



The Raven

BULLETIN OF THE VIRGINIA SOCIETY OF ORNITHOLOGY
PUBLISHED AT LYNCHBURG, VIRGINIA

DR. J. J. MURRAY, EDITOR
LEXINGTON, VA.

VOL. XIX

January-February, 1948

Nos. 1 & 2

CONTENTS

Page

Some Interesting Specimens of Virginia Birds in the American Museum of Natural History By Fred R. Scott.....	2
V. S. O. Winter Field Trip to Back Bay By Fred R. Scott.....	4
Eastern Shore Notes By Fred R. Scott.....	6
The 1947 Christmas Census Reports.....	7
Back Bay	Sweet Briar
Yorktown	Lynchburg
Richmond	Danville
Fort Belvoir	Harrisonburg
Shenandoah National Park	Fairfield
Warren	Lexington
Charlottesville	Blacksburg
	Roanoke
Annual Meeting.....	12

SOME INTERESTING SPECIMENS OF VIRGINIA BIRDS IN THE AMERICAN
MUSEUM OF NATURAL HISTORY

By Fred R. Scott

Recently I had occasion to spend two weeks in New York City and took this opportunity to examine part of the extensive bird collection of the American Museum of Natural History. In doing so I found quite a few interesting records from Virginia, including two species that have not heretofore been listed from Virginia, Bullock's oriole (Icterus bullockii ssp.) and Sitka (red) crossbill (Loxia curvirostra sitkensis). I have listed some of these records below with the American Museum catalog number.

Pterodroma hasitata Black-capped Petrel

An adult female (no. 349314) of this species was collected at Blackburg on August 31, 1893. Although the museum tag gives only the collection of Jonathan Dwight as the origin of this skin, a note in The Auk (vol. X 1893, p. 362) gives the collector as Ellison A. Smyth, Jr. It is strange that a bird so rare even on its breeding grounds in the West Indies should appear in the mountains of Virginia. However, the great hurricane that struck the Atlantic coast during the last of August, 1893, also brought two of these birds to New York state (August 28, and September).

Branta bernicla nigricans Black Brant

An unsexed specimen (no. 350207) from the Dwight collection was shot at Cobb's Island in September, 1888.

Mareca penelope European Widgeon

Dr. G. M. Phelps shot a male (no. 229335 in Back Bay on December 7, 1926.

Aquila chrysaetos canadensis Golden Eagle

A male (no. 155397) was collected in the spring of 1917 at Staunton by W. W. Timberlake.

Rallus elegans elegans King Rail

While not a rare bird the three specimens I located should be recorded. There are two (nos. 354388 and -89) from the Dwight collection killed at Virginia Beach in May, 1893, and one (no. 471876) collected by Lt. Wirt Robinson in Buckingham County on October 29, 1893 (a male).

Coturnicops n. noveboracensis Yellow Rail

Lt. Wirt Robinson collected a female (no. 472179) in Buckingham County on October 29, 1893, and there is a male (no. 354523) from Suffolk in the Dwight collection killed October 25, 1896.

Erolia fuscicollis White-rumped Sandpiper

An unsexed specimen (no. 356688) from the Dwight collection was shot September 22, 1899 on Assateague Island.

Lobipes lobatus Northern Phalarope

A male (no. 357895) from the Dwight collection was shot September 27, 1899 at Virginia Beach.

Sterna hirundo hirundo Common Tern

There are five specimens (nos. 358896-358900) from the Dwight col-

lection which were collected in Albemarle County. No date is given.

Plautus alle Dovekie

A male (no. 359317) was collected on Cobb's Island on December 7, 1891. It was originally from the Dwight collection.

Asio otus wilsonianus Long-eared Owl

A female (no. 360925) from the Dwight collection was collected on November 18, 1890, at Gunston (probably Gunston Hall, the Mason home in Fairfax County).

Sphyrapicus varius varius Yellow-bellied Sapsucker

Lt. Wirt Robinson collected a female (no. 487867) on July 13, 1897, at Hot Springs. In Virginia this bird is generally regarded as breeding in the so-called Canadian zone (i.e., spruce-fir biome), but it is also found in the upper part of the Alleghanian fauna. It is probable, however, that this specimen was collected in some of our last stands of big spruce.

Dendrocopos b. borealis Red-cockaded Woodpecker

There is a flat skin of a male (no. 363791) from the Dwight collection that was killed at Cobham (Albemarle County) and which is not dated. W. C. Rives collected a male (no. 96427) on December 30, 1887, also at Cobham.

Turdus m. migratorius Eastern Robin

There is a specimen (no. 376072) from the Dwight collection which was collected at Mountain Lake on June 17, 1913.

Hylocichla m. minima (Northern) Gray-cheeked Thrush

There are two specimens (nos. 376956 and -957) from the Dwight collection that were collected at Cobham in September 1885, and on September 26, 1894, respectively. Jonathan W. Daniel Jr. collected a female (no. 138962) in Campbell County on May 22, 1901.

Hylocichla m. bicknelli Bicknell's (Gray-cheeked) Thrush

Daniel collected two females (nos. 138963 and -964) in the Dismal Swamp on May 21, 1902.

Vireo philadelphicus Philadelphia Vireo

There is a male (no. 379512) from the Dwight collection that was shot at Cobham in September 1885.

Limnothlypis swainsonii Swainson's Warbler

Five specimens (nos. 138870-138874) were collected by Daniel in 1902 in Dismal Swamp as follows: two females, May 26; one female, May 24; one female, June 24; one male, May 29.

Dendroica striata Black-poll Warbler

Daniel collected a female (no. 138891) in Campbell County on June 3, 1901, a rather late date.

Seiurus n. noveboracensis Northern Water-thrush

Daniel collected a female and an unsexed specimen (nos. 138916 and -916) in Dismal Swamp on May 21, 1902.

Oporornis agilis Connecticut Warbler

In the Dwight collection there is a specimen (no. 383892) which was collected at Cobham on October 3, 1889.

Icterus bullockii ssp. Bullock's oriole

There is a female in the Dwight collection (no. 386555) which was collected on Smith's Island (off Cape Charles) on July 23, 1895. Although no subspecific identification has been made, this bird without doubt belongs to the race I. b. bullockii.

Loxia curvirostra minor Red Crossbill

E. C. Thurber collected two males, one (no. 367700) at Waterloo, Alexander County, on January 15, 1888, and one (no. 367706) at Four Mile Run, Alexander County, on February 7, 1888. H. W. Henshaw collected a female (no. 367713) at Falls Church on November 13, 1887. During the great flight of 1899-1900 J. D. Figgins collected a series of twelve (nos. 72054-72065) at Falls Church between December 5 and 12, 1899. There were adults and immatures of both sexes. I see no necessity for listing each one with its catalog number, date, and sex.

Loxia curvirostra sitkensis Sitka Crossbill

During the flight of 1887-1888 four specimens were collected in Virginia. William Palmer shot a male (no. 367819) at Roslyn, Alexander County, on December 11, 1887. Dr. A. K. Fisher collected a female (no. 48805) at Falls Church on November 20, 1887. E. C. Thurber collected a female (no. 48776) and a male (no. 48779) at Four Mile Run, Alexander County, on February 12, 1888.

Melospiza l. lincolni Lincoln's Sparrow

Daniel collected a male (no. 138823) in Campbell County on May 14, 1901.

Plectrophenax n. nivalis Snow Bunting

C. H. Crumb collected a male (no. 96430) on Cobb's Island on November 4, 1891.

Richmond, Virginia

- - - 0 0 0 - - -

V.S.O. WINTER FIELD TRIP TO BACK BAY

By Fred R. Scott

Early the morning of December 6 thirteen intrepid members of the V.S.O. gathered for breakfast at the Essex House at Virginia Beach. Considering the heavy fog that hung a cloak of invisibility over the countryside, everyone was in very gay spirits. After a truly inspired cook had fully awakened us, we groped our way to Sand Bridge to meet Jack Perkins, the Back Bay Refuge manager, and two army trucks which were to transport us down the beach to the Refuge. We were joined here by two other visitors to the Refuge, W. P. Baldwin of Wilmington, Delaware, and E. B. Chamberlain, Jr. of Charleston, South Carolina.

Fortunately the fog lifted, and we had many fine views of loons, gulls, and an occasional gannet or scoter as we drove south toward the

Refuge. About this time one of our members was heard to state loudly that he was going to collect one migratory bird refuge manager (for scientific purposes, of course) if the party was not shown some snow geese.

Leaving the beach and forsaking any semblance of a road, we ploughed through marshes and mud flats like a pair of tanks. One of the highlights of the trip occurred when about five snow buntings were discovered in a large flock of northern horned larks. These birds were easily picked out in flight because of the large amount of white they exhibited in their wings. For many of us this was our first thrilling view of these northern birds and really made our trip worthwhile.

At the refuge headquarters our bag lunches were reinforced by hot tea and coffee and additional sandwiches generously supplied by Mr. and Mrs. Perkins. After lunch we transferred to two motorboats to search for ducks and geese. We needn't have worried about not seeing any snow geese, for we soon flushed up a large flock of about 1500 of these birds. While most of us gazed spellbound at this magnificent sight, Mrs. Darden was rapidly recording it with her everpresent motion picture camera. As we looked over this enormous flock, we could pick out a few blue geese, easily separable from the snows by their darker color. Soon after this we had to return, but not until we had enjoyed the sight of thousands of waterfowl of many different species. One of the boats almost didn't make it back to the landing dock, but after a furious assault on an oyster bar, the boat proved victorious, and no one had to swim back.

Due to lack of time there were quite a few birds we didn't have an opportunity to see. One of these was the ring-necked duck. Several of the men at the Refuge reported seeing a single flock of 3500 of these ducks a few days prior to our visit.

Our ride back up the beach to Sand Bridge at high tide was a harrowing experience, at least for those who made this trip in the jeep. We were rewarded, however, by two fine big flocks of gannets which put on an exciting show for us as they plunged into the water after fish.

Our total list of birds, consisting of 57 species, follows: common loon, 7; pied-billed grebe, 1; gannet, 43; double-crested cormorant, 11; great blue heron, 1; whistling swan, 318 (partly est.); Canada goose, 2051 (partly est.); snow goose, 1500 (est.); blue goose, 5; black duck, 123 (partly est.); baldpate, 100 (est.); pintail, 81; green-winged teal, 8; redhead, 27; canvasback, 2000 (est.); scap sp., 2000 (est); Am. golden-eye, 5; buffle-head, 8; old squaw, 3; white-winged scoter, 8; surf scoter, 7; American scoter, 7; ruddy duck, 19; hooded merganser, 1; turkey vulture, 4; black vulture, 17; bald eagle, 3; marsh hawk, 8; sparrow hawk, 3; coot, 800 (est.); killdeer, 4; black-bellied plover, 3; Wilson's snipe, 1; sanderling, 20; great black-backed gull, 1; herring gull, 405 (partly est.); ring-billed gull, 44; laughing gull, 21; Bonaparte's gull, 1; northern horned lark, 60 (est.); horned lark ssp., 15; tree sparrow, 200 (est.); crow, 2; fish crow, 11; Carolina wren, 2; mockingbird, 6; bluebird, 1; pipit, 60 (est.); starling, 7; myrtle warbler, 29; English sparrow, 3; meadowlark, 9; red-wing, 35 (est.); goldfinch, 3; savannah sparrow, 15; white-throated sparrow, 21; song sparrow, 8; snow bunting, 5.

Richmond, Virginia

EASTERN SHORE NOTES

By Fred R. Scott

Finding it necessary to drive to New York late last summer, I decided to make it a roundabout trip and go up the Eastern Shore, birding along the way. While crossing the Newport News-Norfolk ferry on August 8, I was quite surprised to find a number of Wilson's petrels. Even though I only counted seventeen, it is astonishing to me that an oceanic bird of this type would occur in the lower part of the James River, especially when there had been no storm or other bad weather preceding for two weeks to drive the birds in. It is quite possible that these birds extended up the river as far as the James River toll bridge, for they did not flock at all, but occurred singly or in groups of two or three. Mr. Ray Beasley of Newport News told me he has also noticed them from this ferry on several occasions but failed to record the dates. It would be interesting to know whether these petrels are summer residents up the Chesapeake Bay as far as Tangier Island. The same afternoon I counted approximately 70 Wilson's petrels from the Little Creek-Cape Charles ferry. I searched in vain for any Leach's petrels.

The next morning, August 9, found me driving toward Chincoteague, determined to reach the refuge on Assateague Island if possible. The highway to Chincoteague crosses several miles of marshes and mud flats which have a wealth of bird life. Among the interesting birds I saw here were one marsh hawk, six clapper rails (including two half grown young), various shore birds, gulls, and terns, eleven boat-tailed grackles, and both the sharp-tailed and seaside sparrows.

After I had obtained permission to visit the refuge, I hired a boat and landed on Assateague near an old lighthouse. Near here was a large area of marshes and mud flats known as the Levels, and containing hundreds of herons and shore birds. Later in the day I walked up the beach and found an entirely different group of birds. The sanderlings which I had missed on the Levels were here in abundance along with many terns of five species. One of the most interesting birds of the trip was a small flock of four Bachman's sparrows which I found near the outer sand dunes on the edge of some pine woods. Although common from Richmond south, these birds are decidedly rare this far east.

My total list of species seen on Assateague is as follows: American egret, 85; snowy egret, 128; Louisiana heron, 10; little blue heron, 18; green heron, 17; black duck, 12; turkey vulture, 10; osprey, 5; semipalmated plover, 350(est.); black-bellied plover, 1; ruddy turnstone, 10; Hudsonian curlew, 5; spotted sandpiper, 7; willet, 21; greater yellow-legs, 87; lesser yellow-legs, 400 (est.); least sandpiper, 2; dowitcher, 62; semipalmated sandpiper, 800 (est.); sanderling, 730 (est.); herring gull, 27; laughing gull, 128; Forster's tern, 5; common tern, 33; roseate tern, 9; least tern, 16; black tern, 117; black skimmer, 1; mourning dove, 1; nighthawk, 1; chimney swift, 4; ruby-throated hummingbird, 1; flicker, 3; eastern kingbird, 12; wood pewee, 1; crow, 10; house wren, 2; Carolina wren, 7; catbird, 3; white-eyed vireo, 1; pine warbler, 8; prairie warbler, 1; yellow-throat, 1; meadowlark, 6; boat-tailed grackle, 7; cowbird, 40; cardinal, 6; towhee, 19; Bachman's sparrow, 4; field sparrow, 8; song sparrow, 9.

Richmond, Virginia

THE 1947 CHRISTMAS CENSUS REPORTS

Back Bay National Wildlife Refuge, Pungo, Virginia (Back Bay Refuge and beach to Virginia Beach, open water and brackish marsh 80%, ocean beach 20%) - December 21; 7:30 A.M. to 4:30 P.M. overcast; wind N, 5 m.p.h.; temp. 32° to 40° F., ground bare. Two observers together. Total hours af field, 9 (4 in car, 3 in boat, 2 on foot). Common loon, 8; gannet, 27; great blue heron, 4; whistling swan, 3000 (est.); Canada goose, 10000 (est.) snow goose, 18000 (est.); blue goose, 10; mallard, 6; black duck, 500 (est.) gadwall, 5; baldpate, 10000 (est.); pintail, 44; green-winged teal, 300 (est.); redhead, 10000 (est.); ring-necked duck, 5000 (est.); canvas-back, 10000 (est.); lesser scaup, 15000 (est.); bufflehead, 3; white-winged scoter, 1; ruddy duck, 300 (est.); red-breasted merganser, 13; bald eagle, 6; marsh hawk, 7; sparrow hawk, 2; coot, 20000 (est.); black-bellied plover, 1; sanderling, 26; black-backed gull, 1; herring gull, 250 (est.); ring-billed gull, 750 (est.); belted kingfisher, 1; fish crow, 1; Carolina wren, 1; mockingbird, 1; bluebird, 6; myrtle warbler, 8; eastern meadowlark, 30; red-winged blackbird, 35; boat-tailed grackle, 5; Savannah sparrow, 5; song sparrow, 7. Total, 41 species; 103,364 individuals. (Seen in area Dec. 22, razor-billed auk (JEP).) Ray J. Beasley, Jack E. Perkins.

- 0 -

Yorktown, Va. (Newport News Reservoir, Harwood's Mill Reservoir, Colonial Battlefield Park including Wormley Lake and waterfront of Yorktown, York River shore from Yorktown northeast to Felgaters Creek, lower part of Back Creek, and woods and marshes along Colonial National Monument Parkway and on the York-Poquoson Rivers peninsula; open farmland 9%, pine woodland 24%, deciduous woodland 15%, bushy fields 9%, bayberry tangles 3%, marshes and open water 40%). - Dec. 26; 6:45 A.M. to 5:15 P.M. Partly cloudy; temp. 29°-50°F.; wind SSW, 13-18 m.p.h.; ground covered with about 1.5 inches of snow; lake water 10% frozen. Two observers frequently separating. Total hours, 10 on foot; total miles, 6 on foot. Horned grebe, 26; pied-billed grebe, 2; double-crested cormorant, 1; great blue heron, 6; Canada goose, 141; black duck, 37; gadwall, 38; baldpate, 256; pintail, 5; ring-necked duck, 199; canvas-back, 138; scaup (sp.), 168; Am. golden-eye, 31; buffle-head, 50; ruddy duck, 534; hooded merganser, 42; Am. merganser, 10; turkey vulture, 44; black vulture, 15; Cooper's hawk, 1; red-tailed hawk, 2; bald eagle, 1; sparrow hawk, 2; coot, 2; killdeer, 9; herring gull, 55; ring-billed gull, 89; Bonaparte's gull, 60 (3 flocks, 2 apparently migrating eastward); mourning dove, 1; kingfisher, 5; flicker, 8; red-bellied woodpecker, 1; yellow-bellied sapsucker, 1; hairy woodpecker, 1; downy woodpecker, 9; phoebe, 1; blue jay, 2; crow, 36; Carolina chickadee, 17; tufted titmouse, 20; brown creeper, 5; winter wren, 1; Carolina wren, 29; mockingbird, 9; hermit thrush, 10; bluebird, 20; golden-crowned kinglet, 27; ruby-crowned kinglet, 1; starling, 81; myrtle warbler, 283; English sparrow, 29; meadowlark, 40; red-wing, 3; cowbird, 2; cardinal, 21; goldfinch, 35; towhee, 36; slate-colored junco, 236; field sparrow, 37; white-throated sparrow, 226; fox sparrow, 52; swamp sparrow, 1; song sparrow, 42. Total, 63 species; about 3292 individuals. - F. R. Scott, C. E. Stevens, Jr.

Richmond, Va. (Windsor Farms including adjacent parts of the James River, Byrd Park, Bryan Park, city dock, and woods, farmland, and marshes in the vicinity of Curles Neck Farm; open farmland 30%, pine woodland 10%, deciduous woodland 22%, residential districts 8%, marshes and river shore 30%). - Dec. 22; dawn to dusk. Fair; temp. 25°-51°F.; wind NE, 2-10 m.p.h.; ground bare; lake water 20% frozen. One observer alone. Total hours, 10 on foot; total miles, 6 on foot. Canada goose, 5200 (est.); snow goose, 2; mallard, 160 (partly est.); black duck, 88; baldpate, 24; pintail, 260 (est.); wood duck, 6; ring-necked duck, 101; lesser scaup, 3; Am. golden-eye, 1; ruddy duck, 4; Am. merganser, 7; turkey vulture, 17; black vulture, 40; bald eagle, 1; sparrow hawk, 2; coot, 76; killdeer, 4; herring gull, 11; ring-billed gull, 25; rock dove, 5; mourning dove, 21; kingfisher, 3; flicker, 4; pileated woodpecker, 1; red-bellied woodpecker, 4; yellow-bellied sapsucker, 1; hairy woodpecker, 2; downy woodpecker, 6; prairie horned lark, 170 (est.); blue jay, 3; crow, 54; Carolina chickadee, 16; tufted titmouse, 5; white-breasted nuthatch, 3; brown creeper, 1; winter wren, 2; Carolina wren, 8; mockingbird, 12; robin, 3; hermit thrush, 4; bluebird, 8; golden-crowned kinglet, 4; ruby-crowned kinglet, 1; cedar waxwing, 2; shrike, 1; starling, 22; myrtle warbler, 8; English sparrow, 4; meadowlark, 108; red-wing, 55; rusty blackbird, 9; cardinal, 23; purple finch, 8; goldfinch, 3; towhee, 1; slate-colored junco, 61; field sparrow, 25; white-throated sparrow, 72; song sparrow, 28. Total, 60 species; about 6783 individuals. (Seen in area Dec. 21: gadwall, 1). - F. R. Scott

Fort Belvoir, Va. (Woods, fields and river front on the Ft. Belvoir peninsula.) Dec. 28; 8:15 A.M. to 3 P.M.; partly cloudy; temp. 30° to 38°F.; strong NW wind; river ice-free; $\frac{1}{2}$ in. snow on ground. Two observers together; by car between favorable spots; 4 miles on foot. Common loon, 1; great blue heron, 1; Am. merganser, 17; turkey vulture, 12; Cooper's hawk, 2; red-shouldered hawk, 1; bald eagle, 11; killdeer, 2; herring gull, 30; ring-billed gull, 50; mourning dove, 2; flicker, 3; pileated woodpecker, 1; red-headed woodpecker, 1 (present since early October); hairy woodpecker, 1; downy woodpecker, 3; red-bellied woodpecker, 5; prairie horned lark, 10; blue jay, 75; crow, 20; Carolina chickadee, 33; tufted titmouse, 6; white-breasted nuthatch, 5; brown creeper, 2; Carolina wren, 11; mockingbird, 4; bluebird, 5; golden-crowned kinglet, 11; starling, 25; English sparrow, 12; meadowlark, 4; red-winged blackbird, 7; rusty blackbird, 83 (one flock); cardinal, 4; towhee, 1; junco, 35; tree sparrow, 2; field sparrow, 12; white-throated sparrow, 8; song sparrow, 16. Total, 39 species, 530- individuals.- Capt. Jackson M. Abbott, Mr. George H. Sigel.

Shenandoah National Park, Va. (Big Meadows, Fishers Gap, Cedar Run Trail from Hawksbill Gap to White Oak Canyon and up canyon trail to Appalachian Trail, Skyland, Stony Man, Tanners Ridge, area about Bearfence Mtn., Lewis Mtn. and upper Devil's Ditch; altitude 2600-4000 ft.; deciduous woods 75%, hemlock groves 15%, open fields 7%, marsh (birch-hawthorn) 3%). - Dec. 27; 6:45 A.M. to 5:30 P.M. Partly cloudy with snow flurries in A.M.; wind NW, 20-30 m.p.h. on ridge; temp. 26° to 33°; 1 inch snow, marsh frozen. Two observers working singly in A.M. and together in P.M. Total hours, 15; total miles, 20 (afoot). Turkey vulture, 1; ruffed grouse, 13; pileated woodpecker, 2; red-bellied woodpecker, 3; hairy woodpecker, 4; downy woodpecker, 8; raven, 8; crow, 4; Carolina chickadee, 10; tufted titmouse, 13; white-breasted nuthatch, 3; brown creeper, 1; Carolina wren, 1; robin, 2; bluebird, 5; golden-crowned kinglet, 2; starling, 13; pine siskin, 1; junco.

55 (of those closely observed 20 were Carolina and 11 slate-colored); tree sparrow, 1; song sparrow, 2; Total, 22 species and subspecies; 152 individuals. - Fred R. Scott, Charles E. Stevens Jr.

Warren (Albemarle County), Va. (James River from Hatton to Warren, areas about Esmont, Rock Castle Creek, Keene, and Powell Store; open fields 45%, river bottom 30%, pine woods 15%, cedar groves 5%, deciduous woods 5%). Dec. 24; 7:45 A.M. to 4:45 P.M. Fair; temp. 29° to 40°; wind NW, 1-7 m.p.h. Three observers together. Total hours, 9; total miles, 30 (18 by car, 12 afoot). Turkey vulture, 32; black vulture, 19; red-tailed hawk, 1; red-shouldered hawk, 1; marsh hawk, 1; sparrow hawk, 3; bobwhite, 9; wild turkey, 1 (seen by hunter in area); killdeer, 1; rock dove, 39; mourning dove, 32; flicker, 1; pileated woodpecker, 2; red-headed woodpecker, 1; hairy woodpecker, 1; downy woodpecker, 12; phoebe, 4; crow, 259; Carolina chickadee, 19; tufted titmouse, 22; white-breasted nuthatch, 1; brown creeper, 4; winter wren, 1; Carolina wren, 11; mockingbird, 8; hermit thrush, 5; bluebird, 51; golden-crowned kinglet, 46; ruby-crowned kinglet, 1; migrant shrike, 5; starling, 331; myrtle warbler, 8; English sparrow, 10; meadowlark, 34; cardinal, 52; goldfinch, 5; junco, 181; tree sparrow, 17; field sparrow, 45; white-throated sparrow, 7; fox sparrow, 1; swamp sparrow, 4; song sparrow, 59; total, 43 species; 1346 individuals. - Gordon Lewis, Harry Lewis, Chas. E. Stevens Jr.

Charlottesville, Va. (Albemarle Lake, Henley's Lake, Thraves' Pond, city reservoir, 8 miles along Rivanna and South Fork Rivanna River-Burnt Mills to town; open fields 25%, weed fields 10%, deciduous woods 10%, pine woods 5%, lakes and reservoir 10%, river-bottom 40%). - Dec. 22; 7 A.M. to 5:15 P.M. Fair; temp. 28° to 41°; no wind. Four observers (3 parties in A.M., 2 parties in P.M.). Total hours, 30; total miles, 67 (45 by car, 22 afoot). Mallard, 4; black duck, 18; Am. golden-eye, 2; turkey vulture, 56; black vulture, 1; sharp-shinned hawk, 1; Cooper's hawk, 4; red-tailed hawk, 1; red-shouldered hawk, 1; bald eagle, 1 (ad.); sparrow hawk, 6; rock dove, 56; mourning dove, 80; kingfisher, 2; flicker, 9; pileated woodpecker, 7; red-bellied woodpecker, 9; yellow-bellied sapsucker, 2; hairy woodpecker, 3; downy woodpecker, 26; phoebe, 4; prairie horned lark, 1; blue jay, 11; crow, 605; fish crow, 11; Carolina chickadee, 59; tufted titmouse, 30; white-breasted nuthatch, 14; red-breasted nuthatch, 2; brown creeper, 7; winter wren, 14; Carolina wren, 38; mockingbird, 30; hermit thrush, 9; bluebird, 76; golden-crowned kinglet, 54; ruby-crowned kinglet, 1; cedar waxwing, 7; migrant shrike, 2; starling, 230; English sparrow, 77; meadowlark, 21; red-wing, 325; cowbird, 6; cardinal, 162; goldfinch, 22; junco, 551; tree sparrow, 89; field sparrow, 99; white-throated sparrow, 142; fox sparrow, 21; swamp sparrow, 3; song sparrow, 113. Total, 53 species; 3025 individuals. (Seen Dec. 21: chipping sparrow, 3.) - John H. Grey Jr., Kenneth Lawless, William F. Minor, Charles E. Stevens Jr.

Sweet Briar College campus, Sweet Briar, Va. cut-over pine and deciduous woods 30%, brushy creek bottoms 20%, lake edges 15%, pasture 10%, mature deciduous woods 10%, newly plowed fields 10%, about yards and buildings 5%. - Dec. 21. Temp. 30° in morning to 60° in afternoon. Wind velocity less than 1 m.p.h. all day, bright blue sky, almost cloudless; seven miles on foot; 7:00 A.M. to 12:00 P.M. and 2:00 P.M. to 5:00 P.M. Three observers together for whole time. Turkey vulture, 3; red-tailed hawk, 2; flicker, 20;

pileated woodpecker, 3; red-bellied woodpecker, 1; yellow-bellied sapsucker, 2; hairy woodpecker, 2; downy woodpecker, 6; phoebe, 1; blue jay, 2; crow, 27; Carolina wren, 5; winter wren, 5; Carolina chickadee, 8; white-breasted nuthatch, 3; brown creeper, 2; mockingbird, 4; bluebird, 15; golden-crowned kinglet, 2; ruby-crowned kinglet, 2; tufted titmouse, 8; migrant shrike, 1; starling, 38; myrtle warbler, 10; English sparrow, 22; meadowlark, 5; cardinal, 9; goldfinch, 6; junco, 75; field sparrow, 3; white-throated sparrow, 28; song sparrow, 18; total species 32; about 340 individuals. - Dr. Samuel Guss, Robert Giles, Gertrude Prior.

Lynchburg, Va. (Timber Lake, Airport, Tomahawk Swamp and Graves' Mill, College Lake and Riverside Park; fields, 30%; woods, 70%). - Dec. 27; 7:10-12:30 A.M., 1:30-5:30 P.M. Partly cloudy, temp. 33-40°; wind, WSW, 0-18 m.p.h.; ground bare, some ice on lakes. Two parties in A.M., one in P.M. Total hours, 12 on foot, two by car; total miles, 15 on foot, 39½ by car. Turkey vulture, 12; black vulture, 10; sparrow hawk, 1; bob-white, 6; rock dove, 17; mourning dove, 4; kingfisher, 2; flicker, 8; red-bellied woodpecker, 2; hairy woodpecker, 1; downy woodpecker, 12; blue jay, 13; crow, 281; chickadee, 36; titmouse, 13; white-breasted nuthatch, 17; red-breasted nuthatch, 1; winter wren, 4; Carolina wren, 14; mockingbird, 4; hermit thrush, 2; bluebird, 26; golden-crowned kinglet, 2; ruby-crowned kinglet, 1; cedar waxwing, 70; starling, 132; myrtle warbler, 5; English sparrow, 18; rusty blackbird, 8; cowbird, 5; cardinal, 38; purple finch, 1; goldfinch, 68; savannah sparrow, 3; junco, 130; tree sparrow, 3; chipping sparrow, 1; field sparrow, 17; white-throated sparrow, 90; swamp sparrow, 2; song sparrow, 24. Total, 41 species, about 1194 individuals. - Jane Freer, Ruskin S. Freer, Kenneth Lawless, Bill McIntosh, C. H. Shaffer, Dr. Kingsley Stevens, Mr. and Mrs. Jas. W. Wiltshire, Jr. (latter two, A.M. only).

Danville (Pittsylvania Co.), Va. (Circle around the town with a radius of about 3 miles; Ballou Park 15%; Dan River Lakes 10%; city streets 5%; scrubby bottom land 5%; deciduous woods 10%; river bottom land 30%; golf course 20%; open weed fields 5%). - December 22; 7:45 A.M. to 5:15 P.M., 1 hr. cut for lunch. Clear and cool all day, temp. 23 to 45 degrees F. wind NE 5 m.p.h. part of lake frozen, swamp frozen over, river open. Four observers in two parties during morning, three observers together in afternoon. Total miles 10 on foot, 14 by car. Great blue heron, 1; black duck, 9; turkey vulture, 10; black vulture, 1; Cooper's hawk, 2; killdeer, 10; mourning dove, 20; rock dove, 9; flicker, 1; hairy woodpecker, 1; downy woodpecker, 5; phoebe, 2; blue jay, 4; crow, 22; Carolina chickadee, 34; tufted titmouse, 9; white-breasted nuthatch, 3; brown creeper, 2; Carolina wren, 9; hermit thrush, 1; bluebird, 10; mockingbird, 6; golden-crowned kinglet, 26; ruby-crowned kinglet, 18; shrike, 2; starling, 165 (partly est.); English sparrow, 12; meadowlark, 3; cardinal, 29; goldfinch, 10; towhee, 3; junco, 123 (partly est.); white-throated sparrow, 97 (partly est.); song sparrow, 7; savannah sparrow, 1. Total, 36 species, 673 individuals. (Observed December 23: winter wren, 1; December 24: sparrow hawk, 1; barred owl, 1; (J.W.). - Johnny Westbrook, McLin Chcate, Jr., Royster Lyle, Royster Lyle, Jr.

Harrisonburg, Va. (Waterman Wood to Tide Spring, a total distance of 12 miles including oak-hickory-cedar-pine woodlot 60%, oak-hickory woodlot 10%, small village bordering school campus 10%, cedar-pine wasteland 10%, pasture field and fence rows 10%). Small pond in oak-hickory woodlot

sparrow, 1; white-throated sparrow, 78; song sparrow, 13. Total, 44 species, 1200 individuals. (Recently killed great blue heron found at Big Spring). - J. J. Murray, R. P. Carroll, Robert Paxton, James Murray, Jr., Alice Carroll, Dickson Vardell Murray, W. L. Richards, John Chapman, Gordon Echols.

Blacksburg (Montgomery Co.), Va. (V. P. I. campus and farm, Strouble's Creek to New River, Brush Mt. and Tom's Creek to New River, along New River from mouth of Strouble's Creek to Goodwin's Ferry - same course as last year); woods 45%, farmland 35%, river-bottom 20%. - Dec. 21; 6:30 A.M. to 5:00 P.M. Clear (visibility poor - bad ground haze); temp. 20° at start, 28° at return; wind W, about one mile per hour; ground bare. Five observers working in four groups. Total hours, 40.5 on foot (car used by one group in shifting from point to point); total miles, 65 (40 on foot, 25 by car). Mallard, 120; black duck, 76; gadwall, 1; baldpate, 20; greater scaup, 2; Am. golden-eye, 20; bufflehead, 51; hooded merganser, 3; turkey vulture, 21; Cooper's hawk, 3; red-tailed hawk, 1; red-shouldered hawk, 4; marsh hawk, 1; sparrow hawk, 12; ruffed grouse, 1; bobwhite, 30 (two coveys); coot, 1; killdeer, 8; Wilson's snipe, 10; domestic pigeon, 10; mourning dove, 29; screech owl, 7; belted kingfisher, 4; flicker, 6; pileated woodpecker, 3; red-bellied woodpecker, 4; red-headed woodpecker, 17; yellow-bellied sapsucker, 1; hairy woodpecker, 4; downy woodpecker, 17; phoebe, 3; prairie horned lark, 101; blue jay, 27; crow, 506; chickadee (var.?, both Carolina and black-capped present), 98; tufted titmouse, 57; white-breasted nuthatch, 15; red-breasted nuthatch, 13; brown creeper, 15; winter wren, 19; Carolina wren, 22; mockingbird, 20; robin, 3; hermit thrush, 8; bluebird, 27; golden-crowned kinglet, 64; cedar waxwing, 10; migrant shrike, 1; starling, 1600 (est.); western palm warbler, 1; English sparrow, 130; meadowlark, 46; cardinal, 118; goldfinch, 61; towhee, 2; slate-colored junco, 340 (est.); tree sparrow, 59; field sparrow, 89; white-crowned sparrow, 56; white-throated sparrow, 16; fox sparrow, 3; swamp sparrow, 2; song sparrow, 116. Total: 63 species; about 4,135 individuals. - C. O. Handley, Sr. and Jr.; John Handley, Robert J. Watson, J. W. Murray.

Roanoke, Va. (Murray's Pond, Roanoke River and adjacent fields.) Dec. 28; 8:30 A.M. - 3:30 P.M. Wind 25-35mph.; temp. 38°. Eighteen miles in car, five miles on foot. High wind all day prevented a satisfactory count. Black duck, 3; turkey vulture, 13; black vulture, 4; Cooper's hawk, 1; sparrow hawk, 1; killdeer, 2; mourning dove, 2; flicker, 1; downy woodpecker, 3; blue jay, 2; crow, 60 (est.); chickadee, 3; tufted titmouse, 2; winter wren, 1; mockingbird, 6; bluebird, 2; golden-crowned kinglet, 1; shrike, 1; starling, 40; English sparrow, 3; meadowlark, 1; cardinal, 3; purple finch, 1; junco, 20; field sparrow, 3; white-crowned sparrow, 2; white-throated sparrow, 1; song sparrow, 6. Total, 28 species, 188 individuals. - L. E. Hawkins, Almon and Dorothy English.

ANNUAL MEETING

The 1948 Annual Meeting will be held in Lexington, Va. on Friday and Saturday, April 23 & 24. Headquarters will be at the Robert E. Lee Hotel, with the dinner and all meetings held there. Make your plans now to attend.

covered with thin sheet of ice. Ground frozen, but no snow or frost. - December 23; 8:00 A.M. to 3:00 P.M. At beginning sky 100% overcast, heavy in east, lighter in west, temp. 35°F., wind S.E. less than 1 m.p.h. Noon sky about 80% overcast, temp. 45°F., wind N.W. about 4 m.p.h. At close sky 70% overcast, temp. 41°F., wind W. about 4 m.p.h. Four observers working together within calling distance. Total hours, 7 on foot; total miles, 8 on foot. Turkey vulture, 19; red-tailed hawk, 1; bald eagle (immature), 1, (seen by only one member of the party); sparrow hawk, 2; mourning dove, 1; flicker, 1; hairy woodpecker, 2; downy woodpecker, 7; blue jay, 3; crow, 176; Carolina chickadee, 34; tufted titmouse, 38; white-breasted nuthatch, 5; winter wren, 1; Carolina wren, 1; mockingbird, 9; robin, 1; bluebird, 6; starling, 367; myrtle warbler, 1; English sparrow, 58; meadowlark, 1; cardinal, 37; purple finch, 2; goldfinch, 12; slate-colored junco, 155; tree sparrow, 17; white-crowned sparrow, 1; white-throated sparrow, 2; song sparrow, 3; total species 30, 964 individuals. Max Carpenter, Daniel Suter, Richard Weaver, D. Ralph Hostetter.

Fairfield (Rockbridge County) Virginia. Village of Fairfield, north and east to South River, along river to mouth of Irish Creek, 8 miles from Fairfield, and return; village yards and gardens 10%, open fields 30%, hardwood forest 30%, stream banks 30%. - December 20, from 7:00 A.M. to 5:00 P.M., temp. 26° at start rising to about 34 at 2:00 P.M., heavy frost, light skim of ice on still water, cloudless, and wind almost imperceptible. Same territory as covered last year. Six observers in three parties. Eight miles on foot, twelve by car, total twenty miles. Turkey vulture, 16; black vulture, 13; sparrow hawk, 3; killdeer, 3; rock dove, 3; mourning dove, 2; flicker, 1; red-bellied woodpecker, 1; yellow-bellied sapsucker, 1; downy woodpecker, 2; phoebe, 1; blue jay, 2; raven, 1; crow, 37; black-capped chickadee, 7; Carolina chickadee, 4; tufted titmouse, 11; white-breasted nuthatch, 1; Carolina wren, 5; mockingbird, 3; bluebird, 13; shrike, 2; starling, 20; English sparrow, 42; meadowlark, 1; cardinal, 19; junco, 5; tree sparrow, 1; field sparrow, 2; white-throated sparrow, 3; song sparrow, 2. Total: 31 species, 227 individuals. Rev. and Mrs. W. B. Clemmons, Anne, Martha and Bill Clemmons, Jr., Miss Draper Fultz. (Same observers as last year).

Lexington, Va. (Same area as in former years: town, 5%, Big Spring Pond 5%, farmland 20%, cedar woods 35%, oak woods 25%, scrub 10%). - Dec. 22; 7:30 A.M. to 5:30 P.M., one hour out for lunch. Clear in A.M., cloudy in P.M.; temp. 24° to 42°; practically no wind; ground frozen, streams mostly open. Nine observers in one party, four all day, five half time. Total hours, 9 (on foot), car used only in shifting points; total miles, 33 (10 on foot, 23 by car). Mallard, 3; black duck, 2; turkey vulture, 13; black vulture, 5; sharp-shinned hawk, 2; sparrow hawk, 4; killdeer, 3; woodcock, 2; Wilson's snipe, 1; rock dove, 39; mourning dove, 24; belted kingfisher, 1; flicker, 17; pileated woodpecker, 5; red-bellied woodpecker, 3; downy woodpecker, 10; horned lark, 57; blue jay, 7; crow, 176; Appalachian chickadee (J.J.M.), 2; Carolina chickadee, 19; tufted titmouse, 13; white-breasted nuthatch, 5; winter wren, 2; Carolina wren, 8; mockingbird, 17; robin, 1; hermit thrush, 6; bluebird, 39; golden-crowned kinglet, 3; ruby-crowned kinglet, 1; shrike, 2; starling, 282; myrtle warbler, 40; English sparrow, 46; meadowlark, 53; rusty blackbird, 2; cardinal, 52; goldfinch, 28; junco, 103; field sparrow, 10; white-crowned



The Raven

BULLETIN OF THE VIRGINIA SOCIETY OF ORNITHOLOGY
PUBLISHED AT LYNCHBURG, VIRGINIA

DR. J. J. MURRAY, EDITOR
LEXINGTON, VA.

VOL. XIX

March-April, 1948

Nos. 3 & 4

CONTENTS

Page

The Great Dismal Swamp, by J. J. Murray

14

THE GREAT DISMAL SWAMP

By J. J. Murray

The name of the Dismal Swamp carries with it the idea of everything that is mysterious and fearsome. From earliest times it has been thought of as a place of darkness and danger, where nature is at its most implacable. Miasmatic fumes, impenetrable morasses, venomous serpents, dangerous beasts and more dangerous men - all these have been in the popular mind the concomitants of the Dismal. But to those who know it well the name is not a term of dread but the symbol of all that is most fascinating in wild nature. Your view of the Dismal will depend in large measure upon your experience. William Byrd, more accustomed to the amenities of his study at Westover than to the hardships of the trail, spoke of it as "a filthy Bogg"; but George Washington, who had tramped the wilderness of Virginia from the seacoast to the Ohio, called it a "glorious paradise." Certainly there are few places in Virginia that have more beauty or more charm than its cool runways and its watery forests.

Although it is sometimes called the Dismal Swamp of Virginia, more than half of its present territory is in North Carolina. At the same time it is easier of access from the Virginia side, since most of its canals lie within our state; and its most striking feature, Lovely Lake Drummond, is entirely in Virginia. Thirty miles long, north and south, and ten miles wide, the Dismal Swamp is as large as the state of Rhode Island. It now contains about 1,000 square miles, in addition to some 700 square miles of original wet land that has been reclaimed. Of the 500,000 acres, 200,000 are in Virginia, largely in Norfolk and Nansemond Counties, and 300,000 in North Carolina, in the five counties of Camden, Currituck, Gates, Perquimans and Pasquotank. The land east of the Dismal Swamp Canal has largely been drained, but in turn the banks of the Canal serve to keep the main swamp wetter than it would be otherwise.

The Swamp has been likened to a gigantic sponge that always remains water-soaked. There are small areas of fairly dry forest around the northern shore of Lake Drummond; there are considerable stretches of open, brushy swamp, locally called 'lights', lying mainly between the Jericho and Portsmouth Ditches; there are extensive cane brakes; but most of the territory is that of a typical cypress-gum swamp, the water generally shallow, but having in places miry holes, quicksands, and deep, fire-caused holes in the peaty soil. The wildest and most unexplored area is in the Cold Water Ditch section in North Carolina, south of the Lake. Along the western edge of the Swamp is a well-marked ancient sea beach, where the Nansemond (or Suffolk) Escarpment rises to a height of thirty feet or more to make a natural barrier.

Almost in the center of the Swamp lies beautiful Lake Drummond, oval in shape, two and three quarters by three miles in diameter. When in spring the maple trees make a rim of amber and pale rose about it, the lake is an enchanting spot. In early summer it is a riot of green, the lake spreading back into the woods, and the jungle crowding in upon the water. Once fifteen feet in depth, it now has, since the lowering of the canals, about six feet of water. Although the bottom is of fine white sand, the water has the hue of old Madeira wine. The lake is sur-

rounded by dense forest. Out in the water stand the stumps of giant cypresses. The living cypresses, a short way out from shore, are decorated with swaying clumps of Spanish moss. A very remarkable thing about this lake is that its surface is the highest place in the Swamp, the lake being like the basal cavity of an inverted saucer on top of the Swamp. While the rest of the Swamp, sloping gently away from the center, stands from ten to twenty feet in elevation, the surface of the lake itself is 22.2 feet above the sea. Seven streams are said to flow out of the lake. Because of this strange situation, the level of the Dismal Swamp Canal is maintained by the drawing of the water from the lake through the Feeder Ditch by way of the Waste Weir Locks near its northern shore.

The water of the Dismal has been famous for nearly three centuries. During the days of the long sailing voyages, when ordinary water became foul in the butts after a few weeks, it was learned that barrels filled with the juniper water from the Swamp would keep sweet indefinitely. There are several varieties of dark water in the Swamp. The gum water is very dark, the color of coca-cola, and not too wholesome. Cypress water is lighter, more of the shade of tea, and more palatable. Juniper water, a blend of the juices of gum and cypress and maple, but with a strong infusion of juniper or white cedar, is best of all. In color it is between orange and chrome yellow. The water in the lake, while drinkable, is rather flat, but that in the Jericho Ditch, flowing from the juniper brakes and shaded always by the great trees, is sweet and cool and refreshing.

The peaty soil of the Swamp varies in depth from a few feet to as much as twenty. Where it is deepest, borings will show first some ten feet of recently formed peat, mixed with roots and still undecayed tree trunks, then another eight or ten feet of clear peat, and underneath fossiliferous sand. The purity of the surface water in the Swamp is due to the antiseptic properties of the peat in which it soaks. No primitive animal remains have been discovered in this peat. Because of the nature of the soil, fire does tremendous damage in dry years, burning slowly underground to break out in new and unsuspected places. In a disastrous fire in 1923 one hundred and fifty square miles were burned over, and fires continued to smolder in places for over two years.

A series of canals, termed 'ditches' in local parlance, has been cut from the lake to the edge of the Swamp. Starting at the northwest and moving clockwise, they are the Washington, Jericho, Portsmouth, and Feeder Ditches. The Washington Ditch, cut under the direction of the great surveyor himself, runs five and a half miles through big, dark woods of gum and cypress and maple from the northwest shore of the lake to a point on the White Marsh Road. Its purpose was to take timber out to the Nansemond River. There was once a hamlet called 'Dismal Town' at the end of the canal. Of the many beauties of the Dismal Swamp, nothing, except the lake itself, stands out in the memory of the explorer like these straight runways of dark water, like endless tunnels under the big trees.

The Jericho Ditch, wildest and most lovely of them all, and with the coolest, sweetest water, leaves the Washington Ditch near the lake and runs through the thick groves of juniper and out into the 'lights'. The Portsmouth Ditch, wider than the former two and with higher banks, is less attractive, since much of its course is through the burned-over

and now brush-covered 'lights', although the growth of pickerel weed and other water plants in its reaches near the lake make it interesting enough in its own right.

The Feeder Ditch, carrying the water of the lake through the locks and into the Dismal Swamp Canal, three miles away, is the largest of all the canals into the lake. Thirty feet in width, it once had a depth of seven feet, but is now so choked with logs that its draft is scarcely three feet. While most of the Swamp belongs to private lumber companies, the United States Government owns a strip around the lake shore and on each side of the Feeder. The United States Army Engineer reservation is located at the Waste Weir Locks, a quarter of a mile from the lake. Here, on the highest and driest land in the Swamp, is the cottage of the caretaker who tends the six gates which regulate the flow of water from the lake.

The chief waterway through the Swamp is the Dismal Swamp Canal, connecting Hampton Roads by way of the south branch of the Elizabeth River with the Pasquotank River and Albemarle Sound. Beginning at Deep Creek village, six miles southwest of Portsmouth, and running twenty-two miles to South Mills, North Carolina, it is fifty feet wide, with ten feet of water over the mitre sills of the two locks. Beside it runs the hard-surfaced George Washington Highway, the only road other than lumber trails that touches the Swamp proper. At Arbuckle's Landing, ten miles south of Deep Creek, the Feeder Ditch empties the waters of Lake Drummond into the canal. It is linked to the Intercoastal Waterway, which is not far distant, at Great Bridge. The Dismal Swamp Company was organized in 1787 for the purpose of cutting this canal. On December first of that year the Legislature of Virginia granted the company a charter, the action being paralleled about the same time by the North Carolina body. The capital of the company was set at \$80,000, it being specified that subscriptions to the stock should be paid in Spanish milled dollars or in silver or gold of the same value. Ten years was fixed for the completion of the work, but the time was extended on December 16, 1800, for five years, and further extended on February 14, 1816. The move was such an important one that the states of Virginia and North Carolina and the Federal Government became stockholders. The first vessel passed through the locks in 1822, the work being finally completed in 1826. The canal was cut principally for the transport of lumber. George Washington wanted it to go through 'Drummond pond', as he called the lake, which might have been more practicable for the lumber interests, but which would not have been so good for the later uses of the canal nor for the preservation of the natural state of the Swamp. The ante-bellum trade came principally from the rivers and sounds of North Carolina, consisting of cypress shingles, lumber, and grain for Norfolk and the northern markets. Vessels were towed by mule teams. During the Civil War the Confederates cut the banks to keep the Federal army from coming into Virginia from the North Carolina waters, which they controlled after the capture of Roanoke Island. After the war it was partially rebuilt. Later a new company dredged and enlarged it, reopening it on October 14, 1899, when the United States torpedo boat Talbot made a successful round trip. In 1929 the canal was taken over by the Federal Government, and is now managed by the Army Engineers.

Lake Drummond took its name from William Drummond, who discovered it while on a hunting trip. He was appointed by the Lords Proprietors in 1664 as the first governor of North Carolina. Returning later to Virginia and taking part in Bacon's Rebellion, he was hanged by his former friend and patron, the vindictive Governor William Berkely, in 1677 at Middle Plantation, later Williamsburg.

The Dismal Swamp seems to have been first so named in 1728 by William Byrd of Westover in The History of the Dividing Line betwixt Virginia and North Carolina. Byrd was the leader of the Virginia section of the Commission appointed to survey the long disputed boundary between the two states. After many efforts to settle the controversy and establish the line had failed, a new Commission was appointed by the two Governors, North Carolina naming four, with an additional surveyor, and Virginia three, with two surveyors. The Virginia commissioners were William Byrd, William Dandridge, and Richard Fitz-William. The work was begun in March 1728. Byrd wrote two accounts of the journey, the public account just referred to, which he worked up over a period of ten years, from 1728 to 1738, and The Secret History of the Line, which is earlier and shorter. The secret account contains most of the references to the discredit of the Virginia party, the quarreling among the Commission members and the ugly treatment of women by some of the attendants, while the public history has most of the animadversions upon the lack of civilization in the sister state. The quotations herein are from the public history.

Colonel Byrd gives a vivid account of the dangers and difficulties encountered by his men when they reached the territory of the Dismal, a picture the more graphic since it is given at second-hand and much embellished by his own imagination. The Colonel was not handicapped by actual experience, since the Commissioners esdaped the difficulties by discreetly going around the Swamp, while they sent the surveyors through. "Nor wou'd the Commissioners themselves have Spared their Persons on this Oc-casion," he piously writes, "but for fear of adding to the poor men's Burthen, while they were certain they cou'd add nothing to their Reso-lution." (p. 60,62, edition of North Carolina Historical Commission, Raleigh, 1929). They did later make a short excursion into the edge of the Swamp.

He marvels at the ignorance of the neighboring countrymen concern-ing the Swamp. "Tis hardly credible how little the Bordering inhabitants were acquainted with this mighty Swamp, notwithstanding they had liv'd their whole lives within Smell of it....they....knew no more of the Matter than Star-gazers know of the Distance of the First Stars. At the Same time, they were Simple enough to amuse our Men with Idle Stories of the Lycns, Panthers and Alligators, they were like to encounter in that dreadful Place." (p. 60) Yet he himself writes with the greatest confidence and credulity about the desolation to be found within the Swamp. "Since the Surveyors had enter'd the Dismal they had laid Eyes on no living Creature: neither Bird nor Beast, Insect nor Reptile came in View. Doubtless, the Eternal Shade that broods upon this mighty Bog, and hinders the sun-beams from blessing the Ground, makes it an uncom-fortable Habitation for any thing that has life. Not so much as a Zeal-and Frog cou'd endure so Aguish a Situation. It had one Beauty, however, that delighted the Eye, tho' at the Expense of all the other Senses:

the moisture of the Soil preserves a continual Verdure, and makes every Plant an Evergreen, but at the same time the foul Damps ascend without ceasing, corrupt the Air, and render it unfit for Respiration. Not even a Turkey-Buzzard will venture to fly over it, no more than the Italian Vultures will over the filthy Lake Avernus, or the Birds in the Holy-Land over the Salt Sea, where Sodom and Gomorrah formerly stood." (p. 70) To those who have been in the Swamp this account is as amusing as it is inaccurate. Far from being an abyss of gloom, barren of all existence, it is a paradise of animal life of all kinds.

Colonel Byrd has many good stories. One of them, recounted to him by one of the borderers, goes as follows: "He told us a Canterbury Tale of a North Briton, whose Curiosity Spurred him a long way into this great Desart, as he call'd it, near 20 Years ago, but he having no Compass, nor seeing the Sun for several Days Together, wander'd about till he was almost famisht; but at last he bethought himself of a Secret his Countrymen make use of to Pilot themselves in a Dark day. He took a fat Louse out of his Collar, and expos'd it to the open day on a Piece of White Paper, which he brought along with him for his Journal. The poor Insect having no Eye-lids, turn'd himself about till he found the Darkest Part of the Heavens, and so made the best of his way towards the North. By this Direction he Sterr'd himself Safe out, and gave such a frightful account of the Monsters he saw, and the Distresses he underwent that no Mortall Since has been hardy enough to go upon the like dangerous Discovery." (p. 64)

Colonel Byrd became a great landholder. His land hunger was quickened by this survey, until he either bought or patented along the State border some 138,000 acres. His zest for land ownership even overcame his disgust for the Dismal; until finally he was filled with a desire to own the Swamp, proposing the organization of a company to drain and redeem it for agriculture. Although this project was not carried out, he left among his manuscripts a paper entitled, "Description of the Dismal Swamp and a Proposal to Drain the Swamp."

George Washington's attitude toward the Swamp was both more cordial and more constructive than that of Byrd. With five partners he organized in 1763 a company to be known as "Adventurers for draining the Dismal Swamp." While the efforts of this company were on too small a scale to attain its aims, they did result in the cutting of canals to get the timber out. Washington seems to have been attracted by the 'juniper' in the Swamp as well as by its agricultural possibilities. The wild beauty of the Swamp, too, made a great appeal to him. He made at least five visits to the region, in May and October, 1763; and in 1766, 1767, and 1768. As has been noted, he surveyed the little waterway that bears his name and supervised its cutting. As late as 1785 he appealed to Governor Patrick Henry for the opening of the Swamp with canals. In his will he valued his 4,000 acres of Dismal Swamp Land at \$20,000.

The Dismal Swamp was always a favorite hunting ground for the Indians of the Tidewater, although they seem to have made no permanent villages within its bounds. Because of the way in which the rank vegetation soon covers them, few relics are found in the Swamp, but in the winter of 1930-1931, when sand bars were exposed along the shore by the abnormally low state

low state of the water in the lake, a visitor to the Swamp found many arrow-heads, hammers and other weapons and implements along the north shore. ("The Dismal Swamp in Legend and History", by J. F. Ariza, National Geographic Magazine, July, 1932, pages 120-130). The last Indian disappeared from the Swamp in the 1790's.

Outside Tidewater Virginia, the Dismal Swamp owes its fame to the Irish poet, Thomas Moore, who made Lake Drummond a household word wherever the English language is spoken. In 1803, in the days when Moore held a sinecure post at a good salary as British consul in the Bermudes, he visited his friend, Colonel Hamilton, the British consul in Norfolk. Hearing there some of the tales about the Dismal, he arranged to visit it, engaging a Negro 'swamp-man' to take him in by the Washington Ditch. The boatman reported that the poet spent most of his time scribbling notes; and when that night he returned to his tavern on Main Street in Norfolk, he wrote the poem which has had a wider spread and a longer reputation than is its literary due, and which some of us learned first to hate and then to love because of Friday afternoon recitations in country schoolhouses. It is called "A Ballad - The Lake of the Dismal Swamp." An explanatory sub-title states that it is the "Story of a young man who lost his mind on the death of the girl he loved, and who was supposed to have wandered away to the Dismal Swamp, where he thought she had gone". For the sake of 'auld lang syne' we may bring it to mind again.

"They made her a grave too cold and damp
For a soul so warm and true;
And she's gone to the lake of the Dismal Swamp,
Where all night long, by a firefly lamp,
She paddles her white canoe.

"And her firefly lamp I soon shall see,
And her peddle I soon shall hear;
Long and loving our life shall be,
And I'll hide the maid in a cypress tree,
When the footstep of death is near.'

"Away to the Dismal Swamp he speeds;
His path was rugged and sore;
Through tangled juniper, beds of reeds,
Through many a fen, where the serpent feeds,
And never man trod before.

"And when on the earth he sank to sleep,
If slumber his eyelids knew,
He lay where the deadly vine doth weep,
Its venomous tear and nightly steep,
The flesh with blistering dew!

"And near him the she-wolf stirred the brake,
And the copper snake breathed in his ear.
Till he starting cried, from his dream awake,
'Oh! when shall I see the dusky lake,
And the white canoe of my dear?'

"He saw the lake and a meteor bright
Quick over its surface played -
'Welcome!' he said; 'my dear one's light;'
And the dim shore echoed for many a night,
The name of the death-cold maid.

"Till he hollowed a boat of the birchen bark,
Which carried him off from shore;
Far he followed the meteor spark;
The wind was high, and the clouds were dark,
And the boat returned no more.

"But oft from the Indian hunter's camp,
This lover and maid so true,
Are seen at the hour of midnight damp,
To cross the lake by a firefly lamp,
And paddle their white canoe."

Another poet, of quality similar to Thomas Moore, has written of the Swamp. Before the War the Dismal was a refuge for runaway slaves. Longfellow used this fact as a basis for his poem, "The Slave in the Dismal Swamp." To quote the first and third verses:

"In the dark fens of the Dismal Swamp
The hunted Negro lay;
He saw the fires of the midnight camp,
And heard at times a horse's tramp
And a bloodhound's distant bay.

"Where hardly a human foot could pass
Or a human heart would dare,
On the quaking turf of the green morass
He crouched in the rank and tangled grass
Like a wild beast in his lair."

There were many of these runaways at times, the bulletin boards of the trading places around being plastered with notices offering rewards for their capture. They were rarely taken, however, as few people wanted to go into their hiding places. The Negro workmen, cutting shingles in the Swamp were usually ready to help them with provisions, and in turn to use their help for the shingle production. Sometimes the contractor would wonder why one man could produce such a batch of shingles in a week, and how, too, one man could need such a batch of provisions. The slaves sometimes raised families in the Swamp, making their living by hunting and fishing, by helping the shingle workers, and by occasional depredations upon the surrounding farms. On other occasions slaves hired themselves from their masters and worked for long periods in the Swamp, coming out at intervals to visit their families and to pay their wages to their masters out of their earnings. No doubt slaves sometimes were able in this way to purchase their freedom.

Still another writer who visited the Swamp and whose real abilities as author and illustrator have all too quickly been forgotten was General

David Hunter Strother, who used in his work the pen name of 'Porte Crayon'. A native of the section which at the time of his birth in 1816 was in Virginia but which is now the Eastern Panhandle of West Virginia, he broke with his southern kin at the approach of the War. Joining Federal Army when hostilities commenced, he was made a Major, and, because of his skill with the pencil, was assigned to topographical work. He retired as a brigadier-general. After the war he settled near Berkeley Springs, finally making his peace with the rest of the family. During the 1850's he was a regular contributor to Harper's New Monthly Magazine, showing considerable talents both as writer and artist in the travel articles on Virginia, which he illustrated himself. Later some of these articles were collected into a book, Virginia Illustrated. He died in 1888. One of his sketches describing the Dismal Swamp, appeared in September, 1856, in the same volume in which the eagerly-read "Little Dorrit" was running. He speaks of his childhood love of Thomas Moore's ballad, which was sung over his cradle, and, when he had visited Lake Drummond, adds, "I have seen the Lake, and a long life yearning has been gratified. I have seen the Lake, and the romance of boyhood is undisturbed. I have seen the Lake, and the recollection still enhances the mournful beauty of the old song."

Porte Crayon tells an amusing story in connection with the color of the swamp water. About 1850 an inn, proudly called the Lake Drummond Hotel, was erected at the lake for the entertainment of sportsmen and pleasure parties during the early summer, while the mosquitoes would permit such affairs. "A stranger was one day dining at that house, and seeing before him a bottle containing a liquid that he took to be brandy, he helped himself, and mixed from another bottle that seemed to contain water. The mixture was rather strong, and he added more water, and so kept drinking until he was entirely drunk and thoroughly perplexed. The innocent stranger had taken swamp water for brandy, and had persevered in weakening his drink with white whiskey."

Lumber has always been the chief industry of the Dismal Swamp. Shingles were made from the huge original cypress trees. Juniper logs were sometimes dug out of the peat, perfectly preserved, and were also worked up into shingles. Telephone poles, railroad ties, and logs for the barrel mills were cut. A big camp of shingle workers, called the Horse Camp, was operated near one of the canals in the middle of the century. Later Jack's Camp was run by a mulatto of that name at a clearing on the southwest shore, to serve as a commissary for the lumber hands. There was said to be a rough shack as late as 1910 at the lake end of Washington Ditch, run by a 'swamp-man' who charged twenty-five cents a day for lodging. There are saw mills now along the edges of the Swamp; and the lumber companies are still operating, one of them maintaining more than thirty miles of narrow-gauge railroad at the North Carolina end; but there is little high-grade lumber left.

The Dismal Swamp was formed some 6,000 years ago, after the Pleistocene deposits had been laid down. It is located on the lowest, or lowest but one, of the series of seven or eight flat terraces in eastern Virginia, which have been formed through the recent period by the underwater deposition of detritus brought down from the Blue Ridge and Piedmont. Seven of these terraces have been distinguished - Brandywine, Cocharie, Sunderland, Wicomico, Penholoway, Talbot, Pamlice (also known as

Dismal Swamp Terrace), with some geologists recognizing a still more recent terrace, the Princess Anne. In the Dismal Swamp region the Pamlico Terrace abuts directly upon the Wicomico, and the junction, at the western edge of the Swamp, is marked by the Nansmond (or Suffolk) Escarpment.

There has been some difference of opinion among geologists as to the origin of the shallow depression which was the starting point for the Dismal Swamp. Professor N. S. Shailer in his classic General Account of Fresh Water Morasses of the United States argued that when the surface of this area emerged from the sea the wet outer shore was covered with a timber growth before the new and barren surface back from the shore; and that the central portion, being shut off from drainage, became a lake, which has gradually become smaller because of the encroaching vegetation. N. H. Darton, in the Norfolk Folio of the United States Geological Survey, says that the Swamp is all that remains of an old sound or lagoon which was shut off from the sea by a barrier beach. A more recent view, stated by Nevin M. Fenneman, in his Physiography of Eastern United States, is that the original depression was a shallow trough in the under-sea surface, made before it emerged as a land terrace. In any case, the accumulation of decaying vegetable matter has built up a mass in this depression, making the center of the swamp higher than the surrounding areas, until a balance is finally reached between the capillary lifting power of the peaty material and the destructive effects of drainage. Man-made canals have helped the effects of natural drainage in this balance. The net result is that of a great sponge which is able to maintain the water table several feet above surrounding levels.

Biologically the Dismal Swamp is one of the most interesting places on the Atlantic Coast. It is situated on the border line between the fauna and flora of the North and of the South, its affinities being rather with the South than with the rest of Virginia. Consequently it provides something different for the Virginia student of biology. While the mountains of the State fall within the Transition Zone, and the Valley floor and all of Piedmont and eastern Virginia lie within the Carolinian or Upper Austral Zone, this southeastern tip of the State is in the Lower Austral, which south of Virginia covers an increasingly wide belt in the Carolinas and Georgia and takes in most of the territory of the Gulf States.

The Dismal Swamp with its neighboring morasses constitutes the most northern outpost of the great body of palustrine forest which covers so much of the coastal plain of the southeastern United States. Its milk equable climate and its wide stretches of uninhabited country make possible a wealth of living creatures. The biologist who visits this wild region will always come away enthusiastic over the strangeness and variety of its plant and animal life. Thomas H. Kearney, in his Report on a Botanical Survey of the Dismal Swamp Region (Contributions from the United States National Herbarium, 1901, 330), says, "The climate of the Dismal Swamp region as a whole is highly favorable in all essential respects to the growth of what we may term, for the sake of convenience, 'normal plants,' i.e., such as are not especially equipped to endure any kind of extreme conditions. It is characterized by a long growing period with a relatively high sum total of effective temperature, a mild winter, normally slight variations of temperature, abundant sunshine,

heavy and well-distributed rainfall, and a high and remarkable uniform percentage of atmospheric moisture. It is preeminently a forest climate, and the whole region was, in its primitive condition, densely forested." Lumbering and forest fires have greatly modified these original conditions, however.

The plant covering, is of course that of the hygrophile, or moisture loving, forest. There are two quite different types of this forest to be distinguished in the Swamp. The chief is the Dark or Black Gum Swamp, covered with heavy deciduous forest. Although now greatly modified both as to size of trees and density of forest by man's lumbering efforts, this is the original form of most of the swamp covering. The most abundant trees are the gums (Nyassa biflora, N. uniflora, and N. aquatica), the maples, the cypress (Taxodium distichum), the water ash (Fraxinus caroliniana), and the poplar. On the higher ridges around the Waste Weir large pines are growing.

The other type of forest is the Light or Juniper Swamp, which was originally covered with an evergreen forest of southern white cedar (Chamaecyparis thyoides), locally known as 'juniper.' There are now only scattered remnants of juniper forest. Much of this section of the swamp has no trees of any size, but is grown up in shrubs and cane, interspersed with ferns and peat moss. This condition is due entirely to the work of man and primarily to his carelessness in permitting forest fires to sweep across the swamp in dry times.

Much of the soil of the swamp would be worthless for agriculture, even if drained. Tradition says that Washington tried to introduce rice culture. If so, it was a failure, as the peaty soil is not suited to it. Cotton stalks attain a rank growth, but the product is worthless blue or yellow fibre. Only corn and a few vegetables, such as beans and cucumbers, grow well in new peat.

Animal life of all kinds is abundant in the Dismal Swamp. There is no place in the State and few anywhere in the country where black bears are so common. An old woodsman, from whom I once rented a boat for the trip up the Washington Ditch, told me that he himself had killed seven during the preceding winter. At this time he had a captive half-grown bear in his barn. During that same winter the State Game Commission had reports on the killing of fifty-five bears in the Swamp. I have never been able to see one there, but I have heard the sounds of bears crashing through the brush in the distance, and along the secluded Jericho Ditch every log shows signs of their scratching. Deer are very common, as are wildcats, raccoons, minks and opossums. Otter slides are frequently seen along the Feeder Ditch. They are probably more common here than anywhere in Virginia. There are not many squirrels, as nut trees do not grow well in the water. The territory is rather wet for foxes. Except for the otter and muskrat, there are few mammals that live underground. Years ago the cattle that escaped into the Swamp bred a fierce strain that made them the most dangerous of all the swamp creatures. Possibly a few of them still exist, although Marines were sent into the Swamp some years ago on a campaign of extermination.

There are still some fish in the lake and in the canals. They were once very abundant, but were almost extirpated by commercial netting be-

fore this was made illegal. All three of Virginia's poisonous snakes occur: the diamond-backed rattlesnake and copperhead on the higher places, and the cotton-mouth moccasin, short, thick, and deadly, in the water. Water snakes of many kinds, sometimes as large as one's arm, drop off the logs in front of the advancing boat, but all of them except the moccasin are entirely harmless. In fact, the only real dangers from animals in the Swamp come from yellow flies, mosquitoes, redbugs and ticks.

Dr. T. Gilbert Pearson, who became President of the National Association of Audubon Societies, was one of the first modern ornithologists to visit this fruitful region. In 1892, while a teacher at Guilford College, North Carolina, he made a trip into the Swamp in an unsuccessful search for the Ivory-billed Woodpecker. He published an account of this expedition in the Ornithologist and Oologist in February, 1893. Dr. Paul Bartsch, of the United States Museum, in company with John W. Daniel, Jr., and two other men, spent a week in the Swamp in the middle of June, 1897; and again in early June, 1899, Bartsch and William Palmer spent a week at the crude hotel which then stood at the junction of the Washington and Jericho Ditches. In an article on "A Trip to the Dismal Swamp", which ran through three numbers of The Osprey in 1901 (Vol. V. pages 35-37, 55-56, 67-69), Bartsch wrote a description of the area and an account of the bird life. In this paper, which was freely illustrated with photographs, he gives some interesting notes on the Prothonotary and Swainson's Warblers, tells of Chimney Swifts nesting in hollow trees, discusses the status of the yellow-throats of the region, and closes with a list of the 53 species of birds seen on the two trips. John W. Daniel, Jr., son of the famous Virginia Senator of that name and a native of Lynchburg, gives his account of the first of these visits in an article on "Summer Birds of the Great Dismal Swamp", in The Auk, in January 1902. A cormorant, taken on this trip, was listed by Bartsch as a Florida Cormorant, but by Daniels as a Double-crested. The specimen, which is now in the museum of the University of Iowa, has been identified by Dr. H. C. Oberholser as the Double-crested. Dr. A. K. Fisher made a short trip into the Swamp, and reported in The Auk for July, 1895, the capture of the first specimen of Swainson's Warbler for Virginia. H. B. Bailey, author of The Birds of Virginia, has also contributed a few notes on this region.

Perhaps the writer's enthusiasm for the Dismal is due to the fact that it is literally a paradise for birds. Something of their abundance and their interest may be indicated by a brief description of a trip into the Swamp, when at the height of the nesting season in late May four of us camped for several days on the shore of Lake Drummond. We went in by small boats along the Washington Ditch. Movement for bird investigation is limited, as there are few places where one can leave the boat to stand on solid ground and still fewer places where the water is deep enough to permit taking the boat away from the canal. But since birds were moving about in the trees and singing all around us, we had only to sit still and watch them. Occasionally a Great Blue Heron flew up from the ditch bank ahead of us, or a Turkey Vulture was surprised at its feeding upon the carcass of some small animal. Prothonotary Warblers were everywhere, threading their way like little yellow shuttles in swift nuptial chase among the dark tree trunks. Some were already carrying food to their hidden young. We found one nest with young close to our starting place, and another with four eggs barely a foot above the

water in a rotting cypress knew. Almost as common were the Hooded Warblers, tiny yellow birds with black hoods pulled over their heads. We were rarely beyond the sound of their sharp 'chips'. Barred Owls were cackling and laughing in the largest trees, even though it was long before dark. Their call has often been likened to the sentence, "Whoo-a, whoo-ah, who cooks for you all?" We could still hear them as we went to sleep in the hunting shack that stood on stilts at the edge of the lake.

Early next morning as we walked along the lake shore a movement in the bushes caught our eyes, and watching closely we saw a mother Wood Duck guide her brood of five little ducklings to safety back in the Swamp. Pileated Woodpeckers were flying back and forth between the swamp trees and the stumps out in the lake. Even if we were not watching for them, they called themselves to our attention as they battered against the stumps for grubs with their heavy bills. This great woodpecker, as large as a crow and handsome in black and white and scarlet, is one of the notable birds of the Swamp. There have been persistent reports, even in recent years, of the occurrence in the Swamp of the still larger Ivory-billed Woodpecker, even though the bird has been extinct for years except for a few spots in Louisiana and possibly in Florida and the Santee Swamps of South Carolina. There is indeed no proof that this magnificent bird ever occurred north of Wilmington on the Atlantic Coast.

A trip one day down the Portsmouth Ditch into the 'lights' gave us striking proof of the way in which man may change an environment. Here where the Swamp has been battered and burned, where there is none of the overhead canopy and little of the water underfoot, the bird life is very different from the true swamp areas. Prairie Warblers are singing everywhere; Yellow-breasted Chats are abundant; Red-winged Blackbirds are sometimes seen; and Florida Yellow-throats swarm over the bushes. They are interesting enough, but there are plenty of places in Virginia where they may all be found, while the haunts of the Prothonotary Warbler are few. So man by his acts, deliberate or careless, changes the environment, and in consequence causes changes in the forms of life.

Another morning we paddled across the lake to the mouth of the Feeder Ditch. As we left we saw several Double-crested Cormorants, large black birds with snake-like bills, flying overhead. Chimney Swifts were also seen, although there are not enough suitable roosting and nesting places in the Swamp to make them very common. Here where man does not provide chimneys for them they hold to their ancestral custom of roosting and nesting in hollow trees. At the edge of the lake we stopped to search for nests of the bright little Parula Warbler in the clumps of Spanish moss hanging from the high shoots on the old cypress stumps. Here the young are rocked by the wind as they sleep in the swinging pockets in the moss. Along the Feeder Redstarts, called 'candelitas' by the children in Cuba, flashed their brilliant red and black colors in almost every tree. All around us the explosive whistles of Acadian Flycatchers were sounding. We found many of their nests, too, nearly always hanging over the water, and often so frail that we could see the eggs from below through the scanty structure.

Near the Waste Weir clearing came the high point of the trip. There is a warbler known as Wayne's Warbler (Dendroica virens waynei), which is a lowland form of the familiar Black-throated Green Warbler. The typical form is a northern bird, which in the South nests only in the mountains. The Wayne's variety occurs in southeastern swamps, separated by hundreds of miles from its parent form. It is only a subspecies, or geographical race. Before this day of which I speak it was supposed to occur only in coastal South Carolina and a few spots in southeastern North Carolina. Since we had some reason to think that it might breed in the Dismal, the extension of its known range was the chief aim of this trip. On the ride up the Washington Ditch we had heard the familiar buzzing song of the Black-throated Green at several places, but had realized, of course, that they might only be late migrants making their way to northern nesting spots. But in the deep woods near the Waste Weir we heard the characteristic notes of young warblers calling for food. It took half an hour of difficult scrambling and searching through the thick wet woods before we finally got sight of adult Wayne's warblers feeding these young, and knew that we had added a bird to the Virginia list and marked out the northern limit of this interesting race.

I trust that enough has been said in this paper to indicate that the Dismal Swamp is a place that for our latitude is unique. In fact, there is nothing like it to be found until one reaches the swamps of the Santee country or the Okefinokee Swamp on the Georgia-Florida border. It would seem to follow inevitably that Virginia and North Carolina cannot allow such a place to be completely spoiled. Great damage has already been done by indiscriminate lumbering and by wasteful forest fires. Something must now be done to restore this spot as far as possible to its original condition and to preserve its beauties for posterity. It scarcely meets the requirements for a National Park, such as the newly-dedicated Everglades National Park in Florida, but it would seem to be an ideal place for a National Forest. Plans are now underway to achieve this status for the Dismal. The move has been approved by the Conservation and Game Departments of both states. This would leave some of the timber crop available for controlled cutting, would greatly lessen fire hazards, would keep the Swamp open always for proper types of recreation, and would maintain inviolate one of our choicest beauty spots in our State. (This paper, which was presented in shorter form at the 1947 meeting of the V. S. O. at Charlottesville, was revised and read before the Fort-nightly Club of Lexington, Virginia).



The Raven

BULLETIN OF THE VIRGINIA SOCIETY OF ORNITHOLOGY
PUBLISHED AT LYNCHBURG, VIRGINIA

DR. J. J. MURRAY, EDITOR
LEXINGTON, VA.

VOL. XIX

May-June, 1948

Nos. 5 & 6

CONTENTS

	Page
The Fifteenth Annual Meeting - April, 1948 By Florence S. Hague	28
V. S. O. Field Trip - Lexington - 1948 By J. J. Murray	30
A Golden Eagle in Bedford County By Ruskin S. Freer	32
A Late Nesting Date for the Goldfinch By Robert P. Carroll	33
Observations on the Birds of Sussex County By Charles C. Steirly	33
Holboell's Grebe & Double-crested Cormorant in Rockingham County - By Max Carpenter	34
Bluebirds and Cub Scouts By W. Claude Cosby	35
Birds Feeding on Rotten Apples By Robert J. Watson	36
Two Winter Bird Censuses By Wm. F. Minor, Charles Stevens, John H. Grey	36
Thomas Lester Engleby By A. O. English	38
Treasurer's Report - 1947	38
New Members of the V. S. O.	39

Fifteenth Annual Meeting
April 23-24, 1948

The Fifteenth Annual Meeting of the V. S. O. was convened at 2 P.M. in the Robert E. Lee Hotel in Lexington by the President, John H. Grey, Jr. Dr. Murray welcomed the Society to Lexington and announced plans for the dinner and the Saturday Field Trip. After the Secretary read the report of the Executive Committee meeting held at Sweet Briar in September of 1947, the President appointed a Nominating Committee consisting of Prof. C. O. Handley, chairman, Mrs. Burgess and Miss Evelyn Watkins, and an Auditing Committee consisting of Mr. Ralph Hostetter and Mr. James Eike.

The first paper in the afternoon program was An Example of Predatory Control in Game Management by C. O. Handley. This was the case of a man who wanted quail on his farm so that he could use them in training bird dogs. He raised food plants in strips and tried to kill all enemies, such as foxes, owls, hawks and turtles. He did succeed in raising many quail, but soon there were so many rodents that they destroyed the lespedeza and so the food supply for the quail. Consequently the recommendation is not to destroy all predators but to control the numbers of such as the Crow, Great Horned Owl, Sharp-shinned and Cooper's Hawks.

Prof. Bruce H. Reynolds exhibited a pair of wide field, prism binoculars which he had made in about eight hours from materials purchased for just under \$70 from the Edmunds Salvage Co. The company sent instructions with the material. He also summarized some papers about birds which were presented at the recent meeting of the Asso. of Southeastern Biologists at Gainesville, Fla. In some localities - but not in Virginia - burning the land about once a year has been found advantageous for quail food. When taking a bird census from a highway the number of species identified has been doubled by counting the song as well as the sight records.

Mr. Jack E. Perkins of the Back Bay Refuge, who has made two trips to the Antarctic with Admiral Byrd, reported on the Wildlife of Little America and showed some pictures of the Antarctic. Lichens and mosses are the only plants found there. A shrimp-like animal called krill seems to be the chief food for the few birds and mammals. Penguins have great curiosity and will travel a mile or more over the ice to stand and watch humans working. There are 17 species in the Antarctic and subarctic regions, most of which make some sort of a nest and have nurseries. The Emperor Penguin has rookeries near the open water. These birds carry the egg or young on their feet and when one penguin drops the egg or young to go for a swim and food, an unmated bird will pick up the egg or young and care for it. Other birds are the Arctic and Antarctic Terns, the Snowy Petrel - of which one may see only the black of bill, feet and eyes as they fly past - and the scavengers, the Skua and the Giant Fulmar. There are four kinds of seals of which one feeds on penguins. The fur seals have been destroyed by hunters. Whales migrate to the Antarctic in summer from all over the world.

Colonel Carroll showed slides of the Rockbridge Raven's nest and of the young as he told us of the difficulties of getting the pictures. Mr. Jacob Hostetter, an understanding friend of every living thing, gave some

of his nature philosophy and some advice on predator control. Miss Martha Clark, Nature Recreation Director, told of the Nature Center program in Danville, emphasizing the handcraft work for adults and nature trails in part of the City Park. In his study of Winter Residents at Charlottesville, William F. Minor found that the shifting of the birds made it difficult to count them, but the abundance of Juncos, Tree and Song Sparrows was particularly marked around a fresh water pond; and of Crows, Carolina Chickadees and Golden-crowned Kinglets in a pine woods. Kenneth Lawless exhibited some of his bird photographs and readily convinced the audience of the pleasures of amateur bird photography, along with a warning against disturbing the surroundings of any nest.

Studies of West Virginia Birds by Prof. Maurice Brooks called attention to the 1500 ft. mean elevation of that state, its comparatively small area, of which four-fifths drains into the Mississippi Valley, and to the work of some of the local bird clubs. The Huntington Club is studying the Cardinal, and the Charleston Club, Swainson's Warbler. The latter was first described by Audubon and then lost until about 1870 when it was found nesting in cane swamps. In the 1930 decade it was reported occasionally in W. Va. and since then has been found nesting in dense foliage in the mountains and later in rather open areas.

The paper on Bird Songs was consoling to those of us who have difficulty in remembering bird songs. Prof. James R. Sydnor pointed out that the pitch of bird songs is higher than that of human voices, averaging in the top octave of the piano, that the change in quality is consequently less readily discernible, and that they sing at a very rapid pace. These points were well illustrated by playing some of the Cornell records of the songs of the Wood Pewee, the White-throated Sparrow and the Indigo Bunting at a slower speed.

Of the 67 who registered at the afternoon session, 43 are members and several others have since joined the V. S. O. The number at the dinner at the Robert E. Lee Hotel was also 67. The evening program was held in the Presbyterian Church auditorium.

Prof. Brooks gave a great deal of information in his interesting and delightful discussion of work in the Cheat Mountain area. This mountain is in the Alleghenies near the Virginia-West Virginia boundary. The approach from the Virginia side is through Monterey and Hightown. The Alleghenies are very ancient mountains, older than those of the Valley of Virginia. The originally northward flowing rivers of this region were diverted westward by the ice sheet which also formed the Ohio River. One of the several forks of Cheat River rises on Cheat Mt. Because of the southwest winds from the Gulf of Mexico there is more rainfall on the west slopes of the Alleghenies and consequently many shrubs as well as trees. In the Cheat Mt. area there have been no serious fires, and where timber has been cut reseedling has occurred. Five zones of plant and animal life are met in the abrupt climb from the base - about 2000 ft. - to the top of the mountain. At the lower elevation is a hard woods forest of oak, hickory and chestnut with some hemlock in protected coves. The birds are like those of the Transition Zone, both northern and southern species, but a few more of the latter. Then comes the region of greenbrier limestone, the Appalachian forest with its remnant of preglacial flora and some 20 to 25 species of birds. The third zone

is a typical northern deciduous forest of beech and maple with many wild flowers. In this the characteristic southern birds - with a few exceptions-have disappeared and the characteristic species, where there are openings, are the Rose-breasted Grosbeak, Wood Thrush and Golden-winged Warbler. At somewhat above 4000 ft. is a plateau about seven miles in diameter and surrounded by ridges of 4500 ft. elevation. On this plateau are found red maple, red spruce, Canadian hemlock and the richest bird life of the mountain. The breeding birds are the northern species such as the Red-breasted Nuthatch, Brown Creeper, Winter Wren, Raven, Magnolia and Canada Warblers, Golden-crowned Kinglet, Purple Finch and four thrushes. The highest zone - 4300 to 4800 - includes the tips of the high peaks and is practically a pure red spruce forest with Cross-bills, Pine Siskins and some birds from the next lower zone. This is the southernmost location of the northern evergreens. The abundance of bird life on Cheat Mountain is indicated by a comparison with the greatest population recorded elsewhere. This record is of 319 pairs of birds per 100 acres in Ontario. In 100 acres of the spruce area of Cheat Mountain 322 pairs of birds were found in 1947. Many hawks migrate along the western slope of the mountain and in the spring the migrating White-crowned Sparrows are numerous. The summer is a rush season for by July 15 some of the birds are ready to go south.

Motion pictures concluded the evening program.

The Saturday Field Trip ended with luncheon at Monmouth Church at which there were 60 members and guests. After luncheon the official bird list for the day was compiled and officers were elected. Prof. Handley reported as follows for the Nominating Committee: for President, Mr. John H. Grey; Vice-president, Mrs. Colgate Darden; Secretary, Miss Florence Hague; Treasurer, Mr. W. Edwin Miller; for the Executive Committee, Miss Evelyn Watkins to take the place of Mr. Leigh Hawkins, '49, Mrs. James Wiltshire and Mr. Max Carpenter to serve until 1951. Prof. Handley presided while other nominations were called for, but none being offered, it was moved, seconded and voted that the slate nominated be elected.

-----00000-----

V. S. O. Field Trip - Lexington - 1948

By J. J. Murray

On Saturday morning, April 24, twelve cars with over sixty passengers, the largest group ever to go on a V. S. O. Field Trip, left Lexington at 7:00 o'clock, after breakfast at the Southern Restaurant. Some of the 'lunatic fringe', under the leadership of Bobby Paxton had already gone on 'dawn patrol' to Cameron's Pond. Here, at one of the famous Lexington birding spots, they had found two Ring-billed Gulls, a Golden-eye, a Ring-necked Duck, and some Wood Ducks and Blue-winged Teals, and had been shown a Killdeer nest with three eggs. By the time they joined the more conservative (or lazier) rest of the party they had already run up a preliminary list of 45 species.

The day was a good one, clear and windless, but turning too hot for the season, with the thermometer standing at 82 on our return at

5:00 P. M. We set out first for the mountain in the western part of Rockbridge County, where a Raven's nest was the chief objective of the field trip. After some ten miles of the highway we turned aside on a dusty mountain road. Leaving the cars at the gate of an abandoned farm, we walked up a long hill through the pasture to the edge of the woods where the real climb begins. Here the expedition divided, the toughest third going ahead to make the rather stiff climb to the nest. Mr. Jacob Hostetter, who has long passed his Biblical three score and ten years and who has watched more Ravens than any man in this part of the country, led the way. Some of the younger climbers confessed later that they were worried, at first for fear that he might not be able to stand the climb, and then for fear that they might not be able to keep up with him. Few of the group had ever seen a Raven, much less its nest, so that the sight of the five large young climbing about the pocket of the cliff was reward enough for the hike. They also kicked up a Ruffed Grouse along the way.

The other section of the party, even though not energetic enough to see the young Ravens in the nest, did not have to forfeit the sight of the old birds, for long before the nest was reached by the climbers their approach set the adult Ravens flying about over the mountain in full view of all. While waiting on the lower slopes of the mountain they listened to the melodious songs of Field and Vesper and Bachman's Sparrows, and to the insect-like 'buzz-z-z' of the Grasshopper Sparrow. Four singing Bachman's Sparrows were found. This bird, which we have always considered purely accidental in Rockbridge County, seems to be establishing itself here. A Pileated Woodpecker was considerate enough to fly along the stream that runs under the hill, showing himself off to advantage and occasionally giving his hoarse 'whucker, whucker, whucker' call. Not least in interest was the magnificent mountain view, with the bulk of House Mountain in the foreground and the line of the Blue Ridge on the other side of the valley.

After two or three hours the group re-assembled to make its way by a different route back to the highway and on to the Big Spring Pond, another of Lexington's good birding places. There was little to be seen there on this particular day, however. The only water birds were a pair of Blue-winged Teals and a few Killdeer. A redwing's nest with four eggs was found in a tussock of grass in the water, and a Dove's nest with large young in a tree nearby. Warbling Vireos and Baltimore Orioles were singing in the sycamores around the pond.

Lunch was served by the ladies of New Monmouth Presbyterian Church in the grove of oaks in the church-yard. The country ham, potato salad, stuffed eggs, hot rools, pie and coffee disappeared rapidly, while the enthusiasm and energy of the crowd built up in direct proportion. The last of the coffee was drunk to the accompaniment of a hot argument as to whether a tanager, high up in poor light in one of the oaks, was the Scarlet or the Summer Tanager.

After lunch half of the members of the party set out for their various homes throughout the State, while the other half went down Kerr's Creek and across the Lime Kiln Bridge to 'If', the Murray's log cabin on Maury River. Here we had another ramble. Some of the members saw and heard their first Cerulean Warbler. (We found this pair building their

nest exactly a month later in the top of a walnut tree in front of the cabin). The boys, clambering about the cliff across the river, found a Black Vulture's nest with two eggs in a small cave. The field trip ended with afternoon tea of crackers and coca-colas on the porch of the cabin.

The list of the 89 species seen follows: Great Blue Heron, Baldpate, Blue-winged Teal, Wood Duck, Ring-necked Duck, Golden-eye, Turkey Vulture, Black Vulture, Red-shouldered Hawk, Broad-winged Hawk, Marsh Hawk, Osprey, Ruffed Grouse, Bob-white, Killdeer, Ring-billed Gull, Rock Dove, Mourning Dove, Chimney Swift, Hummingbird, Belted Kingfisher, Flicker, Pileated Woodpecker, Red-bellied Woodpecker, Hairy Woodpecker, Downy Woodpecker, Kingbird, Crested Flycatcher, Phoebe, Prairie Horned Lark, Rough-winged Swallow, Barn Swallow, Purple Martin, Blue Jay, Raven, Crow, Fish Crow, Carolina Chickadee, Tufted Titmouse, White-breasted Nuthatch, Brown Creeper, House Wren, Bewick's Wren, Carolina Wren, Mockingbird, Catbird, Brown Thrasher, Robin, Wood Thrush, Bluebird, Gnatcatcher, Ruby-crowned Kinglet, Migrant Shrike, Starling, Yellow-throated Vireo, Red-eyed Vireo, Warbling Vireo, Black and White Warbler, Worm-eating Warbler, Parula Warbler, Yellow Warbler, Myrtle Warbler, Black-throated Green Warbler, Cerulean Warbler, Blackburnian Warbler, Chestnut-sided Warbler, Prairie Warbler, Ovenbird, Maryland Yellow-throat, Yellow-breasted Chat, Redstart, English Sparrow, Meadowlark, Redwing, Baltimore Oriole, Purple Grackle, Cowbird, Scarlet Tanager, Summer Tanager, Cardinal, Goldfinch, Towhee, Grasshopper Sparrow, Vesper Sparrow, Bachman's Sparrow, Chipping Sparrow, Field Sparrow, White-throated Sparrow, Song Sparrow.

Lexington, Virginia

-----00000-----

A Golden Eagle in Bedford County
By Ruskin S. Freer

Lynchburg was much interested recently in the killing of a golden eagle in the Bunker Hill section of Bedford County, about February 20, 1948, by a farmer, Mr. Glenn Fizer. According to a story in the Lynchburg News of February 28, from Bedford, Mr. Fizer had noticed that his chickens had stayed close to the farm buildings and would not go far afield. At the same time he noticed that crows on nearby hillsides seemed excited. Finally a large bird alighted in the poultry yard, and Mr. Fizer shot it. Realizing that it was a strange and unusually large bird, he took it to Bedford to find someone who might identify it. Mr. Guy E. Murray believed it to be a golden eagle, and brought it to Mr. John Monaghan of Lynchburg to be mounted. Newspaper reports, from both Bedford and Lynchburg, gave the wing-spread as seven feet. Mr. Monaghan told me that the bird seemed to be emaciated and in poor physical condition.

Mr. C. H. Shaffer of Lynchburg, district Game Technician with the Commission of Game and Inland Fisheries, and this writer, have seen the bird, which is now mounted and in a museum in Bedford.

Dr. J. J. Murray, in his paper, "Additions to the Virginia Avifauna" (Auk, **L**, 2, 190) lists many records of the golden eagle for this state. He has informed me recently of additional records from Crabbottom in Highland County in 1938, and from the vicinity of Bristol, Virginia (F. M. Jones).

While Dr. Murray's published records include one from "Peaks of Otter, with the place somewhat uncertain, December, 1899, or January, 1900", which are in Bedford County, the record would not certainly be in Bedford County, as the line passes through that region. This recent record, therefore, appears to be the first definite one for Bedford County, which is in the area of "The Lynchburg List" (also including Campbell and Amherst counties). This record brings the total for the Lynchburg area to 218 species.

Lynchburg College, Lynchburg, Va.

-----00600-----

A Late Nesting Date For The Goldfinch
By Robert P. Carroll

On August 18, 1947, while cutting the grass on a lot in an undeveloped area on the edge of Lexington, Virginia, goldfinches were observed carrying nesting materials. With this as an excuse we sought the shade and watched the birds. They went to one of the several Russian olive or silver berry bushes (*Eleagnus argentea*, Pursh.). This was situated on a wind-swept hill near the crest at an elevation of about 1100 feet, and there were no taller shrubs nor similar shrubs higher on the hill. On Tuesday, the 19th. they had securely fastened two bunches of material on two of the three upright branches just about four inches above the actual forking of the branches, and about forty four inches above the ground. Wednesday and Thursday were spent in perfecting the nest. The next four days were spent in lining the nest. On the tenth day, the 27th., the first egg was laid before eight o'clock. The second egg was laid on the 28th., and the third on the 29th. On the 31st. a fourth egg was laid. On the 11th. of September there were three newly hatched birds but no trace of the fourth egg. Another observer reports that the egg disappeared during the first week in September. I did not see the nest from the 2nd. until the 11th. The young grew rapidly but on the 17th. some small children broke one of the upright branches and spilled the superstructure of the nest, destroying the brood. The parent birds were not observed around after the 19th.

Lexington, Virginia

-----00000-----

Observations on the Birds of Sussex County
By C. C. Steirly

In the spring of 1947 the writer lived beside a newly constructed pond of approximately 1.9 acres in Sussex County. The pond had been built on a rather narrow strip of bottomland hardwood timber, through

which ran a small stream. Adjacent to the pond was a stand of loblolly pine poles covering approximately one half acre, a bottomland hardwood area of one half acre, an open brushy area (next to a field) of about one acre, and a small fringe of upland hardwoods. At least a third of the flooded pond area still had standing hardwood timber and underbrush.

From this rather concentrated variety of habitats a list of 70 species of birds was built up through daily observations from March 1 to July 1. The list is given herewith to show the variety of birds that can be observed when a wide range of habitats are available even though on a small unit of area. No doubt the construction of the pond attracted numerous species that ordinarily would not frequent a mere slow flowing, narrow stream.

White-throated, song, fox and chipping sparrows, towhee, black poll, black and white, redstart, yellow throat, prothonotary, hooded, palm, pine, myrtle and magnolia warblers, Louisiana water thrush, pileated, red-bellied, hairy, and downy woodpeckers, flicker, yellow-bellied sapsucker, golden-crowned kinglet, blue-gray gnatcatcher, Carolina chickadee, brown creeper, brown-headed nuthatch, white-breasted nuthatch, tufted titmouse, pine siskin (?), robin, bluebird, wood thrush, hermit thrush, cardinal, junco, red-eyed vireo, catbird, brown thrasher, scarlet tanager, olive-sided flycatcher, wood pewee, phoebe, kingbird, crested flycatcher, Carolina wren, red-winged blackbird, purple grackle, starling, meadowlark, shrike, mourning dove, kingfisher, crow, blue jay, turkey vulture, broad-winged hawk, sharp-shinned hawk, screech owl, killdeer, spotted sandpiper, solitary sandpiper, king rail, great blue heron, green heron, little blue heron, American egret, red-breasted merganser and chimney swift.

Owing to the nature of the writer's work, time was not available for detailed nesting studies nor for actual census work at that time of the year. Four pairs of green herons and two pairs of king rails nested on the pond area consisting of standing trees and partially submerged brush.

Waverly, Virginia

-----00000-----

Holboell's Grebe & Double-crested Cormorant
in Rockingham County
By Max Carpenter

I am glad to report another unusual bird from Rockingham County, Virginia. Holboell's Grebes were seen on six different dates over a period of more than a week, at Silver Lake, Dayton, Va. I saw them on March 12, 14, 16 and 19, two on each of the first three days and one on the 19th. Dr. D. Ralph Hostetter saw two on March 18 and one on the 21st. I was out again on the 22nd. but found none. This is an extremely rare bird anywhere in western Virginia.

A Double-crested Cormorant was seen on North River at Bridgewater on May 12 by Dr. Harry G. M. Jopson, and on May 16 and 30 by the writer.

Bridgewater, Virginia

Bluebirds and Cub Scouts

By W. Claude Cosby

The readers of The Raven are of course familiar with the sad plight of the Bluebird, that beautiful little fellow "who wears our national colors so modestly", but being too gentle to compete with the English Sparrows and Starlings, has been chased out of our towns and is hard put to find nesting places where he may raise his young in peace. For those not so familiar with the Boy Scout organization, Cub Scouts are boys in the age group nine to eleven, inclusive, and the unit is called a Pack. Pack 7 of Roanoke, Va., at their monthly meeting in January, 1947, decided to do something about the housing shortage for Bluebirds. They chose as their plan for the house the one shown in a pamphlet "Bird Houses", Circular no. 29, obtained from the National Audubon Society, 1006 Fifth Ave., New York 28, N. Y., and the one described in the pamphlet as being designed by Mr. T. E. Musselman of Quincy, Ill. This is a very simple house, with a hinged top for easy cleaning after the nesting period is over.

The Cub Scouts' hardest job was to find some lumber with which to make these houses, for new lumber was scarce and expensive, and second hand lumber was also scarce. But finally they saw an old building being razed and soon talked the foreman on the job into giving them some boards, out of which twenty-five bird houses were made during the month of February. These bird houses were erected in the first week in March, six houses in the city limits and 19 houses in the nearby country. In the latter part of April the Cub Scouts made a check of these boxes. None of the boxes in the city were inhabited. Five boxes in the country were inhabited. It was a grand sight to see these boys fill with ecstasy and hear them call with excitement when they found the first box with five little pale blue eggs in it. And when a little later they found another box with four little fledglings already hatched, and the fifth coming out of the shell, their happiness was filled to overflowing.

One box was placed on a friend's country place near his home where he could keep a fairly close watch. The pair of Bluebirds that used this box hatched two broods of five each during the season, and then laid three more eggs, but before hatching the third brood they apparently deserted the nest for it was taken over by a pair of Wrens. When inspecting these Bluebird houses it was noted very clearly that the Bluebirds invariably used the houses that were placed according to Mr. Musselman's directions as described in the pamphlet referred to above, that is, houses placed out in the open, on fence posts, about three feet from the ground, with the opening in the box facing south or southeast. Bluebirds are scarce around Roanoke, or at least the Cub Scouts of Pack 7 think so. It is these boys' fervent wish that more of these houses will be occupied in the season of 1948. Their plan this year calls for 25 more boxes and relocation of some of the uninhabited ones.

Cubmaster, Pack 7, Roanoke, Va.

-----00000-----

Birds Feeding on Rotten Apples
By Robert J. Watson

In the back yard of my home at Blacksburg, Virginia, there is a large apple tree bearing small apples of a very poor quality. Last fall the crop of apples on the tree appeared to be unusually large, and many of the fruits remained on the tree throughout the fall and winter. It was, of course, no surprise to see Starlings feeding on the decaying fruits still dangling on the tree, but I was rather surprised when, in November, 1947, I noticed a pair of Flickers utilizing this source of food. One or both of the birds could frequently be seen perched cross-wise on the slender twigs, vigorously pecking away at the now thoroughly rotten apples.

Later in the fall, a small flock of White-crowned Sparrows took up residence just beneath our kitchen widdow, where we fed them regularly with bread crumbs. During the heavy snows which covered the ground in January and February of this year, and which often fell so rapidly that the food which we placed out for the birds would be completely covered up in a few minutes' time, these sparrows also discovered the rotten apples and began to feed on them. Often a dozen or so White-crowned Sparrows, English Sparrows, and Starlings could be seen in the tree at once, busily drilling or hacking away at the soft, rotten pulp. Later I also noticed a Mockingbird feeding in the same way. The birds evidently did not object to the rottenness of the fruit; I examined the fruit on which they had been feeding, and there was no doubt that it was thoroughly decayed.

I have no doubt that this is a common habit where such food is available and relatively abundant. However, it seemed somewhat surprising to see Flickers and White-crowned Sparrows feeding in this way, and since, in a very cursory glance through the literature, I can find no reference to this habit, I felt that it might be of some interest to place this observation on record.

Blacksburg, Virginia

----00000----

Two Winter Bird Censuses

UPLAND PINE WOODS. SIZE: 45 acres. LOCATION: 1 mile south of Proffit, Albemarle County, Virginia. DESCRIPTION OF AREA: A young pine stand, roughly rectangular in shape, on a southeastward sloping hillside, and transversed by several old gullies. The woods consist entirely of pine except for several sycamore (Platanus occidentalis) and tulip poplar (Liriodendron tulipifera) saplings in the gullies. The canopy is 40-60 feet, without openings, and composed 50% of shortleaf pine (Pinus echinata) and 50% of scrub pine (Pinus virginiana). In the majority of the woods there is no substratum, but where it occurs it is made up of red cedar (Juniperus virginiana), southern red oak (Quercus falcata), dogwood (Cornus florida), persimmon (Diospyros virginiana), greenbrier (Smilax rotundifolia), blackberry (Rubus sp.), and honeysuckle (Lonicera sp.). The floor is irregularly covered with

running cedar (Lycopodium flabelliforme), poison ivy (Rhus toxicodendron), spotted wintergreen (Chimaphila maculata), and pipsissewa (Chimaphila umbellata). 5 CLIMATE: Daily mean temperature during census period, 29° (extremes, 5° to 66°); total precipitation, 3.7 inches (ground covered with maximum of 15 inches of snow during 5 days of census period). CENSUS DATES: Dec. 30; Jan. 8, 10, 15, 29, 31; Feb. 3, 7. Total, 8 trips. Hours per trip averaged 2. CENSUS - Average number of birds seen per 100 acres of habitat (with average number of individuals in area per trip in parentheses): turkey vulture, 1 (.4); black vulture, ♀ (.1); mourning dove, 1 (.3); flicker, ♀ (.1); yellow-bellied sapsucker, 1 (.4); hairy woodpecker, 1 (.5); downy woodpecker, 6 (2.8); blue jay, ♀ (.1); crow, 13 (5.8); fish crow, ♀ (.1); Carolina chickadee, 15 (6.8); tufted titmouse, 10 (4.4); white-breasted nuthatch, 4 (1.8); red-breasted nuthatch, ♀ (.1); brown creeper, 6 (2.9); winter wren, ♀ (.1); Carolina wren, 3 (1.3); hermit thrush, 2 (.8); golden-crowned kinglet, 12 (5.4); cardinal, ♀ (.1); eastern goldfinch, ♀ (.1); slate-colored junco, 1 (.4). Total: average of 77 birds per 100 acres. REMARKS: High number of crows was caused by the presence of a flock (including a fish crow) which was seen sitting in the pines and milling around over the area on one of the census trips. Juncos and a cardinal were not found in the area until after a snowfall. A dove, seen twice, apparently roosted in the pines. Golden-crowned kinglets, which ordinarily would have been the most common bird in this habitat, left the area after Jan. 29 for unaccountable reasons. Red-breasted nuthatches were notably scarce this winter. -- William F. Minor and Charles Stevens Jr., Charlottesville, Va.

POND AND BROOMSEDGE FIELDS. SIZE: 39 acres. LOCATION: 2 miles northeast of Crozet, Albemarle County, Virginia. DESCRIPTION OF AREA: A roughly square-shaped area, consisting of 15 acres of fresh-water pond bordered by about 24 acres of lightly grazed broomsedge (Andropogon sp.) fields, scattered irregularly with scrub pine (Pinus virginiana) seedlings, smooth sumac (Rhus glabra), and containing a few large isolated black locusts (Robinia pseudoacacia) and tulip poplars (Liriodendron tulipifera). The tract is hilly, and in the north corner flows a small branch, the borders of which are grown up in sycamore (Platanus occidentalis) saplings, dogwood (Cornus florida), blackberry (Rubus sp.), and honeysuckle (Lonicera sp.). The pond is newly created and has not yet developed a cattail edge. CLIMATE: Daily mean temperature during census period, 29° (extremes, 4° to 66°); total precipitation, 3.7 inches (ground covered with maximum of 16 inches of snow during 5 days of census period). Pond partly frozen one day and totally frozen all others. CENSUS DATES: Dec. 30; Jan. 8, 10, 15, 27, 29, 31; Feb. 5. Total, 8 trips. Hours per trip averaged 2.5. CENSUS -- Average number of birds seen per 100 acres of habitat (with average number of individuals in area per trip in parentheses): turkey vulture, 1 (.4); red-tailed hawk, ♀ (.1); red-shouldered hawk, ♀ (.1); marsh hawk, 1 (.3); killdeer, ♀ (.1); flicker, ♀ (.1); downy woodpecker, 1 (.3); phoebe, 1 (.3); prairie horned lark, 7 (2.8); crow, 10 (3.8); Carolina wren, 1 (.3); mockingbird, 2 (.8); bluebird, 13 (5.1); ruby-crowned kinglet, ♀ (.1); cedar waxwing, 4 (1.4); starling, 2 (.6); western palm warbler, 1 (.3); yellow palm warbler, ♀ (.1); cardinal, 7 (2.8); eastern goldfinch, ♀ (.1); slate-colored junco, 83 (32.4); tree sparrow, 20 (71.9); field sparrow, 7 (2.6); white-throated sparrow, 1 (.3); song sparrow, 13 (5.1). Total: average of 168 birds per 100 acres. REMARKS: Phoebe seen feeding on sumac drupes. Palm warblers associated with bluebirds and departed before first snow in mid-January. Goldfinches were unusually scarce. -- John H. Grey, William F. Minor, and Charles Stevens Jr., Charlottesville, Va.

Thomas Lester Engleby
1875 - 1947

Thomas Lester Engleby, treasurer of the Virginia Society of Ornithology, and retired vice-president of the First National Exchange Bank of Roanoke, died after a brief illness in a Roanoke hospital, April 5, 1947.

He was born in Frostburg, Maryland in 1875, the son of John and Sara Pearce Engleby, and moved to Roanoke with his parents about 1882. His education was received in the public schools of Roanoke and at Randolph Macon Academy, Bedford, Virginia. During the Spanish American War, he served as secretary to General Fitzhugh Lee, who was stationed in Havana, Cuba.

He began his career in the financial field as a clerk for the old National Exchange Bank in 1901. When the National Exchange and First National Banks were merged, he continued with this institution until he was retired May 1, 1945.

Mr. Engleby became a member of the V. S. O. in 1934 and was elected treasurer in 1940. About the time he joined the Society, he became interested in bird-banding, and set up his station at his summer cabin at Bennett Springs about 9 miles from the city. He was a member of the Eastern Bird Banding Association and was an enthusiastic bander until illness in the family and gas rationing restricted his trips to Bennett Springs. Members of the V. S. O. who attended the annual conventions held in Roanoke in 1935 and 1941 will recall the hospitality and genial smile of the host who served luncheon on the lawn of his cabin.

He was vice-president of Fairview Cemetery Corp., a member of Geo. H. Bentley Camp, United Spanish War Veterans, member of Lakeland Lodge No. 190 A. F. & A. M. and a trustee of the West End Methodist Church. Minnie R. Engleby, his wife, survived him thirty-five days. Their son, Lester, and daughter, Helen, reside in Roanoke, Virginia.

A. O. English - Roanoke, Virginia

----00000----

Financial Report of the Treasurer of the
Virginia Society of Ornithology
for the year 1947

Receipts

Balance on hand January 1, 1947	\$171.54
Received for Membership dues	173.00
Received for back issues of <u>The Raven</u>	<u>19.50</u>
	\$364.04

Disbursements

Issues of <u>The Raven</u>	\$491.63
Postage	38.99
Stationery	12.44
Supplies	8.64
Envelopes	58.16
Expenses annual meeting Dr. John H. Grey(lunch)	25.00
Dr. J. W. Aldrich	6.70
Dr. J. J. Murray	1.25
Mr. A. O. English(guest)	6.00
Expenses Fall Executive Meeting	6.00
National Audubon Society (Film)	3.00
Flowers	7.50
Express charges	2.61
	<u>\$225.92</u>

Balance in the State-Planters Bank & Trust Company
Richmond, Virginia, December 31, 1947, \$138.12

W. Edwin Miller, Treasurer

-----00000-----

New Members of the V. S. O.
Since January 1, 1948

Capt. Jackson Miles Abbott	Engineer School	Ft. Belvoir, Va.
Mrs. Frederick V. Bourdon	5410 New Kent Road	Richmond, Va.
Mrs. Jessie T. Broadhurst	202 McDowell St.	Lexington, Va.
Mr. William Broadhurst	202 McDowell St.	Lexington, Va.
Mrs. Malcolm Campbell	602 Ross Road	Lexington, Va.
Mr. Max Carpenter	P. O. Box 294	Bridgewater, Va.
Mr. Lynn G. Dickerson, Jr.	206 Newman Ave.	Harrisonburg, Va.
Mr. Arthur H. Fast	4924 Rock Spg. Rd.	Arlington, Va.
Dr. Samuel B. Guss	604 Dinwiddie Ave.	Lynchburg, Va.
Mrs. Paul M. Holdeman	Evendale, Box 74	Winchester, Va.
Mrs. H. E. Jenkins	Southside Health District	Farmville, Va.
Mr. William Lord	Rock Knob	Floyd, Va.
Mr. W. Edwin Miller, Jr.	% Miller & Rhoads Inc., 6th. & Broad	Richmond, Va.
Mrs. James G. Nevitt	132 Amherst Ave.	Winchester, Va.
Mr. James G. Nevitt	132 Amherst Ave.	Winchester, Va.
Mrs. Wm. Northrop	Norcroft, W. 42nd. St.	Richmond, Va.
Mrs. R. Floyd Plank	902 Main St.	Blacksburg, Va.
Mr. Lauren H. Rhineland	Univ. Station, Box 1386	Charlottesville, Va.
Mrs. Louise M. R. Rhineland	"	"
Mr. Samuel K. Roller	Box 265	Lynchburg, Va.
Mrs. Ellison A. Smyth	P. O. Box 144	Blacksburg, Va.
Miss Mary Evelyn Stiles	Dinglewood	Bon Air, Va.
Mrs. Robert S. Underwood	412 S. Stewart St.	Winchester, Va.

Virginia Polytechnic Institute	Wild Life Section	Blacksburg, Va.
Mr. Mangum Weeks	925 S. St. Asaph	Alexandria, Va.
Mrs. Calvin P. Ward	1606 W. 42nd. St.	Richmond, Va.
Mrs. L. M. Warren	4310 Spring Hill	Richmond, Va.
	Ave.	
Mr. F. M. Yellott	Ross Haven	Lexington, Va.

-----00000-----

Someone left a copy of Peterson's Field Guide at my cabin during the annual field trip. If the owner will notify me, I shall be glad to send it. -- J. J. Murray



The Raven

BULLETIN OF THE VIRGINIA SOCIETY OF ORNITHOLOGY
PUBLISHED AT LYNCHBURG, VIRGINIA

DR. J. J. MURRAY, EDITOR
LEXINGTON, VA.

VOL. XIX

July-August, 1948

Nos. 7 & 8

Contents

	Page
A Trip down the Chickahominy	42
By Fred R. Scott, Jr., and Charles E. Stevens, Jr.	
Bird Study at Camp Shenandoah.....	44
By James Murray, Jr.	
A Red-shouldered Hawk's Nest.....	46
By Robert Paxton	
1948 Breeding-Bird Census, Lexington, Virginia...	46
By J. J. Murray	
Notes on the Spring Migration at Charlottesville.	47
By Charles E. Stevens, Jr.	
Spring Count, Charlottesville.....	47
By Kenneth Lawless and Charles E. Stevens, Jr.	
Spring Bird Count from Richmond.....	48
By Fred R. Scott, Jr.	

A TRIP DOWN THE CHICKAHOMINY

By Fred R. Scott, Jr. and Charles E. Stevens, Jr.

On June 12 the two co-authors launched a canoe at 5 a.m. from the new bridge over the Chickahominy River which was just recently constructed for U. S. route 60 at Bottoms Bridge. For the first hundred yards the river was wide and quite smooth. Our hopes were soon shattered however, for the river suddenly plunged into the swamp and divided into two parts. For the next ten hours we wound back and forth from one side of the swamp to the other, while the river divided and subdivided until on one occasion we were forced to carry the canoe bodily in search of enough water to float it. In all too many places the river was blocked by fallen trees, necessitating lifting the canoe over them or carrying it around. We ended the trip at Roxbury, just six miles from Bottoms Bridge in a direct line but close to three times that distance by water.

The prothonotary warbler was the most common bird, appearing commonly even at Bottoms Bridge. Cypress, apparently this bird's favorite tree, extended westward only to about one-half mile east of Bottoms Bridge.

Our main interest on this trip was to locate a heronry which we suspected of being in the area. We found it in New Kent County at the intersection of Crump's Swamp and the Chickahominy, slightly over a mile from the eastern corner of Henrico County. It is approximately 13 miles east of Richmond, 45 miles from Chesapeake Bay, and 70 miles from the ocean. It was composed of an estimated 150 nests of great blue herons, all containing young birds. There were four adult American egrets in the colony which were apparently nesting, but we were unable definitely to locate a nest. The heronry occupied about $2\frac{1}{2}$ acres of swamp woodland consisting of large cypress, red maple, and tupelo gum (Nyssa aquatica), under which there was a foot or two of standing water. The nests were located in the tops of the cypresses and a few of the gums, at an average height of about 85 feet. One cypress alone contained 20 nests, and many trees bore ten or more. The young herons perched about the upper limbs of the trees in little clusters of three or four, while many more still remained in the nest. It was probably due to their height that our presence did not disturb the birds in the least. Parents were continuously arriving to feed their young and then departing for feeding grounds as far as ten miles away on the James River. The clamor produced by the feeding operations was great and was first heard by us when we were about a quarter of a mile away. From that distance the noise resembled a large pack of hounds. Under the nests, however, the din was almost deafening. The lower vegetation, trunks, and "knees" of the cypresses were white with excrement, and there was a continual rain of it from above - a point which demanded considerable alertness on our part. In the immediate vicinity the air was rather foul-smelling, and the inundated ground was carpeted with the remains of dead birds, egg shells, and old nests, indicating that the heronry has been in use for many years. There were several young birds on the ground, some of which were still fairly healthy. One with a badly broken leg probably explains why there are so many remains of young birds in the water. The river here is not affected by tides but is at an altitude of about 40 feet. Our complete list for the day follows:

Great blue heron, 18 (in addition to those in the heronry); American egret, 4 (in heronry); wood duck, 21 (including 11 immatures); turkey vulture, 1; black vulture, 1; red-shouldered hawk, 4; bob-white, 1; killdeer, 1; yellow-billed cuckoo, 7; chimney swift, 29; ruby-throated

hummingbird, 3; flicker, 1; pileated woodpecker, 9; red-bellied woodpecker, 6; hairy woodpecker, 3, downy woodpecker, 16; kingbird, 1; crested flycatcher, 11; phoebe, 1; Acadian flycatcher, 75 (1 nest building); wood pewee, 11; rough-winged swallow, 7 (1 nest with young, 2 others occupied); blue jay, 1; crow 12; Carolina chickadee, 26; tufted titmouse, 23; white-breasted nuthatch, 17; Carolina wren, 10; wood thrush, 12; bluebird, 1; blue-gray gnatcatcher, 31 (1 feeding young out of nest); white-eyed vireo, 14; yellow-throated vireo, 34; red-eyed vireo, 131; black and white warbler, 3; prothonotary warbler, 133 (7 pairs feeding young out of nests); parula warbler, 69; cerulean warbler, 1 (heard singing in swamp near Roxbury; not seen); yellow-throated warbler, 31; pine warbler, 4; prairie warbler, 3; oven-bird, 8; Louisiana water-thrush, 15; Kentucky warbler, 12; yellow-throat, 5 (1 feeding young out of nest); yellow-breasted chat, 5; hooded warbler, 20; redstart, 50; scarlet tanager, 3; summer tanager, 6; cardinal, 12; indigo bunting, 2 (1 carrying nesting material); towhee, 3; chipping sparrow, 2; field sparrow, 2.

We had two real surprises: the presence of such a high number of yellow-throated vireos and the cerulean warbler which we unfortunately only heard singing. At Richmond it is usually a day of note when one sees as many as six yellow-throated vireos even in migration. The presence of scarlet tanagers was rather unexpected, although they are common summer residents in Chesterfield County.

The method used for determining the location of the heronry might be explained in more detail. Several years ago it was noticed on the James River that even in the breeding season great blue herons were often seen flying rather high and in a direct line, as if to a definite destination. The lines of flight were carefully charted on topographic maps and then combined with similar observations made on the Chickahominy River. Where the lines intersected was presumed to be the location of the heronry. This trip confirmed our supposition, and the colony proved to be only a few hundred yards from our calculated location.

The next day, July 13, we transferred our canoe to the lower, tidal part of the Chickahominy and covered the 17 miles of the river from Lanexa, New Kent County, to the bridge near the James River. Here the river is entirely different. Instead of being narrow and overhung with trees it is quite wide, as much as a mile at some points. Instead of thick swamps the river here is bordered for much of its way by extensive marshes. Cypress grows either singly or in small groves along the edges of the marshes. Where the river is bordered by a steep bank the prothonotary warbler is found occasionally even on the dry hillside. The many side streams that flow into the lower Chickahominy should be carefully investigated for other heronries. Our list for July 13 follows:

Double-crested cormorant, 1; great blue heron, 24; American egret, 1; wood duck, 3; turkey vulture, 7; black vulture, 3; red-shouldered hawk, 1; bald eagle, 9; osprey, 4; bob-white, 6; Florida gallinule, 1; mourning dove, 1; yellow-billed cuckoo, 3; chimney swift, 11; ruby-throated hummingbird, 3; kingfisher, 4; flicker, 1; pileated woodpecker, 1; downy woodpecker, 3; kingbird, 16; crested flycatcher, 2; phoebe, 3 (young in nest under bridge); Acadian flycatcher, 8; wood pewee, 8; rough-winged swallow, 1; barn swallow, 165 (young in nest under boat-house at Lanexa; 31 nests with young under Chickahominy Bridge); purple martin, 6; blue jay, 4; Carolina chickadee, 14; tufted titmouse, 11; Carolina wren, 5; long-billed marsh wren, 42 (not seen above Watts Point but abundant below); brown thrasher, 1; wood thrush, 3;

blue-gray gnatcatcher, 10; white-eyed vireo, 3; yellow-throated vireo, 7; red-eyed vireo, 49; black and white warbler, 6; prothonotary warbler, 18; parula warbler, 15; yellow-throated warbler, 33; pine warbler, 12; prairie warbler, 4; Kentucky warbler, 1; yellow-throat, 23; yellow-breasted chat, 2; hooded warbler, 4; redstart, 6; red-wing, 121; summer tanager, 4; cardinal, 6; indigo bunting, 3; goldfinch, 5; chipping sparrow, 2; field sparrow, 2.

Richmond and Charlottesville, Va.

- - - - 0 0 0 - - - -

BIRD STUDY AT CAMP SHENANDOAH

By James Murray, Jr.

The summer of 1948 marked a distinct change in the administration of the nature program at Camp Shenandoah, the Boy Scout camp in Rockingham County, Virginia. Until that time there had never been a member of the staff whose full-time job it was to see that the camp was provided with a well-balanced round of nature activities. Some of the members of the camping committee, Col. R. P. Carroll in particular, felt that the time had come when the natural sciences should be stressed on an equal basis with the waterfront and the craft shop. Consequently the past summer has been an experiment to try to discover the most practicable and helpful program which can be offered to the boys.

There is a wide variety of subjects on nature under which the scouts may work for merit badges. They may be interested in zoology or botany or reptile study or astronomy. However, the two badges which to the boys have the greatest appeal are Bird Study and Forestry. These two formed the basic classes, always well attended, on which our program rested.

Since the requirements for Bird Study are rather difficult for the scout who has had no previous training we decided to set up the course to consist of two weeks of as varied activity as possible. The boys are required to be able to identify at least forty species in the field; to have a knowledge of the food habits and ecological importance of ten birds of prey, ten fish-eating birds, and twenty birds useful to agriculture; to construct two bird houses and two feeding trays; and to study the birds of three different habitats, such as marsh, fields, etc.

In order to help them with identification our schedule called for six early morning hikes and twelve class periods of an hour each during the two-weeks course. The class periods were given over to a discussion of what birds to expect, field marks, songs, habitats, and many other things. We were able to secure from a government agency some of the buzzer-identification boxes of mounted specimens, which added interest to the classes and which were quite useful in difficult cases, such as the sparrows.

On the early morning hikes the boys were encouraged to put into practice the things which they had learned in class. It was here, too, that they made their study of habitats. We arranged the six hikes to cover three different routes, two hikes to a route. One was made up of country roadsides, with low, open bushes and isolated cedars. Another included arable land, pasture and a barnyard. The third took in a river bank with low bushes

and large trees, with both an open grove and a tangle of underbrush. Thus the boys were able to see the different groups in each habitat, together with those ambitious birds which are at home everywhere.

The building of bird houses was a source of unexpected interest. There was constant rivalry to see whose box would be chosen by the numerous pairs of wrens around camp. We had our hands full to restrain the artistic ability of some of the scouts. One boy brought us a beautifully made feeding tray painted a dazzling green and red, with white designs on the roof.

Now that one summer's work has been completed, the new position of nature study at Camp Shenandoah stands assured, with the "nature shack" rapidly becoming as popular a place as the waterfront and the craft shop. Next year's nature director, who was prepared for his job by a course at the Terra Alta Nature Camp in West Virginia, will have the opportunity to make the program into one of the most useful and interesting phases of camp life.

It may be of interest to add some field notes from Camp Shenandoah for the summer of 1948:

- Great Blue Heron. One pair noted several times between June 15 and July 20.
Eastern Green Heron. One breeding pair.
Wood Duck. One breeding pair. The birds were noted feeding on top of shocks in a wheat field. Female and fledglings seen, June 28.
Black Vulture. None seen until the last week of camp, when they appeared in very large flock of Turkey Vultures, June 20.
Sparrow Hawk. Pair nesting in a large sycamore close to the river. Fledglings seen, June 15.
Bob-white. Two breeding pairs. Covey of about ten birds, about the size of a half-dollar, June 23.
Killdeer. Three breeding pairs in a large open field. No nests found.
Belted Kingfisher. Several nesting holes. Two pairs of breeding birds noted.
Red-headed Woodpecker. Seen in large numbers in previous years, they were surprisingly scarce this year. Only two pairs definitely breeding.
Eastern Kingbird. Nest in leaning sycamore, 30 feet from the water, discovered June 19.
Phoebe. Large fledglings, deserted in nest on the side of a cabin, found dead, June 26. Too many boys.
House Wren. Two pairs moved into camp-built boxes on June 28 and July 1 respectively. Each box had been up three days. On June 20 a pair was discovered building in a tent flap. A box was erected and nesting material from the tent flap was placed on the box. An hour later the wrens were hauling the sticks into the box.
Red-eyed Vireo. Nest discovered 7 feet high in a walnut sapling on June 21. A young cowbird was removed from it on June 29.
Baltimore Oriole. Two nests discovered. Several other pairs noted. They outnumbered the Orchard Orioles approximately four to one.
Purple Grackle. A colony of eleven nests found in the iron-work of a three-span truss bridge. Nesting completed by July 15.

Lexington, Virginia.

A RED-SHOULDERED HAWK'S NEST

By Robert Paxton

The northern red-shouldered hawk, long considered a transient or winter visitor, has never been a common bird in Rockbridge County, so it was with great interest that Dr. J. J. Murray and I observed the first nest of this species for the county throughout its occupancy. It was of especial interest to me since the nest was located within my breeding bird census tract, about one mile west of Lexington at the base of a range of foothills of the Alleghany Mountains known as Brushy Hills.

The nest was discovered on March 26, located about forty feet high near the top of a medium sized, twin-trunked oak tree. Apparently the female had not yet begun to incubate, but both birds were sitting near the nest, allowing close approach. The nest itself was a large bulky affair situated where the trunk of the tree forked into several smaller branches. The nest could not have been reached without climbing spikes, so the number of eggs was never ascertained. Weekly visits were made to the nest during March, April, and early May. On each visit the female (presumably) was on the nest, where she remained even if someone walked right up to the tree.

By May 11, some activity about the nest marked the hatching of the eggs and even more activity heralded the approach of one of the parent birds. Several pairs of crows that nested nearby made life miserable for the hawks at every opportunity. Once a jay, perched screaming over a hawk's head, dived against it with such force that the blow could be heard about fifty feet away, but the hawks ignored every indignity with elaborate unconcern. When the two young birds had grown older, they could be seen very easily from the ground.

On June 12 the nest was empty. No visits were made to the site in the latter part of June to notice the activities of the birds after the young had left, and in July only one immature bird has been seen.

Lexington, Virginia.

- - - 0 0 0 - - -

1948 BREEDING-BIRD CENSUS, LEXINGTON, VIRGINIA

OPEN MIXED HARDWOODS. About 20 acres of open, lightly-grazed woodlot, with thick, rapidly growing undergrowth; 2 grass openings of $2\frac{1}{2}$ and $1\frac{1}{2}$ acres, located three miles north of Lexington, Virginia. First censused in 1944, and fully described in 1945. Coverage: April 1, 5, 19, 26; May 3, 10, 25, 31; June 21, 26; July 5, 8, 13, 19, 26. Total hours: 27. Poorer coverage than usual. Weather: March and April unusually warm; May and June cool. March-July, 8 inches excess rain. Rapid spread of Eleagnus sp. in last two years. CENSUS: bob-white, 1P; mourning dove, 1P; yellow-billed cuckoo, 2P; screech owl, 1P; ruby-throated hummingbird, 1P; downy woodpecker, 1P; crested flycatcher, 2P; phoebe, 1N, 1P; Acadian flycatcher, 1Y, 1P; wood pewee, 1N, 2P; Carolina chickadee, 1N, 3P; tufted titmouse, 1Y, 3P; white-breasted nuthatch, 2P; Carolina wren, $1\frac{1}{2}$ P (numbers cut down by severe winter); catbird, 1P; brown thrasher, 1P; wood thrush, 1P; bluebird, 1N; blue-gray gnatcatcher, 3P; yellow-throated vireo, 1P; red-eyed vireo, 4P; black and white warbler, 2P; worm-eating warbler, 1Y; parula warbler, $1\frac{1}{2}$ P; cerulean warbler, 1N, 1Y; prairie warbler, $3\frac{1}{2}$ P; ovenbird, 1P; Louisiana water-thrush, $\frac{1}{2}$ P; yellow-breasted chat, 4P; redstart, $1\frac{1}{2}$ P; English sparrow, 1N (in steel bridge); cowbird, 3P; summer tanager, 1P;

cardinal, 1N, 1Y, 6P; blue grosbeak, 1N (first nest in Virginia west of Blue Ridge); indigo bunting, 1Y, 3½P; goldfinch, 1N, 4P; chipping sparrow, 1Y, 3P; field sparrow, 3Y, 9P. TOTAL: 39 species, 96 pairs. DENSITY: 480 pairs per 100 acres (530 in 1944, 560 in 1945, 570 in 1946, 525 in 1947). FREQUENT VISITORS: green heron, wood duck, swift, kingfisher, pileated woodpecker, red-bellied woodpecker, flicker, crow, mockingbird, robin (large flocks in late summer) English sparrow.

J. J. Murray
Lexington, Virginia.

- - - 0 0 0 - - -

NOTES ON THE SPRING MIGRATION AT CHARLOTTESVILLE
by Charles E. Stevens, Jr.

An abnormally warm April precipitated some of the earliest arrival dates we have recorded here in five years. The kingbird, hummingbird, parula, cerulean, and worm-eating warblers showed up exceptionally early. Probably the most extraordinary date was that of the house wren which arrived March 26, sixteen days earlier than we had previously recorded it. Of the early arrivals, the bulk of individuals arrived on the normal date.

Purple finches were absent in the fall and winter of 1947, but a few birds turned up in the spring. This status seems to correspond to Griscom's summary of the winter season (Audubon Field Notes, May 1948).

The most freakish record of the spring season was a flock of five royal terns seen by the writer on May 5, at Henley's Lake, a 25-acre pond about two miles northeast of Crozet. The birds were flying and diving over the water and the surrounding fields and afforded good observation. Apparently the only explanation for the occurrence inland of this coastal species was the heavy rain on the preceeding night. Also on the pond was a Forster's tern.

Two Holboell's grebes seen, March 29, at the City Reservoir (first record for the county), were contemporaneous with ones recorded at various points throughout the middle Atlantic states. Also first records for the county were: a Florida gallinule at Henley's Lake on May 3 and 4, and a western sandpiper seen by Kenneth Lawless at Bellair Pond on May 20.

Charlottesville, Virginia.

- - - 0 0 0 - - -

SPRING COUNT, CHARLOTTESVILLE

Charlottesville, Virginia. May 1; dawn to dusk; area along James River at Hatton, woods around Charlottesville, Thraves Pond, Bellair Pond, Henley's Lake, Albemarle Lake, and Sugar Hollow. Pied-billed grebe, 5; green heron, 4; black duck, 1; blue-winged teal, 2; wood duck, 2; ring-necked duck, 1; red-breasted merganser, 3; turkey vulture, 20; black

vulture, 1; Cooper's hawk, 1; red-tailed hawk, 1; osprey, 6; sparrow hawk, 1; bob-white, 6; turkey, 1; killdeer, 2; woodcock, 1; Wilson's snipe, 1; spotted sandpiper, 28; solitary sandpiper, 6; herring gull, 1; Bonaparte's gull, 1; mourning dove, 18; barred owl, 1; whip-poor-will, 1; chimney swift, 116; hummingbird, 2; kingfisher, 4; flicker, 5; pileated woodpecker, 5; red-bellied woodpecker, 5; hairy woodpecker, 1; downy woodpecker, 6; kingbird, 14; crested flycatcher, 18; phoebe, 11; Acadian flycatcher, 1; prairie horned lark, 1; tree swallow, 4; bank swallow, 5; rough-winged swallow, 29; barn swallow, 53; cliff swallow, 20; blue jay, 12; crow, 33; fish crow, 5; Car. chickadee, 14; tufted titmouse, 10; white-breasted nuthatch, 5; house wren, 15; Carolina wren, 6; short-billed marsh wren, 2; mockingbird, 18; catbird, 20; thrasher, 8; robin, 52; wood-thrush, 32; hermit thrush, 1; bluebird, 29; gnatcatcher, 7; ruby-crowned kinglet, 8; cedar waxwing, 24; shrike, 2; starling, 42; white-eyed vireo, 9; yellow-throated vireo, 12; blue-headed vireo, 1; red-eyed vireo, 44; warbling vireo, 2; black and white warbler, 13; worm-eating warbler, 2; Tennessee warbler, 3; parula warbler, 7; yellow warbler, 15; Cape May warbler, 3; black-throated blue warbler, 1; myrtle warbler, 222; black-throated green, 25; cerulean warbler, 3; yellow-throated warbler, 5; chestnut-sided warbler, 1; pine warbler, 6; prairie warbler, 24; oven-bird, 48; La. water-thrush, 10; yellow-throat, 44; yellow-breasted chat, 14; hooded warbler, 25; redstart, 15; English sparrow, 29; bobolink, 36; meadowlark, 29; red-wing, 43; orchard oriole, 1; Baltimore oriole, 2; purple grackle, 28; cowbird, 26; scarlet tanager, 13; summer tanager, 4; cardinal, 26; blue grosbeak, 5; indigo bunting, 4; goldfinch, 43; towhee, 35; savannah sparrow, 37; grasshopper sparrow, 13; vesper sparrow, 12; chipping sparrow, 48; field sparrow, 30; white-throated sparrow, 61; swamp sparrow, 2; song sparrow, 22. Total: 112 species.

Kenneth Lawless and Charles E. Stevens, Jr.
Charlottesville, Virginia.

- - - 0 0 0 - - -

SPRING BIRD COUNT FROM RICHMOND

Since Richmond lies right on the fall line of the James River, there are two distinct sections of the state within a small area around it, the costal plain and the piedmont. Consequently, this year I have attempted to take two separate counts, each being wholly in one of these sections. I had hoped to take these on consecutive days but was forced to put a week between them. There are two things, then, which must be taken into consideration before these counts can be compared intelligently: first, the progression of migration which occurred in the intervening week, and secondly, the difference in the habitats visited. I tried to make the areas covered as typical as possible of the costal plain or "tidewater" on the one hand and the piedmont on the other. The main value in comparing these two counts is in noting the relative abundance of a given species. The difference in the two areas can perhaps best be seen in comparing the relative abundance of the white-eyed vireo, the scarlet tanager, and most of the warblers.

In a comparison of this sort there is always something that turns up to destroy the perfect contrast. It would have been much more typical if the black-throated green and Canada warblers had been recorded

from the piedmont count.

Curles Neck Farm, Va. (Curles Neck Farm, woods and farms along the James River from Varina to the Cape Charles-Hopewell ferry, and the Hopewell waterfront; open farmland 37%, pine woodland 9%, lowland deciduous woodland 26%, marshes, ponds, and river 20%, bushy fields 8%). - May 8, 1948; 4 a.m. to 7 p.m. Cloudy; temp. 46°-70°F.; wind WSW, 12-14 m.p.h. Total hours, 15; total miles, 10 on foot. Common loon, 1; great blue heron, 14; wood duck, 1; red-breasted merganser, 9; turkey vulture, 29; black vulture, 52; Cooper's hawk, 1; bald eagle, 5; osprey, 10; bob-white, 4; turkey, 2; killdeer, 2; Wilson's snipe, 1; spotted sandpiper, 29; greater yellow-legs, 2; lesser yellow-legs, 1; western sandpiper, 11 (on the mud flats at Curles Neck - first record for area); ring-billed gull, 108 (most migrating westward along river in loose flocks); Bonaparte's gull, 2; mourning dove, 33; yellow-billed cuckoo, 1; chimney swift, 45; kingfisher, 3; flicker, 1; pileated woodpecker, 2; red-bellied woodpecker, 6; hairy woodpecker, 1; downy woodpecker, 3; kingbird, 34; crested flycatcher, 10; phoebe, 1; Acadian flycatcher, 14; wood pewee, 11; prairie horned lark, 1; tree swallow, 540 (partly est.); bank swallow, 13; rough-winged swallow, 24; barn swallow, 674 (partly est.); cliff swallow, 1; purple martin, 2; blue jay, 12; crow, 82; fish crow, 10; Carolina chickadee, 13; tufted titmouse, 28; white-breasted nuthatch, 1; house wren, 9; Carolina wren, 20; mockingbird, 30; catbird, 21; brown thrasher, 2; robin, 66; wood thrush, 59; olive-backed thrush, 2; bluebird, 6; bluegray gnatcatcher, 14; ruby-crowned kinglet, 1; cedar waxwing, 3; shrike, 1; starling, 70 (est.); white-eyed vireo, 18; yellow-throated vireo, 3; red-eyed vireo, 63; black and white warbler, 4; prothonotary warbler, 21; parula warbler, 14; yellow warbler, 16; black-throated blue warbler, 2; myrtle warbler, 69; black-throated green warbler, 7; yellow-throated warbler, 20; chestnut-sided warbler, 3; black-poll warbler, 11; pine warbler, 25; prairie warbler, 32; oven-bird, 9; Louisiana water-thrush, 7; Kentucky warbler, 4; yellow-throat, 56; yellow-breasted chat, 41; hooded warbler, 33; Canada warbler, 1; redstart, 55; English sparrow, 38; bobolink, 1720 (est.); meadowlark, 26; redwing, 138 (partly est.); grackle, 27; cowbird, 1; scarlet tanager, 3; summer tanager, 3; cardinal, 64; blue grosbeak, 3; indigo bunting, 40; goldfinch, 28; towhee, 36; savannah sparrow, 20; grasshopper sparrow, 13; chipping sparrow, 37; field sparrow, 42; white-throated sparrow, 18; song sparrow, 35. Total, 102 species. (Seen May 2 in same area: red-tailed hawk, 1; red-shouldered hawk, 2; black-billed cuckoo, 1; short-billed marsh wren, 1; orchard oriole, 1.)

J. R. Sydnor (morning), F. R. Scott.

Richmond, Va. (Windsor Farms, Byrd Park, Bryan Park, south to Pocohontas State Park (formerly Swift Creek Recreational Demonstrational Area), but not including any of the James River lowlands; open farmland, 15%, deciduous woodland 50%, marshes and ponds 4%, residential areas 20%, bushy fields 11%). - May 15, 1948; 4 a.m. to 2 p.m., 4 p.m. to 7 p.m. Partly cloudy; temp. 54°-77°F.; wind S, 2-10 m.p.h. Total hours, 13; total miles, 9 on foot. Green heron, 1; wood duck, 1; red-breasted merganser, 1; turkey vulture, 4; Cooper's hawk, 1; red-tailed hawk, 2; red-shouldered hawk, 2; broad-winged hawk, 2; bob-white, 6; turkey, 3; coot, 2; spotted sandpiper, 3; killdeer, 3; mourning dove, 3; yellow-billed cuckoo, 6; black-billed cuckoo, 5; chuck-will's-widow, 2; whip-poor-will, 11; chimney swift, 28; kingfisher, 1; flicker, 2; pileated woodpecker, 8; red-bellied woodpecker, 5; red-headed woodpecker, 1; downy

woodpecker, 4; kingbird, 12; crested flycatcher, 10; phoebe, 2; Acadian flycatcher, 32; wood pewee, 16; rough-winged swallow, 4; blue jay, 16; crow, 35; fish crow, 1; Carolina chickadee, 16; tufted titmouse, 17; white-breasted nuthatch, 3; house wren, 6; Carolina wren, 11; mockingbird, 34; catbird, 7; brown thrasher, 2; robin, 78; wood thrush, 75; olive-backed thrush, 3; bluebird, 7; blue-gray gnatcatcher, 11; cedar waxwing, 6; starling, 52; white-eyed vireo, 3; yellow-throated vireo, 7; red-eyed vireo, 92; black and white warbler, 8; parula warbler, 4; yellow-warbler, 1; magnolia warbler, 5; black-throated blue warbler, 3; myrtle warbler, 2; yellow-throated warbler, 6; chestnut-sided warbler, 4; black-poll warbler, 16; pine warbler, 12; prairie warbler, 26; oven-bird, 14; Louisiana water-thrush, 5; Kentucky warbler, 6; yellow-throat, 38; yellow-breasted chat, 18; hooded warbler, 29; redstart, 19; English sparrow, 157 (partly est.); bobolink, 75 (est.); meadowlark, 9; red-wing, 21; orchard oriole, 1; grackle, 14; scarlet tanager, 20; summer tanager, 7; cardinal, 19; indigo bunting, 20; goldfinch, 6; towhee, 26; grasshopper sparrow, 6; Henslow's sparrow, 1; Bachman's sparrow, 2; chipping sparrow, 27; field sparrow, 30; song sparrow, 17. Total, 88 species. (Seen in area May 7: osprey, 1; May 8: nighthawk, 2; May 14: ruddy duck, 1; semipalmated plover, 3; solitary sandpiper, 2; least sandpiper, 1).

Fred R. Scott, Jr.
Richmond, Virginia.

- - - 0 0 0 - - -



The Raven

BULLETIN OF THE VIRGINIA SOCIETY OF ORNITHOLOGY

J. J. MURRAY, EDITOR
LEXINGTON, VA.

VOL. XIX

September-October, 1948

Nos. 9 & 10

Contents

	Page
Canadian Zone in Montgomery County?.....	52
By Robert J. Watson	
The Blue Grosbeak in Rockbridge County, Va.....	54
By J. J. Murray	
Mount Rogers Notes.....	55
By W. F. Minor, F. R. Scott, and C. E. Stevens, Jr.	
Highland County Notes.....	57
By W. F. Minor, F. R. Scott, and C. E. Stevens, Jr.	
Bachman's Sparrow in Craig County.....	59
By William L. Wylie	
Virginia Notes.....	60
By J. J. Murray	

(The dates set for the 1948 Christmas Census are, December 25, 1948, to January 2, 1949, inclusive)

CANADIAN ZONE IN MONTGOMERY COUNTY?

By Robert J. Watson

A recent book, The Mammals of Virginia, by Dr. John Wendell Bailey, contains a brief description of the distribution of life-zones in the state of Virginia. In discussing this subject, the author makes the statement that Montgomery County contains one of the few remaining spots of Canadian zone territory in the state. "In Virginia the Canadian zone is represented only by a few isolated areas in the west and southwest above about 4,000 feet in Highland, Giles, Montgomery, Grayson, and Washington counties" (p. 2).

This statement may come as a surprise to those who are familiar with J. J. Murray's exhaustive discussion of Virginia life-zones in his recent article, "The Faunal Zones of the Southern Appalachians" (The Raven, 1945, 16:10-22). On the occurrence of the Canadian zone in Virginia, Murray remarks as follows: "While there is a good deal of Canadian Zone territory on the high Alleghany plateau of West Virginia, and a fair area of it on the great peaks of the Smokies along the North Carolina-Tennessee line, there is little or no territory in Virginia which can really be called pure Canadian. On White Top and Mt. Rogers... and possibly on a few other high mountains in Southwest Virginia, we have some small areas which are practically Canadian; and on Middle Mountain in Highland County we have some territory which approaches it. That is about all we can boast" (p. 20). Thus, according to Murray, the Canadian zone is unknown in Montgomery County.

The life-zone map of Virginia, given by Bailey on page 3 of his book, indicates that the supposed Canadian zone region of Montgomery County occurs in the extreme northwestern portion of the county. As shown on the map, it is evident that this region includes Gap Mountain, which runs along the northwestern border of the county and forms the Montgomery-Giles County boundary, and possibly also Brush Mountain, a lower ridge running parallel with Gap Mountain about two miles to the south, and the valley of Poverty Creek, which separates the two ranges.

As a lifelong resident of Montgomery County, I have spent many hours exploring Brush Mountain and Poverty Creek valley. Thus I knew at once, from personal experience, that these areas were definitely not Canadian zone territory. If Dr. Bailey's statement had any validity, it must apply only to Gap Mountain, which is far less readily accessible from Blacksburg, and has been much less explored.

In order to ascertain definitely whether the statement might be true of Gap Mountain, I decided to make a trip to the area to observe it at first hand. Before doing so, however, I wrote to Dr. Murray, to inquire his opinion on this point. In a letter dated May 24, 1948, Dr. Murray replied in part as follows: "As to Canadian Zone territory in the area which you mention, I would be very doubtful...from all the evidence I have been gathering, based both on plants and animals, particularly birds, there is now little or no Canadian territory in the State. It may be looked for only where there is territory...over 4,000 feet... I certainly would not expect to find any Canadian territory at the region in question."

Murray's statement as to the altitudinal distribution of the Canadian zone in Virginia--and, in fact, Bailey's own statement, quoted above, that the zone occurs "above about 4,000 feet"--would seem at once to rule out any possibility

of its occurrence in Montgomery County, particularly in the area indicated by Bailey. The maximum elevation of Gap Mountain, according to U. S. Geological Survey maps of the area, is less than 3,000 feet, while Brush Mountain is considerably lower. As a matter of fact, if one wishes to look for Canadian zone territory in Montgomery County, a more logical (though still unlikely) place to seek it would be in the extreme southeastern portion of the county, on Poor Mountain, where the elevation reaches 3,700 feet.

In order, however, to leave no doubt about the matter, I visited Gap Mountain on June 24, 1948, spending a total of approximately seven hours in the field. The summit of the mountain was surveyed starting from a point about two miles east of the Montgomery-Pulaski County line, and working eastward to where U. S. Highway 460 crosses the mountain, a distance of from six to eight miles.

On the basis of observations made at this time, it can definitely be stated that there is nothing in the area at all resembling Canadian zone. The forest growth on Gap Mountain is indistinguishable from the predominantly deciduous forest to be found in the rest of the county, consisting principally of chestnut oak (Quercus montana), red maple (Acer rubrum), red oak (Quercus borealis var. maxima), hickory (Carya ovata), scarlet oak (Quercus coccinea), white oak (Q. alba), and young sprouts of chestnut (Castanea dentata), with some pines (Pinus rigida and P. virginiana), black walnut (Juglans nigra), and cherry birch (Betula lenta).

Ornithological observations were hindered by rain and foggy weather, but the following birds were observed on the mountain: Red-eyed vireo, towhee, ovenbird, hooded warbler, crested flycatcher, blue jay, wood thrush, mourning dove, pileated woodpecker, robin, tufted titmouse, scarlet tanager, cardinal, Carolina chickadee, worm-eating warbler, black-throated green warbler, chimney swift, goldfinch, indigo bunting, yellow-breasted chat.

The only ornithological discovery of note is the Black-throated Green Warbler. A single bird of this species was heard singing on the Montgomery County side of the mountain, some seventy-five feet or so below the summit. So far as I know, there are no nesting records for this species in Montgomery County, but this discovery raises the possibility that it may have to be added to the list of breeding birds in the county, if it has not been already.

From the above description, it will readily be seen that the region so described cannot in any way be characterized as Canadian zone territory. It is precisely what one would have expected to find under the circumstances, and is hardly to be distinguished (except possibly by the presence of the Black-throated Green Warbler) from any other mountain in Montgomery County, or anywhere in the Virginia Alleghenies at such elevations. Since my observations dealt only with the bird and plant life of the area, I cannot answer for the mammalogical, entomological, or other characteristics of the region; but whatever these latter may be, it is obviously impossible to apply the term "Canadian zone" to a region such as that described above.

I venture to suggest, therefore, that Dr. Bailey's statement as to the occurrence of Canadian zone territory in Montgomery County is based upon a misunderstanding of some sort.

This is, admittedly, a trifling criticism to make of Dr. Bailey's work, and is not, of course, intended in any spirit of carping criticism, but merely as a desire to set the record straight. I believe it may be of some interest, for the sake of accuracy, to place the above observations on record, particularly for

the information of any readers of The Raven who may have been puzzled by the conflicting statements of Murray and Bailey. There is no Canadian zone territory in Montgomery County.

4 Varsity Hall, University of Va.
Charlottesville, Virginia

- - - 0 0 0 - - -

THE BLUE GROSBEAK IN ROCKBRIDGE COUNTY, VIRGINIA

By J. J. Murray

The Blue Grosbeak seems to be on the increase in western Virginia. When the V.S. O. began to gather data on Virginia birds in 1930 there was but a single record for this species west of the Blue Ridge. My first records for Rockbridge County were made in 1935, when a pair (the male in adult plumage) were seen at Cameron's Pond on May 20, and a different pair (male not in full plumage) nearby on June 2. I had reports of a pair in 1936 and in 1937. It was seven years before I saw another (1944). Since that time the species has clearly been on the increase in this county. By 1945 I was sure that the bird was nesting at several places. In 1947 Bobby Paxton found a young bird not long out of the nest at Goshen Pass. During the summer of 1948 I located at least seven pairs in the county; and Rev. W. B. Clemmons of Fairfield tells me that he saw several other pairs along South River, in the northeastern section of the county.

In the summer of 1948, within thirty yards of my cabin on Maury River, three miles north of Lexington, I discovered the first nest to be reported in the State west of the Blue Ridge. On July 13 the female was gathering fine bark strips from a large cedar tree. Later in the day I found her at work on a nest, which was almost finished, located eight feet up in a sapling that was covered over with vines. This was probably a second nesting, as I had seen the pair about a limestone sink-hole, full of shrubs and briars, about four hundred yards from the cabin. The nest was a small edition of the Cardinal's nest, somewhat deeper in proportion than the nest of that species. The nest contained on July 15 one egg, laid, I think, that day. On the 17th there were three eggs of the owner and a Cowbird's egg. Since I did not want anything to interrupt this interesting nesting, I removed the parasite's egg. Incubation did not begin until all the eggs were laid. I could not visit the cabin often enough to examine the nest every day. On the 30th there were three young, which had probably hatched on the preceding day. The young left the nest on the afternoon of August 8 or in the morning of August 9. As best I could determine, then, the incubation period was thirteen days, and the young spent nine days in the nest.

I have rarely seen birds that were more shy and furtive about the nest than these Grosbeaks. The male never, to my knowledge, came anywhere near the nest at any time. He usually sang at a distance of about 150 yards or more from the nest. The female was also very shy. When the nest was approached she waited until I came within twenty feet, then quietly dropped off into some thick papaw bushes, and usually flew from there almost at once to a high perch in an oak some fifty feet from the nest. Generally she was silent, once giving a single sharp call note, and at another time several low 'chips' from her post in the oak. She would return quickly to the nest, however, when I withdrew. After the young left the nest, the male was in close attendance on them, with the female, both of them

calling loudly when I came near, and the male stopping at times to sing. The young were successfully reared, as I caught sight of them from time to time throughout the month of August.

Lexington, Virginia.

- - - 0 0 0 - - -

MOUNT ROGERS NOTES

by W. F. Minor, F. R. Scott, and C. E. Stevens, Jr.

For some time the co-authors have been interested in how the ornithological picture may have changed on Mt. Rogers since Drs. A. Wetmore and J. J. Murray visited it some years ago. We paid a visit to Rogers and the surrounding area on June 16-18, 1948.

Mt. Rogers, highest peak in Virginia (5719 ft.), is located in the southwestern part of the state on the Smyth-Grayson County line and only five miles from the North Carolina-Virginia boundary. A dense second-growth stand of red spruce and Fraser balsam fir covers its summit and those of the surrounding high points.

We camped in Deep Gap, on the west side of Rogers, and climbed the peak twice, on June 16 and 17. From this gap a road leads to an expansive, boulder-strewn meadow on the southern side of the mountain, and from this 5200 ft. elevation a trail leads almost due north to the summit. From the top we proceeded to Wilburn Ridge, the easternmost of three parallel ridges of 5000+ foot elevation which stretch to the south from the general area of Rogers. Although possessing the greatest average elevation of the three, Wilburn Ridge proved to be rather uninteresting save for the unobstructed view available from its pasturelands. The terminal northern peak of Cabin Ridge (central of the above-mentioned three) was crossed in reaching Wilburn Ridge, and the fir-spruce growth extended this far from Rogers but at a considerably lower elevation.

The annotated list of birds found on June 17 follows:

Turkey Vulture, 3.
Broad-winged Hawk, 1.
Sparrow Hawk, 1, on Wilburn Ridge.
Ruffed Grouse, 1 adult and 4 chicks.
Chimney Swift, 5.
Flicker, 2.
Hairy Woodpecker, 4.
Downy Woodpecker, 3.
Blue Jay, 2.
Crow, 4.

(We were surprised at not finding either chickadee above 4900 ft. on the north and south sides of Rogers or on Cabin Ridge. One would almost expect the black-capped in the birch-fir woods, but perhaps this small island of Canadian zone is not enough to serve. The Tufted Titmouse also was not found.)

Red-breasted Nuthatch, 20. One bird calling as low as 4900 ft. at Deep Gap, in deciduous woods. This species is fairly common on the summit of Rogers and

is scattered out to Cabin Ridge in the fir-spruce.

Brown Creeper, 1, a singing male seen on the summit of Rogers. A cursory investigation of Virginia ornithological literature failed to reveal any record of creepers having been found on the mountain previously.

Winter Wren, 22, fairly common in the fir-spruce on Rogers and Cabin Ridge.

Catbird, 6.

Robin, 24. Found even in the fir-spruce on the top of Rogers.

Wood Thrush, 3 near Deep Gap.

Wren, 21. One feeding a young bird out of the nest on June 16.

Golden-crowned Kinglet, 12, in the fir-spruce on Rogers and Cabin Ridge. Two birds seen carrying food.

Cedar Waxwing, 13.

Mountain Vireo, 11. One carrying food.

Red-eyed Vireo, 2 at 5000 ft. near Deep Gap.

Cairns's Warbler, 4.

Black-throated Green Warbler, 20. Most common in the mixed deciduous-coniferous woods. Several feeding young out of the nest on June 16.

Chestnut-sided Warbler, 49. Commonest in areas where the pastureland is growing up in weeds - predominately blackberry.

Oven-bird, 2, below the fir-spruce.

Yellow-throat, 17, mostly in the blackberry patches along Wilburn Ridge. Several carrying food.

Canada Warbler, 15. One carrying food on June 16.

Scarlet Tanager, 3, below the fir-spruce.

Rose-breasted Grosbeak, 14, below the fir-spruce.

Indigo Bunting, 1, on Wilburn Ridge.

Goldfinch, 1, on Wilburn Ridge.

(Hypothetically) Red Crossbill. While we were on the summit of Rogers a flock of several birds flew over "pipping" and "chittering" but were not seen. Later in the day, while on Wilburn Ridge, we saw a flock of 4 fringillids which were flying eastward toward Mt. Rogers and calling like the birds we previously heard. They were so far away their color could not be determined nor could their crossed bills be seen. However, they were of crossbill size and seemed to exhibit behavior that no other local birds we were familiar with showed.

Towhee, 33.

Vesper Sparrow, 1.

Carolina Junco, 69. Feeding young out of the nest on June 16 and 17.

Song Sparrow, 19, in the blackberry patches on Wilburn Ridge and the south-east side of Rogers.

A visit was made to White Top, the second highest mountain in Virginia (5520 ft.), on June 18. This mountain is only 3.5 miles southwest of Mt. Rogers, and like the higher peak its summit is covered with fir which, however, is not as mature or as damp underneath as the growth on Rogers. It was probably due to the dryness of the coniferous woods that we found fewer numbers of the high-altitude species (only 5 Red-breasted Nuthatches and 3 Winter Wrens). The only observations of note were two Golden-crowned Kinglets carrying food and a group of three Brown Creepers. William C. Rives met with the Creeper on White Top in summer over fifty years ago (A Catalogue of the Birds of the Virginias). As on Rogers, we found no Chickadees.

Charlottesville and Richmond, Virginia.

- - - 0 0 0 - - -

HIGHLAND COUNTY NOTES

By W. F. Minor, F. R. Scott, and C. E. Stevens, Jr.

This interesting section of Virginia was visited on June 21-22 by the writers in the hope that they could find some additional information to supplement that given by Prof. Maurice Brooks and Dr. J. J. Murray, who have made observations in the area. The immediate vicinity visited was around Middle Mountain, a section which can be roughly classified as upper Alleghanian. The woodlands around Middle Mountain and Laurel Fork seem to have been lumbered heavily, are rather young, and consist of various combinations of beech, birch, and maple. Along the higher ridges are small young spruce groves.

The annotated list of species recorded on June 22 on Collins Run, Laurel Fork, and Middle Mountain, from 3200-3800 feet, is as follows:

Broad-winged Hawk, 1.

Ruffed Grouse, 1 adult with 7 chicks.

Chimney Swift, 1.

Ruby-throated Hummingbird, 1.

Flicker, 2.

Hairy Woodpecker, 1.

Downy Woodpecker, 1.

Phoebe, 2.

Least Flycatcher, 4, on Laurel Fork and at Middle Mountain School.

Wood Pewee, 3.

Blue Jay, 1.

Raven, 1 around Middle Mountain School.

Crow, 6.

Black-capped Chickadee, 13. Found along Collins Run, Laurel Fork, and on Middle Mountain. A pair feeding young birds out of the nest at Middle Mountain School.

House Wren, 1.

Catbird, 10.

Brown Thrasher, 5.

Robin, 44. A nest with 2 eggs.

Wood Thrush, 21.

(It is strange that we did not find any Veeries in this seemingly suitable locality.)

Cedar Waxwing, 8.

Starling, 2.

Mountain Vireo, 4.

Red-eyed Vireo, 61.

Black and White Warbler, 15.

Golden-winged Warbler, 4. One near Laurel Fork, the others around Middle Mountain School. We spent a considerable time with these birds, mainly searching for nests. Since they kept high in the trees, they were next to impossible to locate if they did not sing. On investigating a peculiar song which he believed to belong to this species, Scott saw a typical Lawrence's hybrid, noting especially the black cheek patch and bib superimposed on a yellow background. Later, the group as a whole was unable to locate it again.

Parula Warbler, 1.

Magnolia Warbler, 24. Found along Collins Run, Laurel Fork, and commonly about Middle Mountain School. We found several birds carrying food at the latter place. About 45 minutes were spent in a hemlock grove in the attempt to find a Magnolia's nest, but although the birds seemed very agitated and persistently carried food, we could not locate a nest or any young. These birds were found in all varieties of situations: birch-maple woods, laurel thickets, hemlock, and

spruce groves. In many respects they make a good substitute for the hooded warbler.

Cairns's Warbler, 15.

Black-throated Green Warbler, 23.

Blackburnian Warbler, 2. A pair feeding young in a nest at Middle Mountain School.

Chestnut-sided Warbler, 18. Several carrying food.

Oven-bird, 19.

Yellow-throat, 5.

Canada Warbler, 16. One carrying food.

Cowbird, 1.

Scarlet Tanager, 11.

Rose-breasted Grosbeak, 4.

Indigo Bunting, 5.

Purple Finch, 1, a singing male seen by Scott at Middle Mountain School. Murray saw a male on Middle Mountain in June, 1938 (Raven 9:8).

American Goldfinch, 5.

Towhee, 32. A pair feeding young out of the nest.

Vesper Sparrow, 2.

Carolina Junco, 6. It seems unusual that this bird is so uncommon here.

Chipping Sparrow, 3.

Field Sparrow, 12. A pair feeding young out of the nest.

Song Sparrow, 1.

Charlottesville and Richmond, Virginia

- - - 0 0 0 - - -

BACHMAN'S SPARROW IN CRAIG COUNTY

While on a field trip to Potts Mountain, Craig County, Virginia, on July 8, 1948, several Bachman's pinewoods sparrows (Aimophila aestivalis bachmanii) were observed at an elevation of approximately 3000 feet. The location was two and one-half miles southeast of Waiteville, Monroe County, West Virginia on the

Virginia side of the Virginia-West Virginia border. So far as I know, this constitutes a new elevation record for this bird in Virginia.

William L. Wylie
732 Snyder Street
Morgantown, West Virginia

- - - 0 0 0 - - -

VIRGINIA NOTES

Cliff Swallow. Information on nesting colonies of the Cliff Swallow in Virginia is badly needed. Anyone who knows of colonies is asked to report them to the Editor. This bird seems to have become increasingly scarce as a breeder in the State. At the time of the publication of H. H. Bailey's book, The Birds of Virginia, in 1913, it was rapidly diminishing as a breeding bird in Tidewater Virginia. So far as I know, there are now no breeding colonies east of the Blue Ridge; and such colonies have become uncommon even in the Valley. I know of no colony now in Rockbridge County. This summer I found 14 pairs nesting in two barns on the Hevener farm at Hightown, Highland County. I am informed by Mrs. R. E. Christian of a small colony near Deerfield in the western part of Augusta County. Other reports are desired.

Black Vulture. A small flock was seen near Warrenton, Fauquier County, on October 11, 1948; and two birds in Madison County on October 12.

Bewick's Wren. A pair were feeding young on the wing in the western edge of Highland County, where Route 250 crosses Redoak Knob at an elevation of 3750 feet, June 15, 1948.

Golden-winged Warbler. A pair, evidently nesting, seen on Redoak Knob at the place mentioned above, June 15, 1948.

Yellow Warbler. This warbler seems to be scarce in the higher mountain valleys. I saw and heard a male, June 15, 1948, in Bath County, just across the line from Highland County, on Highway 220.

J. J. Murray, Lexington, Virginia

- - - 0 0 0 - - -



The Raven

BULLETIN OF THE VIRGINIA SOCIETY OF ORNITHOLOGY

J. J. MURRAY, EDITOR
LEXINGTON, VA.

VOL. XIX

November-December, 1948

Nos. 11 & 12

CONTENTS

	Page
Further Additions to the Virginia Avifauna. By J. J. Murray	62
Virginia in the 1948 Ornithological Literature. By J. J. Murray	63
Index to Volume 19	63

FURTHER ADDITIONS TO THE VIRGINIA AVIFAUNA

By J. J. Murray

In "A List of Virginia Birds" (The Raven, Vol. 9, 85-93, 1938), the writer reported 369 species and subspecies of birds which have been recorded from the State. Two subsequent papers, "Recent Additions to the Virginia Avifauna" (The Raven, Vol. 15, 90-92, 1944) and "New Birds for the Virginia List" (The Raven, Vol. 18, 2-3, 1947), brought the list to 390. The removal from the 'Check-List' by the A. O. U. Committee on Classification and Nomenclature of the Red-legged Black Duck reduced the State list to 389. Eleven additional forms are listed in this present paper, bringing the total to an even 400. The additions are as follows:

1. Heath Hen. Tympanuchus cupido cupido (Linnaeus). The next edition of the 'Check-List' will include Virginia in the former range of this now extinct race.
2. Purple Sandpiper. Arquatella maritima (Brunnich). In the 1945 Christmas census report, "Little Creek to Cape Charles, Virginia" (The Raven, Vol. 17, 7-9, 1946), Mrs. A. C. Reed gives a satisfactory sight record of two Purple Sandpipers at the Cape Charles breakwater, December 31, 1945. It is a question, of course, whether this species should be included in any final list of Virginia birds until a specimen is taken.
3. Appalachian Bewick's Wren. Thryomanes bewickii altus Aldrich. This recently-described subspecies has now been accepted by the A. O. U. Committee. There are specimens in the United States National Museum from the Virginia area around Washington, one from Rockbridge County (December 19, 1939), and from other places in the western part of the State. Birds from eastern Virginia would belong to the typical form, T. b. bewickii.
4. Newfoundland Veery. Hylocichla fuscescens fuliginosa Howe. Charles O. Handley, Jr., in a paper, "Subspecific Identities of Some Winter and Transient Birds from Virginia" (The Auk, Vol. 65, 133-135, 1948), notes a specimen from Laurel Fork, Highland County, September 22, 1943, which is the first Virginia record for this recently-accepted subspecies.
5. Bullock's Oriole. Icterus bullockii (Swainson). Fred R. Scott (The Raven, Vol. 19, 4, 1948) states that there is a female in the Dwight collection in the American Museum of Natural History, taken on Smith's Island, Virginia, July 23, 1895. It has not been identified subspecifically.
6. Sitka Crossbill. Loxia curvirostra sitkensis Grinnell. Fred R. Scott, in the paper noted above, lists four specimens in the American Museum of Natural History: male, Alexandria County, December 11, 1897; female, Falls Church, November 20, 1887; male and female, Four Mile Run, Alexandria County, February 12, 1888.

7. Labrador Savannah Sparrow. Passerculus sandwichensis labradorius Howe. Handley, in the paper noted above, lists 7 specimens of this race from Accomac, Arlington, Fairfax, and Montgomery Counties.

8. Churchill Savannah Sparrow. Passerculus sandwichensis oblitus Peiers and Griscom. Handley, in the paper noted above, lists three Blacksburg specimens, October 30-November 2.

9. Western Grasshopper Sparrow. Ammodramus saviannarum perpallidus (Gmel.). Handley, in the paper noted above, lists a specimen from Blacksburg, November 14, 1946.

10. Dakota Song Sparrow. Melospiza melodia juddi Bishop. Handley, in the paper noted above, lists three specimens: Blacksburg, March 22, 1941; Asberry (Tazewell County), February 21, 1940; and Rocky Gap (Bland County), February 22, 1940.

11. Western Swamp Sparrow. Melospiza georgiana ericrypta Oberholser. Handley, in the paper noted above, lists four specimens from Blacksburg: November 12, 1938; March 21, 1939; April 10, 1939; and April 19, 1941.

Lexington, Virginia

----- 00000 -----

VIRGINIA IN THE 1948 ORNITHOLOGICAL LITERATURE

By. J. J. Murray

The most important paper of the year from the standpoint of Virginia is one by Charles C. Handley, Jr., entitled, "Subspecific Identities of Some Winter and Transient Birds from Virginia" (The Auk, Vol. 65, 133-135, 1948). After carefully examining the bird collection of the Virginia Cooperative Wildlife Research Unit and looking over additional material in the United States National Museum he has found specimens of six subspecies not previously reported from Virginia. These are the Newfoundland Veery, Labrador and Churchill Savannah Sparrows, Western Grasshopper Sparrow, Dakota Song Sparrow, and Western Swamp Sparrow. He also reports specimens of several other birds which are rare or uncommon in the State and of several forms not yet accepted by the A. O. U. Committee on Classification and Nomenclature.

In a paper in the April issue of The Auk (p. 295), "On Type Localities of Catesby," Dean Amadon argues that Virginia is the type locality for the Bob-white. In the same issue Jackson M. Abbott reports "Sutton's Warbler at Fort Belvoir, Fairfax County, Virginia" on August 13, 1947 (p. 302); W. H. Bell gives records for the "Cerulean Warbler in the District of Columbia, Maryland, and Virginia" (pp. 307-308); and Thomas Smyth reports on "Late Nesting of Ruby-

throated Hummingbird at Mt. Lake, Virginia" (pp. 308-309), with young still in the nest on August 23. In the October issue J. J. Murray reports "Stilt Sandpiper and Caspian Tern at Lexington, Virginia" (p.607) the first having been seen and the second collected on October 13, 1947.

Of considerable interest to Virginia bird students is the reorganization of the Regions of the United States for the Season Reports in Audubon Field Notes. The whole country is to be more adequately covered now. The Regions are larger and are more logically delimited. It will mean, particularly if our Virginia observers will send in reports regularly, much better coverage for our State. The territory in Virginia east of the Blue Ridge is placed in the Middle Atlantic Coast Region, which includes as well the District of Columbia, most of Maryland, Delaware, eastern Pennsylvania, and the southern half of New Jersey. Reports for this Region are being prepared by Julian K. Potter and the writer. Western Virginia is placed in the Appalachian Region, the editor for which is Prof. Maurice Brooks of West Virginia University. Spring and summer season reports on this basis have already appeared.

Lexington, Virginia

-----00000-----

In connection with the Season Reports in Audubon Field Notes we need more reporters among V. S. O. membership in order that Virginia may be given better representation. Reports for localities east of the Blue Ridge foot hills should be sent to J. J. Murray, 6 White St., Lexington, Va. Reports for the mountains and the Valley and Southwest Virginia should go to Prof. Maurice Brooks, Division of Forestry, West Virginia University, Morgantown, West Virginia. Reports should cover occurrence of any unusual birds, changes in the status of any species, and any very early or very late migration dates. Reports are due as follows:

Winter Season - - - - April 1st.
Spring Migration - - - June 1st.
Summer Season - - - - August 1st.
Fall Migration - - - - December 1st.

-----00000-----

INDEX TO VOLUME NINETEEN - 1948

Abbott, Capt. Jackson M. - 8
Albemarle County - 36
Auk, Razor-billed - 7

"Bachman's Sparrow in Craig County" - 59
Back Bay - 7
Bath County - 60
Beasley, Ray J. - 7
Bedford County - 32

- "Bird Study at Camp Shenandoah" - 44
"Birds Feeding on Rotten Apples" - 36
Blacksburg - 12
"Bluebirds and Cub Scouts" - 35
Bob-white - 63
Brant, Black - 2
"Breeding Bird Census, Lexington, Virginia, 1948" - 46
Bridgewater - 34
Brooks, Maurice - 29
Bunting, Indigo - 56 -59
 " , Snow - 4 - 5

"Canadian Zone in Montgomery County?" - 52
Carpenter, Max - "Holboell's Grebe and Double-crested Cormorant in
 Rockingham County" - 34
 " , Max - 11
Carroll, Alice - 12
 " , R. I. - 12 - 23
 " , R. P. - "A Late Nesting Date for the Goldfinch" - 33
Catbird - 53
Censuses, Winter Bird - 36
Chapman, John - 12
Charlottesville - 2 - 47 - 47
Chickadee, Black-capped - 58
Chcato, McLin - 10
"Christmas Census Reports for 1947" - 7
Clark, Martha - 29
Clemmons, Rev. and Mrs. W. B. - 11
Cormorant, Double-crested - 34 - 43
Cosby, W. Claude, "Bluebirds and Cub Scouts" - 35
Cowbird - 59
Craig County - 59
Creeper, Brown - 56 - 57
Crossbill, Red - 4 - 56
 " , Sitka - 4 - 62
Curlew, Hudsonian - 6

Danville - 10
Dayton - 34
Dovekie - 3
Duck, Wood - 42 - 45

Eagle, Bald - 11
 " , Golden - 2 - 32
"Eastern Shore Notes" - 6
Echols, Gordon - 12
Egret, American - 42
"Engleby, Thomas Lester" - 38
English, A. O. and Dorothy - 12
 " , A. O., "Thomas Lester Engleby" - 38

Fairfield - 11
Finch, Purple - 59

- Flycatcher, Least - 58
Fort Belvoir - 8
Freer, Jane - 10
" , Ruskin S., "A Golden Eagle in Bedford County" - 32
Fultz, Draper - 11
"Further Additions to the Virginia Avifauna" - 62
- Gadwall - 8
Gannet - 5
Gallinule, Florida - 43 - 47
Giles, Robert - 10
"Golden Eagle in Bedford County" - 32
Goldfinch - 33 - 56 - 59
Goose, Blue - 5
" , Canada - 5
" , Snow - 5
Grackle, Boat-tailed - 6
" , Purple - 45
"Great Dismal Swamp" - 14
Grebe, Holboell's - 30 - 47
Grey, John H., Jr. - 9 - 37
Grosbeak, Blue - 54
" , Rose-breasted - 56 - 59
Grouse, Ruffed - 56 - 57
Gull, Great Black-backed - 5
Guss, Dr. Samuel - 10
Hague, Florence S., "The Fifteenth Annual Meeting" - 28
Hendley, C. O. Sr. - 12 - 28
" , C. O., Jr. - 12
" , John - 12
Harrisonburg - 10
Hawk, Broad-winged - 56 - 57
" , Red-shouldered - 46
Hawkins, L. E. - 12
Heath Hen - 62
Heron, Great Blue - 12 - 42
" , Green - 34
" , Louisiana - 6
Highland County - 60
"Holboell's Grebe and Double-crested Cormorant in Rockingham County" - 34
Horned Lark, Northern - 5
Hostetter, D. R. - 11 - 34
" , Jacob H. - 28
Hummingbird, Ruby-throated - 57 - 63
- Jopson, Dr. Harry G. M. - 34
Junco, Carolina - 9 - 57 - 59
Kinglet, Golden-crowned - 56 - 57
- "Late Nesting Date for the Goldfinch, A" - 33
Lawless, Kenneth - 9 - 10 - 29
" , " and Charles E. Stevens, Jr., "Spring Count,
Charlottesville" - 47

- Lewis, Gordon - 9
" , Harry - 9
Lexington - 11 - 28 - 30 - 33 - 46 - 46
Lyle, Royster, Sr. and Jr. - 10
Lynchburg - 10
- McIntosh, Bill - 10
Minor, William F. - 29 - 37
" , W. F., F. R. Scott, and C. E. Stevens, Jr., "Mt. Rogers Notes"-55
" , W. F., F. R. Scott, and C. E. Stevens, Jr., "Highland County
Notes" - 57
- Montgomery County - 52
"Mount Rogers Notes" - 55
Murray, Dickson Vardell - 12
Murray, J. J. - 12
" , J. J., "The Great Dismal Swamp" - 14
" , J. J., "1948 Breeding Bird Census, Lexington, Va." - 46
" , J. J., "V. S. O. Field Trip, Lexington, 1948" - 30
" , J. J., "Blue Grosbeak in Rockbridge County, Va." - 54
" , J. J., "Virginia Notes" - 60
" , J. J., "Further Additions to the Virginia Avifauna" - 62
" , J. J., "Virginia in the 1948 Ornithological Literature" - 63
- Murray, James Jr. - 12
" , James Jr., "Bird Study at Camp Shenandoah" - 44
Murray, J. W. - 12
- "Notes on the Spring Migration at Charlottesville" - 47
Nuthatch, Red-breasted - 55 - 57
- "Observations on the Birds of Sussex County" - 33
Old-Squaw - 5
Oriole, Baltimore - 45
" , Bullock's - 4 - 62
Ovenbird - 56 - 59
Owl, Long-eared - 3
- Paxton, Robert - 12
" , Robert, "A Red-shouldered Hawk's Nest" - 46
Perkins, Jack E. - 7 - 28
Petrel, Black-capped - 2
" , Wilson's - 6
Phalarope, Northern - 2
Prior, E. Gertrude - 10
- Rail, King - 2 - 34
" , Yellow - 2
Raven - 8 - 28 - 31 - 58
"Red-shouldered Hawk's Nest, A" - 46
Reynolds, Dr. Bruce H. - 28
Richards, W. L. - 12
Richmond - 8 - 48
Roanoke - 12
Robin - 56 - 58
" , Eastern - 3

- Rockbridge County - 54
Rockingham County - 34 - 44
- Sandpiper, Purple - 62
" , Stilt - 63
" , Western - 47
" , White-rumped - 2
Sapsucker, Yellow-bellied - 3
Scoter, American - 5
" , Surf - 5
" , White-winged - 5
Scott, Fred R. - 7 - 8 - 9 - 48 - 55 - 57
" , Fred R., "Eastern Shore Notes" - 6
" , Fred R., "V. S. O. Winter Trip to Back Bay" - 4
" , Fred R., "Some interesting Specimens of Virginia Birds in the
American Museum of Natural History" - 2
" , Fred R., and Charles E. Stevens, "A Trip down the Chickahominy"-42
Shaffer, C. H. - 10
Shenandoah National Park - 8
Sigel, George H. - 8
Siskin, Pine - 8 - 34
"Some Interesting Specimens of Birds in the A. M. N. H." - 2
Sparrow, Bachman's - 6 - 31 - 59
" , Chipping - 9 - 59
" , Field - 59
" , Grasshopper, Western - 62
" , Lincoln's - 4
" , Savanna, Churchill - 62
" , Song - 57 - 59
" , Savanna, Labrador - 62
" , Song, Dakota - 63
" , Swamp, Western - 63
" , Vesper - 57 - 59
"Spring Count, Charlottesville" - 47
"Spring Bird Count from Richmond" - 48
Starling - 58
Steirly, C. C., "Observations on the Birds of Sussex County" - 33
Stevens, C. E., Jr. - 7 - 9 - 37 - 41 - 47 - 55 - 57
" , C. E., Jr., "Notes on the Spring Migration at Charlottesville"-47
Stevens, Dr. Kingsley - 10
Sussex County - 33
Suter, Daniel - 11
Swallow, Barn - 43
" , Cliff - 60
Sweet Briar - 9
Sydnor, James R. - 29
Sydnor, J. R. and F. R. Scott, "Spring Bird Count from Richmond" - 48
- Tanager, Scarlet - 49 - 56 - 59
" , Summer - 49
Tern, Black - 6
" , Caspian - 63
" , Common - 2

- Tern, Forster's - 47
" , Roseate - 6
" , Royal - 47
Thrush, Bicknell's - 3
" , Gray-cheeked - 3
" , Wood - 56 - 58
Towhee - 57 - 59
"Trip down the Chickahominy" - 42
Turkey, Wild - 9
- Veery - 56
" , Newfoundland - 62
Vireo, Philadelphia - 3
" , Red-eyed - 56 - 58
"Virginia Avifauna, Further Additions" - 62
"Virginia in the 1948 Ornithological Literature - 63
"Virginia Notes" - 60
V. S. O. - Annual Meeting - 28
" - Field Trip - 30
" - New Members - 39
" - Officers - 30
" - Treasurer's Report - 38
"V. S. O. Winter Trip to Back Bay" - 4
Vulture, Black - 45 - 60
- Warbler, Black and White - 58
" , Blackburnian - 59
" , Blackpoll - 3
" , Black-throated Green - 53 - 56 - 59
" , Cairn's - 56 - 59
" , Canada - 56 - 59
" , Cerulean - 32 - 43 - 47 - 63
" , Chestnut-sided - 56 - 59
" , Connecticut - 4
" , Golden-winged - 58 - 60
" , Magnolia - 58
" , Parula - 58
" , Prothonotary - 42
" , Sutton's - 63
" , Swainson's - 3
" , Wayne's - 26
" , Worm-eating - 47
" , Yellow - 60
Warren (Albemarle Co.) - 9
Warrenton - 60
Water-thrush, Northern - 3
Watson, Robert J. - 12
" , R. J., "Birds Feeding on Rotten Apples" - 36
" , R. J., "Canadian Zone in Montgomery County?" - 52
Waxwing, Cedar - 56 - 58
Weaver, Richard - 11
Westbrook, Johnny - 10

Widgeon, European - 2
Wiltshire, Mr. and Mrs. James W. - 10
Woodpecker, Red-cockaded - 3
" , Red-headed - 45
Wren, Bewick's - 60
" , Appalechian Bewick's - 62
" , House - 58
" , Long-billed Marsh - 43
" , Winter - 56 - 57
Wylie, William L., "Bachman's Sparrow in Craig County" - 59
Yellow-throat - 56 - 59
Yorktown - 7