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	CONTENTS		
Mb 2050 2060 Obmid	Di-1 Ct i-	. 173	Page
The 1959-1960 Christ By F.R. Scott	tmas Bird Counts 11		2
Virginia Christmas E Chincoteague Chesapeake Bay Little Creek Back Bay Norfolk County Nansemond River Newport News Hog Island State Hopewell Fort Belvoir Brooke Charlottesville		Warren Big Flat Mon Harrisonburg Rockingham (Middle Mount Highland Lexington Sweet Briar Lynchgurg Roanoke Blacksburg Glade Spring	untain g County tain, County
A New Bird for Virgi	inia, by F.R. Scott	*********	18
Records of the Blue By G.M. Shear	***************************************		
Evening Grosbeak Fee By C.C. Steirly			19
Snow Buntings in Lyn	achburg, by J.L. Ch	amberlain .	19
Snowy Owl in Roanoke	e, by A.O. English	•••••	20
Plans for Annual Mee	eting of the VSO .		20
News and Notes	• • • • • • • • • • • • • • • • • • • •	************	21
VSO Treasurer's Repo	rt	******	22

THE 1959-1960 CHRISTMAS BIRD COUNTS IN VIRGINIA

SUMMARY

By F. R. Scott

This was one of the best seasons for Christmas bird counts in Virginia. There were only 23 counts in all, as compared to a peak of 26 in 1954-1955, but more and more participants are beginning to make the count a serious census of the bird life of their area and not just a pleasant day's outing. A full 176 different individuals participated this year, although their names appear 217 times since many helped in two or more counts. In addition to the counts printed here, the Washington, D.C., count, which takes in large parts of Arlington and Alexandria, will be printed in the Atlantic Naturalist and Audubon Field Notes.

The total species count was 179, close to a record for any count season. This is particularly noteworthy because of poor weather reported by many of the counts. Five count areas reported over 100 species (as in the 1957-1958 season), with Back Bay as usual taking the laurels with 118 species, somewhat less than their all-time record of 127 on December 28, 1957. Although extreme southeastern Virginia had the best over-all coverage, with 7 counts between Surry County and Chesapeake Bay, the best coverage of an individual count was Fort Belvoir, with 39 observers in 15 parties for a total of 109 party-hours of observation, an all-time record for the state. This count makes very interesting reading; for example, in spite of fog and rain all day, the observers listed such totals as 24 Pileated and 120 Red-bellied Woodpeckers.

Six species recorded during the current count period have apparently never been listed previously on a Christmas count in Virginia. These were Glossy Ibis at Chincoteague, Black Rail in Norfolk County, Glaucous Gull at Chincoteague, Western Kingbird at Back Bay, Solitary Vireo in Norfolk County, and Prothonotary Warbler at Newport News.

The chief value of Christmas counts is to show the variation of the common birds in an area over the years and to show trends in bird distribution and abundance that might not be noticed for a number of years. Weather plays a fundamental part in this variation as well as in the appearance of unusual birds. After a slightly cool November, December was far warmer than normal with little or no snow and ice east of the high mountains. As a result, the fall migration of many birds was extended well into the count period, resulting in, or contributing to, higher numbers than usual of many species which would normally winter farther south. In this respect note particularly the 421 Gannets in Chesapeake Bay, a number more usual in migration, not midwinter, and the excellent counts of Yellow-shafted Flickers in many counts, especially in southeastern Virginia. Important as it is, however, weather does not appear to be a particularly important factor in long-term trends, and we thus had an unusual number of some northern species in spite of the warm weather. A number of the trends and individual records of interest are discussed below.

Herons. As usual in a warm winter, there were good counts of wintering herons and egrets near the coast. Aside from the Glossy Ibises at Chincoteague, the most interesting other records were Snowy Egrets at Little Creek, Louisiana Herons at Chincoteague, and Yellow-crowned Night Herons at Little Creek and Nansemond River. The total absence of records of the Black-crowned Night Heron was curious, although the bird is notoriously unpredictable.

Waterfowl. Away from the immediate coast, Whistling Swans were reported at Fort Belvoir (1), Hog Island (4), and Brooke (185). For the second winter in a row apparently feral Mute Swans were recorded at Chincoteague. There were 26 Snow Geese at Hopewell along with the usual flock of Blue Geese, and single Blue Geese were reported at Warren and Lexington. Ducks in general were in poor numbers, especially the diving ducks. One Blue-winged Teal was found at Charlottesville. And what has happened to the Redheads? The only Tidewater record was one bird at Hopewell.

Birds of Prey. A Goshawk at Brooke was apparently only our second Christmas count record. There appeared to be more than the usual number of Red-tailed Hawks in eastern Virginia as compared to the number of Red-shouldered Hawks, the latter normally being the more common. Records of Rough-legged Hawks have been piling up in recent years, and there were reports this season from Back Bay, Chincoteague, and Warren. Similarly, Pigeon Hawks, which normally winter farther south, were found on four eastern counts, with 3 birds at Newport News. An Osprey at Little Creek was unusual. Perhaps the warm weather influenced the Pigeon Hawks and Osprey to remain farther north than usual, but this certainly would not have encouraged the Rough-legged Hawks to come farther south! This was a good season for owls, the most interesting being a Saw-whet Owl at Back Bay. There were no Peregrine Falcons reported during this Christmas count period.

Game and Marsh Birds. The "Iranian Black-necked Pheasants" recorded at Hog Island are only intraspecific strains of our well-known (but as yet nonferal in Virginia) Ring-necked Pheasant, although it seems desirable to use the former name to avoid confusion. These birds were introduced in 1958 and 1959 by the Virginia Commission of Game and Inland Fisheries and may become feral. Soras and Common Gallinules continue to be recorded in winter in southeastern Virginia in small numbers. Oddly, there were no reports of Virginia Rails.

Shorebirds. It was an excellent season for wintering shorebirds, with all the usual ones reported except for Least and Western Sandpipers. Among the interesting ones were 3 American Oystercatchers, 35 Ruddy Turnstones, 10 Knots, and 4 dowitchers at Chincoteague, 1 turnstone at Newport News, and Piping Plover, Semipalmated Plover, and turnstone at Nansemond River. The Purple Sandpiper, regularly recorded at Little Creek, was this year also found on the Nansemond River count, probably in southern Hampton Roads.

Gulls and Terns. Great Black-backed Gulls, which have been slowly increasing on coastal Virginia in recent years, showed a big jump this winter with most coastal counts having high numbers. Single birds were even found inland as far as Brooke and Hopewell. The highest count was 187 at Nansemond River, perhaps an all-time high count for Virginia. A real winter rarity was

the Common Tern, with 3 each at Fort Belvoir and Nansemond River. Royal Terns were found again this year at Little Creek, Back Bay, and Newport News, and a flock of 25 Black Skimmers was seen at Nansemond River.

Red-headed Woodpecker. This was the second successive banner year for this bird, with 13 out of 22 land counts reporting one or more, compared to 11 out of 20 last year. Peak counts were 16 at Brooke and 18 at Charlottes-ville.

Nuthatches, Catbirds, Thrushes. The Red-breasted Nuthatch, a very irregular winter bird, was found on 9 counts. Catbirds and Robins were in very good numbers, with even Charlottesville, Blacksburg, and Glade Spring reporting the former. The best counts were 84 Catbirds at Back Bay and 7000 Robins at Nansemond River. Single Swainson Thrushes were found at Chincoteague and Little Creek. Our only previous count record was at Back Bay two years ago.

Warblers. A Prothonotary Warbler at Newport News is an example of some of the completely inexplicable records that occasionally turn up. Yellow-breasted Chats have been reported in winter with increasing frequency in recent years and were found during this count period at Chincoteague (1), Brooke (1), and Back Bay (4 birds). There were no reports of Orange-crowned Warblers.

Blackbirds and Orioles. The big inland counts of blackbirds reported last year seemed to be reduced or lacking this winter. Of special interest were 3 Brewer's Blackbirds in Norfolk County. The Baltimore Oriole is another species that has been increasing as a wintering bird in recent years. During the count period it was found at Fort Belveir, Little Creek, and Newport News.

Finches and Sparrows. This was a moderate to good season for northern finches. Out of 22 land counts, 8 reported Evening Grosbeaks, 18 reported Purple Finches, and 8 reported Pine Siskins. Evening Grosbeaks, as usual, were least common in southeastern Virginia. Extremely high tides at Chincoteague resulted in good counts of Sharp-tailed (53) and Seaside Sparrows (9) as the birds sought higher ground around the edges of the salt marshes. Curiously, Newport News reported 11 Seaside Sparrows versus only 2 Sharp-tails. Little Creek also listed both species.

- Richmond, Virginia

VIRGINIA CHRISTMAS BIRD COUNTS

1959-1960

Chincoteague National Wildlife Refuge, Va. (all points within a 15-mile-diameter circle centered 2 miles north of center of Chincoteague as in previous 5 years; open farmland 10%, insular pine woodland 10%, mainland pine and mixed woodland 7%, low pine and myrtle 7%, fresh-water marshes and impoundments 15%, salt marshes 27%, sheltered bays 10%, dunes 7%, mud and sand flats 2%, ocean beach 5%). -- Dec. 29; 4:30 a.m. to 5 p.m. Overcast with intermittent heavy fog and rain; temp. 42° to 48°; wind SW to NE to NW, 5-12 m.p.h.; ground bare, water open with extremely high tides. Seventeen observers in 5 parties. Total party-hours, 41 (29 on foot, 7 by car, 5 by motorboat); total party-miles, 148 (21 on foot, 110 by car, 17 by boat). Common Loon, 15; Red-throated Loon, 2; Red-necked Grebe, 1; Horned Grebe, 54; Pied-billed Grebe, 7; Great Blue Heron, 36; Little Blue Heron, 1; Common Egret, 4; Louisiana Heron, 3; Am. Bittern, 2; Glossy Ibis, 3 (E.G.D., P.A.D., L.C.G., F.R.S., et al.); Mute Swan, 4 (second year in area - E.G.D., G.M.M., et al.); Whistling Swan, 129; Canada Goose, 196; Brant, 12,000; Snow Goose, 822; Mallard, 340; Black Duck, 3700; Gadwall, 115; Pintail, 625; Green-winged Teal, 1000; Am. Widgeon, 3700; Shoveler, 234; Ring-necked Duck, 1; Canvasback, 7; Common Goldeneye, 53; Bufflehead, 44; Oldsquaw, 6; White-winged Scoter, 11; Surf Scoter, 186; Common Scoter, 35; Ruddy Duck, 3; Hooded Merganser, 23; Red-breasted Merganser, 62; Turkey Vulture, 5; Sharp-shinned Hawk, 1; Red-tailed Hawk, 3; Red-shouldered Hawk, 2; Rough-legged Hawk, 2; Marsh Hawk, 15; Pigeon Hawk, 1 (E.G.D., G.M.M.); Sparrow Hawk, 7; Bobwhite, 3; Clapper Rail, 27; Am. Coot, 115; Am. Oystercatcher, 3 (reported by 2 parties - J.M.A., L.C.G., R.L.P.); Killdeer, 1; Black-bellied Plover, 82; Ruddy Turnstone, 35 (reported by 3 parties); Am. Woodcock, 1; Common Snipe, 23; Greater Yellowlegs, 27; Lesser Yellowlegs, 1; Knot, 10 (J.M.A., L.C.G.); Dunlin, 880; dowitcher (sp.), 4; Semipalmated Sandpiper, 122; Sanderling, 864; Glaucous Gull, 1 (J.M.A., L.C.G.); Great Black-backed Gull, 92; Herring Gull, 1610; Ring-billed Gull, 80; Bonaparte's Gull, 4; Mourning Dove, 4; Great Horned Owl, 2; Short-eared Owl, 3; Belted Kingfisher, 11; Yellow-shafted Flicker, 88; Red-bellied Woodpecker, 1; Hairy Woodpecker, 2; Downy Woodpecker, 13; Horned Lark, 16; Common Crow, 1400; Fish Crow, 600; Carolina Chickadee, 31; Tufted Titmouse, 4; Red-breasted Nuthatch, 3; Brown-headed Nuthatch, 7; Brown Creeper, 1; Carolina Wren, 31; Long-billed Marsh Wren, 1; Mockingbird, 15; Catbird, 5; Brown Thrasher, 2; Robin, 100; Hermit Thrush, 5; Swainson's Thrush, 1 (M.M.G., G.P.); Eastern Bluebird, 16; Golden-crowned Kinglet, 11; Cedar Waxwing, 47; Starling, 101; Myrtle Warbler, 1738; Pine Warbler, 1; Palm Warbler, 3 (palmarum); Yellowthroat, 2; Yellow-breasted Chat, 1 (H.A.S.); House Sparrow, 98; Eastern Meadowlark, 510; Redwinged Blackbird, 789; Rusty Blackbird, 11; Boat-tailed Grackle, 705; Common Grackle, 183; Cardinal, 53; Evening Grosbeak, 1; Purple Finch, 1; Am. Goldfinch, 29; Rufous-sided Towhee, 39; Ipswich Sparrow, 1; Savannah Sparrow, 68; Sharp-tailed Sparrow, 53; Seaside Sparrow, 9; Slatecolored Junco, 37; Field Sparrow, 82; White-throated Sparrow, 255; Fox Sparrow, 42; Swamp Sparrow, 88; Song Sparrow, 189; Snow Bunting, 13. Total, 118 species; about 34,967 individuals. (Seen in area count period but not on count day: Loggerhead Shrike.) - J.M. Abbott, E.G. Davis, P.A. DuMont, M.M. Gilbert, L.C. Goldman, F.C. Hill, O.D. Justice, Tony Kitzinger, T.W. Martin, G.M. Meade, J.B. Meade, M.C. Newlon, Gertrude Prior, R.L. Pyle, F.R. Scott (compiler), Harriet A. Sutton, H.L. Wessells.

Chesapeake Bay, Va. (a strip census 15 miles long taken from the Little Creek-Kiptopeke Beach ferry just within the mouth of Chesapeake Bay; no closer than 2 miles to land; open water 100%). — Dec. 30; 1:05 to 2:15 p.m. Extremely clear; temp. 50°; wind W, 15 m.p.h.; water surface moderate. One observer. Total party-hours, 1.17 (by boat); total party-miles, 15 (by boat). Common Loon, 1; Red-throated Loon, 1; Horned Grebe, 2; Gannet, 421; Surf Scoter, 9300; Common Scoter, 300; Red-breasted Merganser, 12; Great Black-backed Gull, 1; Herring Gull, 3530; Ring-billed Gull, 50; Bonaparte's Gull, 14. Total, 11 species; about 13,632 individuals. (Most of the Gannets were seen resting on the water about 3 to 6 miles off Ocean View, where most of the Herring and Ring-billed Gulls were also found. Most of the scoters, were, as usual, 2 or 3 miles off Kiptopeke.) — F.R. Scott.

Little Creek, Va. (all points within a 15-mile-diameter circle, center 12 miles NE of Kempsville, including Lynnhaven Inlet, Little Creek, eastern portion of Norfolk City, Stumpy Lake; open farmland 25%, pine woodland 10%, deciduous woodland 50%, salt marsh, sand beach, bay, rivers, 10%, suburbs 5%). - Jan. 2; 5:30 a.m. to 5 p.m. Partly cloudy; temp. 350 to 520; wind NE-SE, O-10 m.p.h.; ground bare and small bodies of water frozen in early morning. Nine observers in 4 parties. Total party-hours, 41 (30.5 on foot, 10.5 by car); total party-miles, 253 (17 on foot, 236 by car). Common Loon, 5; Red-throated Loon, 1; Horned Grebe, 82; Pied-billed Grebe, 30; Gannet, 30; Great Blue Heron, 9; Common Egret, 1; Snowy Egret, 2 (H.A.H. P.W.S.); Little Blue Heron, 1 (F.C.B., J.R.V.); Yellow-crowned Night Heron, 1 (F.C.B., J.R.V.); Canada Goose, 636; Mallard, 52; Black Duck, 57; Am. Widgeon, 24; Wood Duck, 9; Ring-necked Duck, 131; Greater Scaup, 2; Lesser Scaup, 10; Common Goldeneye, 67; Bufflehead, 36; Surf Scoter, 2; Ruddy Duck, 8; Hooded Merganser, 26; Red-breasted Merganser, 42; Turkey Vulture, 4; Black Vulture, 5; Cooper's Hawk, 3; Red-tailed Hawk, 4; Red-shouldered Hawk, 11; Bald Eagle, 5; Marsh Hawk, 4; Osprey, 1 (W.F.R., E.G.W.); Sparrow Hawk, 36; Bobwhite, 70; Clapper Rail, 13; Am. Coot, 30; Killdeer, 82; Common Snipe, 7; Purple Sandpiper, 1; Sanderling, 68; Great Black-backed Gull, 37; Herring Gull, 5980; Ring-billed Gull, 5760; Bonaparte's Gull, 12; Forster's Tern, 20; Royal Tern, 2; Mourning Dove, 292; Screech Owl, 1; Barred Owl, 4; Belted Kingfisher, 11; Yellow-shafted Flicker, 117; Pileated Woodpecker, 11; Red-bellied Woodpecker, 46; Red-headed Woodpecker, 6; Yellow-bellied Sapsucker, 7; Hairy Woodpecker, 8; Downy Woodpecker, 35; Horned Lark, 2; Blue Jay, 13; Common Crow, 329; Fish Crow, 58; Carolina Chickadee, 194; Tufted Titmouse, 70; White-breasted Nuthatch, 6; Brown-headed Nuthatch, 7; Brown Creeper, 9; House Wren, 3; Winter Wren, 9; Carolina Wren, 117; Long-billed Marsh Wren, 4; Mockingbird, 88; Catbird, 9; Brown Thrasher, 16; Robin, 876; Hermit Thrush, 13; Swainson's Thrush, 1 W.F.R., E.G.W.); Eastern Bluebird, 20; Golden-crowned Kinglet, 64; Rubycrowned Kinglet, 7; Water Pipit, 8; Cedar Waxwing, 62; Loggerhead Shrike, 3; Starling, 3500; Myrtle Warbler, 509; Pine Warbler, 11; Yellowthroat, 6; House Sparrow, 445; Eastern Meadowlark, 396; Redwinged Blackbird, 7,430; Baltimore Oriole, 1 (W.F.R. E.G.W.); Rusty Blackbird, 15; Common Grackle, 233; Brownheaded Cowbird, 1955; Cardinal, 257; Purple Finch, 28; Pine Siskin, 1; Am. Goldfinch, 161; Rufous-sided Towhee, 91; Savannah Sparrow, 62; Sharptailed Sparrow, 20; Seaside Sparrow, 2; Slate-colored Junco, 353; Tree Sparrow, 3; Chipping Sparrow, 2; Field Sparrow, 197; White-throated Sparrow, 692; Fox Sparrow, 36; Swamp Sparrow, 87; Song Sparrow, 116. Total, 109 species; about 32,554 individuals. - Dr. & Mrs. W.G. Akers, Mrs. Floy C. Burford, H.A. Hespenheide, Mrs. M.F. Morrisette, W.F. Rountrey, P.W. Sykes, Jr. (compiler), J.R. Vaughan, E.G. Webster, Jr.

Page 7

Back Bay National Wildlife Refuge, Va. (all points within a 15-milediameter circle, center 12 miles east of Back Bay; including refuge and much of the mainland of Princess Anne County; open farmland 20%, pine woodland 10%, deciduous woodland 20%, open beach 5%, marshes and bay 45%). - Dec. 26; 4:45 a.m. to 5:15 p.m. Foggy until 10 a.m., then clear; temp. 36° to 61°; wind NW-SW, 2-5 m.p.h.; ground bare and water open. Thirteen observers in 4 parties. Total party-hours, 41.5 (26 on foot, 15.5 by car); total party-miles, 245 (30 on foot, 215 by car). Common Loon, 4; Red-throated Loon, 4; Horned Grebe, 56; Pied-billed Grebe, 15; Gannet, 2; Double-crested Cormorant, 1; Great Blue Heron, 1; Common Egret, 10; Am. Bittern, 5; Whistling Swan, 1200; Canada Goose, 7000; Snow Goose, 29,000; Mallard, 600; Black Duck, 1300; Gadwall, 26; Pintail, 900; Green-winged Teal, 600; Am. Widgeon, 450; Shoveler, 45; Ringnecked Duck, 800; Canvasback, 1200; Lesser Scaup, 1; Bufflehead, 31; Oldsquaw, 1; White-winged Scoter, 28; Surf Scoter, 16; Common Scoter, 6; Ruddy Duck, 500; Hooded Merganser, 1; Common Merganser, 10; Red-breasted Merganser, 24; Turkey Vulture, 10; Black Vulture, 4; Cooper's Hawk, 2; Red-tailed Hawk, 4; Redshouldered Hawk, 13; Rough-legged Hawk, 1; Marsh Hawk, 18; Sparrow Hawk, 50; Bobwhite, 16; King Rail, 8; Clapper Rail, 2; Common Gallinule, 1; Am. Coot, 20; Killdeer, 42; Common Snipe, 54; Greater Yellowlegs, 2; Sanderling, 18; Great Blackbacked Gull, 106; Herring Gull, 862; Ring-billed Gull, 624; Bonaparte's Gull, 3; Royal Tern, 3; Mourning Dove, 15; Screech Owl, 2; Great Horned Owl, 2; Barred Owl, 9; Saw-whet Owl, 1 (W.F.R.); Belted Kingfisher, 9; Yellowshafted Flicker, 70; Pileated Woodpecker, 6; Red-bellied Woodpecker, 33; Red-headed Woodpecker, 2; Yellow-bellied Sapsucker, 1; Hairy Woodpecker, 4; Downy Woodpecker, 29; Western Kingbird, 1 (A.D.G., G.G., F.C.B. G.E.G.); Eastern Phoebe, 2; Horned Lark, 1; Tree Swallow, 14; Blue Jay, 2; Common Crow, 284; Fish Crow, 24; Carolina Chickadee, 129; Tufted Titmouse, 22; White-breasted Nuthatch, 3; Brown-headed Nuthatch, 65; Brown Creeper, 9; House Wren, 5; Winter Wren, 6; Carolina Wren, 114; Long-billed Marsh Wren, 15; Short-billed Marsh Wren, 26; Mockingbird, 139; Catbird, 84; Brown Thrasher, 14; Robin, 430; Hermit Thrush, 17; Eastern Bluebird, 89; Golden-crowned Kinglet, 81; Ruby-crowned Kinglet, 9; Water Pipit, 91; Cedar Waxwing, 17; Loggerhead Shrike, 1; Starling, 1766; Myrtle Warbler, 2398; Pine Warbler, 6; Palm Warbler, 4; Yellowthroat, 29; Yellow-breasted Chat, 4: House Sparrow, 260; Eastern Meadowlark, 171; Redwinged Blackbird, 4208; Common Grackle, 40; Brown-headed Cowbird, 607; Cardinal, 228; Purple Finch, 21; Pine Siskin, 11; Am. Goldfinch, 473; Rufous-sided Towhee, 102; Savannah Sparrow, 477; Sharp-tailed Sparrow, 6; Slate-colored Junco, 75; Tree Sparrow, 1; Chipping Sparrow, 5; Field Sparrow, 257; White-throated Sparrow, 584; Fox Sparrow, 89; Swamp Sparrow, 509; Song Sparrow, 484; Snow Bunting, 2. Total, 121 species; about 59,794 individuals. -S.E. Breneiser, Mrs. Floy C. Burford, J.S.Calver, S.D. Fretwell, Mrs. G.E. Garrett, Miss A.D. Grimm, Miss Gisela Grimm, H.A. Hespenheide, D.W. Lamm, W.F. Rountrey, P.W. Sykes, Jr. (compiler), E.G. Webster, Jr., C.S. Yelverton.

Norfolk County, Va. (all points within a 15-mile-diameter circle, center $6\frac{1}{2}$ 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 1%). -- Dec. 28; 5 a.m. to 5:15 p.m. Raining most of day, clearing in late afternoon; temp. 55° to 64°; wind SW-S, 8-15 m.p.h.; ground bare, water open. Eleven observers in 4 parties. Total party-hours, 43.75 (24,75 on foot, 19 by car); total party-miles, 319 (17 on foot, 302 by car). Pied-billed Grebe, 2; Great Blue Heron, 1;

Mallard, 3; Black Duck, 27; Green-winged Teal, 1; Wood Duck, 5; Hooded Merganser, 2; Turkey Vulture, 32; Black Vulture, 47; Sharp-shinned Hawk, 1; Cooper's Hawk, 3; Red-tailed Hawk, 7; Red-shouldered Hawk, 21; Marsh Hawk, 17; Pigeon Hawk, 1; Sparrow Hawk, 43; Bobwhite, 51; Black Rail, 1 (R.H.P.); Killdeer, 194; Am. Woodcock, 1; Common Snipe, 12; Herring Gull, 38; Ringbilled Gull, 197; Laughing Gull, 1; Mourning Dove, 263; Screech Owl, 3; Great Horned Owl, 2; Barred Owl, 7; Belted Kingfisher, 8; Yellow-shafted Flicker, 103; Pileated Woodpecker, 21; Red-bellied Woodpecker, 61; Red-headed Woodpecker, 2; Yellow-bellied Sapsucker, 12; Hairy Woodpecker, 36; Downy Woodpecker, 64; Eastern Phoebe, 2; Blue Jay, 34; Common Crow, 3600; Fish Crow, 700; Carolina Chickadee, 133; Tufted Titmouse, 70; White-breasted Nuthatch, 11; Brownheaded Nuthatch, 10; Brown Creeper, 11; House Wren, 8; Winter Wren, 16; Carolina Wren, 166; Long-billed Marsh Wren, 3; Mockingbird, 140; Catbird, 33; Brown Thrasher, 28; Robin, 7000; Hermit Thrush, 23; Eastern Bluebird, 59; Golden-crowned Kinglet, 33; Ruby-crowned Kinglet, 12; Water Pipit, 3; Cedar Waxwing, 243; Loggerhead Shrike, 6; Starling, 5000; Solitary Vireo, 1 (S.D.F., H.A.H., R.H.P.); Myrtle Warbler, 2271; Pine Warbler, 11; Palm Warbler, 10; Yellowthroat; 6; House Sparrow, 320; Eastern Meadowlark, 202; Redwinged Blackbird, 8,000,000; Rusty Blackbird, 38; Brewer's Blackbird, 3 (W.F.R., J.R.W.); Common Grackle, 1,000,000; Brown-headed Cowbird, 60,000; Cardinal, 419; Purple Finch, 82; Pine Siskin, 184; Am. Goldfinch, 530; Rufous-sided Towhee, 316; Savannah Sparrow, 142; Slate-colored Junco, 438; Tree Sparrow, 3; Chipping Sparrow, 26; Field Sparrow, 312; White-throated Sparrow, 2,898; Fox Sparrow, 91; Swamp Sparrow, 208; Song Sparrow, 616. Total, 87 species; about 9,087,741 individuals. -- Mrs. Floy C. Burford, J.S. Calver, S.D. Fretwell, Miss A.D. Grimm, Miss Gisela Grimm, H.A. Hespenheide, R.H. Peake, Jr., W.F. Rountrey, P.W. Sykes, Jr. (compiler), E.G. Webster, Jr., J.R. Withrow.

Nansemond River, Va. (all points within a 15-mile-diameter circle, center 12 miles NE of Driver, including Craney Island Disposal Area, Nansemond River, Chuckatuck Creek, Chuckatuck; open farmland 30%, pine woodland 10%, deciduous woodland 20%, marsh, beach, rivers, bay 40%). -- Dec. 30; 7 a.m. to 5:30 p.m. Clear; temp. 350 to 520; wind SW, 0-6 m.p.h., ground bare and water open. Six observers in 3 parties. Total party-hours, 30.5 (21 on foot, 9.5 by car); total party-miles, 226 (14 on foot, 212 by car). Common Loon, 3; Horned Grebe, 55; Pied-billed Grebe, 9; Double-crested Cormorant, 8; Great Blue Heron, 36; Common Egret, 8; Yellow-crowned Night Heron, 1 (S.D.F., E.G.W.); Canada Goose, 1169; Mallard, 16; Black Duck, 614; Gadwall, 58; Pintail, 455; Green-winged Teal, 28; Am. Widgeon, 949; Shoveler, 17; Ring-necked Duck, 42; Canvasback, 2200; Greater Scaup, 569; Lesser Scaup, 145; Common Goldeneye, 92; Bufflehead, 332; Common Scoter, 1; Ruddy Duck, 7200; Hooded Merganser, 47; Red-breasted Merganser, 61; Turkey Vulture, 24; Black Vulture, 31; Sharp-shinned Hawk, 3; Red-tailed Hawk, 8; Red-shouldered Hawk, 6; Bald Eagle, 1; Sparrow Hawk, 28; Bobwhite, 46; King Rail, 2; Clapper Rail, 4; Sora, 2; Am. Coot, 4; Semipalmated Plover, 6; Piping Plover, 1 (H.A.H., W.F.R.); Killdeer, 56; Black-bellied Plover, 2; Ruddy Turnstone, 1 (H.A.H., W.F.R.); Common Snipe, 2; Purple Sandpiper, 8; Dunlin, 125; Semipalmated Sandpiper, 28; Sanderling, 269; Great Black-backed Gull, 187; Herring Gull, 11,400; Ring-billed Gull, 8,700; Laughing Gull, 15; Bonaparte's Gull, 304; Forster's Tern, 54; Common Tern, 3 (H.A.H., W.F.R.); Black Skimmer, 25 (H.A.H., W.F.R.); Mourning Dove, 40; Belted Kingfisher, 14; Yellow-shafted Flicker, 57; Pileated Woodpecker, 1; Red-bellied Woodpecker, 20;

Red-headed Woodpecker, 1; Yellow-bellied Sapsucker, 3; Hairy Woodpecker, 1; Downy Woodpecker, 26; Blue Jay, 113; Common Crow, 5200; Fish Crow, 3100; Carolina Chickadee, 73; Tufted Titmouse, 33; White-breasted Nuthatch, 2; Brown Creeper, 4; House Wren, 2; Winter Wren, 4; Carolina Wren, 165; Long-billed Marsh Wren, 1; Mockingbird, 122; Catbird, 11; Brown Thrasher, 24; Robin, 159; Hermit Thrush, 9; Eastern Bluebird, 32; Golden-crowned Kinglet, 13; Rubycrowned Kinglet, 4; Water Pipit, 118; Cedar Waxwing, 328; Loggerhead Shrike, 4; Starling, 1173; Myrtle Warbler, 592; Pine Warbler, 6; Palm Warbler, 2; Yellowthroat, 2; House Sparrow, 114; Eastern Meadowlark, 333; Redwinged Blackbird, 1200; Rusty Blackbird, 30; Common Grackle, 2700; Brown-headed Cowbird, 576; Cardinal, 264; Purple Finch, 15; Pine Siskin, 3; Am. Goldfinch, 133; Rufoussided Towhee, 94; Savannah Sparrow, 13; Sharp-tailed Sparrow, 1; Slate-colored Junco, 315; Chipping Sparrow, 5; Field Sparrow, 100; White-throated Sparrow, 781; Fox Sparrow, 20; Swamp Sparrow, 139; Song Sparrow, 273. Total, 111 species; 53,028 individuals. - S.D. Fretwell, H.A. Hespenheide, R.H. Peake, Jr., W.F. Rountrey, P.W. Sykes, Jr. (compiler), E.G. Webster, Jr.

Newport News, Va. (all points within a 15-mile-diameter circle counded by Chesapeake Bay, Hampton Roads, James River, Grafton; woodland 30%, open fresh-water ponds 10%, waterfront 30%). -- Dec. 26; 7 a.m. to 4 p.m. Clear; temp. 35° to 45°; wind W, 5 m.p.h., ground bare, water open. Twenty-three observers in 6 parties. Total party-hours, 48 (24 on foot, 24 by car); total party-miles, 293 (32 on foot, 261 by car). Common Loon, 3; Red-throated Loon, 1; Red-necked Grebe, 1 (J.H.G.); Horned Grebe, 96; Pied-billed Grebe, 43; Doublecrested Cormorant, 21; Great Blue Heron, 11; Common Egret, 3; Canada Goose, 177; Mallard, 72; Black Duck, 19; Am. Widgeon, 634; Ring-necked Duck, 1; Canvasback, 25; Lesser Scaup, 182; Common Goldeneye, 133; Bufflehead, 302; Oldsquaw, 52; White-winged Scoter, 1; Surf Scoter, 150; Common Scoter, 175; Ruddy Duck, 8; Hooded Merganser, 1; Red-breasted Merganser, 12; Turkey Vulture, 2; Black Vulture, 3; Red-shouldered Hawk, 2; Pigeon Hawk, 2; Sparrow Hawk, 9; Bobwhite, 18; Clapper Rail, 9; Sora, 1 (M.E.H., N.P.); Killdeer, 67; Ruddy Turnstone, 1 (J.H.G.); Common Snipe, 5; Dunlin, 95; Sanderling, 62; Great Black-backed Gull, 7; Herring Gull, 1594; Ring-billed Gull, 574; Laughing Gull, 24; Bonaparte's Gull, 27; Royal Tern, 1; Mourning Dove, 64; Belted Kingfisher, 13; Yellow-shafted Flicker, 93; Pileated Woodpecker, 2; Red-bellied Woodpecker, 31; Red-headed Woodpecker, 3; Yellow-bellied Sapsucker, 2; Hairy Woodpecker, 3; Downy Woodpecker, 15; Eastern Phoebe, 10; Tree Swallow, 89; Blue Jay, 37; Common Crow. 272; Fish Crow. 6; Carolina Chickadee, 69; Tufted Titmouse, 51; White-breasted Nuthatch, 3; Red-breasted Nuthatch, 1; Brown-headed Nuthatch, 3; Brown Creeper, 5; Carolina Wren, 71; Short-billed Marsh Wren, 3; Mockingbird, 151; Catbird, 7; Brown Thrasher, 10; Robin, 52; Eastern Bluebird, 9; Goldencrowned Kinglet, 6; Ruby-crowned Kinglet, 4; Cedar Waxwing, 5; Starling, 3861; Prothonotary Warbler, 1 (E.L.M.); Myrtle Warbler, 962; Pine Warbler, 5; Palm Warbler, 1; Yellowthroat, 1; House Sparrow, 488; Eastern Meadowlark, 235; Redwinged Blackbird, 483; Baltimore Oriole, 2; Common Grackle, 38; Brownheaded Cowbird, 3; Cardinal, 107; Evening Grosbeak, 13; Purple Finch, 2; Am. Goldfinch, 80; Rufous-sided Towhee, 84; Ipswich Sparrow, 3; Savannah Sparrow, 203; Sharp-tailed Sparrow, 2; Seaside Sparrow, 11; Vesper Sparrow, 5; Slate-colored Junco, 267; Field Sparrow, 21; White-throated Sparrow, 288; Fox Sparrow, 44; Swamp Sparrow, 6; Song Sparrow, 211; Snow Bunting, 15. Total, 103 species; about 13,170 individuals. -- Betty Blair, Frances Cumming, Georgianna Cumming, John Grey, Carl Hacker, Chas. Hacker, M.E. Hathaway,

Norma Katz, Emmy Lou Machen, Pat Miller, Dorothy Mitchell, Mike Mithcell, Dale O'bannon, Larry Olson, R.E. Olson, Norman Pope, Ash Rawls, Mildred Rawls, C.G. Saunders, Mrs. C.G. Saunders, Doris Smith, W.P. Smith (compiler), Bill Snyder (Hampton Roads Bird Club.)

Hog Island State Waterfowl Refuge, Surry Co. Va. (entirely within the refuge boundaries including adjacent waters of the James River; open river 10%; ponds 20%, marshes 20%, open fields 15%, pine woodland 25%, brushy thickets 5%, river shore 5%). - Jan. 2, 1960; 8 a.m. to 4:30 p.m. Clear, alternating with light, intermittent rain; temp. 30° to 47°; wind slight; ground bare, ponds with thin ice, later melting. Five observers in one party. Total partyhours, $8\frac{1}{2}$ (8 on foot, $\frac{1}{2}$ by car); total party-miles, 8 (7 on foot, 1 by car.) Horned Grebe, 1; Great Blue Heron, 26; Whistling Swan, 4; Canada Goose, 4220; Snow Goose, 4: Mallard, 459; Black Duck, 324; Am. Widgeon, 13; Pintail, 9; Green-winged Teal, 33; Lesser Scaup, 400; Common Goldeneye, 23; Ruddy Duck, 125; Hooded Merganser, 31; Red-breasted Merganser, 3; Sharp-shinned Hawk, 1; Redtailed Hawk, 2; Bald Eagle, 2; Marsh Hawk, 4; Sparrow Hawk, 1; Bobwhite, 11; Iranian Black-necked Pheasant, 2; King Rail, 1; Killdeer, 17; Common Snipe, 4; Dunlin, 3; Herring Gull, 60; Ring-billed Gull, 600; Barn Owl, 1; Belted Kingfisher, 4; Yellow-shafted Flicker, 7; Pileated Woodpecker, 2; Red-bellied Woodpecker, 5; Yellow-bellied Sapsucker, 2; Downy Woodpecker, 10; Tree Swallow, 2; Common Crow, 16; Carolina Chickadee, 11; Tufted Titmouse, 2; Brown-headed Nuthatch, 22; Carolina Wren, 8; Mockingbird, 4; Catbird, 1; Eastern Bluebird, 6; Golden-crowned Kinglet, 15; Starling, 53; Myrtle Warbler, 170; Eastern Meadowlark, 15; Redwinged Blackbird, 250; Common Grackle, 6; Cardinal, 10; Am. Goldfinch, 2; Rufous-sided Towhee, 5; Savannah Sparrow, 203; Slate-colored Junco, 2; White-throated Sparrow, 3; Fox Sparrow, 2; Swamp Sparrow, 26; Song Sparrow, 115. Total, 59 species; about 7365 individuals. - Carl Hacker, Charles Hacker, Mr. and Mrs. W.P. Smith, C.C. Steirly (compiler).

Hopewell, Va. (all points within a 15-mile-diameter circle centered in Curles / Neck as in last 5 years; area includes Presquile National Wildlife Refuge; open farmland 26%, brushy fields 7%, marshes and river shore 30%, deciduous wooded swamp 7%, woodland 30%). -- Jan. 3; 6:45 a.m. to 5:15 p.m. Heavy rain in early a.m. becoming partly cloudy and very windy by 10 a.m.; temp 31° to 60°; wind W to NE, 2-20 m.p.h.; ground bare, water open. Four observers in 2 parties. Total party-hours, $13\frac{1}{2}$ (9 on foot, $1\frac{1}{2}$ by car, 3 by motorboat); total party-miles, 55 (6 on foot, 40 by car, 9 by boat). Great Blue Heron 11; Canada Goose, 7500; Snow Goose, 26; Blue Goose, 53; Mallard, 1650; Black Duck, 1000; Pintail, 250; Green-winged Teal, 15; Am. Widgeon, 20; Wood Duck, 275; Redhead, 1; Lesser Scaup, 15; Bufflehead, 23; Ruddy Duck, 164; Common Merganser, 23; Turkey Vulture, 48; Black Vulture, 13; Red-tailed Hawk, 2; Red-shouldered Hawk, 1; Bald Eagle, 4; Sparrow Hawk, 4; Killdeer, 25; Great Black-backed Gull, 1 (adult; F.R.S. et al.); Herring Gull, 23; Ring-billed Gull, 905; Mourning Dove, 86; Short-eared Owl, 1; Yellow-shafted Flicker, 32; Red-bellied Woodpecker, 8; Yellow-bellied Sapsucker, 3; Hairy Woodpecker, 1; Downy Woodpecker, 10; Horned Lark, 88; Blue Jay, 2; Common Crow, 230; Carolina Chickadee, 20; Tufted Titmouse, 13; White-breasted Nuthatch, 2; Brown Creeper, 4; Winter Wren, 1; Carolina Wren, 19; Mockingbird, 22; Robin, 263; Eastern Bluebird, 8; Golden-crowned Kinglet, 4; Loggerhead Shrike, 5; Starling, 1500; Myrtle Warbler, 17; House Sparrow, 230; Eastern Meadowlark, 165; Redwinged Blackbird, 406; Common Grackle, 1; Brown-headed Cowbird, 2800; Cardinal, 34; Evening Grosbeak, 21; Purple Finch, 11; Am. Goldfinch, 8; Rufous-sided Towhee, 10;

Slate-colored Junco, 140; Field Sparrow, 17; White-throated Sparrow, 185; Fox Sparrow, 1; Swamp Sparrow, 1; Song Sparrow, 56. Total, 64 species; about 18,477 individuals. — Cleo Allen, W.C. Good, F.R. Scott (compiler), Mary Tompkins.

Fort Belvoir, Va. (all points within a 15-mile-diameter circle centered in Lebanon; same area and habitat percentages as last year). --Jan. 2; 6 a.m. to 4:30 p.m. Fog and rain throughout day; temp. 280 to 380; ground bare; water open. Thirty-nine observers in 15 parties. Total party-hours, 109 (82.5 on foot, 26.5 by car); total party-miles, 322.5 (57 on foot, 265.5 by car): Horned Grebe 4; Pied-billed Grebe, 1; Great Blue Heron, 7; Whistling Swan, 1 (Col. and Mrs. B.H.); Canada Goose, 168; Mallard, 32; Black Duck, 854; Gadwall, 1; Pintail, 4; Ring-necked Duck, 81; Greater Scaup, 480; Lesser Scaup, 320; Bufflehead, 70; Ruddy Duck, 2166; Hooded Merganser, 3; Common Merganser, 263; Red-breasted Merganser, 9; Turkey Vulture, 2; Sharp-shinned Hawk, 2; Cooper's Hawk, 1; Red-tailed Hawk, 13; Red-shouldered Hawk, 10; Bald Eagle, 10; Marsh Hawk, 5; Pigeon Hawk, 1 (Mr. and Mrs. B.M.); Sparrow Hawk, 11; Bobwhite, 112; Am. Coot, 2; Killdeer, 44; Herring Gull, 253; Ring-billed Gull, 1072; Common Tern, 3 (Mr. and Mrs. G.R.); Mourning Dove, 215; Barn Owl, 1 (Mr. and Mrs. G.R.); Great Horned Owl, 6; Belted Kingfisher, 14; Yellowshafted Flicker 90; Pileated Woodpecker, 24; Red-bellied Woodpecker, 120; Redheaded Woodpecker, 3; Yellow-bellied Sapsucker, 5; Hairy Woodpecker, 20; Downy Woodpecker, 169; Horned Lark, 1; Blue Jay, 724; Common Crow, 362; Fish Crow, 32; Black-capped Chickadee, 14; Carolina Chickadee, 394; Tufted Titmouse, 299; White-breasted Nuthatch, 71; Red-breasted Nuthatch, 2; Brown Creeper, 23; Winter Wren, 16; Carolina Wren, 126; Long-billed Marsh Wren, 2; Mockingbird, 243; Catbird, 2; Robin, 2750; Hermit Thrush, 4; Eastern Bluebird, 64; Goldencrowned Kinglet, 72; Ruby-crowned Kinglet, 1; Cedar Waxwing, 320; Starling, 1128; Myrtle Warbler, 53; House Sparrow, 446; Eastern Meadowlark, 284; Redwinged Blackbird, 970; Baltimore Oriole, 1 (G.M.M.); Rusty Blackbird, 77; Brown-headed Cowbird, 11; Cardinal, 505; Evening Grosbeak, 82; Purple Finch, 133; Pine Siskin, 3; Am. Goldfinch, 729; Rufous-sided Towhee, 53; Savannah Sparrow, 1; Slate-colored Junco, 1679; Tree Sparrow, 53; Field Sparrow, 297; Whitethroated Sparrow, 1535; Fox Sparrow, 7; Swamp Sparrow, 40; Song Sparrow, 515. Total, 86 species; about 20,796 individuals. - J.M. Abbott (compiler), Louise Berry, Ed Bierley, B.O. Bird, Shirley Briggs, Ron Chiabotta, Dr. and Mrs. E.G. Davis, Paul Dowling, P.A. DuMont, Mr. and Mrs. J.W. Eike, George Golding, Ed Hayward, Col. and Mrs. Bill Houston, G.M. Meade, J.B. Meade, Gerald Mersereau, Dick Middleton, Jim Middleton, Lois Morgan, Mr. and Mrs. Bill Mull, Eugene Prather, Bob Pyle, Peter Pyle, Mr. and Mrs. Gus Rothery, Napier Shelton, George Sigel, Harold Silver, Harriet A. Sutton, Mr. and Mrs. Ray Teale, G. Fox Trowbridge, Ricky Trowbridge, John Weske, Olga Wilson.

Brooke, Va. (all points within a 15-mile-diameter circle, center on west bank of Potomac River at mouth of Aquia Creek, but only the triangular area in Virginia between Widewater and Potomac Creek southeast of the R.F. and P. railroad covered; tidal water 19%, marsh 5%, swamp 5%, fields 10%, hedgerows 9%, mixed forest edge 16%, deciduous woods 30%, pine woods 1%, slash 5%). — Dec. 23; 6:15 a.m. to 5 p.m. Clear a.m., cloudy p.m.; temp. 16° to 32°; wind N to NE, 15 to 10 m.p.h.; ground bare, edges of tidal bays with new ice, marshes partly frozen. Fifteen observers in 8 parties. Total

party-hours, 56: total party-miles, 35 (all on foot). Common Loon, 1; Horned Grebe, 8; Pied-billed Grebe, 1; Great Blue Heron, 22; Whistling Swan, 185; Canada Goose, 2; Mallard, 40; Black Duck, 300; Gadwall, 1; Am. Widgeon, 18; Canvasback, 70; Lesser Scaup, 160; Common Goldeneye, 4; Bufflehead, 50; Ruddy Duck, 8000; Hooded Merganser, 1; Common Merganser, 450; Red-breasted Merganser, 30; Turkey Vulture, 7; Goshawk, 1 (W.H., T.B.N.); Red-tailed Hawk, 1; Red-shouldered Hawk, 4; Bald Eagle, 11; Sparrow Hark, 6; Bobwhite, 54; Killdeer, 43; Am. Woodcock, 1; Common Snipe, 10; Great Black-backed Gull, 1; Herring Gull, 120; Ring-billed Gull, 60; Mourning Dove, 80; Great Horned Owl, 1; Belted Kingfisher, 7; Yellow-shafted Flicker, 50; Pileated Woodpecker, 16; Red-bellied Woodpecker, 50; Red-headed Woodpecker, 16; Yellow-bellied Sapsucker, 19; Hairy Woodpecker, 6; Downy Woodpecker, 80; Horned Lark, 15; Blue Jay, 250; Common Crow, 160; Fish Crow, 2; Carolina Chickadee, 170; Tufted Titmouse, 70; White-breasted Nuthatch, 8; Brown Creeper, 3; Winter Wren, 5; Carolina Wren, 60; Mockingbird, 70; Brown Thrasher, 2; Robin, 330; Hermit Thrush, 11; Eastern Bluebird, 25; Golden-crowned Kinglet, 20; Ruby-crowned Kinglet, 7; Cedar Waxwing, 90; Starling, 170; Myrtle Warbler, 45; Yellow-breasted Chat, 1 (W.H., T.B.N.); House Sparrow, 50; Eastern Meadowlark, 90; Redwinged Blackbird, 250; Rusty Blackbird, 46; Brown-headed Cowbird, 200; Cardinal, 250; Purple Finch, 40; Am. Goldfinch, 90; Rufous-sided Towhee, 42; Savannah Sparrow, 2; Slatecolored Junco, 800; Tree Sparrow, 40; Field Sparrow, 150; White-throated Sparrow, 1000; Fox Sparrow, 7; Swamp Sparrow, 23; Song Sparrow, 400. Total, 79 species; about 14,981 individuals. - C.A. Anderson, Roy A. Bailey, A.A. Baker, Henry Bell, III, John H. Eric, Andrew Griscom, Warren Hobbs, Luna B. Leopold, Edwin T. McKnight (compiler), Thomas B. Nolan, W.W. Rubey, Brian J. Skinner, Robert L. Smith, David B. Stewart, Amos M. White.

Charlottesville, Va. (about same area and habitats as last year). --Jan. 3; 6:45 a.m. to 6 p.m. Clear; temp. 380 to 580; wind W, 5-30 m.p.h. Five observers in 4 parties. Total party-hours, 33 (29 on foot, 4 by car); total party-miles, 150 (43 on foot, 107 by car). Horned Grebe, 1; Pied-billed Grebe, 2; Canada Goose, 47 (most or all feral); Mallard, 30; Black Duck, 54; Pintail, 2; Blue-winged Teal, 1 (K.L.); Wood Duck, 2; Lesser Scaup, 2; Hooded Merganser, 2; Turkey Vulture, 76; Black Vulture, 85; Sharpshinned Hawk, 2; Cooper's Hawk, 2; Red-tailed Hawk, 6; Red-shouldered Hawk, 1; Sparrow Hawk, 3; Bobwhite, 115; Killdeer, 62; Common Snipe, 3; Mourning Dove, 897; Belted Kingfisher, 5; Yellow-shafted Flicker, 15; Pileated Woodpecker, 9; Red-bellied Woodpecker, 23; Red-headed Woodpecker, 18; Yellow-bellied Sapsucker, 2; Hairy Woodpecker, 3; Downy Woodpecker, 19; Eastern Phoebe, 1; Horned Lark, 2; Blue Jay, 131; Common Crow, 722; Fish Crow, 1; Carolina Chickadee, 80; Tufted Titmouse, 55; White-breasted Nuthatch, 9; Red-breasted Nuthatch, 4; Brown Creeper, 1; Winter Wren, 6; Carolina Wren, 59; Mockingbird, 77; Catbird, 1 (K.L.); Robin, 77; Hermit Thrush, 2; Eastern Bluebird, 39; Golden-crowned Kinglet, 14; Ruby-crowned Kinglet, 1; Water Pipit, 22; Cedar Waxwing, 49; Loggerhead Shrike, 3; Starling, 478; Myrtle Warbler, 4; House Sparrow, 15; Eastern Meadowlark, 220; Redwinged Blackbird, 68; Brown-headed Cowbird, 2; Cardinal, 259; Evening Grosbeak, 32; Purple Finch, 77; Pine Siskin, 10; Am. Goldfinch, 39; Rufoussided Towhee, 31; Slate-colored Junco, 717; Tree Sparrow, 2; Field Sparrow, 152; White-throated Sparrow, 251; Fox Sparrow, 9; Swamp Sparrow, 9; Song Sparrow, 192. Total, 70 species; 5412 individuals. - Steve Calver, Mrs. C.O. Gregory, Kenneth Lawless, Robert S. Merkel, Charles E. Stevens (compiler).

Warren, Va. (about same area and habitats as last year). - Dec. 30; 6:45 a.m. to 5:30 p.m. Cloudy; temp. 300-460; wind SW, 0-15 m.p.h. Four observers in 3 parties. Total party-hours, 30 (26 on foot, 4 by car); total party-miles, 156 (40 on foot, 116 by car). Horned Grebe, 1; Great Blue Heron, 1; Blue Goose, 1 (R.S.M., C.E.S. - present since Nov. 22); Mallard, 8; Black Duck, 4; Green-winged Teal, 1; Am. Widgeon, 47; Bufflehead, 19; Ruddy Duck, 6; Turkey Vulture, 61; Black Vulture, 24; Sharp-shinned Hawk, 1; Red-tailed Hawk, 7; Red-shouldered Hawk, 3; Rough-legged Hawk, 1 (light phase - K.L.); Marsh Hawk, 1; Sparrow Hawk, 7; Bobwhite, 27; Common Snipe, 15; Mourning Dove, 457; Screech Owl, 2; Great Horned Owl, 1 (R.S.M.); Belted Kingfisher, 3; Yellow-shafted Flicker, 17; Pileated Woodpecker, 10; Red-bellied Woodpecker, 21; Red-headed Woodpecker, 14; Yellow-bellied Sapsucker, 6; Hairy Woodpecker, 7; Downy Woodpecker, 46; Eastern Phoebe, 1; Horned Lark, 28; Blue Jay, 319; Common Crow, 412; Carolina Chickadee, 122; Tufted Titmouse, 62; White-breasted Nuthatch, 13; Brown Creeper, 5; Winter Wren, 3; Carolina Wren, 78; Mockingbird, 80; Robin, 111; Hermit Thrush, 2; Eastern Bluebird, 90; Golden-crowned Kinglet, 25; Cedar Waxwing, 402; Loggerhead Shrike, 22; Starling, 379; Myrtle Warbler, 22; House Sparrow, 44; Eastern Meadowlark, 239; Rusty Blackbird, 7; Common Grackle, 9; Brown-headed Cowbird, 46; Cardinal, 187; Evening Grosbeak, 1; Purple Finch, 66; Pine Siskin, 6; Am. Goldfinch, 134; Rufous-sided Towhee, 4; Slate-colored Junco, 599; Tree Sparrow, 26; Field Sparrow, 212; White-crowned Sparrow, 31; Whitethroated Sparrow, 281; Fox Sparrow, 1; Swamp Sparrow, 9; Song Sparrow, 177. Total, 68 species; 5075 individuals. - Steve Calver, Kenneth Lawless, Robert S. Merkel, Charles E. Stevens (compiler).

Big Flat Mountain, Va. (mostly in southern section of Shenandoah National Park, same area and habitats as last year). -- Dec. 23; 7 a.m. to 5 p.m. Partly cloudy; temp. 150-280; wind negligible. One observer. Total hours, 10 (on foot); total miles, 18 (on foot). Mallard, 1; Red-tailed Hawk, 4; Ruffed Grouse, 9; Bobwhite, 7; Turkey, 1; Yellow-shafted Flicker, 2; Pileated Woodpecker, 8; Red-bellied Woodpecker, 1; Yellow-bellied Sapsucker, 5; Hairy Woodpecker, 5; Downy Woodpecker, 11; Blue Jay, 8; Common Raven, 3; Common Crow, 114; Carolina Chickadee, 48; Tufted Titmouse, 9; White-breasted Nuthatch, 1; Red-breasted Nuthatch, 7; Brown Creeper, 3; Winter Wren, 2; Carolina Wren, 9; Mockingbird, 6; Robin, 9; Hermit Thrush, 2; Golden-crowned Kinglet, 2; Ruby-crowned Kinglet, 1; Rusty Blackbird, 2; Cardinal, 25; Purple Finch, 27; Am. Goldfinch, 6; Slate-colored Junco, 134; Tree Sparrow, 2; Field Sparrow, 19; White-throated Sparrow, 53; Song Sparrow, 15. Total, 35 species; 561 individuals. -- Charles E. Stevens.

Harrisonburg, Va. (Waterman Wood to Tide Spring, a distance of 12 miles; 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%). -- Dec. 30; 8:00 a.m. to 3:00 p.m. Sky overcast throughout the day; temp. 40° to 42°; wind W, slight; ground wet and muddy. Four observers working within calling distance of one another. Total party-hours, 7 (all on foot); total party-miles, 5 (all on foot; car was used to drive from one habitat to the other). Turkey Vulture, 16; Black Vulture, 11; Red-tailed Hawk, 3; Sparrow Hawk, 8; Bobwhite, 34; Mourning Dove, 8; Great Horned Owl, 1; Yellow-shafted Flicker, 1; Pileated Woodpecker, 2; Red-bellied Woodpecker; 3; Downy Woodpecker, 16; Blue Jay, 35; Common Crow, 204; Carolina Chickadee, 45; Tufted Titmouse, 41; White-breasted Nuthatch, 12; Winter Wren, 1; Carolina Wren, 5;

Mockingbird, 27; Robin, 19; Golden-crowned Kinglet, 4; Cedar Waxwing, 18; Starling, 363; Myrtle Warbler, 12; English Sparrow, 117; Eastern Meadowlark, 12; Cardinal, 52; Purple Finch, 51; Am. Goldfinch, 8; Rufous-sided Towhee, 3; Slate-colored Junco, 84; Tree Sparrow, 14; White-throated Sparrow, 54; Song Sparrow, 3. Total, 34 species; 1287 individuals. — Max Carpenter, D.R. Hostetter, David Mumaw, Daniel B. Suter.

Rockingham County, Va. (all points within a 14-mile-diameter circle, center at Ottobine, including Silver Lake in Dayton; lawn and shade trees in town 5%, cottonwood-sycamore river bottoms 5%, open farm land and farm woodlots 55%, mixed Appalachian conifers and hardwoods in mountains 35%; elevation 1160 to 3200 feet). -- Dec. 26; 8 a.m. to 6 p.m. Cloudy; temp. 36° to 50°; wind SW, 0-5 m.p.h.; ground bare and water open. Five observers in 2 parties. Total party-hours, 20 (15 on foot, 5 by car); total party-miles, 55 (10 on foot, 45 by car). Pied-billed Grebe, 4; Mallard, 100; Black Duck, 3; Gadwall, 13; Pintail, 9; Am. Widgeon, 70; Shoveler, 1; Redhead, 2; Ring-necked Duck, 6; Turkey Vulture, 45; Black Vulture, 2; Cooper's Hawk, 1; Red-tailed Hawk, 5; Marsh Hawk, 1; Sparrow Hawk, 5; Ruffed Grouse, 4; Bobwhite, 47; Am. Coot, 26; Killdeer, 10; Common Snipe, 1; Mourning Dove, 81; Screech Owl, 1; Belted Kingfisher, 3; Yellowshafted Flicker, 1; Pileated Woodpecker, 4; Red-bellied Woodpecker, 3; Yellow-bellied Sapsucker, 1; Hairy Woodpecker, 1; Downy Woodpecker, 8; Blue Jay, 34; Common Raven, 3; Common Crow, 195; Fish Crow, 10; Carolina Chickadee, 35; Tufted Titmouse, 13; White-breasted Nuthatch, 4; Carolina Wren, 7; Mockingbird, 24; Robin, 1; Eastern Bluebird, 5; Golden-crowned Kinglet, 5; Loggerhead Shrike, 2; Starling, 248; House Sparrow, 173; Eastern Meadowlark, 57; Cardinal, 55; Am. Goldfinch, 1; Slate-colored Junco, 28; Tree Sparrow, 35; White-crowned Sparrow, 6; White-throated Sparrow, 40; Fox Sparrow, 1; Song Sparrow, 21. Total, 53 species; 1430 individuals. — Max Carpenter (compiler), Harry Jopson, Ralph D. Hostetter, Jack G. Miller, Daniel Suter.

Middle Mountain, Highland Co. Va. (new area; northwest Highland Co., bordering on West Virginia; 3000 to 4000 feet altitude; Lantz Mountain, Straight Fork, Middle Mountain, Laurel Fork, Sapling Ridge; all points within 5 miles of Middle Mountain Schoolhouse; hardwoods 65%, spruce areas 10%, fields 5%, pastures 20%). - Dec. 23; 7:30 a.m. to 4:30 p.m.; temp. at start 80; at noon 220; at end 200; wind SE, 0-5 m.p.h.; ground frozen; streams running; 3 to 6 inches of dry snow; cloudy. Five observers, most of the time in 2 parties. Total party-hours, 17 (16 on foot, 1 by car); total party-miles, 23 (9 on foot, 14 by car). Sharp-shinned Hawk, 1; Red-tailed Hawk, 1; Turkey, 4 (seen that day by a hunter; tracks seen at another place by Paxton); Ruffed Grouse, 6 (2 birds together 3 times); Pileated Woodpecker, 1; Hairy Woodpecker, 4, Downy Woodpecker, 13; Blue Jay, 9; Common Raven, 4; Common Crow, 5; Blackcapped Chickadee, 63 (numbers of them identified by marks and by calls); Whitebreasted Nuthatch, 5; Brown Creeper, 2; Golden-crowned Kinglet, 12; Evening Grosbeak, 13; Cardinal, 1 (female at the old Middle Mountain School): Slatecolored Junco, 25. Total, 17 species; 169 individuals. - Robert P. Carroll, Sr., Robert P. Carroll, Jr., Robert H. Giles, J.J. Murray (compiler), Robert O. Paxton.

Lexington, Va. (same area as in previous years, but with more emphasis on open farmlands; pasture and open farmland 35%, deciduous woodland 20%, cedar and pine 30%, scrub 10%, town areas 5%). -- Dec. 28; 5:30 a.m. to 5 p.m. (one party), 7 a.m. to 5 p.m. (two parties), time out for lunch. Overcast a.m., dark and raining p.m.; temp. 520 to 560; wind, none; ground clear. Seven observers in 3 parties. Total party-hours, 29 (25 on foot, 4 by car, an hour of this before daylight, listening for owls); total party-miles, 97 (20 on foot, 77 by car, 12 of this before daylight). Blue Goose, 1; Mallard, 61; Am. Widgeon, 1; Redhead, 1; Turkey Vulture, 5; Sharp-shinned Hawk, 1; Red-tailed Hawk, 3; Sparrow Hawk, 6; Bobwhite, 31; Killdeer, 32; Common Snipe, 1; Mourning Dove, 103; Belted Kingfisher, 6; Yellow-shafted Flicker, 5; Pileated Woodpecker, 9; Red-bellied Woodpecker, 11; Red-headed Woodpecker, 9; Yellow-bellied Sapsucker, 1; Hairy Woodpecker, 1; Downy Woodpecker, 25; Eastern Phoebe, 2; Horned Lark, 13; Blue Jay, 63; Common Raven, 1; Common Crow, 170; Black-capped Chickadee, 1; Carolina Chickadee, 51; Tufted Titmouse, 28; White-breasted Nuthatch, 4; Winter Wren, 2; Carolina Wren, 31; Mockingbird, 51; Robin, 18; Eastern Bluebird, 31; Golden-crowned Kinglet, 2; Cedar Waxwing, 69; Loggerhead Shrike, 2; Starling, 488; Myrtle Warbler, 13; House Sparrow, 180; Eastern Meadowlark, 69; Rusty Blackbird, 154; Cardinal, 114; Evening Grosbeak, 22 (five places); Purple Finch, 200; Am. Goldfinch, 53; Slate-colored Junco, 176; Tree Sparrow, 28; Field Sparrow, 30; White-crowned Sparrow, 18; White-throated Sparrow, 164; Fox Sparrow, 1; Song Sparrow, 30. Total, 53 species; 2592 individuals. (Seen in count area preceding night: Screech Owl.) --R.P. Carroll, Sr., Robert Carroll, Jr., Nell Loving Deaver, J.J. Murray (compiler), Robert O. Paxton, Robert Stewart, Cabell Tutwiler, III.

Sweet Briar, Va. (12-mile radius of Sweet Briar College campus; open fields 40%, mixed woodlands 30%, scrubby creek bottoms 15%, lake edges 5%, hedgerows 10%). - Jan. 1; 7:30 a.m. to 4:30 p.m. Overcast; temp. 180 to 34°; no wind; ground bare, ponds open. Four observers in 2 parties in morning, 2 observers in 1 party in afternoon. Total party-hours, 14 (132 on foot, $\frac{1}{2}$ by car); total party-miles, 16 (8 on foot, 8 by car). Scaup (sp.), 1; Turkey Vulture, 2; Bobwhite, 10; Mourning Dove, 1; Yellow-shafted Flicker, 5; Pileated Woodpecker, 6: Red-bellied Woodpecker, 4; Red-headed Woodpecker, 11; Yellow-bellied Sapsucker, 1; Hairy Woodpecker, 2; Downy Woodpecker, 12; Blue Jay, 29; Common Crow, 300 (est.); Carolina Chickadee, 37; Tufted Titmouse, 25; Brown Creeper, 1; White-breasted Nuthatch, 8; Red-breasted Nuthatch, 4; Carolina Wren, 18; Mockingbird, 54; Eastern Bluebird, 4; Starling, 700 (est.); Myrtle Warbler, 9; House Sparrow, 60; Eastern Meadowlark, 10; Cardinal, 71; Purple Finch, 14; Am. Goldfinch, 2; Rufous-sided Towhee, 2; Slate-colored Junco, 66; Field Sparrow, 42; White-crowned Sparrow, 73; White-throated Sparrow, 155; Song Sparrow, 16. Total, 34 species; about 1800 individuals. Twenty-three Robins were observed Dec. 31; a Sharp-shinned Hawk, in very good condition, was found dead against one of the college buildings on the day of the count: this was the first count in 5 years to record the Red-headed Woodpecker. - Jeanette Boone, Florence Hague, Rod MacPherson, Gertrude Prior (compiler).

Lynchburg, Va. (72-mile radius from 0.9 mile south of Lynchburg College, Old Rivermont Park, Riverside Park, Six Mile, Preston Glenn Airport, Timber Lake, Tomahawk; deciduous woods 65%, pine woods 5%, fields 10%, pasture 5%, river 5%, lake 5%, swamp 5%). -- Jan. 2; 7:30 a.m. to 4:30 p.m. Rain and freezing rain; temp. 290 to 320; wind variable, 5 m.p.h.; ground bare and wet. Eight observers in 2 parties. Total party-hours, 18 (16 on foot, 2 by car); total party-miles, 109 (12 on foot, 95 by car). Pied-billed Grebe, 3; Great Blue Heron, 1; Turkey Vulture, 1; Black Vulture, 1; Red-tailed Hawk, 1; Bobwhite, 18; Killdeer, 6; Mourning Dove, 19; Belted Kingfisher, 2; Yellowshafted Flicker, 4; Pileated Woodpecker, 1; Red-bellied Woodpecker, 9; Redheaded Woodpecker, 5; Yellow-bellied Sapsucker, 6; Hairy Woodpecker, 3; Downy Woodpecker, 28; Horned Lark, 39; Blue Jay, 55; Common Crow, 97; Carolina Chickadee, 71; Tufted Titmouse, 30; White-breasted Nuthatch, 11; Red-breasted Nuthatch, 1; Winter Wren, 5; Carolina Wren, 53; Mockingbird, 29; Robin, 20; Eastern Bluebird, 18; Golden-crowned Kinglet, 9; Cedar Waxwing, 12; Starling, 210; Myrtle Warbler, 16; House Sparrow, 1; Eastern Meadowlark, 39; Cardinal, 77; Purple Finch, 37; Am. Goldfinch, 108; Rufous-sided Towhee, 3; Slate-colored Junco, 494; Tree Sparrow, 4; Field Sparrow, 48; White-throated Sparrow, 184; Swamp Sparrow, 4; Song Sparrow, 64; Snow Bunting, 3. Total, 45 species; 1850 individuals. -- Virginia Adams, J.L. Chamberlain (compiler) Larry Farmer, David Freer, Ruskin Freer, Morris Tillotson, Grace Wiltshire, John Withrow.

Roanoke, Va. (same territory as in previous years plus mountain territory to an elevation of (approximately) 2800 feet; open fields 40%. farmland 20%, creek bottom and pond 20%, deciduous and pine woods 20%). --Dec. 27; 7:15 a.m. to 3:30 p.m. Clear; temp. 40° to 60°; wind, none; ground bare. Fifteen observers in 2 parties. Total party-hours, 16.5 (14 on foot, 2.5 by car); total party-miles, 49 (36 by car, 13 on foot). Common Loon, 1; Mallard, 2; Bufflehead, 16; Turkey Vulture, 7; Cooper's Hawk, 2; Red-shouldered Hawk, 2; Sparrow Hawk, 1; Killdeer, 2; Common Snipe, 2; Mourning Dove, 18; Yellow-shafted Flicker, 4; Pileated Woodpecker, 3; Hairy Woodpecker, 4; Downy Woodpecker, 10; Eastern Phoebe, 1; Horned Lark, 2; Blue Jay, 14; Common Raven, 1; Common Crow, 37; Carolina Chickadee, 57; Tufted Titmouse, 28; White-breasted Nuthatch, 5; Brown Creeper, 3; Winter Wren, 1; Carolina Wren, 18; Mockingbird, 23; Robin, 14; Eastern Bluebird, 19; Starling, 1650; House Sparrow, 260; Eastern Meadowlark, 20; Redwinged Blackbird, 2; Common Grackle, 4; Cardinal, 38; Am. Goldfinch, 23; Slate-colored Junco, 65; Field Sparrow, 20; White-crowned Sparrow, 2; White-throated Sparrow, 30; Song Sparrow, 39. Total, 40 species; about 2425 individuals. (Evening Grosbeaks observed by C.H. Lewis on Dec. 22.) -Mr. and Mrs. Chester Brooks, Roger Brooks, Ben B. Dulaney, A.O. English (compiler), Mrs. A.O. English, E.W. Estes, Mrs. Kenneth D. Graves, Mr. and Mrs. P. Anderson Jordan, Perry F. Kendig, C.H. Lewis, Mrs. William J. Nelson, Mrs. Evelyn F. Newcomb, Frank A. Venn.

Blacksburg, Va. (same area as last year, within 7.5-mile radius of Linkous Store, pasture and plowed land 20%, town and suburbs 10%, virgin white oak wood lots 20%, mixed pine and oak woods 20%, river and creek bottom 30%). — Dec. 28; 6:00 a.m. to 6:00 p.m. Cloudy, rain finally clearing; temp. 52° to 55°; wind 0-10 m.p.h.; ground bare, ponds and streams open. Fourteen observers in 6 parties. Total party-hours, 44 (35½ on foot, 8½ by car); total party-miles, 174 (35 on foot, 139 by car). Pied-billed Grebe, 3; Mallard, 67;

Black Duck, 16; Gadwall, 3; Pintail, 4; Am. Widgeon, 67; Ring-necked Duck, 17; Lesser Scaup, 97; Common Goldeneye, 15; Bufflehead, 59; Hooded Merganser, 6; Turkey Vulture, 27; Black Vulture, 26; Sharp-shinned Hawk, 1; Marsh Hawk, 1; Sparrow Hark, 11; Ruffed Grouse, 2; Bobwhite, 58; Am. Coot, 1; Killdeer, 65; Mourning Dove, 169; Screech Owl, 1; Belted Kingfisher, 3; Yellow-shafted Flicker, 7; Pileated Woodpecker, 9; Red-bellied Woodpecker, 5; Red-headed Woodpecker, 5; Yellow-bellied Sapsucker, 1; Hairy Woodpecker, 3; Downy Woodpecker, 33; Eastern Phoebe, 1; Horned Lark, 39; Blue Jay, 130; Common Crow, 787; Black-capped Chickadee, 4; Carolina Chickadee, 117; Tufted Titmouse, 105; White-breasted Nuthatch, 21; Red-breasted Nuthatch, 13; Brown Creeper, 6; Winter Wren, 6; Carolina Wren, 49; Mockingbird, 44; Catbird, 1; Robin, 76; Eastern Bluebird, 19; Golden-crowned Kinglet, 17; Ruby-crowned Kinglet, 2; Cedar Waxwing, 14; Loggerhead Shrike, 6; Starling, 1346; Myrtle Warbler, 5; House Sparrow, 323; Eastern Meadowlark, 24; Redwinged Blackbird, 6; Rusty Blackbird, 15; Brown-headed Cowbird, 100; Cardinal, 102; Purple Finch, 31; Pine Siskin, 27; Am. Goldfinch, 339; Rufous-sided Towhee, 4; Slate-colored Junco, 214; Field Sparrow, 101: White-crowned Sparrow, 105; White-throated Sparrow, 37; Swamp Sparrow, 1; Song Sparrow, 114. Total, 68 species; about 5250 individuals. --Donald G. Cochran, Richard V. Dietrich, Maynard G. Hale, Charles O. Handley, Jr., Martha N. Kline, Burd S. McGinnes, Henry S. Mosby, John W. Murray (compiler), Curtis W. Roane, G. Myron Shear, Allan Smyth, Ellison A. Smith, Mrs. E.A. Smyth, E. Adger Smyth, Jr.

Glade Spring, Va. (all points within a 15-mile-diameter circle, center western town limits at railroad, including towns of Emory and Saltville, Walker Mountain and South Fork Holston River: farmland and pasture 35%, deciduous woods 25%, mixed pine and deciduous woods 22%, river bottoms 15%, marsh and ponds 3%). --Dec. 27; 7 a.m. to 5:30 p.m. Partly cloudy; temp. 450 to 650; wind SE, 0-8 m.p.h. Two observers in one party. Total party-hours, $10\frac{1}{2}$ ($7\frac{1}{2}$ on foot, 3 by car); total party-miles, 55 (5 on foot, 50 by car). Mallard, 65; Black Duck, 6; Greenwinged Teal, 1; Turkey Vulture, 16; Black Vulture, 20; Cooper's Hawk, 1; Redtailed Hawk, 1; Sparrow Hawk, 3; Am. Coot, 13; Killdeer, 40; Common Snipe, 2; Mourning Dove, 20; Great Horned Owl, 1; Belted Kingfisher, 1; Yellow-shafted Flicker, 1; Pileated Woodpecker, 3; Red-bellied Woodpecker, 4; Yellow-bellied Sapsucker, 1; Downy Woodpecker, 8; Blue Jay, 25; Common Crow, 97; Carolina Chickadee, 17; Tufted Titmouse, 13; White-breasted Nuthatch, 1; Red-breasted Nuthatch, 2; Brown Creeper, 2; Winter Wren, 1; Carolina Wren, 9; Mockingbird, 7; Catbird, 1; Robin, 2; Eastern Bluebird, 1; Golden-crowned Kinglet, 5; Cedar Waxwing, 9; Loggerhead Shrike, 1; Starling, 47,500; Myrtle Warbler, 1; House Sparrow, 50; Eastern Meadowlark, 15; Redwinged Blackbird, 1000; Common Grackle, 1000; Brown-headed Cowbird, 500; Cardinal, 55; Purple Finch, 2; Am. Goldfinch, 62; Rufous-sided Towhee, 5; Slate-colored Junco, 10; Field Sparrow, 21; Whitecrowned Sparrow, 12; White-throated Sparrow, 24; Song Sparrow, 24. Total, 51 species; about 50,681 individuals. (Seen in area count period, but not on count day: Sharp-shinned Hawk, Bobwhite, Hairy Woodpecker, Rusty Blackbird, Tree Sparrow, Swamp Sparrow.) - Paul S. Dulaney (compiler), Jane D. White.

A NEW BIRD FOR VIRGINIA

By F. R. Scott

In a small series of Purple Finches collected at Richmond in 1958 and 1959, there were three specimens of the Newfoundland race, <u>Carpodacus purpureus nesophilus</u> Burleigh and Peters, a new subspecies for the Virginia list. These were collected on February 8 (adult male, USNM 466447), April 5 (female, USNM 466453), and April 19 (immature male, USNM 466448), all in 1958. I am indebted to Thomas D. Burleigh of the Fish and Wildlife Service for making the identifications for me. The specimens are now on deposit at the U.S. National Museum in Washington.

- 115 Kennondale Lane Richmond 26, Virginia

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RECORDS OF THE BLUE GROSBEAK AT BLACKSBURG

By G. M. Shear

The Blue Grosbeak has been listed on the checklist of birds of Montgomery County as rare. Ralph Brown, former librarian at V.P.I., who kept careful records of the birds of the area for many years, lists six observations of this species, as follows: 5/12/27; 5/9/28; 5/8/30; 5/10/36; 5/6/40; and 5/13/45. Mrs. E.A. Smyth, III, observed a male of this species May 9, 1949.

The first record of the Blue Grosbeak that might indicate nesting in this area was made by Allen Stickley on July 4, 1956. He saw a male and female on this date and a record of this observation can be found in a note in the Raven, Vol. 27, page 64.

About the first of June 1959, C.W. Roane saw a pair of Blue Grosbeaks. On June 6 and 7 the author saw a male bird near the V.P.I. Airport which is approximately two miles from the place where Roane made his observation. On July 23 and 25 a pair were observed and on August 5, 6, and 9 a male bird was seen feeding young. A male bird was last seen at this site August 20. All of these observations near the airport were made in and around a brushy area of about an acre. The brush was predominantly black locust ten or twelve feet in height.

- 107 McCorkey Street Blacksburg, Virginia

EVENING GROSBEAK FEEDING ON MYRICA FRUITS

By C. C. Steirly

Five Evening Grosbeaks appeared in the writer's yard on Dec. 21, 1959 and since then they have been daily visitors at the small yard feeder. On Dec. 29, owing to an oversight, the feeder had not been filled. The grosbeaks were observed greedily devouring the fruits of a wax-myrtle (Myrica cerifera) that had been planted in the yard some years ago for its beauty as well as an attraction to the Myrtle Warblers. Within a day the grosbeaks had stripped the myrtle of its fruits.

There are several species of Myrica in the Coastal Plain section of Virginia of which Myrica cerifera is perhaps the most common since it is found on a variety of forest soils more or less corresponding in range to the distribution of loblolly pine. Closer to the coast and often on somewhat sterile soil the bayberry (Myrica pennsylvanica) occurs more abundantly. In this latter species the fruit is much larger (diameter 4-5mm) whereas that of cerifera is 2-3mm. Under a hand lens waxy atoms may be detected on the leaves of cerifera. These are wanting on the leaves of pennsylvanica.

Myrica cerifera is quite abundant in most pine forests and probably constitutes an important source of food for the winter woodland birds so frequently found in this habitat.

Other Fringillids visiting the writer's yard have seldom fed on Myrica fruits when the feeders were empty. Perhaps the grosbeaks are not as selective as the normal wintering Fringillid species.

- Waverly, Virginia

SNOW BUNTINGS IN LYNCHBURG

By J. L. Chamberlain

In spite of bad weather there was one bright spot in the Christmas Bird Count of the Lynchburg Club. On the morning of January 2, 1960, three Snow Buntings (Plectrophenax n. nivalis) were seen in a small flock of Horned Larks. The birds were apparently feeding on a straw-covered embankment near the control tower of Preston Glenn Airport. Later that day the party (Chamberlain, Farmer, Withrow, and Wiltshire) revisited the same area for further verification and, at that time identified two female and one male Snow Buntings. J.J. Murray (1952) lists the bird as extremely rare inland, and according to Ruskin S. Freer, this is the first record for the Lynchburg area.

-- Department of Biology Randolph-Macon Woman's College Lynchburg, Virginia

SNOWY OWL IN ROANOKE

By A.O. English

A Snowy Owl, Nyctea scandiaca, was first observed on the roof top of a building in the downtown area of Roanoke, on or about January 17. On January 19 it was photographed by a newspaper photographer, and again on January 21. This is my second record for Roanoke County.

2803 Rosalind Avenue, S.W.
 Roanoke, Virginia

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PLANS FOR ANNUAL MEETING OF THE V.S.O. Bridgewater, Virginia, April 29 and 30, 1960

Plans are going forward for the annual VSO meeting. We have confirmation from Mr. Ernest Swift, Executive Director of the National Wildlife Federation, that he can accept our invitation to be the evening speaker. It is time to issue a call for papers.

The meetings are to be held at Bridgewater College, in Bowman Hall, Room 101. For presentation of papers, projection equipment is available, in the form of 16mm. movie projector, and projectors for 2x2 slides, standard lantern slides and opaque material. Speakers expecting to use this equipment should, however, make arrangements in advance.

Pure Village Court, operated by Mr. O.K. Early, will be headquarters for lodgings. The court is located on Rt. 11, east side, just north of Mt. Crawford, about 4 miles from the college. There is no motel in Bridgewater, Rates per night are: single cabin, \$4.50 and \$5.00. Cabins for 2, \$6.00 and \$7.00, double beds, or \$8.00, twin beds. Extra cots can be placed in double rooms for \$1.50. Mr. Early will arrange for a breakfast to be served in the court's restaurant before the field trip. It will be necessary to make reservations in advance for overnight accommodations and breakfast. Reservations are requested by April 20.

The annual dinner meeting will be held at the Bridgewater Volunteer Fire Company building, and according to present advice, will be a turkey dinner, for \$1.50. The price is not final, but estimated. It might be slightly more. Reservations are requested by April 15.

Field trip arrangements are being made by Max Carpenter. Advance reservations are requested, so that the noon meal can be planned.

All reservations, as well as places on the program, should be made through me. We should have the titles of all papers to be read not later than April 11. I expect to be away over Easter, and will want to arrange the program before leaving.

> H.G.M. Jopson Bridgewater College Bridgewater, Virginia

NEWS AND NOTES

Slides of Birds Available. Dr. James R. Sydnor has a complete set of kodachrome slides of the Fuertes paintings in Forbush's Birds of Massachusetts. He would be glad to lend them to any responsible VSO member who wishes to use them for a lecture and who will return them promptly. Any who are interested in using all or part of these slides should get in touch with Dr. James R. Sydnor, Presbyterian School of Christian Education, 3400 Brook Road, Richmond, Virginia.

International Exhibition of Nature Photography. The Hamilton Naturalists' Club of Hamilton, Ontario, is sponsoring a International Exhibition of Nature Photography in April, 1960. The exhibition has a conservation purpose as well as that of the encouragement of good photography. Any VSO member who might like to enter a picture can secure entry forms from Mr. John Giles, Exhibition Chairman, International Exhibition of Nature Photography, Hamilton Naturalists' Club, Main Post Office, Box 384, Hamilton, Ontario, Canada.

White-eyed Vireo in Winter in Stafford County. Edwin T. McKnight and Amos M. White report the finding of a White-eyed Vireo on December 20, 1959, at Marlborough Point at the southeast corner of Stafford County. McKnight writes: "The bird was very tame, along a hedge row, which allowed making a complete description. Forehead, lores, and eye ring greenish yellow; crown and nape gray with olive tinge; back, rump, and edging on tail and wing feathers, bright olive green; two pale yellow wing bars, and same (nearly whitish) edging on tertials. Side of head back of eye, same as crown. Throat, breast, belly, and under tail coverts whitish (pale gray); sides and flanks bright greenish yellow. Iris light (whitish with pale yellow tinge). The one place where our description appears to be most seriously at fault in comparison with Ridgway was in extending the greenish yellow color of the lores across the forehead. We both made this same observation; and certainly from the side the yellow color on the lores would appear to extend across the forehead, but we were unable to find the bird on our Christmas count to check this point. However, Brooks' illustrations in the 'Birds of Massachusetts' shows this particular feature as we saw it."

Evening Grosbeaks in Fairfax County. A.H. Fast writes: "Every day beginning December 10, 1959, Mr. and Mrs. William Mull of Dunn Loring (near Vienna), Virginia, in Fairfax County, have had up to 91 Evening Grosbeaks at their feeders and in their yard. To January 13, 1960, they have banded 125 of them — using traps and bands of Arthur Fast. These birds have been observed at a number of feeding stations and in the yards in the surrounding areas—including those of Mrs. Elizabeth Peacock in Pine Ridge. She has banded 69 of them."

Evening Grosbeaks. This seems to be another good Evening Grosbeak winter. In another article, C.C. Steirly reports them at Waverly. Murray has been seeing small flocks, numbering up to 25, at various places around Lexington since December 17, and has had a report of a flock of up to 100 at one place there. Another report at Buena Vista describes a flock estimated up to 75. Small flocks have been reported by Kenneth Ellis at Hot Springs. The Christmas counts contain other reports.

V S O TREASURER'S REPORT

On hand, January 1, 1959 Receipts, dues, etc.	\$ 574.88 900.30 \$ 1475.18
Expenditures:	
Raven production Printing - forms and stationery Annual Meeting expense Postage Filing cabinet for Raven production Dues - Virginia Wildlife Federation Dues - National Audubon Society Leaflets & posters for Hawk Campaign Transferred to Publication Fund \$ 448.17 35.00 31.75 37.49 49.28 75.00 15.00 21.60 200.00 \$ 913.29	
On hand, January 1, 1960	\$ 1475.18 913.29 \$ 561.89
(\$100.00 of the above is held in the Trip Fund)	

PUBLICATION FUND (separate account from above)	
On hand, January 1, 1959	\$ 250.21
Income from sale of Check Lists and Avifau \$ 55.84 200.00 \$ 255.84	
	\$ 250.21
On hand, January 1, 1960	\$ 506.05

C.C. Steirly, Treasurer



The Raven

BULLETIN OF THE VIRGINIA SOCIETY OF ORNITHOLOGY

J. J. MURRAY, EDITOR LEXINGTON, VA.

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CONTENTS

Page

Birds of the 1959 Foray - Mountain Lake, Virginia
By R.K. Burns
(Courtesy of The Redstart, Brooks Bird Club)

Bird Specimens from Assateague Island and
Neighboring Areas
By Bernard Feinstein 33

News and Notes

VSO Annual Meeting Bridgewater College, Bridgewater, Virginia April 29 and 30, 1960 BIRDS OF THE 1959 FORAY
MOUNTAIN LAKE, VIRGINIA
June 6-14, 1959

By R. K. Burns

The study area for the 1959 Foray of the Brooks Bird Club comprised a circle of the usual fifteen-mile radius, centering at the Biological Station of the University of Virginia, in Giles County, Virginia. The greater part of the study area lay within this county, but a considerable sector extended northwestward into West Virginia (Monroe County), and smaller parts of three adjacent counties in Virginia (Craig, Montgomery, and Pulaski) were included. However, geography and the availability of access roads tended to restrict intensive coverage of the territory to Giles County.

Topographically, the area is rugged and diversified. It includes parts of several major mountain ridges, representing residual masses of the Appalachian Plateau. The ridges are separated by deep valleys, drained by the local tributaries of the New River. Chief among these are Sinking Creek, Little Stony and Big Stony Creeks, which enter the river from the northeast; and Walker's Creek — a large stream flowing from the southwest. The wide valley of the New River cuts across this territory from southeast to northeast and enters West Virginia through the greater water-gap in Peter's Mountain, known as The Narrows. Of special interest, topographically, is the deep, upper valley of John's Creek, lying to the east of the Salt Pond Mountain — Pott's Mountain massif, which drains northward to Craig's Creek and the James River system. Thus the territory lies athwart the divide between the drainage to the Ohio-Mississippi Rivers and to the Atlantic.

Elevations in the study area range from about 1500 feet on the New River in the vicinity of The Narrows, to an elevation of 4363 feet at the summit of Bald Knob. This peak is the culminating point of this part of the Appalachians and is situated on Salt Fond Mountain, overlooking the lake, about two miles south of the Biological Station. However, other points in this vicinity are only slightly lower. For convenience, in the annotated list, elevations from 1500 to 2500 feet are designated as Lower-. Included here are the lowlands of the New River and the lower valleys of its principal tributaries. Middle elevations extend approximately from 2500 to 3500 feet. Above this are the high backbones and plateau areas of the Salt Pond Mountain - Butt Mountain - Pott's Mountain complex, and the crests of a few other ridges.

The faunal zone relationships for the territory adjacent to the Biological Station have been characterized by Dr. J.J. Murray in a personal communication as follows. "The area on the Salt Pond Mountain plateau around the lake and the University of Virginia Biological Station is definitely Alleghanian Zone territory. Some of its most characteristic birds are: Least Flycatcher, Veery, Solitary Vireo, Blackburnian, Chestnut-sided and Canada Warblers, Scarlet Tanager, Rose-breasted Grosbeak and Carolina Junco.

Because of its proximity to open and warmer areas on the south slopes of the mountain, there is some intrusion of Carolinian species. There is reason to think that fifty years ago conditions on the mountain were affected by a certain amount of Canadian Zone influence, whereas now, after a warmer cycle, there is more Carolinian than Canadian influence." (For a fuller discussion of the faunal relationships of this region see Murray, J.J., A Check-List of the Birds of Virginia. Va. Society Ornith., 1952.)

The statement of Dr. Murray as to possible earlier conditions on the plateau, is substantiated by the testimony of surviving witnesses to the effect that, before the days of major lumbering operations, there were considerable areas of coniferous forest (Hemlock, Red Spruce, White Pine) at higher elevations; and by the fact that there are still relict stands of spruce to be found at Mann's Bog and a few other places. Also, in many of the rougher and more inaccessible valleys and ravines, huge old Hemlocks still stand in considerable numbers, and their progeny have been an important element in the reforestation of these areas. Similar conditions are found locally in a few other elevated situations, such as Butt Mountain, the higher parts of Pott's Mountain, and Angel's Rest Mountain west of Pearisburg.

It should be pointed out that little farm land or open pastures remain at present at these higher elevations. The small farms that once were found have almost all disappeared. The land is now largely National Forest, or in the hands of a few large land-owners with conservationist policies. Agriculture is confined almost entirely to the lower valleys, thus placing sharp limitations to the distribution of many birds.

The number of species listed below (108) compares favorably with the lists for other Forays - this in spite of the fact that the great groups of water birds, and shore and wading birds, are virtually unrepresented. No species of duck was found, and gulls and terms were unrepresented, owing to the scarcity of suitable bodies of water in the study area. Herons, sandpipers, and plovers were represented in each case by a single species. It follows that, by way of compensation, unusually good lists of other groups were found.

The species listed below were reported by members of the Foray working inside the limits of the study area, and within the official period of the Foray (June 6-14, inclusive), with the following minor qualifications. In the case of three species, reported at specific locations but with less than complete certainty, the place was revisited during the following week and the presence of the bird confirmed. In the case of two other species tentatively identified, confirmation could not be made and the names are not included in the list. Appended to the list without numbering are three species (A, B, and C) which were considered as "probables" for the territory, and for which a look-out was kept during the Foray, but without success. They were found during the following week within the study area and have been added in a supplementary capacity.

It should not be assumed that the species listed below are in all cases restricted to the particular areas or altitudes from which they are reported. For example, the Louisiana Waterthrush certainly occurs also at lower elevations than those cited. It is obvious that a strict delimitatiom of the distribution of all species could in any case hardly be made in the limited period covered by the Foray.

All references to Murray in the list which follows are to his Check-list of the Birds of Virginia, cited above.

ANNOTATED LIST OF SPECIES

- 1. Green Heron (<u>Butorides virescens</u>) Reported by several observers at lower elevations in Sinking Creek and New River valleys.
- 2. Turkey Vulture (Cathartes aura) Common at all elevations.
- 3. Black Vulture (<u>Coragyps atratus</u>) Seen occasionally at lower elevations in Doe Creek and New River valleys.
- 4. Sharp-shinned Hawk (Accipiter striatus) Occasional. Seen in the Mann's Bog area and the Big Stony Creek valley.
- 5. Cooper's Hawk (<u>Accipiter cooperii</u>) Apparently rather scarce. Only one reported, from Little Stony Creek valley. However, the bird has previously been found in various parts of the study area.
- 6. Red-tailed Hawk (<u>Buteo jamaicensis</u>) Fairly common at higher elevations. Usually seen soaring overhead.
- 7. Red-shouldered Hawk (<u>Buteo lineatus</u>) Fairly common and generally distributed.
- 8. Broad-winged Hawk (<u>Buteo platypterus</u>) Commonly seen and heard in all areas. A nest containing three young was found in a Beech tree about fifty feet from ground in the Pond Drain study area.
- 9. Peregrine Falcon (Falco peregrinus) Rare. One seen flying over New River near Ripplemead (C. Conrad et al.) and one near Pearisburg (Burns) in the same area.
- 10. Sparrow Hawk (Falco sparverius) Rather common at lower altitudes; not reported from higher elevations.
- 11. Ruffed Grouse (Bonasa umbellus) Very numerous along the higher, forested mountain ridges. Many broods of young reported from Salt Pond and Pott's Mountain areas.
- 12. Bobwhite (Colinus virginianus) Common in open country at lower elevations.
- 13. Ring-necked Pheasant (Phasianus colchicus) Rare. One reported near Blacksburg by C.O. Handley, Sr.

- 14. Turkey (Meleagris gallapavo) Scarce. One heard calling on slope of Bald Knob by C.O. Handley, Sr.
- 15. Killdeer (Charadrius vociferus) Frequently seen or heard in open country at lower elevations.
- 16. Spotted Sandpiper (<u>Actitis macularia</u>) A single one reported by C.O. Handley, Sr., in Little Stony Creek gorge below the Cascades.
- 17. Mourning Dove (Zenaidura macroura) Common in New River valley and valleys of its larger tributaries; not reported at higher altitudes.
- 18. Yellow-billed Cuckoo (Coccyzus americanus) Rather common in New River valley at lower elevations. Not seen on higher mountain tops.
- 19. Black-billed Cuckoo (Coccyzus erythrophthalmus) Occasional. Two reports from middle altitudes (Little Meadows, Clover Hollow).
- 20. Barred Owl (Strix varia) Heard a number of times on Salt Pond Mountain in the vicinity of the Station and around the lake. One seen in deep woods at Hunter's Branch near the Station.
- 21. Common Nighthawk (Chordeiles minor) Rare. One seen near the chemical plant on New River above the town of Narrows.
- 22. Whip-poor-will (Caprimulgus vociferus) Heard a number of times in the vicinity of the Station but less common than usual in this area. One seen on Big Mountain (Burns).
- 23. Chimney Swift (Chaetura pelagica) Fairly common at all elevations.
- 24. Ruby-throated Humming Bird (Archilochus colubris) Less common than usual in this region but reported at varying elevations from New River to the top of Salt Pond Mountain.
- 25. Belted Kingfisher (<u>Megaceryle alcyon</u>) Fairly common in lower valleys along larger streams.
- 26. Yellow-shafted Flicker (Colaptes auratus) Common at all altitudes.
- 27. Pileated Woodpecker (<u>Dryocopus pileatus</u>) Occasional. A number of reports from Salt Pond Mountain and a nest found in Pond Drain ravine.
- 28. Red-bellied Woodpecker (<u>Centurus carolinus</u>) Fairly common but more numerous at middle and lower elevations.
- 29. Red-headed Woodpecker (Melanerpes erythrocephalus) Scarce. Only two reports from Clover Hollow (June 14) and a point near Blacksburg (June 9 Chuck Conrad).
- 30. Yellow-bellied Sapsucker (Sphyrapicus varius) Scarcer than usual in this area. Only one reported from power line strip just south of the Station.

- 31. Hairy Woodpecker (<u>Dendrocopus</u> <u>villosus</u>) Several reports, all from middle or higher elevations.
- 32. Downy Woodpecker (<u>Dendrocopus pubescens</u>) Fairly common at all altitudes.
- 33. Eastern Kingbird (<u>Tyrannus tyrannus</u>) Common at lower and middle elevations.
- 34. Great Crested Flycatcher (Myiarchus crinitus) Fairly common at all elevations from New River valley to the Station grounds.
- 35. Eastern Phoebe (Sayornis phoebe) Common at all elevations.
- 36. Acadian Flycatcher (Empidonax virescens) Fairly common in suitable habitats at middle and lower elevations. Reported from Pond Drain Ravine (3500 ft.) and Cascades road (3000 ft.).
- 37. Least Flycatcher (Empidonax minimus) Very numerous at all higher elevations. One of commonest nesting species on Station grounds.
- 38. Eastern Wood Pewee (Contopus virens) Fairly common at all elevations.
- 39. Horned Lark (Eremophila alpestris) Scarce. A single specimen reported from the border of the Blacksburg Airport.
- 40. Rough-winged Swallow (Stelgidopteryx ruficollis) Fairly common along cliffs and bluffs of New River and Sinking Creek.
- 41. Barn Swallow (Hirundo rustica) Common in farming areas at middle and lower altitudes.
- 42. Blue Jay (Cyanocitta cristata) Widely but irregularly distributed at all elevations.
- 43. Common Raven (Corvus corax) Frequently seen on Salt Pond, Pott's and Big Mountains. An odd specimen with a white or ivory beak was seen at close range by Conrad, Phillips, Gicquelais, and Burns, thus settling a much debated question that had provided amusement for skeptics at the Biological Station for three years.
- 44. Common Crow (Corvus brachyrhynchos) Common throughout the area.
- 45. Carolina Chickadee (Parus carolinensis) Widely distributed but not numerous over the entire area at middle and higher altitudes.
- 46. Tufted Titmouse (Parus bicolor) Common throughout area.
- 47. White-breasted Nuthatch (Sitta carolinensis) Not numerous but distributed widely over the entire area.
- 48. Red-breasted Nuthatch (Sitta canadensis) Rare. A single individual seen near the Station by the Dressels in an area of scattered pines and hemlocks. An unusual find at this season.

- 49. House Wren (Troglodytes aedon) Common at lower elevations.
- 50. Bewick's Wren (Thryomanes bewickii) A single one reported from Walker's Creek in New River Valley. Formerly more common, nesting for many years on the Station grounds.
- 51, Carolina Wren (Thryothorus <u>ludovicianus</u>) Not numerous but widely distributed. Usually reported from lower elevations.
- 52. Mockingbird (Mimus polyglottos) Fairly numerous in New River Valley and at lower elevations.
- 53. Catbird (<u>Dumetella carolinensis</u>) Reported at all elevations but scarcer on the higher mountain tops.
- 54. Brown Thrasher (<u>Toxostoma rufum</u>) Fairly common at all elevations. More numerous than usual around the Station area.
- 55. Robin (<u>Turdus migratorius</u>) Common everywhere and in all types of habitat.
- 56. Wood Thrush (Hylocichla mustelina) Widely distributed at all elevations.
- 57. Veery (Hylocichla fuscescens) Found in suitable woodlands at all elevations but apparently more numerous higher up. Common in the Station area and on Pott's Mountain. There were no reports from New River Valley, but the bird was found on Johns Creek and in the lower valley of Big Stony Creek near Kimballton at an elevation of about 1700 feet.
- 58. Bluebird (Sialia sialis) A number of reports from farmlands and open country at lower and middle elevations.
- 59. Cedar Waxwing (Bombycilla cedrorum) Fairly common at higher altitudes with several pairs nesting in the Station vicinity.
- 60. Loggerhead Shrike (Lanius ludovicianus) Rather rare. One individual was reported near Union, W. Va. Both adults and four young were seen perched on a power line near an abandoned nest on Rt. 42 near Simmonsville, Va.
- 61. Starling (Sturnus vulgaris) Common at lower elevations.
- 62. Yellow-throated Vireo (Vireo flavifrons) Fairly common in New River Valley and along tributary streams up to about 3000 feet.
- 63. Solitary Vireo (<u>Vireo solitarius</u>) Common along the tops of Salt Pond, Big and Pott's Mountains, and in the higher valleys. A regular nester in the Station area. The local population has been identified as <u>V. s. alticola</u>.
- 64. Red-eyed Vireo (Vireo olivaceus) Very common at all elevations.

- 65. Warbling Vireo (<u>Vireo gilvus</u>) Fairly common along New River and in the valleys of Sinking Creek and Walker's Creek.
- 66. Black and White Warbler (Mniotilta varia) Many reports from all elevations. Common around the Station area, where it regularly nests.
- 67. Worm-eating Warbler (Helmitheros vermivorus) Scarce. One reported from Big Stony Creek Valley near Kire by Thacker, elevation 2700 feet.
- 68. Golden-winged Warbler (<u>Vermivora chrysoptera</u>) Fairly common in old fields and bushy clearings at all altitudes. Reported from Little Meadows, White Pine Lodge, Doe Creek, Johns Creek and Big Stony Creek.
- 69. Parula Warbler (Parula americana) Rather common in lower valleys; occasionally at higher altitudes up to 3700 feet.
- 70. Yellow Warbler (<u>Dendroica petechia</u>) Common in all the lower valleys and reported twice at nearly 3000 feet in Doe Creek Valley (Burns); not encountered higher up.
- 71. Magnolia Warbler (<u>Dendroica magnolia</u>) Uncommon. Two reports: from Little Meadows (Chandler) and the adjacent Cascades road (Burns).
- 72. Black-throated Blue Warbler (<u>Dendroica caerulescens</u>) Common in deciduous woods at middle and higher altitudes. The local population is believed to consist only of <u>D. c. cairnsii</u>.
- 73. Black-throated Green Warbler (<u>Dendroica virens</u>) Not common, but several reports at higher elevations, usually in association with old stands of hemlock.
- 74. Cerulean Warbler (<u>Dendroica cerulea</u>) Rather sparsely distributed in stream valleys. Two reports: Walker's Creek (Hurley, et al.) and Big Stony Creek near Kire (Burns) at an elevation of about 2600 feet. (Previous records exist for John's Creek.
- 75. Blackburnian Warbler (<u>Dendroica fusca</u>) Scatteringly distributed, both in deciduous and in evergreen woods. Reported from the Station area, the lake, Pond Drain ravine, Pott's Mountain and the Cascades area.
- 76. Chestnut-sided Warbler (<u>Dendroica pennsylvanica</u>) Common in old clearings and open woods at middle and higher elevations. Commonest warbler nesting in the Station area.
- 77. Pine Warbler (<u>Dendroica pinus</u>) Rather scarce. Two reports: from the Station area and from White Pine Lodge.
- 78. Prairie Warbler (<u>Dendroica discolor</u>) Fairly common in valleys and along brushy road-sides; occasional at higher altitudes to flanks of Bald Knob (Handley).
- 79. Ovenbird (Seiurus aurocapillus) Common in deciduous woods at all elevations.

- 80. Louisiana Waterthrush (Seiurus motacilla) Fairly common and frequently reported from valleys and rocky ravines at middle and higher altitudes, especially in Little Stony Creek Valley. The lack of reports at lower elevations is undoubtedly due to incomplete coverage.
- 81. Yellowthroat (Geothlypis trichas) Common in suitable habitats at all elevations, to the flank of Bald Knob (4300 feet).
- 82. Yellow-breasted Chat (<u>Icteria virens</u>) Rather common in typical habitats at all elevations.
- 83. Hooded Warbler (Wilsonia citrina) Reported for many localities at all altitudes: lower valleyof Little Stony Creek and Johns Creek (1800-2500 ft.); Little Meadows, White Pine Lodge, and Cascades area (3000 ft.); and on side of Bald Knob at 4100 ft. (Handley). One was taken on Station grounds and banded by Mrs. Cole (elevation 3850 ft.).
- 84. Canada Warbler (<u>Wilsonia canadensis</u>) Common at all middle and higher altitudes; one of the commonest species around the Station grounds.
- 85. Redstart (<u>Setophaga ruticilla</u>) Common at altitudes up to about 3000 feet; seen occasionally somewhat higher. Not reported from Salt Pond Mountain.
- 86. House Sparrow (Passer domesticus) Common in suitable locations throughout the area.
- 87. Eastern Meadowlark (<u>Sturnella magna</u>) Common throughout the area in open fields and pastures.
- 88. Redwinged Blackbird (Agelaius phoeniceus) General throughout the area in the usual habitats.
- 89. Orchard Oriole (<u>Icterus spurius</u>) Reported from several stations in the New River and Sinking Creek valleys.
- 90. Baltimore Oriole (<u>Icterus galbula</u>) Reported from many points in the valleys of New River and its larger tributaries. An intact male was found dead on a street in Pembroke.
- 91. Common Grackle (Quisculus quiscula) Rather numerous at lower elevations.
- 92. Brown-headed Cowbird (Molothrus ater) Reported scatteringly from all parts of area, except higher mountain ridges. A young one was seen being fed by Summer Tanager in Sinking Creek valley (the Shearers).
- 93. Scarlet Tanager (<u>Piranga olivacea</u>) Very common in forested areas throughout the region.
- 94. Summer Tanager (<u>Piranga rubra</u>) Rare. A single report from near the Lucas Memorial Church, Sinking Creek Valley, elevation 2000 feet. A female was seen feeding a young cowbird (the Shearers). This bird has been previously reported from a point in Montgomery County about 15 miles distant (Murray 1952).

- 95. Cardinal (Richmondena cardinalis) Common throughout the valleys of the area up to about 3500 feet; absent on the higher mountain ridges.
- 96. Rose-breasted Grosbeak (Pheucticus ludovicianus) Irregularly distributed throughout the area; very common at higher altitudes, especially along the top of Salt Pond Mountain and Pott's Mountain. Several pairs nested around the Station.
- 97. Blue Grosbeak (<u>Guiraca caerulea</u>) Rare. A single male seen singing in the airport area, Blacksburg; a probable sight record near Goldbond in Big Stony Creek Valley (Hurley).
- 98. Indigo Bunting (Passerina cyanea) Common in suitable territory at all elevations throughout the area.
- 99. American Goldfinch (Spinus tristis) Common throughout the area, especially so in the Little Meadows region.
- 100. Rufous-sided Towhee (Pipilo arythrophthalmus) Common at all elevations throughout the area.
- 101. Savannah Sparrow (Passerculus sandwichensis) A single unverified report from the Clover Hollow area (Hurley et al., June 13). This identification should probably be regarded as tentative, as there is no summer record for Virginia. However, there is a record of a bird of the Labrador race from Blacksburg as late as May 27 (see Murray 1952).
- 102. Grasshopper Sparrow (Ammodramus savannarum) Several reports from middle elevations.
- 103. Vesper Sparrow (Pocecetes gramineus) A number of reports from middle and lower valley areas.
- 104. Bachman's Sparrow (Aimophila aestivalis) Rare. One possible report from Clover Hollow at an elevation of about 2500 feet (Bartley, Hurley, et al.). Although scarce, this bird has been previously reported in the past twenty years from adjacent points in Craig, Montgomery, and Giles counties (Murray, 1952).
- 105. Slate-colored Junco (Junco hyemalis) Common on the higher mountains and in the upper valleys. Nests on the Station grounds, frequently using the stone foundation posts beneath the cottages. As far as is known the local population consists only of J. h. carolinensis.
- 106. Chipping Sparrow (Spizella passerina) More common at lower altitudes, but occasional on the higher mountain tops. A few nest about the Station grounds at 3850 feet, and around the Hotel at the lake.
- 107. Field Sparrow (Spizella pusilla) Generally distributed at all altitudes in suitable terrain.
- 108. Song Sparrow (Melospiza melodia) Common at lower elevations but not found on the higher mountain ridges.

- A. Blue-gray Gnatcatcher (Polioptila caerulea) John's Creek valley (2500 feet +) and Mill Creek near Narrows (1600 feet +).
- B. White-eyed Vireo (<u>Vireo griseus</u>) Lower valley of Little Stony Creek (2100 feet <u>+</u>).
- C. Kentucky Warbler (Oporornis formosus) Lower valley of Little Stony Creek, three miles above Pembroke (2100 ft.) and Mill Creek (1600 ft.).
 - Carnegie Institute of Washington Baltimore 5, Maryland

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BIRD SPECIMENS FROM ASSATEAGUE ISLAND AND NEIGHBORING AREAS

By Bernard Feinstein

The last ten days of June, 1957, were spent, in company with John Paradiso, collecting small mammals on the Chincoteague Refuge and adjacent areas for the United States National Museum. One year later, in June of 1958, a return trip was made. We were accompanied by Dr. Charles O. Handley, Jr. Although the work was mainly slanted for mammals, a few birds were also collected. It is from these few specimens plus what specimens could be found in the U.S. National Museum collections that the list below is drawn.

I have arbitrarily assigned the area to be listed as Assateague Island, both Maryland and Virginia portions; Chincoteague Island; Mills Island, Maryland; the waters of Chincoteague Bay; and its upper reaches, Sinepuxent Bay. Chincoteague Refuge occupies the Virginia portion of Assateague Island. This then is a fairly compact area.

The refuge cover is spaced so as to form, more or less, rings. The beach and the dunes immediately to the rear are denuded of vegetation. This belt is followed by a sandy belt with sparse vegetation, then marsh, myrtle bush breaks, young loblolly pine areas, and finally mature loblolly pine stands. Along the central ridge of the refuge area, in a north-south line, run some oak trees. It should be remembered that the pattern set above does not follow this sequence all the time. There are areas, such as found about the northern refuge edge, where the sandy dune-like region abuts directly upon myrtle bush with no intervening moist areas. Likewise in the marsh regions, those areas generally impounded within the dikes, isolated stands of loblolly pines are to be seen.

The majority of specimens listed below are from the collection of J.H. Buckalew. This collection is one of the finest units from the eastern shore area, the Delmarva Peninsula. It is in the U.S. Fish and Wildlife Service collection in the National Museum. The bulk of the remaining specimens were collected by A.C. Hilderbrand, who was assisted by A.J. Duvall. Other small units were collected by J.C. Lingebach, and lastly by the author.

All the specimens listed with data are in the collections of the U.S. National Museum. The data for those specimens listed and notes as not being found come from the catalogues of specimens. The locality Chincoteague, as given, could be any one of three, the town, the island, or the refuge. In those cases where the application of the name is uncertain, no definite locality is given. Where races are concerned, trinomials indicate specimens examined, binomials sight observations.

Gavia immer (Brunnich). Common Loon. A dead and desiccated specimen found on the "C" dike road, June 7, 1958. A female from North Beach, Assateague Island, Maryland, February 14, 1951; a male from Chincoteague, Virginia, May 28, 1950.

Podiceps auritus cornutus Gmelin. Horned Grebe. A female from Chincoteague, Virginia, November 23, 1944.

Podilymbus podiceps podiceps (Linnaeus). Pied-billed Grebe. A male from Chincoteague. Virginia, September 9, 1943.

Puffinus griseus (Gmelin). Sooty Shearwater. A male and female from Chincoteague, Virginia, June 21, 1940. Listed in the catalogues as received by the National Zoological Park from Dr. J.M. Whealton are four specimens from Chincoteague Island, Virginia. Only two of the four could be found, a male and female.

Phalacrocorax auritus auritus (Lesson). Double-crested Cormorant. A female specimen received by the National Zoological Park from Dr. J.M. Whealton, taken on Chincoteague Island, Virginia.

Butorides virescens virescens (Linnaeus). Green Heron. A male from Chincoteague, Virginia, August 8, 1948.

Bubulcus ibis Linnaeus. Cattle Egret. Two male juveniles taken by J. Valentine on Mills Island, Maryland, June 9, 1958.

Leucophoyx thula thula (Molina). Snowy Egret. A male from Green Run, Assateague Island, Maryland, August 16, 1941.

<u>Ixobrychus exilis exilis</u> (Gmelin). Least Bittern. A male from Chincoteague, Virginia, May 29, 1950.

Botaurus lentiginosus (Rackett). American Bittern. Two males from Chincoteague, Virginia, May 5, 1950 and January 17, 1951.

Branta canadensis interior Todd. Hudson Bay Canada Goose. A female from Chincoteague, Virginia, February 15, 1949.

Branta bernicla hrota (Muller). Brant. A male from Chincoteague, Virginia, November 24, 1932.

Chen hyperborea atlantica Kennard. Snow Goose. A female from Green Run, Assateague Island, Maryland, March 13, 1941; an immature female from Popes Island, Virginia, November 3, 1944.

Anas rubripes Brewster. Black Duck. A juvenile skin from Chincoteague Bay, Great Bay Marsh, Maryland, May 29, 1922.

Anas carolinensis Gmelin. Green-winged Teal. An adult male from Assateague Island, Ragged Point, Virginia on November 21, 1934; a male from Green Run, Assateague Island, Maryland, March 4, 1949.

Aythya marila marila (Linnaeus). Greater Scaup. A male from Chincoteague Virginia, December 30, 1942.

Aythya affinis (Eyton). Lesser Scaup. A male from Green Run, Assateague Island, Maryland, January 5, 1949.

Clangula hyemalis (Linnaeus). Oldsquaw. A male from Chincoteague, Virginia, November 14, 1942.

Melannitta deglandi (Bonaparte). White-winged Scoter. Two specimens from Assateague Island, Virginia, November 20 and 22, 1934.

Oxyura jamaicensis rubida (Wilson). Ruddy Duck. A male from Chincoteague Island, Virginia, January 13, 1945.

Mergus serrator serrator Linnaeus. Red-breasted Merganser. A male from Green Run, Assateague Island, Maryland, April 9, 1943.

Circus cyaneus hudsonicus (Linnaeus). Marsh Hawk. An immature female from North Beach, Maryland, November 15, 1948.

Falco columbarius columbarius Linnaeus. Pigeon Hawk. A female from Green Run, Assateague Island, Maryland, May 4, 1950. Two male immatures from Chincoteague, Virginia, September 24, 1942 and September 9, 1949.

Rallus elegans elegans Audubon. King Rail. A specimen from Chincoteague. Island, Virginia, November 19, 1934.

Rallus longirostris crepitans Gmelin. Clapper Rail. Three specimens from Chincoteague, Virginia; two females, February 11, 1935, and a male, May 19, 1951.

Gallinula chloropus cachinnans Bangs. Common Gallinule. Three specimens from Chincoteague Island, Virginia: an immature male, September 26, 1946; a male, July 10, 1949; a male, April 25, 1952.

Fulica americana americana Gmelin. American Coot. A male and female from Miller Island, Maryland, January 17, 1922.

Charadrius semipalmatus Bonaparte. Semipalmated Plover. A male from Chincoteague, Virginia, August 11, 1951.

Charadrius melodus melodus Ord. Piping Plover. A male from Ragged Point, Assateague Island, Virginia, May 13, 1942; a male from Popes Island, Maryland, September 11, 1948; 2 females, May 6, and 11, 1959, and a male, May 7, 1959, from Assateague Island, Maryland.

Charadrius melodus circumcinctus (Ridgway). Pipping Plover. A male from Green Run, Assateague Island, Maryland, March 12, 1949.

Charadrius vociferus Linnaeus. Killdeer. A male from Assateague Island, Maryland, May 6, 1959.

Philohela minor (Gmelin). American Woodcock. A female from Chincoteague, Virginia, March 15, 1941.

Capella gallinago delicata (Ord). Common Snipe. Two male specimens; Chincoteague, Virginia, November 13, 1934; Assateague Island, Virginia, November 16, 1934.

Actitis macularia (Linnaeus). Spotted Sandpiper. A male from Assateague Island, Maryland, May 10, 1959.

Catoptrophorus semipalmatus semipalmatus (Gmelin). Eastern Willet. A male from Assateague Island, Maryland, May 9, 1959.

Catoptrophorus semipalmatus inornatus (Brewster). Western Willet. A female from North Beach, Maryland, August 14, 1948; two immature males from Smith's Island, Virginia, August 23, 1895, and September 1, 1895.

Totanus melanoleucus (Gmelin). Greater Yellowlegs. A male from Assateague Island, Maryland, May 9, 1959. A male from North Beach, Maryland, August 6, 1950.

Totanus flavipes (Gmelin). Lesser Yellowlegs. A female from Assateague Island, Maryland, May 11, 1959.

Calidris canutus (Linnaeus). Knot. A female from Assateague Island, Virginia, September 20, 1945, could not be located in the collection.

Erolia melanotos (Vieillot). Pectoral Sandpiper. A male and female from Green Run, Assateague Island, Maryland, August 6, 1950.

Erolia fuscicollis (Vieillot). White-rumped Sandpiper. Four females from North Beach, Maryland: September 17, 1948 (2); June 5, 1949; and May 28, 1950. A female from Green Run, Assateague Island, Maryland, May 28, 1950.

Erolia minutilla (Vieillot). Least Sandpiper. Two males and a female from Assateague Island, Maryland, May 10 and 11, 1959.

Erolia alpina pacifica (Coues). Dunlin. A male and female from North Beach, Maryland, August 14, 1948, and May 22, 1949; a male from Assateague Island, Maryland, May 12, 1959.

Limnodromus griseus (Gmelin). Since there has been a slight bit of confusion in dealing with the Dowitchers, I think it best to go beyond the limits that have been set for the area. There are 35 specimens in the U.S. National Museum collections coming from the DelMarVa and coastal Virginia areas. A synopsis of these specimens, utilizing the criteria set forth by Pitelka (Geographic Variation and the Species Problem in the Shore-bird Genus Limnodromus, Univ. Calif. Publ. in Zoology, vol.50, no.1, 1950) affords the following breakdown:

Limnodromus griseus griseus (Gmelin). Short-billed Dowitcher.

Delaware	Fenwick Island			female	May 10, 1947
Maryland	Assateague Isl	and		female	May 10, 1959
	11 11			male	May 11, 1959
	n n	Fox H	ill Levels	female	May 28, 1950
	11 11	North	Beach	female	July 17, 1948
	11 11	11	Ħ	female	July 19, 1948
	n n	11	n	male	July 29, 1948
	II H	11	11	male	Sept.17, 1948
	11 11	11	11	female	May 22, 1949
Virginia	Chincoteague			female	June 9, 1950
	11			male	August 11, 1951
	Wallops Island			male	May 23, 1913
	Wachapreague			male	May 13, 1913
	11			female	May 15, 1913
	ıı			male	May 15, 1913
	Cobbs Island			female	July 20, 1880
	n			male	July 20, 1880
	11			female	August 25, 1891
	n			female	May 20, 1892
Virginia	Bone Island			male	July 14, 1880
	Smith's Island			female imm.	August 23, 1895
	II .			male imm.	August 23, 1895

March-April	, 1960	THE RAVEN	Page 38
Virginia	Smith's Island	male imm.	August 29, 1895
	11	male	August 24, 1909
	11	female	August 25, 1909
	Oyster	male	May 13, 1950
	Back Bay	female	August 12, 1944
	n	female	August 12, 1944
Limnodromus	griseus griseus toward	s hendersoni.	
Virginia	Cobbs Island	female	July 20, 1880
	II .	male	July 20, 1880
	n	female /	July 21, 1880
Limnodromus	griseus hendersoni Row	an. Inland Dowitcher.	
Virginia	Cobbs Island	female	July 20, 1880
	Bone Island	female	July 14, 1880
	11	female	July 14, 1880
	Smith's Island	female	August 24, 1909

The intergrades, the three from Cobbs Island, indicate the characters of ventral spotting, ground color and culmen lengths attributed to the diagnosis of the races. In all three specimens, the ventral spotting and ground color are similar to hendersoni, whereas the culmen length of the 1880 female is the only one in the range of hendersoni. The wing lengths of all three are in the range of griseus. It is because of the appearance of two of the three characteristics of hendersoni that I refer to them as intergrades.

Limnodromus scolopaceus (Say). Long-billed Dowitcher. A male from North Beach, Assateague Island, Maryland, September 24, 1950.

Micropalma himantopus (Bonaparte). Stilt Sandpiper. A male and female from North Beach, Maryland, August 6, 1948; an unsexed specimen and a female from Chincoteague, Virginia, August 25, 1912, and July 24, 1949.

Tryngites subruficollis (Vieillot). Buff-breasted Sandpiper. A female from Assateague Island, Virginia, September 5, 1948.

Limosa fedoa (Linnaeus). Marbled Godwit. A male from Chincoteague, Virginia, November 11, 1942; a female from Green Run, Assateague Island, Maryland, November 18, 1948. Limosa haemastica (Linnaeus). Hudsonian Godwit. A male and female from North Beach, Maryland, September 17, 1950.

Crocethia alba (Pallas). Sanderling. A female from Assateague Island, Virginia, October 11, 1940.

Steganopus tricolor Vieillot. Wilson's Phalarope. A male from North Beach, Maryland, August 3, 1949.

Lobipes lobatus (Linnaeus). Northern Phalarope. A male and female from North Beach, Maryland, August 14, 1948, and May 22, 1949.

Larus fuscus graellsii Brehm. Lesser Black-backed Gull. A female from Green Run, Assateague Island, Maryland, October 7, 1948.

Gelochelidon nilotica (Gmelin). Gull-billed Tern. A male from North Beach, Maryland, July 29, 1948.

Sterna forsteri Nuttall. Forster's Tern. A male from Assateague Island, Maryland, May 12, 1959.

Sterna albifrons antillarum (Lesson). Least Tern. A male from Chincoteague, Virginia, May 19, 1951.

Thalasseus maximus maximus (Boddaert). Royal Tern. A male from North Beach, Maryland, September 5, 1948; a male from 5 miles south of Ocean City, Maryland, Sinepuxent Bay, August 27, 1945. The latter specimen could not be located in the collection.

Alca torda torda Linnaeus. Razorbill. A female off Chincoteague (Refuge), Virginia, and an immature male, 10 miles south of Chincoteague, Virginia, November 19, 1948.

Plautus alle (Linnaeus). Dovekie. Three specimens from Chincoteague, Virginia; a female, November 24, 1932; a female, January 3, 1945; a male, December 11, 1949.

Coccyzus americanus americanus (Linnaeus). Yellow-billed Cuckoo. A male from Assateague Island, Virginia, June 27, 1957. This bird was taken while it quietly moved about in an oak tree.

Tyto alba pratincola (Bonaparte). Barn Owl. A female from Chincoteague, Virginia, December 8, 1950.

Otus asio naevius (Gmelin). Screech Owl. A female from Assateague Island, Virginia, June 6, 1958.

Asio otus wilsonianus (Lesson). Long-eared Owl. A female from Chincoteague Island, Virginia, January 21, 1945.

Chaetura pelagica (Linnaeus). Chimney Swift. Two desiccated specimens taken from the Moroney house, Assateague Island, Virginia, June 6, 1958.

Archilochus colubris (Linnaeus). Ruby-throated Hummingbird. A female from Chincoteague, Virginia, August 5, 1950.

Sphyrapicus varius varius (Linnaeus). Yellow-billed Sapsucker. Two male immatures from Green Run, Assateague Island, Maryland, September 24, 1950.

Tyrannus tyrannus (Linnaeus). Eastern Kingbird. A male from Assateague Island, Virginia, June 27, 1957; a male from Assateague Island, Maryland, May 11, 1959. The 1957 specimen was being carried in hand and caused undue agitation among the other males (?) as their territories were crossed. The only portion of the specimen which could be seen was the tail and the head.

Myiarchus crinitus boreus Bangs. Great Crested Flycatcher. A male from Assateague Island, Maryland, May 7, 1959.

Contopus virens (Linnaeus). Eastern Wood Pewee. A male and female from Assateague Island, Virginia, June 24, and 28, 1957.

Eremophila alpestris praticola (Henshaw). Horned Lark. Two females and a male from Assateague Island, Maryland, June 6, 1958, and May 7 and 12, 1959.

<u>Iridoprocne bicolor</u> (Vieillot). Tree Swallow. A male from Assateague Island, Virginia, June 24, 1958.

Hirundo rustica erythrogaster Boddaert. Barn Swallow. A female from Assateague Island, Maryland, May 12, 1959.

Progne subis subis (Linnaeus). Purple Martin. A male from Assateague Island, Virginia, June 24, 1957.

Corvus brachyrhynchos paulus Howell. Common Crow. Two males from Assateague Island, Virginia, November 15, and 16, 1934; one female from Chincoteague Island, Virginia, November 21, 1934; a male from Assateague Island, Maryland, May 8, 1959. The above female was determined to be ossifragus when collected, but now is referred to b. paulus. Measurements of some female specimens of ossifragus, b. paulus and the Chincoteague bird follows:

	ossifragus	b. paulus	Chincoteague spec.
bill (anterior edge of the nostril to the tip)	26 - 28 mm.	32 - 33.5 mm.	33.5 mm.
tarsus	43 - 46 mm.	54 - 58 mm.	55.5 mm.
middle toe without claw	30.5 - 32.5mm.	33 - 36 mm.	35 mm.

<u>Dumatella carolinensis</u> (Linnaeus). Catbird. An immature male from Chincoteague, Virginia, June 29, 1949; a female from Assateague Island, Virginia, June 6, 1958; a mele and female from Assateague Island, Maryland, May 6, 1959.

Toxostoma rufum rufum (Linnaeus). Brown Thrasher. A female, May 30, 1950 and an immature male, June 8, 1958, from Chincoteague, Virginia; a male from Assateague Island, Maryland, May 8, 1959.

Turdus migratorius achrusterus (Batchelder). Robin. Two females from Chincoteague, Virginia, November 13, 1934; a male from Assateague Island, Virginia, November 9, 1934.

Hylochichla guttata crymophila Burleigh and Peters. Hermit Thrush. A female from Assateague Island, Virginia, November 3, 1934.

Sialia sialis sialis (Linnaeus). Eastern Bluebird. A male from Chincoteague, Virginia, March 21, 1949.

Sturnus vulgaris Linnaeus. Starling. An immature male from Refuge Head-quarters, Chincoteague, Virginia, June 8, 1958.

Dendroica coronata coronata (Linnaeus). Myrtle Warbler. Two males from Assateague Island, Virginia, November 3 and 9, 1934.

Dendroica striata (Forster). Blackpoll Warbler. A male from Chincoteague, Virginia, May 22, 1948.

Dendroica pinus pinus (Wilson). Pine Warbler. A male, June 22, 1957; two immature males, June 23, 1957; two immature females, June 24, 1957; immature female, June 25, 1957, all from Assateague Island, Virginia.

Dendroica discolor discolor (Vieillot). Prairie Warbler. A male from Assateague Island, Virginia, June 22, 1957.

Geothlypis trichas trichas (Linnaeus). Yellowthroat. Two males, June 26, 1957, and May 10, 1959, and a female, June 1958, from Assateague Island, Maryland; male, June 28, 1957, and June 8, 1958 from Chincoteague, Virginia; two males, June 6, 1958 from Assateague Island, Virginia.

Passer domesticus domesticus (Linnaeus). House Sparrow. A male and female from Chincoteague, Virginia, the male on April 5, 1949, and the female on June 24, 1950.

Sturnella magna magna (Linnaeus). Eastern Meadowlark. A male from Assateague Island, Maryland, May 12, 1959. A male from Assateague Island, Virginia, June 21, 1951.

Agelaius phoeniceus phoeniceus (Linnaeus). Red-winged Blackbird. A male from Assateague Island, Maryland, May 8, 1959; a male from Chincoteague Refuge, June 21, 1957.

Cassidix mexicanus torreyi Harper. Boat-tailed Grackle. A female and male from Assateague Island, Virginia, June 25, 1957, and June 5, 1958; a male and female from Assateague Island, Maryland, May 6 and 8, 1959.

Quiscalus quiscula stonei Chapman. Common Grackle. A male from Assateague Island, Maryland, May 8, 1959.

Richmondena cardinalis cardinalis (Linnaeus). Cardinal. A male from Chincoteague, Virginia, November 13, 1934.

Pinicola enucleator eschatosus Oberholser. Pine Grosbeak. An immature male from Green Run, Assateague Island, Maryland, November 11, 1945.

Pipilo erythrophthalmus erythrophthalmus (Linnaeus). Rufous-sided Towhee. Two males from Chincoteague, Virginia, June 28, 1957.

Passerculus princeps Maynard. Ipswich Sparrow. A male from Green Run, Assateague Island. Maryland, November 12, 1948.

Passerculus sandwichensis (Gmelin). Savannah Sparrow. Specimens of the species in the U.S. National Museum are: <u>labradorius</u>, a male from Chincoteague, Virginia, November 12, 1934; <u>savanna</u>, a male from Green Run, Assateague Island, Maryland, October 29, 1948; male from Assateague Island, Virginia, November 9, 1934; male and female from Chincoteague, Virginia, November 12 and 13, 1934.

Passerherbulus henslowii susurrans Brewster. Henslow's Sparrow. A male from Pope's Island Light Station, Maryland, May 29, 1922.

Ammospiza caudacuta diversa (Bishop). Sharp-tailed Sparrow. A male from Green Run Inlet, Maryland, August 22, 1937; a male, July 17, 1948, North Beach, Maryland; a male and female from Assateague Island, Maryland, May 9 and 10, 1959; two males from Chincoteague, Virginia, May 3, 1944, and August 8, 1950.

Ammospiza maritima maritima (Wilson). Seaside Sparrow. A male from Chincoteague, Virginia, July 15, 1950.

Spizella arborea arborea (Wilson). Tree Sparrow. A female from Chincoteague, Virginia, February 10, 1949.

Spizella passerina passerina (Bechstein). Chipping Sparrow. A male from Assateague Island, Virginia, June 23, 1957.

Spizella pusilla (Wilson). Field Sparrow. A female from Assateague Island, Virginia, June 26, 1957; a male and female from Assateague Island, Maryland, June 7, 1958, and May 9, 1959.

Zonotrichia albicollis (Gmelin). White-throated Sparrow. A male from Assateague Island, Virginia, November 5, 1934; (female) from Chincoteague, Virginia, November 13, 1934.

Melospiza georgiana ericrypta Oberholser. Swamp Sparrow. An unsexed specimen from Mills Island, Maryland, March 2, 1938; a male from Chincoteague, Virginia, November 12, 1934.

Melospiza georgiana georgiana (Latham). Swamp Sparrow. An unsexed specimen and a male from Assateague Island, Virginia, November 5, 1934.

Melospiza melodia melodia (Wilson). Song Sparrow. Four specimens from Assateague Island, Virginia, three males, November 3, 9, and 13, 1934; a female, November 9, 1934; a male from Chincoteague, Virginia, November 12, 1934.

Melospiza melodia atlantica Todd. Song Sparrow. Four males and two females from Pope's Island Light Station, Maryland, May 29, 1922; a male from Green Run, Maryland, August 6, 1950; two males and three females from Assateague Island, Maryland, June 6 and 7, 1958, May 10, 1959, June 26, 1957, May 6, 1959; two males and four females from Assateague Island, Virginia, June 6, 1958, and June 25, 26 and 28, 1957.

Plectrophenax nivalis nivalis (Linnaeus). Snow Bunting. A female from Green Run, Maryland, November 26, 1949.

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NEWS AND NOTES

Absence of the Editor: A Note to All Contributors. I expect to spend May and June in England, leaving on a freighter about April 20 and returning about July 10. The sailing date was arranged for May 5, so as not to miss the Annual Meeting of the VSO; but freighters are fickle, and this one changed its date to about April 20, when it was too late to make any other plans. Copy for The Raven for March-April has already gone in. Copy for the May-June issue will be made up before I leave. Mail will probably not be forwarded, but for anyone who may want to get in touch with me, the address in England will be: Spring Hill, Hall Farm, Begbroke, Oxon, England. Letters will be welcome. -- J.J. Murray.

Annual Meeting. The Annual Meeting of the VSO will be held at Bridgewater College, Bridgewater, Virginia. Full information has gone out in the VSO Newsletter. The dates are April 29 (beginning at 2:00 P.M.) and 30 (Field Trip). Prof. H.G.M. Jopson, Bridgewater College, is in charge of arrangements. Reservations for rooms and requests for places on the program should be made through him as soon as possible.

Evening Grosbeak Summary for 1959-1960. Robert O. Paxton, 109 Hammond Street, Cambridge 38, Massachusetts, has agreed to work up a summary of Evening Grosbeak occurrences in Virginia during the season, as he has done in other years. All information as to places, dates, and numbers should be sent to him, making it as definite and as complete as possible.

Dr. McIlwaine Speaks. Dr. W.B. McIlwaine, Jr., was the guest speaker at the eighth grade science class at Midway High School in Dinwiddie County in March. He discussed the species of birds to be found in the Petersburg area and their food habits.

Wintering Waterfowl at Back Bay. According to News, the information sheet of the Virginia Commission of Game and Inland Fisheries, well over 100,000 waterfowl were observed in the Back Bay-Currituck Sound area of Virginia and North Carolina during three recent aerial inventories, with counts of 111,916 on January 9; 111,207 on January 17; and 132,362 on February 3. The Back Bay parts of these counts averaged 35,000, with Snow Geese and to a lesser extent, Canada Geese and Whistling Swans making up the bulk of the population, and with Black Ducks and Pintails being the most abundant ducks.

Melanistic Carolina Wren. Fred M. Packard, 24 Elizabeth Lane, Fairfax, Virginia, writes that of two Carolina Wrens which have been spending much of their time in a nest they had built on a ledge of a next door home one is strikingly melanistic. All of the normally rich brown upperparts are of a very dark chocolate brown, the underparts appearing to be normally lighter. He points out that Alfred O. Gross, in his account of the House Wren in Bent's Life Histories (U.S. Nat. Mus. Bull. 195, pages 113-141) remarks that albinism and melanism, which occurs so frequently in many families of birds, is very rare among wrens, being indeed absent, so far as the records go, in house wrens.

Highway Mortality in Cedar Waxwings. Max Carpenter of the Virginia Commission of Game and Inland Fisheries, while traveling with two other game officials, James Thornton, Supervising Biologist, and Clemmer Miller, Supervising Warden, noticed considerable evidence of Cedar Waxwing mortality. At a point several miles south of Steel's Tavern in Rockbridge County, they saw a flock of about 100 Cedar Waxwings feeding in a multiflora rose hedge in the center island of the divided highway. As cars approached, some of the birds would flutter up and into the highway. They picked up five freshly killed birds, saw where two others had been previously hit, and noticed many feathers along the edge of the road. Oddly enough, the editor, in passing this spot a few days ago, had wondered whether such a planting was not more of a hazard than a help to birds.



BULLETIN OF THE VIRGINIA SOCIETY OF ORNITHOLOGY

J. J. MURRAY, EDITOR LEXINGTON, VA.

5 & 6	MAY-JUNE, 1960 NOS.	VOL. XXXI
Page	CONTENTS	- Method Supring assumable on whose third and other
rage		
46	O Annual Meeting lyn Watkins	The 1960 V By Ev
48	nual Meeting Field Trip Carpenter	
49	y Trip of 1959 es W. Eike	The Back B By Ja
51	lackbird and Starling Populations in ern Virginia in 1959-1960 1 W. Sykes, Jr	Southeas
52	Cattle Egret at Chincoteague in 1954, with Behavior in Africa k P. Hailman	Notes on
53	pe in Surry County C. Steirly	Red Phalar By C.
53	wls for Roden Control R. Scott	
54	ation Bird Count ay Pine Ridge t News Glade Spring	Back
58	tes	News and N

THE 1960 VSO ANNUAL MEETING BRIDGEWATER, VIRGINIA

By Evelyn Watkins

Bowman Hall at Bridgewater College was the scene of the 1960 annual meeting of the Virginia Society of Ornithology. Following registration and an Executive Committee meeting, the general session began at 2 o'clock on Friday, April 29. Dr. H. G. M. Jopson, general chairman of the local committee, presided and introduced the speakers for the afternoon. Dr. Warren D. Bowman, President of the College, welcomed the VSO to the Bridgewater campus.

Mr. Max Carpenter, Wildlife Biologist, Virginia Commission of Game and Inland Fisheries, discussed "Observations on the Autumn Hawk Migration on Shenandoah Mountain." He pointed out a number of interesting observations which he and Dr. Jopson made during the peak migration in the fall. One of the main flights seems to be on the Virginia-West Virginia ridge. The flight of hawks follows the main ridge but on some days spread out over a wider area. There is perhaps some correlation between the wind direction and the spread of the hawks. Reddish Knob and High Knob were two of the chief points from which the observations were made, although there were comments concerning the migration through the Massanutten and Blue Ridge regions.

"Wintering Waterfowl at Silver Lake, Dayton, Virginia," was the subject of a paper by Mr. David L. Olsen of Bridgewater College. He gave in detail some of his observations from September 1959 to January 1960 and explained the protected shallow area which was under observation. Birds listed were Coots, Ring-necked Ducks, Pintails, American Widgeons, Redheads, Blue-winged Teal, Mallards, Gadwalls, Shovelers, and Buffleheads.

Mrs. Grace T. Wiltschire of Randolph-Macon Woman's College, gave a fascinating illustrated lecture on "Peru's Wealth Producing Birds - the Guanays." These birds, a species of cormorant, nest by the millions on the barren islands off the coast of Peru, free of precipitation and barren of vegetation. The nesting is continuous and the vast deposits of fertilizer are the source of immense wealth. At present there is a system of three-year rotation of guano mining, which is controlled by the Peruvian government.

Mrs. L. W. Machen of Hampton, Virginia, in a very interesting paper entitled "From 6,000 to 87,000 People and the Birds," described her observations on changes in bird population as development increased in the Hampton area. Although Mrs. Machen did not attempt to draw conclusions from her studies, she had for a number of years made observations which showed a shift of certain species of birds as areas were developed and became more densely populated. Maps and charts were effectively used to demonstrate.

A paper on "Wintering Orioles in the Norfolk Area" was presented by Mr. Paul W. Sykes, Jr., North Carolina State College. His observations were made in the Hampton and Washington areas. He reported that the orioles were not wintering in North Carolina and other inland Virginia areas. The bird feeders are an important factor in the wintering of the Baltimore Orioles. Mr. Sykes mentioned the diet of apples, beef tallow, salt pork, and seeds and stated that the birds also fed on tree sap after sapsuckers have made holes.

Mr. Harold H. Bush, Ranger from Dry River Ranger District, George Washington National Forest, described the National Forest Program and what it means to different groups of people. In his discussion of "The Multiple-Use Program for Forest Lands on the George Washington National Forest," he explained the interdependence of the natural resources and the importance of looking ahead in planning and developing certain areas. Fishermen, hunters, lumbermen, recreationists, soil conservationists, and others have special interests in the National Forests and National Parks which are considered in the over-all planning.

"Pecking Response of Downy Laughing Gulls" was the subject of a paper by Mr. Jack P. Hailman from Norfolk, Virginia. Through pictures he described the models which he used as stimuli in an attempt to determine what stimuli cause young gulls to peck. Although no conclusions were made, several observations were noted. Some important factors in the models used were the shape of the adult head, the contrast in color of the head and bill, and the shape of the tip of the bill.

Mr. John A. Plumb of Bridgewater College presented a paper on "Some Observations of Barn Owl Food Habits." In his studies of Barn Owls he found that their diet consisted chiefly of mice and rats but very few birds. The food habits of the Barn Owl make it a helpful bird.

An Audubon Society film on Wetlands Conservation was shown by Mr. Max Carpenter. This film was strong in its appeal to conserve some of the marshlands and stressed the importance of the wetlands in relation to waterfowl and gamebirds, nature hobbyists, flood control, agriculture, and trappers. An important issue is that of draining our swamplands: a question of waste or wealth?

The evening banquet was served at the Bridgewater Volunteer Fire Company Hall with Mr. W. F. Rountrey, President of VSO, presiding. At a brief business meeting the following officers were elected:

President: Mr. Paul Dulaney, Charlottesville Vice-President: Mr. J. E. Ames, Jr., Driver Secretary: Dr. Robert J. Watson, Arlington Treasurer: Mr. C. C. Steirly, Waverly

The Executive Committee to serve for three years (1960-1963):

Dr. Alexander Wetmore, Washington Mr. C. H. Lewis, Salem

Mr. W. O. Lewis, Ivy

After the banquet the program was continued in Bowman Hall at which time "Phantom of the Marshes," another Audubon Society film, was shown to the group. This film is a story of the Everglades Kite and is beautifully told in color.

The speaker for the evening was Dr. Joseph J. Shomon, Chief of the Education Division of the Virginia Commission of Game and Inland Fisheries and the Editor of <u>Virginia Wildlife</u>. He raised the question, "How well are we conserving our natural resources?" He spoke very convincingly to the

VSO group, pointing out many failures to conserve our vast natural resources. The waste of valuable topsoil, the failure to look to the future concerning our water supply, the poor forest practices still in existence - these and many other factors enter into the picture of the conservation of our natural resources. Many countries have practiced tree forestry for many years, but in this country we still have much to learn. We are still cutting out three trees for every two that are growing. In the use of our mineral resources we also need to learn to reduce waste.

Although the protection of our wildlife is gaining more importance, the trend is still downward. We must provide more spaces for nesting and breeding areas and winter ranges. Some states such as New York have spent millions of dollars for additional land for parks and refuges. Virginia needs to be awakened to the importance of buying up available lands that might be kept as natural habitats for the preservation of animal life. Suggested areas are those along the Eastern Shore and some of the nearby islands.

Dr. Shomon discussed some of the pressures made by builders and other people interested in roads and new developments. However, he believes that if conservationists become better organized and united in their efforts to arouse public opinion, something can be done to preserve our natural resources and wildlife before it is too late. He threw out a challenge to the VSO to work with other conservation groups towards this end.

- Harrisonburg, Virginia

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THE 1960 ANNUAL MEETING FIELD TRIP

By Max Carpenter, Game Biologist Commission of Game and Inland Fisheries

On Saturday morning, April 30, a number of VSO members and their guests gathered for a field trip near Bridgewater following the 1960 VSO Annual Meeting. This field trip produced 83 species of birds and 56 species of wild flowers in bloom. No rare birds were seen, but one wild flower was discovered which has been reported from only one other place in Virginia and that from one specimen. Credit for this rare discovery goes to Miss Lena Artz of Waterlick, Virginia, who requested the species mame of the flower be withheld until more positive identification could be made.

Fifty-two birders lined up Saturday morning for a chilly start to find some birds. Our first two stops, Lake Shenandoah and Silver Lake, were disappointing because they did not produce the waterfowl and shorebirds or terns expected. The best that Lake Shenandoah could show was the female Hooded Merganser and a lone Ring-billed Gull. Dr. Helbert did see an Osprey at the lake before the main group arrived, and another was seen at Silver Lake.

The third stop of the morning was an old orchard on the property of Captain Griffin Herring, where we knew a colony of Black-crowned Night Herons had nested in previous years. We were again let down, for not a single night heron was seen. It was felt that perhaps we were too early, although a dozen were seen there the week before. A very large population of Purple Grackles was found in the orchard, and nests could be seen in every other tree. It is possible the grackles had caused the night herons to find a new colony site. The lanceleaf buckthorn, Rhamnus lanceolata, was found blooming here. It is a shrub that provides food for birds. A Mourning Dove nest was found and many open-field birds were seen on the hike to and from the orchard.

Our final stop was in the mountains at the Hone Quarry picnic area. Here the main attraction was the many warblers in migration. Blackburnians were numerous along with Parula, Blackthroated Blue, and Blackthroated Green Warblers. Some of the party learned for the first time the song of the Worm-eating Warbler — the chipping sparrow-like song of the deep woods. Oddly enough, we counted on seeing a Raven, but none showed up. The old Raven's nest on the ridge above Hone Quarry was checked but was found to be unused. The most interesting flower in bloom here that many inquired about was the long-spurred violet, Viola rostrata, which is a northern species.

The climax of the trip was an excellent lunch served by the ladies of the Briery Branch Community. A final tally of birds was made and everyone headed for home.

-- Dayton, Virginia

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BACK BAY TRIP OF 1959

By James W. Eike

The annual winter field trip of the VSO to Back Bay was held on December 5 and 6, 1959. As in previous years, the DeWitt's opened their home to provide lodging for a number of the out-of-town members at Virginia Beach and to serve as headquarters for the evening fellowship hours. On Friday evening a number of the guests enjoyed fine fresh seafood at Marty's Grill, and then returned for a good sleep to the sound of the surf rolling on the beach in front of the DeWitt Cottage.

After a substantial breakfast everyone departed for Sandbridge, where we were met by our host for the day, Mr. Carl Yelverton, Manager of the Back Bay National Wildlife Refuge. Contrary to last year's experience, no one had to take the long beach walk, which is time-consuming, rewarding though it is. It is unfortunate that transportation places a very real limit on the number who may participate in this trip, which is certainly one of the "must" activities of the Society to all those who have experienced it.

As the group left the trucks south of the Refuge, waves of sound from geese and swans came over the dunes. Until we again reached Sandbridge in the late afternoon, we were never away from the sight and sound of waterfowl. Although the Refuge staff considered the numbers of ducks rather disappointing, the Whistling Swans, Canada Geese, and Snow Geese were present in greater numbers than had ever greeted this group at Back Bay. With an estimated 10,000 swans, 35,000 Snow Gsese, and 60,000 Canadas on the Refuge, the air seemed at times to seethe with great wings, as the birds were roused into flight by the sound of hunter's guns nearby, or by the VSO members observing the show.

Although veterans of this trip bemoaned the complete lack of Gannets, with memories of the spectacular fishing display of 1958 in mind, there were many compensations, such as the scoters riding the surf just off-shore, the Ipswich Sparrow observed by Dr. John Grey, the Avocet, the Great Black-backed Gulls in unusual numbers, and Blue-gray Gnatcatchers on Long Island in the Bay. While on Long Island, Ben Warfield found a female Common Redpoll, which was then observed at close range by a dozen of the group, a life-list bird for all.

The day was punctuated by the usual extremely varied field lunch on the Refuge Manager's lawn in pleasantly moderate temperature. After a fine afternoon, the Tripmaster marshalled his weary but happy forces for the trip to Sandbridge. Here the group took leave of the very hospitable Mr. Yelverton and his staff and returned to Virginia Beach.

The out-of-towners who stayed for the Sunday trip spent a very delightful evening in the home of Mary Tayloe Gwathmey, reminiscing on the fine day, and making comparisons with past years. In the morning the Tripmaster led the way to Knott's Island and the edge of Currituck Sound. This proved to be a most rewarding innovation, with many waterfowl and many species of small land birds, including a Western Palm Warbler on the edge of the Sound. A dozen Belted Kingfishers along the causeway provided considerable interest, as did fine views of Blue Geese intermingled with Snow Geese. After a tasty lunch in the field, the group dispersed with memories of another of the finest VSO activities.

A composite list of species observed at the Back Bay and on the Knott's Island-Currituck Sound trip is as follows: Common Loon, Red-throated Loon, Pied-billed Grebe, Great Blue Heron, Common Egret, American Bittern, Whistling Swan, Canada Goose, Blue Goose, Mallard, Black Duck, Gadwall, Pintail, American Widgeon, Redhead, Ring-necked Duck, Canvasback, Bufflehead, White-winged Scoter, Surf Scoter, Ruddy Duck, Hooded Merganser, Turkey Vulture, Black Vulture, Bald Eagle, Marsh Hawk, Sparrow Hawk, American Coot, Killdeer, Black-bellied Plover, Common Snipe, Sanderling, Avocet, Great Black-backed Gull, Herring Gull, Ring-billed Gull, Royal Tern, Mourning Dove, Belted Kingfisher, Yellow-shafted Flicker, Downy Woodpecker, Eastern Phoebe, Horned Lark, Common Crow, Carolina Chickadee, Carolina Wren, Short-billed Marsh Wren, Mockingbird, Catbird, Hermit Thrush, Eastern Bluebird, Blue-gray Gnatcatcher, Golden-crowned Kinglet, Water Pipit, Ruby-crowned Kinglet, Starling, Myrtle Warbler, Western Palm Warbler, Yellowthroat, Eastern Meadowlark, Redwinged Blackbird, Boat-tailed Grackle, Common Grackle, Brown-headed Cowbird, Cardinal, Common Redpoll, American Goldfinch, Rufoussided Towhee, Ipswich Sparrow, Savannah Sparrow, Sharp-tailed Sparrow, Slate-colored Junco, White-throated Sparrow, Swamp Sparrow, Song Sparrow.

WINTERING BLACKBIRD AND STARLING POPULATIONS IN SOUTHEASTERN VIRGINIA IN 1959-1960

By Paul W. Sykes, Jr.

On December 28, 1959, estimates of wintering blackbirds and Starlings were made in the vicinity of the Virginia section of the Dismal Swamp as the birds made their evening flight to the roosting areas within the swamp. Brooke Meanley and others from the Patuxent Wildlife Research Center, Laurel, Maryland, made the estimates on the west side of the swamp in Nansemond County. The estimates of birds on the east side of the swamp were made by the participants of the Norfolk County Christmas Census.

The following estimates were made:

	East side	West side	Total No. Indiv.
Starling Redwinged Blackbird Rusty Blackbird Brewer's Blackbird Common Grackle Brown-headed Cowbird	5,000 8,000,000 38 3 1,000,000 60,000	100,000 1,052,000 75 0 4,560,000 308,000	105,000 9,052,000 113 3 5,560,000 368,000
Total	9,065,041	6,020,075	15,085,116

The over-all estimate of 15,085,116 is about the same as the estimate for southeastern Virginia in the winter of 1958-1959.

The number of Rusty Blackbirds is definitely an under-estimate. The difficulty of identifying the Rusty Blackbirds when flying overhead in company with the other blackbirds approaches the impossible; therefore most of the figures for this species are of birds seen either perched in trees or feeding on the ground.

The three Brewer's Blackbirds were seen in company with Rusty Blackbirds by W. F. Rountrey and J. R. Withrow. The two females and one male were readily distinguished from the Rusty Blackbirds.

NOTE: Estimates for the west side of the Dismal Swamp and the totals were obtained by the writer through correspondence with Meanley.

-- Norfolk, Virginia

AN IMMATURE CATTLE EGRET AT CHINCOTEAGUE IN 1954 WITH NOTES ON BEHAVIOR IN AFRICA

By Jack P. Hailman

It is inevitable in these times of diverse and copious information on natural history that even the best of authors overlook something in previous literature. Valentine (1958: 68) stated in his excellent report on the Cattle Egret (<u>Bubulcus ibis</u>) at Chincoteague that one of the birds seen on 26 September 1955 had blackish legs ". . . which indicated a bird of the year. This is the first record of an immature bird in the area." Actually, over a year earlier, on 21 August 1954, several others and I noted that one of the five birds on Piney Island had dark blue-green legs (Hailman, 1954). I suspect that this individual had come from farther south during the post-breeding wandering season, and that the Mills Island, Maryland, group had not yet begun to breed.

On 30 September 1958, I made a few notes on the behavior of Cattle Egrets near Kenitra, Morocco (courtesy of the U.S. Navy). Americans on the Port Lyautey Naval Base persist in attempting to grow grass in the Moroccan desert and consequently must water the "lawn" constantly. This unusual habitat seemed particularly attractive to Cattle Egrets for foraging, perhaps because certain kinds of insects became plentiful there. These birds, all immatures, fed in groups of 6 to 20, walking or running over the ground (never hopping). There was little hostility among feeding individuals. In one observed encounter the threatening bird stretched out and lowered its head and neck facing its opponent, appearing to be quite horizontal. The bird threatened was very upright, giving an appearance just opposite to that of the threatening bird, so that postures expressing aggression and fear are not easily confused. No sounds were uttered. I can add nothing else to Valentine's (1958) accounts of behavior from my brief observations.

The spread of the Cattle Egret - and in the same habitat, the Glossy Ibis (<u>Plegadis falcinellus</u>) - in Virginia and surrounding states (see Hailman, 1954, 1959; Quay and Adams, 1956; Quay and Funderburg, 1958; and Valentine, 1958) presents an interesting subject for field investigation by **V**SO members.

Literature Cited

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- _____, and J.B. Funderburg, Jr. 1958. The Cattle Egret in North Carolina. Raven, 29: 115-117.
- Valentine, J.M. 1958. The Cattle Egret at Chincoteague, Virginia.
 Raven, 29: 67-96.
 - Norfolk, Virginia

RED PHALAROPE IN SURRY COUNTY

By C. C. Steirly

On April 4, 1960, the writer observed and studied at close range a Red Phalarope (Phalaropus fulicarius) in a marshy pond at Hog Island State Waterfowl Refuge in northeast Surry County. The pond was about 100 yards from the James River (Cobham Bay).

The bird was in the winter plumage and was observed swimming on the pond. It was quite tame and came to within 12 feet of the observer. The bill, yellow at the base and dark toward the end, was easily seen and served as an excellent diagnostic character in identifying the bird as of this species.

-- Waverly, Virginia

(The three previous Virginia records are listed in <u>A Check-List of the Birds of Virginia</u>, 55, — Editor)

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HAWKS AND OWLS FOR RODENT CONTROL

By F. R. Scott

Recently the VWF requested the Virginia Society of Ornithology to investigate the feasibility of raising a greater number of the smaller hawks and owls for rodent control in game plantings, orchards, etc. This matter was turned over to the VSO Research Committee for consideration.

First of all, it might be said that there seems to have been no previous attempt to raise the rodent-eating birds of prey artificially. Lacking any experience in this field, we are for practical purposes confined to creating a favorable environment in which the birds will increase naturally.

There are four main environmental factors which we might control: food, cover, nesting sites, and predation by man. There appears to be adequate food and cover, but the other two factors could be improved. Artificial nesting sites are readily utilized by two of our small birds of prey, the Sparrow Hawk and Screech Owl, and natural tree cavities for their nests run into trouble from those who wish to prune or remove injured trees that supply such nesting holes. Dr. J. Murray, of Lexington, informs me that a program there to install artificial nesting boxes in orchards and cemeteries has proved quite successful for these two birds. Such programs elsewhere in the state might make ideal projects for youth groups, such as scout troops, 4-H Clubs, and the like.

Page 54

Adult energy, however, might far more profitably be directed towards an educational campaign to stop the needless slaughter of hawks and owls by misinformed persons, especially hunters and farmers. It would not be difficult to bring this matter before individual hunt clubs, but the problem of reaching the farmer is another matter indeed. Several members of the VSO have on their own initiative made themselves available as speakers to youth and women's groups on natural history subjects, and the usefulness of hawks and owls is always emphasized in these talks.

The present law which supposedly protects our hawks and owls is a step in the right direction, but it could easily undermine a VWF program to increase the rodent-eating hawks and owls, since it allows the Board of Supervisors in any county to waive the prohibition against killing the birds in their county. It would appear that an attempt should be made during the next meeting of the legislature to make this law more realistic.

(From News-Record, Virginia Wildlife Federation, February, 1960)

May-June, 1960

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SPRING MIGRATION BIRD COUNT

Back Bay National Wildlife Refuge, Va. (same area as Christmas count, refuge and much of mainland of Princess Anne County; open farmland 20%, pine woodland 10%, deciduous 20%, open beach 5%, marshes and inland bay 45%). --May 7; 4 a.m. to 5:15 p.m. Foggy until 9:30 a.m., then clear; temp. 59° to 78°; wind SE, 5 to 12 m.p.h. Fourteen observers in 6 parties. Total party hours, 61-3/4 (32-3/4 on foot, 29 by car); total party miles, 292 (24 on foot, 268 by car). Common Loon, 4; Red-throated Loon, 3; Horned Grebe, 1; Gannet, 5; Double-crested Cormorant, 59; Great Blue Heron, 21; Common Egret, 27; Snowy Egret, 2; Louisiana Heron, 1; Little Blue Heron, 1; Green Heron, 9; American Bittern, 4; Least Bittern, 3; Glossy Ibis, 1; Canada Goose, 17; Snow Goose, 18; Mallard, 3; Black Duck, 38; Gadwall, 1; Pintail, 4; Greenwinged Teal, 8; American Widgeon, 1; Wood Duck, 10; Red-breasted Merganser, 11; Turkey Vulture, 23; Black Vulture, 14; Red-shouldered Hawk, 4; Bald Eagle, 1; Marsh Hawk, 1; Osprey, 11; Pigeon Hawk, 1; Bobwhite, 105; King Rail, 3; Clapper Rail, 8; Sora, 5; Common Gallinule, 3; Semipalmated Plover, 4; Killdeer, 12; Black-bellied Plover, 39; Ruddy Turnstone, 5; Common Snipe, 14; Whimbrel, 4; Spotted Sandpiper, 2; Solitary Sandpiper, 4; Willet, 18; Greater Yellowlegs, 107; Lesser Yellowlegs, 34; Knot, 4; White-rumped Sandpiper, 7; Least Sandpiper, 174; Dunlin, 16; Short-billed Dowitcher, 26; Stilt Sandpiper, 1; Semipalmated Sandpiper, 31; Sanderling, 266; Great Black-backed Gull, 9; Herring Gull, 347; Ring-billed Gull, 130; Laughing Gull, 149; Bonaparte's Gull, 1; Gull-billed Tern, 2; Forster's Tern, 4; Common Tern, 16; Least Tern, 10; Royal Tern, 150; Caspian Tern, 1; Black Skimmer, 1; Mourning Dove, 72; Yellow-billed Cuckoo, 3; Barn Owl, 1; Screech Owl, 2; Barred Owl, 5; Chimney Swift, 134; Ruby-throated Hummingbird, 11; Belted Kingfisher, 3; Yellow-shafted Flicker, 35; Pileated Woodpecker, 5;

Red-bellied Woodpecker, 39; Red-headed Woodpecker, 8; Hairy Woodpecker, 3; Downy Woodpecker, 15; Eastern Kingbird, 50; Great Crested Flycatcher, 77; Acadian Flycatcher, 3; Eastern Wood Pewee, 29; Tree Swallow, 100; Bank Swallow, 2; Rough-winged Swallow, 2; Barn Swallow, 1042; Purple Martin, 187; Blue Jay, 4; Common Crow, 128; Fish Crow, 20; Carolina Chickadee, 49; Tufted Titmouse, 60; White-breasted Nuthatch, 3; Brown-headed Nuthatch, 7; House Wren, 2; Carolina Wren, 114; Long-billed Marsh Wren, 96; Short-billed Marsh Wren, 1; Mockingbird, 110; Catbird, 61; Brown Thrasher, 64; Robin, 17; Wood Thrush, 54; Eastern Bluebird, 4; Blue-gray Gnatcatcher, 41; Cedar Waxwing, 1; Starling, 463; White-eyed Vireo, 47; Yellow-throated Vireo, 25; Red-eyed Vireo, 63; Black-and-White Warbler, 2; Prothonotary Warbler, 110; Swainson's Warbler, 2; Parula Warbler, 9; Yellow Warbler, 83; Myrtle Warbler, 5; Black-throated Green Warbler, 1; Yellow-throated Warbler, 25; Blackpoll Warbler, 11; Pine Warbler, 33; Prairie Warbler, 149; Ovenbird, 28; Louisiana Waterthrush, 1; Yellowthroat, 251; Yellow-breasted Chat, 38; Hooded Warbler, 50; American Redstart, 1; House Sparrow, 339; Bobolink, 325; Eastern Meadowlark, 217; Redwinged Blackbird, 1415; Orchard Oriole, 37; Rusty Blackbird, 3; Boat-tailed Grackle, 48; Common Grackle, 604; Brownheaded Cowbird, 132; Summer Tanager, 14; Cardinal, 202; Blue Grosbeak, 3; Indigo Bunting, 39; American Goldfinch, 8; Rufous-sided Towhee, 132; Savannah Sparrow, 31; Henslow's Sparrow, 6; Sharp-tailed Sparrow, 4; Seaside Sparrow, 5; Vesper Sparrow, 1 (PWS); Slate-colored Junco, 1 (FCR, WFR); Chipping Sparrow, 97; Field Sparrow, 137; White-throated Sparrow, 16; Swamp Sparrow, 13; Song Sparrow, 81. Total, 156 species; about 9,954 individuals. - Dr. and Mrs. W. G. Akers, W. D. Barnes, Mr. and Mrs. S. E. Breneiser, Mrs. C. W. Darden, Jr., Miss Gisela Grimm, H. A. and F.S. Hespenheide, D. W. Lamm, Mrs. M. F. Morrisette, F. C. Richardson, W. F. Rountrey, P. W. Sykes, Jr. (compiler).

Notes

Snow Goose - The same flock of 18 birds was seen twice.

Bald Eagle - There is an apparent decrease of these birds this year.

Eastern Bluebird - Noticeably scarce in the area this spring. Whether there is any correlation between the late cold spell in the last of February and the first of March is not known.

Vesper Sparrow - (PWS) The bird was observed carefully. The white outer tail feathers were quite readily seen.

Slate-colored Junco - (FCR, WFR) The bird was seen at close range.

Newport News, Va. (all points within a 15-mile-diameter circle. bounded by Chesapeake Bay, Hampton Roads, James River, Grafton; woodland 30%, fresh-water ponds 10%, waterfront 30%, open fields 30%). — May 14; 7 a.m. to 4 p.m. Partly cloudy; temp. 55° to 65°; wind N, 5-10 m.p.h. Eleven observers in 4 parties. Total party-hours, 32 (16 on foot, 16 by car); total party-miles, 180 (20 on foot, 160 by car). Great Blue Heron, 10; Common Egret, 3; Louisiana Heron, 1; Green Heron, 9; Yellow-crowned Night Heron, 3; Blue Goose, 1; Black Duck, 7; Blue-winged Teal, 3; Lesser Scaup, 1; Red-breasted Merganser, 2; Turkey Vulture, 16; Black Vulture, 1;

Osprey, 5; Sparrow Hawk, 1; Bobwhite, 60; Clapper Rail, 27; Semipalmated Plover, 25; Killdeer, 24; Black-bellied Plover, 15; Ruddy Turnstone, 50; Spotted Sandpiper, 134; Solitary Sandpiper, 7; Willet, 5; Greater Yellowlegs, 6; Lesser Yellowlegs, 9; Knot, 2; Pectoral Sandpiper, 1; Whiterumped Sandpiper, 4; Least Sandpiper, 155; Short-billed Dowitcher, 2; Semipalmated Sandpiper, 131; Western Sandpiper, 1; Sanderling, 5; Great Black-backed Gull, 1; Herring Gull, 606; Ring-billed Gull, 137; Laughing Gull, 123; Common Tern, 6; Least Tern, 16; Royal Tern, 14; Black Tern, 1; Mourning Dove, 90; Chuck-will's-widow, 1; Whip-poor-will, 3; Common Nighthawk, 1; Chimney Swift, 67; Ruby-throated Hummingbird, 1; Belted Kingfisher, 6; Yellow-shafted Flicker, 58; Pileated Woodpecker, 2; Redbellied Woodpecker, 9; Red-headed Woodpecker, 9; Hairy Woodpecker, 4; Downy Woodpecker, 4; Eastern Kingbird, 25; Great Crested Flycatcher, 10; Acadian Flycatcher, 2; Eastern Wood Pewee, 19; Tree Swallow, 102; Roughwinged Swallow, 8; Barn Swallow, 369; Cliff Swallow, 4; Purple Martin, 33; Blue Jay, 34; Common Crow, 44; Fish Crow, 19; Carolina Chickadee, 39; Tufted Titmouse, 39; White-breasted Nuthatch, 2; Brown-headed Nuthatch, 5; Brown Creeper, 4; House Wren, 8; Carolina Wren, 35; Long-billed Marsh Wren, 23; Mockingbird, 115; Catbird, 28; Brown Thrasher, 78; Robin, 177; Wood Thrush, 17; Eastern Bluebird, 15; Blue-gray Gnatcatcher, 11; Cedar Waxwing, 14; Starling, 504; White-eyed Vireo, 3; Yellow-throated Vireo, 1; Red-eyed Vireo, 20; Black-and-white Warbler, 1; Parula Warbler, 13; Blackthroated Blue Warbler, 3; Myrtle Warbler, 11; Yellow-throated Warbler, 8; Blackpoll Warbler, 12; Pine Warbler, 6; Prairie Warbler, 10; Palm Warbler, 1; Ovenbird, 9; Louisiana Waterthrush, 2; Yellowthroat, 20; Yellow-breasted Chat, 6; Hooded Warbler, 1; House Sparrow, 246; Bobolink, 214; Eastern Meadowlark, 86; Redwinged Blackbird, 424; Orchard Oriole, 5; Baltimore Oriole, 1; Common Grackle, 297; Brown-headed Cowbird, 98; Scarlet Tanager, 1; Summer Tanager, 14; Cardinal, 96; Indigo Bunting, 21; American Goldfinch, 41; Rufous-sided Towhee, 41; Savannah Sparrow, 8; Seaside Sparrow, 44; Chipping Sparrow, 16; Field Sparrow, 34; Song Sparrow, 105. Total, 120 species; about 5,596 individuals. - Martha Armstrong, Betty Blair, John Grey, Charles Hacker, M. E. Hathaway, Norma Katz, Jacqueline Lackey, Dorothy Mitchell, Norman Pope, Doris Smith, W. P. Smith (compiler).

Pine Ridge, Va. (area in and about Pine Ridge located about 15 miles west of Washington, D.C., just off Route 50, about in the center of a triangle formed by the towns of Fairfax, Annandale, and Falls Church, 5-6 miles from each. Area covered extended from Route 236 across Route 50 to fields just across Route 211; woodland 50%, fields 40%, residential area with large trees and shrubs 10%; woodland principally hardwood, including wooded lowland along Accotink Creek; fields about 2/3 in alfalfa, orchard grass, etc., 1/3 uncultivated, being invaded by shrubs and weeds; all fields with borders of brush and trees or vines). May 7; 6 a.m. to 8 p.m. temp. 60° to 80°; light, variable winds. Sixteen observers in 1 party. Total party-hours, 14; total party-miles, 30. Green Heron, 1; Wood Duck, 2; Turkey Vulture, 12; Black Vulture, 1; Broad-winged Hawk, 2; Sparrow Hawk, 1; Bobwhite, 16; Killdeer, 1; Solitary Sandpiper, 1; Mourning Dove, 21; Barred Owl, 1; Whip-poor-will, 1; Chimney Swift, 19; Ruby-throated Hummingbird, 3; Yellow-shafted Flicker, 8; Pileated Woodpecker, 4; Red-bellied Woodpecker, 6; Downy Woodpecker, 12; Eastern Kingbird, 14; Great Crested Flycatcher, 2; Eastern Phoebe, 2; Acadian Flycatcher, 5; Tree Swallow, 2; Rough-winged Swallow, 2; Barn Swallow, 38; Blue Jay, 100;

Common Crow, 27; Fish Crow, 1; Carolina Chickadee, 30; Tufted Titmouse, 25; House Wren, 12; Carolina Wren, 7; Mockingbird, 30; Catbird, 15; Brown Thrasher, 10; Robin, 100; Wood Thrush, 28; Blue-gray Gnatcatcher, 12; Cedar Waxwing, 2; Starling, 150; White-eyed Vireo, 7; Yellow-throated Vireo, 8; Red-eyed Vireo, 31; Black-and-white Warbler, 5; Blue-winged Warbler, 1; Parula Warbler, 30; Yellow Warbler, 1; Myrtle Warbler, 5; Blackpoll Warbler, 8; Pine Warbler, 1; Prairie Warbler, 20; Ovenbird, 15; Northern Waterthrush, 1; Louisiana Waterthrush, 6; Kentucky Warbler, 30; Yellowthroat, 41; Yellow-breasted Chat, 10; Hooded Warbler, 1; Canada Warbler, 4; American Redstart, 50; House Sparrow, 9; Bobolink, 12; Eastern Meadowlark, 19; Redwinged Blackbird, 24; Orchard Oriole, 3; Baltimore Oriole, 2; Common Grackle, 100; Brown-headed Cowbird, 65; Scarlet Tanager, 10; Cardinal, 50; Rose-breasted Grosbeak, 1; Indigo Bunting, 15; Evening Grosbeak, 3; Purple Finch, 1; American Goldfinch, 47; Rufous-sided Towhee, 25; Grasshopper Sparrow, 10; Chipping Sparrow, 11; Field Sparrow, 18; White-throated Sparrow, 9; Swamp Sparrow, 4; Song Sparrow, 18. Total, 82 species; about 1457 individuals. - Mr. and Mrs. Brantley Peacock, Richard Peacock, Daniel Peacock, Arthur H. Fast, Mrs. Claire L. Eike, Mrs. Mary Kerr, Helen Goldstick, Col. and Mrs. Louis Ely, Mr. and Mrs. John Theban, Mr. and Mrs. Richard Rule and James W. Eike (compilers).

Glade Spring, Va. (same area as Christmas counts: deciduous woods 45%, farmland and pasture 40%, riverbott m 13%, ponds and marsh 2%). --May 7; 5 a.m. to 7 p.m. Cloudy a.m., rain p.m.; temp. 500 to 600; wind SE, 5-15 m.p.h. Four observers in 1-2 parties. Total party-hours, 16 (11 on foot, 5 by car); total party-miles, 80 (8 on foot, 72 by car). Mallard, 13; Black Duck, 1; Turkey Vulture, 4; Black Vulture, 4; Osprey, 1; Sparrow Hawk, 1; Bobwhite, 1; American Coot, 4; Semipalmated Plover, 3; Killdeer, 12; Spotted Sandpiper, 2; Solitary Sandpiper, 4; Lesser Yellowlegs, 1; Least Sandpiper, 12; Mourning Dove, 27; Yellow-billed Cuckoo, 1; Black-billed Cuckoo, 1; Chimney Swift, 80; Yellow-shafted Flicker, 17; Pileated Woodpecker, 2; Red-bellied Woodpecker, 3; Red-headed Woodpecker, 2; Downy Woodpecker, 2; Eastern Kingbird, 3; Great Crested Flycatcher, 8; Eastern Phoebe, 3; Eastern Wood Pewee, 7; Rough-winged Swallow, 43; Barn Swallow, 71; Blue Jay, 39; Common Crow, 40; Carolina Chickadee, 4; Tufted Titmouse, 12; White-breasted Nuthatch, 2; House Wren, 6; Bewick's Wren, 1; Carolina Wren, 4; Catbird, 36; Brown Thrasher, 17; Robin, 33; Wood Thrush, 6; Eastern Bluebird, 2; Blue-gray Gnatcatcher, 1; Cedar Waxwing, 16; Starling, 162; White-eyed Vireo, 8; Red-eyed Vireo, 24; Black-and-white Warbler, 3; Golden-winged Warbler, 4; Yellow Warbler, 17; Chestnut-sided Warbler, 2; Prairie Warbler, 5; Ovenbird, 2; Louisiana Waterthrush, 1; Kentucky Warbler, 7; Yellowthroat, 23; Yellow-breasted Chat, 18; Hooded Warbler, 6; Wilson's Warbler, 1; American Redstart, 2; House Sparrow, 97; Eastern Meadowlark, 46; Redwinged Blackbird, 178; Orchard Oriole, 5; Baltimore Oriole, 8; Common Grackle, 179; Brown-headed Cowbird, 7; Scarlet Tanager, 4; Summer Tanager, 1; Cardinal, 34; Rose-breasted Grosbeak, 2; Indigo Bunting, 26; Purple Finch, 3; American Goldfinch, 90; Rufous-sided Towhee, 24; Vesper Sparrow, 1; Field Sparrow, 33; White-crowned Sparrow, 15; White-throated Sparrow, 8; Fox Sparrow, 1; Swamp Sparrow, 2; Song Sparrow, 56. Total, 82 species; about 1657 individuals. - Mrs. Carleton Abbott, Ben B. Dulaney, Paul S. Dulaney (compiler), Mrs. Jane D. White.

NEWS AND NOTES

New Honor for VSO Member. Professor Ruskin S. Freer, Chairman of the Division of Natural Sciences and Mathematics at Lynchburg College and one of the original charter members of the VSO, has been awarded the honorary Doctor of Science degree by Culver Stockton College, Canton, Missouri.

Ornithology to be Taught at Mountain Lake. The Mountain Lake Biological Station of the University of Virginia will present a course in ornithology during the first term this summer, June 16 to July 21. It will be conducted by Maurice G. Brooks, Professor of Wildlife Management at the University of West Virginia.

"Birds of Rockbridge County" Still Available. J. J. Murray's booklet, "The Birds of Rockbridge County, Virginia," is still available at 50¢ postpaid from F. R. Scott, 115 Kennondale Lane, Richmond 26, Virginia.

Carpenter Replaces Giles as District Game Biologist. Max Carpenter, former information technician with the Commission of Game and Inland Fisheries, was transferred April 1 from the Education Division to the Game Division as a District Biologist. He replaces Robert H. Giles, Jr., who is going to Ohio State University to work toward a Ph.D. in forest game management.



The Raven

BULLETIN OF THE VIRGINIA SOCIETY OF ORNITHOLOGY

J. J. MURRAY, EDITOR LEXINGTON, VA.

VOL. XXXI JULY-A	GUST, 1960 NOS. 7 & 8
Co	NTENTS Page
The 1959-1960 Evening Grosb By Robert O. Paxton	ak Invasion in Virginia
Population Studies of the 19 Bird Club at Mountain Lake By E.R. Chandler (Courtesy of The Redsta	, Virginia
Nests and Young-Out-of-the- the Brooks Bird Club at Ma By James H. Olsen (Courtesy of <u>The Redsta</u>	untain Lake, Virginia
The 1960 Skyland Foray By C.C. Steirly	
Actions of the Executive Cor By Robert J. Watson	nittee 7'

Copy for $\underline{\text{The Raven}}$ (except Field Trip and Local Club News) should be sent to J_*J_* Murray, 6 Jordan Street, Lexington, Va.

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

Requests for change of address or for back issues of The Raven should go to Miss Gertrude Prior, Sweet Briar, Va.

All letters relation to dues and membership should be addressed to C.C. Steirly, Treasurer, Waverly, Va.

THE 1959-1960 EVENING GROSBEAK INVASION IN VIRGINIA

By Robert O. Paxton

No other American passerine species has so spectacularly extended its range over the past generation as the Evening Grosbeak, Hesperiphona vespertina. Whereas the Fourth Edition (1931) of the A.O.U. Check List marked its eastward breeding limit in Michigan, the Fifth Edition (1957) lists breeding records from New York, Vermont, and Massachusetts. Juveniles have turned up in summer as far south as Hadley, Massachusetts (see Mary S. Shaub in Bird Banding, XXX, 4, p.226).

Two population trends appear to be going on simultaneously. In the short run, the species periodically builds up population peaks and irrupts far south and east of its usual range in winter; these waves are followed by years of relative scarcity. At the same time there is a long-term expansion of this species. The waves occur with increasing frequency, and each wave leaves a residue of new breeding birds south and east of previous records.

For Virginia bird students these two processes mean a growing series of winter invasions of Evening Grosbeaks. This past winter's movement was the third great wave in eight years. Invasions have occurred at intervals of six, six, and two years since the winter of 1945-46. In addition, there have been scattered records in almost all the intervening winters since 1945-46, and a minor invasion in 1954-55. Evening Grosbeaks must now be expected in Virginia each winter, although their numbers will vary widely.

What causes these irregular irruptions? This year's grosbeak invasion will undoubtedly be linked to the "great blizzard of 1960." In fact, however, the birds arrived in Virginia well before the first snows and the mechanics of periodic population irruptions has a far more subtle relation to the weather. A wave is probably prepared when a successful breeding season is followed by a shortage of natural food supply. The consequent search for food by flocks of this gregarious species leads them in a random movement quite different from the orderly spring and fall pattern of regular migrants. The population climaxes in Virginia in March and April suggest the continuing arrival of flocks throughout the winter season and into early spring.

If the rhythm of short-term population irruptions is still a matter for conjecture, the long-term expansion of the species seems more easily accounted for. Artificial feeding helps this species bridge the annual winter food crisis which, in a natural ecology, sets the maximum for an otherwise successful species' population. Greater winter survival leads to a larger breeding population, and the trend continues. There is evidence, however, that wandering too far in search of food may have diminishing returns. The fact that Virginia banders such as A.H. Fast of Arlington, who has banded grosbeaks for fifteen years, and Mrs. Elizabeth Peacock of Fairfax County, who has banded them for nine years, have not had any recoveries in the south in subsequent years suggests that most of our birds will not get back to suitable breeding territory. Hence, short-term declines follow the great waves to the south.

Evening Grosbeaks are particularly well adapted to artificial feeding. Lacking a rigid migration pattern, they can move freely to the most satisfactory food supply. They are pugnacious and easily dominate a feeding tray. Once a food source is located, they remain until it is exhausted. Mr. and Mrs. William Mull in Fairfax County fed four hundred pounds of sunflower seeds to a vast reservoir of birds in that area.

With the exception of 35 birds banded in Salem by A.O. English, banding activity was again restricted to the Washington area. There A.H. Fast banded 92, Mrs. Elizabeth Peacock banded 229, and Mr. and Mrs. William Mull banded 569.

Banding activities over the years in Washington have cast some light on grosbeaks' movements. Banding has exploded the notion of a single resident flock. Although the William Mulls had about sixty birds in their yard in Fairfax County each day, they actually banded about nine times that number. A fairly large reservoir of birds seems to circulate within an area up to five miles across, since the Mulls and Mrs. Peacock recovered each other's banded birds. Once established, a flock does not seem to move as far as ten miles, however, for A.H. Fast in Arlington did not recover any of the Fairfax birds.

Before reaching a suitable wintering area, a bird may move long distances quite rapidly. Mrs. Peacock recovered a bird banded by Dr. Maurice Broun at Kempton, Pennsylvania, only nine days later, on 3 January 1960.

The deep snows of February and March made no profound impression on the birds' behavior except to accentuate the tendency for large groups to locate an artificial food supply and remain close to it. As in the past, most observers noticed a tendency for the birds to establish a pattern visiting feeders in the morning and dispersing in the afternoon.

Banding tends to link the Virginia population to the newly established New England population. A bird banded in Ware, Massachusetts, on March 29, 1959, was recovered in Salem by A.O. English. The Mulls recovered several birds banded in New England, and only one each from Minnesota and Michigan.

A comparison with previous invasions shows that the birds arrived earlier this year than before — a natural result of increased breeding activity in New England. Hence they were recorded on eight Christmas counts out of twenty taken on land in Virginia. This wave was greater than that of 1957-58, but less spectacular than the great invasion of 1951-52 except in the Washington area, where all-time records were set and a total of 890 birds banded. As in past years, the birds were recorded throughout the state, from small Eastern Shore towns to the forests of Highland County. Their distribution seemed to conform more to the localities of competent observers rather than to any discernible geographical or ecological pattern. Although the great urban flocks supported by feeding trays were conspicuous, there were numerous observations of small rural flocks supporting themselves on the natural food supply, particularly early in the season before the snows and the discovery of artificial sources of food.

The following summary of Evening Grosbeak observations in Virginia during the winter of 1959-60 is the cooperative effort of a number of V.S.O. members. Although it is undoubtedly incomplete, it suggests the relative abundance and distribution of this species during the past winter's invasion.

Eastern Shore:

Horntown (near Chincoteague) - 1 on Dec. 29 (G. Prior, H. Sutton, M.M. Gilbert).

Accomac - 5 on March 5; 30 on March 6 (F.R. Scott).

Tidewater:

Newport News - 13 on Dec. 26

Hampton - November through April, with a maximum of about 30 in March (Mrs. L.W. Machen).

Waverly - 5, Dec. 21-29 (C.C. Steirly).

Richmond Area:

Jan. 1 to 27 Apr., with a maximum of about 50 in March and April (F.R. Scott). 21 at Hopewell Jan. 3.

Piedmont:

Charlottesville - 32 on Jan. 3 (C.E. Stevens). Warren - 1, Dec. 30.

Washington Area:

Fort Belvoir - 82 on Jan. 2 (J.M. Abbott).

Arlington - Feb. 16 to Apr. 22, 92 banded (A.H. Fast).

Fairfax County - 229 banded at three locations within a radius of 5 miles, Dec. 20 - May 11 (Mrs. Elizabeth Peacock).

Dunn Loring (near Vienna), 569 banded by Mr. and Mrs. William Mull.

Herndon - Dec. 31 - May 15, about 40 (Dr. L. Harold Sharp).

Oakton - reported by Carl Weber.

Lynchburg Area:

Amherst - 2 females week preceding March 13 (Robert Cunningham).

Lynchburg - first seen Jan. 4 (Mrs. W.S. Adams). Present to middle of March. Highest number, about 50, in late February. Also notes by Beverly Corr, Mrs. G.B. King, Mr. and Mrs. William Kyle, R.S. Freer, Sam Franklin, Thomas D. Morrison, Joe L. Richardson, and Mrs. Paul Walker. Most reports are from the Riverment section of the city, with others from Fort Hill and Timber Lake. Freer thinks the birds move along the river valley.

Altavista - about 60 in March (Mrs. Warren Wilkes).

Mountain-Valley Area:

Edinburg - 50-75 from 10 Nov. to 20 Apr. (J.W. Weaver).

Park View (near Harrisonburg) - 7-40 from Feb. 15 to Apr. 20
(D. Ralph Hostetter)

Middle Mountain, Highland County - 13 on Dec. 23 (R.O. Paxton)

Lexington - Dec. 17 to Apr. 9 (J.J. Murray), with a maximum of about 100 on Jan. 31 (Mrs. R.P. Carroll).

Brownsburg, Rockbridge County - 12 on March 16 (J.J. Murray)

Buena Vista - about 60 on Jan. 19 (J.J. Murray)

Monterey - 4 on Feb. 28 (R.S. Freer).

Southwest Virginia:

Roanoke - Jan. 24 to May 9 (A.O. English and Mrs. Homer L. Waid), with a maximum of 40.

Salem - up to 75 from Dec. 22 to May 8, 35 banded (A.O. English).

Pulaski - reported by A.O. English.

Radford - 20 on March 25 (Rev. Richard E. Price, Jr.).

Blacksburg - from Dec. 23 (Mrs. E.A. Smyth) to May 14, with a maximum of 32 (R.V. Dietrich). A number of small groups in the area recorded on 33 days up to 27 Apr. by J.W. Murray.

- Cambridge, Massachusetts

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POPULATION STUDIES OF THE 1959 FORAY OF THE BROOKS BIRD CLUB AT MOUNTAIN LAKE, VIRGINIA

By E. R. Chandler, Coordinator

This is the twelfth year the Club has carried out population studies. These studies were made in three different areas near the Mountain Lake Biological Station of the University of Virginia. The Station is located in Giles County, in the high Alleghenies of western Virginia, less than ten miles from the West Virginia border, between latitudes 37° 20' and 37° 25'. The three areas were selected to represent three types of habitat in this mountain territory at elevations between 3000 and 4000 feet in which most of the Foray work was done.

- 1. Moonshine <u>Dell Trail</u>, close by the Station. A typical second growth oak forest at an elevation of 3900 feet where the dominant breeding bird species was the Ovenbird.
- 2. Pond Drain located about a mile from the Station. A ravine through which ran the stream draining Mountain Lake. The trees varies from mature Hemlock, beech and birch to oak and maple on the hillside. On this census area the Canada and Black-throated Blue Warblers were dominant.
- 3. Little Meadows, an open field surrounded by forest, about three miles from headquarters. It is at an elevation of about 3100 feet. Here Chestnut-sided Warblers, Indigo Buntings and Towhees dominated as breeding species.

Population studies are a group effort by several members of the Foray, with at least two persons responsible for each area, assisted by other members of the group. Daily trips were made through the study areas and group excursions were made to these sections to pin point the territorial range of questionable species. I wish to thank all the members of the Foray who assisted with this project, and particularly those leaders who devoted so much of their time to the project.

CENSUS DATA

Young Oak Forest

Location: Moonshine Dell Trail Area SE of the University of Virginia Biological Station on Salt Pond Mountain, Giles County, Virginia.

Size: 15 acres. (Rectangular, 110 by 660 yards, measured).

- Plant Cover: The area is typical of thousands of acres of forest in the Mountain Lake area a deciduous forest comprising principally second and third growth trees. They averaged about 8 to 10 inches DBH almost entirely White (Quercus alba) and Black (Q. velutina) Oak. Other trees included the Black Locust (Robinia pseudo-acacia) and the Cucumber tree (Magnolia acuminata). The relatively thick understory, in addition to small individuals of the above species, was principally native Chestnut sprouts (Castanea dentata) and Azalea (Rhododendron sp.). The ground cover included large stands of New York fern (Dryopteras noveboracensis) and Bracken (Pteridium latiusculum) as well as Blueberry Vaccinium sp.).
- Situation: The center line followed the Moonshine Trail about halfway; then continued in a straight line along the side of the ridge. The study tract was surrounded on three sides by a similar forest type. The edge on the fourth side, at the South end of the tract, was similar for about 100 feet and then changed to a glen situation comprising swamp, rhododendron and relatively little in the way of large trees. The Towhee, Solitary Vireo, Scarlet Tanager and Chestnut-sided Warbler were found in this end. The whole area was sprinkled with dead stumps making it attractive to Pileated Woodpeckers and Crested Flycatchers.
- Coverage: June 8-12, 1960, daily trips between 5 A.M. and 8 A.M. Two trips between 4 and 6 P.M. and two evening trips after 6 P.M. Total man hours approximately 18.

Census

Species	Territorial Males	Males per 100 acres
Ovenbird	14.5	96
Black-throated Blue Warbler	2	13.4
Rose-breasted Grosbeak	2	13.4
Blackburnian Warbler	2	13.4
Black and White Warbler	1.5	10
Red-eyed Vireo	1.5	10
Rufous-sided Towhee	1	6.7
Solitary Vireo	1	6.7
Scarlet Tanager	1	6.7
Indigo Bunting	1	6.7
Wood Pewee	0.5	3.4
Wood Thrush	0.5	3.4
Pileated Woodpecker	+	+
Crested Flycatcher	+	+
Downy Woodpecker	+	+
Chestnut-sided Warbler	+	+

<u>Totals</u> 16 species 28.5 190.1

Nests of the Ovenbird (1), Rose-breasted Grosbeak (1) and Towhee all containing young birds were found on the tract. The Pileated Woodpecker was either seen or heard on or near the tract every visit and presumably nested nearby.

Visitors included Raven, Crow, Hairy Woodpecker, Tufted Titmouse, and Cowbird.

Census Takers: Nevada Laitsch and George Hurley, ably assisted by Glenn Phillips, Dorothy Conrad, Maxine Thacker and other members.

Mature Beech, Birch, and Heml k Forest

Location: Pond Drain Ravine, at the North end of Mountain Lake, about one mile from the University of Virginia Biological Station, Giles County, Virginia.

Size: 15 acres (rectangular, 110 by 660 yards, measured).

Topography: A sloping hillside, bisected laterally by a narrow dirt road used as a center line. The road at one end of the area was at an elevation of 3850 feet and at the other end it had dropped to 3600 feet. Since the ravine dropped at the same rate as the road, the relative locations of the two remained the same, except at one end where a small stream crossed the road.

Plant Cover: The portion of the area up-hill from the road had been cut-over.

A few older trees remained but about 80% was second growth. Probably as a result of the large deer population in the region underbrush was scarce, and a browse line was noticeable. Trees were oak, maple, birch, and wild cherry. Downhill from the road the forest had not been touched and the trees were mature. The floor was very clean. Trees were Hemlock,

White Pine, Beech, Yellow and Black Birch and Sugar Maple, reaching a height of 70-80 feet and 36 inches DBH. The understory consisted of Rhododendron, Hobble-bush, Stripped Maple, Azalea, Black Cohosh, Hellebore, Greenbrier, Oxalis, and several species of ferns and mosses. The entire area had a closed crown and very little sunlight penetrated the forest canopy.

Coverage: June 8 to 12, 1959; hours varied between 4:30 A.M. to 8 A.M. and 6 to 8 P.M. Total man hours, about 25.

Census

Species	Territorial Males	Males per 100 acres
Canada Warbler	10	67
Black-throated Blue Warbler	9	60.3
Blackburnian Warbler	5	33.5
Wood Thrush	4	26.8
Black and White Warbler	4	26.8
Ovenbird	4	26.8
Veery	3	20.1
Scarlet Tanager	2	13.4
Rose-breasted Grosbeak	2	13.4
Junco	2 (n)	13.4
Solitary Vireo	1.5	10
Red-eyed Vireo	1	6.7
Broad-winged Hawk	+ (n)	+
Pileated Woodpecker	+ (n)	+
Flicker	+	+
Tufted Titmouse	+	+
Totale 26	1 197 - 19	217

<u>Totals</u> 16 species 47.5 317

(n) Junco nest found under construction. Broad-winged Hawk's nest found with 3 young (week old); Pileated Woodpecker's nest with at least 2 young.

<u>Visitors</u>: Turkey Vulture (about 6 vultures used a tree on the acre for a roosting site); Ruffed Grouse; Barred Owl; Raven; Crow; Blue Jay.

Census Takers: H.O. and E.G. Heimerdinger, assisted by E. Chandler, E. Dressel, M. Masteller, R. Bell and others.

Mountain Meadow

Location: Little Meadows three miles W.N.W. of the University of Virginia Biological Station, Giles County, Virginia.

Size: 15 acres (rectangular 110 by 660 yards, measured).

Topography: Almost flat mountain plateau bisected by a little used road to the fire tower, cascades, etc. Near intersection of Little Stony and Meredith Creeks at approximately 3100 feet elevation.

Plant Cover: Four-fifths of area was abandoned farm land now dominated by Shrubby St. John's wort, Sensitive Fern and sedges, spotted with saplings 5 to 25 feet high of White Pine, Pitch Pine, Hemlock, Hawthorn, Wild Cherry, White Oak, and Red Maple. Approximately one fifth of the area had been mowed the previous year and contained a house used as a hunting lodge. Little Stony Creek flows through the area crosswise, accounting for a belt of alders approximately 75 feet wide. Other plants prominent in the area were Greenbrier, Serviceberry, Dewberry, Velvet Grass, Yellow Hawkweed, Orchard Grass, Timothy, Plantain, Red Clover, Goldenrod, Cinquefoil, Maleberry, Yarrow and Ironweed. The tract is roughly bordered on all sides by taller and more mature trees of the same species that appeared as saplings on the area.

Coverage: June 8-11, 1960, with several trips daily. Hours varies from 5 A.M. to 7:45 P.M. Total man hours, 23.

Census

Species	Territorial Males	Males per 100 acres
Chestnut-sided Warbler	4.5	30
Indigo Bunting	4.0	26.7
Rufous-sided Towhee	3.0	20
Golden-winged Warbler	1.5	10
Field Sparrow	1.0	6.7
Phoebe	1.0	6.7
Carolina Chickadee	1.0	6.7
Blackburnian Warbler	1.0	6.7
Yellowthroat	1.0	6.7
Yellow-breasted Chat	1.0	6.7
Catbird	•5	3.4
Brown Thrasher	+	+
Black and White Warbler	+	+
Chipping Sparrow	+	+
Yellow-billed Cuckoo	+	+
Goldfinch	+	+
Cedar Waxwing	+	+
Robin	+	+
		2

Totals 18 species 19.5 130

<u>Visitors</u>: Ovenbird, Red-eyed Vireo, Chimney Swift, Belted Kingfisher, Parula Warbler, Redstart, Turkey Vulture, Crow, Rose-breasted Grosbeak, Eastern Kingbird, Broadwinged Hawk and Blue Jay.

Census Takers: G. Phillips, E. Chandler, J. Olsen, G. Murrey and J.J. Murray.

- 239 Virginia Avenue Chester, West Virginia

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NESTS AND YOUNG-OUT-OF-THE-NEST REPORTED BY CAMPERS OF THE 1959 FORAY AT MOUNTAIN LAKE, VIRGINIA

By James H. Olsen

Introduction

The work of finding and recording information about nests and young-out-of-the-nest was done in an area delineated by a circle drawn around Mountain Lake, Virginia, the radius being approximately 15 miles. The area included parts of Giles County, Virginia and Monroe County, West Virginia; the cities of Rich Creek to the West, and Christiansburg to the East, mark the approximate boundaries.

Headquarters for the work were located at the Mountain Lake Biological Station of the University of Virginia. The observations were made between Friday, June 5 and Sunday, June 14, 1959, inclusive. Mountain Lake is located in Giles County, Virginia, at an elevation of nearly 4,000 feet above sea level. The natural lake from which the name is derived is situated on the top of Salt Pond Mountain and is a body of clear water with a surface area of approximately 100 acres and a maximum depth of 110 feet. Bald Knob, nearby, reaches an altitude of 4,363 feet. Within the fifteen mile radius observations can be made in places with a difference in elevation of 2,500 feet. A description of the area, ecologically, and details of the flora and fauna may be obtained from the report of the Twentieth Annual Foray of the Brooks Bird Club.

A summary shows a total of 202 nests being reported which represents 46 breeding species. In addition 21 reports of young out of the nest were made which added another 8 species. This established a total of 52 breeding records for the Foray.

Annotated List

- 1. Broad-winged Hawk (<u>Buteo platypterus</u>). This nest was found in a Beech tree, about 50 feet off the ground, near the road in the Pond Drain Study Area. Ralph Bell and L.C. Dalyrmple reported three young birds in the nest.
- 2. Ruffed Grouse (Bonasa umbellus). Two nests were reported and four additional reports of young birds were made. George Hurley reported a nest with eight young birds (two adults nearby) near the Moonshine Glen Study Area. Harold Boecher's nest was in the Little Meadow Study Area, just beyond Meredith Creek; it was a shallow depression at the base of a White Pine tree, lined with leaves, and contained three eggs. The other reports are of young birds out-of-the-nest. Nevada Laitsch sighted one chick on the road at the foot of Potts Mountain, an adult with four chicks on Twin Spires Trail, and an adult with nine chicks on the road about one-half mile from camp. The writer reported (and later reported by Ruth Ballentine also), an adult with eight young birds crossing the road about one mile from camp.

- 3. Mourning Dove (Zenaidura macroura). Helen Boecher reported this late nesting, having found the bird on the nest, built ten feet from ground in a willow tree and containing four eggs, along Route 42 near Simmonsville.
- 4. Turkey (Meleagris gallopavo). A hen with 12 chicks was reported by Charles Conrad, the observation being made by a lumberman working in the woods in the Simmonsville area.
- 5. Yellow-shafted Flicker (<u>Colaptes auratus</u>). Six nests were reported; Inez Kessner's at Mountain Lake Hotel, Tom Hurley's on Clover Hollow Road about thirty feet high in a Locust tree, Max Thacker's in Kire about three feet high in a dead Lombardy Poplar, and the remaining three were in telephone poles (Herman Postlethwaite's near Goldbond, John Jacob's and the writer's in camp).
- 6. Pileated Woodpecker (Hylatomus pileatus). This nest, reported by E.R. Chandler, was in the Pond Drain Study Area; hole was in a dead tree, about forty feet high, and the adults were observed feeding the young birds.
- 7. Eastern Kingbird (Tyrannus tyrannus). Three nests and one report of young out-of-the-nest were recorded. Maxine Thacker described a nest in an apple orchard near Blacksburg containing four eggs; George Hurley, one 15 feet high in an apple tree in Clover Valley, containing three young almost ready to leave the nest; Charles Conrad's report is of a nest 40 feet high in a Walnut Tree near Simmonsville. Don Shearer reported an adult feeding three young birds on a fence on the Porterfield farm.
- 8. Great Crested Flycatcher (Myiarchus crinitus). George Hurley reported the one nest, located in Clover Valley. It was 30 feet high in a locust tree.
- 9. Eastern Phoebe (Sayornis phoebe). Twelve nests were reported; Floyd Bartley's in New River Gorge, Florence Brannum's at the intersection of Route 700 and 604, Marjoretta Stahl's two were near Mountain Lake Hotel, Frances Ault's was at the same intersection as Brannum's but in a different farm building, E.R. Chandler's was on the porch of a hunter's cabin in the Little Meadows Study Area, Max Thacker's was two miles below Kire, Tom Hurley's was in the shed at the Cascades path, David Frank's was at the boathouse, Jeff Lightburn's w s in the laboratory entrance, and John Laitsch's two were in a cave near Eggleston.
- 10. Least Flycatcher (Empidonax minimus). Ten nests were described; nine were "on campus" and the tenth was reported by Mae Gicquelais as being 12 feet high in a maple tree in the Mt. Lebanon Churchyard. David Frank reported two, Hal Harrison three, A.F. Gainer one, Claude Ross one, Jeff Lightburn one, and Donna Lynn one. Gainer climbed the tree to reach the nest 18 feet high in a Yellow Pine tree to get a color photograph of the four white eggs. Hal Harrison included his nests in the motion picture studies he conducted during the week.

- 11. Eastern Wood Pewee (Contopus virene). Mary Tunsberg located a nest at a height of approximately 20 feet in a tree in the picnic area at Narrows, West Virginia. The female was sitting on the nest most of the time.
- 12. Rough-winged Swallow (Stelgidopteryx ruficollis). Three nests were described. E.R. Chandler's was in a hole in the wall at the Pembroke school yard, and contained young birds. The nest described by Ethyl Dalrymple was in a rocky hillside in the Narrows, West Virginia picnic grounds. Herman Postlethwaite reported one under a large rock near the top of the lime dump south of Goldbond, Virginia.
- Barn Swallow (<u>Hirundo rustica</u>). Eight nests were described. Marjoretta Stahl reported one containing one egg in the eaves of the Williams residence which is half way from Mountain Lake to Route 460. George Ballentine reported one in the eaves of a cottage at Mountain Lake Hotel, containing eggs. Donald Shearer found young birds in a nest built in a milking shed on the Porterfield Farm about five miles down Route 700. Florence Branum described young birds being fed in the nest built in a barn near the old bridge over Walker Creek on the road from Staffordsville to Eggleston. Tom Hurley reported young birds in a nest in barn rafters on a farm in Clover Hollow. Harold Boecher reported young birds in a nest in a barn on Route 42 near Simmonsville. Charles Conrad and Helen Boecher each described nests in other barns on Route 42 near Simmonsville, Virginia.
- 14. Common Crow (Corvus brachyrhynchos). Ellen Bowers reported four young birds out of the nest along with two adults, seen in flight along the road over Doe Mountain, on the way to the Cascated area.
- 15. House Wren (<u>Troglodytes aedon</u>). Don Shearer described a nest of this species found on the Porterfield Farm; under construction, 12 feet high in a dead Cherry tree.
- 16. Bewick's Wren (<u>Thryomanes bewickii</u>). One nest was reported by E.R. Chandler and George Flouer, in a small shed on a farm in Keenan, West Virginia.
- 17. Mockingbird (Mimus polyglottos). Four nests were reported. David Frank described one six feet high in a grape arbor near Union, West Virginia, containing three eggs. Don Shearer reported two one four feet high in a wild rose bush containing eggs, and one eight feet up in a Mock Orange tree containing young birds. Both were about five miles down Route 700. In the same area Eleanor Sims reported a nest four feet high in a Cedar tree, containing two eggs. Young birds out of the nest were reported from two locations; one by Pearl Gregg near the airport at Blacksburg and one by Don Shearer on the Porterfield Farm on Route 700.
- 18. Catbird (<u>Dumetella carolinensis</u>). Seven nests were reported, along with reports of young-out-of-the-nest. Four of the nests contained eggs, two were under construction and one contained young birds. Nests were found in the camp area, near the Little Meadow Study Area, and near the roads going down the mountain, and in the valley area. Nests were reported by Claude Ross (2), Alice Lightburn, Glen Phillips, Anna Dressel, and Don Shearer (2). Reports of young away from the nests were made by M. Shearer, Harold Boecher, Florence Branum, S.N. Gluck and Chuck Conrad.

- 19. Brown Thrasher (Toxostoma rufum). Four nests were reported.
- 20. Robin (<u>Turdus migratorius</u>). Two reports of young birds out of the nest were given; one by John Laitsch and one by Bessie Pantelis. Thirty-five nests were reported; Eleanor Sims reported seven nests, Dorothy Conrad three, Harold Boecher two, S.N. Gluck two, David Frank two, Mr. Shearer two, John Jacobs two, Florence Branum two, Beth Ann Olsen two, and one each by Don Shearer, Edna Gregg, Mary Frank, L. Gicquelais, Joan Conrad. Alice Lightburn, Tom Hurley, Ruth Ballentine, Ethel Dalrymple, Bill Jacobs, Jeff Lightburn, E. Jacobs.
- 21. Wood Thrush (Hylocichla mustelina). Four nests were described. Tom Hurley's report was of eggs in a nest five feet high in a bush in the cemetery near Keenan. George Hurley's was ten feet high in a Maple on Clover Valley Road, containing young birds. Two young were found in a nest built in the top of a small pine tree in the Pond Drain Study Area by Ralph Bell. Eleanor Sims reported a nest in a dead tree, five feet high, in the woods across the road from camp; it contained three young birds.
- 22. Veery (Hylocichla fuscescens). Four nests were reported by the campers. Claude Ross reported one built in a grapevine eighteen inches off the ground, about five miles from camp on the road to Kire; it contained four young birds. Nevada Laitsch described one on Potts Mountain, in a chestnut sapling, two feet high, containing four young birds. Dorothy Conrad's was on top of a "stump" in a Chestnut sapling, thirty inches off the ground, near the road to Kire. When first located, the nest contained three eggs . . . within seconds, one egg started to crack and the baby bird emerged . . . a dramatic scene for the entranced observers. George Hurley's nest contained four eggs and was built just one foot high in a Birch sapling. The location was a mile from camp on the road to the hotel.
- 23. Eastern Bluebird (Sialia Sialis). Four nests were described, none of them in the camp area. Tom Hurley reported six young in a nest in a fence post near Route 700. Helen Boecher's contained young birds and was in a fence post near Route 42 at Simmonsville. Nearby another nest was found by Harold Boecher, in a fence post, also containing young birds. Mildred Daniels reported one, in a fence post on the Dowdy farm near Blacksburg; the nest contained at least two young birds. Edna Gregg reported two adults and three young out of the nest about one-half mile from Route 460 on Clover Hollow Road.
- 24. Cedar Waxwing (Bombycilla cedrorum). Seventeen nests were described, all of them in the immediate camp area. Most were under construction when first reported, nearly half were completed with the adult sitting on the nest, and three were known to contain eggs. Jeff Lightburn reported three, M. Shearer reported two, Hal Harrison two, Claude Ross two, Eleanor Sims two, and one each by Don Shearer, S.N. Gluck, Jim Olsen, Tom Hurley, David Frank and L.C. Dalrymple.

- 25. Loggerhead Shrike (<u>Lanius ludovicianus</u>). Charles Conrad, in company of Helen and Harold Boecher, reported seeing both adult shrikes and four young birds perched on a power line on Route 42 near Simmonsville. The abandoned nest was located nearby in a wild apple tree.
- 26. Starling (Sturnus vulgaris). Four nests were described; two on the Hoge farm by Carol Conrad and two on the Porterfield Farm, by Don Shearer. Both farms are within five miles of camp, on Route 700.
- 27. Solitary Vireo (Vireo solitarius). Tom Hurley found the only nest of this species. It was seven feet high in a small maple tree near the junction of Salt Sulphur Turnpike and the Appalachian Trail, and contained three young birds.
- 28. Red-eyed Vireo (Vireo olivaceous). Four nests described. Ralph Bell reported one in the fork of a small tree near the swimming pool, containing three young birds. M. Stahl's report stated three eggs of the Vireo and two Cowbird eggs were in the nest constructed five feet high in a Witch Hazel about one-half mile south of the Hotel. Anna Dressel reported an adult bird sitting on the nest found near the junction of Route 700 and Route 460. Estrilla Daniels' was near the end of a limb of a tree near Michaux Cabin on the campus.
- 29. Yellow Warbler (<u>Dendroica petechia</u>). Three nests were found. Helen Boecher reported a nest ten feet high in a willow tree along a stream near Simmonsville, containing young birds. Edna Greeg reported a Yellow Warbler feeding a young Cowbird in an apple tree in an orchard off Clover Valley Road. A nest was reported by Claude Ross to be in a rose bush, three feet high, on the Songer Farm. It contained four young birds.
- 30. Black-throated Blue Warbler (<u>Dendroica caerulescens</u>). Three nests were found. George Hurley described a nest two feet high in a bush, five miles from camp along Salt Sulphur Turnpike; it contained two eggs on June 10 and three eggs on June 11. E.R. Chandler reported a nest under construction on the hillside near the Cascades. Nevada Laitsch reported a nest two feet high in a Laurel shrub, containing three eggs on the west side of Peters Mountain.
- 31. Chestnut-sided Warbler (Dendroica pensylvanica). Nine nests were found and two reports of young-out-of-the-nest. Nevada Laitsch reported an adult feeding young near the foot of Potts Mountain; Claude Ross reported young out-of-the-nest near the parking area at the Cascades. M. Shearer reported a nest containing young birds near a cottage on campus; the nest was three feet high in an Azalea bush alongside the old turnpike road near the laboratory. Hal Harrison reported four young birds in a nest two feet high in Laurel in back of Reed cabin. Tom Hurley reported four eggs in a nest two feet high in a small maple tree about six miles from camp on Salt Sulphur Turnpike. Claude Ross found two nests with one of them in bushes near the parking lot at the Cascades area, containing three young birds probably one day old. His other nest contained one egg and three young birds with the nest built in young chestnut growth around an old stump, thirty inches from the ground, about one mile down the road from camp. Nevada Laitsch reported a nest eight feet from the ground in a young oak tree near the foot of the west side of Peters Mountain; the nest contained three eggs. Eleanor Sims reported one egg and three young birds in a nest built two feet high in a huckleberry bush, at the back of the laboratory building. Edna Greeg reported a nest under construction about two feet off the ground in the Little Meadows Study Area.

- 32. Ovenbird (Seirus aurocapillus). Two nests were found; one, by Nevada Laitsch containing four eggs at the foot of Peters Mountain, and the second by George Hurley containing four eggs, near the Moonshine Dell Study Area. Both nests, of course, were on the ground. Four records of young out-of-the-nest were turned in. E.R. Chandler and Jim Olsen reported an adult with young birds at the edge of the Little Meadow Study Area. O.W. Crowder and H. Postlethwaite reported two adults and one young bird at the same location later in the week. Claude Ross saw young out-of-the-nest alongside the path to the Cascades, and again reported young birds in a thicket along the road to Kire about six miles from camp.
- 33. Louisiana Waterthrush (Seirus motacilla). Nevada Laitsch found two adult birds feeding two young birds alongside Stoney River, two miles north of Goldbond.
- 34. Yellow-throat (Geothlypis trichas). Although no nests were found, two reports of young out-of-the-nest were given; Nevada Laitsch found an adult feeding one young bird in a swamp near Kire and Harold Boecher observed three young birds in bushes along Route 42 near Simmonsville.
- 35. Canada Warbler (Wilsonia canadensis). Three nests were found and two reported of young out-of-the-nest. Helen Ryman reported four young birds in a nest near the Salt Mountain Trail. Ralph Bell reported a nest containing four young birds under a rock in a cluster of ferns near the road in the center of Pond Drain Study Area. Nevada Laitsch's report was of three eggs in a nest on the ground beneath a Rhododendron bush in Mann's Bog. Claude Ross reported young birds in a thicket about six miles from camp along the road to Kire. E.R. Chandler reported adults feeding young near Station Six in the Pond Drain Study Area.
- 36. American Redstart (<u>Setophaga</u> <u>ruticilla</u>). No nests were found, but two reports of young were made. Harold Boecher found young birds above the quarry on New River near Pearisburg. Nevada Laitsch reported one young bird on a small island in Stoney River two miles north of Goldbond.
- 37. House Sparrow (Passer domesticus). Five nests were reported on the Porterfield farm which is five miles from camp on Route 700; four of the nests by Don Shearer and one by Tom Hurley. Helen Boecher reported one nest in an apple tree near Simmonsville. E.R. Chandler flushed a female from a nest 15 feet high in a Spruce tree at the Pembroke School.
- 38. Red-winged Blackbird (Agelaius phoeniceus). No nests were reported but Chuck Conrad reported four young birds out-of-the-nest near Route 42 near Simmonsville, and Harold Boecher reported young out-of-the-nest at a spot nearby.
- 39. Baltimore Oriole (<u>Icterus galbula</u>). Four nests were found and one record of young out-of-the-nest. Florence Barnum reported a nest in the top of a Sycamore tree on a farm at the intersection of Route 700 and Route 604. Frances Ault reported a nest in the top of a Sycamore tree by the covered bridge on Route 604. George Hurley found his nest in Clover Valley. Evan Dressel reported young birds in a nest built

- twenty feet above the ground over a picnic table in a roadside park on Route 219 between Salt Sulphur Springs and Union, West Virginia. Harold Boecher found young out-of-the-nest near Simmonsville on Route 42.
- 40. Orchard Oriole (<u>Icterus spurius</u>). The one nest reported was described by Glen Phillips as being thirty feet high in an Oak tree, containing young birds, near the Christian Church in Clover Hollow Valley.

 M. Shearer found young birds out-of-the-nest on the Hoge Farm.
- 41. Common Grackle (Quisculus quiscula). Glen Phillips found young out-of-the-nest in an orchard near the airport in Blacksburg.
- 42. Brown-headed Cowbird (Molothrus ater). M. Shearer reported seeing an adult Summer Tanager feeding a Cowbird in the sideyard of the Christian Church on the road to camp. M. Stahl reported finding two eggs in a Red-eyed Vireo nest. Edna Greeg reported observing a Yellow Warbler feeding a young Cowbird in an apple orchard. Bill Athey reported a Junco nest with one Cowbird egg.
- 43. Cardinal (<u>Richmondena cardinalis</u>). One nest containing eggs was found by Jim Olsen in a hedge fence at Keenan, West Virginia.
- 44. Rose-breasted Grosbeak (Pheucticus ludovicianus). Eight nests were reported with two records of young out-of-the-nest. Nevada Laitsch and Claude Ross reported a young bird out of the nest about five miles from camp on the road to Kire; they located the bird from the alarm note of the adult and later watched a chipmunk kill the fledgling and attempt to carry it away. Ethel Dalrymple found two young birds out-of-the-nest along the road in camp. Eleanor Sims reported three nests; one fifteen feet high in a thorn tree near the fire tower, the second one was ten feet off the ground in a dogwood tree in the immediate camp area, and the third in a thorn tree, ten feet off the ground, near the golf course. Bessie Pantelis reported a bird sitting on a nest built twenty-five feet above the ground in a birch tree over-hanging the road in the Pond Drain Study Area. George Hurley reported young birds in a nest in a fork of a Maple tree, eight feet off the ground, about five miles from camp along Salt Sulphur Turnpike. Tom Hurley reported four young birds in a nest six feet high in a Box Elder bush alongside Salt Sulphur Turnpike. Hal Harrison reported four young birds in a nest in a Rhododendron bush near the main gate to camp. H. Postlethwaite reported an adult bird sitting on a nest in a maple tree, fifteen feet off the ground, near the laboratory.
- 45. Indigo Bunting (Passerina cyanea). Five nests and two reports of young out-of-the-nest were observed. Claude Ross reported three of the nests. One contained three young birds and was built two feet off the ground in a rose bush on the Songer Farm, another was in a young oak tree, about two feet off the ground, containing four eggs, and was in the immediate camp area; the third contained four eggs and was about one foot off the ground on the road to Pembroke. Eleanor Sims reported two nests; the first one containing four young birds, the second contained four eggs, and both were in small maple trees, near the road from camp to the hotel. Don Shearer reported one young bird out-of-the-nest alongside the road to the hotel. Anna Dressel reported one young bird being fed by a female near the bridge over Walker Creek south of Parkersburg.

- 46. Rufous-sided Towhee (Pipilo erythrophthalmus). Three nests reported. Jeff Lightburn reported a nest containing one egg and one young bird, built on the ground near one of the cabins. Nevada Laitsch reported a nest on the ground containing three eggs, in the Moonshine Dell Study Area. Claude Ross reported a nest seven feet off the ground containing three eggs, near camp on the road to Kire.
- 47. Vesper Sparrow (<u>Pooecetes gramineus</u>). Helen Boecher found two young birds on a fence near the airport near Blacksburg, Virginia.
- 48. Slate-colored Junco (Junco hyemalis). Five nests were described.

 Nevada Laitsch reported a nest under construction beside the path from the road to the golf course. Max Thacker reported a nest under construction by a path in the Pond Drain Study Area. Cindy Conrad found a nest containing eggs, about five feet off the ground in a pine tree near the dining hall. Cindy also found a nest nearby containing four eggs, built six feet off the ground in a hemlock tree. Bill Athey reported three Junco eggs and one Cowbird egg in a nest on the ground on the trail to Bald Knob. Mary Tunsburg reported young birds out-of-the-nest at the gate to the Pond Drain Study Area. Libby Jacobs reported two adult birds feeding three young back of the kitchen.
- 49. Chipping Sparrow (Spizella passerina). Nine nests were found and two records made of young out-of-the-nest. Don Shearer found two nests, both on the Songer Farm. Max Thacker found two nests, both near Day's Grocery. Tom Hurley reported a nest in the cemetary near Keenan, West Virginia. Cindy Conrad reported a nest near the dining hall. Carol Conrad reported a nest on the Hoge Farm. Eleanor Sims reported a nest near Williams Grocery. E.R. Chandler reported a nest on the Little Meadow Study Area. Don Shearer reported one young bird out-of-the-nest, halfway down the mountain on Route 700, and three young birds on the Porterfield farm.
- 50. Field Sparrow (Spizella pusilla). Don Shearer reported the only nest containing four young birds and built ten inches off the ground in a poison ivy vine, half-way down the mountain on Route 700. E.R. Chandler reported an adult feeding young birds in the Little Meadows Study Area.
- 51. Song Sparrow (Melospiza melodia). Five nests were reported. Florence Barnum reported four eggs in a nest two feet off the ground in a cedar tree on the Songer farm. J. Hummel reported a nest containing two young birds near a garage in Maple-brooke. Don Shearer found five young birds in a nest on the ground along the short-cut road to Pembroke. Tom Hurley reported four eggs in a nest on the bank on the Clover Hollow Road.

- 2111 Tremont Road Columbus 21, Ohio

(Reprinted from The Redstart, Volume 27, No. 2, March, 1960, pages 35-42, by permission of the Brooks Bird Club.)

THE 1960 SKYLAND FORAY

By C. C. Steirly

The 1960 Skyland Foray in Shenandoah National Park, June 17, 18 and 19 was pronounced one of the best such events yet and a repeat performance is already in the planning stage for next year. A group of 31 assembled on the evening of June 16 to be briefed by the Tripmaster on the plans for the week-end. A committee had worked the details for each day and several new hikes were worked into the program in order to keep off the more popular trails during the Saturday and Sunday.

On Friday, June 17 the White Oak Canyon trip was made since everyone insisted that one of the old favorite "hollow" trips was a must. This hike proved to be very pleasant and informative. Blackburnian Warblers seemed to be more abundant than in previous years and the young of the Blackburnian Warbler and Black-throated Blue Warbler were much more in evidence than on past trips. A Louisiana Water Thrush nest was found and everyone had an opportunity to observe the feeding of the young. Near the Limberlost area a pair of Blueheaded Vireos were observed constructing a nest. The usual Ravens were seen and heard flying overhead and the song of the Veery was very much in evidence. Lunch that day was had on the promontory overlooking the first falls.

In the evening, in the spacious living room of Hepburn Cottage, Dr. Alexander Wetmore gave a most interesting and stimulating talk on the origin and classification of birds, illustrating it with a number of fossil specimens that he had brought along. He also pointed out the opportunities eastern Virginia members have of exploring the Miocene deposits which underlie the eastern quarter of the state and might produce fossil bird remains of twenty or so million years ago. The Wetmore lectures have become an important event of the Skyland Foray.

The trip on June 18 was something of a novelty or experiment and it far exceeded the expectations of the Trip Committee that had conceived it. Beginning at Tanner's Ridge Overlook the group picked up the Lewis Falls Trail, after some difficulty in scrambling down through dew-drenched brush, which of course yielded some Chestnut-sided Warblers. From thence the trail lead through a strikingly beautiful section of hemlock and ultimately came out at Lewis Falls, the highest falls in the Park. In this area Rose-breasted Grosbeaks, Canada Warblers, Parula Warblers and Scarlet Tanagers were observed and the vantage point at the falls afforded excellent opportunities to see Ravens and Broad-winged Hawks. A portion of the Appalachian Trail was followed through a considerable variety of habitats to the Fisher's Gap parking area where one car had been left for transferring the drivers back to the parked cars. The last portion of the afternoon was spent quite pleasantly at Big Meadows where the ever-present Vesper Sparrows were seen by everyone.

That night, in Hepburn Cottage, Miss Helen Goldstick showed her very excellent collection of slides taken on past VSO trips and most of us could once again see ourselves as others see us — on past Skyland trips, and those to Wachapreague, Cedar Island, Back Bay and the Kiptopeke Ferry trip, where everyone almost froze.

On June 19 the Trip Committee again came up with an excellent innovation when it steered the group over a little used trail from Lewis Mountain Camp Ground to the top of Bearfence Mountain. This trail offered many of the birds of the region and a wealth of wild flowers. Dr. Wetmore advised that Ravens occasionally nested among the rugged rocks of the mountain top. Lunch was enjoyed within hearing of singing Veeries.

Birds observed on the whole trip included: Turkey Vulture, Black Vulture, Red-tailed Hawk, Broad-winged Hawk, Ruffed Grouse, Bobwhite, Yellow-billed Cuckoo, Screech Owl, Chimney Swift, Ruby-throated Hummingbird, Pileated Woodpecker, Downy Woodpecker, Crested Flycatcher, Phoebe, Acadian Flycatcher, Wood Peewee, Raven, Common Crow, Carolina Chickadee, White-breasted Nuthatch, Catbird, Robin, Wood Thrush, Veery, Blue-headed Vireo, Red-eyed Vireo, Black and White Warbler, Parula Warbler, Black-throated Blue Warbler, Blackburnian Warbler, Chestnut-sided Warbler, Ovenbird, Louisiana Water Thrush, Yellow-throat, Chat, Hooded Warbler, Canada Warbler, Brown-headed Cowbird, Scarlet Tanager, Rose-breasted Grosbeak, Indigo Bunting, Goldfinch, Towhee, Vesper Sparrow, Carolina Junco and Field Sparrow.

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ACTIONS OF THE EXECUTIVE COMMITTEE BRIDGEWATER, APRIL 29, 1960

By Robert J. Watson, Secretary

In connection with the annual spring membership meeting, held at Bridgewater College on April 29, 1960, the Executive Committee of the VSO held a short meeting and took the following actions:

- l. Heard a financial report (read by President Rountrey in the absence of the Treasurer). There is \$1,095.83 in the General Fund and \$529.94 in the Publication Fund.
- 2. Heard a report by Mr. Eike concerning a proposed federation of state natural history societies, sponsored by the District of Columbia Audubon Society. Mr. Eike and Mr. Watson attended a meeting on the subject held in Washington last October. The Committee deferred a decision on the question of possible VSO approval of the new organization and asked the Secretary to supply additional information.
- 3. Reappointed (for one-year terms) Dr. J.J. Murray as Editor of The Raven and Miss Gertrude Prior as Publisher.
- 4. Directed Mrs. Morrisette, Chairman of the Membership Committee, to prepare a new membership application form.

5. Heard a report by Mrs. Wiltshire, Chairman of the Education Committee, concerning plans to publicize the Society and its objectives through courses in ornithology to be given at Sweet Briar, Lynchburg, Eastern Mennonite, and Randolph-Macon Woman's Colleges.

NOTE: The above summary is based on the minutes of the meeting prepared by James W. Eike, who, in my absence, served as secretary <u>pro tem</u>. I take this opportunity to express my thanks to him for this service.



The Raven

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J. J. MURRAY, EDITOR

VOL.	XXI	SEPT	EMBER_OCT		1960	NOS.	9	&c	10
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Su	mmer Note	ged Warbler s on the Go le Counties es E. Steve	lden-wing	ed War	bler in Ro	ckingham			8
Duck		p in Virgin P. Hailman				•••••	•••		8
	untain, V	on Hawk Mig irginia - l arpenter	949-1959		Shenandoah		•••		8
Wint		timore Orio W. Sykes			olk Area		•••		90
Defe		ion of Nest Steirly •	-				•••		9:
An U		sting Site Steirly							92
Cons		Legislation t J. Watson					•••		93
Note	s of Loca	1 Chapters:	Northern	Virgi	nia Chapte	er	•••		9:
Revi	ew: "Just	About Ever	ything in	the A	dirondacks	it	•••		90
News	and Note	s					• • •		9'
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SUMMERING OF THE BLACK-CAPPED CHICKADEE AND GOLDEN-WINGED WARBLER IN AUGUSTA AND ROCKINGHAM COUNTIES, VIRGINIA

By F. R. Scott

The following notes have been collected over the last three years in northwestern Augusta County and southwestern Rockingham County. While the observations are preliminary in nature, they appear to indicate two major extensions of known range and are therefore being reported in the hope that other observers will extend the observations even farther.

The area of these observations lies within the George Washington National Forest on the eastern slope of the Shenandoah Mountains. It is roughly a rectangle bordered on the east by the National Forest boundary, on the west by the county lines, and on the north and south by U.S. Routes 33 and 250, respectively. Most of the work has been done in Augusta County, particularly along the Calipasture River, Ramsey's Draft, and Route 250. Several trips were made also into Rockingham County around Hone Quarry, a valley leading up from Virginia Route 257. Most of the observations were made at low altitudes, from about 1600 to 2500 feet, with a few trips over 3500 feet.

Black-capped Chickadee

In a previous paper (Scott, 1952) I traced the summer distribution of the Black-capped Chickadee, Parus atricapillus Linnaeus, from the Middle Mountain area of northwestern Highland County, where it has long been known to breed, into the southwestern corner of the county at 2250 feet. I was surprised to find this species instead of the Carolina Chickadee, Parus carolinensis Audubon, quite common in the Augusta County area noted above. Trips taken on May 4 and August 1-2, 1958, July 25-26, 1959, and May 1 and June 16-18, 1960, all yielded a number of birds singing the characteristic two-note song and with the lower and throatier call notes of this species. The four-note song of the Carolina Chickadee was never heard, and attempts to imitate either song always brought a two-note reply. Interestingly, the birds seemed more common around the few mountain farms and cabins at elevations of 1900 to 2200 feet than they were in the heavy woodlands at higher altitudes. In late July and early August the birds were in postbreeding flocks, and on August 2, 1958, some 18 were counted along the Calfpasture River in one hour.

In Rockingham County three birds singing the two-note song were heard at Hone Quarry (about 1900 feet) on April 30, 1960, by Miss Harriet A. Sutton. On June 18, 1960, I found 5 more birds here and 4, apparently 2 pairs, along Route 257 near Hone Quarry at an elevation of 1600 feet.

The only published work on birds of this area seems to be a paper by Stewart (1943) describing June observation in 1941, but he did not identify the chickadee specifically.

Attempts to find out how far east across the Great Valley the Black-capped Chickadee extends during the breeding season were unsuccessful. Four chickadees were seen at Churchville, 3 miles southeast of the National Forest boundary, on June 17, 1960, but an exact identification could not be made. Farther east, no chickadees at all could be located in the city of Staunton between June 16 and 19, 1960.

It would be interesting to see whether the two species of chickadees come together and hybridize, as Tanner (1952) believes they do in western North Carolina and eastern Tennessee, whether there is a hiatus between them where no breeding chickadees are found, or whether their nesting ranges overlap with no interbreeding. Thus far the only information we have on the Carolina Chickadee in this area is that it breeds in Shenandoah National Park on the eastern edge of Augusta and Rockingham Counties (Wetmore, 1950; Grey and Stevens, 1949) and just to the south in Rockbridge County (Murray, 1957).

In West Virginia the Black-capped Chickadee is known as a breeding bird along the Virginia line south to Mercer County (Brooks, 1944). It is, in fact, quite common in Greenbriar County, where I collected one on June 4, 1950, at Caldwell (2000 feet), just a few miles west of the Alleghany County, Virginia, border (Breiding, 1950). It thus seems reasonable to speculate that the Black-cap will be found breeding in Virginia in western Bath and Alleghany Counties and perhaps also in parts of Craig and Giles Counties, though there seems to be some dispute about the birds at Mountain Lake, Giles County. Most observers believe these are the Carolina (see, for example, Bailey, 1913), and the Brooks Bird Club on their 1959 foray also call them the Carolina with no comment (Burns, 1959). This is of particular interest since the area covered by the foray extended into the higher mountains of Monroe County, West Virginia, where, according to Brooks (1944), the Black-capped Chickadee is the resident bird. Curiously, the report of one of the foray breeding-bird counts in The Redstart listed the Carolina Chickadee (Chandler, 1960), although the same report in Audubon Field Notes did not identify the chickadee specifically (Phillips and Chandler, 1959), C.O. Handley, Sr. (1960), considers there is a possibility that the birds here are actually a hybrid population. Obviously, this is a problem that requires more field work, perhaps supplemented by some collecting.

It might be well here to make the point that in Virginia and West Virginia the Black-capped Chickadee does not appear to have a distribution corresponding to definite faunal zones. That is, it does not seem to breed only above certain altitudes, leaving lower levels between these altitudinal islands with no nesting representatives. Wherever the bird breeds, it seems to occur at all altitudes. As a matter of record, however, the observations of birds during June as low as 1900 feet (1750 feet on May 4, 1948) in Augusta and 1600 feet in Rockingham County seem to constitute low-altitude records for the southern Appalachians. Stevenson and Stupka (1948) knew of no definite breeding-season records below 3500 feet.

Golden-winged Warbler

The Golden-winged Warbler, Vermivora chrysosptera (Linnaeus), has been recorded sporadically in summer from a number of localities west of the Great Valley (Murray, 1952), most recently from Highland and Giles Counties (Scott, 1952; Burns, 1959). In addition, C.E. Stevens (1960) has recently found some in the Blue Ridge of western Albemarle and eastern Rockingham Counties. I have several May and June records from western Augusta County, the best count being 10 singing birds on May 4, 1958, most of which were probably transients. On June 17, 1960, 4 singing birds were found along Route 250 in George Washington National Forest between 1900 and 2100 feet. On June 18, 1960, 2 more singing birds were found along Route 257 in Rockingham County near Hone Quarry. One was found at 1600 and the other at 1700 feet. Stewart (1943) found these birds "uncommon" in this general area in June 1941, but his area included parts of Highland County, and no specific mention was made of these birds east of the crest of the Shenandoah Mountains.

Interestingly, there is very little habitat suitable for this bird in the area under discussion. Most of the National Forest woodland is too heavy to support these birds, and they have been found principally on private, partially cleared land along the main roads. No "chestnut sprout" association, this bird's preferred habitat in the southern Appalachians according to Brooks (1940), could be located in the limited time available, but it undoubtedly can be found with a little effort.

The above records indicate that the bird may be a regular, if somewhat uncommon, summer resident along the western edge of the Great Valley. Although the observation at 1600-foot elevation in Rockingham County seems to be very low for a breeding-season record, Stevenson and Stupka (1948) found it nesting near Gatlinburg, Tennessee, as low as 1450 feet. Possibly this species occurs regularly in summer at Goshen Pass, in nearby Rockbridge County, near 1200 feet (Murray, 1957).

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- Richmond, Virginia

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THE BLUE-WINGED WARBLER NESTING IN ROCKINGHAM COUNTY
AND SUMMER NOTES ON THE GOLDEN-WINGED WARBLER
IN ROCKINGHAM AND ALBEMARLE COUNTIES, VIRGINIA

By Charles E. Stevens

Atop the Blue Ridge along the Albemarle-Rockingham boundary near Big Flat Mountain are numerous square miles of abandoned pastureland. Although not grazed since the Shenandoah National Park acquired it in the 1930's, this land is slow in being naturally reforested. Much of the higher and more exposed part is still quite grassy, while other parts have become bushy and are coming up in black locust.

Beside the Skyline Drive at an elevation of 2900 feet is a section which sustains a particularly rank growth of bushes and weeds. Here among scattered locusts, with some dense 6-foot-high blackberry and elder thickets, I first found the Golden-winged Warbler, Vermivora chrysoptera (Linnaeus), in summer. On June 4 and 18, 1955, a singing male was recorded. The following year none was found, but in 1957 on June 15 a singing male was seen again.

To my surprise in 1958 I discovered at this place a singing Blue-winged Warbler, <u>Vermivora pinus</u> (Linnaeus), on June 14, 15, and 21, and could not find a Golden-wing. The next year there was no Blue-wing, but Golden-wings occurred at several places in the vicinity. There were four scattered singing Golden-wings on May 23, 1959, three males and a female on June 6, and a pair on June 20.

In 1960, on May 21, at the site beside the Drive, Robert Merkel, of Charlottesville, found a singing Blue-wing and heard a Golden-wing. On June 18 I observed the Blue-wing, but I could not locate its nest. However, on July 4, after considerable time, I finally located a Blue-wing nest. Having followed a bird carrying food to a thicket, I was circled by a pair of chipping Blue-wings each with green caterpillars in its bill. Standing and then finally sitting almost motionless for over an hour, I saw one parent come down and feed the young birds which, as it turned out, were only a few feet from me. The nest was situated on the ground between the stems of a blackberry and contained four downy gray young whose mouths and eyes were open and who were just acquiring pin feathers on their wings. The nest appeared fairly deep and was composed of large plant strips on the outside with finer strips or grasses on the inside. Besides blackberry the nearby vegetation consisted mostly of giant ragweed, milkweed, Queen Anne's lace, evening primrose, goldenrod, wild strawberry, yarrow, clovers, and grasses. Also nearby were scattered small locusts and cherries. The nest was located about 100 feet inside Rockingham County from the Albemarle line and about 300 feet west of the Skyline Drive.

The entire time the nest was under observation the parent birds were only seen to carry green caterpillars to the young, and once a fecal sac was carried away.

The other summer birds at this site were (approximately in order of abundance): Chestnut-sided Warbler, Rufous-sided Towhee, Yellowthroat, Yellow-breasted Chat, Field Sparrow, Indigo Bunting, Prairie Warbler, Catbird, American Goldfinch, Red-eyed Vireo, and Rose-breasted Grosbeak.

Each year in the Big Flat Mountain area the old pastureland is being reclaimed more by the woodland it once was. The stage of reforestation which can be found here now seems every year to appeal more to the Golden-winged and Blue-winged Warblers. These birds appear to become more numerous as the weed patches grow higher. So far all of the Golden-wings have occurred between an altitude of 2900 and 3100 feet. Although the Golden-wing has not yet been found breeding, it is probably just a question of time until the fact is established. This also presents the interesting possibility of the hybrids occurring.

The several previous records of Blue-winged Warbler nests in Virginia are somewhat vague as to location and date. Charles W. Richmond said of the Blue-winged Warbler in An Annotated List of Birds Breeding in the District of Columbia which appeared in the Auk 5: 18-25 (Jan. 1888):
"Extremely rare. Mr. Herman H. Birney found a nest containing 4 eggs about to hatch, early in June 1880. This is probably the only known instance of its occurrence here during the breeding season." This record could likely be for the District because Richmond said in his introduction: "Owing to the fact that his experience does not extend far beyond the District limits proper, the writer has preferred to restrict the present notes, as much as possible, to within that boundary."

In <u>Birds of Virginia</u>, J.P. Bell Co., 1913, Harold H. Bailey cites the discovery by his father of 2 nests (with eggs) of the Blue-wing "in twenty years," which may have been located in what was formerly Warick County. The location was certainly near the coast, but specific dates and places are lacking in his account.

- Charlottesville, Virginia

DUCK COURTSHIP IN VIRGINIA A Challenge to Field Observers

By Jack P. Hailman

Courtship displays of ducks are among the most prominent and easily studied behavior patterns in birds. Both diving and puddle ducks have elaborate, highly stereotyped, species-specific postures and movements. In this paper, I report some observations of duck courtship seen in the Norfolk area, and suggest several problems concerned with this behavior that might be partially solved by field observers.

On 22 February 1960, my wife and I studied ducks in two areas near Norfolk. The first of these was at the mouth of the Western Branch of the Elizabeth River, where Red-breasted Mergansers (Mergus serrator), Baldpates (Mareca americana), Buffleheads (Bucephala albeola) and Common Goldeneyes (Bucephala clangula) were the most common ducks. The Goldeneyes were the only ones courting. No "group-courting" was seen, but one complete precopulatory and post-copulatory sequence was noted in detail. This consisted of the female's lying prone on the water, while the male performed a variety of highly stereotyped actions, including shaking his bill laterally as it is brought out of the water after dipping ("bill-shaking"), dipping his bill and then raising his head and neck vertically ("displaydrinking"), touching his bill to his back ("Display-preening"), and swimming quickly to the female to mount ("pre-copulatory steaming"). After mounting, the male grasped the female's head-feathers in his bill, keeping hold until after copulation, at which time the two birds swam in circle together ("rotations"). After he let go of her feathers, the two birds "steamed" in opposite directions and began performing bathing movements which appeared to be exaggerated (and therefore may also be display movements similar to the precopulatory behavior).

At the Craney Island dumping grounds on the southern border of Hampton Roads, common duck species were: Ruddy Duck (Oxyura jamaicensis), Canvasback (Aythya valisineria), Scaup (Aythya spp.), Bufflehead and Common Goldeneye. Some Black Ducks (Anas rubrines), and Pintails (Anas acuta) were also present. Another complete copulation sequence was observed in a pair of Goldeneyes, and another pair performed four precopulatory sequences which never resulted in copulation. Other groups of Goldeneyes were actively courting, giving "head-throws," "bowsprits," "ticking" and other stereotyped patterns which are not seen at copulation, but presumably are pair-formation displays. One male Scaup and one male Canvasback performed single "head-throws" somewhat similar to those of Goldeneyes. A male Bufflehead bobbed its head out and down repeatedly, but gave no other displays. No birds of any of the other species were courting.

These observations raise some interesting questions about duck courtship. Goldeneye displays (well described in Dane, et. al., 1959, from which the names of the displays used above were taken) are markedly different in (a) courting groups, and (b) copulating pairs. Is this

division strictly between pair-forming displays and pre-copulatory displays, or do other factors enter the picture? It was noted that other species have displays reminiscent of some of the Goldeneye's. How similar are these in form? (We lack careful descriptions of the displays of most species occurring in Virginia.) Are similar displays used in the same or in different ways by different species (e.g., pairing versus copulation)? Myres (1959) has shown that several species use very similar pre-copulatory displays, but that the relative frequency of their use (and details of form) differ between species. Do species which nest north of here form pairs before spring migration from Virginia? Do they copulate before leaving? Dane, Walcott and Crury (1959) noticed that displays of the Goldeneye may differ according to where the birds are wintering (i.e., salt water birds have different displays from fresh water birds); is this true in Virginia, and if so, why? Do peaks of courtship activity differ between species to reduce the possibility of hybridization? Are peaks of closely related species more different than those not so closely related?

Other questions will undoubtedly occur to observers as they spend pleasant hours watching duck courtship. Of course, there is considerable literature on duck courtship already published (much in German) with which the amateur could not be expected to be familiar, but by concentrating on several specific aspects of courtship much new interesting material can be learned. The estuaries and sea coast of Virginia present a splendid opportunity for the study of duck courtship.

Literature Cited

Dane, B.; Ch. Walcott and W.H. Drury. 1959. The form and duration of the display actions of the Goldeneye (<u>Bucephala elangula</u>). <u>Behaviour</u>, 14: 265-281.

Myres, M.T. 1959. Display behavior of Buffleheads, Scoters and Goldeneyes at copulation. Wilson Bulletin, 71: 159-168.

- 6037 Lake Terrace Circle Norfolk 2, Virginia OBSERVATIONS ON HAWK MIGRATIONS ON THE SHENANDOAH MOUNTAIN, VIRGINIA, 1949-1959

By Max Carpenter, Game Biologist Virginia Commission of Game and Inland Fisheries

In the fall of 1949 a hawk migration study was initiated by the Maryland Ornithological Society. The purpose of the study was to find routes used by the majority of the hawks, to check on the species composition, to find the period or periods of peak migration, and to give neophyte bird watchers a chance to learn hawk identification. The overall aim of the study was information for setting up better laws for the protection of these birds of prey while in migration.

At the time this study was started other states around Maryland were encouraged to gather supporting data that would give a wider picture of the hawk migration pattern. Consequently, a few birders in the north-western part of Virginia cooperated by spending from 2 to 4 days a year on fire towers to record any movements of hawks in that part of the state. The study of the migration of hawks in Virginia, therefore, has been confined largely to the ridges of the Shenandoah Mountain and to a lesser extent of the Blue Ridge.

Area of Study

Observations of hawk movements in this study were made from three fire towers on Shenandoah Mountain: at Reddish Knob in Augusta County and Meadow Knob and High Knob in Rockingham County. These towers lie in a straight line and are only a few miles apart, no more than 6 or 7 miles at the most. Meadow Knob and High Knob are in sight of each other and are a little less than 3 miles apart. On the 27th of September this past year, observers were on both knobs and hawks were seen at each knob, but from the species, time, and number, at no time could the same bunch of hawks be observed from both towers.

Direction of Flights

Generally speaking, the bulk of the hawks follow the top of the main ridge of Shenandoah Mountain, but some variation of flights was seen on different days. No doubt, slight variations of thermal drafts would cause the hawks to fly farther to the east or west, depending upon the general direction of the wind. In the 1949 Maryland study, it was mentioned that if the wind was in the north or northwest, flights would be good but were stopped if the wind changed to the south or southwest. Our observations do not show this to be true, as the wind was in the southwest on several of our better days. For instance, on September 21, 1957, 674 hawks were counted at Reddish Knob, and the next day 187 hawks were counted at High Knob. On both days the wind was from the southwest. A week later at Reddish Knob only 10 hawks were seen and the wind was from the northeast.

Number and Species Composition

Accompanying Table I shows the number of hawks seen from the three knobs, while Table II gives the names of the hawks and numbers of each species seen.

Comparison with Other Areas

Is the Shenandoah ridge a main flight ridge? From observations made, it appears to be one of the main routes. It was believed at first that the Blue Ridge had flights as large, but in recent years (although less work has been done on the Blue Ridge) it appears the flights on the Blue Ridge are not as frequent nor used by as many birds.

In comparing flights in Virginia with some neighboring states, it seems they are about the same. Some 1949 totals for Maryland, Pennsylvania, West Virginia, and Virginia run from 2 hawks all the way to 2,681 hawks. The Virginia count for 1949 was 635. There appears to be no area in Virginia where the hawks funnel through as they do in some of the northern areas where such high counts are made. Certainly, we have never been able to match the figure of 2214 hawks seen by George Kelly in Calvert County, Maryland, in 1949, or Maurice Broun's record of 3030 Broad-winged Hawks alone in 1956 at Hawk Mountain, Pennsylvania.

This has been an interesting study with a minimum amount of time expended. It is regretted that more observers have not been available from the start of observations. More interest has been shown the last two years among local members in this area, and it is hoped that interest will grow. The past two years we have had very fine assistance at Reddish Knob from the Brooks Bird Club in West Virginia.

Table I. Number of Hawks Seen from Two Towers for Years 1949-1959

Year	Reddish Knob	High Knob	Wind	Sky
1949	635	1 VIN 10'3	ant use 100	-
1950	130	may rive hips	was transfelder	desperate
1955		259	N-NE	Cloudy
1956		19	W	Cloudy
1957	715	187	SW	Cloudy
1958	29	all direction	SW-W	Cloud
1959	315	-	MM	Cloud
1959.	149	24	SE	Cloud

Table II. Species Composition of Hawks Seen for Years 1949-1959

Species	Number
Broad-winged Hawk	2015
Red-shouldered Hawk	156
Red-tailed Hawk	25
Cooper's Hawk	23
Sharp-shinned Hawk	21
Osprey	24
Bald Eagle	8
Rough-legged Hawk	6
Marsh Hawk	5
Sparrow Hawk	2
Duck Hawk	1
Unidentified	208
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- Dayton, Virginia

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WINTERING BALTIMORE ORIOLES IN THE NORFOLK AREA

By Paul W. Sykes, Jr.

The Baltimore Oriole (<u>Icterus galbula</u>) was recorded in the Norfolk area this winter for the first time. Five individuals were seen off and on from December 1, when W.F. Rountrey saw the first wintering bird, until S.E. Breneiser made the last observation of one of the wintering birds on April 3.

The rather mild weather together with available food supply may have been the factors enabling a number of orioles to remain throughout the winter in southeastern Virginia. This past winter was one of the mildest winters in many years, until the low temperatures and heavy precipation in the form of ice and snow that hit the area in late February and early March.

In the Norfolk area, the five Baltimore Orioles were seen regularly in four scattered localities. One bird remained in the vicinity of W.F. Rountrey's home, in Norfolk County, from December 1 until February 5. This bird was rather tame and is believed to have been killed by one of the neighborhood boys with an air rifle. Another bird remained about the home of A.C. Riggan, which is also in Norfolk County, from December 10 to March 2.

The Riggan residence is approximately a mile from the residence of Rountrey. The third bird was seen three times, first on February 1, then on March 6, and last on April 3, at the home of S.E. Breneiser in the western section of Norfolk City. Two birds were observed at the home of Mrs. Floy C. Burford, just out of the Norfolk City limits, in Princess Anne County. The first oriole appeared at Mrs. Burford's on January 17, and a second bird was seen on February 11. The two orioles could be distinguished readily, since one bird had white wing bars and the other had buff or yellowish wing bars. The second bird to arrive at Mrs. Burford's was last seen on March 18, while the other bird was not seen after March 25.

The plumage of all five orioles was dark and dusky, gradually gaining more color in March. However, the birds still had not obtained full spring plumage when last seen. Two of the birds had buff or yellowish wing bars, while the other birds had whitish wing bars. According to Bent's Life Histories of North American Blackbirds, Oriole, Tanagers, and Allies, this would be an indication that two of the birds were immatures and the other three birds were adults.

At each of the localities where the orioles were seen throughout the winter there were one or more bird feeders that were cared for daily. The available food supply at these feeders may be the main factor that enabled the orioles to remain through the winter in the Norfolk area. The Baltimore Orioles were seen most often at or in the vicinity of a bird feeder. They would make trips to the feeders through the day at intervals, staying to feed from several minutes to twenty minutes, unless chased away by other birds or frightened by dogs or people.

The Mockingbird and Brown-headed Cowbird were the only species that appeared to be hostile to the orioles while at the feeder. Usually when a Mockingbird appeared at the feeder the oriole would fly away. If the oriole did not fly away from the feeder the Mockingbird would usually chase it away. It was noted by Mrs. Burford that when an oriole was disturbed by the House Sparrows it would give a fussy wren-like scold and spread its tail fan-like and in a downward position as if in defiance.

The natural basic diet of the Baltimore Oriole consists of soft bodied forms of small animal life, comprising mostly insects and their larvae, and pulpy textured fruits of various plants. Thus the natural forms of food of the oriole are rather scarce in southeastern Virginia by the time the winter season arrives. Bird feeders therefore create an artificial condition that is favorable to the species in that it fulfills one of the basic requirements of all living organisms, that of adequate food supply. Food observed taken at the bird feeders by the orioles includes: apple, bird feed mixture, beef tallow, and salt pork. The apple and the beef tallow were the preferred forms of food. Mrs. Burford placed salt pork at her feeders one day when she could not obtain any beef tallow from her grocer. The salt pork was eaten readily by many other species besides the orioles.

Three of the five orioles were observed on a number of occasions feeding on the sap of various tree species. The sap was oozing from borings inflicted through the bark and cambium into the sapwood by the

Yellow-bellied Sapsucker (Sphyrapicus varius). Sap is the only food seen eaten by the orioles away from a bird feeder. The oriole would often follow the sapsucker from tree to tree, at which time the sapsucker would often become hostile and drive the oriole away from the borings.

I could find no mention in the literature of previous observations of this rather interesting feeding by the Baltimore Oriole on the sap of trees.

> - 1522 Lafayette Blvd. Norfolk 9, Virginia

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DEFENSIVE ACTION OF NESTING KING RAIL

By C. C. Steirly

On June 14, 1960 I was shown a nest of the King Rail on Hog Island State Waterfowl Refuge in Surry County. This nest was in upland grassy ground, part of a clearing, adjacent to a pond with a narrow border of marsh grass, and was well concealed among several clumps of grass of a number of species including Panicum. At that time the sitting bird immediately flew from the nest and quickly disappeared in the nearby extensive grasslands, barely giving an observer any opportunity to note flight marks.

Twenty days later on July 3 I visited the nest again and approached it rather cautiously having forgotten the exact location since it was beautifully concealed. Much to my surprise the adult, presumably the female, attacked me rather savagely and as I beat a retreat away from the immediate vicinity, for fear of stepping on the nest, the bird snipped at my trouser legs two or three times. It then assumed a threatening attitude and remained some ten feet from me with wings outstretched and bent slightly downward, feathers quite ruffled and continuously making a chattering voice. When I approached the nest the bird came closer to me still keeping up its chatter, the whole body trembling. I then found the nest and quickly noted that it contained the seven eggs. The bird did not retreat so instead of alarming it further I withdrew from the area and resumed my ramble.

On the following day, late in the afternoon, I approached the nest with considerable caution as I could now go right to it. This time the bird remained on the nest although my hands were within eighteen inches of it.

⁻⁻ Virginia Division of Forestry Waverly, Virginia

AN UNUSUAL NESTING SITE OF THE YELLOW-BILLED CUCKOO

By C. C. Steirly

The nest of a Yellow-billed Cuckoo was found while canoeing on Spring Hill Pond in north Sussex County. This nest was well hidden in a wild rose (Rosa carolina) which grew out from the buttressed base of a cypress tree growing in some two or three feet of water in the general area where Coppahaunk Swamp and Spring Hill Pond merged imperceptibly. The nest was four feet above the water and although difficult to view from above was found to contain two eggs.

The locale of the nest site looked not unlike Plate XXVII (Warblers in Cypress Backwater) of Sprunt and Chamberlain, "South Carolina Bird Life," Prothonotary and Parula Warblers were present in nearby trees, many of which had rich growth of the hair-moss lichen, <u>Usnea trichodea</u> which the Parula Warblers use in nest construction.

Virginia Division of Forestry Waverly, Virginia

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CONSERVATION LEGISLATION IN THE EIGHTY-SIXTH CONGRESS

By Robert J. Watson

An evaluation of the conservation accomplishments of Congress during the years 1959-1960 reveals a discouragingly meager record. There follows a summary of that record, taken from the invaluable reports and press releases issued by the National Wildlife Federation.

The Federation believes that the most important accomplishment was the passage of the Multiple Use Forestry Bill, which specifies that outdoor recreation and wildlife interests shall be given equal consideration with timber production in the administration of national forests. Although the U.S. Forest Service has always taken account of these objectives, the new law places existing practices on a firm legislative basis. It also settles a controversy concerning the intent of the original national forest law; lumber interests had contended that the latter was intended to give a clearcut priority to timber and watershed protection. The new bill specifies that wilderness preservation shall be considered consistent with the purposes of national forests. The National Wildlife Federation regards this act as a "milestone in resource management."

The few other accomplishments include better protection of wildlife and forests on lands under military ownership and establishment

of a new national park in Hawaii (carved out of the existing Hawaii National Park), as well as of several new national historical parks and monuments. The long-established Cooperative Wildlife Research Program, under which the federal government has cooperated with the states in setting up units for wildlife research, was given explicit legislative approval for the first time; curiously, its only previous santion had been to annual appropriations bills, though it has been in existence for 25 years (the Virginia unit, established in Blacksburg in 1935, was among the first in the country). A purely negative achievement was the defeat of an absurd and fantastic monument — resembling an enormous gyroscope — which the National Park Service proposed to erect as a memorial to former president Theodore Roosevelt on the island in the Potomac River which bears his name. Congress directed that any future monument must be approved by Roosevelt's two surviving children; both have already added their voices to the chorus of ridicule which greeted the original plan.

Other measures supported by conservationists failed to pass, through lack of interest or outright opposition. The Conservation Reserve (Soil Bank) program, which took land out of production in order to reduce agricultural surpluses (thereby creating valuable new wildlife habitat), was doomed when Congress rejected a move to extend it beyond its present deadline (December 31, 1960). A bill to require federal authorities to consult with the U.S. Fish and Wildlife Service and with state wildlife agencies before undertaking any chemical pest-control program was favorably reported by committees but failed to pass. Proposals for additional national parks — including at least two along our fast-vanishing Atlantic shoreline — died in committee, except for the perennially-controversial Chesapeake and Ohio Canal National Park, which passed the Senate but was rejected by the House, ostensibly for reasons of economy.

This writer was particularly disheartened by the lack of progress on the so-called "Wilderness Bill." which would set aside and preserve some of the few remaining unspoiled areas of our nation. Committee hearings in the Senate resulted only in several alternate versions of the bill aimed at meeting objectives. The range of opposition to the bill's objective is surprising, although its sponsors appear to have made every possible concession short of outright surrender. Much of the opposition -that from groups immediately concerned with the commercial, industrial, or agricultural exploitation of public lands -- was of course to be expected, although the measure could not in any way restrict their present operations. More surprising is the hostility of spokesmen for the organized forestry profession, who presumably speak as disinterested experts. Perhaps most alarming is the opposition from groups favoring public power and reclamation, who evidently feel that the measure might block new hydroelectric and irrigation projects. Since the area to be affected by the bill has been estimated at not over 2% of the total area of the nation, and since much of it has already been designated as wilderness by administrative order, one may perhaps be pardoned for wondering if the opposition of these groups indicates unlimited ambitions for federally financed dam construction. Their stand apparently accounts for the opposition of at least one prominent Western senator with a long record of supporting conservation. It is, of course, almost certain that

the sponsors of this measure will continue their fight for approval of at least one of the several pending versions of the bill.

Some of the trends which have prevented enactment of the Wilderness Bill may be seen at work in the one recent Congressional action which appears to represent a definite setback (though admittedly a minor one) for conservation. Several years ago, as a part of the Colorado River Storage Project in the southwestern United States, Congress authorized the construction of a dam on the Colorado River in Glen Canyon, located in northern Arizona and southern Utah. The dam represented a threat to the nearby Rainbow Bridge National Monument, since the impounded waters would back up into the monument and reach at least to the base of the bridge. Therefore, when authorizing the dam, Congress disclaimed any intent to injure any part of the National Park System and authorized the construction of a barrier to protect the monument. This year the Bureau of Reclamation sought money to begin the barrier, but was refused on the gounds that the bridge will not be actually damaged and that protection is therefore a waste of money. It appears certain that the dam will therefore radically and permanently alter this scenic area. This action, doubtless of little interest to most VSO members, is reported here only because it reflects all too clearly our national thinking: engineering projects of direct and immediate economic importance to one section of the country will be undertaken without hesitation, but protection of scenic and aesthetic values. for the benefit of our own and future generations, is a luxury and hence an unjustifiable expense. It also illustrates the double jeopardy which many objectives sought by conservationists must face in Congress: first when originally enacted in principle, and again when money must be spent to put them into practice. Those who oppose a measure thus have two chances to defeat it - a fact which shows that conservationists must be prepared to work at least twice as hard as their opponents.

> - 1507 N. Hancock Street Arlington 1, Virginia

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NEWS OF THE LOCAL CHAPTERS

Northern Virginia Chapter

The Northern Virginia Chapter held its first spring meeting on March 18, 1960, with Miss Helen Goldstick as hostess. Mr. B.B. Warfield described a recent trip to southeastern Texas, of ornithological renown, while Miss Goldstick showed a number of her excellent slides of Florida bird life. On April 2 the members made their annual pilgrimage to Mr. Arthur Fast's large and well-organized banding station, and enjoyed a vicarious ornithological tour of the Shetland Islands conducted by a visitor from England, Mr. Harry K. Bourne. The season's activities were concluded with two field trips: one on May 14 to the residence of Mr. and Mrs. William Babcock, near Herndon, and another on May 28 to the

summer home of Mr. and Mrs. W.A. Rothery on the Potomac, where an unusually large population of Bald Eagles provided special interest.

Two junior members of the chapter, Richard and Daniel Peacock, aged 16 and 15 respectively, carried out a zoological research project during the past winter and spring which won wide acclaim. They studied the sudden increase in the rodent population at the site of the new Dulles Airport now under construction near Herndon, a phenomenon which brought about a spectacular influx of hawks and owls last winter. Under the general supervision of Dr. Charles O. Handley, Jr., of the U.S. National Museum, the Messrs. Peacock spent approximately 200 hours in the field, collecting and preparing specimens in order to compare the composition and distribution of the mouse population in the area of greatest abundance with that in nearby regions. The report of their project, entitled "A Population Study of the Mouse Eruption at Dulles Airport," earned them a grand prize in the Fairfax High School Science Fair, a joint prize in the Northern Virginia Science Fair, honorable mention in the science fair held at Randolph-Macon College, and a certificate of award from the Washington Junior Academy of Science. These awards testify to the caliber of work performed by these two promising young zoologists. They also indicate what can be accomplished by junior members who make use of their time and opportunities for serious and rewarding study. If other members (junior or senior) in this and other chapters could be moved to emulate the Messrs. Peacock, we should be much nearer our goal of bringing about an increase in the knowledge of ornithology and other branches of zoology in Virginia. - R.J. Watson.

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A REVIEW

"Just About Everything in the Adirondacks," by William Chapman White, published by the Adirondack Museum, Blue Mountain Lake, New York. Stiff paper covers, 101 pages, 6 pen and ink vignettes, 1960, \$3.50. William Chapman White contributed articles to "Topics of the Times" in the New York Times and for a number of years ran a syndicated column for the New York Herald Tribune, "Just About Everything." In this little book 47 of these essays from the two newspapers dealing with nature in the Adirondacks have been collected. They treat of many phases of the outdoors in the mountains, nine of them being about birds in particular, Loons and Eagles and Pileated Woodpeckers and others, large and small. The book is an attractive presentation of attractive nature pieces.

J.J. Murray

NEWS AND NOTES

Correction. There is some confusion in the closing paragraph on page 46 of the May-June issue of The Raven. The first three sentences of that paragraph should be corrected to read as follows: "A paper on 'Wintering Orioles in the Norfolk Area' was presented by Mr. Paul W. Sykes, Jr., North Carolina State College. All of his observations were made in the Norfolk area. He stated that there have been many reports of wintering orioles in various sections of North Carolina and several reports from inland sections of Virginia."

More Foreign Game Birds for Virginia. About 1500 more foreign game birds are being stocked in Virginia this fall according to Herman J. Tuttle, foreign game biologist for the Virginia Commission of Game and Inland Fisheries. He is pleased with the way in which Blackneck Pheasants released in Charles City, New Kent, and James City counties seem to be getting established. More of these birds are to be released in these counties this fall. The same optimistic comment is made about another strain of the Blackneck Pheasant which has been released in Halifax, Campbell, and Charlotte counties. Other individuals of this strain will be released in these counties this fall.

A new species, the Reeves Pheasant, will be released somewhere east of the Blue Ridge early this fall. The foreign game bird program began in Virginia in 1958 when the first Blackneck Pheasants from Iran were received at the game farm in Cumberland. Since then the State has experimented with several other species. Most of these birds were sent to Virginia by Dr. Gardiner Bump, a federal game biologist, through a cooperative program with the U.S. Fish and Wildlife Service.

Books on Ornithology for Sale. A VSO member, A.H. Dean, has a good list of books on birds which he would like to sell. The list includes many important books of recent years. Those who are interested might write Mr. Dean for his list and prices, or write him about particular books which they want. His address is 911 Preston Avenue, Blacksburg, Virginia.

Avocet and Wilson's Phalarope at Craney Island. The Craney Island Disposal Area in the Norfolk region continues to display birds of unusual interest. On September 5, J.E. Ames, Jr., F.C. Richardson, and others spent several hours there. They found an Avocet and a Wilson's Phalarope, observing both at close range. They were able definitely to check the significant points about the Wilson's Phalarope: needle bill, white rump, no wing bars. Two Stilt Sandpipers were seen and many Yellowlegs, along with many common shore birds, gulls, and terns, but no ducks or geese.

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The Raven

BULLETIN OF THE VIRGINIA SOCIETY OF ORNITHOLOGY

J. J. MURRAY, EDITOR LEXINGTON, VA.

VOL. XXXI NOVEMBER-DECEMBER, 1960 NOS. 11 & 12 CONTENTS Page Preliminary Report on Mourning Dove Food Habits in Piedmont Virginia By J. L. Chamberlain 101 Fulvous Tree Ducks at Williamsburg, Virginia By John H. Grey 104 Birds at Dulles International Airport, 1959-1960 By Karl H. Weber 105 Recent Nesting of the Red-cockaded Woodpecker in the Norfolk Area By Paul W. Sykes, Jr. 107 Ring-billed Gulls Following the Plow By Jack P. Hailman 109 Bone Island Given to State as Wilderness Area 110 The Back Bay Trip of 1960 By Evelyn F. Newcomb 111 Review of "The Wonders I See" 112 News and Notes 113 Index of The Raven - 1960 116

PRELIMINARY REPORT ON MOURNING DOVE FOOD HABITS IN PIEDMONT VIRGINIA

By J.L. Chamberlain

Introduction

During the 1959 hunting meason 240 crops and gizzards were collected from mourning doves. Sixty-two of these samples have been analysed thus far. The present report is a preliminary survey based solely on these 62 samples. A final report will be prepared and circulated when the total number of samples has been analysed. The information obtained from the 62 samples is a reasonably good indication of the food items normally consumed by mourning doves.

Appreciation is extended to those individuals who generously provided the crops and gizzards for this study.

Review of Literature

The food habits of doves have been fairly well studied by biologists in other sections of the country. There has been little work of this nature in Virginia. Knappen (1938), in a survey of southeastern United States, showed that grasses, legumes, composites, and spurges comprised 82 per cent of the doves' diet. In North Carolina, Cummings and Quay (1953) found that crabgrass, corn, foxtail, paspalum, wheat, pokeweed, ragweed, galingale, soybeans, cowpeas, and croton formed the bulk of the diet of doves. A study in Alabama (Rosene, 1939) showed that corn, wheat, Johnson grass, sorghum, bull paspalum, Egyptian grass, crabgrass, peanuts, cowpeas and pokeweed were important items. Pricklepoppy, ragweed, croton, paspalum, bristle grass, pokeweed, carpet grass, and corn figured foremost in a Florida study (Beckwith, 1959). A similar study in California (Browning, 1954) revealed turkey mullein, redmaids, wheat, milk thistle, windmill pink, and valley spurge as important items.

Methods

The contents of the crops and gizzards were transferred to small envelopes in the laboratory. Each envelope was catalogued by number and pertinent data noted on a corresponding card. Envelope and contents were placed in a drying-oven overnight and then stored until the material could be analysed.

Gross separation of the dried material was by use of a South Dakota Seed Blower. Minute separation was done under a binocular microscope. Similar kinds of foods were identified, grouped, and measured volumetrically in a 10 ml. graduated centrifuge tube. Identification of seeds was accomplished with the assistance of qualified personnel of the Patuxent Research Refuge (U.S. Fish and Wildlife Service) and Dr. A.B. Massey, Botanist, Virginia Polytechnic Institute.

Discussion

The important food items of mourning doves, as determined in this study, are summarized in Table 1. Materials have been ranked according to the frequency which they were found in the crops and gizzards. A frequency of 52, as in the case of Eyebane, indicates that in 52 per cent of the doves examined Eyebane was present. The volume tabulation is also a percentage determined by dividing the total material measured for all the birds into the total for a particular species of plant. It is the writer's opinion that frequency of occurrence is a more reliable indication of the importance of different food items. For example, sorghum ranks low in importance because it was only found in 10 per cent of the birds. However, sorghum would be the fourth most important plant if considered according to its volume in the total sample. This is actually a function of the size of the seed; sorghum seeds are the size of small peas whereas Eyebane seeds are similar to pepper grains.

Nineteen plant species are indicated in Table 1 and these are probably the most important species consumed by doves in this area. Actually about 130 additional kinds were found in the crops and gizzards but none of these occurred more than once or twice. Their presence will not alter the ratings of the seeds as shown in the table.

The mourning dove is definitely a seed-eating bird, and seeds of the grass family are most important in their diet. This point has been clearly established by other workers and is well substantiated in the present study.

Eleven plants of the Grass family were found in the sample. Crabgrasses, paspalum, and panic grass were particularly important items. Three crop plants were present - corn, sorghum, and wheat. Corn ranked third in importance.

The seed eaten most commonly by doves was eyebane. This plant is a member of the spurge family. Eyebane, or wart weed, grows on the surface of the ground in a radiating pattern about 16 inches in diameter. The small opposite leaves are approximately a half inch in length. Eyebane is a common weed in lawns, gardens, and waste places.

Pokeweed, or dove weed, was frequently encountered in the food material. Another local or common name of this plant is inkberry. It is a tall perennial herb with a cluster of prominent dark purple berries.

Lespedeza was the sixth most important item. This legume is an introduced plant commonly used for hedges and fence borders for erosion control and as a wildlife food plant.

Table 1. - FOODS OF MOURNING DOVES IN CENTRAL VIRGINIA:
BASED ON 62 CROPS AND GIZZARDS

Food Item	Frequency*	Volume
Eyebane (Euphorbia maculata)	52	32.5
Hairy Crabgrass (Digitaria sanguinalis)	50	7.9
Corn (Zea Mays)	43	31.6
Pokeweed (Phytolacca americana)	37	3.9
Crabgrass (Digitaria Ischaemum)	26	1.1
Panic grass (Panicum dichotomiflorum)	26	0.5
Korean Lespedeza (Lespedeza stipulacea)	24	0.1
Paspalum grass (Paspalum sp.)	19	0.4
Ragweed (Ambrosia sp.)	18	11.1
Panic grass (Panicum sp.)	18	0.6
Foxtail (Setaria Faberii)	16	0.2
Paspalum grass (Paspalum ciliatifolium)	13	1.0
Velvet-leaf (Abutilon Theophrasti)	11	0.2
Sorghum (Sorghum vulgare)	10	8.7
Three-sided Mercury (Acalypha sp.)	10	0.2
Flowering Spurge (Euphorbia corollata)	5	T**
Animal Matter (Snails, Ants)	5	T
Pigweed (Amaranthus sp.)	2 2 2	T
Foxtail (Setaria viridis)	2	T
Wheat (Triticum aestivum)	2	T
Total		100.0

*frequency and volume expressed as per cent

**trace

Summary

Two hundred and forty mourning dove gizzards and crops were collected from Central Virginia in the 1959 hunting season. Sixty-two of these have been analysed and discussed in this report. Eyebane, crabgrasses, corn, pokeweed, panic grass, and lespedeza were the six most important seeds taken by doves.

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FULVOUS TREE DUCKS AT WILLIAMSBURG, VIRGINIA

By John H. Grey

A pair of Fulvous Tree Ducks (<u>Dendrocygna bicolor</u>) were seen at Williamsburg in late March and mid-April, 1960, by four observers, three of whom did not know the others had seen the birds.

March 30, Mrs. A.D. Strong saw a strange pair of ducks behind her home in Indian Springs on the edge of town. They were flying around in a beech tree and an oak tree, sometimes alighting. Realizing she had never seen such before she noted the beige color, long neck and legs, before asking her husband to use the binoculars while she looked in Peterson's <u>Guide</u>. Reading out the description of the birds he checked the field marks and confirmed her first guess. The birds stayed around the two trees for some five minutes giving good opportunities of watching them perched and in flight. The Strongs were especially impressed with the long legs in the flight pattern, and the very long necks.

April 12, Mrs. Leo Keilocker of Queens Lake, three miles outside of town toward the York River, noticed two ducks - again in a tree - that had "long slender necks, from below a soft shade of brownish tan, with some white in the general area of the wing, also some white about the eye." She too was impressed by the long legs and neck, and saw the birds fly as well as perch.

In late april andrew Curtis, who lives on Queens Lake, told me of seeing a brown duck with the tame ducks on the lake, and it was not like any duck he had seen in his hunting experience. Its legs were long, and the neck was longer than other ducks.

These observers are right keen field workers and know their birds well. It seems reasonable to conclude we had a pair of the ducks, although Curtis saw only one.

The Chat, bulletin of the Carolinas Bird Club (March-June 1960, pp.22-23) cites such birds seen in both Carolinas. The Savannah Refuge had 32 present in December, 1959-January, 1960; and Wilmington, N,C., had 3 on January 18, 1960, and one remained till March 10. Each of these records are the second for their state: North Carolina having a single bird taken in 1886; while South Carolina had two dozen November 26 to December 5, 1956.

These birds breed from southern Louisiana westward and are considered accidentals on the east coast, the Fifth A.O.U. Checklist listing only Florida, North Carolina, Bermuda, and Cuba.

- Williamsburg, Virginia

(This is a new bird for the Virginia list. These descriptions seem to be adequate for the record. There seems to have been an eastward movement of this species. Travis H. McDaniel reports seeing one at Long Island, in Back Bay, on October 19, 1960. The same day John Sincock saw 8 in Currituck Sound, in North Carolina. And on the second day of the hunting season, November 20, one was shot on Knott's Island, on the North Carolina side of the state line, by Albert White. This bird is now at the headquarters of the Back Bay Federal Refuge. — J.J. Murray)

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BIRDS AT DULLES INTERNATIONAL AIRPORT, 1959-1960

By Karl H. Weber

Twenty-seven miles west of Washington, D.C., on the border of Loudoun and Fairfax Counties, Virginia, construction is being pressed on Dulles International Airport, the jet airport for the Washington area. Lying predominantly in Loudoun County, the airport's nearly 9000 acres comprise a level island of grass and concrete in an otherwise rolling region of woods and small fields. Since construction began in late 1959, transformation of the site has produced habitats otherwise less extensively available in the Piedmont. A rapid and largely uncontrolled growth in rodent population has been facilitated as farms have been leveled or lie in disuse. Extraordinary changes in bird life have resulted.

The first indications that unusual finds might be in store came on November 1, 1959. Among the numerous marsh hawks flying low over the grassy fields Col. and Mrs. Louis B. Ely observed many short-eared owls and small numbers of rough-legged hawks. These visitors from the North were accompanied by fair numbers of the more common red-shouldered, red-tailed and sparrow hawks. Thereafter, large numbers of short-eared owls were to be seen daily. As many as 25 could be flushed from a single weed patch. Upwards of 40 were found among the rows of parked machinery on March 12 by Edwin T. McKnight. Since many parts of the airport are not readily accessible, an accurate estimate of total numbers on the site is difficult to make but surely hundreds must have been present. Short-eared owls were seen until at least March 27, 1960, when Mr. and Mrs. McKnight flushed 23 from a single grassy tract.

Rough-legged hawks were reported regularly throughout the winter. As many as 8 were seen at one time and at least 2 were still present on March 27. On January 17, 1960, I observed a perhaps unusual example of owl behavior as I watched 4 short-eared owls "hawk" a rough-legged hawk perched on the tip of a cedar in mid-afternoon. There was no apparent reason for these co-habitors to be at odds but the display continued until passers-by disturbed the hawk some fifteen minutes later.

On January 3, 1960, I observed 4 lapland longspurs among horned larks in a cleared and weed-grown area not far from the location of the future terminal facilities. According to "A Check-list of the Birds of Virginia" (1952 edition), this is the first record of this species in the Piedmont since 1886. A high count of 30 was made on March 12 by McKnight and Robert L. Smith and the last sighting was reported by McKnight on March 19. In addition to the longspurs, both prairie and northern horned larks were observed in the same area.

The presence of the longspurs suggested that other birds of the northern fields might also appear. This proved to be the case for, on January 17, I found a flock of 34 snow buntings in a rough, weedy strip along the newly-completed north-south runway. Other observations were made later in the winter. According to the 'Check-list,' there are no records of snow buntings in the Piedmont although four scattered records are available from the tide-water areas of the nearby Potomac River.

On February 4, 1960, still another northern species turned up in the same general area as the longspurs. Mrs. Ely and Mrs. Mitchell Dreese found redpolls in the weed patches where a flock of perhaps a hundred goldfinches had been seen earlier in the winter. Large numbers of redpolls were subsequently seen. Smith and C.A. Anderson estimated about 40 in a flock on February 27 and there is a report of 60 on February 7. Lesser numbers lingered until March 13 when Mr. and Mrs. David B. Stewart found a single bird.

Interesting observations of other species not common in the Piedmont have been reported. On February 7 four white-crowned sparrows were found. Although this species is of fairly regular occurrence in small numbers during migration in this area, winter records are sparse. Finally, on April 17, McKnight heard an upland plover singing in the air over the airport and on April 30 found two singing males which appeared to be at home.

Too few records are at hand to establish whether the change in bird life first noticed among the wintering species at Dulles International Airport may have extended to the nesting species as well. It is worth noting, however, that a scant thirty miles to the north across the Potomac River in Maryland such summer visitors as upland plovers, dickcissels and lark sparrows have been recorded in small numbers with some regularity.

Several of the wintering species have already returned for the 1960-61 winter season. Lt. Col. and Mrs. William A. Houston on November 20, 1960 observed a dozen short-eared owls in grassy areas near the southern end of the Airport site. Jackson M. Abbott and Specialist 1/c John Weske found 14 lapland longspurs and 24 snow buntings on November 26 near the cement mixing plant where the longspurs were first observed as reported above. In the same general sector of the airport, they also found six rough-legged hawks. Thus, despite considerable alteration as a result of a summer's construction activity, including the seeding of large areas to grass, conditions appear still to be favorable to these uncommon winter visitors.

- 204 Slade Run Drive Falls Church, Virginia

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RECENT NESTING OF THE RED-COCKADED WOODPECKER IN THE NORFOLK AREA

By Paul W. Sykes, Jr.

On January 9, 1960, H.A. Hespenheide and the writer found what appeared to be an active nest of the Red-cockaded Woodpecker (Dendrocopos borealis) about one-half mile west of the Northlanding River in southern Princess Anne County. At this time three birds were seen in the vicinity of the living pond pine (Pinus serotina, Michx. f.) containing the nest cavity. Throughout the spring, resin exuding from wounds made by the woodpeckers through the bark above and below the entrance to the cavity continued to be deposited on the bole of the tree. The nest cavity was proven to be active when Hespenheide, F.C. Richardson, and the writer observed both the male and female D. borealis making frequent trips to the nest with food material on May 28. The young birds were not seen, but could be heard each time an adult flew to the entrance hole.

The nest tree has an estimated height of 45 feet with a diameter of 15.1 inches (measured at 4.5 feet above the ground). The entrance to the nest cavity is about 25 feet above the ground. The pine is approximately 116 years old. This age was determined by counting the annual growth rings of an increment boring and adding an additional

4 years to the count so that the growth from the seed to the height at which the boring was made was taken into consideration. The tree is infected with red heart (Fomes pini) in a rather advanced stage (Boyce, 1948).

The nest tree is located in a shrub-bog community as described by Wells (1942). The soil is of the deep peat type, the upper portions being pure organic matter. The water table is high during most of the year, ranging from 0 to 10 inches from the surface during the wet period. Two distinct layers of the dominant plant species are prevalent. The upper layer is composed of open-grown individuals and scattered groups of pond pine forming a rather ragged canopy. The lower layer consists of both dense and scattered growths of saplings, shrubs, and vines. The dominant species are: red maple (Acer rubrum L.), wax-myrtle (Myrica cerifera L.), bitter gallberry (Ilex glabra (L.) Gray), red bay (Persea borbonia (L.) Spreng.), blueberries (Vaccinium spp.), and laurel-leaved greenbrier (Smilas laurifolia L.).

The active nest of the Red-cockaded Woodpecker in Princess Anne County constitutes the only known nesting record of this species in the Norfolk area since J.B. Gould observed young being fed on April 19, 1912, near Norfolk. The habitat in which this recent nest tree was found is quite different from the habitat described by Steirly (1957) in his work on the nesting ecology of <u>D. borealis</u> in southeastern Virginia.

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RING-BILLED GULLS FOLLOWING THE PLOW

By Jack P. Hailman

On 28 February 1960, my wife and I observed about 75 Ringbilled Gulls, Larus delawarensis, following a plow on a farm several miles south of Stumpy Lake (Norfolk County, Virginia). The birds hovered over the rear of the plow, alighting to feed in the newly-turned earth. As the plow moved on, birds at the end of the line would fly up over all the feeding gulls, and drop down again immediately behind the plow. In this way, the movement of the flock corresponded to the moving tracks of a tracked vehicle such as a tank.

I have frequently seen similar plow-following by Laughing Gulls (L. atricilla) in the Tidewater areas of Virginia, but the behavior does not seem to be as common in the Ring-billed Gull. Bent mentions in his Life Histories of Gulls and Terns (1947. Bull. U.S. Nat. Mus., 113: 137) that Ring-billed Gulls often follow plows in the mid-west, but there is no mention of their doing so in coastal regions where the food habits of this species are directed much more toward scavenging and fishing. Several other gull species are known to follow the plow (see Bent, op. cit.; and Wolk, 1959, Wilson Bull., 71: 387-388).

It would be interesting to know how this feeding habit develops. Wolk suggests that the sound and sight of other birds' feeding attracts neighboring individuals to join them. This suggestion implies two different mechanisms: (a) an immediate attraction to the area by calls and behavior of an individual which accidentally finds food behind a moving plow, and (b) learning from such incidents, after which birds actively seek out plows to feed behind and are no longer dependent upon "accidental" discoveries by themselves or other individuals. These two mechanisms are not mutually exclusive; the first undoubtedly takes place. It is likely that some learning process, possibly the second mechanism mentioned, also takes place, for I have noticed Laughing Gulls on the Eastern Shore flying over fields looking down in the manner which many gulls do when fishing in water. It is possible that young birds are brought to moving plows by adults, so that they learn plow-following at an early age. Hence this would be a "species tradition," in the sense used by Hochbaum in Travels and Traditions of Waterfowl (1955). Careful observation of this behavior is one way the amateur ornithologist can help discover how it develops.

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BONE ISLAND GIVEN TO STATE AS WILDERNESS AREA

The Virginia Department of Conservation and Economic Development announced on November 3 the acquisition of 450 acres of land constituting Bone Island in Northampton County on the Eastern Shore for public use as a natural area for a wildlife sanctuary.

Marvin M. Sutherland, Director, said it was the second piece of property to be acquired by the Department by gift for preservation in a wilderness state. The first acquisition, announced a few weeks ago, covered 758 acres in Accomack County near Onancock on the Chesapeake Bay side, donated by the Old Dominion Foundation. Other areas of Virginia are being considered for inclusion in the New Natural Areas System, which is being administered by the Department's Division of Parks.

The Bone Island property came to the Department from Philadelphia Conservationists, Inc., through a gift, made possible by a grant to the conservation organization by the Old Dominion Foundation. Monroe Bush, Assistant to the President, represented the Foundation in the negotiations.

Allston Jenkins, President, Philadelphia Conservationists, Inc., said that his organization, "despite its name, has a wide regional interest in the whole Middle Atlantic section. We believe that the seaside islands of Virginia are especially valuable for preservation in a natural state, and our members are glad for the chance to cooperate with the Old Dominion Foundation and the State of Virginia in securing the perpetual preservation of Bone Island for the benefit of all the people."

The property consists of 150 acres of land and 300 acres of marsh. It is bounded generally on the north by Sand Shoal Channel and Sand Shoal Inlet; on the east by the Atlantic Ocean; on the south by Shell Creek and Wreck Island; and on the west by Man and Boy Channel. Bone Island is a portion of a larger island group known as Wreck Island.

The deed conveying the property to the Department sets forth that the property shall be maintained in its "natural state and operated as a sanctuary for the maintenance of wildlife and its natural habitat, undisturbed by hunting, trapping and other activities adversely affecting the wildlife."

Sutherland said that the several conditions for maintaining the property in its natural or wilderness state, which were agreed upon for the first property in accomack County, are equally applicable to the Bone Island property.

As required by law, Governor Almond gave his prior approval to acquisition of the property by the Department.

THE BACK BAY TRIP OF 1960

By Evelyn F. Newcomb

The annual winter field trip of the Virginia Society of Ornithology to the Back Bay National Wildlife Refuge was held December 3.

Following days of unseasonable spring-like weather, the fury of real winter had suddenly descended on us as we prepared for this Back Bay trip, but as we surveyed the group, it was evident that they were properly attired for protection and comfort. The morning was briskly cold with temperature in the low twenties and Jack Frost had magnificently arrayed every unprotected area and surface, more especially the automobile windshields. The sunrise was beautiful as witnessed over the Atlantic from The Dunes, and the local weatherman's forecast of a high of forty to fifty degrees gave promise of a nice day.

When we reached Sand Bridge, our host for the day, Mr. Carl Yelverton and his staff, greeted us and the forty some members boarded the pick-up truck, trailer and jeep for the breezy, bumpy, journey along the high tide road to the Refuge. There the group divided, one company continuing down the beach to explore the flats and dunes and the other crossing by boat to Long Island to spend the morning there. Blackbellied Plovers, a Pigeon Hawk, a Short-eared Owl, and many Short-billed Marsh Wrens were among the birds seen in the morning.

Off from Long Island there were many Ruddy Ducks and Canvasbacks, and on the island we saw the Fox Sparrow, Sparrow Hawk, Song Sparrow, Cardinal, Catbird, Myrtle Warbler, Winter Wren and an immature Bald Eagle. The highlight of the visit to Long Island was the plane trip over the Refuge which Mr. Yelverton so graciously made possible and we will ever be grateful for this opportunity of viewing the topography of this area with the ducks, geese and swans that would not have been seen otherwise.

At noon, the group assembled on the Refuge Manager's lawn and, in the warmth of the sun lunch boxes and thermos bottles were opened. Everyone seemed to enjoy this pause for refreshment and fellowship.

In the afternoon, those desiring to go to Long Island departed by boat with Mr. Yelverton, and those desiring to survey the beach, the flats and dunes departed by wagon. The Snow Buntings were observed on the dunes in the morning, but were not seen at all in the afternoon. Myrtle Warblers predominated on the dunes. Those who had seen the Canada Geese, Whistling Swans and Snow Geese in large numbers last year noted their scarcity this year, and we were informed the inactivity among the waterfowl was due to the calm weather prevailing that day.

The day ended all too soon and as we journeyed back to Sand Bridge along the smoother, low tide highway, Venus, Saturn and Jupiter boldly appeared and the round, full moon majestically rose over the horizon to cast a golden path across the calm water and dispel the darkness of the night. It was a wonderful day and with gratitude, we bade farewell to Mr. Yelverton and his hospitable staff who devoted their entire day to the VSO group.

Those out-of-town members spending the night in Virginia Beach gathered for evening fellowship before an open fire at The Garden Lodge and an enjoyable dinner of fresh sea food at Marty's Grill, followed by a showing of Mr. Paul Dulaney's excellent slides taken on his recent trip to Switzerland and the low countries, and those taken at Skyland last June.

On Sunday morning, the group at The Dunes motored to the Craney Island Disposal Area near Portsmouth. The twenty members, with Mr. Ed ames guiding, enjoyed a profitable morning in the foursquare-mile area watching Ducks, Sanderlings, Red-backed Sandpipers, Gulls, several Great Blue Herons and Savannah Sparrows. One Bonaparte's Gull was observed. It was hoped that we would see the Snow Buntings, but they did not make an appearance. Many of the group were thrilled to see for the first time Purple Sandpipers along the gray stony causeway. In flight, they were more beautiful. A flock of six American Pipits, identified by Mrs. Kathryn Michie, held our interest for a while. They were a first record for this area, I believe. The most interesting subject of all, another first record for the area, was the Snowy Owl which the group observed for sometime along the causeway. There was every indication that it had been there for a while and was faring well. As it took to the air and crossed the area to the causeway on the opposite side, it was followed and pursued by several Gulls. This was a very interesting place and we appreciate the VSO members in the area sharing it with us,

The gates of the Craney Island Disposal Area locked behind us, we waved goodbye to our fellow members and we were homeward bound carrying happy memories of another exciting, rewarding trip with the Virginia Society of Ornithology. The trip was complete, except that our most able and faithful Tripmaster, C.C. Steirly, was absent and we missed him. Also, illness prevented Jim Eike from attending and we missed him too.

-- Salem, Virginia

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A REVIEW

The Wonders I See, by John K. Terres, J.B. Lippincott Company, Philadelphia and New York, 1960, 256 pages, 15 drawings by Walter Ferguson. Anyone interested in nature, and particularly anyone with an inquiring mind, will be glad to have this book. Attractive in format, stimulating and informative in material, it is a naturalist's journal of things seen and of speculation as to the significance of these happenings. The author, who is the editor of Audubon Magazine, presents more than 80 sketches, most of them short, some of them running to six or eight pages, about the activities of birds and mammals, reptiles and insects. They are grouped by months around the year, from 11 sections in January to 4 in September and November,

As the author says in his introduction, "A naturalist's journal is his treasure house. In it he stores the intimate experiences with nature that he has every day.... Out of these experiences, when written day after day, he sees a continuity that becomes a spinning wheel of life - a web of life - in which animals, plants, weather, seasons, and climate are bound together in the inexorable forward movement that we call a year."

Since this review is appearing in the November-December issue of The Raven, some typical entries for those months may be mentioned. "The last of the tree crickets" tells of his finding a late individual in November. From this he proceeds to a fascinating account of the courtship activity of this odd insect. In December he discusses "A gray squirrel's sense of smell," "A deer and a cougar" in Florida, and a topic that has attracted and puzzled all of us, "Where do birds sleep at night"? Another very interesting topic from another month is "Everyday hazards in the lives of birds." This is enough to indicate that Mr. Terres' book is well worth owning.

- J.J. Murray Lexington, Virginia

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NEWS AND NOTES

Christmas Bird Count Date Extension. The dates for the Christmas Bird Count are now set for December 21 to January 2 inclusive, Counts made on any of these dates will be acceptable. Deadline for receipt of copy, both for Audubon Field Notes and The Raven is January 16. Reports for The Raven should be sent first to F.R. Scott, 115 Kennondale Lane, Richmond 26, Virginia. See September-October issue for fuller information.

Deadline for Check-List Revision. The deadline for submission of notes through the ducks has already passed. Deadline for notes on vultures through shorebirds will be February 15. It is necessary to set these deadlines, if the work is ever to be completed.

Audubon Screen Tours. Williamsburg (Washington Hall, Room 100) will have Cleveland Grant on January 13, Leonard Hall on February 18, and Robert C. Hermes on March 30. Roanoke College, Salem (Laboratory Theatre), will have Grant on January 11 and Hall on February 10. Hours at both places, 8:00 P.M.

Waterfowl at Back Bay. According to the Virginia Game Commission aerial inventories of the waterfowl in the Back Bay-Currituck Sound area by Federal Biologist John S. Sincock revealed that, on November 17, a total of 165,258 birds were present. Of this number 41,723 were found in Virginia's Back Bay.

On November 26 the grand total observed was 219,967, of which 62,235 were seen in Back. Of the November 26 Back Bay total only 17,345 were ducks, consisting of 5,600 dabblers, mostly baldpate, and 11,745 divers, 9,250 of which were ringnecks, 60 of which were redheads, and 345 of which were canvasbacks. In greater numbers were Canada geese (17,800), snow geese (9,000) and coot (12,440).

These totals of 165,258 on November 17 and 219,967 on November 26 are considerably higher than last year's November 13 survey of 137,290 birds present in the Back Bay-Currituck Sound area.

Cattle Egret. A Cattle Egret was killed by State Game Warden Otto Halstead on May 13, 1959, at the north end of Knotts Island, almost on the Virginia-North Carolina line. The specimen is now at the Wildlife Unit at V.P.I. We have not been able to learn whether technically the spot was on the Virginia or the North Carolina side.

Blue Goose in Residential Norfolk. Mrs. Mary Frances Morrisette reports that an immature Blue Goose arrived at the east end of Severn Road on the Lafayette River on November 5, 1959, joining a flock of ducks. By the middle of January its head was getting white. Later it appeared sick, disappearing on January 23, 1960. Several weeks later what was apparently this same bird was found dead an eighth of a mile away. The interesting part of this record is the fact that the bird stayed in such thickly settled areas. Apparently when such immature Blue Geese wander away from the Mississippi flyway, they stay where they land until time for the northward spring flight. At present there is one on the Womeldorf farm fish pond, just outside Lexington, which has been there since October 23, 1960. This is the third record for this pond and the fourth for Rockbridge County.

Sooty Tern, New Virginia Record. Walter Post Smith reports that Mitchell, a state game warden, found a dead Sooty Tern on Saunders Road in Hampton on September 12,1960, and brought it to Mrs. L.W. Machen. This is a remarkable addition to the Virginia list. More details, we hope, in the next issue.

Hawk Counts at Cow Knob. Max Carpenter reports the following hawk counts at Cow Knob, Rockingham County, Virginia. The elevation at Cow Knob is 4035. September 24, 1960, 8 a.m. to 3:30 p.m., sky clear, light southwest wind, temperature in the 60s: Turkey Vulture, 4; Cooper's Hawk, 7; Red-tailed Hawk, 6; Broad-winged Hawk, 201; Sparrow Hawk, 22; Pigeon Hawk, 1; unidentified, 4 accipiters and 33 buteos.

September 25, 8:30 a.m. to 3:30 p.m., clear overhead, wind and temperatures same as day before: Turkey Vulture, 4; Sharp-shinned Hawk, 3; Cooper's Hawk, 7; Red-tailed Hawk, 1; Red-shouldered Hawk, 4; Broad-winged Hawk, 298; Marsh Hawk, 2; Osprey, 2; Sparrow Hawk, 17; unidentified Buteos, 19. On these days George Harrison and others saw 850 at Reddish Knob, on the Virginia-West Virginia line.

Snowy Owl at Craney Island, Hampton Roads. Some 20 VSO members who went to Craney Island on the morning following the Back Bay trip, December 4, 1960, turned up a Snowy Owl, as reported by J. Edward Ames. The bird was flushed by one of the cars, flew a short distance, and perched on the rocks, giving the group good views. The unusual flight and heavily feathered legs first attracted their attention.

Western Kingbird. Mrs. Edward Katz and Miss Martha Armstrong of Williamsburg, on a field trip with the William and Mary Biology Club on October 23, 1960, got good views of a Western Kingbird at the Hog Island Refuge in James River.

Dowitcher, Short-billed - 37

INDEX TO VOLUME XXXI - 1960

(This index lists all authors and titles; names of people and places when significant; and species of birds when important, but omitting most species in local lists and field trips. J.J.M.)

Albemarle County - 84 Assateague Island - 33 to 43 (specimens) Augusta County - 80 Avocet - 50 - 97 Back Bay, Spring Count - 54 Back Bay Trip of 1959 - 49 Back Bay Trip of 1960 - 111 "Bird Specimens from Assateague Island and Neighboring Areas" - 33 "Birds of the 1959 Foray - Mountain Lake, Virginia" - 24 "Birds at Dulles International Airport, 1959-1960" - 105 Blackbird, Brewer's - 8 - 51 Blackbird, Redwinged - 17 (high count) - 51 (high count) Blackbird, Rusty - 13 (mountains) - 51 (high count) "Blue-winged Warbler Nesting in Rockingham County and Summer Notes on the Golden-winged Warbler in Rockingham and Albemarle Counties, Virginia" - 84 Bobolink - 56 (high count) "Bone Island Given to State as a Wilderness Area" - 110 Brant - 35 (specimen) Brooks Bird Club Foray (Mountain Lake) - 24 - 63 - 68 Bunting, Snow - 16 - 19 (Lynchburg) - 106 Burns, R.K., "Birds of the 1959 Foray - Mountain Lake" - 24 Canvasback - 86 (courtship) Carpenter, Max - "The 1960 Annual Meeting Field Trip" - 48 Carpenter, Max - "Observations on Hawk Migrations on the Shenandoah Mountain, Virginia, 1949-1959" - 88 Carpenter, Max - 58 Catbird - 12 (winter) - 17 (winter) Chamberlain, J.L., "Snow Buntings in Lynchburg" - 19 Chamberlain, J.L., "Preliminary Report on Mourning Dove Food Habits in Piedmont Virginia" - 101 Chandler, E.R., "Population Studies of the 1959 Foray of the Brooks Bird Club at Mountain Lake, Virginia" - 63 Chat, Yellow-breasted - 5 (winter) - 12 (winter) Chickadee, Black-capped - 80 Christmas Counts - 5 to 17 "Conservation Legislation in the Eighty-sixth Congress" - 93 Cowbird - 10 (high count) - 17 (high count) - 51 (high count) Cuckoo, Yellow-breasted - 93 (nesting) "Defensive Action of Nesting King Rail" - 92 Dove, Mourning - 12 (high winter count) - 101 (food habits) Dovekie - 39 (specimen) Dowitcher, Inland - 38 Dowitcher, Long-billed - 38

```
Duck, Fulvous Tree - 104
  Duck, Ruddy - 12 (high count)
  "Duck Courtship in Virginia" - 86
 Egret, Cattle - 52 - 114 (specimen)
 Egret, Snowy - 6 (winter)
 Eike, James W. - "Back Bay Trip of 1959" - 49
 English, A.O. - "Snowy Owl in Roanoke" - 20
 "Evening Grosbeak Invasion in Virginia, The 1959-1960" - 60
 Feinstein, Bernard - "Bird Specimens from Assateague Island and the
                         Neighboring Areas" - 33
 Finch, Newfoundland Purple - 18
 Freer, Ruskin S. - 58
 "Fulvous Tree Ducks at Williamsburg, Virginia" - 104
 Gannet - 6 (high count)
 Gnatcatcher, Blue-gray - 50 (winter)
 Goldeneye - 86 (courtship)
 Goldfinch - 17 (high count)
 Godwit, Marbled - 38 (specimen)
 Goose, Blue - 10 - 13 - 15 - 55 - 114
 Goose, Hudson Bay Canada - 34 - (specimen)
 Goose, Snow - 10 - 54 (late)
 Goshawk - 3 - 12
 Grackle - 17 (high count) - 51 (high count)
 Grey, John H. - "Fulvous Tree Ducks at Williamsburg, Virginia" - 104
 Grebe, Red-necked - 9
 Grosbeak, Blue - 18
 Grosbeak, Evening - 19 (food) - 21 - 60
Gull, Glaucous - 2 - 5
Gull, Great Black-backed - 8 (high count) - 10 - 12
Gull, Herring - 6 (high count)
Gull, Ring-billed - 109 (habits)
Hailman, Jack P. - "An Immature Cattle Egret at Chincoteague" - 52
Hailman, Jack P. - "Duck Courtship in Virginia" - 86
Hailman, Jack P. - "Ring-billed Gulls Following the Plow" - 109
Hawk, Pigeon - 5 - 9 - 11
Hawk, Rough-legged - 5 - 7 - 13 - 106
"Hawk Counts at Cow Knob" -114
"Hawks and Owls for Rodent Control" - 53
Heron, Louisiana - 5 (winter)
Heron, Little Blue - 6 (winter)
Heron, Yellow-crowned Night - 6 (winter) - 8 (winter)
Ibis, Glossy - 2 - 5
"Immature Cattle Egret at Chincoteague in 1954, An" - 52
Junco, Slate-colored - 55 (late)
Kingbird, Western - 2 - 7 (winter) -115
Knot - 5 (winter) - 56
Longspur, Lapland - 106
```

```
Mountain Lake - 24 - 58 - 63 - 68
 Murray, J.J. - Review: "Just About E crything in the Adirondacks" - 96
 Murray, J.J. - Review: " The Wonders I See" - 112
 "Nests and Young Out of the Nest at the 1959 Foray at Mountain Lake,
    Virginia" - 68
 "New Bird for Virginia, A" - 18
 Newcomb, Evelyn F. - "The Back Bay Trip of 1960" - 111
 News and Notes - 21 - 43 - 58 - 97 - 113
 Nuthatch, Red-breasted - 28 (summer)
 "Observations on Hawk Migrations on the Shenandoah Mountain, Virginia,
    1949-1959" - 88
 Olsen, James H. - "Nests and Young Out of the Nest at 1959 Foray at
                      Mountain Lake, Virginia" - 68
 Oriole, Baltimore - 6 (winter) - 11 (winter) - 90 (winter)
Ornithology Course at Mountain Lake - 58
Osprey - 6 (winter)
Owl, Barn - 10 - 11
Owl, Eastern Screech - 39 (specimen)
Owl, Saw-whet - 7
Owl, Short-eared - 106
Owl, Snowy - 20 - 112
Oystercatcher - 5
Paxton, Robert O. - "The 1959-1960 Evening Grosbeak Invasion in Virginia" - 60
Phalarope, Red - 53
Phalarope, Wilson's - 39 (specimen) - 97
Pheasant, Black-necked - 97
Pheasant, Reeves - 97
Plover, Piping - 8 (winter) - 36 (specimens, both races)
Plover, Upland - 106
"Population Studies at the 1959 Foray of the Brooks Bird Club at
   Mountain Lake, Virginia" - 63
"Preliminary Report on Mourning Dove Food Habits in Piedmont Virginia" - 101
Rail, Black - 2 - 8
Rail, King - 92
Razorbill (Auk) - 39 (specimen)
"Recent Nesting of the Red-cockaded Woodpecker in the Norfolk Area" - 107
"Records of the Blue Grosbeak at Blacksburg" - 18
"Red Phalarope in Surry County" - 53
Redpoll, Common - 50 - 106
Reviews - 96 - 112
"Ring-billed Gulls Following the Plow" - 109
Rockingham County - 80 - 84
Sandpiper, Buff-breasted - 38 (specimen)
Sandpiper, Spotted - 56 (high count)
Sandpiper, Stilt - 38 (specimen) - 97
Sandpiper, White-rumped - 56
Sapsucker, Yellow-bellied - 27 (summer)
Scaup, - 86 (courtship)
Scott, F.R. - "A New Bird for Virginia" - 18
Scott, F.R. - "Hawks and Owls for Rodent Control" - 53
```

```
Scott, F.R. - "Summering of the Black-capped Chickadee and Golden-winged
                   Warblers in Augusta and Rockingham Counties, Virginia" - 80
  Shear, G.M. - "Records of the Blue Grosbeak at Blacksburg" - 18
 Shearwater, Sooty - 34 (specimen)
 Shomon, Joseph J. - 47
 Skimmer, Black - 8 (winter)
 "Skyland Foray, The 1960" - 76
 "Snow Buntings in Lynchburg" - 19
 "Snowy Owl in Roanoke" - 20
 Sora - 9 (winter)
 Sparrow, Fox - 14
 Sparrow, Ipswich - 9 - 50
 Sparrow, Vesper - 9 (winter) - 55
 Spring Migration Bird Counts - 54
 Starling - 17 (high count) - 51 (high count)
 Steirly, C.C. - "Evening Grosbeaks Feeding on Myrica Fruits" - 19
 Steirly, C.C. - "Red Phalarope in Surry County" - 53
 Steirly, C.C. - "The 1960 Skyland Foray" - 76
 Steirly, C.C. - "Defensive Action of Nesting King Rail" - 92
 Steirly, C.C. - "Unusual Nesting Site of the Yellow-billed Cuckoo" - 93
 Stevens, Charles E. - "The Blue-winged Warbler Nesting in Rockingham
                          County and Summer Notes on the Golden-winged
                          Warbler in Rockingham and Albemarle Counties" - 84
 "Summering of the Black-capped Chickadee and Golden-winged Warblers in
    Augusta and Rockingham Counties" - 80
 Surry County - 53 - 92
 Swallow, Cliff - 56
 Swan, Mute - 5
 Swan, Whistling - 11
Sykes, Paul W. - "Wintering Blackbird and Starling Populations in
                     Southeastern Virginia in 1959-1960" - 51
Sykes, Paul W. - "Wintering Baltimore Orioles in the Norfolk Area" - 90
Sykes, Paul W. - "Recent Nesting of the Red-cockaded Woodpecker in the
                     Norfolk Area" - 107
Tanager, Summer - 31 (at 2000 feet)
Teal, Blue-winged - 12
Tern, Black - 56
Tern, Common - 8 (winter) - 11 (winter)
Tern, Sooty - 114
Thrush, Swainson's - 5 (winter) - 6 (winter)
Turnstone, Ruddy - 8 (winter) - 9 (winter)
"Unusual Nesting Site of the Yellow-billed Cuckoo" - 93
Vireo, Solitary - 2 - 8 (winter)
Vireo, White-eyed - 21 (winter)
VSO - Annual Meeting - 46
VSO - Annual Meeting Field Trip - 48
VSO - Committees - 98
VSO - Executive Committee Report - 77
VSO - News of Local Chapters - 95
VSO - Officers - 47 - 98
VSO - Treasurer's Report - 22
```

Wren, Long-billed Marsh - 56 (high count)

Warbler, Blue-winged - 84 Warbler, Cerulean - 30 Warbler, Golden-winged - 80 - 84 Warbler, Magnolia - 30 (summer) Warbler, Prothonotary - 2 - 9 (winter) Warbler, Yellow - 30 (at 3000 feet) Watkins, Evelyn - "The 1960 VSO Annual Meeting" - 46 Watson, Robert J. - "Conservation in the Eighty-sixth Congress" - 93 Weber, Karl H. - "Birds at Dulles International Airport" - 105 Willet, Western - 36 (specimen) "Wintering Baltimore Orioles in the Norfolk Area" - 90 (see also 97) "Wintering Blackbird and Starling Populations in Southeastern Virginia in 1959-1960" - 51 Woodcock - 12 (winter) Woodpecker, Red-bellied - 12 (high count) - 13 (high count) Woodpecker, Red-cockaded - 107 Wren, Carolina - 44 (melanistic)