May 6 (both, Mrs. Reed). Not recorded in all winters. Gould saw it twice and English once. Mrs. Reed had 16 records for the last ten years. Maximum 17.

Northern Pine Siskin. Spinus pinus pinus. Five records. September 29, 1941 fifty birds were seen on Holly Lane by Dick Dobie and Mrs. Anguin; the birds stayed for a week (Raven 13:9). Mrs. Darden saw 15 on February 26, 1946 near her home, and saw some on each of the two succeeding days. March 2, 1947 Scott saw a flock of 8 at Lockhaven, and another flock of 23 south of Oceana with goldfinches; he also saw 6 near Sandbridge, January 2, 1949. Miss Sally Ryan saw two March 21, 1949. We should be on the lookout for these birds as William J. Rusling of New Jersey spent September 22 to November 11, 1936 on eastern shore studying the migration and reported a total of 499 Siskins at Kiptopeke during his stay.

Eastern Goldfinch. Spinus tristis tristis. Uncommon resident; abundant spring migrant. No breeding record. Maximum 536 on January 2, 1949 (Christmas Count).

Alabama Towhee. Pipilo erythrophthalmus canaster. Resident; common in summer, a few in winter. Young, May 20 to 28 (Mrs. Reed and English). May 30, 1936, A.H. Howell, collected three near Fungo, all of which proved to be canaster, two of them being typical. He commented that this was as far north as birds were known to breed (Auk 54:462). Someone should collect a winter bird for sub-specific identification. Maximum 52 (Scott).

Ipswich Sparrow. Passerculus princeps. Winter visitor. Scarce. Probably occurs more regularly than our four records indicate: December 30, 1923 (Caps, Crosby and Griscom); a male was taken December 26, 1939 by Grey at Dam Neck, and another seen on the refuge by Mrs. Reed and Grey the same day; December 31, 1944, one was seen on the refuge census. They are always found singly, and in the short grass just behind the dunes, near the seashore.

Eastern Savannah Sparrow. Passerculus sandwichensis savanna. Common as a winter visitor; abundant as transient. September 30 to May 10 (both, Mrs. Reed); average October 10 to May 6. Maximum 125, next best count is 60. Some birds should be collected for subspecies.

Eastern Grasshopper Sparrow. Ammodramus savannarum tratensis.
Uncommon summer resident. April 28 (English and Mrs. Reed) to September 4 (Mackenzie). Mrs. Reed found a nest near Kempsville May 24, 1944, and there were at least 5 singing males nearby. In July 1949 I found it near Little Creek at the emergency landing field.

Eastern Henslow's Sparrow. Passerherbulus henslowii susurrans. Summer visitor; rather local in distribution. April 28 (Gould) to August 30 (Scott); average May 9 to August 24. Found commonly at Sandbridge and lower end of Virginia Beach; formerly there was a colony near Princess Anne Courthouse. Howell, Tyrell, and Duvall took a female near Pungo May 30, 1936 (Auk 54:462); Murray and I took a male at Sandbridge August 22, 1938, and heard at least two other singing males.

Common Sharp-tailed Sparrow. Ammospiza caudacuta caudacuta. Seven records; spread from August 20 to January 18 and also in May. Mrs. Ben Coffey and her sister Mrs. Barefield first reported it January 18, 1944; Mackenzie found it on Knott's Island September 24, 1944; two were found on the Christmas Count December 31, 1944 at the Refuge; Mackenzie saw five on May 5, 1945. It was reported three times in 1949: nine birds January 4; August 20th; and December 31; all of these near the Refuge. Wetmore and Lincoln list this as the common migrant in Maryland. There is no breeding record in Virginia although the Fourth A.O.U. Check-list suggests it breeds as far south as Virginia.

Acadian Sharp-tailed Sparrow. Ammospiza caudacuta subvirgata. I took a male May 22, 1944 at Little Creek from a flock of some 50 birds which was identified by Wetmore as this. This is the only record for Virginia, although they are probably regular migrants.

James Bay Sharp-tailed Sparrow. Ammospiza caudacuta altera. I collected a male May 22, 1944 at Little Creek out of the same flock of sparrows mentioned above, which was identified by Wetmore. This is the second record for Virginia, the other being near Alexandria on September 18, 1893. This also may be a regular transient.

Northern Seaside Sparrow. Ammospiza maritima maritima. Not common summer visitor. March 18 (Mrs. Reed) to November 25 (Mrs. Barefield and Mackenzie). Murray and I took a male at Lynnhaven May 21, 1940 which was idenitified by Wetmore as maritima. The birds around Oregon Inlet to the south of us are Macgillivray's Seaside (Ammospiza maritima macgillivraii) so that our territory is about the southern breeding limit of maritima. I am always surprised at the scarcity of this species in Lynnhaven Inlet, Little Creek, and some of the creeks of the Lafayette River; these being the only places that I know it occurs regularly. One reason may be that the marches around Back Bay are brackish rather than salt, and therefore less suitable as a habitat.

Eastern Vesper Sparrow. Poocetes gramineus gramineus. Five records for November, December, and March. Mrs. Reed saw it: November 16, 1931 with Walsh; November 8,1946 on Sigma Road (Nimmo's Church to Sandbridge); March 9, 1947 at Kempsville; and March 21, 1949 at Knott's Island. Stevens and Lawless saw one December 3, 1949 on Sigma Road.

Eastern Lark Sparrow. Chondestes grammacus grammacus. An adult was observed for about an hour at Back Bay Refuge Headquarters by the group on the V.S.G. field trip August 26, 1950. I think it is the only record for Virginia east of Charlottesville.

Slate-colored Junco. Junco hyemalis hyemalis. Winter visitant; sometimes abundant, but usually in small numbers. October 8 (Mrs. Barefield) to April 14 (Mrs. Reed); average October 12 to April 11. Maximum 90, average 50.

Eastern Tree Sparrow. Spizella arborea arborea. Six records. Gould had a small flock to spend the winter of 1928-29 in his back yard, arriving November 25, 1928. English saw them December 10, 1930; Ben Coffey saw two on the Christmas Count at Back Bay December 20, 1942; Mrs. Reed saw 2 at Stumpy Lake February 8, 1947; Mrs. Herbert Thompson saw one March 9, 1949; and Lester Walsh discovered one at Back Bay January 2, 1949 on the Christmas Count. These records seem surprising to me as I had thought of the Tree Sparrow as sticking closer to the mountains. Until 1944 there was no satisfactory record of the distribution of these birds in North Carolina; the few records obtainable were for scattered flocks around Asheville. I do not believe that State yet has a record east of the upper Piedmont, and therefore someone might add to the knowledge of the winter range by finding a bird in Currituck.

Eastern Chipping Sperrow. Spizella passerina passerina. Fairly common summer visitor; a few remain in some winters. Mrs. Reed has found new arrivals February 10; average March 6 to October 2. I think Mackenzie has the only January record - January 15, 1944. Stevens and Minor on September 11, 1946 found young being fed out of the nest. Maximum 17. This is another species that is not as common as at Raleigh.

Eastern Field Sparrow. Spizella pusilla pusilla. Common resident. Eggs May 5; young May 20 to September 3 (Mackenzie). Maximum 35, average 6.

White-crowned Sparrow. Zonotrichia leucophrys leucophrys. Uncommon transient. February 14 (Mrs. Barefield and Ray) to April 5 (Mrs.
Reed), and October 8 (Mackenzie) to November 2 (Mrs. Reed and Mrs. Barefield). English recorded them December 4, 1932.

White-throated Sparrow. Zonotrichia albicollis. Fairly common winter visitor. October 13 (Mrs. Thomas Thompson) to May 11 (Mrs. Reed); average November 2 to April 28. Maximum 146, average 10.

Eastern Fox Sparrow. Passerella iliaca iliaca. Not common winter visitor. November 20 (Mrs. Reed) to April 16 (Grey); average November 28 to March 10. Maximum 50 March 11, 1948 from Stumpy Lake to North Landing (Mrs. Reed).

Eastern Swamp Sparrow. Melospiza georgiana georgiana. Locally common winter visitor. October 7 to April 28 (both, Mrs. Reed). Maximum 182 on December 31, 1949 (Christmas Count).

Eastern Song Sparrow. Melospiza melodia melodia. Winter visitor, probably in some quantities, but hard to distinguish from the resident form atlantica. A male collected by me at Sandbridge December 29, 1938 was identified by C.S. Brimley as melodia.

Atlantic Song Sparrow. Melospiza melodia atlantica. Resident: abundant in summer, and at least some are here in winter. Murray took a male at Little Creek May 22, 1940 which was identified as this form by Wetmore. In the description of the form specimens are listed from Virginia Beach which were taken in December (Auk 41:147). Young May 24 to August 29 (both, Mrs. Reed). Maximum count for Song Sparrows 164 on December 31.

Lapland Longspur. Calcarius lapponicus lopponicus. Lester L. Walsh identified one on the Christmas Count January 2, 1949 at Back Bay. It should be looked for in company with Horned Larks and Snow Buntings as it should occur more frequently that one record would indicate. While it migrates south to Louisiana and Texas, it may be rare along our coast, as North Carolina records are all inland in spite of careful searching for it at Pea Island by Sam Walker.

Eastern Snow Bunting. Plectrophenax nivalis nivalis. Six records from Back Bay mud flats and Seashore State Park. Mrs. Thomas Thompson saw 4 November 11, 1936; Harry Bailey reported them January 1938; and saw 100 on February 9, 1940; five were seen December 6,1947 on the V.S.O. field trip; Mrs. Reed found two November 4, 1948; and Perkins saw one December 21, 1949.



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A TRIP FROM NORFOLK, VIRGINIA, TO VERA CRUZ, MEXICO By Lt. (J.G.) C.H. Blair, USN

22 May 1950 Departed Norfolk, Virginia, on board U.S. Submarine Grampus (SS 523). On watch on deck from 1200 to 1400, about 14 miles east of Currituck Sound. Saw three Common Loons, 3 Laughing Gulls, 8 Phalaropes of undertermined species, and estimated 125 Wilson's Petrels (one flock contained about 100 birds). Also saw a school of porpoise and 5 large sea turtles. Later in the day, while ship was submerged, watched Wilson's Petrels through the periscope. Birds and porpoises ignore the periscope as a rule, often come within inches of it.

23 May
At sea. Stood watch on deck from 1200 to 1400, about Lat. 33 N, Long. 74 W (about 250 miles E of Charleston, S.C.) 15 Wilson's Petrels; 1 large Tern, species unidentified; 3 Shearwaters, species unidentified. A Blackbellied Plover rode on deck for several hours.

Underway in Straits of Florida, 20 miles E of Florida coast.

During 1200-1400 watch a warbler alighted on deck but would only show his back, so I could not identify him. Two robin-sized land birds flew past the ship about 100 yards away, flying due west. Evidently they were headed from the Bahemas to Florida. Sea birds, mostly too far out for positive identification: 1 probable Man-of-War Bird, 2 Shearwaters, 1 medium-sized Tern, 12 Wilson's Petrels. There are always a few petrels in sight.

At sea, western end Straits of Florida. 0600 passed 5 miles south of Key West sea buoy. 1030 Passed 10 miles SE of Loggerheam Key in the Dry Tortugas. On 1200-1400 watch about 20 miles west of the Tortugas, saw 6 Sooty Terns and 1 Noddy on the water. These birds undoubtedly nest on Loggerhead Key in the Fort Jefferson National Monument. In April 1949 when I was last there they came ashore only at night, going back to sea before sunrise, a procedure followed until nesting commences. At 1300 ship submerged. Watching through periscope, saw 2 Sooty Terns perched on piece of driftwood about 50 yards away; they were not disturbed. A school of porpoise joined us for half an hour, swimming within 50 feet of the 'scope. They were a mottled grey in color when seen at this close range. At 1800, about 60 miles WNW of Tortugas saw 8 Sooty Terns and 1 Audubon's Shearwater.

26 May At sea, about Lat. 27 N, Long. 87 W, headed for Mississippi Delta. No birds in sight all the time that I was on deck except a single land bird and a gull-like sea bird, both too far out to identify.

27 May 0700 stood up Southwest Pass of Mississippi River. Innumerable birds, many of which I could not identify positively. About 150 Man-of-War Birds perched and flying around channel entrance. Some of the species I was able to identify were Brown Pelican, Snowy and American Egret, Little Blue Heron, Caspian Tern, Laughing Gull, Boat-tail Grackle, Yellow-crowned Night Heron. There were no Ospreys, Eagles, or other birds of prey. 1100 Anchored off Venice, Louisians, until 1200. At 1430 cleared Southwest Pass; stood out to sea on course SSW. At the entrance to the Pass there was a sharp line between the blue sea water and the muddy brown river water. Around this dividing line were porpoises by the dozen. Once offshore bird life disappeared except for a single Petrel, probably Wilson's.

- 28 May Stood up the Mississippi to New Orleans and remained there until May 30. Around the docks there/numerous Nighthawks, locally called Mosquito Hawks.
- 31 May 1830 Underway for Vera Cruz, Mexico. The trip down the river is fascinating from an ornithological point of view, but a submarine is not an excursion steamer. I was able to spot what I think was a Water Turkey, a new species for me. Identified Yellow-crowned Night Herons, Louisiana Heron, plus species seen on trip up.
- 1 June At sea in the middle of the Gulf of Mexico. No birds to be seen.
- 2 June 0845 Made landfall on Mexican coast. Saw Man-of-War Bird, the first bird in nearly 1000 miles. The Gulf seemed sparsely populated with birds compared to other bodies of water I have seen.
- 3-4 June At Vera Cruz. Birds scarce; I saw Black Vultures, Boat-tail Grackles, Least Terns, and Man-of-War Birds.
- 5 June 1905 Underway for Norfolk, Virginia. Many flying fish, but only one bird, a Man-of-War Bird.
- At sea, about Lat. 21 N, Long. 92 W, 250 miles NNE of Vera Cruz. Saw 1 Haughing Gull and a flock of 9 Terns, probably Sooties. At 1500 submerged for a 24 hour snorkel run, to surface at this time tomorrow.
- 7 June Submerged. Through the periscope saw a small flock of Terns, possibly the same Sooties. They had an annoying way of staying just too far from the periscope for positive identification.
- 8 June At sea, approximately in Lat. 24 N, Long. 86 W. Saw one immature Laughing Gull, one Shearwater, probably Sooty.
- 9 June Entered Florida Straits this morning. Birds much more common than in the Gulf, one or two in sight all day. During the 1000-1200 watch saw 11 Sooty Terns, 3 Audubon's Shearweters, and 2 Wilson's Petrels.
- Leaving N end of Florida Straits. On the 1000-1200 watch saw 13 Sooty Terns, 1 Wilson's Petrel, and 2 Shearwaters, possibly one Audubon's and one Cory's, although I am not familiar with the latter species.
- 11-13 June Enroute Cape Hatteras. Numerous Wilson's Petrels in sight. Saw one Greater Shearwater on the 13th.
- At 0800 anchored in Hampton Roads off Norfolk, Virginia, having steamed 4300 sea miles on the surface or submerged since leaving Norfolk 22 days before. On this trip logged 21 species of birds, and over 400 individuals.
 - -- Lake Drive, Bay Ridge, Annapolis, Maryland

DISSECTION OF BARRED OWL PELLETS By C.C. Steirly

Two owl pellets were found in a pine woods near Waverly, Virginia, on February 12, 1950. Almost weekly for the past two years a pair of barred owls have been seen or heard in this piece of woods which is adjacent to a bottom-land hardwood area through which a small creek runs. It is reasonable to conclude that the pellets came from these birds.

Upon dissection the pellets were found to contain the following remains:

Pellet Number one:

- 1. Fragments of gray squirrel remains with considerable pelage.
 33 bone fragments, the largest of which was a segment of a femur
 2.1 inches in length. Only small fragments of the skull were
 found only five teeth (morars) were present. Of the bone fragments 12 were vertebrae.
- 2. Remains of one crawfish (Genus Cambarus) consisting of the large claws and tiny fragments of shell. The two large claws were intact. The larger of the two measured 1.3 x.6 inches.

Pellet Number two: This pellet was found under the same tree at a distance of about four feet from pellet Number one.

- 1. Fragments of the skeleton of a small bird. Consisted of ten pieces, including a foot. Judging from the size and character of this foot the victim must have been a slaty junco. No feathers were found.
- 2. Fragments of the skeleton of a short-tailed shrew (Blarina brevicaudis) consisting of nine pieces with a few bits of pelage. The lower jaw was intact and its dentition was checked against a known Blarina skull. Specimens of Blarina brevicaudis had been previously collected in this woods by the writer.
- 3. Remains of three crawfish (same as above) consisting of three pairs of large claws and a mass of tiny shell fragments.
- 4. Five pieces of the shell of a snail were found but exact identification was impossible owing to the snall sizes of the fragments.

-- Waverly, Virginia

WINTER SEASON - 1949-1950 - VIRGINIA By F.R. Scott

The winter season was virtually a repetition of the preceding year, and numerous high temperature records were broken in January. The unusually warm weather continued from November to mid February when cold and windy weather descended upon the region for the rest of the season. At Washington the average daily temperature was 14.6 degrees above normal for January. This caused many birds to begin migrating prematurely, such as Pied-billed Grebes and Ringed-billed Gulls at Richmond and Woodcock, Robins and Fox Sparrows at Washington. The weather also induced many species to linger longer in the fall or to winter more commonly than usual, but with the exception of the shorebirds this was not as pronounced as during the previous winter.

Pelagic Birds. Loons appeared scarce inland, even in Tidewater, One Common Loon near Richmond on December 27 is the latest date there for the fall migration. A count of 170 Horned Grebes in York County on January 21 is the highest number yet recorded there. Pied-billed Grebes wintered in Lynchburg and quite commonly in Tidewater. A good count of 263 Gannets was obtained on the V.S.O. field trip in Princess Anne County on December 3.

Herons. Great Blue Herons were reported scarce at Lexington with one on December 25, and only an occasional one was seen in York County. Nevertheless, an amazing concentration of 60 was seen near Hopewell on January 20 feeding in the shallows of the James (Scott). One immature Little Blue Heron and 53 Black-crowned Night Herons were seen at the Back Bay Refuge on December 31.

Swans, Geese and Ducks. Interesting records of Whistling Swans were 317 at Brooke, Stafford County, on December 31 (Christmas Bird Count) and "a few" on the Newport News Reservoir in late February (Grey). A high count of 20,000 Snow Geese was made at Back Bay on December 3, and 2 Snow Geese and 3 Blue Geese wintered again at Curles Neck near Richmond. The extremely warm weather caused wintering waterfowl, especially around Richmond and Yorktown, to migrate early, and numerous species, either early spring or late fall migrants, were noted throughout the winter. A good example of this was a flock of 350 Pintails which suddenly appeared at Hopewell on January 20. Royster Lyle found a pair of Wood Ducks wintering at Danville, and Grey reports that "good numbers" were killed along the James and Chickahominy Rivers during the hunting season. A male European Teal was observed at the National Airport on December 3 (E.G. Davis) and on December 31 and February 22 (Barnes). Two Old Squaws were noted at Brooke on December 31 and 2 to 4 were present at Lynchburg February 15 to April 4 (Freer). On January 29, 3600 Ruddy Ducks were seen at Westmoreland State Park.

Birds of Prey. Favour reported seeing a Goshawk in Shenandoah National Park on January 1. An albino Red-tailed Hawk was noted near Charlottesville on December 30. It was completely white except for a reddish tail. Another or possibly the same bird was reported from Pass Mountain in Shenandoah National Park. One Rough-legged Hawk was reported at Arlington on December 31, and another was seen at Richmond, December 19 (Scott), a first

record. A third was observed at Fishers Gap, Shenandoah National Park, on December 4 (Wetmore). S.M. Russell found 2 Golden Eagles on Beartown Mountain, Russell County, on February 12. A nest and 4 eggs of the Barn Owl was discovered on Ragged Island, Back Bay, on January 24 (Perkins). A remarkable flight of Snowy Owls gave Virginia 5 winter records, although there were many more just across the border in Maryland and Washington. The Virginia records, all single birds, were Bridgewater, December 4 (Carpenter); Richmond, December 7-9 (Scott); one caught alive, Loudon County, January 2 (John H. McCabe); Westmoreland County, early January (Frank English, reported by a Richmond newspaper); one trapped in Arlington (no date given - see Atlantic Naturalist 5: 185). Several Short-eared Owls were seen near Lexington during the winter, and Favour caught a Saw-whet Owl on the Skyline Drive in mid December.

Shorebirds. Grey found an Oystercatcher at Lynnhaven, Princess Anne County, on the remarkable date of December 3. In Tidewater the shorebird migration lingered quite late, and a Least Sandpiper was seen at Curles Neck on December 5 and 2 Western Sandpipers at Seaford on December 2. Redbacked Sandpipers were present again in winter on the Western Shore at Seaford.

Gulls to Cuckoos. Ring-billed Gulls migrated early at Richmond, and large flocks were seen passing up the James in mid-January. Late Royal Terns were seen at Seaford, December 2, and Virginia Beach, December 3. Two Dovekies were caught in mackerel nets off Chincoteague on December 9 (T.H. Cunningham). Although out of the period covered by this report an interesting late record was made of the Black-billed Cuckoo at Waverly, Suzsex County, October 12, which had been dropped by a Red-shouldered Hawk (Steirly).

Passerine Birds. The abnormal number of Phoebes in eastern Virginia was undoubtedly a reflection of the weather. Two Ravens in Chesterfield County near Richmond, December 24, were quite unusual (Scott). Grey and Stevens had 4 Blue Jays at Back Bay on December 31 where the bird has been rare at any time of year. Wintering House Wrens were noted at Back Bay. December 31 (Stevens); York County, January 21 (Grey); and Petersburg, December 24 (McIlwaine). Stevens found a Short-billed Marsh Wren at Hatton. Albemarle County, on December 26. After a light snow Grey recorded 50 Hermit Thrushes along the Colonial Parkway near Yorktown, February 27. There were winter reports of Brown Thrashers from Lynchburg and Danville, and both they and Catbirds were present in central Tidewater, but less commonly than in the preceding winter. One Cape May Warbler was observed closely at Back Bay on December 3 (Stevens, Lawless, Scott). Myrtle Warblers began migrating early and were quite abundant by mid February at Charlottesville, Richmond and Washington. Several Pine Warblers wintered at Danville (Lyle), but they were much less common at Richmond than last year. There was a large flight of Evening Grosbeaks into Maryland and West Virginia which did not hit Virginia until March. A small flock of White-crowned Sparrows remained around the ranger station at Front Royal during January (Myers).

NOTES AND NEWS

Christmas Count. The dates for the annual Audubon Christmas Bird Count this year are Saturday, December 23, to Monday, January 1. It is hoped that the number of counts in Virginia will to greatly increased this year, and that participants will send their reports both to The Raven and to Audubon Field Notes (Patuxent Research Refuge, Laurel, Maryland).

International Ornithological Congress. The Tenth International Ornithological Congress was held in June in Upsala, Sweden. The retiring President was Dr. Alexander Wetmore, who has always found time, with all his heavy responsibilities, to take an active interest in the V.S.O. and to attend nearly all of its annual meetings. Dr. Wetmore has been President since 1938; and will be succeeded by Dr. A. Landsborough Thompson of England.

The List of Birds of the Shenendoah National Park (Third Revision), by Alexander Notmore. Dr. Wetmore's latest revision of his list of birds of the Shenandoah National Park will be of great interest to all Virginia bird students. This list of 188 species and subspecies known to have occurred in the Park brings up to date the work done by Dr. Wetmore in this region for many years. He adds in this list two new forms for Virginia: Boreal Yellow-shafted Flicker (Colaptes auratus borealis), collected on October 16, 1949, on the North Fork of Thornton Run; and Newfoundland Oven-bird (Seiurus aurocapillus furvior), of which he took two specimens, one on Robertson Mountain, September 23, 1945, and one at the head of Brokenback Run, September 30, 1945. He also gives an additional record for the Western Swamp Sparrow (Melospiza georgiana ericrypta), a specimen taken on North Thornton River, October 16, 1949. This paper is Bulletin No. 1 on the Shenandoah Natural History Association, Shenandoah National Fark, Luray, Virginia, and no doubt can be secured there.

New Vernacular Names. Audubon Field Notes, in its Season Reports, etc., is trying to adopt standard vernacular names. A change in some familiar names is involved. Those most likely to occur in The Raven are as follows:

Red-necked Grebe (for Holboell's); American Widgeon (Baldpate); Common Eider (American Eider); Peregrine Falcon (Duck Hawk); Ringed Flover (Semi-palmated Plover); Upland Sandpiper (Upland Plover); Red Knot (American Knot); Common Nighthawk (Eastern Nighthawk); Yellow-shafted Flicker (Flicker); Traill's Flycatcher (Alder Flycatcher); Common Raven (American Raven); Solitary Vireo (Blue-headed Vireo); Common Yellow-throat (Maryland Yellow-throat); *Pileolated Warbler (Wilson's Warbler); Brown-headed Cowbird (Cowbird); American Goldfinch (Goldfinch); *Pine-woods Sparrow (Bachman's Sparrow); American Tree Sparrow (Tree Sparrow).

Pomarine Jaeger. John Bull writes Fred Scott that he saw a Pomarine Jaeger fly across the bow of the Little Creek - Cape Charles Ferry near the Cape Charles side on April 4, 1948.

Cliff Swellow. Harry Jopson reports Cliff Swellow nests at the John Glick farm, Centerville, Augusta County, Virginia, on August 5, 1950, and at the Charles Glick farm, Sangerville, Augusta County, on July 27 (occupied); also Cliff Swellows over Mossy Creek marsh in the same county on June 30, 1950.