The Raven

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The Virginia Society of Ornithology, Inc. exists to encourage the systematic study of birds in Virginia, to stimulate interest in birds, and to assist the conservation of wildlife and other natural resources. All persons interested in those objectives are welcome as members. Present membership includes every level of interest, from professional scientific ornithologists to enthusiastic amateurs.

Activities undertaken by the Society include the following:

1. An annual meeting (usually in the spring), held in a different part of the state each year, featuring talks on ornithological subjects and field trips to nearby areas.

2. Other forays or field trips lasting a day or more and scheduled throughout the year so as to include all seasons and to cover the major physiographic regions of the state.

3. A journal, *The Raven*, published twice yearly, containing articles relevant to Virginia ornithology, as well as news of the activities of the Society and its chapters.

4. A newsletter, published quarterly, containing current news items of interest to members and information about upcoming events and pertinent conservation

issues.

5. Study projects (nesting studies, winter bird population surveys, etc.) aimed

at making genuine contributions to ornithological knowledge.

In addition, local chapters of the Society, located in some of the larger cities and towns of Virginia, conduct their own programs of meetings, field trips and other projects.

Those wishing to participate in any of the above activities, or to cooperate in advancing the objectives of the Society, are cordially invited to join. Annual dues are \$15.00 for active members, \$25.00 for sustaining members, \$50.00 or more for contributing members, \$400.00 for life members, and \$20.00 for family members (limited to husband, wife and their dependent children).

Editorial queries and comments may be directed to C. Michael Stinson, Rt. 1,

Box 186, Prospect, VA 23960.

OFFICERS OF THE VSO

President: Thelma Dalmas, 1230 Viewmont Drive, Evington, Virginia 24550 Vice President: Larry Lynch, 9430 Tuxford Road, Richmond, Virginia 23236 Secretary: Lisa Hamilton, 321 York Avenue, Staunton, Virginia 24401 Treasurer: Barbara Thrasher, 120 Woodbine Drive, Lynchburg, Virginia 24502 Raven Editor: C. Michael Stinson, Rt. 1, Box 186, Prospect, VA 23960 Raven Editor Emeritus: F.R. Scott, 404 Beechwood Drive, Richmond, Virginia 23229 Newsletter Editor: Bettye J. Fields, 39 Culpepper Avenue, Newport News, Virginia 23606

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Editor C. Michael Stinson

Editor Emeritus F. R. Scott



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THE 1998 HALIFAX COUNTY FORAY

JEFFREY C. BLALOCK 103 Elizabeth Court South Boston, VA 24592

The Virginia Society of Ornithology held its 28th breeding bird foray from 1 June to 7 June 1998 in Halifax County. Participants were Robert Barbee, John Bazuin Jr., Jeff Blalock (foray director), Shirley Blalock, Roger Clapp, John Dalmas, Thelma Dalmas, Charles Hansrote, Melva Hansrote, Richard Miller, Ruth Ann Miller, Gene Sattler and Charles "Mo" Stevens.

A total of 101 species were found during the foray period, of which 33 were confirmed to be breeding. The highlight of the foray was the sighting by several different parties of up to eight Mississippi Kites (*Ictinia mississippiensis*), the first report for Halifax County and a major westward expansion of the range of this species in Virginia.

Halifax County is in the southern Piedmont of Virginia and is bordered on the south by North Carolina, on the west by Pittsylvania County, on the north by Campbell County, on the northeast by Charlotte County and on the east by Mecklenburg County. Its 808 square miles, including the towns of South Boston, Halifax, Clover, Virgilina and Scottsburg, rank this county as the fourth largest in the state. Land use is almost entirely agricultural. Timber and tobacco are the major crops, but the unique Turbeville cantaloupe is perhaps the best known.

All of Halifax County is in the Roanoke (Staunton) River drainage, including the Dan, Banister and Hyco Rivers. Elevations originally ranged from about 280 feet at the junction of the Roanoke and Dan Rivers near Clarksville to about 750 feet near Ingram. However, all of the areas upstream from John H. Kerr Dam were inundated to the 300-foot contour after the dam was completed by the Army Corps of Engineers in 1946. The 50,000-acre Kerr Reservoir, also known as Buggs Island Lake, has been a major influence on the birdlife of the area. Other large impoundments in Halifax County include Banister Lake near Halifax, Conner Lake in the northeast and Big Lake in the southwest.

The eastern and southern parts of Halifax County, including Staunton River State Park, Hyco River, Banister River, South Boston and Paces, were covered during the Kerr Reservoir Foray of 1977 (Scott 1979). There is a US Fish & Wildlife Breeding Bird Survey (Wylliesburg) which includes a portion of northern Halifax County. Other parts of the county have been covered only by the Virginia Breeding Bird Atlas Project (1984-1989). However, because of the Atlas sampling methods used, much of the county had never been studied.

Except as noted in Appendix I, all birds found were presumed to be breeding.

Procedures for this foray were similar to those of past breeding bird forays, with different parties covering different areas each day and the most interesting areas covered several times. This results in some duplication in the totals given in Appendix I, but these totals are representative of the relative abundance of species.

Areas mentioned frequently in Appendix I include:

- (a) Staunton River State Park, the easternmost point of land in the county and flanked by the Roanoke and Dan River branches of Kerr Reservoir, reached via US 360 and VA 344 from South Boston
- (b) Staunton River Battlefield State Park, SR 600 north of Clover
- (c) Banister River Wildlife Management Area, SR 716 east of US 360
- (d) Conner Lake, SR 624 north of Mount Laurel. Sattler covered Northeastern Halifax County in a loop from US 501 and then following SRs: 603, 627, 644, 626, 625, 624 (including Conner Lake), 623, 617, 616, 603, 621, 626, 610, 641, 642 and 622 back to US 501; this is referred to as the "loop trip" in the species accounts.
- (e) Edmunds Dairy Farm, US 360 just north of South Boston
- (f) Powell Farm, on SR 716 2.5 miles east of US 360

There was a brief rainfall on the morning of 4 June, but otherwise the weather for the period was unusually mild and was not a factor on the foray. For the foray period, the participants worked a total of 187 party-hours. There was minimal nocturnal coverage, which is reflected in the low numbers of owls and goatsuckers.

Comments on other species that have occurred or might have been expected in Halifax County during the breeding season are given in Appendix II.

ACKNOWLEDGMENTS

Thanks again to the participants for their hard work and support, especially for an area where there is little variation in habitat and perhaps not as interesting as areas covered on most of the previous forays. The author also expresses his appreciation to Mary Seamster and Henry Hatcher of Scottsburg, Mrs. Paul Edmunds of Halifax, and Runt Powell of South Boston for granting access to their properties. John Dalmas reviewed the initial draft of this paper and provided much of the historical data, including all of the data from the Virginia Atlas Project.

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APPENDIX I

ANNOTATED SPECIES LIST

Double-crested Cormorant (*Phalacrocorax auritus*). Eleven birds were found by seven participants. Blalock reported the highest daily count of five birds from Staunton River State Park on 2 June. This species is not suspected of breeding in the area, but is rapidly expanding its range; there was only one report for the county during the Virginia Atlas Project.

Great Blue Heron (*Ardea herodias*). Reported by all participants for a total of 64 birds. Nine active nests containing two or three young in each for a total of 24 were found and photographed by Bazuin in the Banister Wildlife Management Area – South Unit on 6 June. The young were reported to be almost as large as adults and well feathered and probably would fledge within two weeks. Blalock first found evidence of a rookery in this area with the discovery of a nest here in January 1997; by March, there were up to 11 active nests with adults presumably on eggs. This is one of only two known Great Blue Heron rookeries in the Piedmont of Virginia.

Green Heron (*Butorides virescens*). A total of only eight reported, five by Blalock, two by Bazuin, and one by the Hansrotes and Millers. On 7 June, Blalock observed one being chased by a Mississippi Kite (*Ictinia mississippiensis*) as it flew near the kite roosting area at the Powell farm. Blalock had seen a pair building a nest in the Banister River WMA several years ago.

Black Vulture (*Coragyps atratus*). Common. Reported by all participants with a total of 130 counted. Blalock had the highest daily total of 23 birds at the Powell farm on 5 June.

Turkey Vulture (*Cathartes aura*). Common. Reported by all participants with a total of 157 birds counted. Sattler had the highest count of 23 on his 4 June loop trip.

Canada Goose (*Branta canadensis*). Very common. The total of 269 individuals counted is probably an underestimate of the true population. The Hansrotes and Millers reported 15 adults with seven young behind a restaurant on US 360, and seven adults with 11 juveniles on SR 688, on 3 June. Blalock reported nine adults with ten young along SR 656 on 4 June. Also on 4 June, Clapp found two different families of 6 adults with 4 young and 2 adults with 4 young.

Wood Duck (*Aix sponsa*) Uncommon, with only 19 birds counted by six participants. J. and T. Dalmas reported the highest count of seven from Staunton River Battlefield State Park on 6 June. Bazuin and Blalock observed a female and an immature on 5 June at the Banister River WMA – South Unit.

American Black Duck (*Anas rubripes*). One report. One bird was found in the wetlands along the river at Staunton River Battlefield State Park by the Hansrotes and Millers on 4 June.

Mallard (*Anas platyrhynchos*). Uncommon. Reported by only four participants with a total of 24 birds counted. J. and T. Dalmas reported the high count of 11 on 7 June from the Turbeville area. Though breeding was not confirmed during the foray, Blalock has seen adults with young in the marsh at the Banister River WMA, and there was a record of a pair with young along VA 344 on the 1977 Foray (Scott 1979).

Osprey (*Pandion haliaetus*). Two reports, probably of different birds. Bazuin saw one from SR 781 (west of South Boston) on 4 June. Stevens and Barbee reported one from Staunton River State Park on 5 June.

Mississippi Kite (*Ictinia mississippiensis*). Found at the Powell Farm every day from 2 June through 7 June. Four birds were seen on 2 June by Blalock and later that same day by the Hansrotes and Millers. Blalock had the high count of eight birds on both 6 June and 7 June. The Dalmases also saw two birds on 7 June. This is the first known record of this species for Halifax County.

Bald Eagle (Haliaeetus leucocephalus). Blalock saw an adult and an immature at Staunton River State Park on 2 June, and two adults at the Powell Farm on 6 June. Bazuin found three birds, two adults and one first-year bird, at Staunton River State Park on 5 June. A nest with young found near this site in June 1984 was the first inland reservoir nesting record for the state (Kain 1987).

Cooper's Hawk (*Accipiter cooperii*). Clapp reported one chasing a Mourning Dove (*Zenaida macroura*) at the intersection of SRs 610 and 609 in the Clay's Mill area on 6 June. Blalock found one, possibly the same bird, in this area on 7 June.

Red-shouldered Hawk (*Buteo lineatus*). A total of 15 birds were reported by four participants. The high count was three birds by Sattler on 4 June and by Blalock on 7 June. Although no evidence of breeding was reported, Blalock has seen a pair near a nest in the Banister River WMA in the past.

Broad-winged Hawk (*Buteo platypterus*) Three widely scattered reports. The Hansrotes and Millers reported one on 2 June from the northwest section of the county. Sattler reported one on his 4 June loop trip. J. and T. Dalmas reported one on 7 June from the Turbeville area.

Red-tailed Hawk (*Buteo jamaicensis*). Uncommon. A total of 28 were counted during the foray. Blalock's 5 June report of five from SR 738 was the highest count. No breeding evidence was reported during the foray; however, Blalock has seen a nest along Aarons Creek near its mouth at the Dan River.

American Kestrel (*Falco sparverius*). A total of six were reported, with Clapp reporting three and the Hansrotes and Millers, Bazuin and Blalock reporting one each. Bazuin's report was of an adult male carrying food (a large insect) into a cavity by the steeple of Pleasant Grove United Church of Christ, SR 680, on 4 June. Clapp also observed a pair copulating on 5 June.

Wild Turkey (*Meleagris gallopavo*). Locally common. Reported by all participants with a total of 40 counted. Bazuin had the highest count of 26 on 6 June from Banister River WMA – South Unit, where he found two hens with at least 23 half-grown young that were not yet able to fly. J. and T. Dalmas reported five, one hen with two males and two immature, on 7 June at the Halifax County line along US 501. Clapp found the remains of an eggshell on the road on 1 June.

Northern Bobwhite (*Colinus virginianus*). Uncommon. Reported by all participants with a total of 60 counted. Numerous participants had the highest daily count, which was only three birds. This is in contrast to the results of the 1977 foray, where 60 was the high one-day count (Scott 1979).

Killdeer (*Charadrius vociferus*). Locally common. Reported by ten participants with a total of 56 counted. Blalock reported the high count of eight on 5 June. No breeding evidence was reported during the foray, but Blalock has seen young at Green's Folly Golf Club and on several county farms during previous years.

Rock Dove (*Columba livia*). Locally common. Reported by ten participants with a total of 70 counted. Blalock had the highest count of 30 on 4 June along SR 691, but found none at their usual nesting site under the US 501 bridge over Banister Lake, just north of Halifax.

Mourning Dove (*Zenaida macroura*). Very common. Reported by all participants with a total of 403 counted. Both Clapp and the Hansrotes and Millers had the high count of 37 on 4 June. Blalock saw an adult feeding three fledged young in his backyard in South Boston on 6 June.

Yellow-billed Cuckoo (*Coccyzus americanus*). Uncommon. A total of 69 birds were reported by eight participants. The high one-day count of nine was reported by Clapp on 3 June, and by Bazuin from the Banister River WMA – South Unit on 6 June. Also on 3 June, Clapp found a fresh road kill female cuckoo with an egg that was just about to be laid, on SR 658 just west of US 501. A one-day count of 22 birds in Halifax County on 10 June 1977 was the all-time peak count for the Virginia Piedmont (Kain 1987).

Eastern Screech-Owl (*Otus asio*). Reported only by Blalock, who had five birds along SR 716 from the intersection of SR 726 to the second creek on 4 June. At one location a pair answered a tape recording, and as one of the birds flew back and forth across the road, it was mobbed by a flock of small birds every time it flew overhead.

Barred Owl (*Strix varia*). Only reported by Bazuin, Stevens and Barbee and Blalock with a total of 17 counted. The high count of seven was made by Blalock on 5 June. On 6 June, Bazuin heard the calls on a young owl and later flushed a young bird at the SR 716 bridge over Gibson Creek.

Chuck-will's-widow (*Caprimulgus carolinensis*). One report. Blalock heard one calling around 2100 hrs on 7 June at the Seamster farm, SR 613.

Whip-poor-will (*Caprimulgus vociferus*). A total of five birds were reported by two parties. The Hansrotes and Millers reported two on 2 June from US 58 and SR 730. Blalock reported two on 7 June at the Seamster farm, SR 613. The only other report was from Blalock of a bird along SR 716 on 5 June.

Chimney Swift (*Chaetura pelagica*). Fairly common. A total of 96 birds were found by ten participants. Sattler had the high count of 16 birds on his 4 June loop trip.

Ruby-throated Hummingbird (*Archilochus colubris*). Very uncommon, with a total of only 19 birds reported by nine participants. Blalock had the highest daily count of four on 3 June, and two more in his backyard on 4 June. All other reports were of single birds.

Belted Kingfisher (*Ceryle alcyon*). Very uncommon, with only eight reported. Blalock found a pair flying along the Dan River at the South Boston Water Treatment Plant on 7 June. All other reports were of single birds.

Red-headed Woodpecker (*Melanerpes erythrocephalus*). Rare, only three reports. Sattler found one on his 4 June loop trip. Bazuin found one at the Banister River WMA – South Unit on 6 June. Blalock found one at the South Boston Water Treatment Plant on 7 June. No breeding evidence was reported; however, Blalock has seen fledged young in the county in the summer. This species was found on only one Halifax County block during the Virginia Atlas Project.

Red-bellied Woodpecker (*Melanerpes carolinus*). Fairly common. A total of 75 birds were reported by ten participants. Clapp had the high count of seven on 2 June. No breeding evidence was reported during the foray, but Blalock has seen a number of pairs at nests at various locations in the county.

Downy Woodpecker (*Picoides pubescens*). Uncommon. A total of 66 were counted, with the highest count of nine reported by Clapp on 5 June.

Hairy Woodpecker (*Picoides villosus*). Very uncommon. There were reports from four participants of a total of ten birds. Bazuin had the high count of four birds from Staunton River State Park on 5 June.

Northern Flicker (*Colaptes auratus*). Surprisingly scarce, with a total of only eight birds counted for the foray. Blalock had a pair on 6 June at Edmunds Dairy Farm. No breeding evidence was reported; however, Blalock has seen fledged young in his backyard. This species was considered common on the 1977 foray, when there was a high count of 18 birds at Staunton River State Park (Scott 1979).

Pileated Woodpecker (*Dryocopus pileatus*). Uncommon. Ten participants had a total count of 28 birds. Bazuin had the high count of seven on 5 June from Staunton River State Park.

Eastern Wood-Pewee (*Contopus virens*). Fairly common. A total of 123 birds were counted throughout the county by ten participants. The highest count of 19 birds was by Clapp on 3 June.

Acadian Flycatcher (*Empidonax virescens*). Uncommon. Found by all participants with a total of 65 counted. Bazuin had the maximum daily count of nine on 6 June at the Banister River WMA – South Unit. Apparently much less common than in the past; the 44 birds found in Halifax County on 10 June 1977 was the peak count for the Virginia Piedmont (Kain 1987).

Eastern Phoebe (*Sayornis phoebe*). Fairly common. Ten participants reported a total of 118 birds for the foray. The Hansrotes and Millers had the high count of 15 birds on 3 June, and found nests under bridges along SRs 650, 657 and 667 on 2 June. Sattler reported a nest under the SR 746 bridge (Watkins Bridge) over the Staunton River. Clapp had several reports of nests with eggs and one nest with 4 near fledgling young at various locations from 1 to 5 June.

Great Crested Flycatcher (*Myiarchus crinitus*). Uncommon. A total of 60 birds were found by ten participants. Blalock had the high count of nine on 2 June.

Eastern Kingbird (*Tyrannus tyrannus*). Very uncommon. Reported by all participants, but a total of only 28 birds. Sattler had the high one-day count of five on his 4 June loop trip.

White-eyed Vireo (*Vireo griseus*). Uncommon. Reported by ten participants with a total of 38 birds counted. Bazuin had the high count of five on 4 June.

Yellow-throated Vireo (*Vireo flavifrons*). Uncommon. Nine participants reported a total of 36 birds. Clapp had the highest daily total of 5 on 1 June. Blalock had found a nest with three young in 1997 at Banister River WMA, SR 716.

Warbling Vireo (*Vireo gilvus*). One report. J. and T. Dalmas found a single singing bird below the US 501 bridge over the Roanoke River on 7 June, at the Halifax / Campbell County line. There was also one Halifax County record during the Virginia Atlas Project. In addition, there was only one record on the 1977 foray, a singing bird along the Banister River on 10 June (Scott 1979).

Red-eyed Vireo (*Vireo olivaceus*). Abundant, with 613 birds counted. Bazuin had the high count of 60 on 4 June.

Blue Jay (*Cyanocitta cristata*). Fairly common. Reported by all participants with a total of 127 counted. Blalock saw an adult feeding young in his backyard on both 1 June and 6 June. The high count of 21 was reported by Clapp on 5 June.

American Crow (*Corvus brachyrhynchos*). Abundant. A total of 667 birds were reported. Sattler had the high one-day count of 69 birds on his 4 June loop trip. There were numerous reports of young begging food from adults.

Fish Crow (*Corvus ossifragus*). This species appears to be spreading into the area. A total of six birds were reported for the foray. Blalock reported two on 1 June from SR 716. The Hansrotes and Millers reported two from Staunton River State Park on 3 June and one from the Conner Lake area on 4 June. Bazuin reported one from

Staunton River State Park on 5 June. There were no Halifax County records on the Virginia Atlas Project, or on the 1977 foray (Scott 1979).

Horned Lark (*Eremophila alpestris*) One report. A singing male was found by Clapp on SR 677, about two miles north of US 360. There were no Halifax County records on the Virginia Atlas Project. This species is very uncommon and local in Southside Virginia.

Purple Martin (*Progne subis*). Very scarce, a total of only nine birds were reported. Sattler found eight of these on his 4 June loop trip, and Bazuin saw one flying overhead near the intersection of VA 40 and SR 808. Nest houses had been removed from several locations where birds had previously been found. Birds were found on only two blocks during the Virginia Atlas Project, and none were found on the 1977 foray (Scott 1979).

Northern Rough-winged Swallow (Stelgidopteryx serripennis). Very uncommon; a total of 35 birds were found by ten participants. J. and T. Dalmas had the high count of 15 at Staunton River Battlefield State Park on 6 June. Bazuin reported four at Staunton River State Park on 3 June, including an adult flying out of a burrow in the bank of the Dan River about 200 feet from the eastern tip of the park.

Cliff Swallow (*Petrochelidon pyrrhonota*). Locally common. This species has become re-established in Halifax County. Nests were found by Blalock at the South Boston Water Treatment Plant and under the US 58 bridge over the Hyco River, by Sattler and the Hansrotes and Millers under the SR 746 (Watkins) bridge, and by both Bazuin and Clapp under the US 360 bridge over the Staunton River. Eight observers reported a total of 80 birds, and the high count was 27 birds reported by Clapp on 3 June. Remarkably, this species was not found in the county during the Virginia Atlas Project; their absence at that time is believed to have resulted from bridge work by the Virginia Department of Transportation in the early 1980s. On the 1977 foray, none were seen west of Staunton River State Park, and 20 nests found under the US 58 bridge over the Hyco River were occupied by House Sparrows, *Passer domesticus* (Scott 1979).

Barn Swallow (*Hirundo rustica*). Very common. A total of 462 birds were found during the foray period. Nests were found under bridges and in barns throughout the county. The Hansrotes and Millers had the highest daily count of 82 birds on 3 June.

Carolina Chickadee (*Poecile carolinensis*). Common; a total of 321 birds were reported. Clapp reported the high one-day count of 45 birds on 3 June and a total of 158 for the foray, almost half of the birds found. Blalock reported two adults and a fledged young on SR 738 on 5 June.

Tufted Titmouse (*Baeolophus bicolor*). Common, reported by all participants with a total of 242 counted. Bazuin reported the high count of 27 on both 4 June and 6 June. Blalock saw an adult being harassed by young for food at the Powell farm on 5 June.

White-breasted Nuthatch (*Sitta carolinensis*). Uncommon. A total of 32 birds were reported by only 3 observers. Clapp had the maximum one-day count of eight on 1 Iune.

Brown-headed Nuthatch (*Sitta pusilla*). Uncommon and local. Blalock and Clapp each reported six birds, for a total of 12 during the foray. Blalock reported two at each of the following locations: SR 716 on 1 June, Staunton River State Park on 2 June and SR 742 on 5 June. Although family units are usually seen in Blalock's backyard, none were seen during the foray period.

Carolina Wren (*Thryothorus ludovicianus*). Common. Reported by all participants with a total of 271 counted. The highest one-day count of 40 was by Clapp on 5 June. Blalock found an adult with three fledged young at the SR 688 bridge over Big Toby Creek on 4 June.

House Wren (*Troglodytes aedon*). Only one report. Blalock had a bird singing in his frontyard on 1 June, where they have nested in previous years. This species is found locally in towns and suburban areas of Southside Virginia, but this habitat received little coverage during the foray. They were found on eight different Halifax County blocks during the Virginia Atlas Project.

Blue-gray Gnatcatcher (*Polioptila caerulea*). Common. Reported by all participants with a total of 180 counted. Clapp had the high count of 20 on 5 June. The Hansrotes and Millers observed adults carrying food to a nest where young were calling near the SR 665 bridge over Sandy Creek. Bazuin also reported an active nest about 13 feet up in a 40 foot tall elm (*Ulmus* sp.) on 3 June at Staunton River Battlefield State Park. Blalock found a nest in a Pecan (*Carya illinoensis*) about 30 feet above the roadway at the northeast end of the SR 738 bridge over the Hyco River.

Eastern Bluebird (*Sialia sialis*). Very common. Observed by all participants with a total of 355 counted. Sattler had the highest count of 37 on his 4 June loop trip. Several young with spotted breasts were reported by the Hansrotes and Millers, Blalock and Bazuin. The Hansrotes and Millers reported an immature being fed along SR 639 on 2 June. Blalock reported a female gathering nesting material along SR 656 on 4 June, and another female entering a Martin house at the South Boston Water Treatment Plant on 7 June. Clapp also observed several fledged young and adults entering nest boxes. Bazuin reported a juvenile in an apparent territorial dispute with an adult Prothonotary Warbler (*Protonotaria citrea*) on 6 June at Banister River WMA – South Unit.

Wood Thrush (*Hylocichla mustelina*). Fairly common. Reported by all participants with a total of 133 counted. The Hansrotes and Millers reported the highest daily count with 13 on 3 June. It was much more common on the 1977 foray, when the high one-day count was 40 birds at Staunton River State Park (Scott 1979).

American Robin (*Turdus migratorius*). Common. Seen by all participants with a total of 239 counted. The Hansrotes and Millers had the high count of 28 on 4 June. Blalock found a nest in his backyard on 1 June, an adult carrying food on 2 June, and

two fledged young on 6 June at Edmunds Dairy Farm. Clapp found a nest on 1 June with two warm eggs.

Gray Catbird (*Dumetella carolinensis*). Uncommon and local; only 16 birds reported by seven observers. Clapp had the high count of three on 2 June. Blalock observed a pair in his backyard building a nest in a Japanese laurel (*Aucuba japonica*) on 7 June, but this nest site was eventually abandoned. This species was considered common on the 1977 foray, which had a high one-day count of 20 birds (Scott 1979).

Northern Mockingbird (*Mimus polyglottos*). Very common. There were reports from every participant totaling 307 birds. Clapp submitted the high count of 47 on 5 June, including a nest with two young. He also found three nests on 2 June, and a nest with four eggs and another adult with two fully fledged juveniles begging for food on 4 June.

Brown Thrasher (*Toxostoma rufum*). Fairly common. Seen by all of the participants with a total of 72 birds counted. The high one-day count of ten was reported by Clapp on 2 June. Clapp also found five nests during the foray containing either eggs or young birds. Blalock found a nest in a bush about four feet above the ground containing two newly hatched young at the home of Mr. William Edmunds, 2198 Goode's Road.

European Starling (*Sturnus vulgaris*). Very common, with a total of 547 counted. Blalock had the high count of 93 on 5 June.

Cedar Waxwing (Bombycilla cedrorum). This species has become much more common in the Virginia Piedmont since the early 1980s. Five parties reported a total of 13 birds, seven by Clapp, two by Bazuin and the Hansrotes and Millers, and one each by Blalock and Sattler. It was also found on five and confirmed as breeders on two Halifax County blocks during the Virginia Atlas Project. However, it was not found or expected on the 1977 foray (Scott 1979).

Northern Parula (*Parula americana*). Very uncommon, with a total of only 23 birds but found by all the participants. The high count of three was reported by Clapp on both 4 June and 5 June, and by the Hansrotes and Millers on 3 June.

Yellow Warbler (*Dendroica petechia*). Rare, with only five birds reported for the foray. The Hansrotes and Millers reported one on 2 June and two on 4 June. Sattler reported one on his 4 June loop trip. Clapp reported one on 6 June.

Yellow-throated Warbler (*Dendroica dominica*). Very uncommon, with a total of 18 birds reported by six observers. Clapp reported 15 of the 18 birds found, including eight on 5 June. All of the other reports were of single birds. It was much more common on the 1977 foray, which had a high count of 31 birds in eastern Halifax County on 10 June (Scott 1979).

Pine Warbler (*Dendroica pinus*). Common. Reported by all participants with a total of 247 counted. The Hansrotes and Millers had the high count of 33 on 3 June. Blalock

reported an adult with two fledged young along SR 716 on 2 June, and three fledged young along SR 738 on 5 June. The Hansrotes and Millers reported an adult carrying food on 4 June.

Prairie Warbler (*Dendroica discolor*). Common. Observed by all participants with a total count of 181 birds. The Hansrotes and Millers submitted the high count of 34 birds on 2 June.

Black-and-white Warbler (*Mniotilta varia*). One report. The Hansrotes and Millers observed a singing bird feeding near the top of a tall pine (*Pinus* sp.) along SR 632 on 4 June. This species also was found on only two Halifax County blocks during the Virginia Atlas Project. It was not found on the 1977 foray (Scott 1979).

American Redstart (*Setophaga ruticilla*). Rare, only two reports. Blalock found a female on 4 June foraging in a tree along SR 688 about 0.1 mile from its intersection with SR 656. Clapp reported two singing birds on 5 June along SR 642 near its intersection with SR 832. It was also reported on only two county blocks during the Virginia Atlas Project. However, it was regarded as fairly common on the 1977 foray (Scott 1979), and as a very common summer resident in adjacent Pittsylvania County in the 1940s (Eggleston and Lyle 1952).

Prothonotary Warbler (*Protonotaria citrea*). Uncommon; reported by 11 participants with a total of 22 birds counted. Stevens and Barbee observed a pair copulating on 7 June at the Banister River WMA — South Unit, where Bazuin had reported the high one-day count of five the previous day.

Worm-eating Warbler (*Helmitheros vermivorus*) One report, a singing bird along SR 626 near the county line reported by the Hansrotes and Millers on 4 June. There were no records for this species in Halifax County during the Virginia Atlas Project, but two birds were found at Staunton River State Park on 10 June 1977 (Scott 1979).

Ovenbird (*Seiurus aurocapillus*). Uncommon. A total of 69 birds were found and reported by all participants. Clapp had the highest daily count of 11 on 4 June. Bazuin found two very agitated adult birds, one of which was seen carrying food, at Staunton River State Park on 5 June.

Louisiana Waterthrush (*Seiurus motacilla*). Very uncommon, only 12 birds reported by six observers, mostly of single birds. Clapp reported seeing two birds in territorial chase on 2 June and a total of eight for the foray.

Common Yellowthroat (*Geothlypis trichas*). Fairly common. Reported by all participants with a total of 146 counted. The highest count of 18 for the period was from the Hansrotes and Millers on 4 June. Although no breeding evidence was found during the foray period, Blalock has observed fledged young with adults in the county in the past.

Hooded Warbler (Wilsonia citrina). Uncommon. A total of 26 birds were reported by eight observers. Blalock and Clapp each had the high count of six on 5 June.

Yellow-breasted Chat (*Icteria virens*). Fairly common. Reported by all participants with a total of 116 birds counted. Blalock had the high count of 14 birds on 5 June. Bazuin reported an adult carrying food in a regenerating clearcut along SR 680 on 4 June.

Summer Tanager (*Piranga rubra*). Uncommon, with a total of 68 birds reported by all participants. Bazuin had the highest count of 11 birds on 4 June.

Scarlet Tanager (*Piranga olivacea*). Uncommon. Reported by all participants with a total of 36 counted. Sattler had the high count of seven birds on his 4 June loop trip.

Eastern Towhee (*Pipilo erythrophthalmus*). Fairly common. A total of 84 birds were reported by ten participants. Bazuin had the high count of 11 on 7 June.

Chipping Sparrow (*Spizella passerina*). Common. There were 326 birds reported by all of the participants, with the high count of 42 by Clapp on 5 June. Clapp also reported an active nest with young birds and adults feeding fledged young. Bazuin reported an adult carrying food on SR 679 on 4 June, and a female gathering cattle hair from a barbed wire fence at the Powell farm on 5 June.

Field Sparrow (*Spizella pusilla*). Fairly common; reported by ten participants for a total count of 100 birds. The Hansrotes and Millers had the high count of 24 on 2 June. Bazuin reported a juvenile fledgling following an adult near SR 639 on 7 June.

Grasshopper Sparrow (*Ammodramus savannarum*). Uncommon. A total of 53 birds were reported by ten participants. J. and T. Dalmas had the high count of eight on 7 June from the Turbeville area.

Song Sparrow (*Melospiza melodia*). Uncommon and local. Only 11 birds were reported, ten by Blalock and one by Clapp. The high count was on 6 June at Edmunds Dairy Farm, where Blalock found seven birds; other reports were of single birds from his backyard in South Boston. Although no breeding evidence was reported during the foray period, Blalock has had fledged young being fed in his backyard in previous years.

Northern Cardinal (*Cardinalis cardinalis*). Common. Reported by all participants with a total of 347 birds counted. Sattler had the high count of 30 on his 4 June loop trip. The Hansrotes and Millers reported an adult feeding a fledged young in Leda on 2 June. Blalock reported an adult female feeding two young in his backyard on 4 June, and observed an adult female with two young at Edmunds Dairy Farm on 6 June. Clapp reported a fully fledged immature with a black bill on 4 June, and the discovery of a new nest on 6 June.

Blue Grosbeak (*Guiraca caerulea*). Fairly common. Reported by all participants with a total of 143 birds counted. Clapp reported the highest daily total of 15 on 4 June. Blalock reported a pair copulating on SR 656 on 4 June.

Indigo Bunting (Passerina cyanea). Abundant, with 727 birds reported. Clapp had

the high count of 74 birds on 4 June. Surprisingly, no breeding evidence was reported, but Blalock has observed fledged young in the county and in his backyard.

Red-winged Blackbird (*Agelaius phoeniceus*). Fairly common; reported by all participants for a total of 99 birds. The high count of 23 birds was by Blalock on 4 June. Clapp reported a nest on 3 June with five warm eggs hidden in cattails.

Eastern Meadowlark (*Sturnella magna*). Common. Reported by all participants with a total of 210 birds counted. Sattler had the high count of 23 birds on his loop trip of 4 June.

Common Grackle (*Quiscalus quiscula*). Very common, with 414 birds reported. The high count of 55 birds was reported by Bazuin on 6 June from the Banister River WMA – South Unit. He also observed many juveniles in this group begging for food. The Hansrotes and Millers also reported an adult carrying food on 4 June.

Brown-headed Cowbird (*Molothrus ater*). Fairly common. Found by eight participants with a total of 89 birds counted. Sattler reported the high count of 11 on his 4 June loop trip. No evidence of breeding was reported on the foray, but Blalock has had fledged young being fed by an adult Song Sparrow (*Melospiza melodia*) in his backyard during a previous year.

Orchard Oriole (*Icterus spurius*). Uncommon. Found by ten participants who had a total count of 57 birds. The high count of seven was reported by the Hansrotes and Millers on 3 June and by Clapp on 5 June.

Baltimore Oriole (*Icterus galbula*). Only two reports. Four birds, two on 2 June and two on 3 June, were found by the Hansrotes and Millers. This species is a rare summer resident of Southside Virginia.

House Finch (*Carpodacus mexicanus*). Uncommon. A total of 45 birds were reported by seven participants. Clapp had the high count of six on 3 June. Clapp also found an adult on a nest with three downy young in a red cedar (*Juniperus virginiana*) on 4 June. Blalock observed a female feeding three fledged young in his backyard on 6 June.

American Goldfinch (*Carduelis tristis*). Uncommon, with a total count of 79 birds. The high count of nine birds was reported from the Turbeville area by J. and T. Dalmas on 7 June. No breeding evidence was reported during the foray period; however, Blalock and Fred Collins found an adult carrying food to a nest at the Banister River WMA several years ago. This species breeds later in the season than most other songbirds.

House Sparrow (*Passer domesticus*). Fairly common. Reported by eight participants for a total count of 81 birds. Blalock had the high count of 15 birds on 5 June along SR 716, including a female on a nest in a bluebird box. It had been regarded as abundant on the 1977 foray, where there was a high count of 265 from Halifax County (Scott 1979).

APPENDIX II

The following species are possible or previously confirmed breeders in Halifax County which were not found during the foray:

Pied-billed Grebe (*Podilymbus podiceps*) This species is a winter visitor and spring migrant through Halifax County. Birds are often seen and heard calling at Banister River WMA in late spring.

Yellow-crowned Night-Heron (*Nyctanassa violacea*). There were three 1989 records in the vicinity of the Banister River WMA as late as 18 June which are documented in the Virginia Atlas Project. Four birds were also found here in late May 1998, but there are no confirmed breeding records to date.

Hooded Merganser (*Lophodytes cucullatus*). A record of a female with eight young found on 27 May 1989 at the Banister River WMA is documented in the Virginia Atlas Project.

Sharp-shinned Hawk (*Accipiter striatus*). There are several scattered Piedmont breeding season records documented in the Virginia Atlas Project, including one on the Vernon Hill quadrangle in 1987. There was also one record along the Banister River on 10 June 1977 (Scott 1979).

Spotted Sandpiper (*Actitis macularia*) This species is sometimes found in the summer months at Staunton River State Park. There was one Virginia Atlas Project record, a bird at Watkins Bridge, SR 746, on 10 June 1989.

American Woodcock (*Scolopax minor*). This species was found on two county blocks during the Virginia Atlas Project, and the author had a mid-summer record several years ago of a bird feeding in a ditch alongside SR 716.

Barn Owl (*Tyto alba*). There were records of broods in an old water tower on a farm near Paces for the last several years, but they were not found during the foray. There were also several breeding sites documented in the database for the Virginia Atlas Project.

Great Horned Owl (*Bubo virginianus*). There were no reports of this species on the foray, nor were they found in Halifax County during the Virginia Atlas Project. However, it is believed to be common; the writer has seen and heard birds throughout the county, including two in his backyard several years ago.

Common Nighthawk (*Chordeiles minor*). Although Halifax County is in its breeding range, there is apparently no suitable habitat, as the writer has no record of this species in the county during the breeding season. They can be found in downtown Danville, just 35 miles west of South Boston.

Willow Flycatcher (*Empidonax traillii*). This species is rare in Southside Virginia, but there is one breeding season record for Halifax County, of a singing bird along

the Roanoke River on 10 June 1977 (Scott 1979).

Loggerhead Shrike (*Lanius Iudovicianus*). Formerly a fairly common breeder and now a rare winter visitor in Halifax County. There was one 1988 record of this species in the Oak Level quadrangle documented in the Virginia Atlas Project. There were two Halifax County reports of single birds on the 1977 foray (Scott 1979).

Blue-headed Vireo (*Vireo solitarius*). There are a number of records of this species in the Virginia Piedmont, including one in the Alton quadrangle documented in the Virginia Atlas Project. Records in adjacent counties include singing birds in Mecklenburg County on 11 June 1977 (Scott 1979) and Person County, North Carolina on 27 June 1982 (LeGrand 1982), and a nest found on 15 May 1951 in Pittsylvania County (Eggleston and Lyle 1952).

Bank Swallow (*Riparia riparia*). This species is occasionally seen in the county during migration, but they have been found in the summer in adjacent Mecklenburg County (Scott 1969) and Person County, North Carolina (LeGrand 1982). There is an old nesting record for Pittsylvania County (Eggleston and Lyle 1952).

Kentucky Warbler (*Oporornis formosus*). Although the writer has not seen this species in Halifax County, this is perhaps the most surprising omission. It is quite uncommon but widespread in the Piedmont of Virginia; it was found on five different county blocks during the Virginia Atlas Project. There are nesting records for adjacent Pittsylvania County, where the bird was regarded as an uncommon summer resident (Eggleston and Lyle 1952).

Vesper Sparrow (*Pooecetes gramineus*). This species is normally a rare winter visitor in Halifax County, but there is one breeding record documented in the Virginia Atlas Project, of fledged young at Staunton River State Park in 1985.

Henslow's Sparrow (*Ammodramus henslowii*). The only known record for Halifax County is of a sizable population, up to 15 singing birds, found at an abandoned farm from 25 July to 11 August 1988 by a biologist working on an environmental impact assessment for Old Dominion Electric Cooperative. This site, now occupied by the new Clover Power Plant, is immediately adjacent to Staunton River Battlefield State Park. This record is in the Virginia Atlas Project database. Birds were not seen at this site in subsequent years, but were found in 1990 just across the river in Charlotte County (J. Dalmas, pers. comm.)

Dickcissel (*Spiza americana*). This species was found on seven Halifax County blocks, including one where breeding was confirmed, during the Virginia Atlas Project. All of these records date from 1988, a year when this midwestern species mounted a major invasion of the Mid-Atlantic states during a severe drought in its normal range.

EXPANSION OF THE JAMES RIVER BALD EAGLE CONCENTRATION AREA

BRYAN D. WATTS MITCHELL A. BYRD Center for Conservation Biology College of William and Mary Williamsburg, VA 23187-8795

INTRODUCTION

The lower James River is believed to support the largest concentration of summering Bald Eagles (*Haliaeetus leucocephalus*) in eastern North America (Clark 1992). This site, and to a lesser extent other locations within the Chesapeake Bay, appears to be an area of convergence for post-nesting and subadult eagles from breeding populations in the Northeast and Southeast. During the summer months, the number of eagles using the lower James swells as birds move into the river to utilize foraging areas and communal roosts. In recent years, both the numbers of eagles using the river and their distribution along the shoreline appear to have increased substantially.

The first indication to the ornithological community that the lower James River may support a population of nonbreeding eagles came during the summer of 1971. While conducting an Osprey (*Pandion haliaetus*) survey on the lower James, M. A. Byrd and R. S. Kennedy observed 18 eagles between Weyanoke Point and the Benjamin Harrison Bridge on 20 May 1971 (Scott 1971). These included 10 eagles in juvenal plumage and eight birds in adult plumage. This observation was important because only two pairs of eagles were known to breed on the James at this time.

In the summer of 1980, Byrd began conducting boat surveys of the James River shoreline to evaluate the size and distribution of the population of summering eagles. Birds appeared to be concentrated on the stretch of river between Ward's Creek and Powell's Creek. This area contains approximately 30 km of shoreline. Regular surveys have been conducted on this stretch of river each year from 1982 to the present (Byrd et al. unpub. data).

The purpose of this paper is 1) to document the general increase in the use of the James River by summering Bald Eagles between 1982 and 1997, and 2) to report on the current status and distribution of the concentration area as revealed by an extended shoreline survey conducted on the James during the summer of 1997.

METHODS

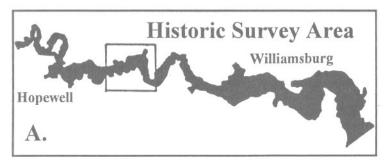
Shoreline surveys for eagles were conducted annually during the years from 1982-1997. Throughout the study period, M. A. Byrd coordinated shoreline surveys. Surveys were conducted by Byrd, students of the College of William and Mary, various associates, and in recent years by staff of the Center for Conservation Biology. Each survey included all primary shoreline between the mouth of Powell's Creek and the mouth of Ward's Creek, hereafter referred to as the "historic survey area" (Figure 1A). This stretch of river contains 30 km of primary shoreline. During the summer months of 1997 the eagle survey was extended to include the James River shoreline between the I-295 bridge in Henrico and Chesterfield Counties and the west side of Mulberry Island in the city of Newport News, hereafter referred to as the "extended study area" (Figure 1B). This expanded area included approximately 140 km of river and 235 km of primary shoreline. Surveys within this area were used to help redefine the eagle concentration area.

During all years, shoreline survey techniques generally followed those outlined by Wallin and Byrd (1984). Eagles were counted while piloting a motorboat parallel to the shoreline. Those observed along the shoreline or flushed were mapped on a copy of a USGS 7.5 min topographic quadrangle. All eagles were recorded as either adult (category reserved for birds with complete white head and tail) or immature (all other plumage types). An average of nine shoreline surveys (number of surveys/year varied between 5 and 23) of the historic survey area were conducted yearly between April and September over the 16-year period. During the summer of 1997, eight surveys of the extended study area were conducted between 8 May and 11 August.

Use of the James River concentration area by eagles is seasonal (Clark 1992, Byrd unpub. data). Birds begin to arrive in the area in early May and begin to depart in August and September. Numbers peak during the months of June and July. Over the years, survey efforts have been centered around peak months with over 65% of surveys occurring during June and July (Table 1). However, because survey effort was not equal between months and years, we believe that the best indication of between-year changes is a comparison of peak counts rather than average counts. For this reason, peak counts are presented here to examine long-term trends in eagle use. In order to examine the extent of shoreline use during 1997, the shoreline within the extended study area was subdivided into 1-km segments. Each segment was individually coded and survey results were compiled by segment.

RESULTS

A total of 147 shoreline surveys were conducted within the historic survey area between 1982 and 1997. Over this time, 8,953 eagle observations were recorded. Peak counts ranged in date between 31 May and 16 July. The majority of peak counts, however, fall between mid-June and mid-July suggesting that eagle numbers reach their peak on the James in mid summer. Over the 16-year period, the number of eagles using the James River increased substantially. Between 1982 and 1991, peak eagle counts within the historic survey area increased by a factor of greater than 5 (Figure 2). However, from 1991 through 1995 numbers were rela-



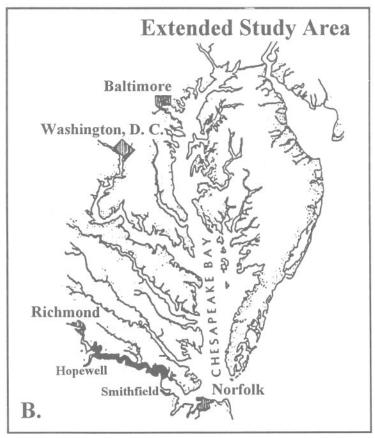


Figure 1. Maps illustrating the location of study sites used for eagle observations. Map "A" shows the extended study area and the location of the historic survey area (section of the extended study area delineated by the square box). Map "B" shows the location of the James River between Richmond and Norfolk. The location of the extended study area on the lower James is highlighted in black.

tively stable. In years after 1995, the number of eagles using the historic survey area has declined.

Eight surveys of the extended study area were conducted during the summer of 1997. A total of 2,674 observations of eagles was made during shoreline surveys including 1,389 (51.9%) birds in adult plumage and 1,285 (48.1%) birds in juvenal plumage. The number of eagles per survey varied from a low of 239 on 11 August to a high of 448 on 11 June.

During the summer of 1997, the number of eagles detected within the historic survey route represented only 26.6% of the total within the more extended study area. As in previous years, eagle numbers increased in the historic area through

Table 1: Seasonal distribution of shoreline surveys.

Year	Apr.	May	June	July	Aug.	Sept.
1982	0	0	3	2	0	0
1983	0	0	3	3	0	0
1984	3	4	4	2	0	0
1985	0	3	4	5	0	0
1986	0	3	2	3	0	0
1987	0	3	3	3	0	0
1988	0	2	3	3	0	0
1989	0	3	2	3	0	0
1990	0	2	4	12	5	0
1991	0	1	2	2	0	0
1992	0	0	2	4	2	0
1993	0	0	3	3	3	1
1994	0	0	2	2	5	0
1995	0	2	3	3	2	1
1996	0	1	1	1	1	0
1997	0	2	2	3	1	0
Total	3	26	43	54	19	2

the summer, peaked from mid-June through mid-July and then declined again. However, the proportion of birds accounted for by the historic area (relative to the extended study area) declined through the early summer reaching a low of 19.2% by late June and then increased again through late summer. This pattern suggests that the historic area may be saturated by mid-summer causing incoming eagles to differentially settle elsewhere along the river.

During the surveys conducted in 1997, eagles were broadly distributed over the extended study area. Using a spatial resolution of 1 km, eagles were documented to use 90% (211 of 234 segments) of the total shoreline. Space use by eagles was also consistent between surveys. At least one eagle was detected during at least 50% of the surveys conducted for 59.1% of the 1-km segments delineated. For 34.9% of the segments, at least one eagle was detected during at least 75% of the surveys conducted.

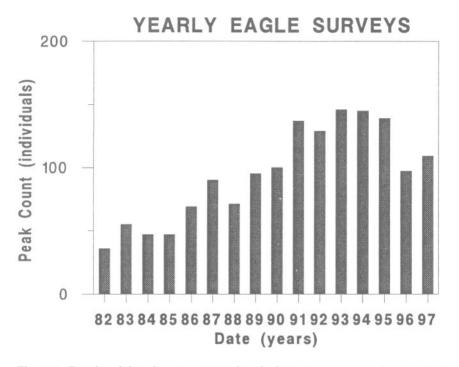


Figure 2. Results of shoreline surveys within the historic survey area between 1982 and 1997. Values represent the peak number of Bald Eagles detected within respective years. The historic survey area contains 30 km of primary shoreline.

Although eagles were documented within a large portion of the shoreline, eagle density was not evenly distributed between used segments. Only 53.2% of the shoreline supported an average of 1 eagle/survey/km. Only 11.9% of the shoreline supported an average of 3 eagles/survey/km. And finally, 2.1% of the shoreline supported an average of 5 eagles/survey/km.

DISCUSSION

The James River Bald Eagle concentration area has expanded well beyond the historic survey route. The regular increase in peak eagle numbers observed throughout the late 1980's appeared to reach a high in the early 1990's suggesting that the area may have reached capacity at that time. This event apparently led to an expansion of the concentration area both east and west along the shoreline. Elevated numbers of eagles (numbers higher than would be expected based on the breeding population alone) now extend from Jones Neck down river to Fort Eustis, a distance of 140 river kilometers that contains 235 km of primary shoreline. The peak count of 448 eagles on 11 June approaches an average of 2 birds/km of shoreline for the entire study area. This value is comparable to peak counts within the historic sur-

vey area from the mid 1980's. However, the new study area contains nearly 8 times more shoreline. Peak numbers of eagles (within the historic area) from the early 1990's exceeded an average of 4 eagles/km of shoreline. Although the extended concentration area may never reach this density, continued increases in the breeding population throughout eastern North America suggest that summering eagles will likely continue to increase on the James for the foreseeable future.

ACKNOWLEDGMENTS

This study would not have been possible without the efforts of many people. We thank the many colleagues, students, and friends who assisted with shoreline surveys over the years. Marian U. Watts produced the study maps. Shoreline surveys have been supported through the years by the Virginia Department of Game and Inland Fisheries, Nongame and Endangered Wildlife Program. We appreciate their commitment to the management of Bald Eagles in Virginia.

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LATE-WINTER NESTING ATTEMPT BY AN AMERICAN ROBIN

PAUL BEDELL 10120 Silverleaf Terrace Richmond, VA 23236

On the morning of 20 February 1998, Larry Rohr (24 W. Roanoke St., Richmond, VA 23225) discovered a dead nestling Robin (*Turdus migratorius*) on the ground at his residence in Richmond, Virginia while raking leaves. He located the nest in a nearby pine tree which contained one unhatched egg. No adult birds were present and the nest had been abandoned. The nestling, nest, and egg were salvaged on 25 February and donated to Virginia Commonwealth University to be deposited in their collection.

The well-constructed nest was identified as recent in origin due to the presence of a few still-green materials woven into the outer nest and by its excellent unweathered condition. The egg was unmarked blue and measured 24.9 x 17mm. No eggshells were in the nest, which appeared undisturbed. The nest was located approximately 2.3m off the ground in a crotch next to the trunk of a young loblolly pine (*Pinus taeda*). The site is on the southwest corner lot of a moderately busy intersection. Streetlights are present on the northeast and southeast corners and the nest site was within 4m of the street.

The hatchling weighed 18.5g, wing chord measured 30mm, tarsus 20mm, and the primary pins 22mm with the feathers just emerging. Due to the elapsed time between death and when the specimen was salvaged and weighed, I am not considering weight in estimating age. Feathers begin emerging from primary pins at 6-8 days, so I estimate the hatchling was a minimum of six days old when discovered. The size is somewhat small for a six-day-old Robin (Howell 1942), but this may be due to malnutrition. The incubation period for the American Robin is 12-14 days (Young 1955). I conservatively estimated the nest initiation date by adding 12 days for incubation, two days for laying the clutch of two, and six days as the age of the hatchling at death. Backdating the twenty-day total from 19 February results in a nest initiation around 31 January. There is only one other record of a Robin nesting in Virginia prior to 1 April, a 5 March record for eggs in Stuarts Draft (Clapp 1997). Winter nesting of American Robins is rare, but has been reported for Pennsylvania (Berger 1966), Ohio (Kress 1967), and North Carolina (Hendrickson and Spencer 1992). These breeding attempts were also unsuccessful. This record represents the first reported winter nesting of the American Robin for Virginia.

The weather from the beginning of January through the third week of February

was unusually mild and wet. The average daily temperature recorded at Byrd International Airport for January was 7.5 °F above normal. Low temperatures were 9.2 °F above the average (NOAA 1998). The period from 2-9 January was particularly mild with daily temperatures exceeding 60°F and low temperatures well above freezing. It is possible that the spring-like temperatures of early January induced pair-bonding and nest building, but no observations of the adults were made. The cause of nest failure is unknown but may have been weather related. The weather on 18 and 19 February was benign, but there were heavy rain and strong winds on the seventeenth. This weather event may have knocked the young bird out of the nest. Since the adult birds were absent from the nest site when it was discovered on the morning of 20 February, it seems likely that the nest failure occurred the previous day at the most recent, and possibly a day or two earlier. I chose to backdate the nest from 19 February.

The breeding cycle of birds can be triggered by a combination of photoperiod and temperature. I believe that the two corner streetlights provided an artificial photoperiod. The long photoperiod combined with the unusually mild temperatures may have induced this premature breeding attempt.

ACKNOWLEDGMENTS

I want to thank Larry Rohr for reporting his discovery. I also want to thank Roger Clapp for providing references and Charles Blem for help with the specimens.

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1998 REPORT OF THE VIRGINIA AVIAN RECORDS COMMITTEE

BOB CROSS VARCOM CHAIRMAN 1523 Live Oak Drive Tallahassee, FL 32301

There were no scheduled meetings of the Virginia Avian Records Committee (VARCOM) during 1998 and no changes to the VARCOM by-laws were enacted. Since 1996 VARCOM has been composed of seven voting members and two nonvoting members. Terms of office are four years for voting members and one year for non-voting members. In November 1998, two new committee members were elected to VARCOM by the VSO Board of Directors to replace two departing members.

The 1998 Virginia Avian Records Committee was composed of the following individuals:

Non-voting members:

Chair: Bob Cross

Secretary-compiler: Charlotte Friend

Voting members:

John Bazuin

George (Cricket) Barlow

Dan Cristol (to replace Larry Lynch who resigned in February 1998)

Brian Patteson (to replace Gary Williamson who resigned in February 1998)

Dick Peake

Brian Taber

Bill Williams

During 1998, VARCOM reviewed documentation related to 58 avian records (43 species) of which 52 (90%) were accepted. As a result, three new species will be added to the Virginia checklist. They are Herald Petrel (*Pterodroma arminjoniana*), Allen's Hummingbird (*Selasphorus sasin*), and Spotted Towhee (*Pipilo maculatus*). Of particular note in 1998 were the phenomenal number and diversity of seabirds described from Coastal Plain and Piedmont regions of Virginia following the passage of Hurricane Bertha in July 1996 and Hurricane Fran in September 1996. Thirty-two hurricane-related records were reviewed and accepted in 1998 resulting in one

new Coastal Plain record and eight new Piedmont records.

We commend all those who submitted documentation of their observations for review and urge you to continue doing so. There were 28 records still under review at the end of 1998.

The following is a summary of records evaluated by VARCOM from 1 January 1998 to 31 December 1998:

ACCEPTED RECORDS

EARED GREBE (*Podiceps nigricollis*), 1 individual, photographed, Dulles Airport pond, Loudoun County, 20 September 1997. Second Piedmont record, category one [David Abbott, Danny Crookston, Catharine Messina, Valerie Kitchens, Glen Richardson].

BLACK-CAPPED PETREL (*Pterodroma hasitata*), at least 4 individuals, Chesapeake Bay Bridge-Tunnel, 13 July 1996. Immediate Coastal Plain record, category two [Edward S. Brinkley and others].

BLACK-CAPPED PETREL (*Pterodroma hasitata*), 26 individuals, Chesapeake Bay Bridge-Tunnel, 14 July 1996. Immediate Coastal Plain record, category two [Edward S. Brinkley and others].

BLACK-CAPPED PETREL (*Pterodroma hasitata*), 2 individuals, Chesapeake Bay Bridge-Tunnel, 7 September 1996. Immediate Coastal Plain record, category two [Edward S. Brinkley and others].

BLACK-CAPPED PETREL (*Pterodroma hasitata*), 5-6 individuals, Kerr Reservoir, Mecklenburg County, 6 September 1996. First Piedmont record, category two [Edward S. Brinkley and others].

HERALD PETREL (*Pterodroma arminjoniana*), light morph, 1 individual, Chesapeake Bay Bridge-Tunnel, 13 July 1996. First state and Coastal Plain record, category two [Edward S. Brinkley and other].

HERALD PETREL (*Pterodroma arminjoniana*), dark morph, 1 individual, Chesapeake Bay Bridge-Tunnel, 13 July 1996. Second Coastal Plain record, category two [Edward S. Brinkley and other].

HERALD PETREL (*Pterodroma arminjoniana*), 1 individual, Kerr Reservoir, Mecklenburg County, 6 September 1996. First Piedmont record, category two [Edward S. Brinkley and others].

FEA'S PETREL (CAPE VERDE ISLANDS PETREL)(Pterodroma feae), 1 individual, Kerr Reservoir, Mecklenburg County, 6 September 1996. First Piedmont record, category two [Edward S. Brinkley]. Fea's Petrel is not on the AOU list.

CORY'S SHEARWATER (*Calonectris diomedea*), 1-3 individuals, Chesapeake Bay Bridge-Tunnel, 13 July 1996. Immediate Coastal Plain record, category two [Edward S. Brinkley and others].

CORY'S SHEARWATER (Calonectris diomedea), 1-2 individuals, Chesapeake Bay

Bridge-Tunnel, 14 July 1996. Immediate Coastal Plain record, category two [Edward S. Brinkley and others].

CORY'S SHEARWATER (*Calonectris diomedea*), 4 individuals, Kerr Reservoir, Mecklenburg County, 6 and 7 September 1996. First Piedmont record, category two [Edward S. Brinkley and others].

BAND-RUMPED STORM-PETREL (*Oceanodroma castro*), 1 individual, Cape Henry, 12 July 1996. Immediate Coastal Plain record, category two [Edward S. Brinkley].

BAND-RUMPED STORM-PETREL (*Oceanodroma castro*), 4-8 individuals, Chesapeake Bay Bridge-Tunnel, 13 July 1996. Immediate Coastal Plain record, category two [Edward S. Brinkley and others].

GREAT BLUE HERON (*Ardea herodias*), nesting colony photographed, Hawkwood, Louisa County, 14 June 1997, First accepted Mountains and Valleys breeding record, category one [Donald Ober].

YELLOW-CROWNED NIGHT-HERON (*Nyctanassa violacea*), 1 individual photographed, Blacksburg, Montgomery County, October 1996 until 15 January 1997. Extends the date of occurrence in the Mountains and Valleys area to the entire year, category one [Don Mackler].

ROSS'S GOOSE (*Chen rossii*), 1 individual, Staunton, Augusta County, 11-18 March 1997. First Mountains and Valleys record, category two [Herbert Allen Larner].

BLACK RAIL (*Laterallus jamaicensis*), sound recording of 1 individual, Dulles Greenways Wetland, Loudoun County, 24 & 28 July 1997. Second Piedmont record, category one [David Abbott].

AMERICAN GOLDEN-PLOVER (*Pluvialis dominicus*), 1 individual, Dulles Greenway Wetlands Mitigation Project, Oatland Mills Pond, Loudoun County, 26 April 1997. Fifth accepted Piedmont record, category two [David Abbott].

WILLET (*Catoptrophorus semipalmatus*), 2 individuals, Kerr Reservoir, Mecklenburg County, 6 September 1996. Fifth Piedmont record, category two [Edward S. Brinkley and others].

WHIMBREL (*Numenius phaeopus*), 37 individuals photographed, Dulles Greenways, Loudoun County, 27 May 1997. Second Piedmont record, category one [David Abbott].

WHIMBREL (*Numenius phaeopus*),1 individual, near Mt. Meridian, Augusta County, 27 May 1998. Fourth Mountains and Valley record, category two [Allen Larner].

RUDDY TURNSTONE (*Arenaria interpres*), 3+ individuals, Kerr Reservoir, Mecklenburg County, 6 September 1996. Fourth Piedmont record, category two [Edward S. Brinkley and others].

RUDDY TURNSTONE (*Arenaria interpres*), 1 individual, Staunton River State Park, Halifax County, 1 September 1997. Fifth accepted Piedmont record, category two [Jeffrey Blalock].

WILSON'S PHALAROPE (Phalaropus tricolor), 1 individual, photographed,

Greenways, Loudoun County, 19-24 May 1997. Fifth Piedmont record, category one [David Abbott].

RED-NECKED PHALAROPE (*Phalaropus lobatus*), 20 individuals, Kerr Reservoir, Mecklenburg County, 6 September 1996. Fifth Piedmont record, category two [Edward S. Brinkley others].

RED PHALAROPE (*Phalaropus fulicaria*), 1 individual, Kerr Reservoir, Mecklenburg County, 6 September 1996. Third Piedmont record, category two [Edward S. Brinkley and others].

POMARINE JAEGER (*Stercorarius parasiticus*), 1 individual, Kerr Reservoir, Mecklenburg County, 6 September 1996. Second Piedmont record, category two [Edward S. Brinkley and others].

PARASITIC JAEGER (*Stercorarius parasiticus*), 1 individual, Kerr Reservoir, Mecklenburg County, 6 September 1996. First Piedmont record, category two [Edward S. Brinkley and others].

LONG-TAILED JAEGER (*Stercorarius longicaudus*), 1 immature bird, photographed, Smith Mountain Lake, Franklin County, 5 September 1993. First accepted Piedmont record, category one [Royce Hough]. This is the same bird that was previously reported and not accepted as Parasitic Jaeger.

BLACK-TAILED GULL (*Larus crassirostris*), 1 individual, photographed, Grandview Park, Hampton, 22 March-15 April 1995. Photographs not considered adequate for identification. This is the second accepted state and Coastal Plain record, category two. This is the first chronological record [Sherman Suter, Ignaz Wanders, Martha Woods, Francis Woods, Brenda Tekin].

BLACK-TAILED GULL (*Larus crassirostris*), 1 individual, photographed, Chesapeake Bay Bridge-Tunnel, 14 December 1997. Third state and Coastal Plain record, category one [Bradley Carlson].

THAYER'S GULL (*Larus thayeri*), 1 individual, Southeastern Public Service Authority, Suffolk, 2 January 1996. Sixth Coastal Plain record, category two [Edward S. Brinkley].

GREAT BLACK-BACKED GULL, (*Larus marinus*), 2 individuals, Kerr Reservoir, Mecklenburg County, 6 September 1996. Third Piedmont record, category two [C. Michael Stinson and others].

SABINE'S GULL (*Xema sabini*), 1 individual, Kerr Reservoir, Mecklenburg County, 6 September 1996. First Piedmont record, category two [Edward S. Brinkley and others].

ROYAL TERN (*Sterna maxima*), 40+ individuals, Kerr Reservoir, Mecklenburg County, 6 September 1996. Third Piedmont record, category two [Edward S. Brinkley and others].

SANDWICH TERN, (*Sterna sandvicensis*), 1-2 individuals, Kerr Reservoir, Mecklenburg County, 6 September 1996. First Piedmont record, category two [Edward S. Brinkley and others].

SANDWICH TERN (Sterna sandvicensis), 1 individual, Briery Creek, 6 September 1996. Second Piedmont record, category two [C. Michael Stinson].

SANDWICH TERN (Sterna sandvicensis), 1 individual, Lake Anna, 7 September 1996. Third Piedmont record, category two [Edward S. Brinkley and others].

ARCTIC TERN (*Sterna paradisaea*), 1 individual, Kerr Reservoir, Mecklenburg County, 6 September 1996. First Piedmont record, category two [Edward S. Brinkley and other].

LEAST TERN (*Sterna antillarum*), 1 adult, Kerr Reservoir, Mecklenburg County, 6 September 1996. Fourth Piedmont record, category two [Edward S. Brinkley and others].

LEAST TERN (Sterna antillarum), 1 immature, Kerr Reservoir, Mecklenburg County, 6 September 1996. Fifth Piedmont record, category two [Edward S. Brinkley and others].

BRIDLED TERN (*Sterna anaethetus*), 1-2 individuals, Chesapeake Bay Bridge-Tunnel, 13 July 1996. Immediate Coastal Plain record, category two [Edward S. Brinkley and others].

BRIDLED TERN (*Sterna anaethetus*), 5 individuals, Chesapeake Bay Bridge-Tunnel, 7 September 1996. Immediate Coastal Plain record, category two [Edward S. Brinkley and others].

SOOTY TERN (*Sterna fuscata*), 5 or more individuals, Kerr Reservoir, Mecklenburg County, 6 September 1996. Fifth Piedmont record, category two [Edward S. Brinkley and others].

BLACK SKIMMER (*Rynchops niger*), 1 individual photographed, Kerr Reservoir, Mecklenburg County, 6 September 1996. Third Piedmont record, category one [C. Michael Stinson].

ALLEN'S HUMMINGBIRD (*Selasphorus sasin*), 1 individual, photographed, Bristol, VA, 22 December-26 December 1997. First state and Mountains and Valleys record, category one [J. Wallace Coffey].

YELLOW-RUMPED WARBLER (*Dendroica coronata auduboni*), 1 individual, Oatlands, Loudoun County, 8 October 1997. First accepted Piedmont record, category two [David Abbott].

BLACK-THROATED GREEN WARBLER (*Dendroica virens*), 1 individual, Blacksburg CBC, Montgomery County, 20 December 1997. Extends the date in the Mountains and Valleys area from 15 April to 20 December. Accepted in category two [Clyde Kessler].

SPOTTED TOWHEE (*Pipilo maculatus*), 1 individual, York County/James City County, 11 February 1995. First accepted state and Coastal Plain record, category two [Edward S. Brinkley].

LE CONTE'S SPARROW (*Ammodramus leconteii*), 1 individual, Dulles Greenways, Loudoun County, October 19-24, 1996. Second Piedmont record, category two [David Abbott].

PAINTED BUNTING (*Passerina ciris*), 1 individual, photographed, Staunton, Augusta County, 15-21 April 1993. Fifth Mountains and Valleys record, category one [YuLee Larner].

UNACCEPTED SUBMISSIONS

SWAINSON'S HAWK (Buteo swainsoni), Eastern Shore NWR, 28 December 1997.

YELLOW-LEGGED GULL (Larus cachinnans), Chesapeake Bay-Bridge Tunnel, 2 March 1997.

BLACK-CAPPED CHICKADEE (*Poecile atricapillus*), Dismal Swamp NWR, 21 December 1997.

SPRAGUE'S PIPIT (Anthus spragueii), Blacksburg CBC, 20 December 1997.

HENSLOW'S SPARROW (Ammodramus henslowii), Lorton, 6 October 1996.

SALTMARSH SHARP-TAILED SPARROW (Ammodramus caudacutus), Mathews County CBC, 5 January 1997.

SUBMISSIONS UNDER REVIEW

WESTERN GREBE (Aechmophorus occidentalis), Lake Thoreau, Reston, 23-25 May 1998.

HERALD PETREL (*Pterodroma arminjoniana*), 1 individual, Greenways Wetlands, Loudoun, 11 September 1996.

SHORT-TAILED SHEARWATER (Puffinus tenuirostris), Norfolk Canyon, 18 January 1998.

WHITE-FACED STORM-PETREL (*Pelagodroma marina*), James City County near Williamsburg, 6 September 1996.

BROWN PELICAN (Pelecanus occidentalis), Rockfish Gap, 11 September 1993.

BROWN PELICAN (*Pelecanus occidentalis*), Blue Ridge Parkway Bridge over the James River, milepost 63.6, Amherst County, 5 July 1998.

MAGNIFICENT FRIGATEBIRD (Fregata magnificens), Rockfish Gap, Nelson County, 7 November 1991.

MUTE SWAN (Cygnus olor), Staunton, Augusta County, June-early November 1993.

MUTE SWAN (Cygnus olor), Staunton, Augusta County, 17 December 1994-13 January 1995.

SURF SCOTER (Melanitta perspicillata), Beaverdam, Loudoun County, 8 November 1997.

AMERICAN SWALLOW-TAILED KITE (*Elanoides forficatus*), 1 individual, Bland County, 20 September 1997.

WHITE-TAILED KITE (*Elanus leucurus*), Cheriton, Northampton County, 26 April 1998.

MISSISSIPPI KITE (Ictinia mississippiensis), Staunton, Augusta County, 13 May 1995.

MISSISSIPPI KITE (*Ictinia mississippiensis*), state road 716 looking toward Banister River WMA—north unit, Halifax County, 2 June 1998.

MISSISSIPPI KITE (Ictinia mississippiensis), Highland County, 23 June 1988.

SANDHILL CRANE (Grus canadensis), Lucketts, Loudoun County, 14 March 1998.

BAR-TAILED GODWIT (*Limosa lapponica*), 1 individual, Chincoteague NWR, 7 September 1991. Photograph only, written documentation is accepted. Photograph lost in the mail.

BUFF-BREASTED SANDPIPER (*Tryngites subruficollis*), 1 individual, Ashburn, Loudoun, 15-17 August 1997.

YELLOW-LEGGED GULL (*Larus cachinnans*), 1 individual, Back Bay NWR, 29 December 1997.

BLACK-LEGGED KITTIWAKE (Rissa tridactyla), 1 individual, Beaverdam Reservoir, 1 April 1996.

SABINE'S GULL (Xema sabini), Dulles Greenways, 13 September 1996.

ROSEATE TERN (Sterna dougallii), 1 individual, Kerr Reservoir, 6 September 1996.

ARCTIC TERN (Sterna paradisaea), Greenways, Loudoun County, 21 May 1997.

WHITE-WINGED TERN (*Chlidonias leucopterus*), Dulles Greenways, Loudoun County, 7 September 1996.

COMMON GROUND-DOVE (Columbina passerina), Greenways Wetlands, 6 September 1996.

CAVE SWALLOW (Petrochelidon fulva), Greenways Wetlands, 21 September 1996.

PAINTED BUNTING (Passerina ciris), Charlottesville, 1 January - 22 March 1998.

SWAMP SPARROW (*Melospiza georgiana*), breeding record, 1 young with adult, Dyke Marsh, Fairfax County, 22 June 1997.

INFORMATION FOR CONTRIBUTORS

The Raven, the official journal of the Virginia Society of Ornithology (VSO), functions to publish original contributions and review articles in ornithology not published elsewhere, mostly relating to Virginia birdlife. Manuscripts should be sent to the editor, C. Michael Stinson, Rt. 1, Box 186, Prospect, VA 23960.

Most manuscripts published in *The Raven* concern the distribution, abundance, and migration of birds in Virginia. Manuscripts on other ornithological topics, such as Virginia-based historical reviews, bibliographical reviews, life history notes, and behavioral observations, are also welcomed. In addition, the journal serves to publish the official proceedings of the VSO and other formal items pertaining to all aspects of the Society's activities. *The Raven* may also publish articles pertaining to the activities of the various public and private organizations engaged in biological and conservation work in Virginia. *The Raven* is a peerreviewed journal; all feature articles and short communications are reviewed before acceptance for publication.

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Deadlines for submission of articles are 15 December for the spring issue and 15 July for the fall issue.



The Raven

JOURNAL OF THE VIRGINIA SOCIETY OF ORNITHOLOGY

Volume 70 Number 2 1999



The Virginia Society of Ornithology, Inc. exists to encourage the systematic study of birds in Virginia, to stimulate interest in birds, and to assist the conservation of wildlife and other natural resources. All persons interested in those objectives are welcome as members. Present membership includes every level of interest, from professional scientific ornithologists to enthusiastic amateurs.

Activities undertaken by the Society include the following:

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- Other forays or field trips lasting a day or more and scheduled throughout the year so as to include all seasons and to cover the major physiographic regions of the state.
- 3. A journal, *The Raven*, published twice yearly, containing articles relevant to Virginia ornithology, as well as news of the activities of the Society and its chapters.
- 4. A newsletter, published quarterly, containing current news items of interest to members and information about upcoming events and pertinent conservation issues.
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THE 1997 GALAX FORAY

JOHN H. DALMAS

1230 Viewmont Dr. Evington, VA 24550

The Virginia Society of Ornithology's 1997 Breeding Bird Foray to the New River Valley was held from 10 through 15 June. Headquarters for the foray, which included western Carroll, eastern Grayson and southern Wythe counties, was at the Super 8 Motel in Galax. Fourteen participants found 117 species of birds in the area during this period, of which 113 were suspected or confirmed to be breeding.

The area covered is a rectangle bordered by longitudes 80° 37.5′ W and 81° 15′ W and by latitude 36° 52.5′ N and the North Carolina state line, about 1940 square kilometers (see Figure 1). Within this mostly rural area is the city of Galax, with a population of about 6500, the towns of Hillsville, Independence and Fries, and the easternmost part of the Mount Rogers National Recreation Area. Major highways include Interstate 77, US Routes 21 and 52 (north-south) and US Routes 58 and 221 (east-west), as well as about 39 kilometers of the Blue Ridge Parkway. Except for a small sector of Piedmont in the southeast corner with elevations as low as 335 meters, referred to herein as the "lowlands," all of the foray area is on the Blue Ridge Plateau, ranging from about 610 meters to a maximum of 1387 meters above sea level. Essentially all of the area north and west of the Blue Ridge Parkway is in the Mississippi River drainage, and the area to the south and east of the Parkway is in the Yadkin River (Atlantic) drainage.

Geologically, the most prominent feature of this area is the New River, perhaps the oldest river in North America (Frye 1986). Some of the other conspicuous features of the area are: (1) the steep escarpment on the east edge of the Blue Ridge Plateau; (2) Point Lookout and Buck Mountains, the high granite peaks just north of Independence; and (3) the Iron Mountains, a sandstone ridge along the Grayson-Wythe County line. Other than the New River and the impoundments created by several small hydroelectric dams, there is very little water or marsh habitat in the Galax Foray area.

The Galax area had a high priority for foray coverage. Although the Mt. Rogers area just to the west had been surveyed on four previous occasions, systematic coverage of breeding birds in the New River Valley and the adjacent uplands has been minimal. The areas east of here were covered by the 1976 Rocky Knob Foray (Scott 1979) and the 1995 foray in Patrick and Henry counties (Dalmas 1996). The only known bird surveys in the 1997 foray area have been the Virginia Breeding Bird Atlas Project, run from 1983 through 1989, and the US Fish & Wildlife Service's Hebron Breeding Bird Survey, which was run ten years between 1978 and 1995. Also, an inventory of rare plant and animal species was made in 1988 of the Fishers Peak Tract, an 890-hectare watershed between the Blue Ridge Parkway and Fishers

Peak owned by the National Park Service.

Perhaps the most significant findings of this Foray were disjunct populations of Red-breasted Nuthatches (Sitta canadensis), a pair of Hooded Mergansers (Lophodytes cucullatus), and two new sites for both Bobolink (Dolychonyx oryzivorus) and Swainson's Warbler (Lymnothlypis swainsonii). The Willow Flycatcher (Empidonax traillii) is perhaps more abundant here than in any other part of the state, and the absence of species which are common elsewhere, such as Purple Martin (Progne subis) and Prairie Warbler (Dendroica discolor), was notable. Details of these findings are given in the annotated species list in Appendix 1.

A total of 28 daily field lists and approximately 200 party-hours provided the basis for this compilation. There was little coverage between the hours of 9:00 PM and 5:30 AM, so nocturnal species are under-represented. The procedure for this foray was similar to that in past years. Participants were provided copies of a site prospectus, as well as field lists and county maps. Assignments to the various sites were rotated among available parties for the five-day period, thus providing maximum coverage efficiency and compensating for variables in the weather, time of day, and ability of observers. Note that there is a high probability of duplication when the same areas are birded on successive days, so the most meaningful measure of relative abundance is the high count of a species by one party on a single day. Except for rain during most of 12 June, the weather was not a factor on the 1997 foray.

Species looked for but not found were Bald Eagle (Haliaeetus leucocephalus), Spotted Sandpiper (Actitis macularia), American Woodcock (Scolopax minor), Barn Owl (Tyto alba), Great Horned Owl (Bubo virginianus), Red-headed Woodpecker (Melanerpes erythrocephalus), Loggerhead Shrike (Lanius ludovicianus), Horned Lark (Eremophila alpestris), Purple Martin (Progne subis), Cliff Swallow (Petrochelidon pyrrhonota), Black-capped Chickadee (Poecile atricapillus), Brown-headed Nuthatch (Sitta pusilla), Winter Wren (Troglodytes troglodytes), Golden-crowned Kinglet (Regulus satrapa), Blackburnian Warbler (Dendroica fusca), Summer Tanager (Piranga rubra), and Dickcissel (Spiza americana).

ACKNOWLEDGMENTS

The author gratefully acknowledges the assistance of Tom Davis of the National Park Service for information on and access to the Fishers Peak Tract. The most current version of the yet-unpublished Virginia Atlas Project data, which is referred to frequently in the annotated list, was provided by Roger Clapp. Bruce Peterjohn of the US Fish & Wildlife Service provided the Hebron BBS data, and John Bazuin reviewed the first draft of this paper and made several helpful suggestions. Thanks go especially to the foray participants Robert Barbee, John Bazuin, Harrol Blevins, Velma Blevins, Hartsell Cash, Roger Clapp, John Dalmas, Thelma Dalmas, Bruce Davenport, Tom Davis, Glen Eller, Charles Hansrote, Melva Hansrote, and Charles Stevens.

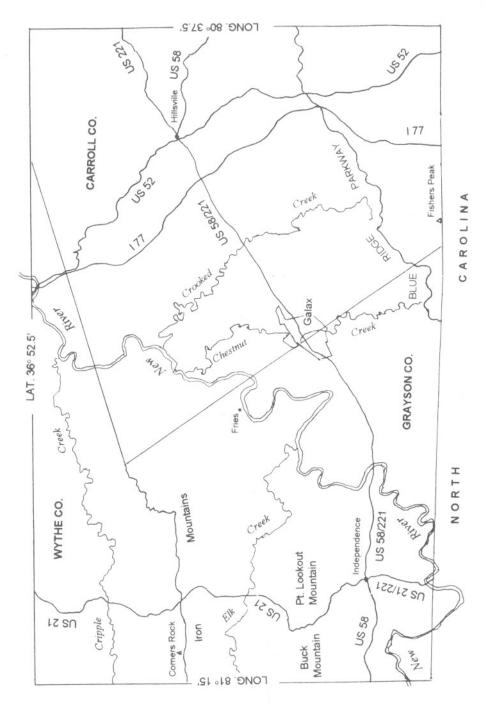


FIGURE 1. GALAX FORAY AREA

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APPENDIX 1

ANNOTATED SPECIES LIST

Pied-billed Grebe (*Podilymbus podiceps*). Two birds were seen 10 June on the New River near the Pattons Mill Lane boat landing off SR 641, Grayson Co. (J. Dalmas), and one was also seen here on 14 June (Eller).

Double-crested Cormorant (*Phalacrocorax auritus*). Three reports. One bird was seen 11 June on the New River, from both SR 635 and SR 737, Carroll Co. (Bazuin). Two birds were seen at this site on 13 June (Cash & H. Blevins), and one was also seen here on 14 June (Eller).

Great Blue Heron (*Ardea herodias*). Only four reports, three of single birds at different points along the New River, and one of two apparently different birds flying over SR 607, Grayson Co., on 13 June (Clapp).

Green Heron (*Butorides virescens*). Very uncommon. The highest count was of three birds found at different locations on 14 June (Eller). There were only five other reports of single birds.

Black Vulture (*Coragyps atratus*). Very uncommon except for one 11 June report of 24 birds, seen from SR 737, Carroll Co. (Bazuin).

Turkey Vulture (*Cathartes aura*). Fairly common, with two high counts of 16 on 12 June (C.&M. Hansrote) and 13 June (Cash & H. Blevins).

Canada Goose (*Branta canadensis*). Fairly common along the New River but not found elsewhere. The high count of 24 birds was reported from various locations along the river in Grayson County on 11 June (J. Dalmas). This species has appar-

ently become established in this area during the past ten years, as it was not reported here during the Virginia Atlas Project.

Wood Duck (*Aix sponsa*). Two broods were found in the Carroll County lowlands, a female with eight 6-inch ducklings at the SR 687 bridge over Lovill's Creek on 11 June (Clapp), and a female with six young along SR 696 at a small pond near the state line on 13 June (J. & T. Dalmas). All of the other eight records were of single birds on the plateau.

Mallard (*Anas platyrhynchos*). Very uncommon. Both of the high counts of three birds were in Grayson County, one on 11 June along the New River (J. Dalmas) and the other on 14 June along Elk Creek (J.&T. Dalmas).

Hooded Merganser (*Lophodytes cucullatus*). One record, a pair seen at the Pattons Mill Lane boat landing off SR 641, Grayson Co., on 10 June (J. Dalmas).

Osprey (*Pandion haliaetus*). Two reports. One was seen on 11 June along the New River from Carroll SR 635 (Bazuin). The other was seen along the New River from SR 711, Grayson Co., just below the Cox's Chapel low water bridge (Cash & H. Blevins).

Sharp-shinned Hawk (*Accipiter striatus*). Two reports. One was seen and heard calling 13 June along Carroll Co. Rt. 856 (C. & M. Hansrote). The other was seen 14 June being chased by an American Kestrel (*Falco sparverius*) along SR 767, Carroll Co. (Clapp).

Cooper's Hawk (*Accipiter cooperii*). One record, of a bird seen 11 June along SR 663 in Grayson Co. by Cash and H. Blevins.

Red-shouldered Hawk (*Buteo lineatus*). One record, of a bird seen 15 June along the New River Trail just west of Austinville, Wythe County (J. & T. Dalmas).

Broad-winged Hawk (*Buteo platypterus*). This species was widespread but very scarce, with a total of 13 birds reported, and a high count of three on 12 June from FR 14, Wythe County (Bazuin).

Red-tailed Hawk (*Buteo jamaicensis*). Also widespread but scarce; there were 14 reports and a total of 19 birds, with the maximum of three reported 11 June from the Elk Creek area, Grayson County (Cash & H. Blevins).

American Kestrel (*Falco sparverius*). Only six reports totaling eight birds, and high counts of two birds each on 12 June in Grayson County and on 13 June in Carroll County (Cash & H. Blevins).

Ruffed Grouse (*Bonasa umbellus*). Nine reports totaling 17 birds, including two different broods, is a very good count for this secretive species. A hen with three chicks was seen 12 June along SR 658 in Grayson Co. (C. & M. Hansrote), and another adult with three chicks was seen 13 June along Fishers Peak Road, Carroll County (Davis). Also on 13 June, an adult performing a distraction display was seen along SR 742 in Carroll Co. (Cash & H. Blevins).

Wild Turkey (*Meleagris gallopavo*). Only six reports, but one of 27 birds, including 2 adults with 13 young along SR 711, Grayson Co., on 12 June (Cash & H. Blevins). Also on 12 June, Bazuin reported a hen with 2 small downy young along FR 14, Wythe County. There was also a 14 June report of two adults with nine young along SR 749 in Carroll Co. (Cash, H.& V. Blevins).

Northern Bobwhite (*Colinus virginianus*). Uncommon. The high count was of 11 birds in southern Grayson County on 13 June (Clapp).

Killdeer (*Charadrius vociferus*). Uncommon. The high counts of six birds were recorded on 11 June (Clapp) and on 13 June (J. & T. Dalmas).

Rock Dove (*Columba livia*). Locally common. The high count was 28 birds from the Elk Creek area of Grayson County on 14 June (J. & T. Dalmas).

Mourning Dove (Zenaida macroura). Common. The high count of 31 birds was recorded in the area between Carsonville and Elk Creek, Grayson County, on 13 June (Bazuin).

Black-billed Cuckoo (*Coccyzus erythropthalmus*). One record. A bird was seen perched in a tree along SR 700 in Carroll Co. on 11 June (Clapp).

Yellow-billed Cuckoo (*Coccyzus americanus*). Very uncommon. The high count of only three birds was recorded in Grayson County on 13 June (Bazuin).

Eastern Screech-Owl (*Otus asio*). Only two records, of single birds responding to taped calls (Clapp). One bird was found in Collins Cove on 10 June along SR 643 in Wythe County, and the other was found on 14 June along SR 769, Carroll County.

Barred Owl (*Strix varia*). One report. Bazuin found one being harassed by American Crows (*Corvus brachyrhynchos*) along FR 14 in Wythe County, just east of the horse trail crossing, on 12 June.

Common Nighthawk (*Chordeiles minor*). The only reports were of birds heard calling over Galax in the early morning of 9 June (Clapp) and 12 and 15 June (Bazuin).

Whip-poor-will (*Caprimulgus vociferus*). One report, of two birds heard calling near the Pattons Mill Lane boat landing, SR 641, Grayson Co., about 8:45 PM on 10 June (J. Dalmas).

Chimney Swift (*Chaetura pelagica*). Fairly common. The high count was 15 birds in Grayson County on 13 June (Bazuin). On 9 June, a bird was also seen entering a chimney along SR 660, Grayson Co. (Clapp).

Ruby-throated Hummingbird (*Archilochus colubris*). Very uncommon. Several parties had the high count of only two birds, and the total number reported for the foray was only 16.

Belted Kingfisher (*Ceryle alcyon*). Very uncommon. The high count of three birds was from southern Grayson County on 12 June (C. & M. Hansrote).

Red-bellied Woodpecker (*Melanerpes carolinus*). Uncommon, with a high count of five birds reported by two parties.

Downy Woodpecker (*Picoides pubescens*). Uncommon. The high count of nine birds was reported from Grayson County on 9 June (Clapp).

Hairy Woodpecker (*Picoides villosus*). Only three reports, with the high count of three birds reported along FR 14, Wythe County, on 12 June (Bazuin).

Northern Flicker (*Colaptes auratus*). Uncommon. The high count of six birds was reported by two parties.

Pileated Woodpecker (*Dryocopus pileatus*). Uncommon, although there was one very high count of 15 birds by Bazuin, mostly along FR 14, Wythe County, on 12 June.

Eastern Wood-Pewee (*Contopus virens*). Fairly common, with a high count of 18 birds in Carroll County on 13 June (J. & T. Dalmas), most of which were from the lowlands.

Acadian Flycatcher (*Empidonax virescens*). Common, with a high count of 26 birds, mostly along FR 14, Wythe County, on 12 June (Bazuin).

Willow Flycatcher (*Empidonax traillii*). Perhaps more common in the upper New River Valley than anywhere else in the state, especially in the Elk Creek and Chestnut Creek drainages. Bazuin had the high count of nine birds along SR 608 near the Grayson-Carroll County line on 10 June. The Hebron Breeding Bird Survey had the highest density for this species of all the BBS routes in the state. Paradoxically, it was found on only one block in the foray area during the Virginia Atlas Project.

Least Flycatcher (*Empidonax minimus*). Uncommon and local. Most of the reports were from the highlands around Buck Mountain and Big Ridge, Grayson County, where there was one high count of 11 birds on 12 June (C. & M. Hansrote). This species was not found in the area during the Virginia Atlas Project.

Eastern Phoebe (*Sayornis phoebe*). Common. The high count was 16 birds in Elk Creek valley, Grayson County, on 14 June (J. & T. Dalmas). Clapp found 11 nests in Grayson County and one in Wythe County between 9 and 13 June, with contents ranging from fresh eggs to nearly fledged young.

Great Crested Flycatcher (*Myiarchus crinitus*). Uncommon. The high count was six birds from the Elk Creek area of Grayson County on 11 June (Cash & H. Blevins).

Eastern Kingbird (*Tyrannus tyrannus*). Fairly common. Two parties had the high count of nine birds.

White-eyed Vireo (*Vireo griseus*). Very uncommon. The high count was seven birds found 10 June in the area just southeast of Galax (Bazuin).

Yellow-throated Vireo (*Vireo flavifrons*). Uncommon, but widespread up to 1030 meters. The high count of nine was tallied on 13 June between Elk Creek and Carsonville, Grayson County (Bazuin).

Blue-headed Vireo (*Vireo solitarius*). Fairly common at the higher elevations, uncommon and local elsewhere on the plateau. The high count was eight birds along FR 14, Wythe County, on 12 June (Bazuin).

Warbling Vireo (*Vireo gilvus*). Locally common in the upper New River valley, where Cash and H. Blevins had a very high count of ten birds on 12 June. It was found on only one block during the Virginia Atlas Project.

Red-eyed Vireo (*Vireo olivaceus*). Abundant, with a high count of 64 birds in Wythe County on 12 June (Bazuin).

Blue Jay (*Cyanocitta cristata*). Common, with a high count of 21 birds from the southernmost part of the foray area on 11 June (C. & M. Hansrote).

American Crow (*Corvus brachyrhynchos*). Abundant. Young birds were seen begging for food by several observers throughout the foray period.

Common Raven (*Corvus corax*). Very scarce but widespread, with only ten reports and a maximum of two birds. Although most of the birds were at elevations above 914 m, five were found at lower elevations, including one in the Caroll County lowlands on 13 June (J. & T. Dalmas).

Tree Swallow (*Tachycineta bicolor*). Uncommon. The high count of seven birds was along the New River in Grayson County on 11 June (J. Dalmas); three of these were seen entering martin boxes along SR 715. An adult was seen feeding young along SR 722, Carroll Co., on 10 June (C. & M. Hansrote). A nest box with 5 young was found at River Ridge Farm, SR 711, Grayson Co., on 12 June (Cash & H. Blevins). A pair was seen carrying food to a nest along SR 767, Carroll Co., on 14 June (Clapp). This species is also expanding its range; it was found on only one block in the foray area during the Virginia Atlas Project.

Northern Rough-winged Swallow (*Stelgidopteryx serripennis*). Fairly common, with one count of 23 birds along the New River in Grayson County on 11 June (J. Dalmas). Clapp found (1)an active inaccessible nest under the SR 887 bridge over Cranberry Creek in Carroll Co. on 10 June; (2)a nest with 2 young under the SR 619 bridge over Cripple Creek in Wythe Co. on 13 June; and (3)an old nest under the bridge near the intersection of SR 622 and SR 625, Grayson Co., on 13 June. Adults were also seen carrying nesting material into holes in a stream bank along SR 697 in Grayson Co. on 11 June (C. & M. Hansrote).

Bank Swallow (Riparia riparia). Two sites. The Hansrotes found a nesting colony on

11 June in the bank of Meadow Creek along SR 607, Grayson Co., just south of SR 787. This colony was also observed by Clapp on 13 June and Eller on 14 June, and was estimated to have up to ten birds. The Dalmases found six birds along the New River Trail at the old railroad bridge over the New River just north of Ivanhoe, Wythe County, on 15 June. No birds were found at the old site just south of Galax, where up to 50 birds and 135 nest holes had been noted from 1990 through 1994 (Simpson 1994). Another site along Meadow Creek just south of US 58/221, with 25-30 birds and 15-18 nest holes, was found in May 1999 (Eller, pers. comm.); this is about 4.8 km northwest of the 1997 site.

Barn Swallow (*Hirundo rustica*). Common. The highest reported count was 46 birds in the Elk Creek area of Grayson County on 14 June (J. & T. Dalmas). Clapp confirmed breeding at four sites, two in Carroll County and two in Grayson County, including a nest with eggs, nests with young, young begging food, and fledged young.

Carolina Chickadee (*Poecile carolinensis*). Common, with the highest reported count of 14 birds from the New River Trail, Wythe County, on 15 June (J. & T. Dalmas). An adult was seen feeding two young along SR 825 near Longs Gap, Grayson Co., on 12 June (C. & M. Hansrote).

Tufted Titmouse (*Baeolophus bicolor*). Common. The high count was 21 birds in Carroll County southeast of Galax on 10 June (Bazuin).

Red-breasted Nuthatch (*Sitta canadensis*). Bazuin found this species in two locations. One was along FR 14 just east of the Iron Mountain ridge top in Wythe County (elevation ~910 m), where he found three birds on 12 June. The second was near the top of the Iron Mountain ridge along SR 653, Grayson Co. (elevation ~1065 m), where he found two individuals on 14 June. Both populations were in mixed woods consisting of hardwoods and white pine (*Pinus strobus*). These two locations are about 3 to 4 kilometers apart. Birds breeding at these locations would represent an eastward extension of the breeding range of the species in Virginia of about 40-45 kilometers from known breeding sites in the Mount Rogers area.

White-breasted Nuthatch (*Sitta carolinensis*). Uncommon. The high count of eight birds was reported 10 June from Wythe County (Clapp) and on 11 June from Carroll County (Bazuin).

Carolina Wren (*Thryothorus ludovicianus*). Fairly common. The high count of 15 birds was from the southernmost part of the area on 11 June (C. & M. Hansrote).

House Wren (*Troglodytes aedon*). Common. The highest reported count of 26 birds was from the Elk Creek area of Grayson County on 12 June (C. & M. Hansrote). On 10 June an adult was seen carrying sticks to a hole in a fence post along SR 646 in Wythe Co., but no nest was found (Clapp).

Blue-gray Gnatcatcher (*Polioptila caerulea*). Uncommon, although there was one high count of 13 birds from southern Grayson County on 11 June (C. & M. Hansrote).

The Hansrotes also saw an adult feeding juveniles along SR 712 in Carroll Co. on 10 June, and another on 12 June carrying food to a nest which was 7.6 m up in a tulip poplar (*Liriodendron tulipifera*) along SR 825 near Longs Gap in Grayson Co..

Eastern Bluebird (*Sialia sialis*). Common, with the highest reported count of 25 birds from Grayson County on 13 June (Bazuin). There were 12 reports of confirmed breeding, mostly juvenile birds, in all portions of the foray area.

Veery (*Catharus fuscescens*). Two reports. Two birds were found on the north slope of Point Lookout Mountain, Grayson County, on 11 June (Barbee, Davenport & Stevens), where the elevation is about 1300 meters. The other report was one bird heard calling at about 1130 m on nearby Buck Mountain, Grayson County, on 12 June (J. Dalmas).

Wood Thrush (*Hylocichla mustelina*). Fairly common. The high count was 12 birds found along the Blue Ridge escarpment and in the lowlands of Carroll County on 13 June (J. & T. Dalmas). An adult carrying food was seen at Comers Rock Picnic Ground on FR 57, Grayson County, on 12 June (J. Dalmas).

American Robin (*Turdus migratorius*). Very common, with the highest reported count of 50 birds from Grayson County on 13 June (Bazuin). There were several confirmations of breeding noted, from a nest with eggs to fledged young.

Gray Catbird (*Dumetella carolinensis*). Fairly common. The high count of 13 birds, including an immature along SR 697 in Grayson Co., was reported from the southernmost part of the Foray area on 11 June (C. & M. Hansrote).

Northern Mockingbird (*Mimus polyglottos*). Fairly common. The highest reported count was the 16 birds found 11 June by the Hansrotes in the southernmost part of the foray area. Clapp found two nests on 10 June in multiflora rose (*Rosa multiflora*) bushes, one with three young 0.8 meter up in a 1.5-meter bush at the intersection of SR 706 and SR 708, Carroll Co., and one with four young 1.2 meters up in a 2.1-meter bush along SR 646, Wythe County.

Brown Thrasher (*Toxostoma rufum*). Fairly common, with the maximum count of 16 birds from Grayson County on 13 June (Bazuin). Six confirmations of breeding were noted, from a nest with eggs to adults feeding fledglings.

European Starling (*Sturnus vulgaris*). Abundant, although very few were noted at the highest elevations. The highest reported count was 233 birds on 11 June (C. & M. Hansrote).

Cedar Waxwing (*Bombycilla cedrorum*). Fairly common. The high count was the 15 birds in three small flocks found by Eller on 14 June. Bazuin noted two pairs gathering nesting materials, one along SR 608 in Carroll Co. on 10 June, and one along SR 660 in Grayson Co. on 13 June.

Blue-winged Warbler (Vermivora pinus). Three records. The Hansrotes found one

along SR 620, Carroll Co., on 10 June, and another along SR 701, Grayson Co., on 11 June. Clapp found one off SR 663, Grayson Co., on 12 June, along with the next species.

Golden-winged Warbler (*Vermivora chrysoptera*). Three records. Two birds were found 11 June in a shrubby, abandoned pasture on the south slope of Point Lookout Mountain, Grayson County, at about 1100 meters and 1220 meters (Barbee, Davenport & Stevens). Clapp heard and saw single birds at two different sites in the Elk Creek area of Grayson County on 12 June, one on SR 764 (970 meters) and one on SR 663 (800 meters).

Northern Parula (*Parula americana*). Uncommon and local. This species appeared on only 12 of the 28 daily lists, but the high count was nine birds along the New River below Byllesby Dam on 13 June (Cash & H. Blevins).

Yellow Warbler (*Dendroica petechia*). Common, with one very high count of 29 birds in the Elk Creek area of Grayson County on 12 June (C. & M. Hansrote).

Chestnut-sided Warbler (*Dendroica pensylvanica*). Fairly common at the higher elevations. The high count was 14 birds on Point Lookout Mountain on 11 June (Barbee, Davenport and Stevens).

Black-throated Blue Warbler (*Dendroica caerulescens*). Uncommon at the higher elevations. There were three high counts of five birds.

Black-throated Green Warbler (*Dendroica virens*). Uncommon at the higher elevations, with one count of five birds along FR 57, Grayson County, on 11 June (Cash & H. Blevins).

Yellow-throated Warbler (*Dendroica dominica*). This species was reported on only four of the 28 lists, and all records were along the New River. The high count of two birds was along SR 715, Grayson Co., on 9 June (Clapp) and along the New River Trail in Wythe County on 15 June (J. & T. Dalmas). This species was not found in the area during the Virginia Atlas Project.

Pine Warbler ($Dendroica\ pinus$). Locally common, with a very high count of 17 birds along SR 708, Grayson Co., on 12 June (Cash & H. Blevins). There was also a surprisingly large population of this species along the top of the Iron Mountain ridge in Grayson County, both along FR 57 and where SR 653 crosses near Jones Knob.

Prairie Warbler (*Dendroica discolor*). Only one record. Cash and H. Blevins found one bird along SR 708 in Grayson Co. on 12 June. Despite what appears to be ample habitat for this species, it had been found on only three of the 15 blocks covered in this area during the Virginia Atlas Project.

Cerulean Warbler (*Dendroica cerulea*). Only one record. One singing bird was found at about 610 m on the Blue Ridge escarpment along SR 620 (Pipers Gap Road), Carroll Co., on 13 June (J. & T. Dalmas). Apparently not present on the Blue Ridge

Plateau, it was not found in the area during the Virginia Atlas Project.

Black-and-white Warbler (*Mniotilta varia*). Uncommon. The high count was nine birds on 10 June, four along SR 643 into Collins Cove, Wythe Co., and five along SR 653 over the Iron Mountain ridge, Grayson Co. (Clapp).

American Redstart (*Setophaga ruticilla*). Uncommon, but apparently much more common than during the Virginia Atlas Project, when this species was found on only one block. The Hansrotes had the high counts of seven birds in the Elk Creek area of Grayson County on 12 June, and along roads paralleling the Blue Ridge Parkway in Carroll County on 13 June. On 11 June, Bazuin saw an adult carrying food at the junction of SR 737 and the New River Trail in Carroll County.

Worm-eating Warbler (*Helmitheros vermivorus*). Surprisingly uncommon considering this species had been found on seven of the 15 blocks covered during the Virginia Atlas Project. There were only seven reports. The high count was four birds in northern Carroll County on 14 June (Clapp).

Swainson's Warbler (*Limnothlypis swainsonii*). Two records of singing birds in thickets of rosebay rhododendron (*Rhododendron maximum*). Bazuin found one on 11 June near the New River along SR 635 just west of its junction with SR 740, Carroll Co. (~670 m). Clapp found one on 12 June along SR 664 0.8 km east of its junction with SR 764, Grayson Co. (~850 m). Neither bird was seen, or found on subsequent trips into the area. The only other known record for the foray area is of birds found in the Fishers Peak Tract, Carroll County, by Alan B. Smith during a biological inventory of the area for the National Park Service in 1988 (Davis, pers. comm.; Smith, pers. comm). This species has also been found at Stone Mountain State Park, North Carolina, 27 km southwest of the Fishers Peak Tract (Simpson 1992).

Ovenbird (*Seiurus aurocapillus*). Common. Bazuin had the high count of 33 birds, mostly along FR 14 in Wythe County, on 12 June, and an adult feeding a non-flying fledgling along SR 653, Grayson Co., near the top of the Iron Mountain ridge on 14 June.

Louisiana Waterthrush (*Seiurus motacilla*). Very scarce, with only seven reports. Three parties had the high count of only three birds.

Kentucky Warbler (*Oporornis formosus*). Very uncommon. There were 11 reports of this species, including one of a bird found on Point Lookout Mountain at an elevation of 1195 m (Barbee, Davenport & Stevens). The high count of six birds was from western Carroll County on 11 June (Bazuin).

Common Yellowthroat (*Geothlypis trichas*). Uncommon. The highest count was 12 birds in the area just southeast of Galax on 10 June (Bazuin).

Hooded Warbler (*Wilsonia citrina*). Fairly common. The highest count of 16 birds was reported from Carroll County on 11 June, along the Blue Ridge Parkway and the road to Fishers Peak (Clapp).

Canada Warbler (*Wilsonia canadensis*). One record. An adult male was seen, but never heard singing, just north of the Comers Rock Picnic Ground in Wythe County, on 12 June (J. Dalmas).

Yellow-breasted Chat (*Icteria virens*). Uncommon in the lowlands, where the high count of six birds was found along the Blue Ridge escarpment and lowlands of Carroll County on 13 June (J. & T. Dalmas). Very uncommon on the plateau, but up to 960 m elevation along SR 611, Grayson Co., on 12 June (Clapp).

Scarlet Tanager (*Piranga olivacea*). Fairly common. There was one high count of 17 birds from Wythe County, mostly along FR 14, on 12 June (Bazuin).

Eastern Towhee (*Pipilo erythrophthalmus*). Very common. The high count was 57 birds, mostly in Grayson County, on 11 June (C. & M. Hansrote).

Chipping Sparrow (*Spizella passerina*). Common. The high count was 27 birds on 11 June, including an immature bird seen along SR 701, Grayson Co. (C. & M. Hansrote). Also on 11 June, an adult with a juvenile was seen along SR 729, Grayson Co. (Cash & H. Blevins), and an adult was seen carrying food near Byllesby, Carroll County (Bazuin).

Field Sparrow (*Spizella pusilla*). Common, with a high count of 18 birds in Grayson County on 11 June (C. & M. Hansrote).

Vesper Sparrow (*Pooecetes gramineus*). Only one record, of four birds found in abandoned pasture on Point Lookout Mountain, Grayson County, on 11 June (Barbee, Davenport & Stevens). An attempt was made to check the large population of birds reported on the open summit of Buck Mountain in 1973 (Stevens 1976), but there are now private homes along the ridge, and access to this area was not possible (J. Dalmas).

Savannah Sparrow (*Passerculus sandwichensis*). This species continues to expand its range. Clapp found singing birds at four different sites in Carroll County, one of them a site where the species was located during the Virginia Atlas Project. Bazuin found another site in Wythe County, with singing birds at four places along SR 651. The maximum count was 13 birds, including fledged young, in a field across SR 685 from Fancy Gap Elementary School, Carroll Co. (J. & T. Dalmas).

Grasshopper Sparrow (*Ammodramus savannarum*). Very uncommon considering the ample amount of suitable habitat. The high count of nine birds was reported by Cash & H. Blevins from the Elk Creek area of Grayson County on 11 June.

Song Sparrow (*Melospiza melodia*). Very common. The high count of 77 birds was reported on 11 June (C. & M. Hansrote). On 13 June, Bazuin saw an adult carrying food along SR 660, Grayson Co., and Clapp found a fledged young begging food at Fairview Baptist Church, SR 607, Grayson County.

Dark-eyed Junco (*Junco hyemalis*). Common at elevations over 915 m, although the highest count of 14 birds, including a nest with four young on a bank by the road, was along FR 14, Wythe County, where the elevation ranges from 807 m to 930 m (Bazuin). A highly agitated adult carrying food was seen along Comers Rock Trail, Grayson County, on 12 June (J. Dalmas). A family group with two flying juveniles was seen 14 June near the crest of Iron Mountain along SR 653, Grayson Co. (Bazuin).

Northern Cardinal (*Cardinalis cardinalis*). Common. The high count was 22 birds on 13 June, mostly from the Carroll County lowlands (J. & T. Dalmas). An adult was seen carrying food along SR 635, Carroll Co., on 11 June (Bazuin).

Rose-breasted Grosbeak (*Pheucticus ludovicianus*). Uncommon at the highest elevations. There were only five reports, with a maximum of three birds from FR 57, Grayson Co., on 12 June (J. Dalmas).

Blue Grosbeak (*Guiraca caerulea*). Very scarce with only five reports, all of single birds on the plateau except for one of three birds from the Carroll County lowlands on 13 June (J. & T. Dalmas).

Indigo Bunting (*Passerina cyanea*). Very common. The high count was 71 birds on 11 June (C. & M. Hansrote). A female was seen carrying nesting materials along SR 608, Grayson Co., on 10 June (Bazuin).

Bobolink (*Dolichonyx oryzivorus*). Clapp found birds at two sites, a singing bird at Skyview Baptist Church, SR 685, Carroll Co., on 11 June, and a male seen along SR 658, Grayson Co., 2.6 km west of US 21, on 12 June. Singing birds were heard and seen at the first site on subsequent days by other parties, with the maximum count of 3 birds—2 males and 1 female—on 14 June (Cash, H&V Blevins). A flock of at least 12 birds was seen in a follow-up trip to the Skyview Church site on 15 June (Cash, pers. comm.), and these birds were thought to be late migrants.

Red-winged Blackbird (*Agelaius phoeniceus*). Very common. The highest reported count of 117 birds was recorded in Elk Creek valley, Grayson County, on 14 June (J. & T. Dalmas). A juvenile was seen along SR 662, Grayson Co., on 11 June (Cash & H. Blevins). A female was seen carrying food along SR 660, Grayson Co., on 13 June, and a female was seen carrying a fecal sac along SR 619, Wythe Co., on 14 June (Bazuin).

Eastern Meadowlark (*Sturnella magna*). Common. The highest reported count was 48 birds in Elk Creek valley, Grayson County, on 14 June (J. & T. Dalmas). An adult was seen carrying food near the junction of SR 650 and SR 660, Grayson Co., on 13 June (Bazuin).

Common Grackle (*Quiscalus quiscula*). Common. The highest reported count was 47 birds in Carroll Co. on 13 June, mostly from the lowlands (J. & T. Dalmas). An adult was seen feeding a fledgling along SR 660, Grayson Co., on 13 June (Bazuin).

Brown-headed Cowbird (*Molothrus ater*). Fairly common, with a high count of 23 birds from Elk Creek valley on 14 June (J. & T. Dalmas).

Orchard Oriole (*Icterus spurius*). Very uncommon, but there was one count of nine birds along the New River in Grayson County on 12 June (Cash & H. Blevins). On 13 June, a male was seen carrying food along Elk Creek, near the junction of VA 274 and SR 660, Grayson Co. (Bazuin).

Baltimore Oriole (*Icterus galbula*). Uncommon, although there was one very high count of 18 birds along the New River in Grayson County on 12 June (Cash & H. Blevins). A pair was seen carrying food on 11 June to a nest 23 m up in a sycamore (*Platanus occidentalis*) at the junction of SR 737 and the New River Trail, Carroll Co. (Bazuin).

House Finch (*Carpodacus mexicanus*). Uncommon. The high count was ten birds from Elk Creek valley, Grayson County, on 14 June (J. & T. Dalmas). Clapp found an old nest 1.4 m up in a 4.9 m arborvitae (*Thuja occidentalis*) in Bethany Chapel cemetery, SR 690, Wythe Co., on 10 June, and a family of four near Salem Methodist Church on US 21, Grayson County, on 12 June.

American Goldfinch (*Carduelis tristis*). Very common. The high count was 36 birds from Elk Creek valley, Grayson County, on 14 June (J. & T. Dalmas).

House Sparrow (*Passer domesticus*). Common. There were high counts of 18 birds reported by three different parties.

OBSERVATIONS OF NESTING LOGGERHEAD SHRIKES IN PRINCE GEORGE COUNTY

BRYAN D. WATTS

Center for Conservation Biology College of William and Mary Williamsburg, VA 23187-8795

ELIZABETH L. SCHOLL

1816 Shop Road Directorate of Public Works Fort Lee, VA 23801-5200

During the mid to late nineteenth century, the Loggerhead Shrike (*Lanius ludovicianus*) underwent a broad expansion of its breeding range into the northern reaches of the conterminous United States and central Canada (Yosef 1996). This expansion corresponds to the creation of early successional habitats resulting from broadscale clearing of forested lands within these regions. Throughout the twentieth century the breeding range has been contracting back to the south, at least in part due to the progression of secondary succession on the same lands (Cade and Woods 1997). The range contraction has been most dramatic within the northeastern United States where breeding birds have disappeared from Maine south to Pennsylvania since the 1960's. Currently, for states along the Atlantic Coast, Virginia is situated just south of the northern range limit for breeding (Yosef 1996).

A review of historical records indicates that confirmed (nests or young observed) or potential (shrikes present, April to August) breeding has been documented in 54 of Virginia's 95 counties and in 12 of 41 independent cities (Luukkonen 1987, Luukkonen and Fraser 1987). During some period in the past, breeding has been documented within all physiographic regions of the state. However, like many other states, Virginia's shrike population has declined dramatically in recent decades. Data from the Breeding Bird Survey indicate that between 1966 and 1985 the Virginia population declined at an average rate of 10% per year (Luukkonen and Fraser 1987). The Virginia Breeding Bird Atlas confirmed breeding in only 26 counties between 1984 and 1989 (Fraser 1991).

The decline in the breeding population in Virginia has resulted in the loss of the species from the coastal plain. Loggerhead Shrikes were apparently uncommon to rare but regular breeders in the coastal plain throughout the 1950's and 1960's (Larner 1979, M. Byrd pers. comm.). A small number of breeding locations known to the senior author were occupied as recently as the mid-1980's in the coastal plain. How-

ever, the senior author is unaware of any breeding records of this species in this physiographic region within the past ten years.

On 17 June 1997 while conducting surveys of breeding birds on Fort Lee Army Installation, Prince George County, the senior author located a pair of Loggerhead Shrikes attending a nest. Upon discovery, the nest contained a single chick near fledging. The nest was located approximately 5 m from the ground in a red cedar (*Juniperus virginiana*). In addition to the active nest, an older nest was present approximately 1 m higher in the same tree. The nest tree was isolated from other trees by a short distance and situated between a small asphalt parking lot and a secondary road. The site was surrounded by several hectares of fallow grasslands. The grasslands contained scattered trees and were dissected by secondary roads and buildings. The shrikes were observed foraging from perches throughout the early successional habitat and were accompanied by the fledged chick throughout the late summer period.

The breeding territory discovered during 1997 was also active during the summer of 1998. On 12 June, birds were once again observed attending a nest in the same red cedar tree. A new nest had been constructed on top of the alternate nest observed in 1997 (nest above the active nest in 1997). Upon discovery this nest contained a single chick near fledging. This chick fledged and was observed foraging with the adults during late June. On 3 August, adults were observed attending a second nest. The new nest was located in a loblolly pine (*Pinus taeda*) approximately 100 m from the first nest. The nest was positioned out from the trunk and approximately 10 m above the ground on the second lowest available limb. Upon discovery, this nest contained four chicks. All of these chicks fledged.

During the summer of 1998, a third adult shrike was observed approximately 1 km from the active territory. The bird was not associated with the breeding pair but was resident around an athletic field for the entire summer. Despite repeated observations, there was no evidence that this bird was mated.

Prince George County is situated in the outer coastal plain and during the 1970's and 1980's apparently supported the last vestige of the Loggerhead Shrike population in that physiographic region. Observers conducting the Hopewell Christmas Bird Count regularly recorded this species until the early 1990's when detections of the species became more erratic. This count has been the most reliable count on the coastal plain for Loggerhead Shrikes over the past 20 years. The breeding adults observed during 1997 and 1998 on Fort Lee do not appear to be resident on the breeding territory during the winter months. It is possible that these birds account for the individuals detected on the Hopewell count in the recent past. Prince George is also not far from the small remnant breeding population that still occurs in the southeastern Piedmont (Fraser 1991). Whether the Fort Lee population represents a holdover from the previously widespread coastal population or a new colonizer from the southern Piedmont population remains unclear. Further surveys are needed within the Hopewell/Petersburg area to search appropriate habitat for other breeding pairs. Observations are also needed to determine the seasonal movement patterns of the Fort Lee birds.



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VIRGINIA CHRISTMAS BIRD COUNTS: 1998-99 SEASON

TETA KAIN

7083 Caffee Creek Lane Gloucester, VA 23061-3374

Forty-six Christmas counts were conducted in Virginia during the 1998-99 season, one more than in 1997, but the total number was lower than the all-time high of 51 in 1994. The lineup was somewhat different than last year's roster. A brandnew count, The Plains, was organized by compiler George Fenwick of Northern Virginia. The count circle is in the Piedmont and the center is located 7 miles northwest of Warrenton on the west side of Watery Mountain along Carter Creek. The area is bounded by The Plains to the north, Warrenton to the south, Bull Run Mountain to the east, and the Rappahannock River to the west.

After experiencing a one-year pause, the Giles County, Tazewell, and Breaks Interstate Park counts returned, but results for the John H. Kerr Reservoir, Martinsville, and Highland County counts were not submitted this year. Ill health and bad weather stymied organizer James Beard on the Martinsville count. The status of the Highland County and Kerr Reservoir counts is not known at this time.

Sadly, we report that long-time compiler Russell Brachman passed away suddenly shortly after he conducted the Danville count. We thank Edward W. Fisher, Sr., who kindly compiled the count results gathered by Brachman and submitted them to *The Raven* for publication.

Results from eight counts — Fort Belvoir, Darlington Heights, Lynchburg, Danville, Peaks of Otter, Roanoke, Giles County, and Bristol — were submitted to *The Raven* but not to the National Audubon Society for publication in their Christmas Counts volume. Two of these counts did not follow the regulations adhered to by other counts. Darlington Heights was conducted outside the Christmas count period and Giles County observers covered the entire county instead of the prescribed 15-mile-diameter circle that other counts encompass.

It should also be noted that compiler Henry Armistead has requested that the Cape Charles count name be changed to Cape Charles-Kiptopeke to reflect the inclusion of that important Eastern Shore area and to better identify exactly where the count is located. That name change appears in the count tables.

The counts in Appendix 1 are arranged geographically, with the three Eastern Shore counts listed first and the rest listed generally in an east-to-west and north-to-south configuration. Counts 1 through 16 are on the Coastal Plain, counts 17 through

27 are in the Piedmont, and counts 29 through 46 are in the Mountains and Valleys region of the state. Appendix 1 follows the order and names of species as set forth in the 7th edition of the American Ornithologists' Union's *A.O.U. Check-list of North American Birds*. See Appendix 2 for Christmas Count descriptions.

The total number of species found on all counts this year was 216, six more than last year's total. Also recorded were two morphs, one race, and two hybrids. Some highly unusual finds were included on the list. The Pacific Loon (*Gavia pacifica*) at Little Creek was a first for Little Creek, but the third time it has been recorded on a Virginia count. Little Creek also chalked up the only Eared Grebe (*Podiceps nigricollis*) found in the state this year. Participants also recorded an Anhinga (*Anhinga anhinga*) for the second year in a row. Cape Charles-Kiptopeke's White Ibis (*Eudocimus albus*) numbers did not reach the astonishing highs of last year, but still, 64 individuals is certainly an impressive number.

Ross's Geese (*Chen rossii*) staged a mini-invasion with one individual found at Chincoteague, an all-time high of three at Cape Charles-Kiptopeke, and one individual at Glade Spring which had been hanging around a long time and was well documented by many. A nice photograph of the bird was also submitted with the documentation. One wonders if the environment can hold many more Canada geese (*Branta canadensis*), with the total number soaring to almost 80,000 this year. Although these majestic birds gladden the hearts of many as they fly in formation against the winter sky, the non-migrants are becoming a serious and many-faceted problem for innumerable communities throughout the commonwealth.

The Northern Goshawk (Accipiter gentilis) showing up on the Cape Charles-Kiptopeke count is almost commonplace now, but the one found on the Blacksburg count was the first seen there since 1938. Cape Charles birders were a little surprised to find a Golden Eagle (Aquila chrysaetos) and the ones at Hopewell and Fort Belvoir were unexpected, but the real bonus was the six counted at Blackford, one more than was found the previous year there.

Although a Black-tailed Gull (*Larus crassirostris*) had been spotted in the state the previous winter, coastal participants were ecstatic to find three individuals at three different places this year. Because the Chesapeake Bay Bridge-Tunnel count was held first, it holds the title of producing the first North American Christmas Bird Count record of this species. At least 21 Lesser Black-backed Gulls (*Larus fuscus*) were at a landfill within the count circle of Dismal Swamp, and perhaps more could have been added. The hundreds of gulls milling around the area made accurate counting difficult.

Loggerhead Shrike (*Lanius ludovicianus*) numbers were up this year with 21 individuals appearing on 14 counts and two more seen during count week at Augusta and Giles counties. Blue-headed Vireo (*Vireo solitarius*) numbers remain low, never approaching the unprecedented 30 individuals that showed up on counts all over the state in 1990. Most unusual was the fact that not one Blue-gray Gnatcatcher (*Polioptila caerulea*) was found this year. Since 1971, this species has been recorded on at least one count every year except 1981 and 1993.

An interesting report was of a Veery (*Catharus fuscescens*) at Danville. The report was accompanied by good details, even comparing the individual with a Hermit Thrush (*Catharus guttatus*) that was seen on the same day by the same observers. The comment at the end of the documentation was of great interest: "We have observed Veeries every year in the area from late October through December. The

milder the weather, the longer into the season we observe the birds." As always, this report and all other extremely rare sightings reported on Virginia Christmas counts will be submitted to VARCOM (Virginia Avian Records Committee) for review and cannot be accepted unless that body of reviewers deems the documentation to be valid.

Hardly any unusual warblers were found this year. A Northern Parula (*Parula americana*) at Williamsburg represented the first time that species has been found on a count since 1986. An American Redstart (*Setophaga ruticilla*) at Hopewell was also a very rare occurrence. A well-described Clay-colored Sparrow (*Spizella pallida*) was recorded at Chincoteague, but it should be kept in mind that the bird was in the Maryland sector of the count circle and cannot be counted as a Virginia record.

As usual, there were a few species that escaped detection. Birds often found somewhere in the state but were missed this year were: American White Pelican (Pelecanus erythrorhynchos), Yellow-crowned Night-Heron (Nyctanassa violacea), Glossy Ibis (Plegadis falcinellus), Harlequin Duck (Histrionicus histrionicus), Piping Plover (Charadrius melodus), Pectoral Sandpiper (Calidris melanotos), Parasitic (Stercorarius parasiticus) and Pomarine (S. pomarinus) jaegers, Blue-gray Gnatcatcher, Dickcissel (Spiza americana), Bullock's Oriole (Icterus bullockii), Red Crossbill (Loxia curvirostra), and Common Redpoll (Carduelis flammea).

Weather and wind codes:

CLD - cloudy

CLR - clear

FOG - foggy

HRS - heavy rain and snow

HVR - heavy rain

LGR - light rain

LGS - light snow

LHR - light to heavy rain

LRS - light rain and snow

MCD - mostly cloudy

OVC - overcast

PCD - partly cloudy

PCR - partly clear

SLE - sleet

UNK - unknown

VAR - variable

Water codes:

MMF - moving water mostly frozen

MPF - moving water partly frozen

MWF - moving water frozen

MWO - moving water open

SMO - still water mostly open

SPF - still water partly frozen

SPO - still water partly open

SWF - still water frozen

WOP - water open

APPENDIX I

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	Red-throated Loon	Pacific Loon	Common Loon	loon, sp	Pijed-billed Grebe	Homed Grebe	Red-necked Grebe	Eared Grebe	Northern Gannet
1. Chincoteague	8		47		11	21			13
2. Wachapreague	21		49	***	9	3	***		16
3. Cape Charles/Kiptopeke 4. CBBT	62 17		178 6		74	235			254 26
5. Little Creek	20	1	49		84	13	2	1	1,370
6. Back Bay	56	***	25		27	2			109
7. Nansemond River	4		3		18	105	***	***	
Dismal Swamp Newport News	39	***	35	•••	8 53	273	•••	•••	230
10. Mathews County	16		196		6	60	2	***	230
11. Williamsburg	6		27	1	31	46			
12. Hopewell			***	***	16	2,716	***		
13. Walkerton	9	2000		***		***	***		
14. Wash. Birthplace 15. Brooke	6		33	***	3 81	11	7	•••	8
16. Fort Belvoir			6		46	7	2	***	***
17. Central Loudoun					CW		-		***
18. The Plains			***				***		
19. Manassas-B.R.					1				
20. Chancellorsville					18		•••		
21. Gordonsville 22. Charlottesville	***	***				***			
23. Warren	***		1	***	11		•••	***	***
24. Darlington Heights	***					***			
25. Banister WMA									
26. Lynchburg					20	***			
27. Danville		***			5	6			
28. Calmes Neck	0111	***	0111				***		***
29. N. Shen. Valley 30. Shen. NP-Luray	CW	•••	CW		8	CW	***	***	•••
		***	***		1.		•••		***
31. Big Flat Mtn. 32. Rockingham Co.			***	***	2	***	•••		***
33. Augusta Co.		•••			3	***	***		
34. Waynesboro			1						
35. Lexington		•••	***		14	***			
36. Peaks of Otter	***		***	***	2			•••	•••
37. Fincastle	•••				2	***			
38. Roanoke 39. Blacksburg		•••	4		15			***	•••
40. Giles County				***	4			•••	•••
41. Tazewell					4	1		***	
42. Glade Spring	***			***	3				
43. Blackford		***	***		2			***	
44. Bristol			12		29	15		•••	
45. Breaks I. S. Park 46. Wise County		***	***		7	***	***	***	
The state of the s					Market and American		***	•••	
Total individuals:	264	1	672	1	625	3,515	13	1	2,027

	Brown Pelican	Double-crested Cormorant	Great Cormorant	cormorant, sp.	Anhinga	American Bittern	Great Blue Heron	Great Egret	Snowy Egret	Little Blue Heron	Tricolored Heron	Cattle Egret
		16				1	101	57	26	2		
	1	79 22			***		65	5	1	2	27	
	19	22	48	5		1	114	73	4	4	62	
	21	4 005	36									
	39	1,035 76	30	***	1	. 1	115	73	1	***	***	20
			***	•••	•••	11	65	1	***	***	•••	20
	CW	2,026 33	1	***	***		23	3				
	***	1,344	***	***	***	•••	8 62	40		•••		
	***	6	***			1	72	13			•••	
	***	540	***			1	97	24				***
	***	***	***	***			284	1				
		1					17					
		283					39					
		35		***	***		69	***				
		23	***				301	1				
	***	***	***	•••			22				***	
	***	***	***			***	2	***			***	***
		1	***		***	***	21					
				***	***		6 7					
	***	***			***		7	***	***	***	***	
	***	***	***	***			15	***		***		***
	***	***	***	***	***		10				***	
	***	***		***	•••		1	***		•••	***	•••
	***	***	•••	***	***		13					
	•••	***	***	***	***	***	17	***				
		***	***	***	***	***	7	***		***	•••	
		1		***	***	***	11 43		***	***		•••
	***						25	***	***	***	***	
									***	***	***	***
	•••			***	***	***	10	***	***	•••	***	***
				***	***	***	10 16	***	***	***	***	
						***	11			***	•••	
							15					
	***	***	***					***		***		
		***					16					
		***					14				***	***
		***		***			17				***	
	***		***	•••	***	***	5					
	•••			***	***	***	1		•••			
	***	***	•••	•••	***	***	22			•••		
		***	***	***	***		4	***				
	***	***					21					
		***	***		***	***		***			***	
_											***	
	80	5,525	115	5	1	16	1,784	253	32	7	93	20
			-			-			NAME OF TAXABLE PARTY.		W	

	Green Heron	Black-crowned Night-Heron	White Ibis	Black Vulture	Turkey Vulture	Greater White-fronted Goose	Snow Goose (Blue form)	Snow Goose	Ross's Goose
Chincoteague Wachapreague Cape Charles/Kiptopeke CBBT	1	16 13 14	 64	55 35 37	167 234 262		158 1 41	16,960 17,868 5,404	3
 Little Creek Back Bay 	1	6		17 2	57 68		3	696 6,370	
7. Nansemond River 8. Dismal Swamp 9. Newport News 10. Mathews County 11. Williamsburg 12. Hopewell	 1 	 4 2		9 21 7 24 186	47 139 21 55 163 226	 1	 550	44 18,045 71	
13. Walkerton 14. Wash. Birthplace 15. Brooke 16. Fort Belvoir 17. Central Loudoun 18. The Plains		 1 	***	41 34 5 88 39 62	206 174 86 174 234 149			32 	
19. Manassas-B.R. 20. Chancellorsville 21. Gordonsville 22. Charlottesville 23. Warren 24. Darlington Heights				34 6 44 120 81 20	217 101 166 164 163 127			1	
25. Banister WMA 26. Lynchburg 27. Danville 28. Calmes Neck 29. N. Shen. Valley 30. Shen. NP-Luray				12 58 162 5 192 2	58 252 91 19 219 125	 2		 3 1	
31. Big Flat Mtn. 32. Rockingham Co. 33. Augusta Co. 34. Waynesboro 35. Lexington 36. Peaks of Otter	cW	•••		53 246 6 40 8	347 981 22 124 26				
37. Fincastle 38. Roanoke 39. Blacksburg 40. Giles County 41. Tazewell 42. Glade Spring				36 113 764 14 127	50 127 187 1 				
43. Blackford 44. Bristol 45. Breaks I. S. Park 46. Wise County Total individuals:		1 58	64	15	17 6,149		753	65,495	

Canada Goose	Canada Goose (small forms)	Brant	Tundra Swan	Mute Swan	Wood Duck	Gadwall	Eurasian Wigeon	American Wigeon	American Black Duck	Black Duck/Mallard hybrid	Mallard
1,741 4,786 2,286 239 848	 2 	1,126 2,500 606 CW 45	244 7 52 28 712	2	6 12 18 49 15	163 21 359 182 437	 1 CW	167 32 787 396 91	1,965 663 1,207 2 74 330	1,500	1,302 379 337 950 450
440 111 516 329 6,743 10,873	***	CW 16 460 	12 5,275 337 62	 18	9 128 21 2 4 13	165 77 16 47		323 30 283 6 11 39	83 26 109 22 64 55		251 22 834 255 472 233
1,751 6,778 437 9,877 1,503 2,095		cw	80 443 345 6	7 1 	54 2 15 88 1	20 59 211 4 188		2 31 212 6 37	34 225 52 1,598 206 216	6	144 357 823 2,111 529 320
3,199 1,011 1,095 874 2,228 41				2 3 	3 2 5 8 6	 3			13 2 13 9 13		402 247 33 3 85
191 171 218 3,929 3,273 560			 2 CW		3 8	8 11 2 1		 4 CW	8 2 24 66 3		324 193 83 163 1,074 338
33 257 390 184 57					3 2	 7 1		33 4 2 	2 2 16 		216 559 215 207
101 47 664 57 50 314					2 1 	18 28		 8 57 3	2 16 30 2 16		82 426 775 71 45 609
70,853		 4,753	7,605	34	485	40 2,069		97 2,662	18 7,196	1,506	48 500 3

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	Mallard/Gadwall hybrid	Blue-winged Teal	Northern Shoveler	Northern Pintail	Green-winged Teal	Canvasback	Redhead	Ring-necked Duck	Greater Scaup
Chincoteague Wachapreague			487	1,026	128 28			6 150	2
Cape Charles/Kiptopeke CBBT Little Creek		6	67	11	258		1	317	***
6. Back Bay		5	228 44	10 269	33 365	•••	16	323 16	
Nansemond River B. Dismal Swamp			104	24	40 7	3,223	CW	40 62	CW
Newport News Mathews County			8	1	cw	1	475 5	250	210
11. Williamsburg 12. Hopewell			38	12	323 31	1,796 1	3	412 255	***
13. Walkerton 14. Wash, Birthplace	•••	3		6	316	450		62	
15. Brooke 16. Fort Belvoir			18 108	4 125	12 761	150 1,615 611	24 25	182 931	300
17. Central Loudoun 18. The Plains			***	5	3 21	1		301	75
19. Manassas-B.R.		***	•••		1	14	5	241	
20. Chancellorsville 21. Gordonsville							13	311 71	
22. Charlottesville 23. Warren	•••		1						
24. Darlington Heights	•••			•••	***	***		***	•••
25. Banister WMA 26. Lynchburg					6	12 1		68 58	
27. Danville 28. Calmes Neck						***		2	
29. N. Shen. Valley 30. Shen. NP-Luray			2	1	48	CW 1	CW	8	2
31. Big Flat Mtn. 32. Rockingham Co.									
33. Augusta Co. 34. Waynesboro	***		***		22				
35. Lexington 36. Peaks of Otter				CW					
37. Fincastle					21	***			
38. Roanoke 39. Blacksburg			2	2	15				
40. Giles County 41. Tazewell					***			3 7	
42. Glade Spring		•••	12		8		1		
43. Blackford 44. Bristol	***			1			2	1 62	
45. Breaks I. S. Park 46. Wise County	***								
Total individuals:	-	The same of the sa					572		

Lesser Scaup	scaup, sp.	King Eider	Common Eider	Surf Scoter	White-winged Scoter	Black Scoter	scoter, sp.	Oldsquaw	Bufflehead	Common Goldeneye	Hooded Merganser
4	301			0							
		***		8 95	***	14 12	61	11 31	554 515	***	714 256
9	5			1,514	17	465	160	16	1,756	1	794
		1		720	3	210		42	CW	***	
20	•••		8	703	3	63		37	869	8	440
	***	***	•••	61	4	12	***		9	1	38
9		***	***	60			***	***	398	7	75
250	1 2	***	•••	55	2	3		22	10		36
64				769	3	27	300	482	1,182 904	4 296	235 1 59
8								402	211	7	200
41			***	***		***			63		85
***						***			8	25	7
3,093	***		***	78				1	2,126	454	55
13		***	***		***			20	181		38 311
9,586	555	***		13	1	1	***	4	788	5	311
1	***		•••		***			•••	11		25
	***	***		***	***		***		69	1	67
1 10		***		***	***	***	***	CW	1	CW	42 36
					•••	***	•••		69 14	•••	36 15
***					•••				14	1	24
3	***								3		43
	40	***	***							***	
2			***						42		31
	***								2		9
2 6	***		***								10
11	•••	***	•••	***	***			1	1	4	23
		•••	***		***		***	•••	CW	CW	6
•••	***	***		***	***	•••	***		***	•••	4
***	***	***	***	***	***		***				***
	***	***	***	***	***	***	***	•••		***	
		***	***						1	***	1
	***		***	***	***						
•••		***		***		***				***	
	***		***		***						
		***							7		41
38	***		•••					***	60	•••	89
1			•••	•••					3		2
8											
3					•••				299		238
***			***								
13,185	904	1	8	4,076	33	807	521	667	10,156	814	4,149
			THE RESERVE OF	-				-			.,

	Common Merganser	Red-brested Mergansert	Ruddy Duck	duck, sp.	Osprey	Bald Eagle	Northern Harrier	Sharp-shinned Hawk	Cooper's Hawk
Chincoteague Wachapreague Cape Charles/Kiptopeke CBBT Little Creek Back Bay		177 72 588 380 212 72	60 20 207 4	36 50 	 1	14 16 5 3	33 37 68 4 70	12 8 15 6 10	9 9 2 3
7. Nansemond River 8. Dismal Swamp 9. Newport News 10. Mathews County 11. Williamsburg 12. Hopewell	3 3 4	148 137 151 5	679 6 402 3 5,266 95	98 	3 1 1	6 12 3 8 23 38	11 1 4 7 4 11	8 7 10 3 8 10	6 3 3 1 4
13. Walkerton14. Wash. Birthplace15. Brooke16. Fort Belvoir17. Central Loudoun18. The Plains	210 15 999 	1 11 41 	4 433 3,021 1,406 60 6		 2 	14 137 12 166 	20 8 17 8	1 1 24 5 2	1 3 15 8 3
19. Manassas-B.R. 20. Chancellorsville 21. Gordonsville 22. Charlottesville 23. Warren 24. Darlington Heights	6 	 2 	1 200 17 3 	 2 		2 2 1	2 2 3 	14 2 5 6 2	8 6 3 3
25. Banister WMA 26. Lynchburg 27. Danville 28. Calmes Neck 29. N. Shen. Valley 30. Shen. NP-Luray	1 1 4 CW	cw	 5 CW			2 3 12	CW 5 5	CW 5 4 4 15 7	1 3 4 10 5
31. Big Flat Mtn.32. Rockingham Co.33. Augusta Co.34. Waynesboro35. Lexington36. Peaks of Otter			6 				 3 	5 3 3	3 2 1
37. Fincastle 38. Roanoke 39. Blacksburg 40. Giles County 41. Tazewell 42. Glade Spring	2		1 2			ïi 	1 1 1	6 4 9 4 2 3	3 5 7 1 2 8
43. Blackford 44. Bristol 45. Breaks I. S. Park 46. Wise County Total individuals:	1,253	1,998	1	186		1	1 2	240	154
	100			AND DESCRIPTION OF THE PERSON NAMED IN	CONTRACTOR OF THE PARTY.				100

Northern Goshawk	Accipiter, sp.	Red-shouldered Hawk	Red-tailed Hawk	Rough-legged Hawk	Buteo, sp.	hawk, sp.	Golden Eagle	American Kestrel	Merlin	Peregrine Falcon	Ring-necked Pheasant
		1	34					7	6	2	
	1	3 7	34 42 70	1			1	7 61 38	1 3 CW	2 5 4	
			70					17	cw	1	***
		2 3	11 17					17 43	1 3		
•••	•••					•••				1	
		2	26 15			•••		17 27 12 1 5	1		
	1	3	12 12 12		1			12	CW	1	***
•••		3 10 7 33	12 12	***	***			5	1		
		33	44	•••			1	22	1	1	1
		12 5	24 17	***	***			6	***	***	
	***	5	17					12 2 24	1	***	
		20 59	21 83	1	•••		1	24	2	***	
		28	76	1				19	1	***	
	***	14	37					8			
	***	40	67 7					10	•••		
		4	13			1 2		10			
		19	36					6			
	•••	12	34 25	***		•••		10 12	***	***	
***	***			***	***	***	***			***	***
		1	17 37	***				8		•••	
		3	17	1				12	***		
***	***	8	49		***	***	1	39 39	***	***	1
		4	77 29		***			19			
	***						***				
	***	1	24					20	***		
			33 30	1			***	33 18	1	•••	
		3	9					8			
		1	3	•••				1			
		3	37					14	1		
		2	30 23	•••	•••			9	***		***
		1	4		1			17 4			
		12.	6				***	6		***	
***	***	***	40	***	***	***	•••	27		•••	•••
***	***	1	10		***		6	14	1		
		1	30 2 6				•••	30			
		1	6					4			
2	2	341	1,248	5	2	3	10	704	25	15	3

	Ruffed Grouse	Wild Turkey	Northern Bobwhite	Black Rail	Clapper Rail	King Rail	Virginia Rail	Sora	Common Moorhen
1. Chincoteague	***		30		4		1		
2. Wachapreague			15		6				
 Cape Charles/Kiptopeke CBBT 	***		97		138		7	***	***
5. Little Creek			***		17	***	***	***	***
6. Back Bay			14	1		18	13	5	1
7. Nansemond River			6		29			100000	
8. Dismal Swamp			3				•••		
9. Newport News	***	3	***		18		***		
 Mathews County Williamsburg 		42	2	***	13	***		***	•••
12. Hopewell		30	6		21	***	1	***	•••
13. Walkerton		40	4	***	***	•••	***	***	•••
14. Wash. Birthplace	7	18	22		***	***	***	***	***
15. Brooke		3	2			***		***	***
16. Fort Belvoir	***	1	2			3	***	***	
17. Central Loudoun 18. The Plains	***	9	CW	***		•••	***	***	
	***	1	***	***		***	***	***	•••
 Manassas-B.R. Chancellorsville 		***		•••		***		***	***
21. Gordonsville		5	15	•••	***	***	•••		***
22. Charlottesville		19		***				•••	
23. Warren	***	11	2		***				
24. Darlington Heights	***	***		***	***	***			
25. Banister WMA		20	9			***			
26. Lynchburg 27. Danville	***	91	11	***			***		***
28. Calmes Neck	5	34 13	***	***	***	•••	***		***
29. N. Shen. Valley	2	7		***			CW	•••	***
30. Shen. NP-Luray	4	1			***				
31. Big Flat Mtn.	8	15	***						
Rockingham Co.		1				***		***	
 Augusta Co. Waynesboro 				***		•••		***	***
35. Lexington	CW 1	3 6	•••		***	•••		***	***
36. Peaks of Otter		12		•••	•••	•••	•••	•••	
37. Fincastle		14			•••		***		
38. Roanoke		14	1		***	***	***	•••	•••
39. Blacksburg		20						***	
40. Giles County	3	25	6	***	***				
41. Tazewell 42. Glade Spring			***		***	***	***		
	1	***		***	•••	•••		•••	
43. Blackford 44. Bristol		47		***	***		***		***
45. Breaks I. S. Park	9	17	1	***	•••	***	***	***	
46. Wise County	2		1	***	***	***		•••	***
Total individuals:	35	464	249	1	246	21	22	5	1
	-				- 10	fin 1		3	

1 76 9 168 93 84 23 86 10 62 1,178 74 383 159 2 447 70 129 7 3 38 645 12 .		American Coot	Black-bellied Plover	Semipalmated Plover	Killdeer	American Oystercatcher	American Avocet	Greater Yellowlegs	Lesser Yellowlegs	Willet	Spotted Sandpiper	Whimbrel	Marbled Godwit
645 12		62	76 406 1,178	5 74	168 33 383	93 224 159	2	84 132 447		18		1	10 3 38
9 182 10 2		645	12		656	10							***
9 182 10 2		76	4		157			5					
49												***	***
267 16		49			182								
		267			122								
38 256 148 14 18 <		***			62								
1,730		3	***	***				6					
1,730		38	***	***			***		***				***
1,730		***		***	148		***						
9			***	***	14			2					
9	1	,730				***	***		***		***		
5 6		386				***	***		7	***	***		
48 16		5			11						***	***	***
48		3	***			***	***	***	***	***	***	***	***
1 6		***	***	***		***			***	***	***		
		48				***		***	***	***		***	
									***	***	***	***	
									•••	***	***	***	***
18					2								
62		•••	***			***	***				***	•••	***
20 22					18		***	3		***	***	***	***
20 22		02			16								
20 22		31			12								
		20			22		***						
2 2					10								
						100000							
		2			2	***	***						
3 3 2					14								
		3			3								
26 15					2								
		***		***		***							
26 19					15								
1 47												***	
158 18		1											
14													
158 18									***			***	
158 18		24			16		***		***		***	***	***
158 18					2	***		***					
		158			18								

3,659 1,692 88 2,782 497 2 730 102 233 1 4 51	-	_											
	_ 3	,659	1,692	88	2,782	497	2	730	102	233	1	4	51

	Ruddy Tumstone	Red Knot	Sanderling	Western Sandpiper	Least Sandpiper	Purple Sandpiper	Dunlin	peep, sp.	Short-billed Dowitcher
1. Chincoteague	6		520	2	3		1,620		85
Wachapreague	17	***	120	133	2		3,645		3
Cape Charles/Kiptopeke	66	1	478	438	8	200	12,924	50	248
4. CBBT 5. Little Creek	9 65	***	2 171	•••	***	29 30	67		
6. Back Bay		***	63						
7. Nansemond River			250		11		400	14	2
8. Dismal Swamp									
9. Newport News	13		84				252		2
10. Mathews County	3		411	45	***		580	***	***
11. Williamsburg 12. Hopewell	***	***		22	***		***	***	***
	***	***	***	•••	•••		***		***
13. Walkerton	***	***	***	***	1	***	***	•••	
14. Wash. Birthplace 15. Brooke	•••	•••		***	***				
16. Fort Belvoir									
17. Central Loudoun				***					
18. The Plains				•••	•••	•••			***
19. Manassas-B.R.						***			
20. Chancellorsville				***	***				
21. Gordonsville			***	***		***	***	***	***
22. Charlottesville 23. Warren		•••	•••	***	•••	***	***	***	***
24. Darlington Heights						***			***
	***		***	***					
25. Banister WMA 26. Lynchburg	***	***	***	***	***	•••	***	•••	***
27. Danville	***			•••					***
28. Calmes Neck	***					***	***		
29. N. Shen. Valley	***	***	***		2		***		
30. Shen. NP-Luray				***	***		***	***	•••
31. Big Flat Mtn.	***				***			***	
32. Rockingham Co.	***			•••	***	•••		***	•••
33. Augusta Co.	***		***	***	***		•••	***	•••
34. Waynesboro 35. Lexington	***								
36. Peaks of Otter									
37. Fincastle									
38. Roanoke									
39. Blacksburg							***		
40. Giles County						***	•••		***
41. Tazewell		***	***	***	***	***	***	•••	***
42. Glade Spring		***	***	•••		***	***		***
43. Blackford		***			***	***	***	•••	***
44. Bristol 45. Breaks I. S. Park	•••	***	***	•••	•••	***	***	***	***
45. Breaks I. S. Park 46. Wise County					***				
	-	Contract Spins	-	and the same of the same of					-
Total individuals:	179	1	2,099	640	27	59	19,488	64	340

	Long-billed Dowitcher	dowitcher, sp.	sandpiper, sp.	Common Snipe	American Woodcock	Laughing Gull	Little Gull	Bonaparte's Gull	Black-tailed Gull	Ring-billed Gull	Herring Gull	Thayer's Gull
		44		22	10					1.017	724	
	1 10 	11 	3	23 8 95	13 4 121 5	6 246 13 6	 1 1	9 67 277 462 10	 1 1 1	1,017 1,267 1,857 2,190 8,145 2,680	734 1,802 1,158 1,200 886 161	 1
	***	***		1	1	79		63 6		5,121 4,786	4,109 9,538	
				1		420 352		2		7.896	1.923	
	***	•••	•••	3	2 2	1 174		138 63	•••	894 1,918	3,135 284	
				54	2	2,104		303		15,025	638	
			***	50			***	•••		22 617		
				4	1	9		1	***	617	38	***
	•••			54	7	1	***	22		2,192 5,328 32	442 7,661	1
				2	2					32	3	
	•••		***	•••	1	***	***	***	***	225	***	***
	***			• • •			***	***		767 64	6	***
			***				***		200			
					2			***				
	•••		***	16	•••	•••	•••	•••	•••			
			•••				•••			4 4 0 4		
				10				<i>56</i>		1,181		
				***				***		2		
		***	***	5				***	***	5 10		***
			***	5								
	***	***		. 1	***		***				***	
				6			***					
	***	***	***	7	***		***		***	2		
	***	***						***	***			
										206	***	
				11						1,583 9		
				14						70	***	
	***			2				***				
				4				***		236	1	•••
				CW								
-	11	11	3	388	164	3,411	2	1,479	3	65,347	33,719	2
-			-			-, -, -, -,	- No.	.,		,,		

Page 68

	Iceland Gull	Lesser Black-backed Gull	Glaucous Gull	Great Black-backed Gull	Black-legged Kittiwake	gull, sp.	Royal Tem	Forster's Tem	tem, sp.
Chincoteague Wachapreague Cape Charles/Kiptopeke CBBT Little Creek Back Bay	 1	 2 1 4 5	cw	155 91 465 266 272 133	 1 1	220 25 	1 	333 157 6 166 148	 1
7. Nansemond River 8. Dismal Swamp 9. Newport News 10. Mathews County 11. Williamsburg 12. Hopewell	1 	2 21 	 1 	172 501 377 241 58 86		1,340	 2	6 39 50 81 79	
13. Walkerton 14. Wash. Birthplace 15. Brooke 16. Fort Belvoir 17. Central Loudoun 18. The Plains		 1 		12 106 889 		7 		32 16 	
19. Manassas-B.R. 20. Chancellorsville 21. Gordonsville 22. Charlottesville 23. Warren 24. Darlington Heights									
25. Banister WMA 26. Lynchburg 27. Danville 28. Calmes Neck 29. N. Shen. Valley 30. Shen. NP-Luray									
31. Big Flat Mtn.32. Rockingham Co.33. Augusta Co.34. Waynesboro35. Lexington36. Peaks of Otter									
37. Fincastle 38. Roanoke 39. Blacksburg 40. Giles County 41. Tazewell 42. Glade Spring									
43. Blackford 44. Bristol 45. Breaks I. S. Park 46. Wise County Total individuals:		36		3,824		1,592	 4	1,113	

106 392 18 15		owl, sp.
181 319 2 23 31 2 2 6 1,084 418 30 4 3	***	
2		
61 670 4 6 1		•••
61 670 4 6 1		
39 262 14 3 3		
39 262 14 3 3		
31 294 CW		
168 438 6 7 2 152 3 3 9 226 2 4 30 201 2 140 777 1 9 17 13 217 314 1 2 13 10 4		
168 438 6 7 2 152 3 3 9 226 2 4 30 201 2 140 777 1 9 17 13 217 314 1 2 13 10 4		•••
152 3 3		•••
30 201 2		
30 201 2		***
217 314 1 2 13 10 4		
217 314 1 2 13 10 4	4	
00 000	9	
92 286 3	•••	•••
179 742 3 4	***	
47 70 3 1 3 152 56 1 1 2 1		***
225 224 4 2		•••
170 151 2 10		
32 120 6 1		
40 00		
315 413 2 2	***	
1,059 1,466 25 1 CW 1 830 741 1 16 9 2	***	
	***	***
6 1 1		***
E00 620 2 CW		• • •
324 361 4 1		***
146 289 15 3		
6		
247 514 5 1		
1,468 411 5 1 284 927 6 3		
284 927 6 3	•••	
65 57 9 1 1 129 91 1		1
129 91 1		
10 010		
200 700 4 04 40		
44		
91 93 3 CW	***	
6 11,479 16,017 9 308 187 CW 68 7 2		

	Belted Kingfisher	Red-headed Woodpecker	Red-bellied Woodpecker	Yellow-bellied Sapsucker	Downy Woodpecker	Hairy Woodpecker	Northern Flicker	Pileated Woodpecker	Eastern Phoebe
Chincoteague Wachapreague Cape Charles/Kiptopeke CBBT	28 26 31	 1	16 25 82	2 6 16	13 35 60	6 3 7 	108 101 132	7 3 7	8 4 60
 Little Creek Back Bay 	34 21	1	51 35	10	39 22	2	70 58	20	4
7. Nansemond River 8. Dismal Swamp 9. Newport News 10. Mathews County 11. Williamsburg 12. Hopewell	13 23 38 30 36 <i>51</i>	 CW 20 20	23 128 74 35 81 145	2 31 5 11 17 47	19 109 31 18 47 99	2 22 13 2 7 19	30 218 96 82 80 239	4 60 7 3 27 41	1 27 1 4 9 26
13. Walkerton 14. Wash. Birthplace 15. Brooke 16. Fort Belvoir 17. Central Loudoun 18. The Plains	18 12 23 77 25 6	24 3 10 5 CW	53 48 64 411 87 87	14 9 9 88 26 23	24 21 59 324 61 98	6 6 4 107 8 13	74 66 44 379 64 35	13 12 21 82 23 32	7 7 3 3 2
19. Manassas-B.R. 20. Chancellorsville 21. Gordonsville 22. Charlottesville 23. Warren 24. Darlington Heights	28 8 7 25 20 3	3 1 4 2	165 33 41 144 84 27	14 1 27 68 50 11	141 20 29 101 86 28	19 4 3 22 19 7	154 13 31 117 88 34	57 21 7 87 67 13	3 1 17 19 8
25. Banister WMA 26. Lynchburg 27. Danville 28. Calmes Neck 29. N. Shen. Valley 30. Shen. NP-Luray	5 20 10 17 76 22	37 2 6 6	29 86 43 153 168 61	5 34 9 48 36 23	19 65 27 155 207 103	16 14 19 11	18 76 26 52 113 48	2 41 4 35 60 56	13 9 3 1 2 4
31. Big Flat Mtn.32. Rockingham Co.33. Augusta Co.34. Waynesboro35. Lexington36. Peaks of Otter	10 13 8 15	7 3 2 1	21 25 36 31 29 3	19 5 5 14 16 5	34 29 29 37 47 7	6 3 4 7 13 2	34 11 17 36 36 4	27 14 11 22 26 8	1 1 2 1 3 2
37. Fincastle 38. Roanoke 39. Blacksburg 40. Giles County 41. Tazewell 42. Glade Spring	23 26 26 14 2		34 33 49 15 5 22	10 20 17 10 3 3	56 54 104 37 8 31	12 12 17 4 3	47 25 30 4 1 26	27 31 60 22 2 10	7 6 10 5 2 9
43. Blackford 44. Bristol 45. Breaks I. S. Park	4 22 1	1	5 30	2	6 45 1	1 12	12 16	1 18 4	19 2
46. Wise County	2	1	7	2	28	5	4	8	2
Total individuals:	914	161	2,824	780	2,613	482	2,949	1,112	318

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_	flycatcher, sp.	Loggerhead Shrike	White-eyed Vireo	Blue-headed Vireo	Blue Jay	American Crow	Fish Crow	crow, sp.	Common Raven	Horned lark	Tree Swallow	Carolina Chickadee
					23 91	98 542	 77				86	74 206
			***	1	56	532	299			80	14	264
			***	3	175	961	3,110					191
			•••	1	72	275	17					135
	***			2	54	153	14			7		102
			3	8	104 156	224 674	224	10				403 130
					100	471	4	2				140
	•••	1		•••	138 225	264 558	1 23	2 50		10		221 479
	***			***	78	460		8	***	10	•••	68
		***			50	776				2		65
	***				143	455	40	***	***			281
				***	611 175	1,990 726	888 58	433 100	11	100		1,134 256
					168	954	3			CW		228
					360	1,266	234	1,008	***			627 84 92
			***		104	186	2	•••				84
					70 315	585 1,112	279		1 9			268
		1			156	1,061	51		10	***		268 273 78
		3		•••	59	658	***	•••	•••	214		
		1			100 272	133 874		***				72 279
			1		191	454	6		13			133
		1			192	726		***	7	***		486
	***	1	***	•••	327 259	1,717 1,563	28	•••	10 45	30 68		701 515
			***	****	13	20		***		00		
		1	***	1	56	405	1		6 9	237		44 79
		CW	***		204	1,263	163	56	1	7		162
		1		• • • •	105 113	604 694	20	***	10	56	***	148 113
	***				1	83		***	11 11			31
		4			156	755		***	11			185
					138	653			2	***		270
	•••	cw	***		173	944		***	9	CW		228 38
					103	236 266	2	***				10
	***	2			130	644			1			62
		1	***		37	453			5			6
	***	2			139	1,015			1	75		141
					62	268				7		144
-	1	21	4	16	6,288	28,760	5,556	1,667	194	910	100	9,646

	Black-capped Chickadee	chickadee, sp.	Tufted Titmouse	Red-breasted	White-breasted Nuthatch	Brown-headed Nuthatch	Brown Creper	Carolina Wren	House Wren
Chincoteague Wachapreague Cape Charles/Kiptopeke CBBT Little Creek Back Bay			27 16 26 91 27	 12 1 8	 16 11	8 9 23 28	3 1 14 13 6	57 113 312 118 101	3 6 57 4 6
7. Nansemond River 8. Dismal Swamp 9. Newport News 10. Mathews County 11. Williamsburg 12. Hopewell			33 106 76 73 108 246	5	4 60 3 3 47 40	10 2 2 20 44 2	2 20 4 6 13	62 158 97 130 123 330	4 4 1 5 3
13. Walkerton 14. Wash. Birthplace 15. Brooke 16. Fort Belvoir 17. Central Loudoun 18. The Plains	cw 		69 54 120 534 232 235	1 1 1 cw	21 7 30 141 104 89		1 2 88 6 3	45 33 77 511 82 94	7 1 7
19. Manassas-B.R. 20. Chancellorsville 21. Gordonsville 22. Charlottesville 23. Warren 24. Darlington Heights			492 74 47 230 108 20	3 1	149 21 28 105 66 13		15 4 2 3 5	158 17 27 202 164 35	
25. Banister WMA 26. Lynchburg 27. Danville 28. Calmes Neck 29. N. Shen. Valley 30. Shen. NP-Luray	 3 15		61 213 125 353 347 282	 1 2	30 59 23 184 177 139	CW 12 	1 3 15 18 10	23 141 47 92 166 118	
31. Big Flat Mtn.32. Rockingham Co.33. Augusta Co.34. Waynesboro35. Lexington36. Peaks of Otter	 4 6 2 16 2	 28	22 56 113 81 134 14		18 21 27 36 38 10		2 2 3 2 1	21 22 41 52 66 8	
37. Fincastle 38. Roanoke 39. Blacksburg 40. Giles County 41. Tazewell 42. Glade Spring	6 4 6 24 	 186 22 	91 134 249 59 33 43	 2 	50 54 132 35 7 28		11 12 15 1	125 116 209 39 10 45	" 1 … …
43. Blackford 44. Bristol 45. Breaks I. S. Park 46. Wise County Total individuals:	 6 	236	11 101 14 113 5,693	 7 	3 52 12 49		4 2 4 319	4 110 3 41 4,545	1
The second secon		and the same of	the same of the sa	Control of the last owner.	Contract Contract	THE RESERVE TO SHARE BY		-	Name and Address of the Owner, where

	Winter Wren	Sedge Wren	Marsh Wren	Golden-crowned Kinglet	Ruby-crowned Kinglet	Eastern Bluebird	Hermit Thrush	American Robin	Gray Catbird	Northern Mockingbird	Brown Thrasher
	20 8 47	4 27	2 1 14	35 39 88	5 3 73	70 296 308	24 6 75	1,388 1,038 388	7 10 33	20 75 80	16 1 5
	7 2	1 14	2 7	94 20	73 18	9 128	27 8	956 143	15 10	76 54	8 7
	3 57 4 3 12 23	 2 		39 100 15 2 21 80	45 115 15 3 79 120	47 143 40 577 205 437	6 188 4 18 13 56	273 3,169 144 6,282 79 320	2 50 5 1 3	30 32 82 94 65 115	9 14 11 10 17 18
	6 2 44 3 			24 40 40 138 21 17	23 16 20 21 6	176 191 245 413 275 243	9 12 6 127 22 12	902 453 194 614 525 74	1 4 1 7 	34 22 91 199 125 84	1 7 3 2
	19 1 1 12 8 4			104 41 20 65 100 25	7 2 19 51 51	351 117 163 244 358 168	30 6 14 69 36 16	1,241 253 299 382 65 99	1 1 1	125 36 63 106 106 40	 1 1 1
	4 6 1 11 8 28			8 54 3 12 32 110	8 37 13 3 8 14	146 298 195 423 661 403	5 18 3 28 14 16	116 151 258 4,511 6,410 2,939		26 93 91 95 238 88	4 1 1
	13 4 2 4 6 5			28 9 36 34 152 42	6 3 14 18 15	9 127 208 105 210 26	12 2 3 9 25 4	3 509 1,181 9 2,138		40 108 77 51 3	
	3 38 5 			73 160 195 49 3 21	9 42 25 8 	309 161 166 101 20 66	13 8 16 2 2	65 217 283 129 	2	151 80 109 19 3 43	1 2
	23 7 6	•••		97 2 48	15	25 193 	1 9 4 1	5 265 15 99		7 112 7	1 1
_	465	48	26	2,336	1,027	9,072	980	38,658	161	ž,195	143

	European Starling	American Pipit	Cedar Waxwing	Orange-crowned Warbler	Northern Parula	Yellow-rumped Warbler	Pine Warbler	Prairie Warbler	Palm Warbler
Chincoteague Wachapreague Cape Charles/Kiptopeke CBBT	1,812 3,012 2,665	58 749	115 153 1,241	 5		2,645 1,062 13,533	2 4 22		36 75
5. Little Creek 6. Back Bay	2,990 1,625	47	1,545 1,025	1		1,260 2,010	18	1	3
7. Nansemond River 8. Dismal Swamp 9. Newport News 10. Mathews County 11. Williamsburg 12. Hopewell	627 654 3,771 887 1,689 6,306	11 2 79	467 595 95 1,282 539 1,363	4	 1	1,875 343 1,449 1,505 2,349 419	5 35 7 2 15 3		3 2 1 2 7
13. Walkerton 14. Wash. Birthplace 15. Brooke 16. Fort Belvoir 17. Central Loudoun 18. The Plains	236 745 2,062 2,179 31,792 1,732	20 75 2 2	342 1,124 432 650 122 149			175 262 209 330 179 135	1 5 6 6 		6
19. Manassas-B.R. 20. Chancellorsville 21. Gordonsville 22. Charlottesville 23. Warren 24. Darlington Heights	3,324 196 1,917 611 858 391	 110	1,181 124 481 478 196 118			586 37 91 264 241 83	 3		 1
25. Banister WMA 26. Lynchburg 27. Danville 28. Calmes Neck 29. N. Shen. Valley 30. Shen. NP-Luray	101 2,352 2,375 3,337 24,877 9,781	121 3	6 307 27 60 1,704 171			70 74 20 31 629 274	12 1 22 2		
31. Big Flat Mtn. 32. Rockingham Co. 33. Augusta Co. 34. Waynesboro 35. Lexington 36. Peaks of Otter	3,165 5,027 1,284 2,785		10 3 77 57 127			1 52 257 60 221	 2 		
37. Fincastle 38. Roanoke 39. Blacksburg 40. Giles County 41. Tazewell 42. Glade Spring	1,315 4,875 4,672 183 550 12,439	250	57 36 			100 43 91 33 22	1 1 6 		•••
43. Blackford 44. Bristol 45. Breaks I. S. Park 46. Wise County	815 3,348 241	100	19 8			9 47 2			
Total individuals:	155,603		16,547	13	1	33,078	191	1	142

Black-and-white Warbler	American Redstart	Common Yellowthroat	Wilson's Warbler	Yellow-breasted Chat	warbler, sp.	Eastern Towhee	American Tree Sparrow	Chipping Sparrow	Clay-colored Sparrow	Field Sparrow	Vesper Sparrow
***			***			33	***	6	1	106	1
***	***	1	***		***	2	5	3	•••	10 534	4
1	***	5	***			40	1	21		534	4
1	***	***	***	***		31	1	14		11	
***	***	6	***	1	***	28	***	37	***	26	
1	***	7	***	***	***	19	2	14	***	16	
***	***	4	1	***	***	106 32		8	***	27 12	***
		***		***		17	1	105	***	6	***
	***			1		45		28		49	***
***	1	***	***	***		32		24	***	99	***
***	***	***	***	***	***	20	***	23		3	***
***	***	1	***	***	***	10		***	***	19 12	***
1	***	7	***	***	•••	63	6 47	2	***	189	1
			***	***	***	6	93		***	48	
***	***	***	***	***	***	3	4	***	***	39	***
***		***	***			24	***	2		97	***
***		***	***	***	***	10	***		***	11	***
		***	***	***	***	1 16	3	2	***	18 176	1
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			***	***		3	3000	2	***	31	
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***	2.00	***	***		***	1	74	***		31	1
			***			3	12	***		54	
				***	***	7			***	1	***
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	***	***	***	***	***	***	4	***	***	25	***
		***	***	***	***	2 5	3		***	32 22	***
	***	***	***	***	***	2		***			
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***	***		***	***		22 5	***		***	23	
***	***	***			1	22		3	***	18	
***	***	***	***	***	***	15	***		•••	21 11	***
***	***	***	***	***	***	9 42		3	***	88	
***	***	***	***	***		3				17	
***	***	***	***	***	***	19	1	12		51	
***	***	***	***	***	***	2	***			2	***
	***	***	***	***	***	6	***	5		39	***
4	1	34	1	2	1	790	346	333	1	2,246	8

351 8,606

Fall 1999

Total individuals:

1,549

5

24

9

6

6

Lincoln's Sparrow	Swamp Sparrow	White-throated Sparrow	White-crowned Sparrow	sparrow, sp.	Dark-eyed Jun∞	Lapland Longspur	Snow Bunting	Northern Cardinal	Red-winged Blackbird	Eastern Meadowlark	Rusty Blackbird
	262 21	825 350			281 267		22	148	5,643 1,183	112 64	326 10
5	471	1,040	1		69	2		278	39,598	314	10
1	25 295	275 237	15		328 268			117 163	1,280 7,630	14 199	362
	123	313	6		162		***	132	300,711	88	1
2	214 5	632 215			525 154			78 139	796 526	97 21	5
	1	253	1	9	1,131			209	723	74	30
	92	454 977	3		358 736			161 330	1,323	39 55	
***	41		10	***		•••	•••				
•••	20 13	539 242	***	•••	626 331			62 140	686 1,145	9 86	cw
	16	234	12		445			101	145	17	
•••	199	1,114	23		1.057			877	728	2	287 280
•••	27 12	341 653	176 16	***	932 1,179	3	20	336 344	137 20	4	280
•••						•••		479	14	4	
•••	4	394	2	3	1,471			54	14	2	
		63 291	30		628			162		32	
	17	1,140	57		1,279	***		358	31	16	
***	32	824 175	50	***	636 252			235 80	13 23	66 151	
•••				***					134	36	5
	20 7	272 432	5 10		390 645			68 265	134	43	
	2	274			466			171	78	19	***
	7	442	144		1,009			678	250	24	43
•••	13	398 443	221 137		1,568			446 178	91 340	24	2
								39			
	1	155 147	147		201 238			64		2	6
	2	191	216		520			175	150	13	26
	3	170	202	***	528	CW	•••	156	14	8	***
***	•••	266 44	50	***	561 220	***	***	170 13	30		
***			404	***	484	***	***	281	20	7	
***	3	245 135	194 13		292	***		187	20		
	4	367	137		601			352	101	11	
	1	118	4		176		***	66		CW	
	***	30 240	3 342		129 153			73 174	161	45	6
	•••					3.55		8		23	
***	6	13 238	3 92		102 268			205		14	29
		1			10			9			
	2	41			90			55	30		
8	1,962	16,243	2,328	12	23,176	5	42	8,897	365,198	1,719	1,420

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	Brewer's Blackbird	Common Grackle	Boat-tailed Grackle	Brown-headed Cowbird	blackbird, sp.	Baltimore Oriole	Purple Finch	House Finch	Red Crossbill
Chincoteague Wachapreague Cape Charles/Kiptopeke CBBT Little Creek		18,778 24 265,406 	17 211 584 	187 209 3,385 5	 17,000 		 3	129 146 83 	
Back Bay Nansemond River		12,235	43	1,380				85 20	
8. Dismal Swamp 9. Newport News 10. Mathews County		2,002,491 2,335 5,808 491	354 145	83 138 16				13 172 186	
11. Williamsburg 12. Hopewell		35,688 1,930		51 12		2		120 88	•••
13. Walkerton 14. Wash. Birthplace 15. Brooke		373 250 4		1	1,000			30 77 163	•••
16. Fort Belvoir 17. Central Loudoun 18. The Plains	 1 	208 2,172 21		164 58 92			14 1 7	444 317 113	13
19. Manassas-B.R. 20. Chancellorsville 21. Gordonsville 22. Charlottesville		20		 2	1 		42 4	306 28 137	
23. Warren 24. Darlington Heights		3,002 189		106		***	2 40 4	140 186 26	
25. Banister WMA 26. Lynchburg 27. Danville 28. Calmes Neck 29. N. Shen. Valley 30. Shen. NP-Luray		6 17 756 409 43		51 7 48			13 3 2	14 168 58 85 544	
31. Big Flat Mtn. 32. Rockingham Co.				7,228				316 133	
33. Augusta Co. 34. Waynesboro 35. Lexington		3,011 8,956		250 221 2	100		21 15	478 25 147	
36. Peaks of Otter 37. Fincastle 38. Roanoke		16					3	112	
39. Blacksburg 40. Giles County 41. Tazewell 42. Glade Spring		200 CW 81		350 93			3 2	193 282 55 59 123	***
43. Blackford 44. Bristol 45. Breaks I. S. Park		3				***	3	24 155 2	
46. Wise County Total individuals:	4	2,366,079	1,439	24,393	18,101	2	188	6,063	13

Pine Siskin	American Goldfinch	Evening Grosbeak	House Sparrow	Total number of speices	Total number of individuals	Dte counts held	Time in the field (a.m. to p.m.)	Wind direction	Wind speed (miles/hour)	Inches of snow on the ground
 3 18	261 34 404 120 43		54 56 48 50 65	137 125 168 31 138 134	69,874 46,875 392,300 5,699 37,817 44,603	30 Dec 19 Dec 27 Dec 26 Dec 31 Dec 28 Dec	0600-1730 0700-1700 0445-1745 0645-1630 0500-1730 0500-1700	NW SW V NE NW NE	5-21 5-15 0-10 10-22 0-8 0-20	0.25
	66 299 92 88 194 235		51 171 66 68 53	118 106 113 110 112 110	2,338,134 52,786 36,931 25,999 65,567 54,152	3 Jan 2 Jan 19 Dec 3 Dec 20 Dec 20 Dec	0515-2000 0630-1730 0500-1700 0500-2345 0700-1600 0515-1730	SE V V NE calm calm	15-29 5-10 0-5 0-20 	
 2	24 46 243 560 218 232	 2 4	25 7 64 556 191 19	82 101 98 130 92 79	9,725 22,767 18,416 37,197 11,724 11,566	3 Jan 19 Dec 18 Dec 3 Jan 27 Dec 31 Dec	0430-1745 0645-1715 0645-1645 0000-1600 0300-1715 0600-1730	SE S W NE SW W	0-10 5-15 0-10 0-30 0-12 0-15	 1 1 1
3 2 	256 29 20 227 228 37		50 11 5 25 48 3	78 65 73 78 78 60	21,268 4,262 7,238 11,115 13,349 3,897	27 Dec 3 Jan 2 Jan 27 Dec 20 Dec 10 Jan	0500-1830 0415-1900 0700-1600 0615-1730 0630-1730 0730-1730	SW V SW SW SW W	0-5 5-10 0-10 0-5 0-2 0-5	05 0-1
ïi 	126 153 43 187 445 201		23 113 44 256 105 190	74 75 69 78 94 81	4,584 9,172 6,927 30,385 51,199 30,263	3 Jan 19 Dec 19 Dec 2 Jan 19 Dec 20 Dec	0730-1730 0600-2100 0700-1700 0600-1800 0400-1800 0630-1730	NW SW calm calm S V	5 10 14 	
 2 	19 66 132 68 96 9		270 195 116 15	36 72 72 72 72 66 39	865 8,135 18,050 14,904 9,297 645	31 Dec 19 Dec 19 Dec 28 Dec 26 Dec 22 Dec	0615-1800 0700-1630 0600-1700 0730-1700 0500-1800 0800-1600	NW calm V UNK SW NW	0-10 10-18 0-10 0-5 25	0-1
1 3	140 204 256 69 82 106		39 47 304 16 164 96	69 72 80 62 57 74	6,706 11,432 17,267 2,181 2,005 17,455	20 Dec 19 Dec 19 Dec 27 Dec 30 Dec 3 Jan	0600-1700 0530-1715 0545-1700 UNK 0700-1700 0615-1745	calm UNK N V SE V	0-10 0-10 light 10-15 0-15	 1 .25
	193 182 148		43 63	54 89 28 51	2,354 10,981 140 1,971	19 Dec 27 Dec 2 Jan 19 Dec	0430-1830 UNK 0800-1700 0615-1645	E S W calm	5-10 5 15-30	 3
35	6,881	8	3,786	216	3,653,479					

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	Temperatures (Fahrenheit)	Water conditions	Skies (a.m.)	Skies (p.m.)	Number of feeder observers	Hours at feeders	Number of field observers
Chincoteague Wachapreague Cape Charles/Kiptopeke CBBT Little Creek Back Bay	27-39 41-54 25-45 35-44 26-39 42-43	WOP WOP SPF, MWO WOP SPF WOP	CLD, LRS CLR CLR CLD CLD, LGS LGR	CLD PCR CLD PCD CLD LGR			31 15 25 7 26 26
7. Nansemond River 8. Dismal Swamp 9. Newport News 10. Mathews County 11. Williamsburg 12. Hopewell	45-63 25-40 41-58 47-61 48-63 38-66	WOP WOP WOP WOP WOP	CLD, HVR CLR CLR PCR, HVR PCD CLR	CLR CLR PCD CLR CLR CLR		2.50	12 28 35 40 26 50
13. Walkerton14. Wash. Birthplace15. Brooke16. Fort Belvoir17. Central Loudoun18. The Plains	32-50 33-59 22-47 27-61 14-41 17-27	WOP SPF, MWO SPF, MWO SPO, MWF SPF, MPF SPF, MPF	FOG, LHR PCD CLR HRS, SLE CLR CLD, LGS	CLR PCR PCD PCD CLD CLD		 11.00	15 27 21 59 43 26
19. Manassas-B.R. 20. Chancellorsville 21. Gordonsville 22. Charlottesville 23. Warren 24. Darlington Heights	12-40 24-45 18-24 20-38 27-57 18-33	SWF, MWO SPF, MPF SPF, MPF SPF, MWO WOP SWF, MWO	CLR CLD, LGR CLD CLR PCR CLR	PCD PCD CLD CLD PCR CLR	 2 1 2	2.00 3.00 4.00	108 13 16 21 19
25. Banister WMA 26. Lynchburg 27. Danville 28. Calmes Neck 29. N. Shen. Valley 30. Shen. NP-Luray	28-42 24-45 35-40 17-24 32-51 36-58	SWF, MWO WOP WOP WOP WOP SPO, MWO	CLD CLR CLD CLD PCR PCD	CLR CLR PCD CLD PCR CLD	 6 3 7	10.00 6.00 10.25	5 37 29 32 58 28
31. Big Flat Mtn.32. Rockingham Co.33. Augusta Co.34. Waynesboro35. Lexington36. Peaks of Otter	17-30 30-55 32-56 25-48 25-38 35-55	SPF, MWO WOP WOP SWF, MWO SPF, MWO WOP	CLD, LGS PCD PCD CLD FOG PCD	CLD PCD PCD CLD CLR PCD	 1 5	2.50	2 22 26 22 15
37. Fincastle 38. Roanoke 39. Blacksburg 40. Giles County 41. Tazewell 42. Glade Spring	48-59 28-56 30-54 18-37 9-19 20-38	WOP WOP WOP UNK SPF, MPF SMO, MMF	PCD PCD PCD PCD PCD, LGS CLD, LRS	PCR MCD CLD, LGR OVC CLR MCD, LGS	9 9 2	6.00 23.75 8.00	24 32 40 10 7 14
43. Blackford 44. Bristol 45. Breaks I. S. Park 46. Wise County Totals:	21-33 25-47 28-30 25-38	WOP SPF, MWO SPF, MWO WOP	CLD CLD CLD	HRS CLD PCD CLD, LGR	 1 53	7.00	5 21 1 12

_	Number of field parties (non-owling)	Hours owling	Miles owling	Hours on foot	Hours by car	Hours by boat	Total hours (excludes owling & feeder hours	Miles on foot	Miles by car	Miles by boat/canoe	Total miles (excludes owling miles)
	11-15 10-12 9-17 1-2 10-13 11-14	3.50 1.00 4.00 6.00 2.50	7.00 0.50 20.00 36.00 13.00	46.50 28.00 107.00 10.00 72.75 64.00	48.00 48.00 28.00 1.00 21.25 24.00	4.00 4.00 1.00	94.50 80.00 139.00 11.00 94.00 89.00	31.00 27.00 76.00 1.00 46.00 33.00	184.50 338.00 285.00 10.00 372.00 429.00	12.00 10.00 2.00	215.50 377.00 371.00 11.00 418.00 464.00
	6 10-11 13 11-13 9 23	1.00 4.00 4.50 2.00 5.50	4.00 20.00 14.75 16.00 25.00	17.75 54.50 62.50 37.50 33.25 92.75	17.50 29.50 44.50 61.50 38.00 71.25	3.00 0.50 10.00	35.25 87.00 107.00 99.00 71.75 174.00	15.75 48.50 50.50 28.50 21.75 84.25	258.75 282.50 349.50 418.50 297.00 576.00	6.00 10.00 40.00	274.50 347.00 400.00 447.00 328.75 700.25
	9-11 9-10 33 14-16	1.00 4.25 0.50 9.00 4.00	3.00 25.75 0.50 24.50 7.00	17.75 25.25 51.50 106.50 53.75 28.00	20.50 26.00 33.00 36.50 49.75 92.00	5.50 3.50 	43.75 54.75 84.50 143.00 103.50 120.00	13.50 9.00 26.00 71.25 46.25 28.00	212.50 294.00 246.00 225.50 422.25 357.00	15.00 42.00 	241.00 345.00 272.00 296.75 468.50 385.00
	27 6 6-8 16 13 4	4.50 2.50 0.50 1.50 2.00 2.00	5.00 3.50 7.00 16.00 22.00 20.00	163.25 21.00 22.75 106.00 78.00 10.00	12.25 16.50 33.25 15.00 24.00 30.00		175.50 37.50 56.00 121.00 102.00 40.00	107.75 13.50 19.50 97.50 79.00 17.50	208.00 195.00 335.00 163.00 227.00 283.00		315.75 208.50 354.50 260.50 306.00 300.50
	5 13 17 16 21 14	1.50 11.00 0.25 11.00 4.50	6.00 69.00 0.00 18.00 17.00	24.50 38.00 37.50 25.00 67.00 65.75	11.00 40.00 31.00 67.00 97.00 58.50	 17.00	35.50 78.00 68.50 92.00 18.1.00 124.25	19.00 28.00 31.00 26.00 77.00 66.50	198.00 409.00 404.00 521.00 923.00 613.00	27.00	217.00 437.00 435.00 547.00 1027.00 679.50
	2 8-9 12 9 8 6	1.50 1.00 1.50 1.00 2.00	3.00 1 00 12.00 9.00 9.00	19.50 12.25 23.75 25.50 27.00 12.00	35.50 63.25 35.50 18.00 13.00		19.50 47.75 87.00 61.00 45.00 25.00	31.00 12.00 16.25 17.50 24.00 9.00	290.50 548.00 389.00 121.00 27.00		31.00 302.50 564.25 406.50 145.00 36.00
	15 15 16-17 UNK 5 6	1.50	10.00 7.00	31.00 54.00 85.25 UNK. 5.00 15.50	37.00 34.50 42.75 UNK 35.00 40.25		68.00 88.50 128.00 UNK 40.00 55.75	17.00 39.00 72.25 14.00 7.00 10.25	292.00 333.50 335.50 90.00 170.00 377.50		309.00 372.50 407.75 104.00 177.00 387.75
_	3 6 1 9	2.00 5.00 0.75	28.00 47.00 20.00	7.00 34.00 7.00 19.50	11.00 23.50 2.00 26.25		18.00 57.50 9.00 45.75	9.00 UNK 6.00 18.00	300.00 UNK 20.00 227.75		309.00 UNK 26.00 245.75
-	483-516	111.00	547.00	1,946.00	1,543.00	49.00	3538.00	1,542.00	13,569.00	164.00	15,274.00

CHRISTMAS COUNT DESCRIPTIONS

(Observers are listed for Darlington Heights, Lynchburg, Danville, Peaks of Otter, Roanoke, and Bristol—counts which do not appear in the ninety-ninth Christmas bird counts book published by The National Audubon Society. Fort Belvoir and Giles County counts were also not submitted to National Audubon, but the compilers did not include the names of the participants in the reports to *The Raven*, consequently, they do not appear in this list.)

- CHINCOTEAGUF NATIONAL WILDLIFE REFUGE. 37°58'N 75°22'W
 Center: 2 miles north of the center of Chinoteague in Accomack County.
 Compilers: Richard and Nancy Roberts (7212 Fiddler Bay Lane,
 Chincoteague, VA 23336).
- WACHAPREAGUE. 37°40′N 75°42′W
 Center: Jct. 789 and 715 in Accomack County.
 Compiler: Irvin Ailes (6479 Myrtle Lane, Chincoteague, VA 23336-3825).
- CAPE CHARLES/KIPTOPEKE. 37°12'N 75°56'W
 Center: 1.5 miles southeast of Capeville Post Office in Northampton County.
 Compiler: Henry Armistead (523 E. Durham St., Philadelphia, PA 19119).
- CHESAPEAKE BAY BRIDGE-TUNNEL (CBBT). 37°05′N 76°08′W
 Center: The northern three islands of the bridge-tunnel complex and adjacent
 waters out to one mile.
 Compiler: Ned Brinkley (21238 Huntington Rd., Cape Charles, VA 23310).
- LITTLE CREEK. 36°51'N 76°06'W
 Center: 3.8 miles northeast of Kempsville in Virginia Beach.
 Compiler: Paul Sykes (1080 Forest Rd., Watk nsville, GA 30677).
- BACK BAY NATIONAL WILDLIFE REFUGE. 36°39'N 76°00'W Center: 1.5 miles ratst of Back Bay NWR. Compiler: Paul Sykes (1080 Forest Rd., Watkinsville, GA 30677).
- 7. NANSEMOND RIVER. 36°52′N 76°26′W

 Center: Jct. 17 and 626 in Pughsville, Suffolk.

 Compiler: Les Willis (P.O. Box 6063, Suffolk, VA 23433).
- DISMAL SWAMP. 36°40′N 76°29′W
 Center: Intersections of Middle and Jericho Ditches in Dismal Swamp National Wildlife Refuge.
 Compilers: Donald Schwab (1411 Planters Dr. Suffolk VA 23434)

Compilers: Donald Schwab (1411 Planters Dr., Suffolk, VA 23434) and Thomas Gwynn III (1640 Morris Ave., Norfolk, VA 23509).

NEWPORT NEWS. 37°05′N 76°25′W
 Center: Northern corner of Magruder & Cmdr. Shepard boulevards in Hampton. Compiler: Hayes Williams (P.O. Box 95, White Marsh, VA 23183-0095).

10. MATHEWS COUNTY, 37°25'N 76°18'W

Center: 0.5 mile east of Beaverlett Post Office in Mathews County. Compiler: Mary Pulley (HC 75, Box 2750, Hudgins, VA 23076).

11. WILLIAMSBURG. 37°17'N 76°42'W

Center: Colonial Williamsburg Information Center in Williamsburg.

Compiler: Bill Holcombe (4705 Lady Slipper Path, Williamsburg, VA 23188).

12. HOPEWELL. 37°23'N 77°17'W

Center: Curles Neck in Henrico County.

Compiler: Sherrie Siers (724 Luton Lane, Richmond, VA 23225).

13. WALKERTON, 37°46'N 77°02'W

Center: 1.5 miles southwest of Walkerton bridge, just west of Whitebank.
Compiler: Fred Atwood (Flint Hill School, 10409 Academic Dr., Oakton, VA 22124).

14. WASHINGTON'S BIRTHPLACE. 38°07'N 76°57'W

Center: Horners in Westmoreland County.

Compiler: William Portlock (23195 Mt. Cloud Rd., Bowling Green, VA 22427).

15. BROOKE. 38°22'N 77°20'W

Center: At Center Road 3 miles east southeast of Brooke in Stafford County. Compiler: David Stewart (10715 Midsummer Dr., Reston, VA 20191).

16. FORT BELVOIR. 38°42'N 77°11'W

Center: Pohick Episcopal Church, Fort Belvoir, in eastern Fairfax County. Compiler: David F. Abbott (43579 Plantation Terr., Ashburn, VA 22011). Observers: Names not submitted.

17. CENTRAL LOUDOUN. 39°06'N 77°38'W

Center: Near jct. Of 704 and 769 in Loudoun County.

Compiler: Joseph Coleman (19499 Yellow Schoolhouse Road. Round Hill, VA 20141).

18. THE PLAINS. 38°48'N 77°52'W

Center: 7 miles northwest of Warrenton on the west side of Watery Mountain along Carter Creek Fauquier County.

Compiler: George Fenwick (P.O. Box 407, The Plains, VA 20198).

19. Manassas-Bull Run. 38°50'N 77°26'W

Center: Centreville in western Fairfax County

Compiler: Stan Gray (7717 Shooting Star Dr., Springfield, VA 22152).

20. CHANCELLORSVILLE. 38°16'N 77°40'W

Center: Chancellorsville Battlefield, 10 miles west of Fredericksburg in Spotsylvania County.

Compiler: Joella Killian (Dept. Of Biology, Mary Washington College, Fredericksburg, VA 22401).

21. GORDONSVILLE, 38°09'N 78°12' W

Center: Jct. Of 15 and 33 north of the town of Gordonsville in Orange County. Compiler: Donald Ober (P.O. Box 6, Orange, VA 22960).

22. CHARLOTTES VILLE. 38°04'N 78°34'W

Center: Near Ivy in Albemarle County.

Compiler: Charles Stevens (615 Preston Place, Charlottesville, VA 22903).

23. WARREN, 37°51'N 78°33'W

Center: At Keene in Albemarle County.

Compiler: Charles Stevens (615 Preston Place, Charlottesville, VA 22903).

24. DARLINGTON HEIGHTS, 37°12'N 78°36'W

Center: Darlington Heights Post Office in Prince Edward County.

Compiler: Carolyn Wells (204 Fayette St., Farmville, VA 23901).

Observers: Ruth Boyer, John Dalmas, Thelma Dalmas, Dale Hodges, Jane Holman, Ann Ingram, Jane Jobe, Judy McCann, Velmont Miller, Tom Price, Chris Register, Katie Register, George Shorter May Shorter, David Spears, Sally Statham, Randy Thrasher, Sue Thrasher, and Carolyn Wells.

25. BANISTER RIVER WILDLIFE MANAGEMENT AREA. 36°43'N 78°48'W

Center: At Banister River Wildlife Management Areas in Halifax County. Compiler: Jeffrey Blalock (103 Elizabeth Court, South Boston, VA 24592).

26. LYNCHBURG, 37°24'N 79°11'W

Center: Lynchburg College in Lynchburg.

Compilers: John and Thelma Dalmas (1230 Viewmont Dr., Evington, VA 24550-2006).

Observers: Rexanne Bruno, John Dalmas, Thelma Dalmas, Virginia Delaney, Kathie Driscoll, Glen Eller, Betty Epperson, Robert Epperson, Bob Eubank, Brad Hall, Linda Hall, Charles Hansrote, Melva Hansrote, Mike Hayslett, Mark Johnson, Phyllis Jones, Margaret Kehrer, Victor Kehrer, Joanne Langford, RuthAnn Miller, Gene Moore, Myriam Moore, Hope Montague, Wyatt Murphy, John Nowlin, Claudia Puckette, Dan Puckette, Daniel Puckette, Norma Jean Rist, Gene Sattler, Jim Scranton, Susan Stanton, Ed Theisinger, Randy Thrasher, Sue Thrasher, Debbie Troutman, Margaret Wenning, Susan Wingfield, and Jo Wood.

27. DANVILLE. 36°34′N 79°25′W

Center: Ballou Park in Danville.

Compiler: Edward W. Fisher, Sr. (Dept. Of Biology, Averett College, Danville, VA 24541).

Observers: Richard Bliss, Pat Brachman, Russ Brachman, Barbara Clark, Francis Craigue, Edward Fisher, Martha Foster, Mary Foster, Sarah Foster, Vickie Fuquay, Ann Garbett, Gary Grant, Andrew Hudgins, Steven Huff, George Jepsom, Margaret Milam, Ken Obye, Peg Obye, John Rhodes, Kathlin Rhodes, C.B. Strange, Sue Urbanik, Quentin Warren, Margaret Weringo, Larry Wilburn, Nultie Wiseman, Gordon Woody, and Hugh Wyatt.

28. CALMES NECK. 39°07'N 77°54'W

Center: Casteman's Fery Bridge, State Route 7 and and the Shenandoah River in Clarke County.

Compiler: Frances Endicott (3355 Calmes Neck Lane, Boyce, VA 22620).

29. NORTHERN SHENANDOAH VALLEY. 39°03'N 78°10'W

Center: Jct. Crooked Run and Rt. 606 in Frederick County.

Compiler: Rob and Ann Simpson (1932 E. Refuge Church Rd., Stephens City, VA 22655).

30. Shenandoah National Park—Luray. 38°35'N 78°28'W

Center: Hershberger Hill near Stanley in Page County.

Compiler: Mara Meisel (304 Trenton Ave., Shenandoah, VA 22849).

31. BIG FLAT MOUNTAIN. 38°11'N 78°43'W

Center: On Pasture Fence Mountain in Albemarle County.

Compiler: Charles Stevens (615 Preston Pl., Charlottesville, VA 22903).

32. ROCKINGHAM COUNTY. 38°26'N 79°02'W

Center: Ottobine in Rockingham County.

Compiler: Chuck Aukerman (301 West Bank Street, Bridgewater, VA 22812-1005).

33. AUGUSTA COUNTY. 38°12'N 78°59'W

Center: Jct. 780 and 781 in Augusta County.

Compiler: John Mehner (1036 Selma Boulevard, Staunton, VA 24401).

34. WAYNESBORO. 37°59'N 78°57'W

Center: Sherando at Jct. 610 and 664 in Augusta County.

Compiler: Crista Cabe (404 DuPont Ave., Staunton, VA 24401).

35. LEXINGTON. 37°51'N 79°29'W

Center: Big Spring Pond in Rockbridge County.

Compilers: Bob Paxton (460 Riverside Dr. #72, New York, NY 10027) and George Tolley (492 Greenhouse Rd., Lexington, VA 24450).

36. PEAKS OF OTTER. 37°27′N 79°36′W

Center: Peaks of Otter Visitor Center in Bedford County.

Compiler: Barry Kinzie (P.O. Box 446, Troutville, VA 24175).

Observers: Mike Donahue, Charles Hansrote, Melva Hansrote, David Holt, Joyce Holt, Eunice Hudgins, John Hudgins, Bill Hunley, Barry Kinzie, Katrina Knight, Mike Purdy, and Liz Williams.

37. FINCASTLE. 37°31'N 79°52'W

Center: North of Fincastle near Jct. 220 and 679 in Botetourt County.

Compiler: Barry Kinzie (P.O. Box 446, Troutville, VA 24175).

38. ROANOKE, 37°18'N 79°56'W

Center: Oakland Blvd. And Williamson Rd. In Roanoke.

Compiler: Michael Donahue (147 Southampton Dr., Vinton, VA 24179).

Observers: Andrea Biggs, Max Bursey, Dan Clark, Linda Cory, John Cutler, Mike Donahue, Linda Ferguson, Tad Finnell, Matt Gentry, Loren Graham, Bob Hogan, David Holt, Joyce Holt, Eunice Hudgins, John Hudgins, Bill Hunley, Tina Kemper, Susan Kidd, Barry Kinzie, Katrina Knight, Connie Marsh, Eric Miller, Mike Purdy, Alyce Quinn, Tim Quinn, Mike Smith, Kathy Summers, Kent Summers, Mark Taylor, Anne Tucker, Bill Tucker, and Liz Williams.

39. BLACKSBURG. 37°14'N 80°25'W

Center: Jct. Merrimac Rd. (657) and Prices Fork Rd. (685) in Montgomery County.

Compilers: Patricia A. Polentz (915 Coal Hollow Rd., Christiansburg, VA 24073 and Bruce Grimes (2306 Terra Bella St., Blacksburg, VA 24060).

40. GILES COUNTY. 37°19'N 80°38'W

Center: Pembroke in Giles County.

Compiler: David A. Brady (P.O Box 70, Newport, VA 24128).

Observers: Names not submitted.

41. TAZEWELL. 37°08'N 81°30'W

Center: Fourway in Tazewell County.

Compiler: Sarah Cromer (P.O. Box 98, North Tazewell, VA 24630).

42. GLADE SPRING. 36°47'N 81°47'W

Center: Jct. 750 and 609 in Glad Spring.

Compiler: Larry McDaniel (330 Godsey Rd., Apt. 114, Bristol, TN 37620).

43. Blackford. 37°00'N 81°55'W

Center: Confluence of the Clinch and Little rivers in Russell County. Compiler: Robert Riggs (Rt. 2, Box 27B, Lebanon, VA 24266).

44. BRISTOL. 36°36'N 82°07'W

Center: Jct. 647 and 654, east of Bristol TN in Washington County, VA. Compiler: Richard Lewis (407 V.I. Ranch Rd, Bristol, TN 37620).

Observers: Rob Biller, Ron Carrico, Wallace Coffey, JoAnne Detta, Sarah Garrett, Bert Hale, Ken Hale, Loraine Hale, Ron Harrington, Marty Huber, Andy Jones, Rick Knight, Geoff Larsen, Phillip Lewis, Richard Lewis, Larry McDaniel, Amanda Martin, Janice Martin, Dave Worley, Van Remsen, and John Shumate.

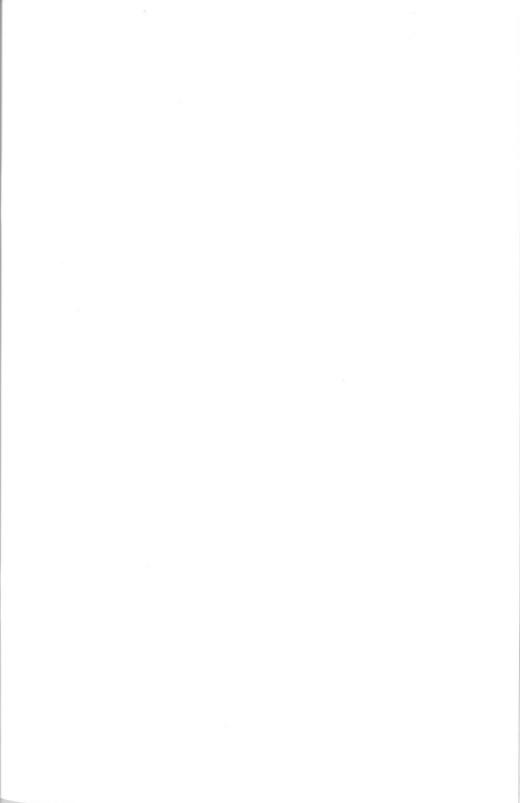
45. Breaks Interstate Park. 37°15'N 82°13'W

Center: 4.5 miles n.e. of Haysi in Buchanan County. Compiler: Terry Owens (PO Box 100, Breaks, VA 24607).

46. WISE COUNTY. 36°57'N 82°39' W

Center: At Dorchester in Norton City.

Compiler: Randy Stanley (2432 Egan Rd., Big Stone Gap, VA 24219).





INFORMATION FOR CONTRIBUTORS

The Raven, the official journal of the Virginia Society of Ornithology (VSO), functions to publish original contributions and review articles in ornithology not published elsewhere, mostly relating to Virginia birdlife. Manuscripts should be sent to the editor, C. Michael Stinson, Rt. 1, Box 186, Prospect, VA 23960.

Most manuscripts published in *The Raven* concern the distribution, abundance, and migration of birds in Virginia. Manuscripts on other ornithological topics, such as Virginia-based historical reviews, bibliographical reviews, life history notes, and behavioral observations, are also welcomed. In addition, the journal serves to publish the official proceedings of the VSO and other formal items pertaining to all aspects of the Society's activities. *The Raven* may also publish articles pertaining to the activities of the various public and private organizations engaged in biological and conservation work in Virginia. *The Raven* is a peerreviewed journal; all feature articles and short communications are reviewed before acceptance for publication.

Format of The Raven generally follows guidelines set by the Council for Biology Editors as outlined in the CBE Style Manual, 6th edition, 1994 (Council of Biology Editors, Inc., 11250 Roger Bacon Dr., Reston, Virginia, 20190). All manuscripts should be typewritten or prepared with a word processor and doublespaced. Tables, table legends, and figure legends must be similarly prepared and should be submitted on separate pages at the end of the manuscript. Currently only black-and-white photographs, graphs, maps, or other illustrations may be used. The original size for these items should not exceed 5 x 7 inches. Authors may submit manuscripts for initial review with accompanying diskette or as paper copies only. Upon acceptance all manuscripts with revisions incorporated should send be sent on diskette or as e-mail attachments, preferably in Microsoft Word 97 format. Authors are welcome to consult with the editor on additional matters of format or style. Vernacular and scientific names of birds should be those published in the Seventh Edition of the A.O.U. Check-list of North American Birds and subsequent supplements. Linear measurements and weights should be in metric units.

Deadlines for submission of articles are 15 December for the spring issue and 15 July for the fall issue.

