Fort Belvoir, Virginia, Christmas Counts:  
A 13 Year Summary  
By Jackson M. Abbott  

Virginia Christmas Bird Counts - 1956  
Chincoteague  Big Flat Mountain  
Hog Island  Charlottesville  
Chesapeake Bay  Warren  
Little Creek  Harrisonburg  
Norfolk County  Rockingham County  
Back Bay  Lexington  
Waverly  Roanoke  
Hopewell  Blacksburg  
Brooke  Glade Spring

Bald Eagle Survey: First Annual Report  
By Jackson M. Abbott  

The 1956 December Field Trip to Back Bay  
By Gertrude Prior  

News and Notes  
Treasurer's Annual Report  

VSO Annual Meeting - Wachapreague - May 3-4
The 13th Christmas bird count for the Fort Belvoir (Fairfax County), Virginia area was held on Sunday, December 23, 1956. The first Christmas count in this area was conducted by the writer on the Fort Belvoir military reservation peninsula on December 21, 1941, when he was a private stationed at the Fort. This inauspicious beginning (with 43 species and 621 individuals) has led to an annual count conducted by a recent average of 20 participants covering Mount Vernon, "Lebanon" and Hallowing Point, and the Woodbridge-Neabsco Creek area as well as Fort Belvoir. In two years (1952 and 1953) a fifth team covered the Indian Head, Maryland side of the Potomac River.

The total accumulative list of species for the 13 counts is 109 with the single high count of 87 species recorded on the 1953 census. Of the 109 species recorded, 19 have been seen only once, and three of these were added on the 1956 count. The most unusual birds recorded are a Gray-cheeked Thrush seen by I.C. Hoover in 1952 at Fort Belvoir and a Baltimore Oriole by Phil DuMont et al at Woodbridge in 1955. It is interesting to note that at least one species new to the count has been added to the total species list each year.

The 1956 count was noteworthy by being the first in which poor weather (rain and mist) prevailed all day and by having the highest temperatures of all the counts. Sixty-three species and 5,747 individuals were recorded. Three new species were added to the accumulative total: Canvasback, Woodcock, and Pipit. The two Woodcocks were seen by Ed Bierley, Enoch Johnson and George Sigel at Fort Belvoir. The remarkable thing about this record is that both birds were performing their spring flight song, just at dawn. The Pipit (3) was added to the list by Harriet Sutton and her group covering "Lebanon" and Hallowing Point, while Phil DuMont and Dave Pierce covering the Woodbridge area contributed the Canvasbacks.

The accompanying table gives all the particulars of each of the 13 counts.
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| Common Loon                   | -    | -    | 1    | 1    | -    | -    | -    | -    | -    | -    | 1    | -    | -    | 3    |
| Horned Grebe                  | -    | -    | 2    | -    | -    | -    | 1    | -    | -    | -    | 1    | -    | 2    | 1    |
| Pied-billed Grebe             | -    | -    | 1    | -    | -    | 2    | 2    | -    | 1    | -    | -    | -    | -    | -    |
| Great Blue Heron              | -    | 2    | 2    | 1    | 3    | 5    | 3    | 6    | 12   | 7    | 4    | 3    |      |
| Black-crowned Night Heron     | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| Canada Goose                  | -    | -    | -    | -    | -    | -    | -    | -    | 260  | 30   | 188  | 9    | 8    |      |
| Mallard                       | -    | -    | 3    | 1    | 75   | 1    | 7    | 52   | 75   | 50   | 166  |      |      |      |
| Black Duck                    | 2    | 100  | -    | -    | -    | 52   | 421  | 122  | 16   | 512  | 701  | 350  | 273  | 133  |
| American Widgeon              | 2    | -    | -    | -    | -    | -    | -    | -    | -    | 24   | -    | 11   | -    | 30   |
| Pintail                       | -    | 2    | -    | -    | -    | -    | 8    | -    | -    | -    | -    | -    | -    | -    |
| Green-winged Teal             | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Redhead       | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | 1    | -    | 5    |
| Canvasback    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | 2    | -    |
| Greater Scaup | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | 6    | 1    | 3    | 1    |
| Lesser Scaup  | -    | (4)  | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | (36) |
| Scaup (species?) | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| American Goldeneye | - | 4 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Bufflehead    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| Old Squaw     | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| Ruddy Duck    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| Hooded Merganser | -   | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| American Merganser | 25 | 100 | 25 | 17 | 59 | 9 | 101 | 47 | 87 | 146 | 42 | 431 | 68 |
| Red-breasted Merganser | - | - | - | - | - | - | - | - | - | - | 1 | 1 | - | 4 |
| Turkey Vulture | -    | 10   | 8    | 12   | 14   | 9    | 13   | 13   | 130  | 77   | 55   | 63   | -    | -    | -    |
| Black Vulture | -    | 6    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| Sharp-shinned Hawk | - | 1 | 2 | - | - | - | - | - | - | - | 1 | 1 | 1 | 2 | 2 |
| Cooper's Hawk  | -    | 1    | 1    | 1    | 2    | 1    | 3    | 4    | 2    | 4    | -    | -    | -    | -    | -    |
| Red-tailed Hawk | - | 3 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Red-shouldered Hawk | 1 | 2 | - | - | - | - | - | - | - | - | 1 | - | - | - | - |
| Am. Rough-legged Hawk | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Bald Eagle     | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| Marsh Hawk     | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| Pigeon Hawk    | -    | 2    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| Sparrow Hawk   | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| Bob-white      | -    | 25   | 14   | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| Turkey         | -    | 3     | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| Virginia Rail  | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| Coot           | -    | 5    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| Killdeer       | -    | 1    | 5    | 2    | 7    | 53   | 18   | 10   | 52   | 109  | 52   | 22   | 140  | -    | -    |
| Woodcock       | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| Common Snipe   | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| Herring Gull   | 40   | 10   | 6    | 30   | 26   | 46   | 32   | 5    | 266  | 59   | 26   | 83   | 32   | -    | -    |
| Ring-billed Gull | 100 | 100 | 55  | 50  | 64  | 71  | 170  | 55  | 570  | 580  | 165  | 170  | 3    | -    | -    |
| Laughing Gull  | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| Bonaparte's Gull | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Mourning Dove  | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| The Raven      | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |

*The Raven* January-February, 1957

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Note: The table contains counts for various species from 1941 to 1956.
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| TOTAL SPECIES                     | 43   | 51   | 46   | 39   | 51   | 61   | 67   | 60   | 79   | 87    | 72   | 84   | 63   |
| TOTAL INDIVIDUALS                 | 621  | 1195 | 627  | 530  | 1344 | 1202 | 2119 | 1167 | 7214 | 13544 | 9514 | 11190 | 5717 |
| SPECIES NOT PREVIOUSLY REC'D.     | 43   | 15   | 6    | 2    | 5    | 1    | 3    | 5    | 13   | 8     | 1    | 4    | 3    |
| TOTAL SPECIES (ACCUMULATIVE)      | 43   | 58   | 64   | 66   | 71   | 72   | 75   | 80   | 93   | 101   | 102  | 106  | 109  |
Chincoteague National Wildlife Refuge, Va. (same area as last year but with much less coverage of mainland area; open farmland 3%, pine and mixed woodland 10%, low pine and myrtle 20%, fresh-water marshes and impoundments 20%, salt marshes 10%, sheltered bays 17%, dunes 5%, mud and sand flats 5%, ocean beach 10%). - December 27; 7 a.m. to 5:30 p.m. 
Overcast with mixed light rain and snow in early morning, becoming partly cloudy before noon; temp. 38° to 49°; wind S, 5-20 m.p.h.; ground bare, water open. Six observers in 3 parties. Total party-hours, 29 (22½ on foot, 3 by car, 3½ by motorboat); total party-miles, 80 (12 on foot, 55 by car, 13 by boat). Common Loon, 28; Red-throated Loon, 93; Horned Grebe, 203; Pied-billed Grebe, 13; Gannet, 13; Great Blue Heron, 43; American Egret, 6; Little Blue Heron, 5; American Bittern, 2; Whistling Swan, 32; Canada Goose, 304; American Brant, 1300; Snow Goose, 1200; Mallard, 570; Black Duck, 5800; Gadwall, 1150; American Widgeon, 2900; Pintail, 3050; Green-winged Teal, 2650; Blue-winged Teal, 5 (C.C.S., F.R.S.); Shoveller, 565; Ring-necked Duck, 2; American Golden-eyes, 63; Bufflehead, 41; Old-squaw, 11; White-winged Scoter, 620; Surf Scoter, 110; American Scoter, 1065; Hooded Merganser, 67; Turkey Vulture, 3; Red-tailed Hawk, 3; Red-shouldered Hawk, 1; Bald Eagle, 1; Marsh Hawk, 9; Peregrine Falcon, 1; Sparrow Hawk, 6; Clapper Rail, 2; American Coot, 800; Killdeer, 1; Black-bellied Plover, 39; Greater Yellow-legs, 16; Lesser Yellow-legs, 24; Least Sandpiper, 6; Red-backed Sandpiper, 283; Dowitcher (sp.), 9 (P.A.D., H.A.S.); Semipalmated Sandpiper, 60; Western Sandpiper, 1; Sanderling, 417; Great Black-backed Gull, 40; Herring Gull, 465; Ring-billed Gull, 456; Bonaparte's Gull, 14; Mourning Dove, 26; Belted Kingfisher, 4; Yellow-shafted Flicker, 8; Downy Woodpecker, 3; Horned Lark, 7; American Crow, 4000; Fish Crow, 300; Carolina Chickadee, 6; Tufted Titmouse, 2; Brown-headed Nuthatch, 3; Carolina Wren, 2; Hockingbird, 1; Golden-crowned Kinglet, 8; Loggerhead Shrike, 1; Common Starling, 205; Myrtle Warbler, 241; House Sparrow, 44; Eastern Meadowlark, 197; Red-winged Blackbird, 700; Boat-tailed Grackle, 620; Purple Grackle, 1; Brown-headed Cowbird, 60; Cardinal, 21; Eastern Towhee, 2; Savannah Sparrow, 8; Slate-colored Junco, 1; White-throated Sparrow, 50; Fox Sparrow, 7; Swamp Sparrow, 8; Song Sparrow, 36. Total, 82 species; about 31,160 individuals. - P.A. Dukont, E.J. Hayward, F.R. Scott (compiler), C.C. Steirly, Miss H.A. Sutton, J.M. Valentine, Jr.
Hooded Merganser, 30; Red-breasted Merganser, 38; Marsh Hawk, 3; American Oyster-catcher, 50 (counted); Black-bellied Plover, 179; Ruddy Turnstone, 8 (seen by all observers); Red-backed Sandpiper, 196; Sanderling, 65; Great Black-backed Gull, 7; Herring Gull, 452; Ring-billed Gull, 145; Yellow-shafted Flicker, 1; American Crow, 8; Myrtle Warbler, 53; Eastern Meadowlark, 18; Savannah Sparrow, 3; Sharp-tailed Sparrow, 1; Song Sparrow, 3.

Total, 35 species; 4249 individuals. - F.R. Scott (compiler), C.C. Steirly, J.M. Valentine, Jr.

Chesapeake Bay, Va., (a strip census 15 miles long, taken from the Little Creek-Kiptopeke Bench Ferry just within the mouth of Chesapeake Bay; no closer than 2 miles to land; open water 100%). - December 26; 9:20 to 10:35 a.m. Fair; temp. 44°; wind NW, 0-5 m.p.h.; water surface moderate. Two observers together. Total party-hours, 1.25 (by boat); total party-miles, 15 (by boat). Common Loon, 10; Red-throated Loon, 4; Horned Grebe, 4; Gannet, 265; White-winged Scoter, 10; Surf Scoter, 818; American Scoter, 140; Red-breasted Merganser, 1; duck (sp.), 500; Great Black-backed Gull, 1; Herring Gull, 460; Ring-billed Gull, 9; Bonaparte's Gull, 3; Laughing Gull, 1. Total, 13 species; about 2240 individuals. Seen in area December 29: Old-squaw, 1; Royal Tern, 1. The Laughing Gull is an addition to the 8-count summary published in The Raven for March-April, 1956. - F.R. Scott (compiler), C.C. Steirly.

Little Creek, Va. (7½ mile radius centering 1½ miles NE of Kempsville, including Lynnhaven Inlet, Little Creek, eastern portion of Norfolk City, Stumpy Lake; open farm land 25%, pine woodland 10%, deciduous woodland, 50%, salt marsh, sand beach, bay, rivers 10%, city suburbs, 5%. - December 31; 7 a.m. to 5:15 p.m. Clear; temp. 34° to 69°; wind SW, 8-30 m.p.h.; ground bare and water open. Eleven observers in 6 parties. Total party-hours, 49 (27½ on foot, 21½ by car); total party-miles, 393 (30 on foot, 363 by car). Common Loon, 11; Red-throated Loon, 37; Horned Grebe, 25; Pied-billed Grebe, 40; Gannet, 32; Double-crested Cormorant, 19; Great Blue Heron, 15; American Egret, 3; Black-crowned Night Heron, 3; Canada Goose, 451; American Brant, 75; Mallard, 36; Black Duck, 52; American Widgeon, 406; Pintail, 14; Green-winged Teal, 11; Ring-necked Duck, 776; Canvas-back, 33; Greater Scaup, 25; Lesser Scaup, 65; American Golden-eye, 59; Bufflehead, 32; Old-squaw, 3; White-winged Scoter, 15; Surf Scoter, 15; American Scoter, 19; Ruddy Duck, 72; Hooded Merganser, 29; American Merganser, 1; Red-breasted Merganser, 6,074; Turkey Vulture, 45; Black Vulture, 58; Cooper's Hawk, 1; Red-tailed Hawk, 4; Red-shouldered Hawk, 1; Bald Eagle, 10; Marsh Hawk, 3; Sparrow Hawk, 32; Bob-white, 5; Clapper Rail, 3; American Coot, 143; Killdeer, 204; Wilson's Snipe, 1; Lesser Yellow-legs, 1; Purple Sandpiper, 1; Red-backed Sandpiper, 17; Sanderling, 25; Great Black-backed Gull, 10; Herring Gull, 2,513; Ring-billed Gull, 2,960; Laughing Gull, 7; Bonaparte's Gull, 796; Forster's Tern, 24; Royal Tern, 10 (7 by one party and 3 by another party); Mourning Dove, 38;
Screech Owl, 1; Belted Kingfisher, 7; Yellow-shafted Flicker, 53; Pileated Woodpecker, 3; Red-bellied Woodpecker, 19; Red-headed Woodpecker, 2; Yellow-bellied Sapsucker, 2; Downy Woodpecker, 16; Eastern Phoebe, 4; Horned Lark, 25; Say's Phoebe, 1; Blue Jay, 2; American Crow, 359; Fish Crow, 30; Carolina Chickadee, 31; Tufted Titmouse, 15; White-breasted Nuthatch, 3; Brown Creeper, 2; Winter Wren, 1; Carolina Wren, 65; Mockingbird, 89; Catbird, 3; Brown Thrasher, 7; American Robin, 76; Hermit Thrush, 4; Eastern Bluebird, 19; Golden-crowned Kinglet, 27; Ruby-crowned Kinglet, 15; Water Pipit, 210; Cedar Waxwing, 96; Loggerhead Shrike, 9; Common Starling, 7,175; Myrtle Warbler, 488; Pine Warbler, 6; Palm Warbler, 58; Common Yellowthroat, 2; House Sparrow, 488; Eastern Meadowlark, 281; Red-winged Blackbird, 15,648; Purple Grackle, 146; Brown-headed Cowbird, 1,680; Cardinal, 106; American Goldfinch, 116; Eastern Towhee, 35; Savannah Sparrow, 28; Sharp-tailed Sparrow, 6; Seaside Sparrow, 1; Slate-colored Junco, 236; Chipping Sparrow, 37; Field Sparrow, 106; White-throated Sparrow, 457; Fox Sparrow, 5; Swamp Sparrow, 28; Song Sparrow, 128. Total, 113 species (1 additional subspecies); 43,973 individuals. Species seen not on above list: Florida Gallinule, 3 (FCR, WFR); Black Skimmer, 2 (MTG, FWS); House Wren, 4. A Say's Phoebe was collected and identified at the Smithsonian Institution as this species. We hope for a subspecific identification report later. - Dr. W.C. Akers, Drs. & Mrs. S.B. Breniser, Mrs. L.E. Burford, M.T. Griffin, Mrs. Gisela Grimm, H. Hespenheide, F.C. Richardson, W.F. Rountrey, P.W. Sykes, Jr. (compiler), E. Webster, Jr.

Notes: Brant - This goose is rare in the area. Seventy-five birds have been in the area for the past two or three weeks. Florida Gallinule - (FCR, WFR) The birds have been present all fall. This is the second winter in a row that this species has wintered in the area in small numbers. Royal Tern - Seven birds were observed by one party and three by another party. All field marks noted. Black Skimmer - (MTG, FWS) Two adult birds were observed both flying and setting. The shape of the bill and the color were noted. Mantle, top of head, and nape were black. This is one of the few winter records of this species for the area.

Norfolk County, Va. (7½ mile radius centering approximately 6½ miles NE of Wallaceton, including eastern edge of Dismal Swamp, western part of Northwest River, Great Bridge, Butts Station, Fentress, Deep Creek; open farmland, 30%; wooded swampland 24%; mixed woodland 30%; deciduous woodland 5%; pine woodland 10%; marsh land 1%). - December 29; 7 a.m. to 5 p.m.; cloudy; rained, snowed, and sleeted from 8:45 a.m. to 2:30 p.m.; temp. 35° to 47°; wind NNW, 10-18 m.p.h.; ground bare and water open. Eight observers in 3 parties. Total party-hours, 28½ (10 on foot, 18½ by car); total party-miles, 390 (4½ on foot, 385½ by car). Pied-billed Grebe, 13; Great Blue Heron, 1; American Bittern, 1; Canada Goose, 263; Black Duck, 1; Wood Duck, 2; Turkey Vulture, 8; Black Vulture, 2; Sharp-shinned Hawk, 1; Cooper's Hawk, 2; Red-tailed Hawk, 13; Red-shouldered Hawk, 11; Harsh Hawk, 7; Sparrow Hawk, 30; Bob-white, 58; Killdeer, 211; Wilson's Snipe, 7; Herring Gull, 13; Ring-billed Gull, 38; Laughing Gull, 3; Bonaparte's Gull, 7; Mourning Dove, 67; Belted Kingfisher, 6; Yellow-shafted Flicker, 32; Pileated Woodpecker, 4; Red-bellied Woodpecker, 20; Hairy Woodpecker, 4; Downy Woodpecker, 25; Eastern Phoebe, 3;
Blue Jay, 8; American Crow, 103; Fish Crow, 103; Carolina Chickadee, 35; Tufted Titmouse, 10; White-breasted Nuthatch, 10; House Wren, 3; Winter Wren, 5; Carolina Wren, 39; Mockingbird, 39; Catbird, 8; Brown Thrasher, 12; American Robin, 166; Hermit Thrush, 3; Eastern Bluebird, 43; Golden-crowned Kinglet, 20; Ruby-crowned Kinglet, 14; Water Pipit, 11; Cedar Waxwing, 134; Loggerhead Shrike, 7; Common Starling, 10,000; Myrtle Warbler, 314; Pine Warbler, 11; Palm Warbler, 2; Common Yellowthroat, 1; House Sparrow, 160; Eastern Meadowlark, 358; Red-winged Blackbird, 1,500,000; Rusty Blackbird, 26; Purple Grackle, 500,000; Brown-headed Cowbird, 50,000; Cardinal, 116; American Goldfinch, 192; Eastern Towhee, 87; Savannah Sparrow, 76; Slate-colored Junco, 661; Chipping Sparrow, 78; Field Sparrow, 88; White-throated Sparrow, 1,179; Fox Sparrow, 59; Swamp Sparrow, 45; Song Sparrow, 111. Total, 71 species; 2,065,789 individuals. - M.T. Griffin, Miss Gisela Grimm, H. Hespenheide, F.C. Richardson, W.F. Rountray, F.M. Sykes, Jr. (compiler), E. Webster, Jr., J.R. Withrow. (The blackbird population is way below normal this year.)

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Back Bay National Wildlife Refuge, Va. (same area as in previous years; refuge and much of mainland of Princess Anne County; open farmland 20%, pine woodland 10%, deciduous woodland 20%, open beach 5%, marshes and inland bay 20%). - December 27; 5 a.m. to 5 p.m. partly cloudy; temp. 32° to 53°; wind strong, SW 11-14 m.p.h.; ground bare and water open. Seven observers in 2 parties. Total party-hours, 21 (14 1/2 on foot, 6 1/2 by car); total party miles, 145 (16 on foot, 129 by car). Common Loon, 3; Red-throated Loon, 6; Horned Grebe, 18; Pied-billed Grebe, 8; Coot, 33; Great Blue Heron, 14; American Egret, 8; Louisiana Heron, 1 (PWS); Little Blue Heron, 1 (PFR, WFR); American Bittern, 1; Whistling Swan, 300; Canada Goose, 4,300; Snow Goose, 800; Blue Goose, 2; Mallard, 400; Black Duck, 600; American Wigeon, 144; Pintail, 700; Green-winged Teal, 76; Blue-winged Teal, 3; Shoveller, 21; Redhead, 5; Canvas-back, 20; Lesser Scaup, 5; American Scoter, 2; Ruddy Duck, 28; Red-breasted Merganser, 28; Turkey Vulture, 4; Black Vulture, 9; Cooper's Hawk, 1; Red-tailed Hawk, 2; Red-shouldered Hawk, 3; Bald Eagle, 2; Marsh Hawk, 24; Peregrine Falcon, 1; Sparrow Hawk, 34; Bob-white, 2; King Rail, 2; Florida Gallinule, 1 (PFR, WFR); American Coot, 87; Killdeer, 119; Black-bellied Plover, 1; Wilson's Snipe, 10; Greater Yellowlegs, 1; Great Black-backed Gull, 19; Herring Gull, 100; Ring-billed Gull, 465; Bonaparte's Gull, 3; Royal Tern, 9 (PWS); Mourning Dove, 26; Barred Owl, 2; Belted Kingfisher, 10; Yellow-shafted Flicker, 20; Red-bellied Woodpecker, 14; Yellow-bellied Sapsucker, 2; Hairy Woodpecker, 6; Downy Woodpecker, 8; Red-cockaded Woodpecker, 4 (PFR, WFR); Eastern Phoebe, 3; Tree Swallow, 1,000 (PWS); American Crow, 84; Fish Crow, 3; Carolina Chickadee, 30; Tufted Titmouse, 20; White-breasted Nuthatch, 3; Brown-headed Nuthatch, 27; Brown Creeper, 2; House Wren, 3; Winter Wren, 3; Carolina Wren, 28; Long-billed Marsh Wren, 2; Short-billed Marsh Wren, 5; Mockingbird, 23; Catbird, 11; Brown Thrasher, 6; American Robin, 294; Hermit Thrush, 7; Eastern Bluebird, 13; Golden-crowned Kinglet, 43; Ruby-crowned Kinglet, 26; Water Pipit, 200; Cedar Waxwing, 4; Loggerhead Shrike, 5; Common Starling, 43; Myrtle Warbler, 530; Pine Warbler, 13; Palm Warbler, 12; Common Yellowthroat, 8; Yellow-breasted Chat, 1 (PFR, WFR);
House Sparrow, 35; Eastern Meadowlark, 160; Red-winged Blackbird, 20,000; Rusty Blackbird, 150; Boat-tailed Grackle, 103 (FCR, WFR); Purple Grackle, 13; Brown-headed Cowbird, 50; Cardinal, 69; American Goldfinch, 45; Eastern Towhee, 53; Savannah Sparrow, 150; Sharp-tailed Sparrow, 1 (PWS); Slate-colored Junco, 8; Field Sparrow, 28; White-throated Sparrow, 369; Fox Sparrow, 10; Swamp Sparrow, 131; Song Sparrow, 910 Total, 107 species; 32,431 individuals. (A strong offshore wind kept the sea ducks too far offshore to be identified.) – M.T. Griffin, H. Hespenheide, F.C. Richardson, W.F. Rountrey, P.W. Sykes, Jr. (compiler), E. Webster, Jr., C.S. Yelverton.

Notes: Louisiana Heron – The bird was observed at close range. This species is not generally found in the area during the winter. Little Blue Heron – (FCR, WFR) This heron is not normally found in the area at this time of year.
Florida Gallinule – (FCR, WFR) The bird was observed with 10x50 binoculars. This is the second year in a row that this species has occurred in the area in winter. Royal Tern – (PWS) The nine birds recorded were seen in groups of 2 or 3 and observed at close range. This species does not normally winter in the region. Red-cockaded Woodpecker – (FCR, WFR) This woodpecker is rather rare in the area and this is the first time it has occurred during the winter.
Tree Swallow – (PWS) This species is found in very small numbers occasionally during the winter, but this is by far the largest number ever recorded during the winter in this area. Yellow-breasted Chat – (FCR, WFR) Bird observed at close range. This is the second year that Chats have been seen in the winter. Boat-tailed Grackle (FCR, WFR) 103 is the largest number of these grackles that have been recorded in the area during the winter. Sharp-tailed Sparrow – (PWS) This species of salt marsh sparrow is not generally recorded on the Back Bay count because all the marsh is fresh. This is the first time this bird has been recorded on this particular count.

Waverly, Va. A purely local census of the drainage area of Spring Branch, a tributary of the Blackwater River in North Sussex County; bottomland hardwood 45%, pine forest 20%, fields 10%, brush thickets 10%, wooded pond 15%. December 24; 7:00 a.m. to 2:30 p.m. Overcast with intermittent light rains during most of day. Wind 3 m.p.h., temp. 58° to 64°. One observer, seven and one-half hours on foot; total miles 5.2.
Pied-billed Grebe, 2; Mallard, 11; Ring-necked Duck, 4; Wood Duck, 4; Turkey Vulture, 4; Black Vulture, 3; Red-tailed Hawk, 1; Red-shouldered Hawk, 2; Bobwhite, 14; Coot, 1; Mourning Dove, 25; Kingfisher, 1; Flicker, 10; Pileated Woodpecker, 2; Red-bellied Woodpecker, 11; Yellow-bellied Sapsucker, 5; Hairy Woodpecker, 4; Downy Woodpecker, 10; Phoebe, 2; Blue Jay, 4; Common Crow, 35; Carolina Chickadee, 5; Tufted Titmouse, 10; White-breasted Nuthatch, 5; Winter Wren, 4; Carolina Wren, 18; Mockingbird, 4; Hermit Thrush, 1; Bluebird, 8; Ruby-crowned Kinglet, 1; Cedar Waxwing, 12; Loggerhead Shrike, 1; Starling, 11; Myrtle Warbler, 8; Meadowlark, 46; Redwing, 124; Purple Grackle, 22; Brown-headed Cowbird, 20; Cardinal, 20; Goldfinch, 19; Towhee, 13; Slate Junco, 42; Field Sparrow, 5; White-throated Sparrow, 157; Fox Sparrow, 2; Swamp Sparrow, 8; Song Sparrow, 20. Total, 47 species; 741 individuals. – C.C. Steirly.
Hopewell, Va. (Presquile National Wildlife Refuge and vicinity; same area and habitat percentages as last two years). - December 30; 6:15 a.m. to 5:30 p.m. Clear; temp. 25° to 39°; wind SW, 10-25 m.p.h., ground bare, water open. Three observers in 3 parties. Total party-hours, 28 (20 on foot, 2 by car, 6 by boat); total party-miles, 104 (13 on foot, 80 by car, 11 by boat). Pied-billed Grebe, 6; Great Blue Heron, 41; American Egret, 1; Canada Goose, 60; Snow Goose, 6; Blue Goose, 74; Mallard, 4800; Black Duck, 2000; American Widgeon, 37; Pintail, 42; Wood Duck, 403; Ring-necked Duck, 15; American Golden-eye, 9; Ruddy Duck, 346; Hooded Merganser, 4; American Merganser, 9; Turkey Vulture, 18; Black Vulture, 5; Sharp-shinned Hawk, 3; Red-tailed Hawk, 4; Red-shouldered Hawk, 1; Bald Eagle, 6; Marsh Hawk, 1; Sparrow Hawk, 10; Bob-white, 3; Turkey, 2; Killdeer, 11; Herring Gull, 18; Ring-billed Gull, 347; Mourning Dove, 275; Sorellc Owl, 1; Belted Kingfisher, 5; Yellow-shafted Flicker, 20; Fileted Woodpecker, 3; Red-bellied Woodpecker, 24; Yellow-bellied Sapsucker, 11; Hairy Woodpecker, 6; Downy Woodpecker, 18; Eastern Phoebe, 13; Horned Lark, 150; Blue Jay, 4; American Crow, 136; Carolina Chickadee, 50; Tufted Titmouse, 42; White-breasted Nuthatch, 5; Brown Creeper, 5; House Wren, 2 (C.E.S.); Winter Wren, 6; Carolina Wren, 54; Mockingbird, 34; American Robin, 2; Hermit Thrush, 5; Eastern Bluebird, 42; Golden-crowned Kinglet, 32; Ruby-crowned Kinglet, 10; Cedar Waxwing, 7; Loggerhead Shrike, 4; Common Starling, 296; Nuttall Warbler, 40; House Sparrow, 61; Eastern Meadowlark, 286; Red-winged Blackbird, 200; Brown-headed Cowbird, 300; Cardinal, 150; Purple Finch, 2; American Goldfinch, 62; Eastern Towhee, 2; Savannah Sparrow, 7; Slate-colored Junco, 31; Field Sparrow, 28; White-throated Sparrow, 41; Fox Sparrow, 6; Swamp Sparrow, 8; Song Sparrow, 95. Total: 74 species; about 18,573 individuals. The strong wind kept small birds under cover and very quiet. - F.R. Scott (compiler), C.E. Stevens, Jr., J.R. Walther.

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Brooke, Va. (triangular area with Brooke, Widewater, and mouth of Potomac Creek at the 3 apices; waterfront on Potomac River and tidal bays 32%, marsh 7%, wooded swamp 3%, fields and hedgerows 20%, mixed forest edge 16%, deciduous woods 18%, pine woods 4%). - December 28; 7:30 a.m. to 4:30 p.m. Alternating sun and dense clouds on south edge of continuous cloud bank; temp. 31° to 49°; wind E, at midday only, 6-8 m.p.h.; ground bare, river and bays ice-free. Six observers in 5 parties. Total party-hours, 38; total party-miles, 26 (all on foot). Common Loon, 1; Horned Grebe, 4; Pied-billed Grebe, 6; Great Blue Heron, 18; Whistling Swan, 9; Canada Goose, 62; Mallard, 100; Black Duck, 700; Gadwall, 2; American Widgeon, 70; Pintail, 17; Ring-necked Duck, 4; Canvas-back, 10; Lesser Scaup, 45; American Golden-eye, 5; Bufflehead, 35; Ruddy Duck, 1200; Hooded Merganser, 4; American Merganser, 250; Red-breasted Merganser, 350; Turkey Vulture, 3; Sharp-shinned Hawk, 2; Red-tailed Hawk, 1; Red-shouldered Hawk, 3; Bald Eagle, 5; Marsh Hawk, 1; Sparrow Hawk, 2; Bob-white, 70; American Coot, 350; Killdeer, 15; Wilson's Snipe, 1; Herring Gull, 100; Ring-billed Gull, 50; Mourning Dove, 75; Belted Kingfisher, 6; Yellow-shafted Flicker, 9; Fileted Woodpecker, 2; Red-bellied Woodpecker, 16; Yellow-bellied Sapsucker, 6; Hairy Woodpecker, 2; Downy Woodpecker, 31; Eastern Phoebe, 3; Blue Jay, 7; American Crow, 75; Carolina Chickadee, 75; Tufted Titmouse, 27; White-breasted Nuthatch, 4;
Brown Creeper, 3; Winter Wren, 3; Carolina Wren, 45; Mockingbird, 25;
Catbird, 1; Brown Thrasher, 1; American Robin, 65; Hermit Thrush, 10; Eastern
Bluebird, 40; Golden-crowned Kinglet, 6; Ruby-crowned Kinglet, 1; Common
Starling, 150; Myrtle Warbler, 31; House Sparrow, 35; Eastern Meadowlark, 40;
Red-winged Blackbird, 450; Rusty Blackbird, 115; Cardinal, 100; Purple Finch,
2; American Goldfinch, 35; Eastern Towhee, 15; Savannah Sparrow, 5; Slate-
colored Junco, 500; American Tree Sparrow, 10; Chipping Sparrow, 1 (R.L.S.);
Field Sparrow, 150; White-throated Sparrow, 350; Fox Sparrow, 3; Swamp
Sparrow, 8; Song Sparrow, 100. Total, 77 species; about 6,133 individuals.

Note: Details of Chipping Sparrow identification: Viewed on weed stalk at 50
feet through 8x binoculars. Breast clear pale gray without dark spot or trace
of buffy or reddish on sides or near shoulders; cap bright rufous; pronounced
white line over eye. Associated with field sparrows but was independent in
behavior. Species well known to observer, Robert L. Smith.

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Big Flat Mountain, Va. (same area and habitat percentages as last
year - lying mostly in the southern portion of the Shenandoah National Park). -
December 22; 7 a.m. to 5:15 p.m. Rain in early a.m., cloudy rest of day;
temp. 50° to 65°; wind W, C-10 m.p.h. One observer. Total hours, 10½; total
miles, 20 on foot. Mallard, 95; Turkey Vulture, 49; Cooper's Hawk, 1;
Ruffed Grouse, 2; Bob-white, 15 (1 covey); Turkey, 1 (fresh scratchings and
tracks); Pileated Woodpecker, 5; Hairy Woodpecker, 1; Downy Woodpecker,
8; Eastern Phoebe, 5; Blue Jay, 3; Common Raven, 2; American Crow, 131; Fish
Crow, 1; Carolina Chickadee, 18; Tufted Titmouse, 4; Winter Wren, 4; Carolina
Wren, 24; Mockingbird, 1; American Robin, 8; Golden-crowned Kinglet, 6;
Cedar Waxwing, 2; Common Starling, 134; Cardinal, 12; American Goldfinch, 2;
Slate-colored Junco, 81; American Tree Sparrow, 1; Field Sparrow, 11;
White-throated Sparrow, 26; Fox Sparrow, 5; Song Sparrow, 4. Total,
31 species; 665 individuals. Warm enough in p.m. for a few spring peepers
to be heard. - Charles E. Stevens.

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Charlottesville, Va. (Same area as in previous years except
slightly reduced; riverbottom 30%, farmland 25%, lakes and ponds 20%,
deciduous woods 20%, pinewoods 5%). - December 29; 7 a.m. to 5 p.m.,
Cloudy; temp. 25° to 38°; wind NW, 5-30 m.p.h. Four observers in 4 parties.
Total party-hours, 24½ (19½ on foot, 5 by car); total party-miles, 97 (29 on
foot, 68 by car). Pied-billed Grebe, 3; Great Blue Heron, 2; Mallard, 37;
Black Duck, 1; American Widgeon, 4; Blue-winged Teal, 1 (K.L.); Buffle-head, 4;
Turkey Vulture, 44; Black Vulture, 22; Sharp-shinned Hawk, 1; Cooper's Hawk, 2;
Red-shouldered Hawk, 2; Sparrow Hawk, 2; Bob-white, 15; Mourning Dove, 218;
Belted Kingfisher, 4; Yellow-shafted Flicker, 7; Pileated Woodpecker, 1;
Red-bellied Woodpecker, 6; Yellow-bellied Sapsucker, 1; Downy Woodpecker, 16;
Eastern Phoebe, 4; Horned Lark, 2; Blue Jay, 8; American Crow, 476; Fish Crow, 1; Carolina Chickadee, 67; Tufted Titmouse, 37; White-breasted Nuthatch, 11; Brown Creeper, 2; House Wren, 1 (seen and heard in a honeysuckle tangle — first winter record—C.E.S.); Winter Wren, 5; Carolina Wren, 34; Mockingbird, 28; Hermit Thrush, 2; Eastern Bluebird, 87; Golden-crowned Kinglet, 34; Ruby-crowned Kinglet, 16; Cedar Waxwing, 23; Loggerhead Shrike, 2; Common Starling, 118; Myrtle Warbler, 10; House Sparrow, 30; Eastern Meadowlark, 10; Cardinal, 231; Purple Finch, 5; American Goldfinch, 73; Eastern Towhee, 1; Slate-colored Junco, 591; American Tree Sparrow, 9; Field Sparrow, 156; White-crowned Sparrow, 11; White-throated Sparrow, 249; Fox Sparrow, 17; Swamp Sparrow, 8; Song Sparrow, 122. Total, 56 species; 2,874 individuals.


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Warren, Va. (Same area as last year except slightly reduced; open farmland 40%, riverbottom 35%, deciduous woods 15%, pine woods 5%, ponds 5%). December 28; 6:45 a.m. to 5 p.m. Partly cloudy; temp. 32° to 68°; wind S, 0-20 m.p.h. Two observers in 2 parties. Total party-hours, 20 (15 on foot, 5 by car); total party-miles, 98 (23 on foot, 75 by car). Horned Grebe, 3; Pied-billed Grebe, 4; Great Blue Heron, 1; Mallard, 194; Black Duck, 55; Gadwall, 1; American Widgeon, 47; Pintail, 2; Green-winged Teal, 12; Blue-winged Teal, 3 (K.L.); Wood Duck, 33; Redhead, 1; Ring-necked Duck, 2; American Golden-eye, 2; Ruddy Duck, 3; Hooded Merganser, 2; Turkey Vulture, 16; Black Vulture, 55; Sharp-shinned Hawk, 1; Red-tailed Hawk, 4; Red-shouldered Hawk, 2; Sparrow Hawk, 3; Bob-white, 22 (shot by hunters); Turkey, 4; Killdeer, 14; American Woodcock, 1 (shot by hunter); Wilson’s Snipe, 43; Mourning Dove, 399; Belted Kingfisher, 2; Yellow-shafted Flicker, 6; Pileated Woodpecker, 3; Red-bellied Woodpecker, 18; Red-headed Woodpecker, 2; Yellow-bellied Sapsucker, 2; Hairy Woodpecker, 3; Downy Woodpecker, 23; Eastern Phoebe, 5; Horned Lark, 1; Blue Jay, 17; American Crow, 538; Carolina Chickadee, 75; Tufted Titmouse, 30; White-breasted Nuthatch, 5; Red-breasted Nuthatch, 2; Brown Creeper, 3; Winter Wren, 7; Bewick’s Wren, 1 (second winter record — C.E.S.); Carolina Wren, 56; Mockingbird, 47; Hermit Thrush, 2; Eastern Bluebird, 54; Golden-crowned Kinglet, 9; Cedar Waxwing, 31; Loggerhead Shrike, 7; Common Starling, 488; Myrtle Warbler, 13; House Sparrow, 39; Eastern Meadowlark, 166; Red-winged Blackbird, 36; Rusty Blackbird, 4; Cardinal, 118; Purple Finch, 2; American Goldfinch, 31; Slate-colored Junco, 500; American Tree Sparrow, 4; Field Sparrow, 147; White-crowned Sparrow, 14; White-throated Sparrow, 144; Fox Sparrow, 2; Swamp Sparrow, 7; Song Sparrow, 78. Total, 71 species; 3,671 individuals. Herring Gull seen in area during period (K.L.) — Kenneth Lawless, Charles E. Stevens.

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Harrisonburg, Va. (Waterman Wood to Tide Spring, a total distance of 12 miles including oak-hickory-juniper-pine woodlot 60%, oak-hickory woodlot 10%, a small village bordering College Campus 10%, juniper-pine wasteland 5%, pasture field and fence rows 15%). A small farm pond in oak-hickory woodlot. - December 24; 8:15 a.m. to 3:00 p.m. Ground very wet, damp and cloudy in a.m. with more sunshine in p.m. Temperature at start, 52°; at noon, 56°; at close 58°. Wind from south at 5-7 m.p.h. Three observers working within calling distance of each other. Total party-hours, 31. Turkey Vulture, 17; Red-tailed Hawk, 1; Sparrow Hawk, 1; Mourning Dove, 3; Flicker, 3; Pileated Woodpecker, 1; Red-bellied Woodpecker, 1; Red-headed Woodpecker, 1; Downy Woodpecker, 3; Blue Jay, 19; Crow, 69; Carolina Chickadee, 15; Tufted Titmouse, 34; White-breasted Nuthatch, 5; Winter Wren, 2; Carolina Wren, 5; Mockingbird, 22; Bluebird, 8; Golden-crowned Kinglet, 4; Starling, 153; Myrtle Warbler, 6; English Sparrow, 71; Meadowlark, 2; Cardinal, 27; Purple Finch, 2; Goldfinch, 18; Slate-colored Junco, 95; White-throated Sparrow, 10. Total, 28 species; 598 individuals. - Daniel B. Suter, Milo Stahl, D. Ralph Hostetter.

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Rockingham County, Va. (within 7 1/2 mile radius from Ottobine). - December 26; 8 a.m. to 5 p.m. Weather cloudy with snow flurries; 30° at start, 34° at finish. Six observers plus pointer dog, 15 miles on foot and 60 miles in car. Elevation 1160 to 3200 feet; habitats, Silver Lake, lawn and shade trees in town, cottonwood-sycamore river bottom, open farm land and farm woodlot, mixed Appalachian conifers and hardwoods in mountains. Ground clear. Pied-billed Grebe, 1; Mallard, 233; Black Duck, 4; Gadwall, 19; Baldpate, 59; Pintail, 9; Green-winged Teal, 1; Shoveller, 1; Ring-necked Duck, 4; Canvasback, 1; Bufflehead, 2; Ruddy Duck, 1; Turkey Vulture, 351; Black Vulture, 23; Sharp-shinned Hawk, 1; Sparrow Hawk, 6; Ruffed Grouse, 4; Bob-white, 31 (3 coveys); Coot, 24; Mourning Dove, 7; Soreechee Owl, 1; Great-horned Owl, 1; Belted Kingfisher, 2; Pileated Woodpecker, 2; Red-bellied Woodpecker, 1; Hairy Woodpecker, 1; Downy Woodpecker, 11; Horned Lark, 1; Blue Jay, 4; Raven, 2; Crow, 227; Fish Crow, 17; Chickadee, 7; Tufted Titmouse, 10; Winter Wren, 2; Carolina Wren, 7; Hermit Thrush, 1; Mockingbird, 10; Bluebird, 10; Golden-crowned Kinglet, 2; Migrant Shrike, 2; Starling, 190; Myrtle Warbler, 1; English Sparrow, 41; Meadowlark, 3; Cardinal, 48; Goldfinch, 11; Towhee, 1; Slate-colored Junco, 16; Tree Sparrow, 2; Field Sparrow, 9; White-crowned Sparrow, 9; White-throated Sparrow, 14; Fox Sparrow, 1; Song Sparrow, 13. Total, 55 species, 1,462 individuals. - Dr. Harry Jopson, Dr. Hollen Helbert, Dr. Richard Smith, Leon Powell, Fred Swartz, Max Carpenter.

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Lexington, Va. (Same area as in former years), - December 26; 7 a.m. to 5 p.m. Overcast; temp. 32° to 45°; wind NW, 10-15 m.p.h.; ground clear, partly frozen; streams and ponds open. Seven observers in three parties. Total party-hours, 30 (27 on foot, 3 by car); total party-miles, 109 (31 on foot, 78 by car). Pied-billed Grebe, 2; Great Blue Heron, 2; Mallard, 19; Pintail, 1; Turkey Vulture, 10; Black Vulture, 8; Cooper's Hawk, 1; Red-tailed Hawk, 2; Sparrow Hawk, 4; Bob-white, 38; Killdeer, 12; Wilson's Snipe, 5; Mourning Dove, 123; Belted Kingfisher, 4; Flicker, 3; Pileated Woodpecker, 7; Red-billed Woodpecker, 1; Hairy Woodpecker, 1; Yellow-bellied Sapsucker, 1; Horned Lark, 6; Blue Jay, 14; Raven, 1; Crow, 1332; Black-capped Chickadee, 3; Carolina Chickadee, 46; Tufted Titmouse, 68; White-breasted Nuthatch, 10; Brown Creeper, 1; Winter Wren, 1; Carolina Wren, 35; Mockingbird, 29; Hermit Thrush, 1; Bluebird, 28; Golden-crowned Kinglet, 5; Cedar Waxwing, 33; Shrike, 7; Starling, 495; Myrtle Warbler, 23; House Sparrow, 185; Meadowlark, 63; Cardinal, 124; Purple Finch, 4; Goldfinch, 40; Junco, 371; Tree Sparrow, 12; Field Sparrow, 28; White-crowned Sparrow, 40; White-throated Sparrow, 197; Fox Sparrow, 1; Song Sparrow, 51. Total, 31 species, 3,535 individuals. - Col. Robert P. Carroll, Robert Carroll, Jr., David Foster, J.J. Murray (compiler), James Murray, Jr., Robert Paxton, Joshua Womeldorf.

Roanoke, Va. (Same territory as in previous years; Murray's Pond, Woodrum Field Airport, Peters Creek Road, Salem; farmland 20%, open fields 40%, deciduous woods and pine woods 20%, creek bottom and pond, 20%). - December 30, 7:45 a.m. to 4:30 p.m. Fair, temp. 25° to 38°; wind 18-25 m.p.h.; miles 39 (13 on foot, 26 by car). Black Duck, 12; Blue-winged Teal, 7; Turkey Vulture, 7; Sparrow Hawk, 3; Killdeer, 6; Wilson's Snipe, 11; Mourning Dove, 10; Doway Woodpecker, 2; Horned Lark, 40; Blue Jay, 5; American Crow, 1; Carolina Chickadee, 5; Tufted Titmouse, 3; White-breasted Nuthatch, 1; Carolina Wren, 3; Mockingbird, 1; Cowbird, 2; Eastern Bluebird, 3; Ruby-crowned Kinglet, 1; Shrike, 1; Starling, 600 (Est.); House Sparrow, 40; Eastern Meadowlark, 6; Cardinal, 16; Purple Crackle, 1; American Goldfinch, 15; Slate-colored Junco, 20; Field Sparrow, 14; White-throated Sparrow, 3; Song Sparrow, 24. Total, 31 species, 869 individuals. - C.H. Lewis, Leigh Hawkins, (Mrs. Frank A. Venn, feeding station birds), A.O. English.

Blacksburg, Va. (Same area as last year; pasture and plowed land 20%, town and suburbs 10%, virgin white oak woodlots 20%, mixed pine and oak woods 20%, river and creek bottom 30%). - December 27; 6:30 a.m. to 5:30 p.m. Clear to overcast; temp. 30° to 46°; wind SW, 20-30 m.p.h.; ground bare, water open. Twelve observers in 7 parties. Total party-hours, 63 (59 on foot, 4 by car); total party-miles 132% (65% on foot, 67 by car).
Pied-billed Grebe, 9; Mallard, 60; Black Duck, 14; Gadwall, 10; American Widgeon, 179; Pintail, 4; Redhead, 25; Ring-necked Duck, 29; Lesser Scaup, 75; American Golden-eye, 22; Bufflehead, 129; Hooded Merganser, 28; Turkey Vulture, 11; Cooper’s Hawk, 2; Red-tailed Hawk, 1; Red-shouldered Hawk, 1; Sparrow Hawk, 5; Ruffed Grouse, 2; Bob-white, 13; American Coot, 1; Wilson’s Snipe, 4; Mourning Dove, 39; Belted Kingfisher, 5; Yellow-shafted Flicker, 4; Pileated Woodpecker, 3; Red-bellied Woodpecker, 10; Yellow-bellied Sapsucker, 3; Hairy Woodpecker, 4; Downy Woodpecker, 31; Eastern Phoebe, 1; Horned Lark, 52; Blue Jay, 44; American Crow, 671; Black-capped Chickadee, 1; Carolina Chickadee, 1; Tufted Titmouse, 134; White-breasted Nuthatch, 52; Brown Creeper, 7; Winter Wren, 6; Carolina Wren, 39; Mockingbird, 40; American Robin, 13; Hermit Thrush, 7; Eastern Bluebird, 12; Golden-crowned Kinglet, 4; Ruby-crowned Kinglet, 1; Loggerhead Shrike, 8; Common Starling, 2,912; House Sparrow, 163; Eastern Meadowlark, 68; Rusty Blackbird, 18; Purple Grackle, 2; Cardinal, 224; Purple Finch, 6; American Goldfinch, 244; Eastern Towhee, 3; Slate-colored Junco, 473; American Tree Sparrow, 10; Field Sparrow, 108; White-crowned Sparrow, 59; White-throated Sparrow, 62; Fox Sparrow, 9; Swamp Sparrow, 5; Song Sparrow, 59. Total, 49 species; about 3,576 individuals. - J. E. Cooper, A. L. Dean, C. O. Handley, Sr., C. O. Handley, Jr., R. V. Dietrich, J. S. Lindsey, J. W. Murray, C. W. Roane, G. M. Shear, Mrs. E. A. Smyth, Allan Smyth, R. J. Watson (compiler).

Glade Spring, Va. (same area as last year; farmland and pastures 40%, deciduous woods 30%, mixed pine and deciduous woods 15%, river bottoms 13%, marsh and ponds 2%). - December 28; 7 a.m. to 5:30 p.m. Clear a.m., partly cloudy, p.m.; temp. 35° to 50°; wind SW, 0-20 m.p.h. Six observers in 3 parties. Total party-hours, 20 (16 on foot, 4 by car); total party-miles, 71 (16 on foot, 55 by car). Pied-billed Grebe, 5; Blue Goose, 1; Mallard, 37; Black Duck, 1; Green-winged Teal, 8; Ring-necked Duck, 3; Ruddy Duck, 1; Turkey Vulture, 41; Black Vulture, 19; Cooper’s Hawk, 1; Sparrow Hawk, 4; Bob-white, 2; American Coot, 19; Killdeer, 21; Mourning Dove, 107; Belted Kingfisher, 4; Yellow-shafted Flicker, 1; Pileated Woodpecker, 3; Red-bellied Woodpecker, 3; Hairy Woodpecker, 2; Downy Woodpecker, 10; Eastern Phoebe, 2; Blue Jay, 42; American Crow, 110; Carolina Chickadee, 28; Tufted Titmouse, 16; White-breasted Nuthatch, 8; Winter Wren, 3; Carolina Wren, 16; Mockingbird, 21; Brown Thrasher, 1; Eastern Bluebird, 4; Golden-crowned Kinglet, 3; Loggerhead Shrike, 1; Common Starling, 2500, House Sparrow, 200; Eastern Meadowlark, 59; Red-winged Blackbird, 2; Purple Grackle, 1; Brown-headed Cowbird, 12; Cardinal, 54; American Goldfinch, 25; Slate-colored Junco, 46; Field Sparrow, 56; White-crowned Sparrow, 24; White-throated Sparrow, 17; Fox Sparrow, 1; Swamp Sparrow, 3; Song Sparrow, 27. Total, 49 species; about 3,576 individuals. (See in area in count period: Pintail, Hooded Merganser. - Lee Douglas, Ben B. Dulaney, Paul S. Dulaney (compiler), Sara Dulaney, A. R. Shields, Jane D. White.

Notes: An immature Blue Goose was observed with a flock of mallards on a salt water pond inside the town limits of Saltville, Va. Ponds, marsh, and a golf course comprise a large open space owned by the Olin Mathieson Chemical Corp, which pumps brine from the ground for use in their nearby plant. Numerous water birds winter on these ponds and since they are not molested they are easily approached. The Blue Goose was carefully observed at close range on land and in flight; color, slate gray; wings and back paler gray, except primaries and secondaries; bill and legs, dusky. Size, somewhat larger than mallard.
Bald Eagle Survey: First Annual Report

By Jackson M. Abbott

One year ago a Bald Eagle Survey Committee was set up in the D.C. Audubon Society to collect data on the eagle population in the general area of the Chesapeake Bay. Local bird clubs in the region were circularized for assistance and the project was publicized in Dr. Barnes' column and in press releases.

The initial objective of this survey is to locate as many eagle nests as possible and then keep an annual check on each nest to determine whether or not it is used each year and if so, the number of eaglets successfully raised from each nest. Future objectives to be attained by analysis of this data are:

1. to determine if there actually is (as it appears) a continuing decline in the eagle population in this region;
2. to determine the factors contributing to this decline;
3. to recommend actions which will slow or halt this decline.

During the past year nine people submitted definite data on the location of 23 Bald Eagle nests. Many more people contributed sight records of Bald Eagles and information on general areas where the eagle is suspected of nesting.

Of the 23 nests reported 6 are located along the New Jersey shore of the Delaware River between Camden and Port Norris; one is for the Philadelphia area; two are for the Delaware shore of the Delaware River between Wilmington and Bombay Hook Refuge; two are for the shore of the Susquehanna River near the Pennsylvania-Maryland state line; three are for the west shore of the Chesapeake Bay between North-East and Baltimore, Maryland; one is for the District of Columbia; and eight are for the Maryland and Virginia shores of the Potomac River between Oxon Run (Maryland) and Currioman Bay, Westmoreland County, Virginia.

As shown in the accompanying table, of these 23 nests reported 6 were destroyed by natural or man-made causes prior to the 1956 season, leaving 17 existent at the start of the season. Of these 17 nests 2 were abandoned for unknown reasons, 7 were not reported on during the 1956 season and all of the remaining 8 nests reported as occupied during the 1956 season were not visited frequently enough to determine their success in numbers of young raised, or their lack of success.

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<td>No reports in 1956</td>
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<td>Nests destroyed prior to 1956</td>
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Thus it is obvious that no conclusive deductions can be drawn from the above information except that more field work is required and, we hope, forthcoming during the present nesting season. It should be noted that there are undoubtedly many more Bald Eagle nests in the census region. It is hoped that all interested readers will assist in locating and reporting on eagle nests so that this committee can arrange to check them each year, should the finder not be able to do so. Address all reports and inquiries to:

The Bald Eagle Survey Committee
Box 202, Ben Franklin Station
Washington 4, D.C.

or to the Committee Chairman:

Jackson M. Abbott
814 13th Street
Alexandria, Virginia

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THE 1956 DECEMBER FIELD TRIP TO BACK BAY

By Gertrude Prior

The winter field trip of the Virginia Society of Ornithology was held December 8-9, with headquarters at Virginia Beach. Saturday's trip was to Back National Wildlife Refuge, and Seashore State Park was visited on Sunday morning. Most of the out-of-town participants gathered at the DeWitt Cottage in Virginia Beach on Friday evening, and after a very ample and pleasant breakfast the next morning, joined the local group at Sandbridge at 7:30 a.m. There were some 30 persons in all.

We are sure that most people had been planning for some time how they were to avoid the usual experience of nearly freezing to death on this winter trip, for it can be bitter along the ocean front and on the Bay. A ride down the beach from Sandbridge to the Refuge Headquarters in open trucks usually serves to put the hardiest of VSO members under cover of whatever is available. This time we enjoyed the balmy breezes and kept unpeeling layer after layer of clothes which we had been afraid not to put on when we dressed before daybreak. The ride to the Refuge was accomplished in good time in the trucks which Mr. Carl Yelverton, the new manager, had procured for us. Very few birds were seen over the ocean, which was just like a lake, and there was a distinct lack of shore birds.

After reaching the Refuge, we left the beach and walked back of the dunes toward the flats where the geese were feeding. There were Myrtle Warblers, Towhees and Song Sparrows in the myrtle bushes, and the farther toward the swampy flats we went, the more mosquitoes we found (or found us!). We batted at the hungry creatures, rolled down our sleeves, and turned up our collars to protect ourselves as best we could. Soon we forgot our buggy
plight, however, when the Snow Geese, not too far away, became restless at our presence and rose in one great mass - thousands of them. The breathtaking sight of the myriads of white birds, touched on the wingtips with black, was a sight long to be remembered. The flock settled far off, and later we were to see them rise up again when we were on the boat in the bay. Small and larger flocks of Canada Geese kept sailing over our heads. Whistling Swans flew about and settled against the shore of the bay, A Marsh Hawk sailed low over the marshy land. Pintails flew over the water. The number of ducks, however, was very small, and Mr. Yelverton told the group that they just had not come south, apparently, and they did not know where they were.

Lunchtime came soon, and a number of the group ate their picnic on the dunes in front of the Refuge Headquarters. Over the calm, calm ocean there were Gannets flying about, and we got very good close-up views of these magnificent denizens of the air. The temperature was about 70°; the date, again - December 8!

Long Island was the destination of the group after lunch, and Mr. Yelverton obligingly shuttled us across - the first visit for many of us. Here it was that several members of the group found the Upland Plover, and there was an American Pipit that was observed for quite a long while.

The trip back up the beach yielded little in the way of birds, save a few Gulls and the Gannets, but the sunset on the west and the reflection of it in the mirror-like ocean on the east, as we reached Sandbridge was an extra dividend.

The Sunday morning in Seashore State Park gave the group a very nice walk through the cypress lagoons and the unusual wooded area so close to the Atlantic shoreline. We were conducted along the paths by the Superintendent of the Park, and were shown the beautiful sand ridges along Broad Bay, Eagle nests in trees on one of the ponds, and the unusual flora found within the boundaries.

Charles C. Steirly, as Tripmaster, had charge of the arrangements for the outing.

The Back Bay list follows: Common Loon, Red-throated Loon, Pied-billed Grebe, Horned Grebe, Gannet, Double-crested Cormorant, Great Blue Heron, American Egret, American Bittern, Whistling Swan, Canada Goose, Snow Goose, Blue Goose (3, R.J. Beasley), Mallard, Black Duck, Baldpate, Pintail, Green-winged Teal, Redhead, Canavasback, Lesser Scaup, Bufflehead, Ruddy Duck, Turkey Vulture, Bald Eagle, Marsh Hawk, Sparrow Hawk, Coot, Killdeer, Black-bellied Plover, Greater Yellowlegs, Upland Plover (Harriet Sutton, R.J. Beasley, and others), Great Black-backed Gull, Herring Gull, Ring-billed Gull, Kittiwake (R.J. Beasley), Royal Tern, Flicker, Tree Swallow, Crow, Carolina Wren, Mockingbird, Golden-crowned Kinglet, Ruby-crowned Kinglet, Pipit, Starling, Myrtle Warbler, Yellowthroat, Meadowlark, Redwing, Towhee, Savannah Sparrow, Seaside Sparrow, Song Sparrow.

— Sweet Briar, Virginia
NEWS AND NOTES

1957 Annual Meeting. At the last meeting of the Executive Committee of the VSO it was decided that the 1957 Annual Meeting would be held at the Wachapreague Hotel, on the Eastern Shore. This will not be as convenient a location as we usually have, but it will offer a wonderful opportunity both for fellowship and for good birding. The hotel is famous for its food. Most of the members will be able to stay under one roof, although there are motor courts not too far away for those who prefer them. The Field Trip will start from the door of the hotel. The dates will be May 3 and 4.

VSO members who wish to appear on the program during the papers session on Friday afternoon, May 3, are urged to write the Committee on Arrangements, F.R. Scott, Co-chairman, 115 Kemondale Lane, Richmond 26, Virginia, not later than March 25. Papers without slides or motion pictures will ordinarily be limited to 15 minutes.

Please supply the following information:

(1) Title of paper, preferably with a brief description or abstract unless the title is descriptive enough.

(2) Time required for presentation.

(3) Special equipment required, if any. It is hoped that participants will supply their own slide or motion picture projectors.

(4) Type of illustrations, if any. Number and type of slides, etc.

More complete announcements will be made in later issues of The Raven.

Glossy Ibis Nesting in Virginia. On June 19, 1956, John Terborg found two nests of the Glossy Ibis at Hog Island, on the Virginia Eastern Shore. One nest had two young; the other had three young and an unhatched egg. The young were banded. We were asked for a time not to publish the record; but now Mr. Terborg has given permission to make it public. When our "Check-List" was published in 1952, we had only a sight record and a rather indefinite statement from Baird, Brewer and Ridgway on the occurrence of the species in Virginia. Since then we have had some eight good sight records, and now this breeding record.
TREASURER'S ANNUAL REPORT

On hand in Bank of Waverly - Jan. 1, 1956 .......................... $ 488.02
Receipts from dues and donations ................................. 742.50

$1,230.52

Expenditures:

Raven production .............................................. $ 280.32
Secretarial expenses ........................................... 4.06
Potomac Valley Cons. & Rec. Council dues ......... 5.00
Virginia Wildlife Federation dues ...................... 70.75
Annual meeting expenses .................................... 17.35
Postage (treasurer) ............................................. 27.00
Treasury expenses (printing, envelopes, etc.) .... 5.00
Letterheads and Raven envelopes ......................... 97.35
Typewriter ......................................................... 171.55
Transfer cases (Raven) ........................................ 18.72
Expenses Executive Committee ......................... 16.80

$ 714.90

Balance on hand in Bank of Waverly - Jan. 1, 1957 ................. $ 515.62

The above includes the Trip Fund which as of Jan. 1, 1957 amounted to $103,10. This leaves a net operating fund of $123,52.

The Publication Fund is carried in a separate savings account. As of January 1, 1957, this fund amounted to $270.94.

Submitted by:

C.C. Steirly
Treasurer, VSO
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Annual Meeting - V.S.O. - Wachapreague - May 3 and 4

Blue Ridge Foray - Skyland - June 21, 22, 23
NESTING ECOLOGY OF THE RED-COCKADED WOODPECKER IN VIRGINIA

By C. C. Steirly  
District Forester, Virginia Division of Forestry

"Though there is endless room for observation in the field of nature, which is boundless, yet investigation (where a man endeavours to be sure of his facts) can make but slow progress; and all that one could collect in many years would go into a very narrow compass."

--- Gilbert White, Selborne  
April 12, 1776

Breeding Range in Virginia

The Red-cockaded Woodpecker (Dendrocopos borealis borealis (Vieillot)) is a bird of the southern pine region whose range extends into southeastern Virginia. The earlier bird books give the northern extremity of its breeding range as North Carolina. Later works extend this to southeastern Virginia and one writer, Sprunt (1949), gives it as central Virginia. Records available at the time of the preparation of the Check List of the Birds of Virginia indicate observations of the species in Brunswick County (1921), Dinwiddie County (1931) and near Swift Creek in Chesterfield County (1937). The westernmost observation was one made in Albemarle County in 1887, a specimen being collected at that time by Rives.

Generally speaking all reported recent observations of breeding sites of the species in Virginia have been confined to the southeastern portion of the state with the most northerly record being located in east central Prince George County. A possible western record of an active nest site is to be found a half mile west of Jarratt in Greensville County. Thus a line drawn between Petersburg and Emporia along the present Highway 301 would arbitrarily form a western boundary of the present breeding range of the Red-cockaded Woodpecker in Virginia. As yet no nest trees have come to the writer's attention in Surry County despite an abundance of suitable pine forest in that county. A tentative northern boundary of its breeding range would be approximately the Blackwater River from central Prince George County to its crossing of the Surry-Isle of Wight County line, and thence more or less arbitrarily to Isle of Wight and possibly to Chuckatuck and the Norfolk area. Within this area the species has been found nesting in various parts of Southampton County, lower Isle of Wight and Nansemond Counties, Norfolk and Princess Anne Counties, and in several rather widely separated places in Sussex County.

Problem of Life Zones

It is interesting to note that these limits, except for the one nest tree in Greensville County, lie within the area described as the Lower Austral Faunal Zone by Clark and Clark (1951). The map prepared by these authors is based largely on the occurrences of various species of butterflies whose distribution in many cases is largely influenced by the distribution of certain food plants and by humidity relationships during certain periods of their life.
NESTING STATIONS
of the
RED-COCKADED WOODPECKER
in Virginia

10 MILES
histories. This is perhaps a somewhat superfluous refinement to have much influence on the distributional limits of a bird species, or upon the plants forming its natural habitat. An ecologist, Lucy Braun (1950), refers to this area south of the James River as the Southeastern Evergreen Forest Region, which, according to her map, coincides more or less with the Lower Austral of other writers who define it as occurring in Virginia east of the Dismal Swamp, although Dice (1943) refers to this as Austroriparian. Since the longleaf pine (Pinus palustris) is a characteristic tree species of the Lower Austral Zone it is interesting to note that the species reaches its most northern and western extension within the Virginia breeding range of the Red-cockaded Woodpecker as outlined above. In fact the nest trees found in Southampton County and some in Sussex have, in most cases, been in pine forests which contained scattered longleaf pines. Specimens of longleaf pine have been found in Sussex County along the boundary between it and Southampton County, and one specimen with several seedlings has been found almost on the Sussex-Surry boundary north of Wakefield. These represent the northernmost specimens of longleaf pine reported by members of the Virginia Division of Forestry. A number of other plants characteristic of the Lower Austral Zone are also to be found in this region.

It is beyond the scope of this paper to discuss a more westerly and northerly extension of this faunal zone. The region under discussion is without doubt a transition or tension zone between the Upper and Lower Austral Zones. The significance here is that within the area are to be found breeding sites of a typical Lower Austral bird associated with longleaf pines which are characteristic plants of the Lower Austral or Austroriparian Zones.

Nesting Peculiarities

The Red-cockaded Woodpecker is unique in that it always nests in living pine trees and has never been recorded as nesting in dead pines. Following the death of a nest tree the old nest is abandoned. Although the excavation of a nest cavity in a living pine is unique, this species goes one step further and safeguards its nest by deliberate and more or less systematic chipping of the bark above and below the nest hole in order to produce a flow of resin around the entrance hole. This sticky mass no doubt prevents the entry of ants, squirrels and other possible enemies. Whenever the flow of resin ceases the hole is abandoned and another is made in another portion of the tree where a fresh face is available for chipping. Owing to the habit of producing a flow of resin down the trunk of the tree the nest trees are relatively easy to find since the resin, after contact with the air, becomes whitish, somewhat like candle wax. The same effect is to be seen when a pine tree is blazed, injured or worked for naval stores.

The loblolly pine (Pinus taeda) is the common pine of the southeastern portion of Virginia, and it is the species used most frequently for nest excavation. A few cases involving the use of shortleaf pines (Pinus echinata) for nest trees have been found, and in eastern North Carolina and probably in the portion of Virginia east of the Dismal Swamp the pond pine (Pinus rigida serotina) is sometimes used. By far the greater majority of nest trees found have been loblolly pines. No Virginia records of the use of longleaf pine for nesting purposes have been found, nor have any instances of the use of Virginia pine (Pinus virginiana) been reported. Very little of this latter species is to be found in the region under discussion,
All nest trees examined by the writer have been trees infected with the red heart disease, a fungus disease causing a decay of the heartwood of the tree. It would be almost inconceivable to expect any woodpecker to excavate a cavity in solid heartwood of any of the southern pines. Numerous nest cavities examined revealed that a zone of from two to three inches of sapwood was excavated in order to reach the soft, rotten heartwood of the chosen nest tree. That all nest trees are infected with this heart rot was proven either by the presence of the fruiting body as sporophore of the fungus causing the heart rot or by borings with a forester's increment borer or by examination of the ends of the logs in felled nest trees.

As far as is known the Red-cockaded Woodpecker does not make use of any tree other than the pines. In Bent (1937) there is reference to its use of willow and "china" trees. This was reported by E. A. McIlhenny in 1895 writing of southern Louisiana. Sprunt (1954) quotes Howell in referring to the species in Florida, "The nests of this species are always located in a living pine ..." In his South Carolina Bird Life (1949) Sprunt has this to say of the species in South Carolina, "it is always in a living pine, usually the loblolly pine." Lowery (1955) writing of the species in Louisiana states, "it excavates its nest hole in a living pine." Pearson, Brimley and Brimley (1919) and Forbush and May (1939) reiterate what has been said above by the authors of the several works on southern birds. The species thus seems to be dependent upon the southern pines, particularly the loblolly pine, for its nesting. It is further obligated to utilize only those pine that are victims of the red heart disease. In fact the writer has never observed the Red-cockaded Woodpecker anywhere but in a pine forest or its very close environs.

Habitat in Virginia

Throughout the area under discussion, that is, southern Virginia east of Highway 301 and south of the James River, pine forests are a dominant feature of the landscape. Much of the area is broken up by agricultural clearings and the whole region is dissected by rivers and streams which are bordered by extensive areas of bottomland and swamp hardwood forests, and where heavy cuttings have been made in pine forests these are typical upland hardwood or oak-pine forests. However, pure stands of loblolly pines are almost constantly in sight of the traveller save where he enters the more extensive fringing swamp forests of the river bottoms (notably the Blackwater and Nottoway Rivers as well as much of the Dismal Swamp). This forest type, the loblolly pine, is of great commercial importance and much of it is being brought under systematic forest management. Within this great area of even-aged loblolly pine all sorts of variation and gradations of ground cover, stand density, age classes and size classes can be readily detected. Not all of them are suitable as habitats for the Red-cockaded Woodpeckers, and literally thousands of acres of pure loblolly pine can be carefully explored without finding a trace of the species. The habitat suited to this species is somewhat restricted, at least as far as nesting sites are concerned, for the Red-cockaded Woodpecker requires old timber.
The nesting sites are always found in stands of the 70 year age class or older. In such stands there is usually a relatively heavy understory or shrub layer consisting of myrtle, (Myrica cerifera), holly (Ilex sp.), dogwood (Cornus florida), huckleberry (Vaccinium corymbosum), pepperbush (Clethra alnifolium) and shrubs of the Coastal Plain. Invariably the lower story includes relatively dense growths of deciduous tree species in their sapling and pole stages. These include black gum (Nyssa sylvatica), red maple (Acer rubrum), sweet gum (Liquidambar styraciflua), oak (Quercus spp.) etc.

Most of the writers in southern ornithological works refer to the habitat preferred by this species as being rather open, grassy or somewhat park-like. In fact most of the illustrations in these works depict the nest trees as being rather isolated and the ground in such pictures seems to be devoid of undergrowth. In southeastern Virginia the writer’s observations have not been in accord with those of the other writers. The pines were not particularly open or scattered and in every situation the undergrowth impeded easy movement and observation. Generally the average spacing of the pines has been from 16 to 20 feet apart, and in some areas the stands have been somewhat denser. In fact in all of the areas under observations there has been evidence that the older pines were making full use of the site in that the crowns, while not in all instances touching each other, were forming a fairly uniform canopy with but few holes where a tree here or there had succumbed to the ravages of age, insects and disease. The conditions pictured by artists and photographers whose work depicts the pine forests of the south are not found in Virginia except in certain instances where soil conditions and repeated forest fires have reduced the carrying capacity of the site to fewer stems per acre and have precluded the establishment of a heavy shrub understory. A somewhat open situation was found near the Sussex School Forest where the number of old pines per acre was 60.

In the vicinity of one group of nest trees (Road 604) a towhee’s nest was found. This should give some indication of the extent and character of the undergrowth.

**Red Heart**

Since the Red-cockaded Woodpecker seems obligated to make use of only those trees that have been attacked by the red heart fungus it might be well to discuss the economically important disease of the loblolly and other pines.

Red heart or red-ring rot is caused by a fungus (Fomes pini), one of the Polyporaceae family of Basidiomycetes. This fungus attacks virtually all of the Conifers and is saprophytic upon heartwood, Percival (1933). According to Hubert (1931) the fungal hyphae of the organism destroy the cell walls of the heartwood, producing soft masses of cellulose in an enzymatic delignifying process. The disease is definitely related to age of the host tree and in the case of the southern pines, an old age disease. Generally speaking foresters in the southern pine region begin looking for symptoms of the disease in pine timber of the 80 year age class and older. Occasionally symptoms of the disease are found in suppressed trees especially those on poor sites that are considerably younger (40 years).
Red heart according to Percival (1933) does not attack the sapwood cells of pine. Since it is confined to the dead heartwood cells it cannot be listed as an agency effecting the life of the tree except in so far that it might be a direct cause of breakage, often having weakened the heart of the tree. It is therefore not a parasite on the living portion of the tree. Spores of the disease are produced in sporophores or conks that are quite characteristic and easy to detect. These are hoof shaped protrusions from old branch stubs and are to be found almost anywhere along the trunk of the tree. They are grayish brown and fairly rough, often covered with lichens, on the upper surface. The under surface is light brown. Since the fungus conk is perennial, a series of annual layers is evident upon dissection. Quite often a tree may be riddled with this heart decaying fungus without there being any outward sign of a conk. The rot can usually be detected by sounding with an axe.

It is significant in this paper therefore to state that the economically important forest tree disease associated with the Red-cockaded Woodpecker is an old-age disease of the pines, occurring normally in the forest after the trees have reached their point of greatest economic growth. In even the most extensively managed forests but few victims of this disease would be found since the forest manager would ordain the felling of the timber before it reached the age of normal red heart incidence.

Ecology and Management of Pine Forests

Loblolly pine in our region is subclimax ecologically speaking. It is succeeded by a forest of oak, hickory and beach although the rate of succession varies according to soil conditions. Normally mature stands of loblolly pine have fairly well developed understories in which the climax species are conspicuous.

The old field succession which accounts for the great majority of our present pine stands has been well presented by Odum (1953) in graphic form. Basically this succession on normal soil is a series of plant invasions and replacements. Within the first couple of years after agricultural abandonment, or any other disturbing influence such as severe fire, complete logging or any other disaster, a growth of various grasses becomes the dominant vegetative feature of the area. By the third year broom sedge (Andropogon virginica) is dominant. At about this time seedlings of pine can be found. These soon, within two or three more years, become dominant and within ten years or so form a closed canopy which quickly brings to an end the grass sere. For several years of this pine thicket stage there is very little other vegetation on the area other than the pines which by this time are some 20 feet or more in height. Soon, however, a few shade enduring broadleaved shrubs and trees will be making their appearance. As the pine grows and develops natural competition for soil moisture and nutrients as well as crown space ensues with a great reduction in the number of stems per unit of area. The understory meanwhile takes on a more or less definite character, the association of plant components being governed somewhat by the soil moisture relationship. By the 40th year the pine is definitely middle aged and the hardwood components of the understory, including the several oaks, red maple, sweet gum, black gum, beech and hickory, will have formed a very definite secondary layer above the shrub layer. The occasional death or removal of a pine permits this secondary story or layer to develop at a more rapid rate to fill the hole thus created. Pine regeneration will, owing to the heavy shade and competition for soil moisture, be quite lacking except in openings of sufficient width (Touney 1928).
80th year the pine is mature both physiologically and economically. At this age red heart can be expected and pine timber growth will have dropped off considerably. The hardwood layer in the meantime will have continued its development, exploiting any opening created in the crown canopy of the pine. Around the 150th year the pine will have been replaced in most cases by the hardwoods, notably the oak, hickory, and beech which in the meantime will have begun to reproduce themselves. The climax will have been reached and barring disturbances will keep on reproducing itself. It will then be in balance—nature's final expression of the vegetative capacity of that soil. In it pine will have become a scattered relic species. Here we have been following the series of replacement on normal soil. On adverse soil the succession will of course require a much longer time. It can be readily seen that pine then is a temporary timber type, one that is destined to be replaced eventually by a forest of hardwood.

Tree species, like all living things, must die sometime. Certain tree species are relatively short-lived while others seem to survive for several centuries. Loblolly pines occasionally reach ages of 200 years. This is, however, rather uncommon. A number of factors bring about the deaths of trees. Insects and the weather elements account for most of them, although all must eventually succumb through senility of the meristematic tissues if they do escape the ravages of insects, storms and lightning, (Toumey 1928).

From the foregoing it can be readily seen that the practicing forester's job is pretty well cut out for him. Since loblolly pine is the important commercial tree species of the Coastal Plain and Lower Piedmont of Virginia it is essential that the normal succession in nature's scheme of things be halted somewhere along the line so that the pine stage is retained. Loblolly pine, being a rather intolerant species to shade and excessive competition for soil moisture, is best managed on an even-aged basis.

In good forest management a stand of pine is carried through what is known as a rotation. This is merely the period of years elapsing between establishment and the final harvest. The rotation is set by the forest manager such that continuous growth is maintained. When the point is reached where the growth rate declines, certain financial aspects of forestry preclude carrying the stand any further. To do so would not be good business practice since managed forests must be considered from the investment standpoint. Thus the rotation is most often fixed according to financial rather than physiological maturity of the timber. In loblolly pine this period in the life history of a stand varies according to soil and past management or the technical demands for the products. It hardly ever would exceed the 80th year—thus the incidence of red heart is precluded. In fact a rotation set such that the ravages of the several old age diseases are eliminated is referred to as the pathological rotation (Hubert 1931).

In any hitherto unmanaged forest passing into a phase of forest management one of the first steps the forester takes is to order the cutting of the oldest timber first. A series of salvage or sanitation cuttings is often in order too. Such cuttings remove the diseased and insect infested trees.
Nest Cavities

Two nest cavities have been carefully dissected by the writer who took advantage of a logging operation in old timber to examine one in detail, and felled a nest tree that had been broken off at the cavity by a wind storm.

The holes in both cases were made into the tree at a slight upward angle.

Dimensions of the cavities were as follows:

<table>
<thead>
<tr>
<th></th>
<th>Tree A</th>
<th>Tree B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Height of entrance hole</td>
<td>2.6 inches</td>
<td>2.9 inches</td>
</tr>
<tr>
<td>Width of entrance hole</td>
<td>1.7 inches</td>
<td>1.9 inches</td>
</tr>
<tr>
<td>Depth of entrance hole to beginning of cavity</td>
<td>2.8 inches</td>
<td>4.0 inches</td>
</tr>
<tr>
<td>Depth of entrance hole to rear of cavity</td>
<td>6.0 inches</td>
<td>9.0 inches</td>
</tr>
<tr>
<td>Depth of cavity from bottom of entrance hole</td>
<td>7.6 inches</td>
<td>6.7 inches</td>
</tr>
<tr>
<td>Diameter of cavity at widest point</td>
<td>3.0 inches</td>
<td>4.0 inches</td>
</tr>
<tr>
<td>Heights of hole above average ground level</td>
<td>23.6 feet</td>
<td>42.0 feet</td>
</tr>
<tr>
<td>Pitch chippings (highest above hole)</td>
<td>8.0 feet</td>
<td>6.0 feet</td>
</tr>
<tr>
<td>Pitch chippings (lowest below hole)</td>
<td>7.0 feet</td>
<td>13.0 feet</td>
</tr>
</tbody>
</table>

Tree A (Highway 460) was available for more detailed study. It was 103 years of age, had a total height of 74.6 feet, its diameter at breast height was 12.5 inches and a sporophore of Fomes pini was found at a point of 12.4 feet above ground. The entire area of the cavity was quite rotten and sections of the trunk from the sporophore up to the cavity were found to contain rotten heartwood.

Heights of holes above ground in a number of nest trees range from 23.6 feet to 50 feet. This height naturally would vary somewhat with the total height of the tree although no general ratio of hole height to total height can be established. Data from sample trees are as follows:

<table>
<thead>
<tr>
<th>Total height of tree</th>
<th>Height of hole</th>
<th>Age of tree</th>
</tr>
</thead>
<tbody>
<tr>
<td>81 feet</td>
<td>28 feet</td>
<td>104 years</td>
</tr>
<tr>
<td>80 feet</td>
<td>40 feet</td>
<td>90 years</td>
</tr>
<tr>
<td>74.6 feet</td>
<td>23.6 feet</td>
<td>103 years</td>
</tr>
<tr>
<td>75 feet</td>
<td>50 feet</td>
<td>104 years</td>
</tr>
<tr>
<td>77 feet</td>
<td>37 feet</td>
<td>103 years</td>
</tr>
</tbody>
</table>

The deliberate chipping of numerous horizontal wounds above and below the whole is characteristic behavior of this species. These wounds are generally two inches or more in width, about an inch in height and extend into the sapwood of the tree. In active nest trees these are kept open such that sticky, fresh resin exudes from the wounds exactly as in the naval stores operations of the deep south. The number of wounds or chippings is quite variable. Some trees will have these extending as far as fifteen or more feet above or below the hole. Several abortive holes were found which had several chippings associated with them.
Heights of chipping above and below the holes of representative trees are as follows:

<table>
<thead>
<tr>
<th>Height above hole</th>
<th>Distance below hole</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 feet</td>
<td>13 feet</td>
</tr>
<tr>
<td>8 feet</td>
<td>7 feet</td>
</tr>
<tr>
<td>5 feet</td>
<td>10 feet</td>
</tr>
</tbody>
</table>

Enough chips are made to ensure an almost continuous mass of sticky resin around the hole at least on the hole-side of the tree. In the immediate vicinity of most holes the bark has been removed for a distance of five or six inches upward and downward from the hole. The area is actually an exposure of bare wood heavily encrusted with dried resin.

All indications are that the same birds use the same tree year after year. In fact active trees, within the past season, can be quickly distinguished from inactive trees by the color and character of the resinous coating. In old, inactive trees this material takes on a brownish color. That of recent nesting activity is whitish. The birds tend to keep the chip wounds open all during the nesting season, and in many cases keep making new chips. A nest tree that has had a number of years of such use will have a thick coating of resin down its trunk. Quite often considerable resin is found on the ground at the bases of such trees.

Specific Locations

All nest trees reported to the writer have been visited and carefully studied. Something of a colonial nesting tendency has been discovered and for this area might be considered as a characteristic habit of the species. Usually whenever the writer found a nest tree, a careful search of the area revealed the presence of two or three more nearby. There is no evidence for assuming that the species is restricted to just a few trees for in most of the sites under observation there seemed to be ample suitable trees in all directions from the chosen group of trees used for nesting purposes.

A number of specific colonies or groups of nest trees will be briefly discussed herewith.

1. Sussex School Forest area: Between Stony Creek and Sussex. Here in 104 year old timber there is a group of six active and one dead nest trees within an area of less than a third of an acre. To west of this at about 100 yards are two active nest trees fifty feet apart. Although this group occurs in a mature pine forest of some 20 acres no other trees or colonies have been found. This particular stand is the most open of any studied thus far.

2. Highway 460: About midway between Waverly and Wakefield. Here the timber is between 100 and 105 years of age, has attained no great size and the ground is rather densely covered with hardwood saplings and brush species. On the south side of the Highway there are two active nest trees 25 feet apart. One of these is quite visible from the highway. Across the highway from these there are two
others 75 feet apart. Before a recent wind storm there was a third tree here. West of these some 1200 feet are two inactive trees very close together, one of these had been broken off in a wind storm.

3. Higgins Lumber Company tract near Gray, Virginia (lower Sussex County): Observed by the writer at the time it was being logged in 1946. There were four or five nest trees in one group in this area.

4. Road 604 area: In Sussex County along Road 604 south of 460 between Waverly and Wakefield. Here there are three active trees and one broken off by a wind storm, all within the compass of a quarter of an acre. One of these was photographed and reproduced in Virginia Wildlife of August, 1952.

5. Lebanon Church Area: East central Prince George County. Here in a 95 year old timber there were three active nest trees within a circle of 100 foot radius. This tract was cut in 1953 but one of the nest trees was left. In April 1956 two woodpeckers were observed in an adjacent pole-sized stand. At that time the nest tree seemed to be yet active. During the summer of 1956 the two were struck by lightning and died. It probably will not be used anymore.

6. Drewryville area: Southampton County at the time of logging 1947 a group of nest trees was observed. Associated with these were several longleaf pines.

7. Coman's Church area: Central Sussex County. At the time of logging in 1950 two nest trees were found in this area. The stand was completely cut-over.

8. Sussex Court House: Two trees were located about one mile south of Sussex. Both were cut in 1953.

9. Single trees recorded by the writer (all are still active):
   a. Booker School area (Sussex County)
   b. Penitentiary Farm (Southampton County)
   c. Tower Hill Plantation (Sussex County)
   d. Jarratt: West of Jarratt along Virginian Railroad (Greensville County)
   e. Road 636: Just north of Sussex Court House (Sussex County)
   f. Oak Grove area (near Road 604 group) (Sussex County)
   g. Road 621 near Oak Grove area.
   h. Road 610 one mile east of Jarratt (Sussex County)
   i. Mile Post 53, Norfolk and Western Railroad, near Wakefield (Sussex County)
   j. Camp Experimental Forest, Wakefield (Sussex County)
   k. Joyner area (Southampton County)
   l. Highway 258 near North Carolina State line (Southampton County)
A number of old pine tracts in Surry County have been inspected carefully by the writer but to date no evidence of the presence of the Red-cockaded Woodpecker has been found in them. These stands, containing red heart as they do, do not differ materially from other stands in which the species is found nesting.

**Future Status of the Red-cockaded Woodpecker as a Virginia Breeding Bird**

From the foregoing it can readily be seen that the Red-cockaded Woodpeckers seek only pine timber of such advanced age that it is succumbing to the effects of the red heart disease. Timber tracts of this stage of maturity are daily becoming fewer and fewer. Intelligent business-like management of the pine forests of Southside Virginia preclude permitting the stands to reach this age and condition since growth of any appreciable economic importance ceases after about the 70th year. In fact a 60 year rotation might conceivably become standard practice in the well-managed forest. To date the youngest nest tree was found to have been 80 years of age. The youngest stands showing any incidence of red heart is about 70 years except in cases of very poor soil.

The Red-cockaded Woodpecker, from all available information and the writer's own findings, seems obligated to select only living pine for its nest trees and these must be infected with red heart in a fairly advanced stage.

With the rapid liquidation of present over mature loblolly pine stands and with the passage of vast acreages of pine forest to a managed pine forest there is but little hope that many acres of timber ideally suited to the rather exacting demands of this species will ever be found. It is possible that such stands occurring on estates whose legal settlement are fraught with difficulties might remain intact. The extent of such acreage is rather negligible, however, since pine forests are now valuable assets and the landowning public is becoming conscious of the fact that pine timber must be sold when it ripens and cannot economically be held over long periods of time after maturity, either physiological or financial, is reached.

The species thus seems doomed as a future breeding bird in Virginia, and it will within a decade or two go the way of the Ivory-billed Woodpecker which is holding on precariously, if at all, in large areas of mature hardwood forest in the deep south. The Red-cockaded Woodpecker will be, sad as we are to admit, a victim of "progress" in the husbanding and wise use of our natural resources. The writer intends to carry on experimental work to see if the species will remain in an area following cutting of the main stand with retention of only the nest trees. Such a study was started on the Lebanon Church tract but this was frustrated by the inopportune death of the nest tree through it being struck by lightning.

**Effects of the Species on the Nest Trees**

Prior to the drilling of the nest cavity the tree selected is already something of an economic loss owing to the advanced stage of the red heart. At most such trees are mere shells of useable timber. The species therefore cannot be blamed for injuring the tree. Even if it did it is nowhere abundant enough to be considered a factor in the destruction of forest values. Living as it does almost entirely in the pine forest it is bound to have some beneficial effects in controlling certain forest insects; however, its relative scarcity makes this service relatively negligible.
Whether or not the cavity and the chipping for resin flow contribute to the death of the tree is a difficult matter to settle. Excessive chipping of trees already weakened by age and the red heart disease no doubt brings on the death of many trees. Numbers of them have been observed that were dead in the tops, probably from the girdling effect of too many chippings.

The only readily assessible damage the writer has been able to find has been the breakage of the nest trees at the cavity during wind storms. The cavity no doubt makes for a weak spot in the hole of the tree. Any forest tree is subject to severe stresses during times of violent winds and wherever a weak spot exists, there is where the break will occur. This is often noticed in forests where the trees are infected with the rust canker (Cronartium fusiforme). The writer has found a number of nest trees that have broken off at the cavity. The loss of such trees is not great for the red heart has already rendered most of the trees unfit for lumber. Even if such trees are not cut in lumbering operations they still might conceivably have some value as seed producers. However, under modern silvicultural concepts such trees would indeed be poor risks as progenitors of the future forest. Foresters and lumbermen should not look upon the Red-cockaded Woodpecker as a forest pest. Its harm is but very slight, if any, and, as is true of the woodpecker family in general, it is bound to do some amount of good in destroying insect pests.

The bird student seeking this species during the breeding season will find in the same habitat the typical pine woods birds, the Brown-headed Nuthatch, Pine Warbler, Yellow-throated Warbler and the Prairie Warbler. These, fortunately will remain to enliven the pine forests long after the Red-cockaded Woodpecker has ceased to be a component of our avifauna.

A most accessible nest tree is to be seen on Highway 460 about four miles east of Waverly on the right hand side of the road (going eastward from Waverly). A forest fire prevention sign has been erected here at an excellent parking place. Adults with three young ones were seen at this tree on May 6, 1956.

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PINK-SIDED JUNCO AT ALEXANDRIA

By Jackson M. Abbott

On December 26, 1956, I had excellent views of a typical Pink-sided Junco (Junco Mearnsi) in a flock of about 70 Slate-colored Junco (Junco hyemalis) feeding in an old field in back of the sewage disposal plant on Hunting Creek, Alexandria, Virginia. Attentive to my "squeaking," the mearnsi and several hyemalis perched on a weed stalk about 30 feet from me while I watched them through 7x50 binoculars. The extensive bright pink sides and flanks, sharply defined where the color joined the gray of the head and neck, the brown back, and the gray head (no trace of brown), with black area between the bill and eyes convinced me that this was the first typical Junco mearnsi I have seen in the Eastern United States and apparently constitutes a first record for Virginia.

Between 27 March and 20 April of 1956 I saw a pinkish-sided junco on a number of occasions at a picnic area near Collingwood, Fairfax County, Virginia. Mr. Philip A. DuMont and I watched this bird within 8 feet for many minutes on one occasion and agreed that its plumage, despite the pinkish-tinted sides, showed too much brown in the head and not enough brown on the back to be
a typical mearnsi; we marked it down as a hybrid mearnsi - hyemalis. A similar indefinitely-colored, pinkish sided junco was watched for half an hour by Dr. Edwin G. Davis, Mr. and Mrs. I.C. Hoover and the writer in Pimmit Hills, near Falls Church, Virginia, on 27 February, 1955. Having these fairly recent observations in mind, and having seen mearnsi a number of times in the Charleston Mountains in Nevada last April, I am certain that the bird I saw on 26 December, 1956, was indeed a typical mearnsi.

--- 814 13th Street
Alexandria, Virginia

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YELLOW WARBLER AT ALEXANDRIA IN DECEMBER, 1956

By Jackson M. Abbott

On the warm, misty morning of December 9, 1956, I was bird-watching on Jones Point, Alexandria, Virginia. In a small flock of Song, White-throated and Field Sparrows feeding in waist-high weeds by a cinder path on the point I had good views of a Yellow Warbler (Dendroica petechia) within ten feet through 7x50 binoculars. The bird was busy catching insects from the weed stalks and at the base of the weeds. It's plumage was bright yellow-green, darker on the head, neck, upperparts and rump than below. The outer tail feathers had bright lemon-yellow "spots" or "windows" so typical of the Yellow Warbler. The primaries appeared blackish while the secondaries and lesser wing coverts were olive-greenish; the warbler-like bill was black as were the eyes. The absence of streaks on the underparts and the decidedly greenish cast to the plumage indicated that this bird was probably of the Newfoundland subspecies of the Yellow Warbler. This is about two months later than the latest fall record for a Yellow Warbler in the Middle Atlantic Region.

--- 814 13th Street
Alexandria, Virginia

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A HUNTING COOPER'S HAWK

By Mrs. H. W. Stinson

On a country road near The Plains, Virginia, on February 10, 1957, we came upon a male Cooper's Hawk perched in a tree at the side of the road. At our approach he flew low, on down the road to perch in another tree. He kept on ahead of us for a quarter of a mile, quartering across the road and into the bordering fields like a hunting dog. He was not too alarmed by us, only
annoyed enough to keep moving on ahead. We had a clear view of his buffy breast and blackish head as he perched on limbs near the road. Soon he flew over a ridge in a field to our left and we went on down the road several hundred yards where we spied a covey of about sixteen quail that had just crossed the road. Keeping well together they were scurrying into the cover of the stubble.

One quail, cut off by us, remained on the right side of the road for a while. He soon crossed over to sit on the lower rail of the fence and gave a beautiful, soft, liquid whistle-call: It was evidently a covey-call, though far different from what Peterson describes as "a shrill 'ka-loi-hee?'."

As we watched the lone quail, he suddenly jumped from the rail, ran a few feet and crouched low in the stubble. At that instant, like the villain in the piece, the Cooper's Hawk came sweeping up, circled the area once, and landed on a low tree limb at the edge of the field. There wasn't a quail to be seen where seconds before our covey of sixteen had been. The hawk perched for a few seconds and then, either discouraged by our presence or lack of visible quail, flew off.

--- R.F.D. #1
The Plains, Virginia

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A TURKEY VULTURE AT THE ZOO

By Malcolm Davis

The morning of August 15, 1956, a zoo visitor called my attention to a Turkey Vulture (Cathartes aura) that appeared to be caught atop of the large outdoor eagle cage in the National Zoological Park, Washington, D.C. The Turkey Vulture is attracted by the presence of food and the collection of captive birds-of-prey. The buzzard is frequently seen walking on the outside top of the cage. I started to ascend the cage and found that the bird was in a dorsal position with wings outstretched and as I approached the bird righted himself and flew away. On two occasions I have seen this bird in that unusual position. I surmise that the vulture was sunning himself.

--- The National Zoological Park
Washington, D.C.

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"LIST OF CAROLINE COUNTY BIRDS"

A Review

"List of Caroline County Birds," by A. J. Fletcher and others; Maryland Avifauna No. 1, December 1956; published by the Maryland Ornithological Society and obtainable from A. J. Fletcher, Route 1, Denton, Maryland, for $0.25.

This 22-page paper-bound booklet is a fine example of what a local bird group can do if they put out a little effort. Caroline County is an "inland" county on the Eastern Shore of Maryland, touching neither the ocean nor Chesapeake Bay. As would be expected under the circumstances, it has none of the water-bird attractions that Virginia's Eastern Shore is famous for. Persons interested in the land birds of the Eastern Shore, however, will find this booklet a valuable addition to the meager published papers on this subject. Of particular interest to Virginians are the statements that both the Warbling Vireo and the Baltimore Oriole are uncommon summer residents. Neither of these is known to nest at present on Virginia's part of the Eastern Shore. The same can be said of the Vesper Sparrow, which in this paper is listed as a common summer resident.

-- Fred R. Scott
115 Kennondale Lane
Richmond 26, Virginia

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VIRGINIA NEWS AND NOTES

By J. J. Murray

The 1957 Annual Meeting of the Virginia Society of Ornithology will be held at Wachapreague, Virginia, on Friday and Saturday, May 3 and 4. Headquarters will be the Wachapreague Hotel, famous among fishermen for its food. All sessions will be held at the hotel. Those who plan to attend should arrange for their accommodations as soon as possible, preferably at the Wachapreague Hotel. Rates: $7.00 to $10.00 per day, American plan, which includes the annual dinner and a packed lunch for the Saturday field trip. Other accommodations are available at Whispering Pines, Accomac, Virginia, about 11 miles for Wachapreague. Registration will begin at 1:00 P.M. on Friday; with a registration fee of $1.00. The program will begin at 1:30. The Field Trip on Saturday will be a boat trip to the barrier islands. As places will be scarce on the boats, those who plan to take the field trip should register in advance, sending in the $1.00 fee to C.C. Steirly, Waverly, Virginia, not later than April 25. There will be an early field trip on Friday morning for those arriving on Thursday.

Note: As Ferry service from Little Creek is very crowded on Fridays after 8:00 A.M., persons planning to use the ferry are advised to spend Thursday night in Norfolk and cross before 8:00 A.M. The VSO Newsletter will give fuller information; or information can be secured from Fred Scott, 115 Kennondale Lane, Richmond 26; or from C.C. Steirly, Waverly.
Nominations of Officers for the VSO. The Nominating Committee appointed by the Acting President, consisting of Dr. Ralph Hostetter, Chairman, James W. Eike, and Leigh Hawkins, will submit the following nominations at the business meeting to be held on Friday evening at the annual meeting:

President: W. F. Rountrey, Norfolk
Vice President: Paul S. Dulaney, Portsmouth
Secretary: R. J. Watson, Arlington
Treasurer: C. C. Steirly, Waverly.

Executive Committee Members for a three year term: J. E. Ames, Driver; Walter J. Bruce, Jr., Richmond; Raymond Stevens, Arlington. The floor is always open for other nominations.

Virginia Federation of Garden Clubs Help on the Hawk and Owl Bill. One of the objectives of the Federation this year is to help promote the hawk and owl bill, which came so near passing at the meeting of the General Assembly in 1956. Mrs. C. L. Burgess, active VSO member, is State Chairman of Birds of the Federation. She is sending out suggestions and material to all affiliated clubs. Each club has been urged to put on a program during the year on the value of hawks and owls. Members of the VSO should give all possible help to clubs in their localities.

Bald Eagle Nesting Records. VSO members in Tidewater, Virginia, are urged to help in the Bald Eagle Survey (see The Raven for March-April, 1956, and January-February, 1957). Virginia records should be cleared through Fred R. Scott, who will then transmit them to the survey committee. All members are asked to report for their areas, even when there are no active nests.

White-fronted Goose. Paul Sykes reports a White-fronted Goose killed at Back Bay in January, 1955. The bird is now at the Back Bay Game Warden Headquarters.

Blue Goose in Rockbridge County. An immature Blue Goose, now molting into adult plumage, has spent the winter, at least since mid-December, at a farm on Maury River at Alone Mill, ten miles north of Lexington. It was still there on March 26. It comes into the barnyard with domestic ducks. This is the second record for the county and the third for the Valley.

European Widgeon. Paul Sykes writes that a taxidermist friend of his at Princess Anne Court House showed him a picture of a European Widgeon that was killed at Back Bay in December, 1954, and stated that he had mounted another that was killed there about the same time.
Barn Owl Nesting at Back Bay in Winter. Paul Sykes was shown an owl's egg taken from a nest containing two other eggs in a duck blind at Back Bay during the first week in January, 1957. The egg measured 1.75x1.35 inches, using a caliper. Considering all the factors, this would seem to be a Barn Owl's nest.

Early Killdeer Nests in Rockbridge County. Joshua Womeldorf found a Killdeer nest, with the first egg on the amazingly early date of March 6. I have not been able to find a date elsewhere within ten days of that time. The second egg was laid on the 8th; the third on the 9th; and the last on the 10th. The bird was incubating until crows destroyed the eggs on March 16th. An egg was found by a child in another early nest on March 22 and brought to me for identification.

Woodcock Nest. Dr. Stuart Ragland reported to Fred Scott that he had flushed a Woodcock from a nest with four eggs on March 23 at the Hidden Acres Game Preserve at Trevillians, Louisa County. His description of the nest, eggs, and habitat was detailed.

Kittiwakes Off-shore. James V. Moran, while returning from a Navy cruise to the Azores on December 9, 1956, saw two Kittiwakes, an adult and an immature, about 20 miles due east of Norfolk. He is familiar with the species, both at sea and at his home in Massachusetts.

Jackson Abbott Wins Duck Stamp Contest. A drawing by Jackson M. Abbott of two Eider Ducks flying over the surf won first place in the contest for the 1957-58 Migratory Bird Hunting Stamp. The same artist also won second prize, with a design of two flying Brant. This is the first occasion on which an artist has placed twice in one contest.

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BLUE RIDGE FORAY NOTICE

The annual Blue Ridge Foray will be held this year at Skyland in Shenandoah National Park, June 21, 22 and 23.

Those planning to attend the full foray should be present the night of June 20. A short planning meeting will be held that night, after supper, in Massanutten Cabin, which will again be the headquarters, and residence of the trip master.

The arrangements will be essentially the same as last year. Five cabins have been reserved for the VSO. Reservations for accommodations should be made with C.C. Steirly, Waverly, Virginia. The customary trip fee of $1.00 must accompany the request for reservations. Accommodations within the VSO
reserved cabin space will be made on a first-come, first-served basis with priority going to those who intend to stay the three nights. The charge will be $3.00 per person per night. (Wayside Cabin, the source of some irritation last year, is not one of those reserved). Meals of course can be obtained in the Skyland dining room overlooking the Valley.

Trip reservations must be made by June 15th.

The trip committee's plan is tentatively as follows:

June 21: Climb Hawksbill in the morning. The afternoon will be spent at Big Meadows and the Dark Hollow Falls Trail.

June 22: An all-day hike down White Oak Canyon, through the Limberlost Area. Lunch materials should be brought for this.

June 23: Morning hike in Stony Man Mt. vicinity. The trip will officially end at noon.

On this trip normally we observe: Ravens, Veeries, Black-throated Blue Warblers, Canada Warblers, Blackburnian Warblers, Carolina Juncos, Rose-breasted Grosbeaks, Blue-headed Vireos, Broad-winged Hawks, etc., etc. The Field Activities Committee is working on ornithological objectives.

Further details may be obtained by addressing:

C. C. Steirly, Trip Master
Waverly, Virginia
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The 1957 meeting of the Virginia Society of Ornithology was held at Wachapreague, Virginia, May 3 and 4, 1957. After a Friday morning field trip to the nearby Chincoteague Marshes, the meeting opened officially at 1:45 P.M. in the auditorium of the Wachapreague Fire House. C.C. Steirly, co-chairman (with F.R. Scott) of the committee on local arrangements, welcomed the members and presided over the afternoon session.

The first speaker was Dr. D. Ralph Hostetter, who described "Mountain Top Experiences with the Carolina Junco," based on his studies of this bird at the Mountain Lake Biological Station during the years 1936-38. This subspecies spends most of its time in the mountains, but moves southward and coastward in winter to a certain extent. A study of 80 nests showed an incubation period of 12 days, a normal clutch of 4 eggs, and a period of 11 days in the nest after hatching. Dr. Hostetter conducted a number of experiments with the psychology of the nesting birds.

W.F. Rountrey, Acting President of the Society, announced "News of the Virginia Hawk Bill." This is the hawk protection bill sponsored by the Society for the past three years. Virginia is one of only six states providing no protection for hawks. The VSO has obtained the support of the Virginia Wildlife Federation for this bill. In 1956 it was introduced into the state legislature and passed the House of Delegates unanimously, but was killed in a Senate committee by a tie vote, largely through the influence of a single man. Mr. Rountrey expressed hope that the Federation of Garden Clubs would go on record in favor of the bill at its meeting the following week. He asked all VSO members to assist by contacting their local representatives and discussing the subject with them. At the conclusion of his remarks, Mr. Steirly paid tribute to the efforts which Mr. Rountrey has made on behalf of this project.

Dr. J.J. Murray, in a talk entitled "Recent Changes in the Virginia Checklist," summarized changes which have brought the present list of Virginia birds to 435 species and subspecies (417 on the regular list, 16 hypothetical, and two hybrids). This figure compares favorably with nearby states. Since the Checklist was first published in 1952, 22 additions have been made to the regular list. The number of changes, according to Dr. Murray, reflects activity generated by the publication of the Checklist, and shows the need for a revised edition in the near future.

J.M. Valentine described the Chincoteague National Wildlife Refuge, of which he is manager. It was acquired in 1941, but improvement did not start until 1951. Mr. Valentine showed slides illustrating how the refuge looked when first acquired, how it looks today, and how improvements have been effected, followed by slides depicting some of the species of wildlife found there.

Mr. C.C. Steirly's talk, "Notes and Records," was an exhortation to members to keep accurate and complete records of their observations. He cited several examples of the value of careful notes, and described some methods of preserving records in permanent form.
Max Carpenter, of the Virginia Commission of Game and Inland Fisheries, showed a sound motion picture entitled "Yours for a Song," distributed by the Commission, which described methods of attracting birds. Afterwards there was an interlude for coffee and refreshments served by members of the Richmond Natural History Society, who were acting as hosts for the meeting.

The session then reconvened to hear a panel discussion on the operations and activities of the four local chapters of the VSO. Dr. W.G. Akers described the Cape Henry Bird Club; Mrs. W.P. Smith, the Hampton Roads Bird Club; Miss Henrietta Weidenfeld, the Richmond Natural History Society; while R.J. Watson spoke on the Northern Virginia Chapter and served as moderator of the discussion. Each speaker briefly summarized the history, organization, and activities of his chapter. There followed a short discussion from the floor on relations between the chapters and the parent society and how these relations might be improved.

The annual dinner was held at 7:00 P.M. in the dining room of the Wachapreague Hotel. The evening session began at 8:15 P.M. in the fire house, with Acting President Rountrey presiding. Mr. Rountrey briefly summarized the activities of the Society for the past few months and plans for the immediate future. These include cooperation with the Virginia Wildlife Federation in supporting desirable legislation in Congress, and a plan to send a representative before the next meeting of the Virginia Education Association, in order to cooperate with science teachers in elementary and secondary schools. Mr. Rountrey drew attention to a story in the Norfolk newspapers concerning the action of the Portsmouth City Council in declaring Portsmouth a bird sanctuary, a decision which resulted primarily from the activities of two VSO members from Portsmouth, Mrs. J.E. Blick and Mr. Paul S. Dulaney.

Mr. Steirly briefly described plans for forays during 1957. These will include trips to Skyland on June 21-23, to the Chincoteague National Wildlife Refuge on August 24, and to Back Bay sometime in December.

Mr. Rountrey called on Dr. Hostetter for the report of the nominating committee. Dr. Hostetter presented the following nominees: for president, W.F. Rountrey, Norfolk; for vice president, Paul S. Dulaney, Portsmouth; for secretary, R.J. Watson, Arlington; for treasurer, C.C. Steirly, Waverly; for the Executive Committee (to serve a three-year term), J.E. Ames, Driver, W.J. Bruce, Richmond, and Raymond Stevens, Arlington. All the nominees were elected.

The Acting President then turned the meeting over to Mr. Steirly, who introduced the featured speaker, Dr. J.J. Murray. Using the title "Falcon in the Sky," Dr. Murray began by describing the peregrine falcon, or duck hawk, which he characterized as his favorite bird. He then passed to a review of attitudes toward hawks and conservation in general, recognizing three stages which follow one another in approximate chronological order: (1) the economic, or "practical" viewpoint, which sees all wildlife as man's possessions and judges the right of each species to survive in terms of its "good" or "bad" habits; (2) the scientific, in which predation is realized as an essential force in nature, which is by no means harmful; and (3) the esthetic, which accepts nature in itself and views the general public as having a right in nature which transcends that of any particular group. He expressed the hope that the last of these three points of view will win out.
The Saturday morning field trip got underway by boat from the hotel at 7:30 A.M., under the leadership of Messrs. Scott and Steirly. Visits to Cedar and Parramore Islands gave members an opportunity to observe migrating shorebirds in breeding plumage and to study the ecology of these interesting offshore islands. The trip terminated with a return to Wachapreague about 4:00 P.M., after which the members dispersed and the meeting broke up.

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THE 1957 VSO FIELD TRIP - WACHAPREAGUE, VIRGINIA

By Robert O. Paxton

The barrier islands of Virginia's Eastern Shore include some territory which Rachel Carson describes as "one of the best places in the Middle Atlantic Region to enjoy the spectacle of shore bird migration." Some sixty members and guests of the Virginia Society of Ornithology gathered at Wachapreague on May 4th for a day on Cedar and Parramore Islands and found her description no overstatement.

The group mustered on the dock of the Hotel Wachapreague at 7:30 A.M., well fortified by a memorable breakfast of eggs, bacon and clam fritters. The morning was gray and unseasonably cold — an exceptionally comfortable one in these usually sun-baked and mosquito-infested marshes.

The boat trip to Cedar Island through winding marsh channels afforded a continuous show of Forster's terns, laughing gulls, willets, and small, twisting flocks of red-backed sandpipers. The most spectacular feature of this boat trip, and indeed of the entire day, was the concentration of Hudsonian curlews. Flocks of these magnificent waders were almost constantly in sight, streaming across the marshes or standing erect in the long grass.

Cedar Island, a few acres of beach, dunes, and bayside marsh, turned out to be occupied by half a dozen pairs of oyster catchers and a solitary shaggy goat. A dense flock of shore birds resting on the north end of the island contained red-backs, black-bellied plovers, sanderlings, dowitchers, and a ruddy turnstone. The red-backed sandpipers alone, the dominant species, were conservatively estimated at 400 birds. Similar flocks appeared to be working their way northward over the bay.

The shore birds exhibited a variety of plumages, from the complete winter dress of the sanderlings to generally bright spring plumage among the red-backs. Two knots on Parramore Island were in high spring plumage. The black-bellied plovers appeared in every stage from winter plumage through blotched and patched phases to full breeding dress.

For those willing to wade into the marsh on Cedar Island, there were excellent opportunities to compare seaside and sharp-tailed sparrows.
Although the characteristic Forster's terns and laughing gulls were not to have eggs for another month, nesting activity of high interest was discovered on Cedar Island. Four oyster-catcher nests found on the upper beach are early among Virginia records; they suggest that oyster-catchers breed somewhat earlier on the Virginia coast than had been hitherto supposed. Their nests, a mere depression in the shells and pebbles of the upper beach, each containing three olive-green eggs blotched with dark brown, elongated and tapered at both ends, were a new sight for many in the group. Working through the marsh grass, various members of the crowd flushed clapper rails from nests. One nest held only the first two eggs of the clutch; two others contained ten eggs apiece, and a fourth nest had twelve eggs. Fragments of eggs, with a pair of clapper rails persistently skulking close by, at least suggest that one brood of young birds was hatched and already hidden in the grass.

Dr. J.J. Murray and F.R. Scott surveyed a colony of green herons and boat-tailed grackles on Club House Point, and a smaller colony of green herons on Cedar Island. Thirty-nine green heron nests were located on Club House Point and ten on Cedar Island—all in low myrtle bushes except one, containing two eggs, which had been built directly on the ground. The nests were at a variety of stages: five nests were newly completed but still empty, eleven nests had one egg, ten nests had two eggs, eight had three eggs, ten had four eggs, and five nests contained five eggs apiece. Thirty-five boat-tailed grackle nests were located in the myrtle and cedars of Club House Point, twenty-three of them still empty, three nests containing one egg, four holding two eggs, three with three eggs, and one nest containing four eggs. One nest held two young birds and a single egg.

Following a sandwich lunch in the boats, the party landed at Parramore Island Coast Guard Station to spend the early afternoon. With its interior forests of loblolly pine and open glades, Parramore Island offers a wider variety of wild life than Cedar Island. The woods on Parramore held a few warblers and vireos of species that breed locally, but almost nothing which could be identified as a migrating group.

Three occupied osprey nests dominated the island's skyline. Two of these in dead red cedars were investigated by Dr. Murray and were found to contain three eggs and two eggs.

A pair of red-tailed hawks was the genuine surprise of Parramore Island. Red-tails have not been recorded as a breeding species on the Eastern shore, and, in fact, this record is one of the few there for any hawk except the osprey during breeding season.

J.M. Valentine and R.B. McCartney found a willet nest containing two eggs in one of Parramore Island's interior glades. An Atlantic song sparrow nest with four eggs was discovered along a roadway bank.

By the standards of previous V.S.O. field trips, the list published below is not a large one. By limiting the trip primarily to a salt marsh and open beach habitat, the group missed a lot of common land birds altogether. The list, with its prominent gaps, is an interesting example of the Eastern Shore's bird population in spring, when the primary migration routes for land birds seem to remain west of Chesapeake Bay. No one was conscious of any ornithological poverty, however, in the excitement of watching curlews, terns, and flocks of shore birds, showing now white, now dark, over the salt marsh.
The list of seventy-one species found during the day is as follows:
common loon; horned grebe; pied-billed grebe; gannet; double-crested cormorant;
great blue heron; American egret; snowy egret; Louisiana heron; green heron;
black duck; blue-winged teal; red-breasted merganser; turkey vulture; red-tailed hawk;
osprey; pigeon hawk; clapper rail; oystercatcher; piping plover;
semipalmated plover; Wilson's plover; black-bellied plover; ruddy turnstone;
Hudsonian curlew; spotted sandpiper; willet; greater yellowlegs; knot; least sandpiper;
red-backed sandpiper; dowitcher; semipalmated sandpiper; sanderling.

Herring gull; ring-billed gull; laughing gull; gull-billed tern;
Forster's tern; common tern; least tern; royal tern, crested flycatcher; prairie
horned lark; tree swallow; barn swallow; crow; fish crow; house wren; Carolina
wren; mockingbird; catbird; brown thrasher; starling; white-eyed vireo; yellow
warbler; myrtle warbler; pine warbler; prairie warbler; yellow-throat; yellow-breasted chat;
meadowlark; red-wing; boat-tailed grackle; purple grackle;
cardinal; red-eyed towhee; sharp-tailed sparrow; seaside sparrow; white-throated
sparrow; and song sparrow.

--- Lexington, Virginia ---

MAJOR RECENT CHANGES IN THE VIRGINIA AVIFAUNA

By J. J. Murray

The many changes in the list of Virginia birds, and still more, the
greater development in our knowledge of the status of many birds on the Virginia
list, are indications of the increased activity of bird students in our State,
and in turn of the influence of the 'Check-List' published by the Virginia Society
of Ornithology in 1952. They indicate also the need in the not too distant
future of a thorough revision of the 'Check-List'. The present paper will
indicate only the changes in the Virginia list itself.

Birds Added to the Regular List Since 1952:

1. Cory's Shearwater. Puffinus diomedea borealis Cory. R. Bruce
McCarty, while on the light-ship, 20 miles off Chincoteague, recorded it
regularly, June to October, 1954, seeing up to several hundreds on some days.
W. S. James, on a naval vessel, 60 miles east of Cape Charles, saw about 20 on
June 17, 1954.

Hurricane Hazel brought one of these tropical birds to Staunton on October 15,
1954. It was picked up alive on a Staunton street by Miss Mary Artis Danner,
but soon died. It is now in the possession of Charles H. Robertson of Staunton,
who had it mounted.

3. Cattle Egret. Bubulcus ibis ibis (Linnaeus). First seen at the
upper end of the 'Levels' at Chincoteague on May 13, 1953, by John H. Buckalew.
It occurs there regularly in small numbers from late March to early November.
It was seen at Back Bay by Romie Waterfield in 1956, on April 28 or 29. Mrs.
L. W. Machen reports that two were seen near Hampton on April 19, 1957, by a
group of the Hampton Bird Club members.

5. Atlantic Blue-winged Teal. *Anas discors orphna* Stewart & Aldrich. This is a newly-described coastal race, breeding from New Jersey to Virginia (Distinction of Maritime and Prairie Populations of Blue-winged Teal, by Robert E. Stewart and John W. Aldrich, *Proc. Biol. Soc. of Wash.* Vol. 69, pp. 29-36, May 21, 1956). Two specimens of the new race are listed from Nelson County, April 11, 1902, and several specimens of the typical race. The writer has collected a male at Lexington, March 19, 1957, but has not yet had it identified.


8. Franklin's Gull. *Larus pipixcan* Wagler. This bird was omitted from the 1952 'Check-List' by error. Dr. Ellison H. Smyth, Jr., collected a female in fall plumage at Blacksburg, October 22, 1898.

9. Atlantic Black-legged Kittiwake. *Rissa tridactyla tridactyle* (Linn). There are two specimens in the Norfolk Museum; one picked up as a sick bird in Broad Bay, Norfolk, by Cooper Barefield, January 3, 1953; and one found dead at Sandbridge, January 13, 1953, by E.K. Sloane. We also have three recent sight records, two offshore, and one on the Potomac at Washington by J.M. Abbott.

10. Appalachian Yellow-bellied Sapsucker. *Sphyrapicus varius appalachiensis* Ganier. A new race, described by Dr. Alfred T. Ganier. All our breeding birds, as well as many winter birds of western Virginia, belong to this race. The writer has a specimen of each race from Lexington.

11. Say's Phoebe. *Sayornis saya saya* (Bonaparte). One of our remarkable records is that of a bird of this subspecies seen near Salem, in Princess Anne County, on December 31, 1956, by F.C. Richardson and W.F. Rountrey, and collected on January 1, 1957, by Rountrey. It was identified by Dr. Herbert Friedmann as of the typical race.

12. American Black-billed Magpie. *Pica pica hudsonia* (Sabine). One was seen in flight and in good view at Chincoteague Refuge, March 29, 1957, by J.M. Valentine, Jr., and R.R. Rudolph of the Fish and Wildlife Service. It is possible that this was an escaped bird, but with two records, one of them supported by a specimen, it seems best to put the species on our list.
13. Brown-capped Chickadee. *Parus hudsonicus* subsp.? One came to a feeder at the home of Mr. and Mrs. E.W. Bennington, near Dyke, on the Mount Vernon Highway, on January 29, 1955, and was present throughout the winter. It was identified by Dr. John W. Aldrich and others as to species, but was not collected for subspecific determination (Atlantic Naturalist, 10, 214-215).

14. Willow Veery. *Hylocichla fuscescens saliccola* Ridgway. Dr. John W. Aldrich collected one in Fairfax County, 3 miles west of Annandale, May 9, 1953. It is now in the U.S. National Museum.

15. Newfoundland Yellow Warbler. *Dendroica petechia amnicola* Batchelder. An adult female was collected by the writer at Cameron's Pond, near Lexington, September 8, 1952, and identified by Dr. Alexander Wetmore.


17. Giant Redwing Blackbird. *Agelaius phoeniceus arctoleucus* Oberholser. A male, picked up dead by the writer at Cameron's Pond, Lexington, on November 10, 1955, was identified by Dr. Wetmore.

18. Brewer's Blackbird. *Euphagus cyanocephalus* Wagler. We have several recent sight records: one carefully observed by J.M. Abbott at Roaches Run, near Alexandria, October 8, 1952; one seen by Stephen M. Russell, who is familiar with the species, at Abingdon, December 25, 1954; and a probable record reported by Charles M. Handley at Blacksburg, December 28, 1954.


21. Cassiar Slate-colored Junco. *Junco hyemalis cismontanus* Dwight. Two individuals, banded at Arlington in 1952 by Arthur H. Fast, one on December 13 and one on December 30, were identified by Dr. John W. Aldrich and Allen J. Duvall.

22. Coastal Plain Swamp Sparrow. *Melospiza georgiana nigrescens* Bond & Stewart. We have two Virginia specimens: a female collected by the writer at Cameron's Pond, Lexington, October 27, 1952, and one collected at Shirley, Charles City County, by Fred R. Scott, November 25, 1952; both being identified by Dr. Wetmore.
Birds Added to the Hypothetical List Since 1952:

1. Atlantic Fulmar. *Fulmaris glacialis glacialis* (Linnaeus). McCartney has reported seeing a mounted specimen of the Fulmar at the home of Captain Ed Doughty at Oyster. It is in what is left of the collection of Captain Crumb, former Captain of the Cobb Island Coast Guard Station. This is probably the bird referred to in a letter of Francis Harper's, dated August 25, 1916, and now in the Fish and Wildlife Service files. Harper speaks of seeing a mounted Fulmar in the possession of Captain Alvin (? Crumb, which he understood was collected in the vicinity of Cobb Island. This record seems quite definite, but is still being held on the hypothetical list.

2. Curlew Sandpiper. *Erolia testacea* (Pallas). Mr. and Mrs. Joseph Mersereau and Mr. and Mrs. James Moran noted all the field marks on a bird seen at Hunting Creek, Alexandria, October 16, 1956. Moran had had previous experience with the bird.

3. Atlantic Common Puffin. *Fratercula arctica arctica* (Linnaeus). Jack Perkins states that Romie Waterfield, assistant at Back Bay Refuge, described accurately to him one of these birds seen at Back Bay, January 1, 1955. He observed the large bill, and knew that it was not a Dovekie or a Razor-billed Auk.

4. Rufous Hummingbird. *Selasphorus rufus* (Gmelin). Arthur B. Fuller reported a bird of this species seen at Jamesville, on the Eastern Shore, November 30, 1952. From the description Dr. Aldrich thinks the bird was a young male.

5. Eastern Bewick's Wren. *Thryomanes bewickii bewickii* (Audubon). Although it is entirely reasonable to suppose that birds formerly breeding in Tidewater were of this typical race, but we have no Virginia specimen, so it seems best to remove this bird from the regular to the hypothetical list.


7. Oregon Junco. *Junco oreganus* subsp.? One of these birds, which frequented the feeder at the home of Mrs. Lucille N. Still in Fall Church during the winter of 1954-1955, was seen by Dr. E.G. Davis and others.

Removed from the Regular List:

1. Eastern Bewick's Wren. To the hypothetical list.


Removed from the Hypothetical List:

1. Southern Great-crested Flycatcher. Specimens collected in southeastern Virginia indicate that the southern form does not reach Virginia.
A winter bird-population study was planned in a 29 acre block of a 60 year old loblolly pine in the northern portion of Sussex County along Road 603. This area was just south of the Blackwater River. Three trips were made through this area — January 5, 13 and 26. Partial logging of the area after the third trip made it necessary to curtail the project. In studies of this nature, counts should be made at least seven times during the winter. However, in order to give a rough idea as to the bird population of this habitat the results of the three trips are given herewith:

<table>
<thead>
<tr>
<th>Species</th>
<th>Average per trip</th>
<th>Number per 100 acres</th>
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<tbody>
<tr>
<td>Tufted Titmouse</td>
<td>6.6</td>
<td>22.7</td>
</tr>
<tr>
<td>Carolina Chickadee</td>
<td>4.0</td>
<td>13.7</td>
</tr>
<tr>
<td>Hermit Thrush</td>
<td>4.0</td>
<td>13.7</td>
</tr>
<tr>
<td>Carolina Wren</td>
<td>3.6</td>
<td>12.4</td>
</tr>
<tr>
<td>Red-bellied Woodpecker</td>
<td>3.3</td>
<td>11.3</td>
</tr>
<tr>
<td>Downy Woodpecker</td>
<td>3.3</td>
<td>11.3</td>
</tr>
<tr>
<td>Robin</td>
<td>2.0</td>
<td>6.9</td>
</tr>
<tr>
<td>Ruby-crowned Kinglet</td>
<td>1.6</td>
<td>5.5</td>
</tr>
<tr>
<td>Pileated Woodpecker</td>
<td>1.3</td>
<td>4.4</td>
</tr>
<tr>
<td>White-breasted Nuthatch</td>
<td>1.6</td>
<td>2.0</td>
</tr>
<tr>
<td>Red-shouldered Hawk</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>Yellow-bellied Sapsucker</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>Brown Creeper</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>Golden-crowned Kinglet</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>Winter Wren</td>
<td>+</td>
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The plus sign (+) indicates an average trip occurrence of less than .5.
The study area supported a relatively dense stand of near-mature loblolly pine (averaging 82' in height) with widely scattered yellow poplars, southern red oaks and sweet gums. The understory consisted for the most part of myrtle (Myrica cerifera), holly, high-bush blueberry, (Vaccinium corymbosum), dogwood and small sapling growth of red oak, sweet gum, red maple, etc. In establishing the area, a buffer strip was maintained between the edge of the pine forest and the hardwood transition zone between it and the bald cypress-tupelo forest along the Blackwater River. The paucity of species and numbers could probably be attributed to the proximity of this area to the much more attractive swamp forest.

--- Waverly, Virginia ---

V. S. O. PROJECTS IN THE NEWS

From the Richmond News Leader, March 26, 1957:

"The Executive Committee of the Virginia Society of Ornithology has passed a resolution condemning the use of electronic audio devices by duck hunters.

"The group, dedicated to the scientific study of birdlife, is the second state organization to take a stand against the use of records and tape recordings of ducks and geese feeding. These records proved very successful for some hunters last season and prompted the Virginia Wildlife Federation to ask that they be ruled illegal.

"The resolution - a copy of which has been sent to the Commission of Game and Inland Fisheries - follows:

"Whereas, duck and goose hunters in Virginia are known to have used recordings of waterfowl sounds to attract such waterfowl to their blinds; and

"Whereas, all evidence points to many waterfowl being virtually defenseless against such a trap; now therefore, be it

"Resolved, that the Virginia Society of Ornithology condemns the use for hunting purposes of electronic audio devices for attracting birds and considers such equipment unworthy of a true sportsman; and that the society urges the complete prohibition by law of the use of any such device."

From the Richmond Times-Dispatch, May 9, 1957:

HAWKS AND OWLS FIND A FRIEND

"Virginia owes a lot to the Federation of Garden Clubs. Its members are interested not only in gardens, their own and others, but in that greater garden we call the Old Dominion. They champion the endless struggle to 'keep Virginia green,' to rid our roads of 'litterbugs,' and to ban huge billboards from road-sides where they would otherwise deface scenic views."
"Now the garden clubs are about to launch another campaign — to amend Virginia laws which class hawks and owls as 'predatory and undesirable species.'

"The indiscriminate shooting of these birds, concluded the federation's board, upsets 'the balance in nature.' That's another way of saying that rodents and other small mammals, which are principal items on the hawks' and owls' menus, may increase to the detriment of Virginia fields and gardens, unless their indiscriminate destruction is halted.

"We shall not pretend to pose as amateur Audubons. We should like to point out that legal protection of the two species exists in 42 states. Only six, including Virginia, permit indiscriminate killing.

"Hawks and owls do kill poultry occasionally, but that fact would be taken into consideration in the proposed amendment, to permit pertinent exemptions.

"Barring refutation by biological statistics, the garden clubs' proposal appears sound."

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WINTER BIRD POPULATION STUDY
Upland Deciduous Forest

By Gertrude Prior

Upland Deciduous Forest. Location: Sweet Briar College, Sweet Briar, Virginia. Size: 23 acres. Description of Area: Mature hardwood forest, roughly of triangular shape. The dominant trees, White Oak (Quercus alba) and Red Oak (Quercus rubra) form one of the few remaining stands of mature oak in this section. They average about 100 feet in height and about 32 inches DBH (diameter breast high). Other dominant trees are Beech (Fagus grandifolia), Tulip Poplar (Liriodendron tulipifera), Hickory (Carya glabra), Red Maple (Acer rubrum), White Ash (Fraxinus americana) and Black Gum (Nyssa sylvatica). A distinct understory includes such species as Dogwood (Cornus florida), Redbud (Cercis canadensis), Black Cherry (Prunus serotina), Sassafras (S. variifolium), Magnolia (M. acuminata), and Azalea (A. viscosum). Names of plants are taken from Gray's Manual of Botany, 1950. Topography: Wooded countryside with some farm and pastureland in the rolling foothills of the Blue Ridge; elevation, 750 feet. Edge: A paved road cuts through the forest and forms one long side of the triangular area. A buffer strip 100 feet wide separates the census area from a field edge across the base of the triangle, a creek running through the woods bounds about 600 feet of the area and another buffer strip separating the area from pastureland completes the rather irregular edge. Coverage: December 29, 31, 1956; January 6, 12, 13, 19, 20; February 9, 10, 1957. Total, 9 trips, averaging 1½ hours each. Census: Red-bellied Woodpecker, 2 (9); Carolina Chickadee, 2 (9); Tufted Titmouse, 2 (9); Mourning Dove, 1 (4); Downy Woodpecker, 1 (4); Crow, 1 (4); White-breasted Nuthatch, 1 (4); Carolina Wren, 1 (4); Bluebird, 1 (4); Cooper's Hawk, 1; Yellow-bellied Sapsucker, 1; Phoebe, 1; Red-breasted Nuthatch, 1; Mockingbird, 1; Cardinal, 1; Slate-colored Junco, 1. Average Total: 13 birds (density, 56 birds per 100 acres). Remarks: The figure for numbers of birds is probably low, since all censuses were made in the afternoon. The Titmice and Chickadees were usually found together at one end of the

* Pileated Woodpecker, +;
census area near the creek. The Pileated Woodpecker was heard on all but two trips, but usually from the adjacent similar habitat section of the woods. On two different trips, a Turkey Vulture flew over. There are a number of large downed trees, left from the hurricane of October, 1954. During the census period the temperature ranged from 32° to 53°, with a daily mean of 40°. The ground was free of snow except for one trip when there were small patches. Six of the nine trips were taken with an overcast sky and very little wind.

— Sweet Briar, Virginia

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TRIP TO PANAMA

Arthur Fast, 4924 Rock Spring Road, Arlington, Virginia, writes that he visited Panama and the Canal Zone for 17 days in February, 1957. Weather-wise the trip was perfect. The steady trade-wind kept the air fresh, even though the temperatures were mid-summer warm. On the coldest night of the winter in Balboa, a low of 68 was registered. He spent about half of the time on Barro Colorado Island (in Gatun Lake), a refuge and research center under the supervision of the Smithsonian Institution. Dr. Carl B. Koford (formerly of California and author of the National Audubon Society's Research Report on the California Condor) is Resident Naturalist there. He has several mist nets and is able to spend a limited amount of time netting birds, and bats of many species. Fast was there in the dry season, which was unusually dry this year. He tended the nets for several days, but succeeded in catching only about 12 birds and several bats; among the birds were a Plain-colored Tanager, a Golden-masked Tanager, two species of Hummingbirds — and a Yellow Warbler. Before leaving the area, Fast had the great, good fortune of going out with Dr. Alexander Wetmore, the foremost living authority on Panamanian birds. One of the trips was to the Pecora marshes, one of the richest bird areas in Panama. (See, "My Tropical Air Castle," C. XIV, by F.M. Chapman.) On one two-months trip to that area, Dr. Wetmore collected 270 species of birds. Fast reports that the variety and numbers of tropical birds almost overwhelmed him. During his stay in the Panama area, he added 75 birds to his life list.

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NEWS AND NOTES

By J.J. Murray

Chincoteague Refuge Field Trip, August 24, 1957. This trip will necessitate staying over the nights of August 23 and 24 in order to make a full day of it on the Chincoteague National Wildlife Refuge. Complete information on the trip may be had by writing C.C. Steirly, Trip Chairman, Waverly, Virginia. (The trip chairman will have a mimeographed sheet with full details for all who are sufficiently interested in the trip to write him for it. This procedure will probably be followed for future trips in order not to use unnecessary space in The Raven. Editor.)
Mourning Dove Banding Project. The Fish and Wildlife Service is anxious to have more Mourning Doves banded in Virginia. Few birds were banded in the State during 1956. All records of birds banded should be sent to Regional Director, Fish and Wildlife Service, Peachtree-Seventh Building, Atlanta 23, Georgia, and marked for Harold S. Peters.

Hog Creek Heronry. Jacob M. Valentine, on a visit to the heronry in the Hog Creek Marsh, near Assawoman Inlet, south end of Wallops Island, on May 8, 1957, found about the following numbers of nests: Snowy Egret, 100; Louisiana Heron, 10; Green Heron, 25. Most nests had the full complement of eggs. No American Egrets, Little Blues, or Cattle Egrets were seen.

Cattle Egrets at Hampton. Mrs. L.W. Machen saw two Cattle Egrets on the farm of William M. Cumming, near Hampton, on April 14, 1957. The birds had first appeared on April 9.

Upland Plovers near Churchville. Dr. H.G.M. Jopson saw 3 Upland Plovers near Churchville, Augusta County, on May 30. At this date they would likely have been breeding. The species is now scarce in summer even in the Valley.

Red-headed Woodpecker. After a rather alarming scarcity all along the middle Atlantic states, this species seems now to be in better condition. We are getting reports of increasing numbers. It is present in fair numbers in Richmond. Mrs. E.C. Moore, Roanoke, has seen it in recent years in a number of places in Floyd County. Murray saw a single bird in two places in northwestern Augusta County on June 6.

Prairie Horned Lark. A.O. English reports that the Prairie Horned Lark is now well established as a breeding bird in Roanoke County. He first saw the species in that area in December, 1944, which was some years after it had been found breeding in Montgomery County to the south and in Rockbridge County to the north. The first nest was found on April 12, 1947. Now it breeds at a number of places in Roanoke County.

Cliff Swallow. This species, which had been on the decline for some years past in the Valley of Virginia, now seems to be increasing. Jopson found 15 pairs near Bridgewater on May 30. Murray found nests at two places in Highland County on June 18; 13 nests at the Revener farm at Hightown; and 30 nests, most of them under the low eaves of a chicken house, on the John H. Stephenson farm, near Vanderpool. Joshua Womeldorf has had a few nests at his farm near Lexington this season. One of these nests was of particular interest, as the pair of Cliff Swallows took an old Barn Swallow nest and remodelled it into the typical jug nest of the Cliff Swallow.

Dickcissel. Fred Swartz, student at Bridgewater College, saw a male Dickcissel near Cross Keys, Rockingham County, June 15 and 17.
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JOHN B. LEWIS, NATURALIST

By Dr. Alfred Akerman

John B. Lewis passed away on June 8. I have been thinking of him and his work, and I wonder whether we here in Brunswick appreciated his good life and work as much as they deserved.

I met him in 1922 when he was County Agent. I was District Forester at that time, and had come to Brunswick County to see whether anything could be done toward controlling fires which were rampant in the woods and no concerted effort was being made to stop them. John Lewis knew the damage they were doing to young timber and to wildlife, especially to birds that nest on or near the ground. Through his contacts with farmers he helped build up sentiment against forest fires and for concerted effort to prevent and combat them. The organized protection we now have in Brunswick County is in large measure owing to the educational work he did.

Three years later I was called away on other work, and for some years I lost contact with Mr. Lewis. In those years he had moved to Amelia County where he was County Agent, had taken a course in nature study at Cornell, and had made a biographic survey of Amelia County. In the same time I had made a sort of circle and had come back to Brunswick County as Director of the Seward Forest Experiment Station. I wished to develop the Seward Forest as a place for study of nature in general along with its primary use as a place to test different methods of timber growing. Mr. Lewis had finished his survey of Amelia County and was available for making a like survey of Brunswick County with the Seward Forest as a base to work from. Where the rub came was how to stretch the small budget of the Seward Forest far enough to get a naturalist of John Lewis' standing. But for his love of God's outdoors and his willingness to put up with crude living conditions here at the Forest we could not have had his services. He took quarters in the bunkhouse, which he re-named Loblolly Lodge, and settled down to the sort of work he delighted in. The bulk of the survey was made in three years, but we were glad to have him stay on for three more, for now and then he added new specimens to the collections and he was of great help when groups of visitors came. Several times bus loads of children from the school came to spend a day at the Forest. When that happened the group was split in two, and Mr. Lewis took half in the morning, and we swapped halves at noon. In that way the children got a glimpse of both forestry and wildlife.

The Dean of the University described John Lewis as a "born naturalist," and he was. When he came to the Seward Forest in 1940 he was 72 years old. That is an age when men are supposed to sit by the fire in winter and in the shade of the porch in summer and tell young people that the world has gone to pot. Instead, he was out and going over the countryside with eyes and ears open. He collected shrubs, herbaceous plants, birds, mammals, amphibians, and reptiles. He found over 700 species of plants, and dried and pressed specimens of them. He noted over 100 birds, and collected 26 specimens of mammals, 16 amphibians, and 19 reptiles. He mounted some of the birds and mammals, and preserved some of the amphibians and reptiles in formaldehyde.

Zoologists and botanists came from about all the colleges in Virginia to see him. A collector from the Philadelphia Museum of Natural History spent
several days working with him. Dr. Fernald of Harvard came here several times to check ranges of plants for a revision of Gray's Manual of Botany. Mr. Lewis called his attention to a ginger on the banks of White Oak Creek. On his return trips Dr. Fernald got specimens of it in the flowering and fruiting stages, decided it was an undescribed species, wrote and published a description of it and entered it in the revised Gray's Manual as Asarum Lewisii with a note that it was named for John Barzillai Lewis.

John Lewis was more than a technical naturalist. He was a technical naturalist with the soul of a poet. The following paragraphs from an article he wrote while here show how he felt about the things he saw in nature.

"One of my favorite walks is through the little valley of Rattlesnake Creek. The low-grounds through the creek flows, like those of most of our streams, is heavily wooded with sycamore, willow oak, red birch, and holly with now and then some beeches on the higher spots and at the bases of the bluffs.

"Here in spring the first anemonies, Spring beauties, and bloodroots bloom; and the water thrush trips along the margin or through the shallows looking for food and singing his clear ringing song. A little later the wood thrush sings from among the lower branches of the trees, and many migrating warblers will pause for food, water, and rest on their journey northward.

"All through the year many furry creatures live their lives and rear their families along the creek. I sometimes jump a gray fox from a thicket, and squirrels play in the treetops or come down to the creek for an occasional drink. Tracks in the damp sand along the water's edge often tell of the wonderings of coons, 'possums, and minks; and along the bayous where the water is still one may find tracks of muskrats.

"Why do men travel hundreds of miles to see nature's distant wonders before they have seen the wonders that are almost in their back yards?"

That story is well told with a sound moral at the end of it, and it makes good reading. It is hoped that Mr. Lewis' family have a full file of his writings and that some way can be found to have them printed.

(Reprinted from The Brunswick Times-Gazette, Lawrenceville, Virginia, July 4, 1957)
SHENANDOAH NATIONAL PARK FIELD TRIP

By C.C. Steirly

The annual Shenandoah National Park Field Trip, familiarly known as the Foray, was held this year on June 21, 22, and 23 with twenty-six members and guests in attendance. As in the past Skyland was used as a base of operations, advance arrangements having been made for the group to occupy four cabins in the same general area. The trip was a delightful combination of birds, botany and fellowship under the guidance of a committee consisting of Miss Gertrude Prior, Dr. R.J. Watson and J.C. Eike which coordinated the basic plans of the Trip Master.

One of the outstanding guests attending the meeting was Dr. H.N. Kluijver of the Instituut voor Oecologisch Onderzoek at Arnhem, Netherlands. Dr. Kluijver, a prominent European ornithologist on a professional visit to the United States, was accompanied by Dr. Alexander Wetmore. He was persuaded to give the usual Friday evening lecture and discussed the trapping and banding phase of his ecological bird studies in the Netherlands. On the hikes the VSO members had the pleasure of introducing him to a great many of his North American "firsts".

The field trips proved to be a bit ambitious as planned and each was considerably shortened from the series of hikes recommended by the Appalachian Trail Club, the Trip Master having learned through the sweat and toil of his charges that birds and botany cannot be adopted to Appalachian Trail marathon hikes.

On the first day drove to the Big Meadows picnic area and took a trail leading through a bit of swampy ground eventually merging with the Dark Hollow Falls Trail. This was an all day affair with lunch along the trail in a delightful area of cascades, rocks and hemlocks. Upon reaching the highway the group still had energy enough to work the Big Meadows area under the guidance of Dr. Wetmore. A fawn here added to the charm of the field trip along with the ravens and vesper sparrows that are always to be found there.

The second morning found the group eager to start the long hike through the Limberlost, down White Oak Canyon and back along the Cedar Run Trail. However, after another trailside lunch in a rocky gorge the committee hastily improvised a short cut back along a fire road which proved to be a much easier walk and which seemed to abound in singing veeries, making the walk doubly pleasant. In White Oak Canyon the nest of a Louisiana Water Thrush was found. Here too were seen Blackburnian, Black-throated Green, Wood Thrushes, Scarlet Tanagers and several of the flycatchers.

One of the best trips of all was held on the last day. This was the old favorite hike up Hawksbill Mountain where the Canada Warblers are always to be found. Only a few of the group, however, saw the four ravens from the top of the mountain whose elevation is 4049 feet, the highest point in the Blue Ridge. Coming down the long trail a side trip was made to Naked Top, a rather open area that was most productive of birds. Here there were Rose-breasted Grosbeaks, Chestnut-side Warblers, Indigo Buntings and many others. Nearby on the mountain side the veeries could be heard singing that finest of bird music, second only to the flute-like notes of the Hermit Thrush. All of the group felt...
that it was almost a sacrilege to talk while this song drifted up the mountain side from the dark, shadowy hemlock forest below.

Two cases of Cowbird parasitism were observed and one worthy of note. In the Skyland area many of the group observed a male Blue-headed Vireo feeding a young cowbird at least half again its size and on the trail up Hawksbill a similar feeding was studied, in this instance the parent was a male Black-throated Blue Warbler feeding a cowbird that seemed to be almost twice its size. The young bird gave an excellent demonstration of its quivering food-begging posture.


--- Waverly, Virginia ---

CAPE MAY WARBLER WINTERS AT SWEET BRIAR

By Gertrude Prior

Early in December of 1956 I noticed on one of my bird feeders what I mentally checked off as a Hyrtle Warbler with an unusual amount of yellow on it. It was not until December 28, however, after I had returned from a Christmas holiday, that I took a careful look at the bird and came to the conclusion that it must be a male Cape May Warbler. The identification was agreed upon subsequently by Dr. Florence Hague, Mrs. Wm. A. Wachenfeld, and John Withrow.

The "dim suffused patch of yellow behind the ear", described by Peterson, was very noticeable, the breast was very yellow with dark streaks, and the wide white band on the wing, the yellow rump and even the chestnut cheek patch were features already of some prominence. At the time I supposed that it was a first year male, but not being familiar with the differences in the first winter plumage and the winter plumage of an adult male, this remains but an assumption.

The feeder to which the Cape May was attracted is about seven feet from my kitchen window, in a dogwood tree. The house is set in a wooded area of rather large oaks, tulip poplars, pines and small dogwoods, redbuds and accompanying undergrowth. The diet of the bird consisted of suet and peanut butter; it was never seen eating any of the seed material that was also available.
There were only three days from December 28 until April 15 that the bird was not observed at the feeder. Although I was gone the best part of every day, I usually saw the Cape May in the morning, and/or at noon, and/or during the late afternoon, so it does not seem illogical to conclude that the bird spent much of its time at or near the feeder. Very often it would come by itself, and at other times it would appear with the Myrtle Warblers or the Chickadees and Titmice. At first it could be scared away by the Myrtles, but later on the Myrtles left the feeder when the Cape May made a sally toward them. The most singular sight we have ever noted on our feeders occurred one day during February when we saw the Cape May and a Pileated Woodpecker feeding about three feet away from each other.

The behavior of the Cape May was markedly different from the Myrtle Warblers, who were very nervous feeders, and noisy and fussy. The Cape May was calm and unruffled most of the time, and would often sit motionless on the feeder or nearby on a branch of a tree. This was not, I am sure, lassitude due to undernourishment. The bird always looked in good feather, was plump, and could make lightning passes at other birds on the feeder. It was never heard to make any kind of recognized call or note during the whole of its stay.

On April 13 a light snowfall covered the ground, and the next day, Sunday the 14th, the Cape May was literally on the feeder all day long, eating much of the time. This was the last day the bird was seen. The next morning the temperature was 28°, and there was still some snow on the ground, but the Cape May was gone. I assumed that it had departed for its northern breeding grounds.

Bent, in his "Life Histories of North American Wood Warblers", lists April 13 as the early spring arrival date at Greensboro, N.C., April 19 at Washington. Pearson, in his "Birds of North Carolina" shows April 7 as his earliest arrival date. Rather incomplete Sweet Briar records do not show the Cape May as arriving before the first week in May, and Freer in his "Birds of Lynchburg and Vicinity" gives May 3 to 13.

-- Sweet Briar, Virginia

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JUNE ROADSIDE CENSUS IN LOUDOUN COUNTY

By John V. Dennis

The following list is a tabulation of the frequency with which certain species were recorded on roadside censuses in Loudoun County in northwestern Virginia:

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Between June 9 and June 26, 1957, I made seven trips by car on unpaved roads in the vicinity of Leesburg for the purpose of determining the relative frequency of birds to be seen in typical farmland and woodlot habitats of the region. Stops were made at intervals of .4 of a mile and only the birds that were seen or heard on these stops were checked off. No attempt was made to count number of individuals. A species was entitled to only one check per stop, and relative frequency was determined by dividing the total number of stops (87) into the number of times (or number of stops) a species was recorded.

This method does not pretend to give actual population figures, but is merely an index by which some idea can be obtained as to how widely dispersed the birds of a region may be. Census methods favor higher percentage totals for conspicuous birds or birds with loud songs or call notes. Five minutes was the time limit for each stop. This was long enough to list all the singing or calling birds for several hundred yards around and to pick out any birds flying over or perched in the open. But it wasn't long enough to search for birds among cover or to check faint or unfamiliar song or notes. For this reason the present census methods do not favor the recording of rare or unusual species, or birds that are inconspicuous, sing or call infrequently or have faint song or call notes.

Despite some obvious weaknesses the method, I felt, had merit in being a simple and easy way to gauge the relative frequency of occurrence of birds over a wide area. My own earlier impressions as to frequency suffered some severe jolts when I tabulated the results. I had always considered the field sparrow to be one of the most abundant birds of the region, but not as widely spread, for example, as the cardinal, mockingbird, or starling. Surprisingly, it was recorded on 66 percent of the stops, considerably more often than any
other species. The cardinal (44 percent) and the mockingbird (40%) ranked high but not as high as several others. The starling was way down the list, recorded on only 17% of the stops. It was gratifying to find that the English sparrow averaged only 24%. This species is abundant about farm houses and in towns, but census results show that it is not widely dispersed through the countryside.

I had anticipated a high total for the indigo bunting. It is a conspicuous bird and a loud and constant singer. But I was surprised to find that it ranked as high as second place with an average of 52%. Next in order - the crow, meadowlark and bobwhite - deserve part of their high ratings to loud and frequent song or call notes. I think that on a repeat census of this kind I would make my stops at intervals a mile apart; ¼ of a mile is not far enough to eliminate the possibility of a single bird being heard at more than one stop. The crow, although not numerically abundant in this region, has a loud voice that carries and thus would seem to be more abundant and widespread than it actually is.

Without mentioning all of the high-ranking species, I shall turn to the yellow-breasted chat which, with 29% for a rating, outranks all other warblers by far. This is even higher than the red-eyed vireo (25%). The vireo is a persistent singer and occurs in the many small wooded tracts which dot this part of the county. The chat, of course, has an even louder voice, but sings at much less frequent intervals. But the fact that so much of the country I traversed was good chat habitat accounts for its wide occurrence. Whenever my route led through country with dense tangles of honeysuckle, briars and small trees, chats were plentiful, but in sections with clean fencerows and intensive cultivation, chats were non-existent. Of course such country is unfavorable generally for a wide variety of birdlife. Country devoted to pastures, small grain, and corn abounds in meadowlarks, grackles, mourning dove, starlings, English sparrows, grasshopper sparrows, cowbirds, and, if a little cover is present, such species as vesper sparrow, indigo bunting, chipping sparrow, goldfinch, mockingbird, and house wren.

Surprisingly enough, the one warbler that might be expected to be abundant in wooded areas of this region - the American redstart - is absent or virtually so. During the past ten years, I have spent five summers in the Leesburg region and have yet to find a redstart during the breeding season. Redstarts are abundant around Washington, D.C., 30 miles to the southeast, and again in the Blue Ridge and its foothills to the north. I have not checked the length and width of this apparent hiatus in the redstart's range. I might suggest that bird watchers in northern Virginia check the breeding status of redstarts in their sections.

I was surprised at the low ratings received on my roadside censuses by some of the conspicuous birds which are frequently on the wing - turkey vulture (12%), chimney swift (9%), barn swallow (7%), and purple martin (3%). From earlier observations in this area, I would have given any one of these species a high frequency rating. But apparently one's outlook is biased by personal experiences with birds. The more familiar we are with a bird the more likely we are to exaggerate its numbers.

To overcome this pitfall bird watchers should cover larger territories and follow a suitable censusing method. (I do not especially recommend my own method; I am sure there are better ones, but it is important to follow a procedure consistent with our abilities and the time we have available). In a
census study I do not recommend choosing an area because it is very rich in
birdlife or apt to yield a large percentage of rarities. We need to know more
about the expected densities in common habitat types.

There was a time when ornithologists devoted more attention to common
birds, their biology and relation to man. I feel that this is still a very
worthwhile end.

-- Leesburg, Virginia

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BIRDS ON A ROOF
By Perry F. Kendig

On August 31, 1957, I noticed an incident of birds making use of
man's inventions that I had never noticed before. Perhaps it might be of mild
interest to other members of the VSO.

There is a small factory in Salem, Graham-White Manufacturing Company,
1209 Colorado Street, which has a flat gravel roof. As part of the cooling
system this roof is kept covered with about one half inch of water.

This roof is very attractive to birds. I was not surprised to see
starlings and English sparrows there; they are everywhere. I was surprised,
however, to see a dozen killdeer pattering happily about and one other smaller
shorebird which I identified tentatively as a semipalmated sandpiper. (I could
not get a close enough look at the top of the roof for a positive identification.)

-- Roanoke College
Salem, Virginia

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BLACK VULTURE NEST
By C. C. Steirly

The nest of a Black Vulture was found on March 18, 1957, in the
ruins of a very old cabin, one of the smaller buildings of an old farm house
establishment, whose fields were long since grown up in loblolly pine. The
house area itself was heavily overgrown with honeysuckle and represented about
a half acre not covered with pine. This cabin had been built over a hundred
years ago. It was somewhat tumbled down, the roof having fallen through and
one portion of it had slid down the outside forming something of a lean-to
against the wall.
Under this lean-to, which was hardly a foot and a half above the ground at the point of its contact with the wall, the two eggs had been laid on an old board. No effort had been made to make a nest although there were several dried weed stalks scattered about close to the eggs.

On the first visit the adult had flown up through the ruins as the writer approached the building. On a later visit, on March 28, the same behavior was noted and the eggs were found intact. A final visit was made to the area on April 25 at which time one young vulture had just hatched. On this occasion the adult was loath to leave the area, and, in fact, was met face to face as the writer crawled under the lean-to to check on the status of the eggs.

The locale of observation was the west side of Gray's Creek Marsh in upper Surry County.

--- Waverly, Virginia

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PROTHONOTARY WARBLER NEST

By C. C. Steirly

The writer found the nest of a Prothonotary Warbler in a bottomland hardwood forest along Spring Branch a mile north of Waverly (Sussex County). This nest was at first glance taken to be a mass of vegetal fibers lodged in the top of an old willow stub which had been broken off some eighteen inches from the ground. Closer inspection revealed that it was a nest cleverly covered over with various plant fibers including tendrils, leaf veins, pine needles, grasses and moss of the genus Thuidium. It was partially lined with a few feathers, presumably of a green heron. In carefully pulling aside the top material three young ones were found. A hole in the side away from the upright part of the willow stub permitted access to the nestlings. This nest was not in a cavity such as a woodpecker hole or other hollow. Instead it was built up within the rotten crotch of the willow which had broken off leaving a long stub four feet high. The willow was eight inches in diameter and the nest entrance was eighteen inches above the swampy ground which was covered more or less with a growth of jewel-weed *Ipatiens biphora* and lizard-tail *Saururus cernuus*.

The nest tree was in a stand of sapling-sized black willow, red maple and white ash which formed a rather dense canopy over the swampy, wet ground. It was ten feet from the edge of a small creek. Most references to the nests of this species place them in hollow trees, old woodpecker holes etc., standing or leaning over water. Numerous trees meeting these specifications were found in the vicinity.

This was no doubt a second brood. The species is quite numerous as a breeding bird along the Blackwater River and its tributaries which include Spring Branch.

--- Waverly, Virginia
SECOND REPORT ON
CAGE-READED WOOD DUCKS NEAR UPPERVILLE, VIRGINIA

By Arthur H. Fast

In August, 1956, Arthur H. Fast, Arlington, banded 25 Wood Ducks reared in a large outdoor cage on the 500 acre farm near Upperville, Virginia, owned by Mr. and Mrs. William Grayson. (See RAVEN, Vol. XXVII, Nos. 10, 11, 12, Oct.-Dec., 1956) Three of these ducks were recovered during the succeeding hunting season - two in South Carolina and one near Fredericksburg, Virginia. During the 1957 breeding season, more Wood Ducks were reared in the same outdoor cage. On August 10, 1957, Fast (accompanied by Mrs. Louise Wilson of Arlington and Mr. and Mrs. Ralph E. Lawrence, nature photographers of Washington, D.C.), went to the Grayson farm. As in 1956, Mr. Grayson had captured the ducks and put them in small cages. Twenty-nine ducks were banded in a ceremony befitting the occasion; and released on the edge of the farm pond. Most of them flew away, circling the pond several times, a few surprisingly made sustained flights for at least five minutes. A few sought cover in the grass and weeds at the edge of the pond; many others flew into the nearby woods and disappeared from sight. The Lawrences took some colored pictures of the banding operations and the release of the ducks. A plenteous lunch served by the Graysons and a short visit ended the pleasant outing.

--- 4924 Rock Spring Road
    Arlington 7, Virginia

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BACK BAY TRIP

Date: December 7 and 8 (those coming any distance should plan to stay in Virginia Beach December 6 and 7. Dewitt Cottage is recommended.

Time: Sandbridge at 8:00 A.M., December 7.

Lunch: Lunch materials should be brought.

Clothes: Cold weather clothes and waterproof footwear are recommended.

General: The trip of the 8th will be a morning hike in Seashore State Park. Those planning to attend should notify the Trip Chairman by December 2. No trip reservation fee is being charged.

Further details as to the trip and accommodations can be obtained from the Trip Chairman, C.C. Steirly, Box 97, Waverly, Virginia.
CONTENTS

FALCON IN THE SKY

By J. J. Murray

Copy for The Raven (except Field Trip Reports and Local Club News) should be sent to J. J. Murray, 6 White Street, Lexington, Virginia.

Field Trip Reports and Local Club News should be sent to Fred R. Scott, 115 Kennondale Lane, Richmond 26, Virginia.

Requests for changes of address or for back issues of The Raven should go to Miss Gertrude Prior, Sweet Briar, Virginia.
FALCON IN THE SKY

By J.J. Murray

As a minister it is a natural thing for me, as well as appropriate to my subject tonight, to start out with a verse from the Bible. It comes from the Book of Proverbs in the 30th chapter:

"There be three things which are too wonderful for me, yea four which I know not: the way of an eagle in the air; the way of a serpent upon a rock; the way of a ship in the midst of the sea; and the way of a man with a maid."

Solomon has been credited by tradition with the authorship of the Book of Proverbs; but I do not think he could have written this verse. This verse must have been written by a bachelor. Knowing as much as he did about women, Solomon would no doubt have said, "the way of a maid with a man."

But the part I am thinking about is the first of the four phrases about things that are wonderful - "the way of an eagle in the air."

We are here tonight because all of us have a hobby. Every man or woman needs a hobby. We may need it desperately when we are old and when we have to step aside from the work of our lives. But even when we are young it is of great value as a relaxation. It loosens a man up; it keeps him out of ruts; it broadens his horizons. It does not make too much difference what the hobby is. After all, you do not choose a hobby; it chooses you. It is like catching the measles; or, on a much higher plane, like finding a wife. You do not set out to do it. The lightning just strikes!

Hobbies do not have to be reasonable; more particularly, they do not have to be reasonable to the dull mass of outsiders. I have a collection of cartoons, poking fun at bird watchers; but I have never seen a cartoon stop anyone with the disease from wading in a swamp to find a Pronthonotary Warbler. After my wife went with me to her first two or three bird meetings, she very innocently (at least, I hope it was innocently) said to me: "Does bird watching make people nuts; or is it just nuts that take it up?" But it doesn't seem funny to her any longer. The lightning has struck. She now has the disease.

To be sure all hobbies are not equal. Ours is, of course, the finest of all hobbies. It combines in such rich fashion sport and exercise, science and intelligence, and all the aspects of the aesthetic. Birds present such an amazingly attractive combination of form and color; of song and action; and of fascinating problems to fill many lifetimes of study.

But to come nearer to our subject. I suppose every bird student has his favorite bird or group of birds. With some it is the homely garden birds, cardinal and wren and catbird. And very properly so, for they give the best scope for study. Few birds are more common than the Song Sparrow. Yet, until Mrs. Margaret Nice began her work, nearly every statement in the books about the Song Sparrow was either entirely or partially incorrect. Everybody knows the Robin; but nobody knows the answers to a dozen simple questions about the Robin in your garden.
For other people, the Shorebirds make up the favorite group. And surely there is nothing more charming in nature than the evolutions of a flock of Killdeer or Sanderlings along a beach.

My favorite group, at least tonight (for my favorite bird is generally the bird at which I happen for the moment to be looking), is made up of the hawks. I am fascinated by their size, their wildness, their skill in the air.

And my favorite bird is the bird which in America we call the Duck Hawk, but which in English literature is known as the Peregrine Falcon. It is the bird which through the centuries in Europe was the favorite bird in that type of hunting which takes its name from the bird itself, Falconry. The nobleman rode out to the chase with a hooded Peregrine perched on his gauntleted left arm. Because it is such a noble bird, no man of birth lower than an Earl was permitted to keep a Peregrine. The King had a full staff of falconers to train and care for his birds.

By the way, I am not in too much sympathy with the effort to change the names of our falcons back to their European names; but in the case of this bird, Duck Hawk does seem too plebeian a cognomen.

The Peregrine Falcon is a magnificent bird, fast and wild and powerful. I have seen his mastery of the air both in the European and the American bird. Once on a mountain top in the Highlands of Scotland, I was looking out over the long, narrow lake that forms one of the eastern links of the Caledonian Canal. A shadow appeared high over Loch Lochy and at my level. Aiming my field glasses, I saw that it was the bird I had been hoping to see, a Peregrine Falcon, crossing the lake. Mile after mile I followed him as he sped with steady, strong wing-beats toward his high aerie in the rocky cliffs.

Last summer I watched a pair of them playing over the South Rim of the Grand Canyon, chasing one another in and out of their nesting site in the red cliffs. The grace and the skill of those beautiful creatures added even to the awesome majesty of the Grand Canyon.

One evening in Germany just a few weeks before Hitler launched his wild drive for world rule, we walked out into the square at Cologne for a view of that grand Cathedral that started about the year 1100 and took nine centuries in building. The cathedral with its twin towers seems to grow right out of the ground. As we looked up in the twilight two interesting things happened. A huge Zeppelin came in sight, floating noiselessly through the sky, until for a moment it was outlined between the two towers. Then, from across the Rhine came two speedy Peregrine Falcons, also appearing between the towers, but only for a second before they sailed into the South Tower to their nesting place. The contrast between these fine living creatures and the great man-made machine was all in favor of the birds.

Some of my most interesting memories are bound up with the sight of a Peregrine. The only time I ever came near death in bird work was in the effort to reach one of their nests in an Alleghany mountain cliff. John Grey and I had borrowed a rope and lugged it to the top of the mountain. We tied it to a clump of chestnut saplings and dropped it down over the cliff. I went down the rope hand over hand, and searched the cliff. The nest was not far away, so
that I could hear the young in it, but could not reach it. On the way back up
the rope, I found that strand after strand had snapped. The rope had developed
dry rot. Fortunately not more than one of the three strands broke at any one
place; but I reached the top in a cold sweat.

The Duck Hawk is a bird of power. The pair at the nest in the cliff
just referred to stayed aloft for three hours, always in sight and never coming
to a perch. It is said to fly up to 90 miles per hour on a straightway. No
bird can ever hope to escape by plain flying. No one knows how fast the Duck
Hawk can go in a power dive. Bent records an instance where an aviator, diving
at 175 m.p.h., was passed by a plunging Duck Hawk as if his plane were standing
still. It takes its food on the wing, clubbing down a flicker or a duck with
clenched fists, sometimes catching the dead prey before it hits the ground.
Sometimes it turns over in flight to pluck an unlucky dove out of the air above
him.

It is called a Duck Hawk because it likes ducks where it can find
them. In our mountain country it has small chance at such royal food, and must
be satisfied with Flickers or Doves or such lesser fowl. It is the greatest
enemy of the Blue Jay, accustomed to torment other hawks but wise enough to let
the Duck Hawk severely alone.

One day at Big Spring Pond a Duck Hawk, striking at some Green-winged
Teals, flew within thirty feet of me, making a noise like an express train.
Another time at the same pond two of us were walking up on a mixed flock of
ducks, which had in it two Gadwalls, birds rare enough with us for a close look.
When we hemmed the flock in too closely, they took to the air and flew in circles
above the pond. We were watching them with glasses, delighting in the skill
with which they kept in formation, when suddenly, the flock burst apart, and
each bird for himself dashed toward shelter, even though it had to be near us.
We could not imagine what had occasioned this panic, until we saw a dark flash
over the water, and remembered that some time before we had seen a Duck Hawk
perched in a tree a third of a mile away.

The finest sight I have ever witnessed in the avian world was the
manoeuvering of a pair of Duck Hawks at Grandfather Mountain many years ago.
Alexander Sprunt and I had been watching a straggling flight of migrating Duck
Hawks, apparently two family parties, when we noticed that a pair were engaged
in play. The female was floating along, high over the Linville Valley and
about on a level with out position on the mountain. The male would fly so high
that he seemed but a speck to our natural eyes; then set his wings for a power
dive, heading straight for his mate. As he came to the very point of striking
her, he would swerve, the rush of air from his dive turning her over and over
in the air. Again and again he did it, she seeming to enjoy it as much as he.

From all this, you see that I like hawks. Indeed, I have a passion
for them. I think that in this group of birds you find one of the finest end
products of evolutionary creation.

But there are many people who do not like hawks. Many farmers hate
them. Many sportsmen, though not now so many as formerly, think they are
vermin, and shoot them whenever they have a chance. Their idea is like the
pioneer's idea of Indians; "The only good hawk is a dead hawk." The slaughter
at points along Hawk Mountain, Pennsylvania, and at Cape May, New Jersey, is a
case in point, though much of this is from the mere love of slaughter, for not
only hawks, but flickers and doves and all kinds of small birds are shot in the
general massacre. There is still an occasional county in Virginia that pays
the bounty on hawks, in spite of all the evidence about its uselessness from
any standpoint and about the frauds inevitably connected with the bounty system.
You may remember the article in Virginia Wildlife some years back, "Mutiny on
the Bounty," when some sportsmen were waking up to the absurdity of the bounty
idea.

All scientific biologists, not to say all nature lovers, know that
this hatred of hawks is foolish, that it is not based on sound knowledge, and
that the persecution of hawks and owls is even detrimental to man's interests.
Others are now joining us. For a long time the nature lovers, who wanted to see
this persecution stopped, have been voices crying in the wilderness of ignorance
and prejudice, but now there seem to be at least some ears to hear their cries.

There have been in my memory three stages in the effort to block the
slaughter of these birds of prey. These three stages might be called: the
economic, the scientific, and the aesthetic.

(1) The first stage was the Economic, or Practical, although in the
end, like so many things labelled 'practical,' it was not practical or common-
sense at all.

In that stage, hawks and owls, and indeed all other animals, were
looked on simply as man's possessions. An animal, bird or mammal, was not
thought of as having any rights of its own. It was looked on as existing only
for man's benefit - for his use, or sport, or, if he chose, as something for
him to destroy. If it were worth man's while to wipe out, or assist in wiping
out, a fine creature like the Passenger Pigeon, or an interesting and highly
specialized species like the Great Auk, there was no reason why he should not
do it. To be sure there were 'cranks,' who protested against such an assumption
of divinity on the part of mortal man, but they were called 'zoophiles' or
'sentimentalists' and largely ignored.

Naturally, in such a situation, the only appeal was that of man's
selfish interest, the appeal to his economic interests, or at best to his
fairness when it could be shown him that a particular species did him and his
possessions no damage. And so, the basis for the fight against persecution of
hawks and owls was the study of food habits, by laboratory analysis of stomach
contents and by field observations around nests; thus to show that while some
hawks might be harmful to man's economic interests, others were beneficial to
him.

Surprising things were discovered in this way. Dr. Ellison A. Smyth,
in an article on the birds of Montgomery County, Virginia (Auk, 1912, 516),
told of an experience he had with a farmer and a Broad-winged Hawk. The
farmer had heard Dr. Smyth's defense of some hawks, and finally in high in-
dignation brought in to him a female Broad-winged Hawk which he had just shot.
It had a nest in a large oak near his home. He said that the hawk had been
killing his chickens, and that he had shot it just after it had eaten a chicken.
Dr. Smyth took him and the hawk into the laboratory, opened the hawk's stomach
in the farmer's presence, and showed the man to his astonishment that not only
was there no chicken feather in it but that the crop contained the remains,
easily distinguishable, of a young rat.
This kind of study resulted in the division of hawks into the 'bad' hawks and the 'good' hawks; or rather into three classes, beneficial, neutral, and harmful. The 'harmful' hawks turned out to be particularly the Cooper's and Sharp-shinned, which happen to be the most difficult for the farmer or sportsman to shoot. The rest were shown by this method to be mainly beneficial to man's interests. And in general, by the control of rodents, which do so much damage to man's crops, all of the hawks and owls taken together do man far more good than harm. It has been estimated that a pair of Barn Owls is worth at least $30 a year to a farm.

I remember how, about thirty years ago, the apple growers of the lower Valley were having serious trouble with small mice girdling the roots of apple trees. Experts were called in, only to tell the orchardists that they had brought this plague on themselves by destroying all hawks and, particularly, the little Screech Owls. Men who had previously shot Screech Owls began to put up nest boxes for them.

We do have to acknowledge that on this basis we do not get anywhere for our falcons. They are almost exclusively meat eaters, with a small proportion of insect food. In an analysis of 182 Duck Hawk stomachs (Sprunt, Birds of Prey) from many different places, remains of birds were found in 81, of mammals and insects in 15. Bent lists over 50 kinds of birds taken by Duck Hawks, the most common being jays, flickers, pigeons, meadowlarks and other birds of intermediate size; but as small as warblers and as large as mallards, herons and pheasants.

But as P.A. Taverner (Birds of Canada) has remarked, turning from the purely practical aspect: "There should be enough game in the country to support so picturesque a character without arousing the jealousy of other hunters."

(2) The second stage in the battle against the persecution of birds of prey was the Scientific.

It might be called the Ecological stage, for it was an effort not simply to study the hawk in relation to man, but in relation to the whole natural environment in which it lived. This is certainly more truly 'practical' than the barely practical first stage.

From this viewpoint there are no 'good' hawks or 'bad' hawks; there are only natural hawks. Predation is a perfectly natural part of the system of life. From a 'small bird's eye view' any hawk is bad. But from a 'worm's eye view', a Robin is the most vicious creature imaginable; and the more of them the hawk catches the better the worm should like it.

Predation is not only natural, but is necessary. The research of this scientific period began to show several things in succession:

(a) Predation is not always harmful to the species preyed upon, but is often beneficial. It may be harmful to the individual bird indeed, but at the same time helpful to the species. It is necessary for Nature to keep every species 'on its toes.' If there were no struggle for existence in Nature, there would be no advancement in Nature. It is only in the case of man, where (we hope) intelligence plays a part, that there can be any loosening of this law; and even there it is dangerous.
If in Nature there were, for example, no natural checks on the Bob-white, unfit individuals would reproduce their kind, with a consequent degeneration of the stock. It seems likely that predators take chiefly the slow, the weak, and the sickly Bob-whites, leaving the stronger individuals to carry on the race. We have learned that a species can stand a reasonable amount of predation, whether from natural enemies, like hawks, owls, foxes, weasels, or even from unnatural enemies like man, supported as he is by automobiles and high-powered weapons.

(b) This scientific research developed the concept of the Balance of Nature, or the Web of Life.

We can overdo the concept of the balance of nature, if by it we mean letting Nature entirely alone. Since man has come into the picture, there is no longer any Balance of Nature, with which there should be no interference. From now on we have to do the best we can in a confused situation, interfering as little as possible, and only where we have reason to think our interference is in accord with Nature's trends. For instance, there is no use in killing off the Screech Owls, and then being over-run with a plague of mice; or of killing off coyotes, and having a plague of jack rabbits; or of killing off all mountain lions and in consequence ruining the Kaibab Forest with too many deer.

In turn, we have learned that predation is only one and by no means the chief factor in the welfare of a species. The limitations on the numbers of a species are ecological, predation being only one of the elements. The relation between the number of quail on a farm this spring and the numbers left next spring, is dependent upon food and water and cover. A farm will have as many quail as it has food to support them and cover to protect them.

Now, with this better understanding of the unity of all living things, plant and animal and human, there is coming a new sense of our own place in this 'web of life.'

(3) And so we are entering a third stage, not only in our attitude toward the birds of prey, but toward the conservation of all nature. This stage is the Aesthetic, or Comprehensive.

(a) It means, for one thing, the realization that the general public has its concern for and its rights in the outdoor world and its use, along with farmer and sportsman, along with the commercial interests of mining and grazing and lumbering.

The boy with his pole, as he fishes the stream, needs to hear the Kingfisher's rattle and to see its flash of blue, entirely apart from the scientific fact that the Kingfisher's damage to fish is a small matter. Visitors from the cities to our beaches have the right to watch the parade over the surf of the Brown Pelicans and the file of Cormorants on the pilings, even if they do take some fish. The wild hoot of the Great Horned Owl in the dark woods is worth an occasional hen. And most of all, the pageant of the Peregrine in the sky justifies his meal of ducks or flickers.

(b) It means, for another thing, that the social sanity of our modern life depends upon a good measure of Nature in our schedule. Aldo Leopold, in the first sentence in A Sand County Almanac, says that "There are some of us
who can live without wild things, and some who cannot." I take it that the reason you are members of the VSO is that you are one of the 'cannots.' "For us of the minority," writes Leopold, "the opportunity to see geese is more important than television and the chance to find a pasqueflower is a right as inalienable as free speech." More people need to join that minority, if our nation's life is to be sound.

You have but to visit one of our National Parks, particularly in the West, to know that there are people in increasing numbers in our land who feel the need of a direct contact with Nature. That intangible but very real value is at the heart of our conservation efforts. I have not in a long time been so proud of America as when I read in Wild America what Roger Peterson's companion on their circum-continental trip, James Fisher, the English biologist, said about the wonder and the wisdom of our National Park system. Not only for these parks and others which need to be set aside, but for every bit of wild America around each town and village we must be ready to labor and to fight.

America is no longer a pioneer nation, where all of us stand on the ground and can look out into the woods. Too many of us now stand only on the concrete, and it gives our spirits fallen arches. Too many of us look out only on steel and brick and mortar, and the eyes of our minds grow dull. There is danger that we shall become increasingly more shrewd and increasingly less wise.

There are curses as well as blessings in civilization. The contact with Nature is one of the things that will restrain those curses. It is not only a tragic thing to wipe out a species of wild bird or mammal that has been a hundred million years in the making; to cut back all our forests to a dull uniformity of second-growth; to squander our natural resources of soil and water; it is not only a tragic thing but it is suicidal for us to brush aside all simple, natural things and become but urban tenants, who do not truly own the ground on which they live because they never see or know the life it creates.

I have talked about the Peregrine. I have, of course, been thinking of him as a plain, real and wonderful fact in our Wild America. But as much I have been thinking of him as a Symbol. In his grace and power, in his skill, he is the symbol of all that is beautiful and exciting in the world around us.

He is the Symbol of Wild America, elemental and untamed, symbol of the delight in beauty, symbol of the freedom to which we must hold, if life is to continue to have in it any simplicity and any zest.

He is the Symbol, not of God's final and finest gifts indeed, for those lie in the realm of personal relationships, human and divine; but Symbol of God's first and simplest gifts, the Nature from which we have come, and to which, if all our hope of advancement in intelligence and in spirituality are to be realized, we must continue to hold fast.

(This talk was delivered at the Annual Meeting of the Virginia Society of Ornithology at Wachapreague, Virginia, on May 3, 1957. It is reproduced here in the informal style in which it was given.)
The Raven
BULLETIN OF THE VIRGINIA SOCIETY OF ORNITHOLOGY

J. J. Murray, Editor
LEXINGTON, VA.

VOL. XXVIII  NOVEMBER-DECEMBER, 1957  NOS. 11 & 12

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Change of Address for the Editor (after January 1):
J. J. Murray, 109 East Broadway, Louisville 2,
Kentucky. Manuscripts should be sent there.
THE 1957 AUGUST FIELD TRIP TO CHINCOTEAGUE REFUGE

By James W. Eike

The summer field trip of the Virginia Society of Ornithology took place on August 24, 1957, with headquarters at the ever-delightful Wachapreague Hotel. The majority of the group of some 20 members and friends assembled at the hotel the evening of August 23 to enjoy the tremendous dinner, the evening of fellowship, and the view of the marshes from the third floor verandah.

On Saturday morning, after breakfast at the hotel - no one would pass that up even if he missed some birds - the group drove to the Chincoteague National Wildlife Refuge headquarters on Piney Island (an offshoot of Chincoteague Island). Near the headquarters we received what to many constituted the first big thrill of the trip - eight Cattle Egrets close-up. We were able to approach within perhaps 40 feet of the Egrets by using a great clump of stumps and fallen trees as a screen. Several of the birds feeding in and out between the feet and around the heads of the Brahma cattle were in fine plumage. One bird closely accompanying a massive bull had particularly showy plumes. Another Egret was seen later on the Refuge.

Although the Refuge Manager, Mr. Valentine, was away on a trip he had arranged to make us welcome and to have us transported to and from the Refuge on Assateague Island. The weather was excellent, not too warm and a brisk NNE wind discouraged the mosquitoes almost completely. We found that a good rain on the preceding Monday has restored water to what had been dry impoundments and provided fine feeding areas for the birds. One impoundment which did contain salt water provided another highlight, a flock of 90 (of 120 seen for the day) Black Terns in all plumage phases coursing gracefully against the wind, repeatedly dipping to the water for food.

The group was also pleased to see a total of 32 Stilt Sandpipers. This to many was a new bird, and was certainly uncommon for all. At one impoundment we were able to observe some of these birds in a mixed flock of shore birds within 30-50 feet of our stand on a dike. This particular spot had Stilts, Ringed Plovers, Semi-palmed Sandpipers, Least Sandpipers, a Solitary Sandpiper, a Spotted Sandpiper, Lesser Yellowlegs, and a Northern Water Thrush in close company, with the Water Thrush making several vigorous sallies after shore birds.

Few ducks were expected at this date, so the 57 Pintails seen were a surprise. Only four other species of ducks were seen.

After a sandwich lunch on the dunes, some of the hardier members had an invigorating swim in the Atlantic surf. With teeth chattering violently, and with purple lips, they described it as "w-w-wonderfull!"

The party returned to the Wachapreague Hotel in time for dinner and a review of the day's activities. The following morning, in intermittent rain, about half of the group visited the Kiptopeke area. Here the Western Kingbird was added, as were 3 Great Black-backed Gulls, 1 Wilson's Plover, and 4 very early Myrtle Warblers. Eight Osprey's were seen in a single group.
As always on V.S.O. trips, there were many small pictures to add to the interest and to be remembered with pleasure: the Yellow-throated Warbler seen at eye-level 20 feet from the third floor verandah, in a tree top; the colorful Portuguese Man-O-War on the beach; hundreds of immature toads along the Refuge road, ranging from 3/4 inch to 1-1/2 inch in length; the large Hognosed Snake crossing the road, barely clearing the jeep; the Chincoteague ponies, still free and wild; and the lovely clump of Cardinal Flowers (Lobelia Cardinalis, Mr. Steirly!), vivid against a dark green shrub background.

Fifty-three species of birds were seen on the Refuge. The writer is grateful to F.R. Scott of Richmond for his carefully-kept counts of birds seen. The list is as follows:

American Egret, 15; Snowy Egret, 20; Cattle Egret, 1; Yellow-crowned Night Heron, 1; Black Duck, 55; Gadwall, 1; Pintail, 57; Green-winged Teal, 6; Blue-winged Teal, 10; Turkey Vulture, 3; Osprey, 3; Pigeon Hawk, 1; Sparrow Hawk, 2; Oystercatcher, 3; Piping Plover, 1; Ringed Plover, 40; Black-bellied Plover, 2; Ruddy Turnstone, 12; Hudsonian Curlew, 30; Spotted Sandpiper, 2; Solitary Sandpiper, 1; Willet, 3; Greater Yellowlegs, 3; Lesser Yellowlegs, 35; Knot, 25; Pectoral Sandpiper, 7; Least Sandpiper, 55; Eastern Dowitcher, 4; Stilt Sandpiper, 32; Semipalamed Sandpiper, 80; Sanderling, 800 (est.); Herring Gull, 107; Ring-billed Gull, 60; Laughing Gull, 50; Gull-billed Tern, 2; Forster's Tern, 8; Common Tern, 110; Least Tern, 3; Caspian Tern, 13; Black Tern, 120; Black Skimmer, 18; Mourning Dove, 1; Kingfisher, 1; Horned Lark, 1; Barn Swallow, 10; Crow, 2; Pine Warbler, 2; Northern Water-thrush, 1; Meadowlark, 15; Goldfinch, 1; Eastern Kingbird, 2; Crested Flycatcher, 1; Wood Peewee, 1.

Falls Church, Virginia

GREATER SHEARWATER ON CHINCO TEGUE REFUGE

By Philip A. DuMont

While the Audubon Society of the District of Columbia was on Chincoteague National Wildlife Refuge for its field trip on August 10, 1957, studying bird and marine life along the dune and shore areas, a bird specimen was found nearly covered with sand. Its size, about that of a Laughing Gull, hooked bill, light gray rump and underparts, indicated a Greater Shearwater. Although the bird might have been dead for a week or more, the head was saved by me and forwarded to Dr. John W. Aldrich, Chief, Section Distribution of Birds and Mammals, U.S. Fish and Wildlife Service, who confirmed its identification as a Greater Shearwater, probably the third record for Virginia.

Washington, D.C.
HAWK MOUNTAIN FORAY

By Perry F. Kendig

Having a few days vacation left, we decided on a long week-end in October, with a day on Hawk Mountain as the main event. Since birds were to be one of the chief interests of this trip, we decided to keep a trip record, day by day, of what we observed.

When Mrs. Kendig and I left Salem on Friday morning, October 18, 1957, the weather was fair, warm, and calm. We drove to Lancaster, Pennsylvania, arriving in time for a late dinner. Above Staunton the sky was overcast, and from Gettysburg on we had rain. On this day of travel, we saw the following species: Turkey Vulture, Black Vulture, Rock Dove, Blue Jay, Crow, Mockingbird, Bluebird, Loggerhead Shrike, Starling, English Sparrow, Eastern Meadowlark, Purple Grackle, Cardinal, and Song Sparrow (14 species).

On Saturday, October 19, we did no birding as such, but drove about in Lancaster County, including a drive of four or five miles along the east bank of the Susquehanna River, south of Columbia. Yet even on this day a few new species were observed: Sparrow Hawk, Herring Gull, Robin, Red-wing Blackbird (4 species). The weather on this day was still overcast, with heavy atmosphere and occasional rain.

Sunday, October 20, was to be the big day. We fervently hoped for a break in the weather during the night, and the final radio reports were encouraging. What the hawks and we wanted was a new front with clearing skies and a brisk wind.

Perhaps this is the time for a brief digression on Hawk Mountain, and the importance of the weather factor there. Hawk Mountain Sanctuary is a 1400 acre tract near Hamburg, in east central Pennsylvania. It is owned and maintained and operated by the Hawk Mountain Sanctuary Association, a non-profit corporation, of which Mrs. Rosalie Edge of New York is founder and still president. Hawk Mountain itself is a rocky spur of the Kittatinny Ridge of the Blue Ridge Mountains of Pennsylvania. It is about 1000 feet above the normal terrain, and from its summit one has an imposing view of the surrounding ridges and valleys with the Schuylkill River winding like a silver ribbon far beneath to the northwest and still further to the northwest the main mass of the Blue Ridge. The rocky knob itself is a wonderful vantage point from which to observe hawks (and other birds) flying southward on the flyway - when the weather is right.

The weather is right when the sky is clear and there is a good brisk breeze blowing from the northwest. The ideal day occurs when a new front moves in after a spell of heavy, wet weather. The front moved in during the night of October 19-20, and our hopes were high as we drove the 50 miles from Lancaster to the Sanctuary that bright, breezy Sunday morning.
When we arrived at the gate to the Sanctuary, Mr. Nagy, the assistant curator, greeted us with, "Well, strangers, you surely picked the right day. They're really moving up there." My reply was, "I'm mighty glad they are. We've come a long way to watch them!" After a hard twenty-minute climb, we reached the observation site, and greeted old friends from the Lehigh Valley Bird Club and Curator Maurice Broun, the "Hawk Man of Hawk Mountain," as Roger Tory Peterson calls him. Said he, "You must be good luck; this is the first good week-end flying day we've had all season. Pick yourself a soft rock and get settled. We're going to have some action in the next hour or so."

This prophecy was amply borne out. We got settled on the pinnacle about 11:00 a.m., and by 11:40 we had seen 9 different species of hawks, some species in great numbers. This is more different kinds of predators than many conscientious bird students see in a year. In these forty minutes we identified Turkey Vulture, Goshawk, Sharp-shinned Hawk, Cooper's Hawk, Red-tailed Hawk, Red-shouldered Hawk, Marsh Hawk, Osprey, and Pigeon Hawk. After the rush was over and the noon-time lull had set in, there was one final climactic thrill: a great Golden Eagle went over high and fast, riding the cold upper air currents on rigid wings - one of the freest, wildest sights in birdom.

After this we wended our way back to the highway and then on to Bethlehem, picking up several species in the hemlock forest and around "Schroumboch's," the curator's interesting old house, which dates from Revolutionary times. On this wonderful Sunday the following species were added to the trip list: Mallard, Black Duck, Bald Pate, Green-winged Teal, Goshawk, Sharp-shinned Hawk, Cooper's Hawk, Red-tailed Hawk, Red-shouldered Hawk, Golden Eagle, Marsh Hawk, Osprey, Pigeon Hawk, Killdeer, Mourning Dove, Downy Woodpecker, Black-capped Chickadee, Tufted Titmouse, White-breasted Nuthatch, Golden-crowned Kinglet, Ruby-crowned Kinglet, Cowbird, Pine Siskin, and White-throated Sparrow (24 species).

Monday, October 21, took us from Lancaster to Harrisonburg, Virginia, via Hershey, Harrisburg, and Chambersburg. We recorded only a very few new species on this day of travel: Pintail, Lesser Yellowlegs (2 species).

We arrived home in Salem just before noon on Tuesday, October 22, and on that day recorded Kingfisher, Carolina Chickadee, and Gold Finch (3 species).

We had been gone three and one-half days. We had driven 884 miles. We had seen many relatives and old friends. We had identified 47 different species of birds. We had by pure luck and good fortune been on the Hawk Mountain Pinnacle on the best day of the season. All in all, a memorable and wonderful week-end.

- Salem, Virginia
BREWER'S BLACKBIRDS AND NESTING BEWICK'S WRENS AT FAIRFAX

By Fred M. Packard

On May 2, my mother, Mrs. Pauline Packard, told me she had seen a strange blackbird at her feeder, different than the cowbirds and grackles regularly occurring there. Two days later we saw two male Brewer's Blackbirds there. Both remained about a week, and one was seen again with some Grackles in mid-June. I know the species well from my experience in the West, and conditions were ideal for observation.

Mother also reported she saw a wren in the ivy on her home on June 28 which proved to be a Bewick's Wren. It was seen briefly about the ivy from time to time and I heard it singing beside the house well into July. We assumed it was seeking insects there until a house guest described an adult feeding a young bird on the windowsill. Mother finally discovered the nest on another windowledge, completely concealed in the ivy. The secretive behavior contrasted with the open activity of the House Wrens which built a nest ten feet away on a shelf under the porch eaves, and with that of the Carolina Wrens which frequent the property. After the House Wrens had reared their young, the Bewick's Wren built a story of twigs on top of their nest. Its true nest was of finer materials for the most part, and had a deep cup of grasses. This nest has been sent to the U.S. National Museum. So far as I can determine, the only previous record of nesting in this vicinity is of a pair at Arlington in 1956.

These records were obtained at 22 Elizabeth Lane, two miles east of Fairfax on Route 236.

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EARLY EVENING GROSBEAKS AT CHARLOTTESVILLE

By George S. Hamm

We had a fall record of Evening Grosbeaks in Charlottesville which is nearly two weeks earlier than any record in the 1952 Virginia check-list.

On the afternoon of October 22, 1957 at about 1:00 P.M. I was working on the back wooded end of my lot, which joins the city park and golf course. It was a beautiful cloudless and windless day, with the temperature near 70°F. I was scraping flower beds. I was working under a dogwood tree. Dogwood berries and hulls were raining down on me, but I paid no particular attention as I could hear Cardinals calling nearby. I filled my buckets and was about to leave when I heard a bird call so unfamiliar to me that I immediately dropped the buckets and looked up. Not fifteen feet above me I observed five Evening Grosbeaks, two males and three females, eating dogwood berries. I observed them from a distance of only a few feet for some time. I was quite familiar with this species, as I had watched a flock of them around the Charlottesville parks in 1952 from March until April. Finally I
went on with my work, and although I made several noisy trips back and forth beneath the tree, the Grosbeaks went on eating with no concern at all for me. About thirty minutes later they flew into a sumac tree on my back lawn, and a few minutes later departed.

- 1117 Park Street
  Charlottesville, Virginia

(Mrs. Norman C. Scott of Clifton Forge, reports 6 Evening Grosbeaks in her yard on October 30, Editor.)

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PORTSMOUTH A BIRD SANCTUARY

In March, 1957, the City of Portsmouth, Virginia, was officially designated a bird sanctuary by action of City Council. This action was brought about by the efforts of the Portsmouth-Norfolk County Council of Garden Clubs and Mrs. J.E. Blick, a V.S.O. member. Appropriate signs, designed by the City Planning Commission, have been erected on the same post with the corporate limit signs on the main highway approaches to the city. These signs were purchased by the garden clubs and put in place by the city.

Portsmouth thus becomes the first city in the state to become a bird sanctuary. At least two towns have taken this action previously: Abingdon and Chase City. The practical effect of the bird sanctuary ordinance is that the city by this means enlists its local police forces for the protection of birds protected by the Migratory Bird Treaty Act.

- Paul S. Dulaney

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NEWS OF THE LOCAL CHAPTERS

By Fred R. Scott

The members of the Richmond Natural History Society recently elected the following new officers for the year:

President, Miss Mary Tompkins
Vice President, Miss Cleo Allen
Treasurer, Miss Henrietta Weidenfeld
Recording Secretary, Mrs. Benjamin Davis
Corresponding Secretary, Mrs. E.A. Marks, Jr.

Members-at-large of the Executive Committee:

Walter T. Bruce, Jr.
John S. Haw, Jr.
E. A. Marks
Fred Peters
Warren M. Smith

The Society plans an enlarged and varied program this year including at least one indoor program and one field trip per month. The highlight of the year will be three Audubon Screen Tours, the first time an entire series of these has been held in Richmond. The programs are as follows:


"Puerto Rico, U.S.A.," by Fran William Hall, April 1.

All programs will be held at Mary Munford School at 8 p.m. Tickets are $1.25 for adults and 75¢ for students and are on sale at Miller and Rhoads. Season tickets are also available for $3.00.

The current paid-up membership of the Society is 59, and it is expected that the Audubon Screen Tours will cause this number to increase somewhat.
### Stated Meetings of the Virginia Society of Ornithology

Organizational Meeting: Lynchburg December 7, 1929

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(Compiled by Fred R. Scott)
OFFICERS OF THE VIRGINIA SOCIETY OF ORNITHOLOGY

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<th>President</th>
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(Compiled by Fred R. Scott)

*** No elections were held from 1942 to 1945, inclusive.

Note: J.J. Murray was elected to the Editorship of The Raven at the organizational meeting on December 7, 1929. Since that time he has been appointed to that office by the Executive Committee.
VIRGINIA NOTES

Next Annual V.S.O. Meeting:

The next Annual V.S.O. Meeting will be held at Blacksburg. The date has not yet been set.

Hawk Counts:

The only fall hawk counts reported are from Max Carpenter. They are as follows:

Reddish Knob, September 15, 1:30 P.M. to 3:30: Broad-winged Hawk, 29; Marsh Hawk, 2. Total, 31.

Reddish Knob, September 21, 9 A.M. to 4 P.M.: Sharp-shinned Hawk, 2; Cooper's Hawk, 4; Red-tailed Hawk, 2; Broad-winged Hawk, 657; Bald Eagle, 1; Sparrow Hawk, 1; unidentified, 5. Total, 674.

High Knob, September 22, 8:30 A.M. to 4:30 P.M.: Cooper's Hawk, 1; Red-tailed Hawk, 1; Broad-winged Hawk, 171; Bald Eagle, 4; Sparrow Hawk, 1; unidentified, 8. Total, 187.

Reddish Knob, September 28, 10 A.M. to 3:30 P.M.: Red-tailed Hawk, 1; Broad-winged Hawk, 8; Osprey, 1. Total, 10.

Red-headed Woodpecker:

Jimmy Dearing reported two broods at Warwick this year; and Walter P. Smith reported a brood in the Boulevard area in Hampton.

Summer Tanaper:

Mrs. L.W. Machen saw young in a nest at Vesuvius, Rockbridge County, July 13, 1957.

The Editor, having resigned his church at Lexington and having accepted an interim appointment on the faculty of the Louisville Presbyterian Theological Seminary for some eighteen months, is moving temporarily to Louisville, Kentucky. He will still act as Editor of The Raven. Correspondence should be directed to the address noted on the front cover.
THE WARBLERS OF AMERICA: A REVIEW

By J. J. Murray

The long-awaited warbler book is a sumptuous volume. It is edited by Ludlow Griscom and Alexander Sprunt, illustrated with 33 color plates and black and white drawings by John Henry Dick, and published by the Devin-Adair Company. It is beautifully printed and bound. The price is $15.00 (from the Devin-Adair Company, 23 East 26th Street, New York 10, New York).

Naturally, a book of this kind will be judged primarily by its color plates. In them John Henry Dick has done beautiful work. The poses of the birds are good. There is a fine balance in the planning of the plates. For example, plate 9, with the Olive and Grace's Warblers repeats the ochraceous tone of the Olive Warbler's head to good effect in the background. He has shown a marked development in his treatment of backgrounds. This is particularly good in the plate of the Yellowthroats. The colors in the original plates, as exhibited at the Cape May Meeting of the A.O.U. are even better than would be judged from some of the reproductions. Plate 29, with the Red-faced Warbler and the Painted Redstarts is a strikingly beautiful piece of work.

In this book the artist has carried out a monumental task. In thirty-three plates he has presented all the species of the warbler family, covering the whole Western Hemisphere. In this completeness of presentation the book has a great advantage over Chapman's classic monograph on the North American species. The artist has done an immense amount of field work in preparation for this undertaking. He was privileged to sketch from life such rare species as Bachman's Warbler and the Colima Warbler. To this reviewer the plates depicting the Central and South American species were of special interest. It was necessary to crowd the figures on these plates, but the results are nevertheless good.

The plates are in the main well reproduced, although there are some unfortunate infusions of wrong colors. For example, in plate 19 the immature Black-throated Green Warbler has a band of reddish around the yellow on the face, while the adult male shows a touch of it on the back. Too often the yellows are suffused with brown. This is most noticeable in the Yellowthroats, but also in the female Yellow Warbler and in the Prairie Warbler. In general, however, the plates are beautifully done.

Of the nineteen chapters seven are introductory, the most useful being "An Introduction to the Warbler Family," by Alexander Skutch and the chapter by Griscom on "The Classification of Warblers." Chapter 8 occupies well over half of the book, 205 pages out of 356. It lists the 60 warblers, including three hybrids, breeding in the United States and Canada. Considering the much greater amount of knowledge about these North American species and the fact that the overwhelming proportion of bird students live in the area inhabited by them, it is quite natural that these birds should have been given this preponderance of space. Each species is given a subchapter on habitat, range, habits, etc. Within the limits of space permitted they are skilfully done. Indeed, this reviewer found these sketches so attractive that he could wish them to be double or triple their length.
Bent's volume on the warblers must be used to fill in the details. These sub-chapters are written by various ornithologists, sometimes two or more sharing in the writing of a sketch. Alexander Sprunt has written or shared in half of them.

The last eleven chapters are on special areas: Mexico, the West Indies, Central America, Panama, South America, Alaska, and several chapters on Canada. The point of the Canada chapters in a work of this size is not clear, as there is no more distinction to be drawn from these birds between Canadian and United States territory than between northern and southern United States. It would seem more useful to have had a specialized chapter on the Southwestern States, and possibly one discussing the differences in regard to warblers between the eastern and western parts of the continent, with Canada and the United States considered together.

The chapters on the warblers that spend their lives south of the Rio Grande are of great interest. Here space could have been saved by treating migrant North American warblers in southern latitudes in one chapter instead of spreading this material through five chapters. Perhaps a certain amount of repetition and scattering of material is unavoidable in a book with so many collaborators. The plates of resident warblers of Central and South America are most helpful. They are necessary if the reader is to get a picture of the warbler family as a whole. Then, too, they provide an introduction to these birds for many who in days of easy travel may get a chance to see the birds of Mexico or Haiti or other hitherto inaccessible places.

All in all, *The Warblers of America* is a handsome book. It fills a real need and will long be a treasure to those who are attracted by the lovely members of this avian family.

- Lexington, Virginia

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**THE A. O. U. CHECK-LIST: A REVIEW**

By J. J. Murray


The A. O. U. Check-List is a required reference work for all serious bird students. This edition, first issued in September at the Cape May Meeting of the A. O. U., lists all North American species and subspecies of birds accepted by the A. O. U. Committee on Classification and Nomenclature. "North America," by the definition of the A. O. U., includes the continent north of the Rio Grande, also by traditional usage Baja California. It gives
presently recognized classification and scientific names. A radical and very sensible change in the presentation of subspecies has been adopted in this edition. The species name is the group heading. Under the species name is given the total range of the species. The names of the various subspecies follow in smaller type, and with each name its more localized range. Only the species is given a common name.

This is the fifth edition of the Check-List, previous editions having been issued in 1886, 1895, 1910, 1931. This is probably the most extensive and certainly the largest revision of the series. The growth of ornithological knowledge in the United States is indicated by the more carefully detailed ranges and by the increased number of subspecies in this edition. "The fourth edition covered 1,420 species and subspecies, while in the present work the number has grown to 1,686." There is an appendix with a short Hypothetical List.

- Lexington, Virginia
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